



BRAHMAPUTRA CRACKER AND POLYMER LIMITED

[A Government of India Enterprises]

TENDER NO.: BCPL/DIB/C&P/SER/20130139/SD

FOR

NAME OF WORK:

ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA , DIBRUGARH, (ASSAM).

Consultant:



M/s Rajkhowas Aarchi
M. D Road, House No – 128
Chandmari, Guwahati – 03
Ph: 0361 – 2664912
Email: rajkhowsaarchi@rediffmail.com
rajkhowsaarchibcplsite@gmail.com

Regd.Office: Hotel Brahma Putra Ashok, M.G.Road, Guwahati-781001, Assam: Tel: 0361-2733554, 0361-2733556(Fax)
Project Office: Main Fire Station Building, P.O. Lepetkata, Dibrugarh - 786006 Tel: 0373- 2914611
Project Execution office: 3rd Floor, GTI; 24, Sector 16A; NOIDA 201 301: Tel: 0120 2513102
www.bcplindia.co.in

CUT-OUT SLIP

(OUTER ENVELOPE)

DO NOT OPEN

NAME OF WORK: ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA, DIBRUGARH, (ASSAM)

TENDER NO. : BCPL/DIB/C&P/SER/20130139/SD

**SUBMISSION DUE DATE : 24/01/2014
& TIME**

FROM:

Name:
Address:

TO:

DGM (C&P)
CENTRAL WARE HOUSE
BCPL PROJECT SITE, LEPETKATA
DIBRUGARH-786006
ASSAM

(To be pasted on the outer envelope containing "Priced", "Unpriced" bids

MASTER INDEX

S.N.	DESCRIPTIONS	PAGE NOS
1.	CUT – OUT SLIP	2
VOLUME – 1 (COMMERCIAL PART)		
2.	MASTER INDEX	3
3.	NOTICE INVITING TENDER	4-10
4.	EXHIBIT 'A' AND CHECK LIST FOR SUBMISSION OF DOCUMENT	11-14
5.	FORMAT FOR FILLING OF ANNUAL TURNOVER, POSITIVE NET WORTH, RETURN ON EQUITY, WORKING CAPITAL ETC TO BE ATTACHED.	15-16
6.	EXHIBIT 'B': ACKNOWLEDGEMENT CUM CONSENT LETTER	17-18
7.	EXHIBIT 'C': STATUTORY AUDITOR / CHARTERED ACCOUNTANT	19-28
8.	INSTRUCTIONS TO BIDDERS	29-37
9.	SPECIAL CONDITIONS OF CONTRACT- PART-A	38-50
10.	CONTRACTOR'S SAFETY RECORD IN LAST ASSIGNED JOB	51-52
11.	FORMAT OF NO DEVIATION CONFIRMATION	53
12.	SPECIAL CONDITIONS OF CONTRACT- PART-B	54-63
13.	GENERAL CONDITIONS OF CONTRACT	64-123
14.	SCHEDULE OF RATES	124-132
15.	TECHNICAL SPECIFICATIONS (VOLUME -2)	133-153
16.	LIST OF MANDATORY TEST	154-159
17.	LIST OF DRAWINGS	160 (DWG. ENCLOSED)

NOTICE INVITING TENDER (NIT)

(Tender no.) BCPL/DIB/C&P/SER/20130139/SD

Sealed Bid under single stage two envelop system is invited from bidders enlisted under State PWD, CPWD, Railways and PSU's etc. for the following works for **BRAHMAPUTRA CRACKER & POLYMER LIMITED, AT LEPETKATA, DIBRUGARH, ASSAM.**

A)	NAME OF WORK	:	ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA , DIBRUGARH, (ASSAM)
B)	CONTRACT PERIOD	:	10 (Ten) MONTHS
C)	BIDDING DOCUMENT ON SALE	:	From 01/01/2014 – 23/01/2014
D)	BIDDING DOCUMENT FEE (NON REFUNDABLE)	:	₹. 1,500/- (in favour of "Brahmaputra Cracker & Polymer Ltd.", payable at Dibrugarh (Assam) However, PSUs are exempted from payment of tender fee.
E)	EARNEST MONEY DEPOSIT	:	₹. 7,55,000/- (in favour of "Brahmaputra Cracker & Polymer Ltd.", payable at Dibrugarh (Assam) However, PSUs are exempted from payment of tender fee.
F)	PRE-BID CONFERENCE	:	AT. 15.00 Hrs on 10/01/2014, in CENTRAL WARE HOUSE BCPL office at Dibrugarh.
G)	DATE & TIME FOR RECEIPT OF BID	:	24/01/2014 up to 14.30 Hrs.
H)	DATE & TIME FOR OPENING OF BID	:	24/01/2014 at 15.00 Hrs. in the presence of bidder's representatives.
I)	PLACE & SUBMISSION OF BID	:	DGM (C&P), CENTRAL WARE HOUSE, BCPL PROJECT SITE PO – BARBARUAH, LEPETKATA-786006 DIBRUGARH, ASSAM

The Earnest Money Deposit (EMD) for the amount as mentioned above shall be submitted in the form of crossed Bank Demand Draft drawn on any Nationalized/Scheduled bank in favour of Brahmaputra Cracker & Polymer Limited, payable at Dibrugarh, Assam. Alternatively, Earnest Money deposit may also be submitted through Bank Guarantee from any Indian Scheduled Bank or a branch of an International Bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in the proforma attached with the Tender Document. However, other than the Nationalized Indian Banks, the banks whose BGs are furnished must be commercial banks having net worth in excess of ₹. 100 Crores and a declaration to this effect should be made by such commercial bank either in the bank guarantee itself or separately on a letter head.

The complete bidding document is also available on the website of GAIL (www.gailonline.com) and BCPL (www.bcplonline.co.in), bidders and desirous to submit their bid on the basis of downloaded document shall pay cost of bidding document by crossed demand draft in favour of **Brahmaputra Cracker & Polymer Limited, payable at Dibrugarh (Assam)** along with the Techno-Commercial Bid, failing which their bid shall not be considered for opening/evaluation. **Bids are also available for sale at the office of DGM, C&P department as per the date mentioned above.**

SUBMISSION OF BIDS:

The Bid shall be submitted in the following manner in separately sealed envelopes duly superscribed:

a) PART – I : TECHNICAL AND UNPRICED COMMERCIAL PART

b) PART – II: PRICE PART

PART – I of the bid shall contain the following:

- a) Bid/Offer in hard copy as per the requirement of the Bidding Document duly signed and stamped on each page.
- b) Master Index enclosed with Request for Quotation duly signed and stamped by the bidders in token of having received and read all parts of bidding documents and having accepted and considered the same in preparing and submitting the bid.
- c) Earnest Money deposit as specified in Instructions to Bidders (ITB)

PART – II of the bid shall contain the following:

Bidder shall fill price in Schedule of Prices. In this part of bid, the bidder shall not stipulate any conditions. There shall not be any over writing.

BIDDERS EVALUATION CRITERIA FOR THIS TENDER WILL BE AS UNDER:

The bidder shall meet the following Experience and Financial Criteria.

a) Experience Criteria:

TECHNICAL:-

- i) Bidder should have executed at least one single contract of similar nature of **ROAD WORKS** having value not less than **₹. 150.99** Lakhs (RUPEES ONE FIVE ZERO POINT NINE NINE ONLY) in the previous seven years to be reckoned from the due date of submission.

“OR”

Bidder should have executed at least two separate contracts of similar nature of **ROAD WORKS** having value not less than **₹. 113.24** Lakhs (RUPEES ONE ONE THREE POINT TWO FOUR ONLY) in each case in the previous seven years to be reckoned from the due date of submission.

In case of Sub-contractor, bidder shall be required to furnish the following attested/notarized documents in support of meeting the above “Experience Criteria.”

- A) Copy of work order mentioning detailed scope of work along with SOR issued by main contractor.

- B) Copies of Completion Certificate from the end User / Owner and also from the main contractor. The Completion Certificates shall have details like work order no. / date, brief scope of work, ordered & executed value of the job, completion date etc.

*All documents in support of **Technical Criteria** of Bid Qualification Criteria (BQC) to be furnished by the bidders shall necessary be duly certified/attested by **Chartered Engineer** and **notary public** with legible stamp.*

FINANCIAL:-

- i) The annual turnover of the bidder should be minimum ₹. 188.75 Lacs (RUPEES ONE EIGHT EIGHT POINT SEVEN FIVE) in any of the preceding three financial years.
 - ii) The financial Net Worth of the bidder should be positive as per the last Audited Financial Statement.
 - iii) The bidder should have minimum working capital of ₹. 37.75 Lacs (RUPEES THREE SEVEN POINT SEVEN FIVE) as per the last audited financial year. If the bidder's working capital is inadequate, the bidder shall supplement this with a letter issued by their Banker having net worth not less than ₹. 100 Crores, conforming the availability of line of credit to meet the above specified working capital requirement.
- Bidder shall submit details of Financial Capability of bidder in the below prescribed format (**ANNEXURE - Z**) duly signed & stamped by **Chartered accountant**.
 - Further, copy of full audited annual financial statements submitted in bid shall be duly certified /attested by **notary public** with legible stamp.

FORMAT FOR CHARTERED ACCOUNTANT CERTIFICATE FOR FINANCIAL CAPABILITY OF THE BIDDER

We have verified the Annual Accounts and other relevant records of M/s..... (Name of the bidder) and certify the following

A. ANNUAL TURNOVER OF LAST 3 YEARS:

YEAR	AMOUNT(CURRENCY)
Year1:	
Year2:	
Year3:	

B. FINANCIAL DATA FOR LAST AUDITED FINANCIAL YEAR:

DESCRIPTION	YEAR
	AMOUNT(CURRENCY)
1.Current Assets	
2.Current Liabilities	
3.Working Capital (Current Assets-Current liabilities)	
4.Net Worth (Paid up share capital and free reserves & Surplus)	

Name of Audit Firm:
Signatory]
Chartered Accountant
Date

[Signature of Authorized

Name:
Designation:
Seal:
Membership no.

Instructions:

1. The financial year would be the same as one normally followed by the bidder for its Annual Report.
2. The bidder shall provide the Audited annual financial statements as required for this Tender document. Failure to do so would result in the Proposal being considered as non responsive.
3. For the purpose of this Tender document .(i)Annual Turnover shall be “sale value/Operating Income “(ii)Working Capital shall be “Current Assets less Current liabilities “ and (iii) Net Worth shall be “Paid up share capital and Free Reserves & Surplus”

A job executed by a bidder for its own plant/ projects cannot be considered as experience for the purpose of meeting requirement of BQC as mentioned above. However, jobs executed for Subsidiary/Fellow subsidiary/ Holding company will be considered as experience for the purpose of meeting BQC subject to submission of tax paid invoice(s) duly certified by Statutory Auditor of the bidder towards payments of statutory tax in support of the job executed for Subsidiary/Fellow subsidiary/Holding company. Such bidders shall submit these documents in addition to the documents specified in the BEC.

BCPL reserves the right to complete the evaluation based on the details furnished without seeking and additional information.

SUBMISSION OF ATTESTED COPIES OF CERTIFICATES / DOCUMENTARY EVIDENCES

The bidders are required to submit the copies of all certificates/documentary evidences as mentioned above duly **attested by Gazetted Officer/notarized** towards the proof of meeting the Bid Evaluation Criteria (BEC) as stated above:

- **Attested copies of all the relevant documents viz. Work Order(s), Execution Certificate(s), Annual Report / Balance Sheet and Profit & Loss Account and other documents as mentioned in Exhibit 'A'.**
- **Attested copy (ies) of partnership deed (in case of partnership firm) and power of attorney.**
- **Attested copy of P. F. certificate.**
- **Attested copy of PAN Card.**
- **Affidavit (on non-judicial stamp paper) duly notarized, as per clause no. 38.2 of Special conditions of Contract Part–A.**
- **An undertaking (by the bidders who quotes by down loading the tender from web site) on their letter head stating that “The contents of the Tender Document have not been modified or altered by M/s (Name of the bidder with complete address). In case, it is found that the tender document has been modified / altered by the bidder, the bid submitted by the M/s (Name of the bidder) shall be liable for rejection”.**

Please note that this is a zero deviation tender. Bidders are advised to strictly confirm compliance to tender conditions and not to stipulate any deviation / conditions in their offer. Subsequent to bid submission, BCPL will not seek confirmations / clarifications and any bid(s) not in line with tender conditions shall be liable for rejection. Bidders are also requested to submit the documents / confirmations strictly as per the check list enclosed in the tender document.

Bids complete in all respect must reach this office not later than 14.30 hrs on the notified date of closing of the tender.

All out-station bids, if sent by post, should be sent under registered cover. Any excuse regarding late delivery of bid due to any reason whatsoever will not be entertained.

Bidders may depute their authorized representative to attend the bid opening. Bidders selected for opening of their priced bid shall be informed about the date and time of price bid opening.

Any change in bid after due date of submission of tender will not be considered.

Bidders are advised in their own interest to ensure that their bids reach this office well before the closing date and time of the tender as the bids received after the closing date and time of the tender will not be considered.

Please confirm that you have received the tender document and will be quoting for the tender items/jobs. In case you are not quoting for the same, please return complete set of tender documents.

The Bidder is required to submit the bid along with their covering letter under letter head disclosing the name and designation of authorized person signing the bid, complete postal address of firm / company, telephone no., fax no., e-mail etc.

GUIDELINES FOR SCRUTINY/COMPARISON OF BIDS:-

The discrepancies in rate filled for various items shall be resolved in the following manner:-

- (i) When there is a difference between the rates in figures and words, the rate which corresponds to the amount worked out by the contractor (by multiplying the quantity and rate) shall be taken as correct.
- (ii) When the rate quoted by the contractor in figures and words tallies but the amount is incorrect, the rate quoted by the contractor shall be taken as correct and not the amount and the amount corrected.
- (iii) When it is not possible to ascertain the correct rate, in the manner prescribed above, the rate as quoted in words shall be adopted and the amount worked out, for comparison purposes.
- (iv) In case it is observed that any bidder has not quoted for any item in the Schedule of Rates (Such unquoted item not being in large numbers), the quoted price for the purpose of evaluation shall be considered as the maximum rate quoted by the remaining bidder for such items.

If after evaluation, such bidder is found to be the lowest evaluated bidder, the rates for the missing item shall be considered as included in quoted bid price.

If the estimated price impact of the unquoted items is more than 10% of the bidder's quoted price, the above provision shall not be applicable and such bid shall be rejected.

EVALUATION IN RESPECT OF EXCISE DUTY/SERVICE TAX/VAT:

1. In case of Excise duty and service tax, bids shall be evaluated after considering the effect of cenvatable excise duty and service tax to avail cenvat credit.
2. If the item is entitled for availment of input tax credit on VAT under Assam Value Added Act 2003, the bid shall be evaluated after considering the effect of ITC on VAT .In case bidders quote as inclusive of VAT, same shall not be considered during evaluation of bid.
3. Bidders are requested to mention the above components clearly in the SOR so that evaluation can be done accordingly.
4. In case the applicable amount towards VAT/Excise Duty /Service Tax as mentioned by the bidder is considered for giving benefit during evaluation of bid as stated above, the bidder must ensure to submit their invoice as per their declared applicable taxes & duties. If the bidder does not pass on the benefit to that extent to BCPL, the differential amount shall be deducted from their bill.

SERVICE TAX: -

- While quoting against the tender, bidder shall have the option to decide on the method of valuation prescribed under the service tax rules, i.e, either on actual service portion or deemed service portion.

- Whether Service Tax is to be paid on actual service portion, the bidder(s) shall indicate the value for service portion on which the Service Tax is applicable.
- Whether Service Tax is to be paid on deemed service portion as per percentage prescribed, the bidder(s) shall indicate the percentage (presently 40%, 60% or 70%) of the gross works contract value on which Service Tax is applicable.
- Whether the bidder opts for paying Service Tax on deemed service portion, the gross works contract value or the purpose of payment of service tax shall mean the sum total of the gross amount charged for the works contract and the fair market value of all goods and services supplied in or in relation to the execution of the works contract, whether or not supplied under the same contract or any other contract.
- The fair market value of Free Issue Material (FIM) and services, wherever applicable, are indicated in the Bidding Documents.
- Bidders shall quote prices inclusive of all taxes and duties excluding service tax. In other words, the amount of service tax shall not be included by the bidders in their quoted price. However, bidders will indicate the details of applicable service tax as mentioned above along with the break-up of the service tax payable by him and service tax payable by Owner/BCPL as service recipient, if applicable, as per the reverse charge rule of service tax.
- In case a bidder does not provide any of the above requisite information, his bid will be evaluated with highest applicable rate of service tax (Presently 12.36%) on total value of works contract.
- Owner/BCPL will reimburse the service tax to the contractor at actual against submission of cenvatable invoices issued in accordance with service tax Rules to enable Owner/BCPL to claim cenvat credit of service tax paid. In case any variation in the executed quantities, the amount on which the Service Tax is applicable shall be modified in same proportion.
- The benefit of Cenvat credit of service tax quoted shall be considered for evaluation of bids.

You are requested to depute your representative along with authorization letter at the time of bid opening.

Thanking you,

SAMRAT DUTTA
SR. OFFICER (CONTRACTS & PROCUREMENT)
For BRAHMAPUTRA CRACKER & POLYMER LIMITED,
sdutta@bcplindia.co.in
0373-2914635/11

NOTE:

1. Bidders are requested to fill all the Annexure as enclosed in the tender documents.
2. Bidders must sign & stamp on each page of tender document.

CONFIRMATION OF BIDDERS FOR MEETING BEC AND OTHER REQUIREMENTS OF TENDER

NAME OF WORK	:	ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA , DIBRUGARH, (ASSAM)
--------------	---	--

TENDER NO: BCPL/DIB/C&P/SER/20130139/SD

SN	TENDER REQUIREMENT	BIDDER'S REPLY / CONFIRMATION
1	<u>TECHNICAL:-</u> Bidder should have executed at least one single contract of similar nature of ROAD WORKS having value not less than ₹. 150.99 Lakhs (RUPEES ONE FIVE ZERO POINT NINE NINE ONLY) in the previous seven years to be reckoned from the due date of submission. “OR” Bidder should have executed at least two separate contracts of similar nature of ROAD WORKS having value not less than ₹. 113.24 Lakhs (RUPEES ONE ONE THREE POINT TWO FOUR ONLY) in each case in the previous seven years to be reckoned from the due date of submission. In case of Sub-contractor, bidder shall be required to furnish the following documents in support of meeting the above “Experience Criteria.” - Copy of work order mentioning detailed scope of work along with SOR issued by main contractor. - Copies of Completion Certificate from the end User / Owner and also from the main contractor. The Completion Certificates shall have details like work order no. / date, brief scope of work, ordered & executed value of the job, completion	Reference documents furnished:

	date etc. <i>All documents in support of Technical Criteria of Bid Evaluation Criteria (BEC) to be furnished by the bidders shall necessary be duly certified/attested by Chartered Engineer and notary public with legible stamp.</i> <u>FINANCIAL:-</u> a) The annual turnover of the bidder should be minimum ₹. 188.75 Lacs (RUPEES ONE EIGHT EIGHT POINT SEVEN FIVE) in any of the preceding three financial years. b) The financial Net Worth of the bidder should be positive as per the last Audited Financial Statement. c) The bidder should have minimum working capital of ₹. 37.75 Lacs (RUPEES THREE SEVEN POINT SEVEN FIVE) as per the last audited financial year. If the bidder's working capital is inadequate, the bidder shall supplement this with a letter issued by their Banker having net worth not less than ₹. 100 Crores, conforming the availability of line of credit to meet the above specified working capital requirement. • <i>Bidder shall submit details of Financial Capability of bidder in the prescribed format (ANNEXURE – 2) duly signed & stamped by Chartered accountant.</i> • <i>Further, copy of full audited annual financial statements submitted in bid shall be duly certified /attested by notary public with legible stamp.</i>	
2	The bidder should have valid E.P.F. Registration no. / Certificate and copy (duly attested) of the same should be submitted along with their un-priced offer at the time of submission of bid.	Reference of attested copies of documents furnished: 1.

3	Affidavit duly notarized, as per clause no. 38.2 of Special conditions of Contract Part–A	Reference of document furnished
4	Power of Attorney in favour of person who has signed the offer in stamp paper of appropriate	Reference of document furnished
5	An undertaking by the bidders (who quotes by down loading the tender from web site) as instructed in the Page no.3 of RFQ.	Reference of document furnished 1.
6	Attested copy of PAN Card	

Note:

Please note that the documents listed by you above only shall be considered for evaluation of your claim of meeting Bidder Evaluation Criteria & other requirements of the tender. Any other documents, not included above shall not be considered. Further please note that all the documents submitted should be attested by a Gazetted officer / Notarized.

Date:

Bidder's signature_____

CHECK LIST FOR SUBMISSION OF DOCUMENTS

Bidder is requested to fill this check list and ensure that all detail / documents have been furnished as called for in the Bidding Document along with duly filled in, signed & stamped checklist with each copy of the “Un-priced bid (Part-I)”.

Please tick the box and ensure compliance:

SL. NO.	DETAILS OF DOCUMENTS	BIDDER'S CONFIRMATION
01.	EMD OF REQUISITE AMOUNT IS SUBMITTED IN THE FORM OF DD/BG FROM ANY SCHEDULED BANK AS MENTIONED IN RFQ.	EITHER DEMAND DRAFT DD NO. _____ DATED: _____ DRAWN ON: _____ OR BANK GUARANTEE BG NO. _____ DATED: _____ VALID UPTO: _____ (BG VALID UPTO 06 MONTHS FROM THE DUE DATE OF SUBMISSION OF BID)
02.	SUBMISSION OF DOCUMENTS AS PER EXHIBIT 'A' DULY FILLED IN SUBMITTED.	
03.	VALIDITY OF OFFER IS UP TO FOUR (04) MONTHS FROM THE DATE OF SUBMISSION OF TECHNO-COMMERCIAL PART.	YES VALID UPTO: _____
04.	POWER OF ATTORNEY IN FAVOUR OF PERSON WHO HAS SIGNED THE OFFER IN STAMP PAPER OF APPROPRIATE VALUE.	
05.	PARTNERSHIP DEED IN CASE OF PARTNERSHIP FIRM AND ARTICLES OF ASSOCIATION IN CASE OF LIMITED COMPANY.	
06.	COPY OF THE P. F. REGISTRATION CERTIFICATE ISSUED BY THE P. F. AUTHORITIES.	YES EPF REGISTRATION NO: _____
07.	ORIGINAL BIDDING DOCUMENT ALONG WITH BLANK (UN-PRICED) COPY (2 NOS) OF PRICE BID (SCHEDULE OF RATES) AND ADDENDUM, IF ANY.	
08.	NO DEVIATION CONFIRMATION IN THE PROFORMA ENCLOSED.	
09.	AFFIDAVIT DULY NOTARIZED, AS PER CLAUSE NO. 38.2 OF SPECIAL CONDITIONS OF CONTRACT PART – A.	
10.	ALL PAGES / DOCUMENTS ARE STAMPED AND SIGNED BY THE AUTHORIZED SIGNATORY OF THE BIDDER TOWARDS ACCEPTANCE OF TERMS AND CONDITIONS OF THE TENDER.	
11.	COPY OF PAN CARD DULY ATTESTED.	

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

COMPANY SEAL : _____

FORM - 1
ANNUAL TURNOVER

Annual Turnover data for the last 3 years:

YEAR	AMOUNT
YEAR 1: FINANCIAL YEAR:	
YEAR 2: FINANCIAL YEAR:	
YEAR 3: FINANCIAL YEAR:	

1. The information supplied should be the Annual Turnover of the bidder.
2. A brief note should be appended describing thereby details of turnover as per audited results.

SEAL AND SIGNATURE OF THE BIDDER

FORM – II
FINANCIAL SITUATION
BIDDER MUST FILL THIS FORM
FINANCIAL DATA FOR LAST AUDITED FINANCIAL YEAR

DESCRIPTION	FINANCIAL YEAR- 2012-2013 AMOUNT
1. CURRENT ASSETS	
2. CURRENT LIABILITIES	
3. WORKING CAPITAL (CURRENT ASSETS LESS CURRENT LIABILITIES)	
4. NET WORTH OWNERS FUNDS (PAID UP SHARE CAPITAL AND FREE RESERVES & SURPLUS) (NW)	
5. PROFITS BEFORE TAXES (PBT)	
6. RETURN. ON EQUITY (PBT / NW) X 100	

1. Attached are copies of the audited balance sheets, including all related notes and income statement for the **last Audited Financial year**, as indicated above, complying with the following conditions?
 - All such documents reflect the financial situation of the bidder
 - Historic financial statements must be audited by a certified accountant.
 - Historic financial statements must be complete, including all notes to the financial statements.
 - Historic financial statements must correspond to accounting periods already completed and audited (no statement for partial periods shall be requested or accepted)

SEAL AND SIGNATURE OF BIDDER

ACKNOWLEDGEMENT CUM CONSENT LETTER

(Within 7 days of receipt of Bidding document, Bidder shall acknowledge the receipt and confirm his intention to Bid against the enquiry/tender through e-mail to or per return FAX by filling up the this Format.)

To,
DGM (C&P)
CENTRAL WARE HOUSE
BCPL Project Site
Lepetkata-786006
Dibrugarh, Assam

SUBJECT: TENDER NO.: BCPL/C&P/DIB/SER/20130139/SD

Dear Sir,

We hereby acknowledge receipt of a complete set of bidding document along with enclosures for subject item/work.

We undertake that the contents of the above bidding document shall be kept confidential and further that the drawings, specifications and documents shall not be transferred and that the said documents are to be used only for the purpose for which they are intended.

A) We intend to bid as requested for the subject item/work and furnish following details with respect to our quoting office:

(i) Postal Address with PIN Code :

.....

.....

(ii) Telephone Number :

(iii) Telefax Number :

(iv) Contact Person :

(v) E-mail Address :

(v) Mobile Number :

B) Details of Contact person:

(i) Postal Address with PIN Code:

.....

.....

(ii) Telephone Number :

(iii) Fax Number :

(iv) Contact Person :
(v) E-mail Address :
(vi) Mobile Number :

- C) We are unable to bid for the reasons given below and we are returning back the entire set of bidding documents.

Reasons for non-submission of bid:

Agency's Name :
Signature :
Name :
Designation :
Date :
Seal/Stamp :

CERTIFICATE FROM BIDDER / STATUTORY AUDITOR/CHARTERED ACCOUNTANT

(ALL THE CERTIFICATES SHOULD BE IN LETTER HEADS OF RESPECTIVE BIDDER / STATUTORY AUDITOR/CHARTERED ACCOUNTANT)

- (i) Covering letter from Statutory Auditor/Chartered Accountant.
- (ii) Format-A for Ownership/Possession of Equipment/Vehicles.
- (iii) Format-B for Financial Capacity and Experience Criteria for Hiring of Legal or similar consultant.
- (iv) Format-C for Details of Similar Supply of Goods. Works/Services in past 07 years and certification from a Chartered Accountant in case audit of accounts is not mandatory as per Law (present ceiling of Annual Turnover is ₹. 40 Lakhs in India).
- (v) Format-D for Details of Similar Supply of Goods/Works/Services in past 07 years and certification from a Statutory Auditor who audits Annual accounts of bidder.
- (vi) Format-E for Details of Financial Capability of the bidder.

(COVERING LETTER ON LETTER HEAD)

To,

Date:

Sub: Certificate regarding.....

Dear Sir,

We..... (Name of Statutory Auditor/Chartered Accountant) are the Statutory Auditor/Chartered Accountant of M/s..... (name of bidder).

We hereby confirm that we have issued following certificate:

- 1.
- 2.
- 3.

Thanking You,

Place
Date

(Signature)
Name of Authorized Signatory
Membership no.:

Encl: As above

Note:

Bidder whose accounts are not audited by auditors as per Law/Jurisdiction, certification from a Chartered Accountant to be submitted.

FORMAT FOR CERTIFICATION FROM STATUTORY AUDITOR/CHARTERED ACCOUNTANT* (FOR OWNERSHIP/POSSESSION OF EQUIPMENT/VEHICLES)

Certificate from the Statutory Auditor/Chartered Accountant* regarding Ownership/Possession

Based on the books of accounts and other published information authenticated by.....(name of the Bidder), this is to certify that.....(name of the Bidder) located at.....(address) owns the title/possess (strike out whichever is not applicable) the equipment/vehicles as per enclosed list.

Further, M/s..... (Name of the Bidder) have been undertaking.....services/operations (name of the services) since..... (Mention the number of years in operation).

Name of Audit Firm/:
Chartered Accountant
Date:

[Signature of Authorized Signatory]
Name:
Designation:
Seal:
Membership no.

Note:

- (i) List of Equipment owned by the bidder to be enclosed along with certificate must indicate capacity/make/model etc. Further the list should also be signed by the Statutory Auditor/Chartered Accountant* who is issuing the above certificate.
- (ii) List of Vehicles owned by the bidder to be enclosed along with certificate must indicate Registration number/make/model/year etc. Further the list should also be signed by the Statutory Auditor/Chartered Accountant* who is issuing the above certificate.
- (iii) *Bidder whose accounts are not audited by auditors as per law/jurisdiction, certification from a Chartered Accountant to be submitted.

FORMAT FOR CERTIFICATE FROM STATUTORY AUDITOR/CHARTERED ACCOUNTANT* (APPLICABLE FOR HIRING OF LEGAL OR SIMILAR CONSULTANTS)

i) FORMAT FOR ASCERTAINING THE FINANCIAL CAPACITY OF THE CONSULTANT:

S. N.	FINANCIAL YEAR	CONSULTANCY REVENUE/TURN OVER (SPECIFY CURRENCY AND AMOUNT)
1.		
2.		
3.		

Certificate from the Statutory Auditor/Chartered Accountant*

This is to certify that.....(name of the Bidder) has Consultancy Revenue/Turn over in the respective years as shown above.

Name of Audit Firm/
Chartered Accountant
Date:

[Signature of Authorized Signatory]
Name:
Designation:
Seal:
Membership no.

* Bidder whose accounts are not audited by auditors as per Law/Jurisdiction., certification from a Chartered Accountant to be submitted.

ii) Format for ascertaining the Experience Criteria of Consultant#:

S.N.	NAME OF CLIENT	NAME OF JOB/CONTRACT	ESTIMATED VALUE OF CONTRACT (SPECIFY CURRENCY & AMOUNT)	PAYMENT OF CONSULTANCY REVENUE RECEIVED BY THE APPLICANT (SPECIFY CURRENCY & AMOUNT) (IF APPLICABLE)
(1)*	(2)	(3)	(4)	(5)
1				
2				
3				

Applicant should provide details of only that Consultancy Job that have been undertaken by it under its own name.

* The names and chronology of Consultancy Job included here should conform to the project-wise details.

Certificate from the Statutory Auditor/Chartered Accountant*

This is to certify that the information contained in Column 5 above is correct as per the accounts of the Applicant and/or the client.

Name of Audit Firm/
Chartered Accountant
Date:

[Signature of Authorized Signatory]

Name:
Designation:
Seal:
Membership no.

* Bidder whose accounts are not audited by auditors as per Law/Jurisdiction, certification from a Chartered Accountant to be submitted.

FORMAT FOR CERTIFICATE FROM CHARTERED ACCOUNTANT FOR DETAILS OF SIMILAR SUPPLY OF GOODS/WORKS/SERVICES IN PAST 07 YEARS.

(Applicable for cases where bidder's account are not audited by Statutory Auditor as per Law/Jurisdiction)

NAME OF THE WORK	
NAME, ADDRESS AND CONTACT DETAILS OF CLIENT	
P.O. / W.O NO.	
SCOPE OF WORK OF BIDDER	
DATE OF COMMENCEMENT OF THE PROJECT/WORK	
DATE OF COMPLETION OF THE PROJECT/WORK	
TOTAL EXECUTED VALUE FROM THE PROJECT/WORK (SPECIFY CURRENCY AND AMOUNT)	

- (i) Copies of Letter of awards/Order/Work Orders and completion certificate (in case of works/services) or IRN/Proof of delivery (in case of supplies, if applicable) to be enclosed.
- (ii) The Supply/Work/Services completed earlier than 07 years need not be indicated here.
- (iii) The list of Supply/Work/Services, not of similar nature need not be indicated here. Failing to comply aforementioned instructions may lead to rejection of bid.

[Signature of Authorized Signatory of Bidder]

Name:

Designation:

Seal:

Date:

Place:

FORMAT FOR CERTIFICATION BY CHARTERED ACCOUNTANT

Certificate from the Chartered Accountant regarding Supply of Good/Works/Services

Based on its books of accounts and other published information authenticated by it, (this is to certify that LOA/PO/WO No.....dated.....was awarded to.....(name of the Bidder) by(Name of Client) to execute.....(name of Supply/work/Service). The Supply/Works/Services commenced on..... (Date) and was/is likely to be completed on..... (Date, if any). It is certified that the total value of contract/order executed by.....(name of bidder) was(Specify Currency and amount) and executed value was.....(Specify Currency and amount).

Name of Audit Firm/:
Chartered Accountant
Date:

[Signature of Authorized Signatory]

Name:
Designation:
Seal:
Membership no.

FORMAT-D**FORMAT FOR CERTIFICATE FROM STATUTORY AUDITOR FOR DETAILS OF SIMILAR GOODS/WORK/SERVICES SUPPLIED/DONE DURING PAST 07 YEARS.****(Applicable in all cases where bidder's accounts are audited by Statutory Auditor)**

S. No.	Description of the Goods/Works/Services	LOA/PO/WO No. and date	Full Postal Address & phone nos. of Client. Name, designation and address of Engineer/Officer-in-Charge (for cases other than purchase)	Value of Contract/Order (Specify Currency Amount)	Date of Commence-ment of Work/Services or supply of goods	Scheduled Completion Time (Months) Delivery Schedule	Date of Actual Completion/ Supply	Reasons for delay in execution, if any
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Pl refer instruction								

Place:

[Signature of Authorized Signatory of Bidder]

Name

Designation:

Date:

Seal:

Instructions:

1. Copies of Letter of awards/Order/Work others and completion certificate (in case of works/services) or IRN/Proof of delivery (in case of supplies, if applicable) to be enclosed.
2. The Supply/work/Services completed earlier than 07 years need not be indicated here.
3. The list of Supply/Work/Services, not of similar nature need not be indicated here. Failing to comply aforementioned instructions may lead to rejection of bid.
4. Bidders are expected to provide details in respect of each Order in this Annex. The orders cited must comply with the Bid Evaluation criteria specified in Tender Document. Details provided in this section are intended to serve as a backup for information provided in Offer/Quotation. Bidder should also refer to the Instructions below.
5. A separate sheet should be filled for each LOA/Work Order/Purchase Order.
6. Certificate from the Bidder's statutory auditors must be furnished in the format below for LOA/Work Order/Purchase Order mentioned above (separately for each orders).
7. It may be noted that in the absence above certificates, the details would be considered inadequate and could lead to the bid being considered ineligible for further evaluation.

Certificate from the Statutory Auditor regarding Supply of Good/Works/Services

Based on its books of accounts and other published information authenticated by it, (this is to certify that LOA/PO/WO No.....dated.....was awarded to.....(name of the Bidder) by(Name of Client) to execute.....(name of Supply/work/Service). The Supply/Works/Services commenced on..... (Date) and was/is likely to be completed on..... (Date, if any). It is certified that the total value of contract/order executed by.....(name of bidder) was(Specify Currency and amount) and executed value was.....(Specify Currency and amount).

Name of Audit Firm/:
Chartered Accountant
Date:

[Signature of Authorized Signatory]

Name:
Designation:
Seal:
Membership no.

FORMAT FOR STATUTORY AUDITOR'S/CHARTERED ACCOUNTANT* CERTIFICATE FOR FINANCIAL CAPABILITY OF THE BIDDER

(For Supply of Goods/Works/Services)

We have verified the Annual Accounts and other relevant records of M/s..... (Name of the bidder) and certify the following.

A. ANNUAL TURNOVER OF LAST 3 YEARS:

YEAR	AMOUNT (CURRENCY)
Year 1:	
Year 2:	
Year 3:	

B. FINANCIAL DATA FOR LAST AUDITED FINANCIAL YEAR:

DESCRIPTION		YEAR____ (AMOUNT - CURRENCY)
1.	Current Assets	
2.	Current Liabilities	
3.	Working Capital (Current Assets-Current liabilities)	
4.	Net Worth (Paid up share capital and Free Reserve & Surplus)	

Name of Audit Firm/
Chartered Accountant
Date:

[Signature of Authorized Signatory]

Name:
Designation:
Seal:
Membership no.

INSTRUCTIONS:

1. The financial year would be the same as one normally followed by the bidder for its Annual Report.
2. The bidder shall provide the audited annual financial statements as required for this Tender document. Failure to do so would result in the Proposal being considered as non-responsive.
3. For the purpose of this Tender document, (i) Annual Turnover shall be "Sale value/Operating Income" (ii) Working Capital shall be "Current Assets less Current liabilities" and (iii) Net Worth shall be "Paid up share capital and Free Reserves & Surplus."
4. * Bidder whose accounts are not audited by auditors as per law/jurisdiction, certification from a Chartered Accountant to be submitted.

INSTRUCTIONS TO BIDDERS

DESCRIPTION:

NAME OF WORK: ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA , DIBRUGARH, (ASSAM)

(TENDER NO. **BCPL/DIB/C&P/SER/20130139/SD**)

1.0 BIDDING DOCUMENT, CLARIFICATION AND ADDENDUM

1.1 BIDDING DOCUMENT:

1.1.1 One set of bidding document (Tender document) are issued. Bidder shall submit the Tender document duly signed & stamped on each page of tender in token of his acceptance along with his bid.

1.1.2 Transfer of bidding document issued to one intending bidder to another is not permissible.

1.1.3 Bid shall remain valid for 120 days from the date of submission of Bid.

1.2 CLARIFICATION REQUESTS BY BIDDER:

1.2.1 Although the details presented in this Bidding document consisting of conditions of contract, scope of work, technical specifications and drawings have been compiled with all reasonable care, it is the Bidder's responsibility to ensure that the information provided is adequate and clearly understood.

1.2.2 Bidder shall examine the bidding documents thoroughly in all respect.

1.2.3 Any failure by Bidder to comply with the aforesaid requirement shall not excuse the Bidder, after subsequent award of contract, from performing the work in accordance with the agreement.

1.3 AMENDMENT OF BIDDING DOCUMENT:

1.3.1 BCPL may, for any reason whether at his own initiative or in response to the clarification requested by the prospective Bidder, issue amendment in the form of addendum during the Bidding period and subsequent to receiving the bids. Any addendum thus issued shall become part of Bidding document and Bidder shall submit 'original' addendum duly signed and stamped in token of his acceptance.

1.3.2 For addendum issued during the Bidding period, Bidder shall consider the impact in his Bid. For addendum issued subsequent to receiving the Bids, Bidder shall follow the instructions issued along with addendum with regard to submission of impact on quoted price / revised price, if any.

1.4 CONFIDENTIALITY OF DOCUMENT:

1.4.1 Bidder shall treat the Bidding document and contents thereof as confidential.

1.5 ACKNOWLEDGEMENT & CONFIRMATION OF BID:

1.5.1 Within 7 days of receipt of bidding document, Bidder shall acknowledge the receipt and confirm his intention to Bid for the Bidding work.

2. EARNEST MONEY DEPOSIT:

- 2.1** The bid must be accompanied by earnest money (interest free) for the amount indicated in 'Request for Quotation' in the form of a Demand Draft drawn on any Nationalized/Scheduled Bank in favour of M/s. Brahmaputra Cracker & Polymer Limited payable at DIBRUGARH, ASSAM or in the form of Bank guarantee issued by Nationalized Bank for an equal amount valid for six (06) months from the due date of submission of bid as per the format enclosed in bidding document. Bid not accompanied by earnest money will not be considered unless the same is exempted as per 'Letter Inviting Tender'. Bank guarantee shall be revalidated for extended period as required by BCPL in writing.
- 2.2** If the bidder, after submission, revokes his bid or modifies the terms and conditions thereof during the validity of his bid except where the BCPL has given opportunity to do so, the earnest money submitted by Bidder will, in such case, not be refunded to him.
- 2.3** BCPL may at any time cancel or withdraw the invitation to bid without assigning any reason and the earnest money submitted by Bidder will in such case be refunded to him.
- 2.4** The successful Bidder shall be required to deposit within 10 days of acceptance of his bid, security deposit / Initial Security Deposit with the BCPL in the manner indicated in General Conditions of Contract / Special Conditions of Contract. Should the successful Bidder fail or refuse to sign the agreement or furnish the security deposit / initial security deposit within the period fixed by the BCPL as indicated above, the earnest money shall be forfeited without prejudice to his being liable to any further loss or damage incurred in consequence by the BCPL.
- 2.5** Earnest money shall be returned to the successful Bidder after the security deposit / initial security deposit has been furnished by him to the BCPL.

3.0 SCHEDULE OF RATES:

- 3.1** The schedule of Rates shall be read in conjunction with all other sections of bidding document.
- 3.2** The rates quoted by the bidder shall be firm and fixed for the completion period of the tendered works, unless stated otherwise. The rates quoted by the Bidder shall include all taxes, duties & levies except Service Tax and any cess thereon. Service Tax and cess thereon shall be paid by BCPL extra at actual against CENVAT invoice to be submitted by the bidder. Notwithstanding the instructions given above, in case any bidder(s) mention the terms such as "Inclusive" or "Included" in respect of Service Tax, their bids will still be evaluated considering the prices exclusive of Service Tax. However, in the event of such bidder emerging as the lowest bidder based on this evaluation, the award shall be made considering the service tax included in the quoted rates and the same will be conclusive and binding on the bidder. Further, the bidder will be required to submit Cenvat invoice to enable BCPL to avail Cenvat benefit.
- 3.3** Rates must be filled in format for 'schedule of rates' enclosed as part of bidding document. If quoted in separate typed sheets and any variation in description, unit is noticed, the bid is liable to be rejected. In any case bidder shall be presumed to have quoted against the description of work and the same shall be binding on the bidder.
- 3.4** In case any activity though specifically not covered in description of 'Schedule of Rates' but is required to complete the work as per Scope of Work, Scope of Supply, Specifications, Standards, Drawings, General Conditions of Contract, Special condition of contract or any other part of bidding document, the quoted rates will deemed to be inclusive of cost incurred for such activity.

- 3.5 The rates shall include all expenditure incurred towards mobilization and demobilization.
- 3.6 Rates quoted shall be in Indian Rupees Only.
- 3.7 Bidder shall quote rates both in figures as well as in words.

4.0 DOCUMENTS COMPRISING THE BID:

- 4.1 Bidder is advised that BCPL intend to fully evaluate the technical and un-priced commercial submissions.
- 4.2 It is important that Bidder clearly demonstrates his experience and capability, giving to BCPL a high level of confidence that if awarded, the Bidder will be able to perform the works within the stipulated Time Schedule and quoted price and meeting all other requirements listed in the Bidding document.
- 4.3 Bidder is requested to furnish the complete and correct information required for evaluation of his Bid. If the information with regard to resources and concurrent commitments or any other information / documentation forming basis of evaluation is found in complete / incorrect the same may be considered adequate ground for rejection of the bid.
- 4.4 Bidder shall arrange his bid in the following order:

i) PART-I TECHNICAL AND UN-PRICED COMMERCIAL PART (TECHNO-COMMERCIAL BID)

:

Technical and un-priced commercial part shall comprise the attachments, specifying attachment number arranged in the order as follows:

- a) Submission of bid letter along with Bidding document (Tender document), Earnest Money Deposit and its details.
- b) Attested copies of documents as mentioned in Request for Quotation
- c) Copy of tender document duly signed and stamped towards acceptance to terms and conditions of the tender.
- d) Power of Attorney in favour of authorized signatory of the Bidding document.
- e) Organization details
 - In case of a proprietorship firm, the name and address of proprietor, and certified copy of 'Certificate of registration of firm'.
 - In case Bidder is a partnership firm, certified copy of the partnership deed.
 - In case of company (whether private or public), certified copy of the 'Certificate of Incorporation' together with certified Memorandum / articles of Association.
- f) Copy of "Schedule of Rates" without any prices (which will be left blank) duly signed and stamped.
- g) Technical offer if any, required as per Bidding document.
- h) Check list (Exhibit-A)
- i) Any other relevant document, Bidder desires to submit.

ii) PART-II PRICED COMMERCIAL PART (PRICE BID):

- a) Priced commercial Part shall contain "Schedule of Rates" duly filled in .Two copies i.e. one ORIGINAL COPY and one DUPLICATE copy of "Schedule of Rates" shall be submitted.

- b) No stipulation, deviation, terms & conditions, presumption, basis etc. shall be stipulated in Price part of bid. BCPL shall not take cognizance of any such statement and may at their discretion reject such price bids.

5.0 SUBMISSION OF BID:

5.1 SUBMISSION IN TWO SEPARATE ENVELOPS:

5.1.1 Un-priced and priced part must be submitted in separate sealed envelopes in following 2 parts:

i) **PART-I – TECHNICAL AND UN-PRICED COMMERCIAL PART**

- a) This part shall contain technical and commercial (Un-priced) bid. This envelope shall comprise the signed copy of Bidding document (Tender document), drawings, addendum (if any), one original and 1 copy of the information listed for submission in Part –I under Para 4.4. above. Techno-commercial bid containing prices shall be summarily rejected.
- b) The envelope shall have following information clearly written on the outside of the envelope, failing which BCPL will assume no responsibility for the misplacement or premature opening of the bid.

Part-I Technical and Un-priced Commercial Part.

Name of Work: _____

Bidding document No.: _____

Due date & time of Opening: _____

From : [Name & Address of Bidder]: _____

- c) Original earnest money deposit (EMD shall also be enclosed in this part.

ii) **PART-II SEALED PRICED COMMERCIAL PART:**

- a) This part of the bid shall contain the Schedule of Rates, duly filled in all respects and other information specifically requested for submission in price part under Para 4.4 ii) above. The envelope shall have the following information clearly written on outside of the envelope, failing which BCPL will assume no responsibility for the misplacement or premature opening of the bid.

PART-II – PRICE PART

Name of Work : _____

Bidding document No. : _____

From :[Name & Address of Bidder] : _____

- b) This part of Bid will be submitted in original plus one copy.

5.2 DATE, TIME & PLACE OF SUBMISSION:

5.2.1 Bid must be submitted by the due date and time mentioned in the Letter Inviting Tender or any extension thereof as duly notified in writing by BCPL at the following address:

DEPUTY GENERAL MANAGER (C&P), CENTRAL WARE HOUSE, BCPL PROJECT SITE, LEPETKATA-786006, DIBRUGARH, ASSAM INDIA.

5.2.2 Bid received after the time and date fixed for receipt of bid is liable for rejection.

5.3 CHECK LIST FOR SUBMISSION OF BID:

- 5.3.1 To assist bidder in ensuring the completeness of bid, a checklist for submission of various documents / details in 'technical & un-priced commercial part of bid has been enclosed to "INSTRUCTIONS TO BIDDERS". Bidder, in his own interest, is requested to fill the checklist and submit along with his bid for ready reference.
- 5.3.2 In case of incomplete submissions, BCPL will not be under any obligation to give the bidder an opportunity to make good such deficiencies and BCPL may at its discretion treat such bids as incomplete and not consider for further evaluation.

6.0 BID OPENING AND EVALUATION:

6.1 OPENING OF TECHNO-COMMERCIAL PART OF BID

- 6.1.1 On the date and time mentioned in 'Letter Inviting Tender' (if specified), Part-I i.e. Technical and un-priced commercial Part will be opened in the office of BCPL, CENTRAL WARE HOUSE, BCPL Project Site, Lepetkata-786006, Dibrugarh, Assam.
- 6.1.2 In the event, the specified date of bid opening is declared a holiday for BCPL, the bid shall be opened on the next working day at the specified time and location.

6.2 CLARIFICATION & ADDITIONAL INFORMATION:

During evaluation, BCPL may request Bidder for any clarification on the bid, additional or outstanding documents. Bidder shall submit all additional documents in one original and one copy. However, seeking clarification shall be on sole discretion of BCPL.

6.2 TECHNO-COMMERCIAL DISCUSSIONS:

- 6.3.1 Bid of the bidder who submits the required EMD shall be taken up for detailed evaluation.
- 6.3.2 Techno-commercial discussions with bidder shall be arranged, if needed. Bidder shall depute his authorized representative(s) for attending the discussion. The representative(s) attending the discussions shall produce authorization from his organization to attend the discussions and sign the minutes of meeting on behalf of his organization. The authorized representatives must be competent and empowered to settle all technical and commercial issues.

6.4 BID EVALUATION CRITERIA:

- 6.4.1 Bid is the responsibility of bidder and no relief or consideration can be given for errors and omissions made by the bidder inadvertently or adherently. Bid with incomplete information is liable for rejection.
- 6.4.2 The techno-commercial part of bid shall be evaluated as per bid evaluation criteria, wherever indicated in the bidding document.
- 6.4.3 Non-submission of details / documents as per Para (4.4.) above may lead to rejection of bid.

6.4.4 REJECTION CRITERIA:

- I) Bidders are advised to strictly confirm compliance to tender condition and not to stipulate any deviation / condition in their offer. Bids received with deviation to tender condition especially to the following clauses shall be considered non-responsive and shall be summarily rejected:

- I. Firm Price
- II. EMD / Bid Bond
- III. Scope of Work
- IV. Specification
- V. Price Schedule / Schedule of rates
- VI. Delivery / Completion Schedule
- VII. Period of Validity of Bid
- VIII. Price Reduction Schedule
- IX. Performance Bank Guarantee / Security Deposit
- X. Guarantee
- XI. Arbitration / Resolution of Dispute
- XII. Force Majeure
- XIII. Applicable Laws
- XIV. EPF Registration in case of Domestic bidder
- XV. Clauses no.6.4.2 and 6.6 of instruction to bidders.
- XVI. Any other condition / clauses mentioned in the tender documents.
- XVII. Penalty/Compensation for delay
- XVIII. Defect Liability period
- XIX. Termination
- XX. Time schedule

6.4.5 GUIDELINES FOR SCRUTINY/COMPARISON OF BIDS:-

The discrepancies in rate filled for various items shall be resolved in the following manner:-

- (v) When there is a difference between the rates in figures and words, the rate which corresponds to the amount worked out by the contractor (by multiplying the quantity and rate) shall be taken as correct.
- (vi) When the rate quoted by the contractor in figures and words tallies but the amount is incorrect, the rate quoted by the contractor shall be taken as correct and not the amount and the amount corrected.
- (vii) When it is not possible to ascertain the correct rate, in the manner prescribed above, the rate as quoted in words shall be adopted and the amount worked out, for comparison purposes.
- (viii) In case it is observed that any bidder has not quoted for any item in the Schedule of Rates (Such unquoted item not being in large numbers), the quoted price for the purpose of evaluation shall be considered as the maximum rate quoted by the remaining bidder for such items.

If after evaluation, such bidder is found to be the lowest evaluated bidder, the rates for the missing item shall be considered as included in quoted bid price.

If the estimated price impact of the unquoted items is more than 10% of the bidder's quoted price, the above provision shall not be applicable and such bid shall be rejected.

ABNORMALLY HIGH RATED ITEMS (AHR ITEMS):

In items rate contract where the quoted rates for the items exceed 50% of the estimate rates, such items will be considered as Abnormally High Rates Items (AHR) and payment of AHR items beyond the SOR stipulated quantities shall be made at the lowest amongst the following rates:

- (I) Rates as per SOR, quoted by the contractor.
- (II) Rate of the item, which shall be derived as follows:
 - a) Based on rates of machine and labor as available from the contract (which includes contractor's supervision, profit, overheads and other expenses).
 - b) In case rates are not available in the contract, rates will be calculated based on prevailing market rates of machine, material and labor plus 10% to cover contractor's supervision profit, overhead & other expenses.

6.4.6 DETERMINATION OF RESPONSIVENESS:

- i) Prior to the financial evaluation of bids, the BCPL will determine whether each bid is substantially responsive to the requirements of the Bidding document.
- ii) For the purpose of this clause, a substantially responsible bid is one, which conforms to all the terms and conditions and specifications of the bidding document without material deviation or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of the works or which limits in any substantial way, in consistent with the bidding document, the employer's rights of contractor's obligation would affect unfairly the competitive position of bidders presenting substantially responsive bids.
- iii) If a bid is not substantially responsive to the requirements of the Bidding documents, it may be rejected by the BCPL.

6.4.7 Bidders must submit the bid in line with bid stipulations without taking any deviation. However, in case it becomes unavoidable and the Bidder seeks some clarifications / queries with respect to technical / commercial part, the bidder may stipulate the same strictly as per Annexure-I for the technical and commercial part.

6.4.8 UNSOLICITED POST BIDDING MODIFICATIONS:

Bidders are advised to quote strictly as per terms and conditions of the bidding document and not to stipulate any deviations / exceptions. Once quoted, the bidder shall not make any subsequent changes, whether resulting or arising out of any technical / commercial clarifications sought on any deviations or exceptions mentioned in the bid. Any proposal price change is likely to render the bid liable for rejection.

- 6.4.9 Bidders must ensure that complete bid along with all details as sought are submitted as per provisions of the bidding document. The checklist has been provided in the bidding document to ensure that any required details are not missed by the bidders while submitting their offer.
- 6.4.10 Proposed deployment of resources like manpower, equipment, tools and tackles shall be looked into to ensure performance of work within stipulated time period.
- 6.4.11 The concurrent commitments of Bidder on various jobs under execution by the bidder will be taken into account to assess the spare capacity available with the Bidder.
- 6.4.12 Performance of bidder on work executed / under execution shall be taken into consideration before selecting the bidder for opening of his price bid.

6.4.13 MECHANIZED CONSTRUCTION:

- i) Bidder shall furnish construction methodology based on mechanized construction techniques for execution of work along with details of plant & machinery to be

- deployed. The bidder shall assess the number and type of plant and machinery for the scope of work and the completion schedule.
- ii) Bidder will deploy the required numbers and types of plant & machinery applicable for different activities in consultation with the Engineer-In-Charge after award and during execution of work with respect to actual mobilization required.

6.5 OPENING OF PRICE PART OF BID:

Priced commercial part of only those bidder, whose bids are considered techno-commercial acceptable, shall be opened.

6.6 EVALUATION OF PRICES:

The "Schedule of Rates" quoted by the bidder shall be taken up for evaluation on overall basis. Price bids containing additional qualifications not mentioned in Techno-Commercial part of the bid shall be summarily rejected.

6.8 PROCESS TO BE CONFIDENTIAL:

Information related to the examination, clarification, evaluation and comparison of bids recommendations for award of contract shall not be disclosed to bidder or other person not officially concerned with such process. Any effort by bidder to influence the BCPL processing of bid or award decisions may result in rejection of such Bids and the owner may initiate action against such bidders, as deemed fit, including putting them on "HOLIDAY LIST".

6.9 OWNER'S RIGHT TO ACCEPT OR REJECT A BID:

- 6.9.1 BCPL reserves the right to accept a bid other than the lowest and to accept or reject any bid in whole or part, to annul the bidding process or to reject all bids with or without notice or reasons. Such decisions by BCPL shall bear no liability whatsoever consequent upon such decisions.

7.0 AWARD OF WORK AND CONTRACT DOCUMENT:

7.1 AWARD OF WORK:

- 7.1.1 The bidder whose bid is accepted by BCPL shall be issued Letter of Intent / fax of Intent (LOI/FOI) prior to expiry of bid validity. Bidder shall confirm acceptance by returning a signed copy of the LOI / FOI.

- 7.1.2 BCPL shall not be obliged to furnish any information / clarification / explanation to the unsuccessful bidders as regards non acceptance of their bids. Except for refund of EMD to unsuccessful bidder, BCPL shall correspond only with the successful bidders.

7.2 CONTRACT DOCUMENT:

- 7.2.1 The successful bidder shall be required to execute a formal agreement in accordance with the 'Form of Contract' (Annexed to General Condition of Contract (GCC)), within 10 days of receipt of LOI/FOI/Detailed Letter of Award specified period.

- 7.2.2 Contract Documents to be signed between BCPL & selected bidder shall consist of the following:

- i) Agreement on stamp paper of appropriate value.

- ii) Letter of Intent / Fax of Intent
- iii) Detailed letter of award / acceptance along with agreed variation and other enclosures.
- iv) Original bidding document along with set of drawings
- v) Addendum/Corrigendum issued to bidder, if any.

7.2.3 Stamp paper of appropriate value shall be provided by the successful bidder after ascertaining its value.

7.2.4 The statement of Agreed variation prepared based on the deviation if any, finally retained by the bidder and accepted by BCPL, shall form part of detailed letter of award.

7.2.5. The information required in FORM 32 must be submitted to EIC within 15 days from the date of placement of Letter of award.

7.2.6. Bidders if so desires, may seek in writing the reason for rejection of their bid, to which BCPL shall respond quickly.

SPECIAL CONDITIONS OF THE CONTRACT

PART-A

DESCRIPTION:

NAME OF WORK: **ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA , DIBRUGARH, (ASSAM)**

TENDER NO: BCPL/DIB/C&P/SER/20130139/SD

1.0 GENERAL:

- 1.1 The Special Condition of Contract shall be read in conjunction with the General Conditions of Contract, Schedule of rates, specifications, drawings and any other documents forming part of contract, wherever the context so requires. Notwithstanding the sub-division of the documents into these separate sections and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the CONTRACT so far as it may be practicable to do so.
- 1.2 Where any portion of the General Condition of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, unless a different intention appears, the provisions of the Special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.
- 1.3 Wherever it is mentioned in the specifications that the CONTRACTOR shall perform certain WORK or provide certain facilities, it is understood that the CONTRACTOR shall do so at his cost and the VALUE OF CONTRACT shall be deemed to have included cost of such performance and provisions, so mentioned.
- 1.4 The materials, design, and workmanship shall satisfy the relevant INDIAN STANDARDS, the JOB SPECIFICATIONS contained herein and CODES referred to. Where the job specification stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied.
- 1.5 The intending bidder shall be deemed to have visited the site. Non-familiarity with site condition and unawareness of General Condition of contract will not be considered a reason either for extra claim or for not carrying out work in strict conformity with drawings and specifications.

2.0 LOCATION:

BCPL & CISF TOWNSHIP, Lepetkata, Dibrugarh, Assam.

3.0 SCOPE OF WORK:

The Scope of work shall be as per Special Conditions of Contract Part-B.

4.0 TIME OF COMPLETION/PERIOD OF CONTRACT:

The Time of Completion/Period of Contract shall be as per Special Conditions of Contract Part-B.

The work shall be executed strictly as per time Schedule given in Tender Document. The period of completion given includes the time required for mobilization as well as testing, rectifications, if any, re-testing and completion in all respects to the entire satisfaction of the Engineer-in-Charge.

5.0 TERMS OF PAYMENT:

Payment will normally be made within 30 days of submission of R.A. bills to Engineer-in-charge after applicable deduction of Income Tax and any other taxes and duties.

Other terms and conditions related to Payment terms are specified in SCC Part B.

6.0 EARNEST MONEY:

The bidder must deposit the earnest money as given in the letter/notice inviting tenders failing which the tender is liable to be rejected. Earnest Money can be paid by way of Demand Draft drawn on any Scheduled/Nationalized Bank in favor of **M/s. Brahmaputra Cracker & Polymer Limited, payable at DIBRUGARH, ASSAM**.

Alternatively, Earnest Money may also be submitted in the form of Bank Guarantee from any Nationalized/Schedule Bank of India. The Bank Guarantee so furnished by the bidder shall be in the proforma prescribed by the OWNER attached with the Tender document. No interest shall be paid by the OWNER on the Earnest Money deposited by the bidder. The Bank Guarantee furnished in lieu of Earnest Money shall be kept valid for a period of **(6) SIX MONTHS** from the date of opening of tender.

BCPL will refund the Earnest Money of the unsuccessful bidders directly to the bidders within a reasonable period of time. Correspondence in this regard may be addressed to BCPL directly by the BIDDERS.

7.0 INCOME TAX/ SALES TAX/WORKS CONTRACT TAX:

Income Tax deduction shall be made from all payments to the contractors as per rules and regulation in force in accordance with the Income Tax Act prevailing from time to time. Sales Tax, Works Contract Tax and other duties/ levies, as applicable shall be borne by the contractor.

The BCPL will issue the necessary certificate for income tax deduction at source, however, the contractor has to submit detail of their **Permanent Account No. (PAN)** before issue of such certificate. However, if the contractor has not been allotted PAN and has applied for the same to Income Tax department / the authorized agency nominated by Income Tax department, contractor shall submit the copy of application filed for allotment of PAN No. In absence of any of these documents, no TDS certificate shall be issued by BCPL.

Similarly, in case of Works Contract (involving both supply of material and services) Tax will be deducted at source by BCPL towards W.C. Tax at the rate applicable from time to time (presently 4%) and issue necessary certificate to this effect.

8.0 SERVICE TAX:

The Quoted rates should be inclusive of all taxes & duties applicable during the contract period except Service Tax and Education Cess thereon. Service Tax and Cess thereon shall be paid extra if applicable on submission of documentary evidence/invoice(s).

The bidder shall indicate in its bid the Service Tax registration no. and in case the Service Tax registration no. is not available, the bidder will give confirmation for obtaining registration with a copy of application for registration.

The Contractors liable to pay Service Tax for the work / services rendered to BCPL, shall specifically mention the Service Tax registration No. in their Invoice(s). Further, the amount and rate of Service Tax shall be separately and distinctly specified in the Invoice(s).

For payment of service tax, serially numbered invoice / bill shall be issued by the service provider and should also specify following as per rate 4A of service tax Rules:

- (i) The name, address and registration number of the service provider
- (ii) The name and address of the recipient of the taxable service
- (iii) Description, classification and value of taxable service provided and
- (iv) The service tax payable on such services

In case of non-compliance to the above, BCPL is not liable to reimburse any claim of contractor in respect of service tax. Further service tax invoices are to be raised keeping in view the new rules of service tax w.e.f. 01.07.2012.

9.0 SECURITY DEPOSIT:

9.1 Security deposit @ 10% of contract value has to be deposited within ten days of receipt of LOA/LOI by the contractor. EMD deposited with the tender shall be adjusted towards security deposit/ISD provided it is deposited by Demand Draft/Bankers Cheque.

9.2 No interest shall be payable by the Company to the contractor for the amount of Security deposit.

9.3 Contractor can furnish the initial or total security deposit amount through bank guarantee from any nationalized /Schedule bank in prescribed proforma which shall be valid for 90 days beyond completion of the job or expiry of Defect Liability Period whichever is applicable.

9.4.1 Security Deposit shall be refunded within 90 days after the completion of work or Defect Liability Period whichever is applicable.

10.0 TECHNICAL SPECIFICATION:

As enumerated in Special Conditions of Contract/Scope of Work/attached Drawing/Details/Schedule of Rates.

11.0 TESTS AND INSPECTION:

- 11.1 The Contractor shall carry out the various tests as enumerated in the technical specifications of this tender document and the technical documents that will be furnished to him during the performance of the work and no separate payment shall be made unless otherwise specified in schedule of rates.
- 11.2 All the tests either on the field or at outside laboratories concerning the execution of the work and supply of materials by the Contractor shall be carried out by Contractor at his own cost.
- 11.3 The Contractor shall provide for purposes of inspection access ladders, lighting and necessary instruments at his own cost for inspection work.
- 11.4 Any work not conforming to execution drawings, specifications or codes shall be rejected forthwith and the Contractor shall carryout the necessary rectification at his own cost.
- 11.5 All results of inspection and tests will be recorded in the inspection reports, Proforma of which will be approved by the Engineer-in-Charge. These reports shall form part of the completion documents.
- 11.6 For materials supplied by Owner, Contractor shall carryout the tests, if required by the Engineer-in-Charge, and the cost of such tests shall be reimbursed by the owner at actual to the Contractor on production of documentary evidence. Contractor shall inspect carefully all equipment before receiving them from Owner for installation purposes. Any damage or defect noticed shall be brought to the notice of Engineer-in-Charge.
- 11.7 Inspection and acceptance of work shall not relieve the Contractor from any of his responsibilities under this Contract.

12.0 MEASUREMENT OF WORK:

- 12.1 Measurement of works shall be made in the units mentioned in the Schedule of Rates as per details given in Technical/Standards specifications.
- 12.2 Wherever details are not available or inadequate in the execution drawings, physical measurements will be taken by the contractor in the presence of the representative of the Engineer-in-Charge. In such cases payment will be made on actual measurements.

13.0 DEFECT LIABILITY PERIOD:

The defect liability period shall be as per Special Conditions of Contract of Part-B.

14.0 CONSTRUCTION EQUIPMENT AND SITE ORGANIZATION:

- 14.1 The Contractor shall without prejudice to his overall responsibility to execute and complete the work as per specifications and time schedule, progressively deploy adequate equipment and tools and

Tackles and augment the same as decided by the Engineer-in-Charge depending on the exigencies of the work so as to suit the work/construction schedule without any additional cost to owner. The bidder shall submit a list of construction equipment he proposes to deploy for the subject work along with deployment schedule. No Construction Equipment shall be supplied by the Owner.

14.2 Subject to the provisions in the tender document, contractor shall deploy experienced technical personnel. The minimum requirement for deployment of Technical personnel are as under:

- 1) 1 (One) no. Project Engineer (B.E / B.Tech) having 10 years relevant experience / Diploma in Civil Engineering having 15 years of relevant experience.
- 2) 2 (Two) nos. Site Engineers (Civil), (B.E / B.Tech) having 1 year relevant experience / Diploma in Civil Engineering having 3 years of relevant experience.

Duration of deployment: Project engineer & Site engineer – Within 7 days of commencement of execution work till completion of the project.

In case of non deployment, a penalty may be imposed as per discretion of the Engineer-in-Charge subject to a maximum of **₹. 2,00,000/-**. The bidder shall submit the details of site organogram.

- The contractor shall provide for Engineer-in-Charge or his Representative at all times during the contract including defect liability period a competent Supervisor/Foreman and/or and all such other men to assist him in carrying out or checking any measurements, levels setting out or measuring up of work, inspection and approval of works etc. The contractor shall also provide all tools, ladders, gangways, etc. as necessary for inspection or measurement of the works by the Engineer-in-Charge or his Representative.

15.0 MOBILIZATION ADVANCE (M.A.):

No mobilization advance is payable for this work.

16.0 COMPENSATION FOR EXTENDED STAY:

No compensation for extended stay is payable to contractor.

17.0 ABNORMALLY HIGH RATED ITEMS (AHR ITEMS):

In items rate contract where the quoted rates for the items exceed 50% of the owners/estimated rates, such items will be considered as Abnormally High Rates Items (AHR) and payment of AHR items beyond the SOR stipulated quantities shall be made at the least of the following rates:

- (I) Rates as per SOR, quoted by the contractor.
- (II) Rate of the item, which shall be derived as follows:
 - A) Based on rates of machine and labor as available from the contract (which includes contractor's supervision, profit, overheads and other expenses).
 - B) In case rates are not available in the contract, rates will be calculated based on prevailing market rates of machine, material and labor plus 10% to cover contractor's supervision profit, overhead & other expenses.

18.0 MISCELLANEOUS:

All obligations arising of labor deployment labor laws to meet the necessary statutory requirement would solely lie on the contractor. Contractor would be solely responsible for safety and security of manpower and materials.

19.0 SUBMISSION OF TENDER DOCUMENTS:

Over-writing should be avoided. Any overwriting or cutting should be signed by the bidder. All copies of tender documents along with drawings should be signed and submitted by the bidder.

20.00 SCHEDULE OF RATES:

20.1 The quantities indicated in Schedule of Rates are just tentative. The rates quoted by the bidder shall remain firm for any variation and will assume to be inclusive of all taxes & duties excluding Service Tax & Cess thereon.

20.2 No escalation of whatsoever nature shall be paid to the contractor for the entire Contract Period.

21.00 COMPENSATION FOR DELAY:

No compensation for extended stay is payable to contractor.

22.00 TERMINATION OF CONTRACT:

The Owner/ Engineer-in-Charge reserve the right to terminate the contract on giving one-week notice without assigning any reason.

23.00 CONTRACT AGREEMENT:

If the work is awarded the contractor shall enter into an agreement with BCPL in the prescribed Performa within 10 days of the issue of LOA/LOI whichever is earlier. The agreement shall be executed on non-judicial stamp paper of ₹. 100/- .The cost of stamp paper shall be borne by the contractor. The format of agreement can be obtained from the office of the Deputy General Manager (C&P), BCPL, DIBRUGARH, ASSAM.

24.00 SUPERVISION OF WORK:

Contractor or his authorized representative shall be available at site all times, during the progress of the work.

25.00 CLEARANCE OF SITE:

25.1 As a part of the contract the contractor shall completely remove all temporary/disposable materials, while execution of work at his own cost and initiative and dispose off the same as directed by Engineer-in-charge.

25.2 The works will not be considered as complete and taken over by the owner, until all the temporary works, labor and staff colonies etc. constructed are removed and the work site cleared to the satisfaction of the Engineer-in-charge, surplus materials and rubbish is cleared off the site completely and the work shall have been measured by the Engineer-in-charge whose measurement shall be binding and conclusive.

25.3 If the contractor fails to comply with the requirements of this clause on or before the date fixed for the completion of the work, the Engineer-in-charge may at the expenses of the contractor remove such, surplus materials and rubbish and disposal off the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall forthwith pay the amount of all expenses as incurred and shall have no claim in respect of any such surplus materials as aforesaid except for any sum actually realized by the sale thereof.

26.0 ADHERENCE TO SAFETY REGULATIONS:

Contractor shall ensure that all safety precautions required one observed at all times during the execution of the job.

27.00 NUISANCE:

The contractor or his representative shall not at any time cause any nuisance on the site or do anything which shall cause unnecessary disturbance to the owners or tenants or occupants or their properties near the site and to the public generally.

28.0 OWNER NOT BOUND BY PERSONAL REPRESENTATION:

The contractor shall not be entitled to any increases on the schedule of rates or any other right or claim whatsoever by reason of any representation, explanation statement or alleged representation explanation statement or alleged representation, promise or guarantees given or called to have been given to him by any person.

29.0 CARE OF WORKS:

From the commencement to completion of the work, the contractor shall take full responsibility for the care for all works including all temporary works any in case any damages, loss or injury shall happen to the work or to a part thereof or to any temporary works from any reason.

30.0 DEFENCE OF SUITS:

If any action in court is brought against the owner or an officer or agent of the owner, for the failure, omission or neglect on the part of the contractor to perform any acts, matters, convenient or things under the contract or damage or injury caused by the alleged omission or negligence on the part of the contractor, his agents, representative or his subcontractors or in connection with any claim based on lawful demand of sub-contractor, shall in such cases indemnify and keep the owner and/or their representatives harmless from all lesson, damages, expenses or decrease arising out of such action.

31.0 RESPONSIBILITIES OF THE CONTRACTOR AND COMPLIANCE WITH LABOUR/INDUSTRIAL LAWS:

- 31.1 The contractor shall have his own PF code no. with the RPFC as required under employee PF & Miscellaneous Provisions Act, 1952.
- 31.2 The contractors shall periodically submit the challans / receipts / proof for the depositing PF contribution with RPFC.
- 31.3 The contractor is required to obtain labor license under the provisions of Contract Labor (R&A) Act, 1970 from the office of ALC, Ministry of Labor, Govt. of India, Dibrugarh.
- 31.4 The contractor is liable to abide by all necessary licenses / permissions from the concerned authorities as provided under the various labor legislations.
- 31.4.1 The contractor shall discharge obligations as provided under various statutory enactments including the employee's provident fund and Miscellaneous Provisions Act, 1952, Contract Labor (R&A) Act, 1970, Minimum Wages Act, 1948, Payment of wages act 1936, workman compensation act and other relevant acts, rules and regulations enforced from time to time.
- 31.5 The contractor shall be solely responsible for the payment of wages and other dues to the personnel, if any, deployed by him latest by 7th day of the subsequent month.
- 31.7 The contractor shall be solely responsible and indemnify the BCPL against all charges, dues, claim etc. arising out of the disputes relating to the dues and employment of personnel, if any, deployed by him.
- 31.8 The contractor shall indemnify BCPL against all losses or damages, if any, caused to it on account of acts of the personnel, if any, deployed by him.
- 31.9 All personnel deployed by the contractor should be on the rolls of the contractor.
- 31.10 The contractor shall ensure regular and effective supervision and controls of the personnel, if any, deployed by him and give suitable direction for undertaking the contractual obligations.
- 31.11 The personnel to be deputed by the contractor shall observe all security, fire and safety rules of BCPL while at the site. His work will be supervised by the supervisors of contractor. Contractor has to strictly adhere to guidance, instruction when required.
- 31.12 Contractor shall provide proper identification cards for his employees to be deputed by him for work, duly signed by the contractor or authorized person on behalf of contractor. Also the contractor should obtain entry passes from CISF through engineer-in-charge for his employees.
- 31.13 Contractor has to deploy the personnel with no past criminal records. Reformed people, names of such persons should be clearly indicated in case of. Also the contractor has to provide police verification for all the persons deployed by him.
- 31.14 While confirming to any of these conditions, the contractor should ensure that no law of state regarding labor, their welfare, conduct etc, is violated. The contractor shall indemnify BCPL for any action brought against him for violation, non-compliance of any act, rules & regulation of center / state / local statutory authorities.

- 31.15 All existing and amended safety / fire rules of BPC, BCPL are to be followed within the BPC plant or service center.
- 31.16 Contractor shall ensure payment of wages to the person employed and meet all statutory obligation of payment as per Minimum Wages act 1948 and payment of wages Act 1936.
- 31.17 Boarding and lodging facilities for contractor's personal for carrying out the work is to be made by the contractor at his own cost outside the plant premises.
- 31.18 Special safety equipment e.g. breathing apparatus etc. shall be arranged by the Contractor.
- 31.19 The contracts will be required to provide full body harness safety belt for all their workers working at site positively.
- 31.20 The contractor should submit a valid health check-up certificate of their workers/labourers to BCPL before starting the job from a recognized Government Hospital towards the sound health for carrying out the job/work at site by each individual deployed.
- 31.21 Before undertaking jobs, contractor shall take work permit from Engineer-in-charge and same shall be returned after completion of job.
- 31.22 All types of transport connected with the work shall be in the scope of the contractor.
- 31.23 Suitable site office space may be provided by BPC, BCPL if required and available.
- 31.24 BCPL will provide free water, steam, air and electricity at suitable points, if required, for under taking the job.
- 31.25 All personnel undertaking the job proposed to be deployed by the contractor shall be medically examined and declared fit by qualified medical practitioner. It should be insured that no personnel engaged by the contractor is suffering from communicable disease.
- 31.26 Technicians/ supervisors deployed by the contractor should be technically qualified for fulfilling the contractual obligation.
- 31.27 In case of account, injury and death caused to the employee of the contractor while executing the work under the contract, the contractor shall be solely responsible for payment of adequate compensation, insurance money etc. to the next kith & kin of injured / diseased. Contractor shall indemnify BCPL from such liabilities.
- 31.28 The contractor shall also undertake to obtain necessary insurance coverage covering all risks connected with the job to be undertaken by him under the contract from insurance company and pay the premium accordingly.

32.0 PHOTO GATE PASS/LABOUR PERMISSION/VEHICLE PERMISSION :

The contractor shall arrange to make photo gate passes/labor permissions/vehicle passes etc. for his persons/labors/vehicles for working in site plant premises at his own cost as rules of the company.

33.0 ARBITRATION CLAUSE:

- 33.1 All disputes or differences, whatsoever, arising between the parties hereto pertaining to any part of the contract including its execution or concerning the WORKS or maintenance thereof this CONTRACT or to the rights or to liabilities of the parties or arising out or in relation thereto whether during or after completion of the CONTRACT or whether before or after determination, foreclosure or breach of the CONTRACT (other than those in respect of which the decision of any person is by the CONTRACT expressed to be final and binding) shall after written notice by either party to the CONTRACT be referred for adjudication to a sole arbitrator to be appointed by BCPL as hereinafter provided.
- 33.2 For the purpose of appointing the Sole Arbitrator referred to above, the Appointing Authority will send within thirty days of receipt of the notice, to the CONTRACTOR a panel of three names which are not connected with the work in question.
- 33.3 The CONTRACTOR shall on receipt of the names as aforesaid, select any one of the persons named to be appointed as a sole Arbitrator and communicate his names to the Appointing Authority within thirty days of receipt of names. The Appointing Authority shall thereupon without any delay appoint the said person as the sole arbitrator. If the CONTRACTOR fails to communicate his choice for appointment of an Arbitrator, the Appointing Authority shall do it on expiry of 30 days.
- 33.4 If the Arbitrator so appointed is unable to or unwilling to act or resigns or vacates his office due to any reason whatsoever, another sole Arbitrator shall be appointed as aforesaid.
- 33.5 The WORK under the CONTRACT shall however, continue during the Arbitration proceedings and no payment due or payable to the CONTRACTOR shall be withheld on account of such proceedings.
- 33.6 The venue of arbitration shall be Guwahati.
- 33.7 The award of the Arbitrator shall be final and binding on both the parties.
- 33.8 Subject to aforesaid the provisions of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.

34.0 JURISDICTION:

The CONTRACT shall be governed by and constructed according to the laws in force in INDIA. The CONTRACTOR hereby submits to the jurisdiction of the Courts situated at GUWAHATI for the purpose of disputes, actions and proceedings arising out of the CONTRACT.

35.0 PRICE PREFERENCE:

Price Preference to Central/State Government/Public Sector Enterprises (PSEs), Public Sector Construction and Services Enterprises or joint ventures with PSEs shall be applicable as per directives of Government of India.

36.0 SUMMARY TERMINATION OF CONTRACT DUE TO SUBMISSION OF FALSE DOCUMENT:

- 36.1 Bidders are required to furnish the complete and correct information/documents required for evaluation of their bids. If the information/documents forming basis of evaluation is found to be false/forged, the same shall be considered adequate ground for rejection of the Bids and forfeiture of Earnest Money Deposit.
- 36.2 In case, the information/document furnished by the contractor forming basis of evaluation of his bid is found to be false/forged after the award of the contract, BCPL shall have full right to terminate the contract and get the remaining job executed at the risk & cost of such contractor without any prejudice to other rights available to BCPL under the contract such as forfeiture of Security Deposit, withholding of payments etc.
- 36.3 In case the issue of submission of false document comes to the notice after execution of the work, BCPL shall have full right to forfeit any amount due to the contractor along with forfeiture of Security Deposit furnished by the contractor.
- 36.4 Further, such contractor/bidder shall be blacklisted for future business with BCPL.

37.0 SUBMISSION OF ATTESTED COPIES OF CERTIFICATES/DOCUMENTARY EVIDENCES:

- 37.1 The bidders are required to submit the copy of PF certificates duly attested by Gazetted Officer/Officer of Public Sector Enterprises.
- 37.2 Further, the bidders are required to furnish the attested copy (ies) of Power of Attorney/Partnership Deed.
- 37.3 Bidders are required to furnish the attested copy (ies) of documentary evidence in support of meeting the Bidder's Eligibility Criteria.
- 37.4 Non-submission of the attested copies of the certificates/documents will render they bid non-responsive and liable for rejection.

38.1 SUB LETTING OF WORK:

No contractor shall sublet or assign any work in part or whole to any firm, individual, partnership firm, Pvt. Ltd., Company, Proprietorship firm etc without the prior written permission of BCPL. In case the contractor sublets or assigns the contract in part or whole without the prior written permission of BCPL and any claim referred by any firm / individual to BCPL stating that the main contractor has not paid his or their dues/ payments, in that circumstances, BCPL shall without assigning any reasons, withhold from the payments of contractor, the amount equivalent to the claim amount of sub-contractor/ individual/ vendor (s) etc. The same shall be released to the contractor after contractor and labour/ supplier/ sub-contractor jointly submits a joint written settlement to BCPL.

38.2 AFFIDAVIT:

The bidder shall submit an affidavit duly notarized to the effect "that the document submitted by him are true and genuine and in case of any discrepancy noticed or observed

at any stage the bidder shall be personally responsible not only for the damages or loss to BCPL, but also for criminal proceedings under the relevant laws”.

38.3 PF REGISTRATION:

Bidder must have their own Valid P.F. account / code no. from Regional PF commissioner and attested copy of the same are to be submitted along with the technical bid.

39.0 The deployed labour by the contractor shall be directly controlled / supervised / directed by the contractor himself or his representatives.

40.0 PENALTY AGAINST VIOLATION OF SAFETY, HEALTH AND ENVIRONMENT RELATED NORMS:

40.1 Against Violation of applicable Safety, Health and Environment related norms, a penalty of ₹. 5,000.00 per occasion.

40.2 Violation as above resulting in:

40.3 Any physical injury, a penalty of 0.5% of the contract value (maximum of ₹. 2, 00,000.00) per injury in addition to ₹. 5,000.00 as in para 40.1.

40.4 Fatal accident, a penalty of 1% of the contract value (maximum of ₹. 10, 00,000.00) per fatality is addition to ₹. 5,000.00 as in para 40.1.

41.0 PUBLIC PROCUREMENT POLICY (PPP), 2012

Bid submitted by MSEs shall be processed as under subject to availability of the item(s) in the notified Gazette published by Government of India from time to time:

- i) In Tender, participating Micro and Small Enterprises quoting price within price band of L1+15% shall also be allowed to supply a portion of requirement by bringing down their prices to L-1 price in a situation where L-1 price is from someone other than a micro small enterprises and such micro and small enterprises shall be allowed to supply up to 20% of the total tendered value. In case of more than one such Micro and small Enterprises, the supply shall be shared proportionately (to tendered quantity). Further, out of above 20%, 4% (20%of 20%) shall be from MSEs owned by SC/ST entrepreneurs. This quota is to be transferred to other MSEs in case non-availability of MSEs owned by SC/ST entrepreneurs.
- ii) The quoted prices against various items shall valid in case of splitting of quantities of the items as above.
- iii) In case bidder is a Micro or Small Enterprise under Micro, Small and Medium Enterprises Development Act, 2006, the bidder shall submit the following:
 - a) Documentary evidence that the bidder is a Micro or Small Enterprises registered with District Industries Centers or Khadi and village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises.
 - b) If the MSE is owned by SC/ST Entrepreneurs, the bidder shall furnish appropriate documentary evidence in this regards.

The above documents submitted by the bidder shall be duly certified by the Statutory Auditor of the bidder or a practicing Chartered Accountant (not being an employee or a Director or not having any interest in the bidder's company/firm) where audited accounts are not mandatory as per law.

If the bidder does not provide the above confirmation or appropriate document or any evidence, then it will be presumed that they do not qualify for any preference admissible in the Public Procurement Policy (PPP), 2012.

In case of MSEs, Tender fees & EMD/Bid Security is not applicable.

Brahmaputra Crackers & Polymers Ltd. reserves the right to accept or reject any or all bids received, at its absolute discretion, without assigning any reason whatsoever.

42.0 PRICE REDUCTION SCHEDULE:

Time is the essence of the CONTRACT. In case the CONTRACTOR fails to complete the WORK within the stipulated period, then, unless such failure is due to Force Majeure or due to EMPLOYER's defaults, the Total Contract price shall be reduced by ½ % of the total Contract Price per complete week of delay or part thereof subject to a maximum of 5 % of the Total Contract Price, by way of reduction in price for delay and not as penalty. The said amount will be recovered from amount due to the Contractor/ Contractor's Contract Performance Security payable on demand. The decision of the ENGINEER-IN-CHARGE in regard to applicability of Price Reduction Schedule shall be final and binding on the CONTRACTOR.

All sums payable under this clause is the reduction in price due to delay in completion period at the above agreed rate.

BRAHMAPUTRA CRACKER & POLYMER LIMITED

LEPETKATA, DIBRUGARH, ASSAM

A: CONTRACTOR'S SAFETY RECORD IN LAST ASSIGNED JOB: -

- Total nos. of employees =
- Working hours / day =
- Nos. of days worked =
- Total man hours worked =
(total nos. of employees X
working hrs / day X no. of days
worked)
- No. of fatalities =
- No. of major injuries =
- No. of three days injuries =
- Nos. of minor injuries =
- Total nos. of occupational
Diseases / illness =

B: SAFETY INFORMATION TO BE SUBMITTED BY CONTRACTOR:

Following information to be submitted at the end of the every month to the, office of In-charge (F&S) directly with copy to Engineer-In-Charge.

- A. - Total nos. of employees =
- Working hrs / days =
- Duration of contract (in days) =

B. STATUS OF SAFETY – GADGETS

- Nos. of helmets =
- Nos. of safety belt =
- Nos. of goggles =

Welding Goggles =	Grinding Goggles =	General Goggles =
-------------------	--------------------	-------------------

- Nos. of hand gloves =
- No. of safety shoe / gum boot =
- Length of barricading tapes =
- Status of warning tags (like
radiography, road blocking, no
entry etc. use) =

C. INCIDENT STATUS

- Name of safety representative =
- Nos. of minor injuries =
- Nos. of three days injuries =
- Nos. of major injuries =
- Nos. of fatalities (if any) =

D. INSPECTION RECORD

- Gas cutting set & welding =
- Machine inspected on & by
- List of hand tools updated on =
- Hand tools inspected on & by =
- Ladders & lifting tools inspected on & by =

SIGNATURE OF SITE IN-CHARGE

Contractor's Signature_____

NO DEVIATION CERTIFICATE

**BRAHMAPUTRA CRACKER & POLYMER LIMITED
LEPETKATA, DIBRUGARH, ASSAM**

Dear Sir,

We understand that any deviation/exception in any form may result in rejection of bid. We, therefore, certify that we have not taken any exceptions/deviations anywhere in the bid and we agree that if any deviation/exception is mentioned or noticed, our bid may be rejected.

NAME : _____

BIDDER'S NAME : _____

COMPANY SEAL : _____

SPECIAL CONDITIONS OF CONTRACT (SCC)

PART-B

NAME OF WORK: ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA , DIBRUGARH, (ASSAM)

TENDER NO: BCPL/DIB/C&P/SER/20130139/SD

1. GENERAL:

1.0 The special conditions of contract shall be read in conjunction with general conditions of contract where the provisions of these special conditions are at variance with the provisions of the General Conditions of the contract; the provision of these special conditions shall take precedence.

2. ORDER OF PRECEDENCE:

In case of ambiguity in Schedule of Rates, General Conditions of Contract, Specifications, Drawings the following order of precedence will prevail –

- a) Telex/Telegram/Fax of intent, detailed letter of intent along with statement of agreed variations and its enclosures and any corrigendum/addendum.
- b) Architectural, Structural and Services drawings
- c) Price part (with brief specifications)
- d) Specifications/Special notes regarding specifications/drawings in conjunction with each other however in case of any variations of size/thickness/dimensions of members between drawings/specifications etc. then drawings shall prevail over specifications.
- e) Special/additional conditions of contract.
- f) General conditions of contract.

3. LOCATION AND SITE CONDITION:

3.1 The site of the proposed WORK at BCPL/ CISF TOWNSHIP site is located adjacent of NH-37 (almost 18 KMS from Dibrugarh Town – towards Guwahati) in the Dibrugarh district of Assam.

3.2 The contractor shall deem to have inspected the site and thoroughly acquainted him with the site condition before submitting their tender. Non-familiarity with site condition will not be considered a reason either for extra claims or for not carrying out works in strict conformity with drawings and specifications.

4. SCOPE OF WORK:

4.1 The work involves **ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA , DIBRUGARH, (ASSAM)** as per drawings/specifications. The job scope is inclusive of necessary foundations and all associated civil works.

4.2 The basic scheme and the key requirements are spelt out in different parts of Technical specifications and the set of drawings as annexed with the document for different building

works. The contractors in their own interests are advised to make themselves aware of site conditions, actual job requirement.

4.3 Quoted rate shall be inclusive of all required labour, materials, tools and tackles, consumables etc. and item rate offers shall be quoted taking into consideration that job shall be done as per specifications/drawings and with best workmanship. Quoted rate shall also include the cost for uprooting of tree trunks, clearing of jungles/bushes for smooth start of the job.

4.4 Site clearance, jungle clearance and cutting of shrubs, trees etc.

5. SCOPE OF SUPPLY:

5.1 All materials and labours required for completion of the work are to be supplied by the contractor unless mentioned otherwise.

6. RIGHT OF EMPLOYER TO ACCEPT/REJECT ANY TENDER:

6.1 The right to accept the tender rests with the EMPLOYER. The EMPLOYER, however, does not bind himself to accept the lowest tender and reserves the authority to reject any or all tenders received without assigning any reason what so ever.

7. EMPLOYER'S OBLIGATIONS:

7.1 The owner's obligations are limited to the following:

- a) Handing over the site
- b) Supply of construction drawings
- c) Payment to the contractor for performance of the work under the contract as per terms and conditions specified therein.
- d) A piece of land for setting up temporary site office, godown etc.

8. CONSTRUCTION WATER AND POWER:

8.1 CONTRACTORS have to arrange for themselves construction water and power for the completion of the job.

9. INFORMATION REQUIRED:

9.1 The following details are also required to be submitted along with of offer (supporting documents/certificates shall be required to be submitted with their request letters for short listing purpose).

The tenders as submitted will consist of the following:

- a) Complete set of Tender Documents (Original) as issued/sold duly filled in and signed by the tenderer as prescribed in different clauses of the tender document.
- b) Earnest money in the manner specified in clause 6 of GCC hereof.
- c) Power of attorney or a true copy thereof duly attested by a Gazetted Officer in case an authorized representative has signed the tender, as required by clause 14 of GCC hereof.
- d) Information regarding tenderers in the pro-forma enclosed.
- e) Details of work of similar type and magnitude carried out by the Tenderer in the pro-forma provided in the tender document.
- f) Organization chart giving details of field management at site, the tenderer for using in this work.

- g) A detail of construction plant and equipments available with the tenderer proposes to have for this job.
- h) Solvency Certificate from Schedule Bank to prove the financial ability to carry out the work tendered for.
- i) Latest Balance Sheet and Profit & Loss Account duly audited.
- j) Details of present commitment as per pro-forma enclosed to tender.
- k) Data required regarding SUB-CONTRACTOR(s) / Supplier / Manufacturers and other technical information's the tender wish to furnish.
- l) Provident Fund Registration Certificate.
- m) List showing all enclosures to tender.

10. DEVIATION IN TENDER DOCUMENTS:

10.1 The tenderers are required to quote item wise rates and unit rates (as per SOR) inclusive of all royalties, taxes, duties and levies as applicable from time to time without any deviations to the terms and conditions in tender document. However, service tax (if applicable) shall be Extra at actual & same shall be applicable as reverse charge mechanism w.e.f 01/07/2012. However, no deviations on the clauses as mentioned at 6.4.4 under ITB shall be acceptable and any offer containing deviations/exceptions to those shall be rejected.

11. SCHEDULE OF RATES:

11.1 The Schedule of Rates shall be read in conjunction with Special Conditions of Contract, General Conditions of Contract, Technical Specifications, Drawings and any other Document forming a part of this CONTRACT.

All items of work in the schedule of rates shall be carried out as per the specifications; drawings and instructions of the ENGINEER-IN-CHARGE and the rates are inclusive of all materials, consumables, labour, supervision, tools and tackles as well as preparatory, incidental, intermediate/auxiliary/ancillary or enabling works.

The rates shall be offered on LUMPSUM AND ITEM RATE basis after considering all the aspects necessary for job execution as per drawings /specifications.

Dewatering of surface as well as subsoil water, wherever required to carry out the works shall be carried out by the CONTRACTOR and slopes for effective drainage shall be provided within the quoted rates.

Surplus excavated earth, materials; muck etc. shall be disposed off by the CONTRACTOR at his own cost to the places as directed by the ENGINEER-IN-CHARGE. The site shall be cleaned of all surplus material after execution quoted rates shall be deemed to be inclusive of all these provisions.

Preparing approaches and working area for the movement and operation of CONTRACTORS men and materials, leveling the areas for assembly and erection shall be the responsibility of the contractor and the quoted rates shall be deemed to include all these.

12. REGISTRATION WITH PF AUTHORITIES:

12.1 Intending bidders must furnish the proof of having valid PF code and valid registration with regional provident fund authorities along with their tenders. Proof of challans/receipt with regional PF authorities shall be submitted from time to time for verification of ENGINEER-IN-CHARGE.

13. VAT REGISTRATION:

Tenderer must submit wherever necessary attested copy of registration certificate on prescribed pro-forma under the Assam VAT Act. Alternatively, tenderer must give an undertaking that they would comply with this requirement before award of work.

14. LABOUR LICENSE:

Contractor shall obtain an appropriate license from concerned authority under the contract labour (abolition and regulation) Act 1970 and furnish copy of the same to owner. Contractor shall also be responsible for its validity and for complying with provisions of all applicable Acts, rules & regulation in force at the site of work.

15. TESTS AND INSPECTION:

15.1 The CONTRACTOR shall carry out the various tests as enumerated in the technical requirements annexed with this document (LIST OF MANDATORY TEST) and no separate payment shall be made unless otherwise specified in schedule of rates.

15.2 All the tests either on the field or at outside laboratory are concerning the execution of the work and supplies of materials if any by the contractor shall be carried out by CONTRACTOR at his own cost.

16. COMPLETION CERTIFICATE:

Within one month of the completion of work(s)/Part(s) in all respect, the contractor shall be furnished with a certificate by the ENGINEER-IN-CHARGE of such completion, but no certificate shall be given nor shall the work be deemed to have been executed until all surplus materials and rubbish is cleared off the site completely nor until the work shall have been measured by the ENGINEER-IN-CHARGE whose measurement shall be binding and conclusive. The works will not be considered as complete and taken over by the owner, until all the temporary works, labour and store and colonies etc. constructed are removed and the work site cleared to the satisfaction of the ENGINEER-IN-CHARGE.

If the CONTRACTOR fails to comply with the requirements of this clause on or before the date fixed for the completion of the works, the ENGINEER-IN-CHARGE may at the expenses of the CONTRACTOR remove such, surplus materials and rubbish and disposal off the same as he thinks fit and clean off.

Such dirt as aforesaid, and the CONTRACTOR shall forthwith pay the amount of all expenses incurred and shall have no claim in respect of any such surplus materials as aforesaid except for any such actually realized by the sale thereof.

17. DEFECTS LIABILITY PERIOD:

The tenderer shall guarantee all the work (Including workmanship & materials, etc.) executed by him for a period of 12 months from the date of completion of work(s)/Part(s). If during this period any defect occur, the same shall be made good by the contractor at his own cost. Failure to comply with this requirement may result in the forfeiture of security deposit.

However, in case of critical items, if the guarantee period is beyond defect liability period, then guarantee shall applicable for that period also.

18. TIME SCHEDULE:

Total period of CONTRACT for this work will be for **10(Ten) MONTHS** to be reckoned from 7TH day from the date of issue of LOI/FOI. Time is the essence of the CONTRACT and as such as every effort should be made to complete the work within prescribed time period for the execution of the work as contemplated under this CONTRACT. BCPL reserves the right to terminate the CONTRACT without assigning any reason during the currency of the CONTRACT PERIOD by giving 30 days notice to the CONTRACTOR.

19. ARCHITECTS / CONSULTANT:

The company has appointed M/s. Rajkhowas Aarchi, M.D. Road, Guwahati - 03 as their Architects and Consultants for the planning, design and construction supervision of the project. For any clarification on this tender the tenderer shall contact the Architects/Consultants.

20. ESCALATION:

No Escalation shall be paid for this contract. CONTRACTORS are required to quote firm price for the work.

21. PROVIDENT FUND ACT:

The CONTRACTOR, as a statutory obligation, should strictly comply with the provisions of the Employee's Provident Fund Act.

22. PROGRESS REPORTS

The Daily, Weekly and Monthly Progress Reports should be submitted in the format as asked for by the Engineer-in-charge.

23. SUBMISSION OF PROJECT PLANNING DOCUMENT:

- The Contractor should submit a detailed construction schedule with Gantt chart representation within 7 days of the date of LOA. This schedule after approval of the Engineer in-charge and the OWNER shall be regarded as the Baseline schedule in all future references during the execution of the project.
- Resource allocation chart is to be submitted along with the Baseline Schedule.
- The status of work w. r. t the baseline schedule and the resource allocation chart for the month is to be submitted in the Monthly progress report along with a set of Site photograph reflecting the progress at site.

24. EXTRA AND SUBSTITUTED ITEM:

The rates for extra items/substituted items of work, ordered to be operated / executed shall be derived as under:

- a) If the item of work is similar to the item for which, the bidder has quoted rates in SOR, the quoted rate shall be applicable.
- b) If the rate for the item does not appear in the SOR, the rate shall be derived from similar items of work indicated in SOR.
- c) In the cases, where analogous items are not available in the SOR and cannot be derived from quoted rates, the rates for such items shall be derived on the basis of DSR 2012 plus/minus applicable premium at the time of award of work. In case the item is not available in the DSR 2012, the Contractor, within 15 days (or as agreed by the Engineer- in-charge) of receipt of order to execute such items shall submit rate analysis to the Engineer- in-Charge supported by documentary evidence of basic rates adopted therein, notwithstanding the fact that the rates for such items exist in the Contract, having regard to the cost of materials (including transportation and taxes, levies if paid), actual wages for labour and ownership & operational cost of construction equipment as per standard norms or if standard norms are not specified/available then on the basis of labour/materials/equipment actually engaged for the particular work. The standard norms specified herein shall mean those specified in CPWD rate analysis. The opinion of the Engineer in charge as to the current market rates for materials and the quantum of labour involved per unit shall be final and binding on the contractor.
- d) Applicable premium on the basis of DSR 2012 will be calculated as below:
 - Direct Cost as per DAR 2012(excluding CP & OH-15%, Water/Electricity charges-1%).
 - Variation in material cost i.e. increase or decrease in the amount in rupees to be paid on the material part of DAR 2012 (V_m) [$=X_m \times (MI-MIo)/MIo$]
 MIo = All India Wholesale price Index for "All commodities" (Base year 2004-05 = 100) as published by Office of Economic Advisor to Govt. of India, Ministry of Commerce & Industry for the month of September-2011.
 MI = All India Wholesale price Index for "All commodities" (Base year 2004-05 = 100)as published by Office of Economic Advisor to Govt. of India, Ministry of Commerce & Industry for the month of award of work.
 X_m = Total cost of materials (excluding sundries etc.) expressed in the direct cost of the item as mentioned above.
 - Variation in labour cost i.e. increase or decrease in the amount in rupees to be paid or recovered (V_L) [$=X_L \times (LI-LIo)/LIo$]
 LIo = Minimum labour age for constructions works in Assam (Area 'C') as circular dated 13.04.2011 (50% skilled + 50% unskilled).
 LI = Minimum labour age for constructions works in Assam (Area 'C') as on the date of award of work (50% skilled + 50% unskilled).
 X_L = Total cost of labour (excluding sundries etc.) expressed in the direct cost of the item as mentioned above.

Above provisions for derivation of rates of extra items/substituted items shall supersede

the provisions indicated in GCC.

25. GUARANTEES AND WARRANTIES:

All manufacturer's warranties and guaranties for equipment supplied by the CONTRACTORS shall be passed on the EMPLOYER. Further, guarantees/warranties for any work carried out to specialized agencies such as water proofing, anti –termite etc. shall also be passes on the EMPLOYER.

26. EXTENSION FOR TIME OF COMPLETION FOR ADDITION, ALTERATION AND SUBSTITUTED WORK:

- a) In case of any addition alteration or substitution work, the time of completion of work shall be extended in the proportion to the value of altered, additional or substituted work that it bears to the original contract value of work and time. Over and above this, a further period to the extent of 20% of such extension shall be allowed to the contractor.
- b) The contractor shall not be entitled to increase in prices or for any compensation whatsoever on account of the extension of time allowed.
- c) Any extension of time granted under the provision of this clause shall be without prejudice to other conditions of contract and will not absolve the contractor from the obligations of other clauses under the contract.
The decision of the EMPLOYER in this regard will be final and binding on the CONTRACTOR.

27. ALTERATIONS, ADDITIONS AND OMISSION:

The Architect make any variation of the form, quality or quantity of the works or any part thereof that may, in his opinion, be necessary and for that purpose or if for any other reason it shall, in his opinion be desirable he shall have power to order in writing to the contractor to do and the contractor shall do any of the following:

- a) Increase or decrease in the quantity of any work included in the contract.
- b) Omit any such work.
- c) Change the character or quality or kind of any such work.
- d) Change the levels, lines, position and dimension of any part of the works and
- e) Execute additional work of any kind necessary for the completion of the works and no such variation shall in any way vitiate or invalidate the contract. But the value, if any of all such variations, shall be taken into account in ascertaining the amount of the contract price.

28. RESPONSIBILITY FOR PROCUREMENT:

Sole responsibility rests with CONTRACTOR for procurement of all materials required for completion work within the stipulated time.

29. SALES TAX / TURN OVER TAX:

Tenderer should quote all inclusive prices including the liability of all types of taxes, duties and sales tax on works contract tax (if any) imposed by State/Central/Local Government

bodies from time to time. Sales tax on works contract if applicable will be deducted at source as per the rules.

30. INCOME TAX:

Income tax deductions as per Income Tax rules shall be made from CONTRACTOR's running account bills unless specific exemption has been obtained by the CONTRACTOR from the Income Tax Dept. and documentary evidence to this effect has been submitted to the EMPLOYER.

31. APPROVALS:

The CONTRACTOR shall furnish to the ENGINEER-IN-CHARGE for approval samples of all material to be used in the item/work. Such samples shall be submitted before item/work is commenced in advance. It is the responsibility of the CONTRACTOR to arrange for tests as required by ENGINEER-IN-CHARGE at his own cost. The material representing approved samples shall only be used for the construction and installation. CONTRACTOR shall procure materials as indicated in list of approved makes (if given) / or materials with ISI certification may also be used after approval of ENGINEER-IN-CHARGE.

32. SEALED TENDER:

The tenders shall be submitted in sealed envelopes as mentioned in clause no. 3.0 of General Conditions of Contract. All the tender papers issued (Vol. I & II) and all supporting documents/credentials authenticating the capability/resources of the CONTRACTORS and EMD shall be submitted along with the tendered offer.

33. VARIATIONS IN QUANTITIES OF ITEMS DURING EXECUTION:

During execution of item/work variation in individual quantities may be up to any limit (plus and minus) as per the site requirement. The CONTRACTOR shall be bound to execute them at the rates quoted by him. BCPL also reserves the right to split the item/work in full or in part during its execution (depending upon exigencies of work) without assigning any reason thereof. The decision of ENGINEER-IN-CHARGE shall be final and binding on the contractor in this regard.

34. SPECIAL NOTE TO TENDERER:

- a) The Special Conditions of Contract supersede the relevant clauses of General Conditions of contract.
- b) Supervision and conduct of all the personal deployed by the contractors shall be the sole responsibility of the CONTRACTOR.
- c) The CONTRACTOR should issue his own identity card to his personal after verifying their character and antecedents through appropriate authorities and BCPL shall have no role on it whatsoever.

- d) The payments of wages to the employees employed by the CONTRACTOR are to be disbursed by CONTRACTOR or his representatives in the presence of BCPL representative and payment register shall be signed by BCPL representatives.

35. SPECIALIZED JOBS:

The Contractor is bound to carry out the specialized jobs by the specialized agencies (for anti-termite, water proofing, external painting etc.) as per the desire of the ENGINEER-IN-CHARGE. Contractor should arrange for the guarantees / warranties as issued by the Company for the job carried out by them.

36. TERMS OF PAYMENT:

36.1 PAYMENT OF RUNNING BILLS:

Progress payment shall be released to Contractor against monthly running account bills duly certified by Engineer in Charge after affecting the necessary deductions. 95% payment shall be released on completion of item / work as certified in the R.A bills.

36.1.1 Contractor has to furnish the below mentioned documents with the 1st RA bill:

- i) Power of attorney in the name of the signatory of the bill is required.
- ii) Copy of PAN card.
- iii) Copy of VAT registration certificate.
- iv) Copy of Labour license for the said work.
- iv) Copy of provident fund registration certificate
- v) Copy of registration under interstate migrant workers act. (if applicable)
- vi) Copy of registration under Assam building and other construction workers act.
- vii) Copy of last month EPF/ESI challan duly certified that provident fund amount with respect to workers engaged for the work has been deposited.
- viii) Certificate of minimum wages act compliance
- ix) Copy of contractors all risk policy.
- xi) Copy of workmen insurance policy.
- xii) Copy of insurance policy of plant and machinery engaged for the job.
- xiii) Renewal certificate of WCT.

36.2 PAYMENT OF FINAL BILL:

CONTRACTOR must submit his final bill within sixty days of completion of the work and payment of the final bill shall be made to the CONTRACTOR within 120 days of the submission of the bill and after completion of all obligations under the CONTRACT.

- 36.3** The bills shall be submitted in a printed form in quadruplicate along with soft copy of bill. Security deposit and other taxes as applicable shall be deducted from the bills. Payment of running bills shall be made to the contractor within 30 days of the submission of the bill to ENGINEER-IN-CHARGE.

37 MODE OF PAYMENT:

A) ITEM RATE

37.1.1 ITEM RATE PART:

37.2.1 (i) PAYMENT OF RUNNING BILLS:

95% payment shall be released on completion of item / work as certified in the R.A bills.

37.3.2 (ii) PAYMENT OF FINAL BILL:

CONTRACTOR must submit his final bill within sixty days of completion of the work and payment of the final bill shall be made to the CONTRACTOR within 120 days of the submission of the bill and after completion of all obligations under the CONTRACT.

37.3.3(iii) The bills shall be submitted in a printed form in quadruplicate along with soft copy of bill. Security deposit and other taxes as applicable shall be deducted from the bills. Payment of running bills shall be made to the contractor within 30 days of the submission of the bill to ENGINEER-IN-CHARGE.

GENERAL CONDITIONS OF CONTRACT (GCC)

Wherever written as "GAIL" in GCC should be read as "BCPL"

TABLE OF CONTENTS FOR GENERAL CONDITIONS OF CONTRACT

SL. NO.	DESCRIPTION
(I)	Table of Content
(II)	Submission of Tender
	SECTION – I (GENERAL CONDITIONS OF CONTRACT)
1	Definition of Terms
	SECTION II (GENERAL INFORMATIONS)
2	GENERAL INFORMATION
	Location of Site
2.2	Scope of work
2.3	Water Supply
2.4	Power Supply
2.5	Land for Contractor's field office, Godown & workshop
2.6	Land Residential Accommodation
	SECTION – III (GENERAL INSTRUCTIONS TO BIDDERS)
3	Submission of Tender
4	Documents
4.1	General
4.2	All pages to be initialed
4.3	Rates to be in figures and words
4.4	Corrections and Erasures
4.5	Signature of Tender
4.6	Witness
4.7	Details of Experience
5.0	Transfer of Tender Documents
6.0	Earnest Money
7.0	Validity
8.0	Addenda/Corrigenda
9.0	Right of Owner to Accept or Reject Tender
10.0	Time Schedule
11.0	Bidder's Responsibility
12.0	Retired Government or Company Officers
13.0	Signing of the Contract
14.0	Field Management & Controlling/Coordination Authority
15.0	Note to Schedule of Rates
16.0	Policy for Tenders under consideration
17.0	Award of Contract
18.0	Clarification of Tender Document
19.0	Local Conditions
20.0	Abnormal Rates

SECTION – IV (GENERAL OBLIGATIONS)

21.0 Interpretation of Contract Documents)

21.1 General

21.2 Headings & Marginal Notes

21.3 Singular and Plural

22.0 Special Conditions of Contract

23.0 Contractor to obtain his own information

24.0 Security Deposit

25.0 Time of Performance

25.1 Time for Mobilization

25.2 Times Schedule of Construction

26.0 Force Majeure

26.1 Conditions for Force Majeure

26.2 Outbreak of War

27.0 Compensation for Delay (Liquidated Damages)

28.0 Rights of Owner to forfeit Security Deposit

29.0 Failure by the Contractor to comply with the provisions of the Contract.

30.0 Contractor remains liable to pay compensation if action not taken under Clause 29.

31.0 Change in Constitution

32.0 Termination of Contract for Death

33.0 Members of the Owner not individually liable

34.0 Owner not bound by personal representations

35.0 Contractor's office at site

36.0 Contractor's subordinate staff and their conduct

37.0 Sub letting of works

(i) Sub Contracts for Temporary works etc.

(ii) List of Sub-contractors to be supplied

(iii) Contractor's Liability not limited by contractors

(iv) Owner may terminate sub contracts

(v) No remedy for action taken under this clause

38.0 Power of Entry

39.0 Contractor's responsibility with Mechanical, Electrical, Intercommunication System, Air Conditioning Contractors and other Agencies

40.0 Other agencies at site

41.0 Notices

41.1 To the Contractor

41.2 To the Owner

42.0 Rights of Various Interests

43.0 Patents and Royalties

44.0 Liens

45.0 Delays by Owner & his authorized agents

46.0 Payments if Contract is terminated

47.0 No waiver of Rights

48.0 Certificate not to affect Right of Owner and Liability of contractor

49.0 Languages & Measures

50.0 Transfer of Title

51.0 Release of Information

52.0 Brand Names

53.0 Completion of Contract

54.0 Spares

SECTION – V (PERFORMANCE OF WORK)

- 55.0 Execution of work**
- 56.0 Co-ordination and Inspection of work**
- 57.0 Work in Monsoon & dewatering**
- 58.0 Work on Sundays & Holidays**
- 59.0 General Conditions for construction & Erection Work**
- 60.0 Alternations in specified, Design & Extra work**
- 61.0 Drawings to be supplied by the Owner**
- 62.0 Drawings to be supplied by the Contractor**
- 63.0 Setting out works**
- 64.0 Responsibility for Levels and Alignment**
- 65.0 Materials to be supplied by Contractor**
- 66.0 Stores supplied by Owner**
- 67.0 Condition for issue of material**
- 68.0 Materials Procured with assistance of Owner/Return of surplus**
- 69.0 Materials obtained from Dismantling**
- 70.0 Articles of Value found**
- 71.0 Discrepancies between instructions**
- 72.0 Action where no specification is issued**
- 73.0 Inspection of Works**
- 74.0 Tests for Quality of Works**
- 75.0 Samples for approval**
- 76.0 Action and Compensation in case of bad work**
- 77.0 Suspension of Work**
- 78.0 Owner may do part of work**
- 79.0 Possession prior to completion**
- 80.0 Twelve months period of liability from the date of issue of completion certificate**
- 81.0 Care of Works**
 - 81.1 Defects prior to taking over**
 - 81.2 Defects after taking over**
- 82.0 Guarantee/Transfer of Guarantee**
- 83.0 Training of Owner's personnel**
- 84.0 Replacement of Defective parts & materials**
- 85.0 Defense of Suits**
- 86.0 Construction Aids, Equipments, Tools & Tackles**

SECTION – VI (CERTIFICATES AND PAYMENTS)

- 87.0 Schedule of Rates and Payments**
 - (i) Contractor's Remuneration
 - (ii) Schedule of Rates to be inclusive
 - (iii) Schedule of rates to cover construction equipment, materials, labour etc.
 - (iv) Schedule of Rates to cover Roaylties; Rents and claims
 - (v) Schedule of Rates to cover taxes & duties
 - (vi) Schedule of Rates to cover risks of delay
 - (vii) Schedule of Rates cannot be altered
- 88.0 Procedure for Measurement and billing of works in progress**
 - 88.1 Billing Procedure**
 - 88.2 Secured Advance on materials**
 - 88.3 Dispute in mode of measurement**
 - 88.4 Rounding of Amounts**
- 89.0 Running Account Payments to be regarded as advances**
- 90.0 Notices of Claims for Additional Payments**
- 91.0 Payment of contractor's bills**

- 92.0 Receipt for Payment**
- 93.0 Completion Certificate**
 - 94.1 Application for Completion Certificate
 - 94.2 Completion Certificate
 - 94.3 Completion Certificate documents
- 94.0 Final Decision & Final Certificate**
- 95.0 Certificate and Payments on evidence of completion**
- 96.0 Deduction from Contract Price**
- SECTION – VII (TAXES AND INSURANCE)**
- 97.0 Taxes, Duties, Octroi etc.**
- 98.0 Sales Tax/Turnover tax**
- 99.0 Excise duty (one works contract only)**
- 100.0 Insurance**
- 101.1 General**
 - (i) Employees State Insurance Act
 - (ii) Workmen Compensation and Employee’s Liability Insurance
 - (iii) Any other insurance required under law or regulations or by Owner
 - (iv) Accident or injury to workmen
 - (v) Transit Insurance
- 101.0 Damage to property or to any person or any third party**
- SECTION – VIII (LABOUR LAWS & ARBITRATION)**
- 102.0 Labour Laws**
- 103.0 Implementation of Apprentices act 1961**
- 104.0 Contractor to indemnify the Owner**
- 105.0 Health and Sanitary agreement for Worker**
- 106.0 Arbitration**
- 107.0 Jurisdiction**
- SECTION – X (SAFETY CODES)**
- 108.0 General**
- 109.0 Safety Regulations**
- 110.0 First-aid and Industrial Injuries**
- 111.0 General Rules**
- 112.0 Contractor’s barricades**
- 113.0 Scaffolding**
- 114.0 Excavation and Trenching**
- 115.0 Demolition/General Safety**
- 116.0 Care in Handling Inflammable Gas**
- 117.0 Temporary Combustible structures**
- 118.0 Precautions against Fire**
- 119.0 Explosives**
- 120.0 Mines Act**
- 121.0 Preservation of Places**
- 122.0 Outbreak of Infectious diseases**
- 123.0 Use of intoxicants**
- ANNEXURES**
- 1. Proforma for Indemnity Bond for Advance against material**
- 2. Proforma for Contract Agreement**
- 3. Proforma for Bank Guarantee for Earnest Money Deposit**
- 4. Proforma for Bank Guarantee for Security Deposit**

SUBMISSION OF TENDER

From :

M/s

To :

Brahmaputra Cracker & Polymer Ltd.
Central Ware House Building,
BCPL Project Site, Lepetkata-786007
Dibrugarh, Assam

1. I/We hereby tender for execution of the WORKS of -----
-----as per TENDER DOCUMENT within the Time Schedule of completion of work for jobs, as separately signed and accepted by me/us, at the schedule of Rates quoted by me/us for the whole work in accordance with Notice/Letter Inviting Tender, General Conditions of Contract. Special Conditions of Contract, Schedule of Rates Specifications for materials and workmanship, Drawings, Time Schedule of Completion of job, and other documents and papers, all as detailed in the tender documents.
2. It has been explained to me/us that the time stipulated for jobs and completion of WORKS in all respects and in different stages mentioned in the "Time Schedule" of completion of jobs and signed and accepted by me/us is the essence of the CONTRACT. I/We agree that in the case of failure on my our part to strictly observe the Time of Completion mentioned for jobs or any of them and to the final Completion of WORK in all respects according to the schedule set out in the said "Time Schedule" of completion of jobs, I/We shall pay compensation to the OWNER as per provisions and stipulations contained in General Conditions of Contract and I/We agree to recovery being made as specified therein. In exceptional circumstances, extension of time which shall always be in writing may, however, be granted by ENGINEER-IN-CHARGE at his entire discretion for some items of work, and I/We agree that such extension of time will not be counted for the extension of completion dates stipulated for job and for the Final Completion of WORK as stipulated in the said "Time Schedule" of completion of jobs.
3. I/We agree to pay the Earnest Money and Security Deposit and accept the terms and conditions laid down in the memorandum below in this respect.

MEMORANDUM

- | | | |
|-----|-----------------------------|---|
| (a) | General Description of Work | |
| (b) | Earnest Money | (Rupees) |
| | | The Earnest Money is payable in the manner set out in para 5 below. |
| | | The Earnest Money, if the tender is accepted, will be adjusted against the Security Deposit, when Earnest Money is paid by demand draft only. |
| (c) | Security deposit will be | 10% of the CONTRACT amount, which |

paid in the manner set out in the General Conditions of Contract / Special Conditions of Contract.

(d) Time allowed for starting work From the date of issue of LOI / FOI/ LOA.

4. Should this tender be accepted, I/We hereby agree to abide by and fulfill all terms and conditions referred to above and in default thereof, to forfeit and pay to the OWNER or its successors or its authorized nominees such sums of money as are stipulated in conditions contained in General Tender Notice and other Tender Documents.
5. I/We hereby pay the Earnest Money of Rs.-----
(Rupees-----in Bank Demand Draft/Banker's Cheque No.-----issued by -----
--(name and office of the State Bank of India or any nationalized Bank) in favour of Brahmaputra Cracker & Polymer Ltd.
6. If I/We fail to commence the work specified in the Memorandum in Para (3) above, or I/We agree that the said OWNER or its successors without prejudice to any other right or remedy be at liberty to forfeit the said Earnest Money in full, otherwise the said earnest Money shall be retained by OWNER towards the security Deposit specified in (3) above. The said OWNER shall also be at liberty to cancel the Notice of Acceptance of Tender if I/We fail to deposit the Security Deposit as aforesaid or to execute and Agreement or to start WORK as stipulated in the Tender Documents.

I/we enclosed herewith evidence of my/ our experience of execution of works of similar nature and magnitude carried out by me/us in the prescribed proforma and also the income-Tax and sales Tax Clearance/Certificates.

Dated the _____ day of _____ 2013

Witness :

Name in Block Letters :

Address :

Yours faithfully,

Signature of Bidder (s)with the seal of the Firm

Name and Designation of authorized person signing the tender on behalf of the Bidder (s)

GENERAL CONDITIONS OF CONTRACT

SECTION- I DEFINITIONS

1. DEFINITION OF TERMS:

1.1 In this CONTRACT (as here-in-after defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise required.

- 1.1.1. The EMPLOYER/COMPANY/BCPL means Brahmaputra Cracker & Polymer Ltd., a public limited company, incorporated under the Company's act 1956 and having its Registered office at Hotel Brahmaputra Ashok, M. G. Road, Guwahati – 781 001 and includes its successors and assigns.
- 1.1.2. The "CONTRACTOR" means the person or the persons, firm or Company or corporation whose tender has been accepted by the EMPLOYER and includes the CONTRACTOR's legal Representatives his successors and permitted assigns.
- 1.1.3. The ENGINEER/ENGINEER-IN-CHARGE" shall mean the person designated from time to time by the GAIL and shall include those who are expressly authorized by him to act for and on his behalf for operation of this CONTRACT.
- 1.1.4. The "WORK" shall mean and include all items and things to be supplied/ done and services and activities to be performed by the CONTRACTOR in pursuant to and in accordance with CONTRACT or part thereof as the case may be and shall include all extra, additional, altered or substituted works as required for purpose of the CONTRACT.
- 1.1.5. The "PERMANENT WORK" means and includes works which will be incorporated in and form a part of the work to be handed over to the EMPLOYER by the CONTRACTOR on completion of the CONTRACT.
- 1.1.6. "CONSTRUCTION EQUIPMENT" means all appliances/equipment and things whatsoever nature for the use in or for the execution, completion, operation, or maintenance of the work or temporary works (as hereinafter defined) but does not include materials or other things intended to form or to be incorporated into the WORK, or camping facilities.
- 1.1.7. "CONTRACT DOCUMENTS" means collectively the Tender Documents, Designs, Drawings, Specification, Schedule of Quantities and Rates, Letter of Acceptance and agreed variations if any, and such other documents constituting the tender and acceptance thereof.
- 1.1.8. CONSULTANT: means M/s Rajkhowas Aarchi who are the consulting engineer to the Employer for this project and having registered office at M.D. Road, Chandmari, Guwahati - 03
- 1.1.9. The "SUB-CONTRACTOR" means any person or firm or Company (other than the CONTRACTOR) to whom any part of the work has been entrusted by the CONTRACTOR, with the written consent of the ENGINEER-IN-CHARGE, and the legal representatives, successors and permitted assigns of such person, firm or company.
- 1.1.10. The "CONTRACT" shall mean the Agreement between the EMPLOYER and the CONTRACTOR for the execution of the works including therein all contract documents.
- 1.1.11. The "SPECIFICATION" shall mean all directions the various technical specifications, provisions attached and referred to the Tender Documents which pertain to the method and manner of performing the work or works to the quantities and qualities of the work or works and the materials to be furnished under the CONTRACT for the work or works, as may be amplified or modified by the GAIL or ENGINEER-IN-CHARGE during the performance of CONTRACT in order to provide the unforeseen conditions or in the best interests of the work or works. It shall also include the latest edition of relevant Standard Specifications including all addenda/corrigenda published before entering into CONTRACT.
- 1.1.12. The "DRAWINGS" shall include maps, plans and tracings or prints or sketches thereof with any modifications approved in writing by the ENGINEER- IN-CHARGE and such other drawing as may, from time to time, be furnished or approved in writing by the ENGINEER-IN-CHARGE.
- 1.1.13. The "TENDER" means the proposal along with supporting documents submitted by the CONTRACTOR for consideration by the EMPLOYER.
- 1.1.14. The "CHANGE ORDER" means an order given in writing by the ENGINEER-IN-CHARGE to effect additions to or deletion from and alteration in the works.

- 1.1.15. The "COMPLETION CERTIFICATE" shall mean the certificate to be issued by the ENGINEER-IN-CHARGE when the works have been completed entirely in accordance with CONTRACT DOCUMENT to his satisfaction.
- 1.1.16. The "FINAL CERTIFICATE" in relation to a work means the certificate regarding the satisfactory compliance of various provision of the CONTRACT by the CONTRACTOR issued by the ENGINEER-IN-CHARGE/EMPLOYER after the period of liability is over.
- 1.1.17. "DEFECT LIABILITY PERIOD" in relation to a work means the specified period from the date of COMPLETION CERTIFICATE upto the date of issue of FINAL CERTIFICATE during which the CONTRACTOR stands responsible for rectifying all defects that may appear in the works executed by the CONTRACTOR in pursuance of the CONTRACT and includes warranties against Manufacturing/Fabrication/ Erection/Construction defects covering all materials plants, equipment, components, and the like supplied by the CONTRACTOR, works executed against workmanship defects.
- 1.1.18. The "APPOINTING AUTHORITY" for the purpose of arbitration shall be the CHAIRMAN and MANAGING DIRECTOR or any other person so designated by the EMPLOYER.
- 1.1.19. "TEMPORARY WORKS" shall mean all temporary works of every kind required in or about the execution, completion or maintenance of works.
- 1.1.20. "PLANS" shall mean all maps, sketches and layouts as are incorporated in the CONTRACT in order to define broadly the scope and specifications of the work or works, and all reproductions thereof.
- 1.1.21. "SITE" shall mean the lands and other places on, under, in or through which the permanent works are to be carried out and any other lands or places provided by the EMPLOYER for the purpose of the CONTRACT.
- 1.1.22. "NOTICE IN WRITING OR WRITTEN NOTICE" shall mean a notice in written, typed or printed characters sent (unless delivered personally or otherwise proved to have been received by the addressee) by registered post to the latest known private or business address or registered office of the addressee and shall be deemed to have been received in the ordinary course of post it would have been delivered.
- 1.1.23. "APPROVED" shall mean approved in writing including subsequent written confirmation of previous verbal approval and "APPROVAL" means approval in writing including as aforesaid.
- 1.1.24. "LETTER OF INTENT/FAX OF INTENT" shall mean intimation by a Fax/Letter to Tenderer(s) that the tender has been accepted in accordance with the provisions contained in the letter.
- 1.1.25. "DAY" means a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.
- 1.1.26. "WORKING DAY" means any day which is not declared to be holiday or rest day by the EMPLOYER.
- 1.1.27. "WEEK" means a period of any consecutive seven days.
- 1.1.28. "METRIC SYSTEM" - All technical documents regarding the construction of works are given in the metric system and all work in the project should be carried out according to the metric system. All documents concerning the work shall also be maintained in the metric system.
- 1.1.29. "VALUE OF CONTRACT" or "TOTAL CONTRACT PRICE" shall mean the sum accepted or the sum calculated in accordance with the prices accepted in tender and/or the CONTRACT rates as payable to the CONTRACTOR for the entire execution and full completion of the work, including change order.
- 1.1.30. "LANGUAGE FOR DRAWINGS AND INSTRUCTION" All the drawings, titles, notes, instruction, dimensions, etc. shall be in English Language.
- 1.1.31. "MOBILIZATION" shall mean establishment of sufficiently adequate infrastructure by the CONTRACTOR at "SITE" comprising of construction equipments, aids, tools tackles including setting of site offices with facilities such as power, water, communication etc. establishing manpower organization comprising of Resident Engineers, Supervising personnel and an adequate strength of skilled, semi-skilled and un-skilled workers, who with the so established infrastructure shall be in a position to commence execution of work at site(s), in accordance with the agreed Time Schedule of Completion of Work. "MOBILISATION" shall be considered to have been achieved, if the CONTRACTOR is able to establish infrastructure as per Time Schedule,

where so warranted in accordance with agreed schedule of work implementation to the satisfaction of ENGINEER-IN-CHARGE/ EMPLOYER.

- 1.1.32. "COMMISSIONING" shall mean pressing into service of the system including the plant(s), equipment(s), vessel(s), pipeline, machinery(ies), or any other section or sub-section of installation(s) pertaining to the work of the CONTRACTOR after successful testing and trial runs of the same. "COMMISSIONING" can be either for a completed system or a part of system of a combination of systems or sub-systems and can be performed in any sequence as desired by EMPLOYER and in a manner established to be made suited according to availability of pre-requisites. Any such readjustments made by EMPLOYER in performance of "COMMISSIONING" activity will not be construed to be violating CONTRACT provisions and CONTRACTOR shall be deemed to have provided for the same.

SECTION-II GENERAL INFORMATION

2. GENERAL INFORMATION

- 2.1 a) Location of Site: The proposed location of Project site is defined in the Special Conditions of Contract.
- b) Access by Road: CONTRACTOR, if necessary, shall build other temporary access roads to the actual site of construction for his own work at his own cost. The CONTRACTOR shall be required to permit the use of the roads so constructed by him for vehicles of any other parties who may be engaged on the project site. The CONTRACTOR shall also facilitate the construction of the permanent roads should the construction there of start while he is engaged on this work. He shall make allowance in his tender for any inconvenience he anticipates on such account. Non-availability of access roads, railway siding and railway wagons for the use of the CONTRACTOR shall in no case condone any delay in the execution of WORK nor be the cause for any claim for compensation against the EMPLOYER.
- 2.2 Scope of Work: The scope of WORK is defined in the Technical Part of the tender document. The CONTRACTOR shall provide all necessary materials, equipment, labour etc. for the execution and maintenance of the WORK till completion unless otherwise mentioned in the Tender Document.
- 2.3 Water Supply: Contractor will have to make his own arrangements for supply of water to his labour camps and for works. All pumping installations, pipe net work and distribution system will have to be carried out by the Contractor at his own risk and cost. Alternatively the Employer at his discretion may endeavour to provide water to the Contractor at the Employer's source of supply provided the Contractor makes his own arrangement for the water meter which shall be in custody of the Employer and other pipe net works from source of supply and such distribution pipe network shall have prior approval of the Engineer-in-Charge so as not to interfere with the layout and progress of the other construction works. In such case, the rate for water shall be deducted from the running account bills. However, the Employer does not guarantee the supply of water and this does not relieve the Contractor of his responsibility in making his own arrangement and for the timely completion of the various works as stipulated.
- 2.4 Power Supply:
- 2.4.1 Subject to availability, EMPLOYER will supply power at 400/440 V at only one point at the nearest sub-station, from where the CONTRACTOR will make his own arrangement for temporary distribution. The point of supply will not be more than 500 m away from the CONTRACTOR'S premises. All the works will be done as per the applicable regulations and passed by the ENGINEER-IN-CHARGE. The temporary line will be removed forthwith after the completion of work or if there is any hindrance caused to the other works due to the alignment of these lines, the CONTRACTOR will re-route or remove the temporary lines at his own cost. The CONTRACTOR at his cost will also provide suitable electric meters, fuses, switches, etc. for purposes of payment to the EMPLOYER which should be in the custody and control of the EMPLOYER. The cost of power supply shall be payable to the EMPLOYER every month for Construction Works power which would be deducted from the running account bills. The EMPLOYER shall not, however, guarantee the supply of electricity nor have any liability in respect thereof. No claim for compensation for any failure or short supply of electricity will be admissible.

- 2.4.2 It shall be the responsibility of the CONTRACTOR to provide and maintain the complete installation on the load side of the supply with due regard to safety requirement at site. All cabling, equipment, installations etc. shall comply in all respects with the latest statutory requirements and safety provisions i.e., as per the Central/State Electricity Acts and Rules etc. The CONTRACTOR will ensure that his equipment and Electrical Wiring etc., are installed, modified, maintained by a licensed Electrician/Supervisor. A test certificate is to be produced to the ENGINEER-IN-CHARGE for his approval, before power is made available.
- 2.4.3 At all times, IEA regulations shall be followed failing which the EMPLOYER has a right to disconnect the power supply without any reference to the CONTRACTOR. No claim shall be entertained for such disconnection by the ENGINEER-IN-CHARGE. Power supply will be reconnected only after production of fresh certificate from authorized electrical supervisors.
- 2.4.4 The EMPLOYER is not liable for any loss or damage to the CONTRACTOR's equipment as a result of variation in voltage or frequency or interruption in power supply or other loss to the CONTRACTOR arising therefrom.
- 2.4.5 The CONTRACTOR shall ensure that the Electrical equipment installed by him are such that average power factors does not fall below 0.90 at his premises. In case power factor falls below 0.90 in any month, he will reimburse to the EMPLOYER at the penal rate determined by the EMPLOYER for all units consumed during the month.
- 2.4.6 The power supply required for CONTRACTOR's colony near the plant site will be determined by the EMPLOYER and shall be as per State Electricity Board's Rules and other statutory provisions applicable for such installations from time to time. In case of power supply to CONTRACTOR's colony, the power will be made available at a single point and the CONTRACTOR shall make his own arrangement at his own cost for distribution to the occupants of the colony as per Electricity Rules and Acts. The site and colony shall be sufficiently illuminated to avoid accidents.
- 2.4.7 The CONTRACTOR will have to provide and install his own lights and power meters which will be governed as per Central/State Government Electricity Rules. The metres shall be sealed by the EMPLOYER.
- 2.4.8 In case of damage of any of the EMPLOYER's equipment on account of fault, intentional or unintentional on the part of the CONTRACTOR, the EMPLOYER reserves the right to recover the cost of such damage from the CONTRACTOR's bill. Cost of HRC Fuses replaced at the EMPLOYER's terminals due to any fault in the CONTRACTOR's installation shall be to CONTRACTOR's account at the rates decided by the ENGINEER-IN-CHARGE.
- 2.4.9 Only motors upto 3 HP will be allowed to be started direct on line. For motors above 3 HP and upto 100 HP a suitable Starting device approved by the ENGINEER- IN-CHARGE shall be provided by the CONTRACTOR. For motors above 100 HP slipring induction motors with suitable starting devices as approved by the ENGINEER- IN-CHARGE shall be provided by the CONTRACTOR.
- 2.4.10 The CONTRACTOR shall ensure at his cost that all electrical lines and equipment and all installations are approved by the State Electricity Inspector before power can be supplied to the EMPLOYER.
- 2.4.11 The total requirement of power shall be indicated by the tenderer alongwith his tender.
- 2.5 Land for Contractor's Field Office, Godown and Workshop: The EMPLOYER will, at his own discretion and convenience and for the duration of the execution of the work make available near the site, land for construction of CONTRACTOR's Temporary Field Office, godowns workshops and assembly yard required for the execution of the CONTRACT. The CONTRACTOR shall at his own cost construct all these temporary buildings and provide suitable water supply and sanitary arrangement and get the same approved by the ENGINEER-IN-CHARGE. On completion of the works undertaken by the CONTRACTOR, he shall remove all temporary works erected by him and have the SITE cleaned as directed by ENGINEER-IN-CHARGE. If the CONTRACTOR shall fail to comply with these requirements, the ENGINEER-IN-CHARGE may at he expenses of the CONTRACTOR remove such surplus, and rubbish materials and dispose off the same as he deems fit and get the site cleared as aforesaid; and CONTRACTOR shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such surplus materials disposed off as aforesaid. But the EMPLOYER reserves the right

to ask the CONTRACTOR any time during the pendency of the CONTRACT to vacate the land by giving 7 days notice on security reasons or on national interest or otherwise. Rent may be charged for the land so occupied from contractor by the Employer. The CONTRACTOR shall put up temporary structures as required by them for their office, fabrication shop and construction stores only in the area allocated to them on the project site by the EMPLOYER or his authorised representative. No tea stalls/canteens should be put up or allowed to be put up by any CONTRACTOR in the allotted land or complex area without written permission of the EMPLOYER. No unauthorised buildings, constructions or structures should be put up by the CONTRACTOR anywhere on the project site. For uninterrupted fabrication work, the CONTRACTOR shall put up temporary covered structures at his cost within Area in the location allocated to them in the project site by the EMPLOYER or his authorised representative. No person except for authorised watchman shall be allowed to stay in the plant area/CONTRACTOR's area after completion of the day's job without prior written permission from ENGINEER-IN-CHARGE.

2.6 Land for Residential Accommodation:-No Land shall be made available for residential accommodation for staff and labour of CONTRACTOR.

SECTION-III GENERAL INSTRUCTIONS TO TENDERERS

3. SUBMISSION OF TENDER:

- 3.1 TENDER must be submitted without making any additions, alterations, and as per details given in other clauses hereunder. The requisite details shall be filled in by the TENDERER at space provided under "Submission of Tender at the beginning of GCC of Tender Document. The rate shall be filled only in the schedule given in this Tender Document.
- 3.2 Addenda/Corrigenda to this Tender Document, if issued, must be signed, submitted along with the Tender Document. The tenderer should write clearly the revised quantities in Schedule of Rates of Tender Document and should price the WORK based on revised quantities when amendments of quantities are issued in addenda.
- 3.3 Covering letter along with its enclosures accompanying the Tender Document and all further correspondence shall be submitted in duplicate.
- 3.4 Tenderers are advised to submit quotations based strictly on the terms and conditions and specifications contained in the Tender Documents and not to stipulate any deviations.
- 3.5 Tenders should always be placed in double sealed covers, superscribing ["QUOTATION DO NOT OPEN" Tender for _____ Project of BCPL due for opening on _____]. The *Full Name, Address and Telegraphic Address, Fax No. of the Tenderers* shall be written on the bottom left hand corner of the sealed cover.

4. DOCUMENTS:

- 4.1 General: The tenders as submitted, will consist of the following:
 - (i) Complete set of Tender Documents (Original) as sold duly filled in and signed by the tenderer as prescribed in different clauses of the Tender Documents.
 - (ii) Earnest money in the manner specified in Clause 6 hereof.
 - (iii) Power of Attorney or a true copy thereof duly attested by a Gazetted Officer in case an authorised representative has signed the tender, as required by Clause 14 hereof.
 - (iv) Information regarding tenderers in the proforma enclosed.
 - (v) Details of work of similar type and magnitude carried out by the Tenderer in the proforma provided in the tender document.
 - (vi) Organisation chart giving details of field management at site, the tenderer proposes to have for this job.
 - (vii) Details of construction plant and equipments available with the tenderer for using in this work.
 - (viii) Solvency Certificate from Scheduled Bank to prove the financial ability to carry out the work tendered for.
 - (ix) Latest Balance Sheet and Profit & Loss Account duly audited.
 - (x) Details of present commitment as per proforma enclosed to tender.
 - (xi) Data required regarding SUB-CONTRACTOR(s)/ Supplier/ Manufacturers and other technical informations the tenderer wish to furnish.

- (xii) Provident fund registration certificate
- (xiii) List showing all enclosures to tender.

- 4.2 All pages are to be Initiated: All signatures in Tender Documents shall be dated, as well as, all the pages of all sections of Tender Documents shall be initialed at the lower right hand corner and signed wherever required in the tender papers by the TENDERER or by a person holding power of attorney authorising him to sign on behalf of the tenderer before submission of tender.
- 4.3 Rates to be in Figures and Words: The tender should quote in English both in figures as well as in words the rates and amounts tendered by him in the Schedule of Rates of Tender submitted by the CONTRACTOR for each item and in such a way that interpolation is not possible. The amount for each item should be worked out and entered and requisite total given of all items, both in figures and in words. The tendered amount for the work shall be entered in the tender and duly signed by the Tenderer. If some discrepancies are found between the RATES in FIGURES and WORDS or the AMOUNT shown in the tender, the following procedure shall be followed:
- a) When there is difference between the rates in figures and words, the rate which corresponds to the amount worked out by the tenderer shall be taken as correct.
 - b) When the rate quoted by the tenderer in figures and words tally but the amount is incorrect the rate quoted by the tenderer shall be taken as correct.
 - c) When it is not possible to ascertain the correct rate by either of above methods, the rate quoted in words shall be taken as correct.
- 4.4 Corrections and Erasures: All correction(s) and alteration(s) in the entries of tender paper shall be signed in full by the TENDERER with date. No erasure or over writing is permissible.
- 4.5 Signature of Tenderer:
- 4.5.1 The TENDERER shall contain the name, residence and place of business of person or persons making the tender and shall be signed by the TENDERER with his usual signature. Partnership firms shall furnish the full names of all partners in the tender. It should be signed in the partnership's name by all the partners or by duly authorised representatives followed by the name and designation of the person signing. Tender by a corporation shall be signed by an authorised representative, and a Power of Attorney in that behalf shall accompany the tender. A copy of the constitution of the firm with names of all partners shall be furnished.
- 4.5.2 When a tenderer signs a tender in a language other than English, the total amount tendered should, in addition, be written in the same language. The signature should be attested by at least one witness.
- 4.6 Witness: Witness and sureties shall be persons of status and property and their names, occupation and address shall be stated below their signature.
- 4.7 Details of Experience: The tenderer should furnish, along with his tender, details of previous experience in having successfully completed in the recent past works of this nature, together with the names of Employers, location of sites and value of contract, date of commencement and completion of work, delays if any, reasons of delay and other details along with documentary evidence(s).
- 4.8 Liability of Government of India: It is expressly understood and agreed by and between Bidder or/Contractor and M/s BCPL, and that M/s BCPL, is entering into this agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that the Government of India is not a party to this agreement and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that M/s BCPL is an independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable Laws of India and general principles of Contract Law. The Bidder/Contractor expressly agrees, acknowledges and understands that M/s BCPL is not an agent, representative or delegate of the Government of India. It is further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly, Bidder/Contractor hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Government of India arising out of this contract and covenants not to sue to Government of India as to any manner, claim, cause of action or thing whatsoever arising of or under this agreement.

5. TRANSFER OF TENDER DOCUMENTS:

5.1 Transfer of Tender Documents purchased by one intending tenderer to another is not permissible.

6. EARNEST MONEY:

6.1 The bidder must pay Earnest Money as given in the letter /notice inviting tenders and attach the official receipt with the tender failing which the tender is liable to be rejected and representatives of such tenderers will not be allowed to attend the tender opening. Earnest Money can be paid in Demand Drafts or Bank Guarantee or Banker's Cheque or Letter of Credit from any Indian scheduled bank or a branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank. However, other than the Nationalised Indian Banks, the banks whose BGs are furnished, must be commercial banks having net worth in excess of Rs. 100 crores and a declaration to this effect should be made by such commercial bank either in the bank guarantee itself or separately on a letter head. The bid guarantee shall be submitted in the prescribed format.

Note: The Bank Guarantee so furnished by the tenderer shall be in the proforma prescribed by the EMPLOYER. No interest shall be paid by the EMPLOYER on the Earnest Money deposited by the tenderer. The Bank Guarantee furnished in lieu of Earnest Money shall be kept valid for a period of "SIX MONTHS" from the date of opening of tender.(TWO MONTHS beyond the bid validity). The Earnest Money deposited by successful tenderer shall be forfeited if the Contractor fails to furnish the requisite Contract Performance Security as per clause 24 hereof and /or fails to start work within a period of 15 days or fails to execute the AGREEMENT within 15 days of the receipt by him of the Notification of Acceptance of Tender.

Note: The Earnest Money of the unsuccessful bidder will be returned by EMPLOYER/CONSULTANT, directly to the tenderer (s), within a reasonable period of time but not later than 30 days after the expiration of the period of bid validity prescribed by EMPLOYER.

7 VALIDITY:

7.1 Tender submitted by tenderers shall remain valid for acceptance for a period of "4 MONTHS" from the date of opening of the tender. The tenderers shall not be entitled during the said period of 4 months, without the consent in writing of the EMPLOYER, to revoke or cancel his tender or to vary the tender given or any term thereof. In case of tender revoking or canceling his tender or varying any term in regard thereof without the consent of EMPLOYER in writing, the EMPLOYER shall forfeit Earnest Money paid by him alongwith tender.

8 ADDENDA/CORRIGENDA

8.1 Addenda/ Corrigenda to the Tender Documents will be issued in duplicate prior to the date of opening of the tenders to clarify documents or to reflect modification in design or CONTRACT terms.

8.2 Each addenda/ corrigendum issued will be issued in duplicate to each person or organisation to whom set of Tender Documents has been issued. Recipient will retain tenderer's copy of each Addendum/Corrigendum and attach original copy duly signed along with his offer. All Addenda/Corrigenda issued shall become part of Tender Documents.

9 RIGHT OF EMPLOYER TO ACCEPT OR REJECT TENDER:

9.1 The right to accept the tender will rest with the EMPLOYER. The EMPLOYER, however, does not bind himself to accept the lowest tender, and reserves to itself the authority to reject any or all the tenders received without assigning any reason whatsoever. At the option of the Employer, the work for which the tender had been invited, may be awarded to one Contractor or split between more than one bidders, in which case the award will be made for only that part of the work, in respect of which the bid has been accepted. The quoted rates should hold good for such eventualities. Tenders in which any of the particulars and prescribed information are missing or are incomplete in any respect and/or the prescribed conditions are not fulfilled are liable to be rejected. The Tender containing uncalled for remarks or any additional conditions are liable to be rejected. Canvassing in connection with tenders is strictly prohibited and tenders submitted by the Tenderers who resort to canvassing will be liable to rejection.

10 TIME SCHEDULE:

- 10.1 The WORK shall be executed strictly as per the TIME SCHEDULE specified in TENDER/CONTRACT Document. The period of construction given in Time Schedule includes the time required for mobilisation as well as testing, rectifications if any, retesting and completion in all respects to the entire satisfaction of the ENGINEER-IN-CHARGE.
- 10.2 A joint programme of execution of the WORK will be prepared by the ENGINEER-IN-CHARGE and CONTRACTOR based on priority requirement of this project. This programme will take into account the time of completion mentioned in 10.1 above and the time allowed for the priority works by the ENGINEER-IN-CHARGE.
- 10.3 Monthly/Weekly construction programme will; be drawn up by the ENGINEER-IN-CHARGE jointly with the CONTRACTOR, based on availability of work fronts and the joint construction programme as per 10.2 above. The CONTRACTOR shall scrupulously adhere to these targets /programmes by deploying adequate personnel, construction tools and tackles and he shall also supply himself all materials of his scope of supply in good time to achieve the targets/programmes. In all matters concerning the extent of targets set out in the weekly and monthly programmes and the degree of achievements the decision of the ENGINEER-IN-CHARGE will be final and binding on the CONTRACTOR.

11 TENDERER'S RESPONSIBILITY:

- 11.1 The intending tenderers shall be deemed to have visited the SITE and familiarized submitting the tender. Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the works in strict conformity with the DRAWINGS and SPECIFICATIONS or for any delay in performance.

12 RETIRED GOVERNMENT OR COMPANY OFFICERS:

- 12.1 No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the States/ Central Government or of the EMPLOYER is allowed to work as a CONTRACTOR for a period of two years after his retirement from Government Service, or from the employment of the EMPLOYER without the previous permission of the EMPLOYER. The CONTRACT, if awarded, is liable to be cancelled if either the CONTRACTOR or any of his employees is found at any time to be such a person, who has not obtained the permission of the State/Central Government or of the EMPLOYER as aforesaid before submission of tender, or engagement in the CONTRACTOR'S service as the case may be.

13 SIGNING OF THE CONTRACT:

- 13.1 The successful tenderer shall be required to execute an AGREEMENT in the proforma attached with TENDER DOCUMENT within 15 days of the receipt by him of the Notification of Acceptance of Tender. In the event of failure on the part of the successful tenderer to sign the AGREEMENT within the above stipulated period, the Earnest Money or his initial deposit will be forfeited and the acceptance of the tender shall be considered as cancelled.

14 FIELD MANAGEMENT & CONTROLLING/COORDINATING AUTHORITY:

- 14.1 The field management will be the responsibility of the ENGINEER-IN-CHARGE, who will be nominated by the EMPLOYER. The ENGINEER-IN-CHARGE may also authorize his representatives to assist in performing his duties and functions.
- 14.2 The ENGINEER-IN-CHARGE shall coordinate the works of various agencies engaged at site to ensure minimum disruption of work carried out by different agencies. It shall be the responsibility of the CONTRACTOR to plan and execute the work strictly in accordance with site instructions to avoid hindrance to the work being executed by other agencies.

15 NOTE TO SCHEDULE OF RATES:

- 15.1 The Schedule of Rates should be read in conjunction with all the other sections of the tender.
- 15.2 The tenderer shall be deemed to have studied the DRAWINGS, SPECIFICATIONS and details of work to be done within TIME SCHEDULE and to have acquainted him of the condition prevailing at site.

- 15.3 Rates must be filled in the Schedule of Rates of original Tender Documents. If quoted in separate typed sheets no variation in item description or specification shall be accepted. Any exceptions taken by the tenderer to the Schedule of Rates shall be brought out in the terms and conditions of the offer.
- 15.4 The quantities shown against the various items are only approximate. Any increase or decrease in the quantities shall not form the basis of alteration of the rates quoted and accepted.
- 15.5 The EMPLOYER reserves the right to interpolate the rates for such items of work falling between similar items of lower and higher magnitude.

16 POLICY FOR TENDERS UNDER CONSIDERATION:

- 16.1 Only Those Tenders which are complete in all respects and are strictly in accordance with the Terms and Conditions and Technical Specifications of Tender Document, shall be considered for evaluation. Such Tenders shall be deemed to be under consideration immediately after opening of Tender and until such time an official intimation of acceptance /rejection of Tender is made by BCPL to the Bidder.
- 16.2 Zero Deviation: Bidders to note that this is a ZERO DEVIATION TENDER. BCPL will appreciate submission of offer based on the terms and conditions in the enclosed General Conditions of Contract (GCC), Special Conditions of Contract (SCC), Instructions to Bidders (ITB), Scope of Work, technical specifications etc. to avoid wastage of time and money in seeking clarifications on technical/ commercial aspects of the offer. Bidder may note that no technical and commercial clarifications will be sought for after the receipt of the bids. In case of any deviation/nonconformity observed in the bid, it will be liable for rejection.

17 AWARD OF CONTRACT:

- 17.1 The Acceptance of Tender will be intimated to the successful Tenderer by BCPL either by Telex/ Telegram/ Fax or by Letter or like means-defined as LETTER OF ACCEPTANCE OF TENDER.
- 17.2 BCPL will be the sole judge in the matter of award of CONTRACT and the decision of BCPL shall be final and binding.

18 CLARIFICATION OF TENDER DOCUMENT:

- 18.1 The Tender is required to carefully examine the Technical Specifications, Conditions of Contract, Drawings and other details relating to WORK and given in Tender Document and fully inform himself as to all conditions and matters which may in any way affect the WORK or the cost thereof. In case the Tenderer is in doubt about the completeness or correctness of any of the contents of the Tender Documents he should request in writing for an interpretation/clarification to BCPL in triplicate. GAIL will then issue interpretation/clarification to Tenderer in writing. Such clarifications and or interpretations shall form part of the Specifications and Documents and shall accompany the tender which shall be submitted by tenderer within time and date as specified in invitations to tender.
- 18.2 Verbal clarification and information given by BCPL or its employee(s) or its representatives shall not in any way be binding on BCPL.

19 LOCAL CONDITIONS:

- 19.1 It will be imperative on each tenderer to inform himself of all local conditions and factors which may have any effect on the execution of WORK covered under the Tender Document. In their own interest, the tenderer are requested to familiarise themselves with the Indian Income Tax Act 1961, Indian Companies Act 1956, Indian Customs Act 1962 and other related Acts and Laws and Regulations of India with their latest amendments, as applicable GAIL shall not entertain any requests for clarifications from the tenderer regarding such local conditions.
- 19.2 It must be understood and agreed that such factors have properly been investigated and considered while submitting the tender. No claim for financial or any other adjustments to VALUE OF CONTRACT, on lack of clarity of such factors shall be entertained.

20 ABNORMAL RATES:

- 20.1 The tenderer is expected to quote rate for each item after careful analysis of cost involved for the performance of the completed item considering all specifications and Conditions of Contract. This will avoid loss of profit or gain in case of curtailment or change of specification for any item. In case it is noticed that the rates quoted by the tenderer for any item are unusually high or unusually low, it will be sufficient cause for the rejection of the tender unless the EMPLOYER is convinced about the reasonableness after scrutiny of the analysis for such rate(s) to be furnished by the tenderer (on demand).

SECTION-IV GENERAL OBLIGATIONS

21 PRIORITY OF CONTRACT DOCUMENTS:

- 21.1 Except if and the extent otherwise provided by the Contract, the provisions of the General Conditions of Contract and Special Conditions shall prevail over those of any other documents forming part of the CONTRACT. Several documents forming the CONTRACT are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the ENGINEER-IN-CHARGE who shall thereupon issue to the Contractor instructions thereon and in such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows :
- (i) The Contract Agreement ;
 - (ii) The Letter of Acceptance;
 - (iii) The (Instructions to Bidders)ITB;
 - (iv) Special Conditions of Contract (SCC);
 - (v) General Conditions of Contract (GCC)
 - (vi) Any other document forming part of the Contract. Works shown in the DRAWING but not mentioned in the SPECIFICATIONS OR described in the SPECIFICATIONS without being shown in the DRAWINGS shall nevertheless be deemed to be included in the same manner as if they had been specifically shown upon the DRAWINGS and described in the SPECIFICATIONS.
- 21.2 Headings and Marginal Notes: All headings and marginal notes to the clauses of these General Conditions of Contract or to the SPECIFICATIONS or to any other Tender Document are solely for the purpose of giving a concise indication and not a summary of the contents thereof, and they shall never be deemed to be part thereof or be used in the interpretation or construction thereof the CONTRACT.
- 21.3 Singular and Plural: In CONTRACT DOCUMENTS unless otherwise stated specifically, the singular shall include the plural and vice versa wherever the context so requires.
- 21.4 Interpretation: Words implying 'Persons' shall include relevant 'Corporate Companies / Registered Associations/ Body of Individuals/ Firm of Partnership' as the case may be.

22 SPECIAL CONDITIONS OF CONTRACT:

- 22.1 Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract, specification of Work, Drawings and any other documents forming part of this CONTRACT wherever the context so requires.
- 22.2 Notwithstanding the sub-division of the documents into these separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the CONTRACT so far as it may be practicable to do so.
- 22.3 Where any portion of the General Condition of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, unless a different intention appears the provisions of the Special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.
- 22.4 Wherever it is mentioned in the specifications that the CONTRACTOR shall perform certain WORK or provide certain facilities, it is understood that the CONTRACTOR shall do so at his cost and the VALUE OF CONTRACT shall be deemed to have included cost of such performance and provisions, so mentioned.
- 22.5 The materials, design and workmanship shall satisfy the relevant INDIAN STANDARDS, the JOB SPECIFICATIONS contained herein and CODES referred to. Where the job specification stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied.

23 CONTRACTOR TO OBTAIN HIS OWN INFORMATION:

23.1 The CONTRACTOR in fixing his rate shall for all purpose whatsoever reason may be, deemed to have himself independently obtained all necessary information for the purpose of preparing his tender and his tender as accepted shall be deemed to have taken into account all contingencies as may arise due to such information or lack of same. The correctness of the details, given in the Tender Document to help the CONTRACTOR to make up the tender is not guaranteed. The CONTRACTOR shall be deemed to have examined the CONTRACT DOCUMENTS, to have generally obtained his own information in all matters whatsoever that might affect the carrying out of the works at the scheduled rates and to have satisfied himself to the sufficiency of his tender. Any error in description of quantity or omission therefrom shall not vitiate the CONTRACT or release the CONTRACTOR from executing the work comprised in the CONTRACT according to DRAWINGS and SPECIFICATIONS at the scheduled rates. He is deemed to have known the scope, nature and magnitude of the WORKS and the requirements of materials and labour involved etc., and as to what all works he has to complete in accordance with the CONTRACT documents whatever be the defects, omissions or errors that may be found in the DOCUMENTS. The CONTRACTOR shall be deemed to have visited surroundings, to have satisfied himself to the nature of all existing structures, if any, and also as to the nature and the conditions of the Railways, Roads, Bridges and Culverts, means of transport and communication, whether by land, water or air, and as to possible interruptions thereto and the access and egress from the site, to have made enquiries, examined and satisfied himself as to the sites for obtaining sand, stones, bricks and other materials, the sites for disposal of surplus materials, the available accommodation as to whatever required, depots and such other buildings as may be necessary for executing and completing the works, to have made local independent enquiries as to the sub-soil, subsoil water and variations thereof, storms, prevailing winds, climatic conditions and all other similar matters effecting these works. He is deemed to have acquainted himself as to his liability of payment of Government Taxes, Customs duty and other charges, levies etc. Any neglect or omission or failure on the part of the CONTRACTOR in obtaining necessary and reliable information upon the foregoing or any other matters affecting the CONTRACT shall not relieve him from any risks or liabilities or the entire responsibility from completion of the works at the scheduled rates and times in strict accordance with the CONTRACT. It is, therefore, expected that should the CONTRACTOR have any doubt as to the meaning of any portion of the CONTRACT DOCUMENT he shall set forth the particulars thereof in writing to EMPLOYER in duplicate, before submission of tender. The EMPLOYER may provide such clarification as may be necessary in writing to CONTRACT, such clarifications as provided by EMPLOYER shall form part of CONTRACT DOCUMENTS. No verbal agreement or inference from conversation with any effect or employee of the EMPLOYER either before, during or after the execution of the CONTRACT agreement shall in any way affect or modify and of the terms or obligations herein contained. Any change in layout due to site conditions or technological requirement shall be binding on the CONTRACTOR and no extra claim on this account shall be entertained.

24 CONTRACT PERFORMANCE SECURITY:

- 24.1 The CONTRACTOR shall furnish to the EMPLOYER, within 15 days from the date of notification of award, a security in the sum of 10% of the accepted value of the tender or the actual value of work to be done whichever is applicable due to any additional work or any other reasons, in the form of a Bank draft/Banker's cheque or Bank Guarantee or irrevocable Letter of credit (as per proforma enclosed) as Contract Performance Security with the EMPLOYER which will be refunded after the expiry of DEFECTS LIABILITY PERIOD.
- 24.2 CONTRACTOR can furnish the Contract Performance Security in the form of Demand Draft or through a Bank Guarantee or through an irrevocable Letter of Credit from any Indian scheduled bank or a branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank. However, other than the Nationalised Indian Banks, the banks whose BGs are furnished, must be commercial banks having net worth in excess of Rs. 100 crores and a declaration to this effect should be made by such commercial bank either in the bank guarantee itself or separately on a letter head. The bank guarantee or the Letter of Credit shall be submitted in the prescribed format.
- 24.3 If the CONTRACTOR/SUB-CONTRACTOR or their employees or the CONTRACTOR's agents and representatives shall damage, break, deface or destroy any property belonging to the EMPLOYER or others during the execution of the CONTRACT, the same shall be made good by the CONTRACTOR at his own

expenses and in default thereof, the ENGINEER-IN-CHARGE may cause the same to be made good by other agencies and recover expenses from the CONTRACTOR (for which the certificate of the ENGINEER-IN-CHARGE shall be final).

- 24.4 All compensation or other sums of money payable by the CONTRACTOR to the EMPLOYER under terms of this CONTRACT may be deducted from or paid by the encashment or sale of a sufficient part of his Contract Performance Security or from any sums which may be due or may become due to the CONTRACTOR by the EMPLOYER of any account whatsoever and in the event of his Contract Performance Security being reduced by reasons of any such deductions or sale of aforesaid, the CONTRACTOR shall within ten days thereafter make good in cash, bank drafts as aforesaid any sum or sums which may have been deducted from or realised by sale of his Contract Performance Security, or any part thereof. No interest shall be payable by the EMPLOYER for sum deposited as Contract Performance Security.
- 24.5 Failure of the successful bidder to comply with the requirements of this Clause shall constitute sufficient grounds for the annulment of the award and the forfeiture of bid security.

25 TIME OF PERFORMANCE:

- 25.1 Time for Mobilisation: The work covered by this CONTRACT shall be commenced within fifteen (15) days, the date of letter/Fax of Intent and be completed in stages on or before the dates as mentioned in the TIME SCHEDULE OF COMPLETION OF WORK. The CONTRACTOR should bear in mind that time is the essence of this agreement. Request for revision of construction time after tenders are opened will not receive consideration. The above period of fifteen (15) days is included within the overall COMPLETION SCHEDULE, not over and above the completion time to any additional work or any other reasons.
- 25.2 Time Schedule of Construction:
- 25.2.1 The general Time Schedule of construction is given in the TENDER DOCUMENT. CONTRACTOR should prepare a detailed monthly or weekly construction program jointly with the ENGINEER-IN-CHARGE within 15 days of receipt of LETTER/FAX OF INTENT or ACCEPTANCE OF TENDER. The WORK shall be executed strictly as per the Time Schedule given in the CONTRACT DOCUMENT. The period of construction given includes the time required for mobilisation testing, rectifications, if any, retesting and completion in all respects in accordance with CONTRACT DOCUMENT to the entire satisfaction of the ENGINEER-IN-CHARGE.
- 25.2.2 The CONTRACTOR shall submit a detailed PERT network within the time frame agreed above consisting of adequate number of activities covering various key phases of the WORK such as design, procurement, manufacturing, shipment and field erection activities within fifteen (15) days from the date of LETTER/FAX OF INTENT. This network shall also indicate the interface facilities to be provided by the EMPLOYER and the dates by which such facilities are needed.
- 25.2.3 CONTRACTOR shall discuss the network so submitted with the EMPLOYER and the agreed network which may be in the form as submitted with the EMPLOYER or in revised form in line with the outcome of discussions shall form part of the CONTRACT, to be signed within fifteen (15) days from the date of LETTER OF ACCEPTANCE OF TENDER. During the performance of the CONTRACT, if in the opinion of the EMPLOYER proper progress is not maintained suitable changes shall be made in the CONTRACTOR's operation to ensure proper progress. The above PERT network shall be reviewed periodically and reports shall be submitted by the CONTRACTOR as directed by EMPLOYER.

26 FORCE MAJEURE:

- 26.1 CONDITIONS FOR FORCE MAJEURE: In the event of either party being rendered unable by Force Majeure to perform any obligations required to be performed by them under the CONTRACT the relative obligation of the party affected by such Force Majeures shall upon notification to the other party be suspended for the period during which Force Majeures event lasts. The cost and loss sustained by the either party shall be borne by the respective parties. The term "Force Majeures" as employed herein shall mean acts of God, earthquake, war (declared or undeclared), revolts, riots, fires, floods, rebellions, explosions, hurricane, sabotage, civil commotions and acts and regulations of respective Government of the two parties, namely the EMPLOYER and the CONTRACTOR. Upon the occurrence of such cause(s) and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party in writing immediately but not later than 72 (Seventy-two) hours of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of its claim. Time for

performance of the relative obligation suspended by the Force Majeures shall then stand extended by the period for which such cause lasts. If deliveries of bought out items and/or works to be executed by the CONTRACTOR are suspended by Force Majeure conditions lasting for more than 2 (two) months the EMPLOYER shall have the option to terminate the CONTRACT or re-negotiate the contract provisions.

26.2 OUTBREAK OF WAR

26.2.1 If during the currency of the CONTRACT there shall be an out-break of war whether declared or not, in that part of the World which whether financially or otherwise materially affect the execution of the WORK the CONTRACTOR shall unless and until the CONTRACT is terminated under the provisions in this clause continue to use his best endeavour to complete the execution of the WORK, provided always that the EMPLOYER shall be entitled, at any time after such out-break of war to terminate or re-negotiate the CONTRACT by giving notice in writing to the CONTRACTOR and upon such notice being given the CONTRACT shall, save as to the rights of the parties under this clause and to the operation of the clauses entitled settlement of Disputes and Arbitration hereof, be terminated but without prejudice to the right of either party in respect of any antecedent breach thereof.

26.2.2 If the CONTRACT shall be terminated under the provisions of the above clause, the CONTRACTOR shall with all reasonable diligence remove from the SITE all the CONTRACTOR's equipment and shall give similar facilities to his SUB-CONTRACTORS to do so.

27 PRICE REDUCTION SCHEDULE:

27.1 Time is the essence of the CONTRACT. In case the CONTRACTOR fails to complete the WORK within the stipulated period, then, unless such failure is due to Force Majeure as defined in Clause 26 here above or due to EMPLOYER's defaults, the Total Contract price shall be reduced by ½ % of the total Contract Price per complete week of delay or part thereof subject to a maximum of 5 % of the Total Contract Price, by way of reduction in price for delay and not as penalty. The said amount will be recovered from amount due to the Contractor/ Contractor's Contract Performance Security payable on demand. The decision of the ENGINEER-IN-CHARGE in regard to applicability of Price Reduction Schedule shall be final and binding on the CONTRACTOR.

27.2 All sums payable under this clause is the reduction in price due to delay in completion period at the above agreed rate.

27.3 BONUS FOR EARLY COMPLETION (*)

BONUS FOR EARLY COMPLETION If the Contractor achieves completion of Works in all respect prior to the time schedule stipulated in the SCC, the Employer shall pay to the Contractor the relevant sum, if mentioned specifically in SCC, as bonus for early completion. The bonus for early completion, if provided specifically in SCC, shall be payable to the maximum ceiling of 2 ½ % of the total contract price.

(*) Partial earlier completion may not always produce net benefits to the Employer, for example where utilization of the completed Works requires (a) the fulfillment of all parts of the Contract (e.g. the training of personnel); or (b) the completion of all Sections (e.g. in pipeline laying, where early completion of the laying of pipeline would not be useful if the compressor is still under installation); or (c) certain seasonal effects to take place (e.g. onset of the rainy season, for impounding a reservoir); or (d) other circumstances. Also a more rapid drawdown of budgeted funds may be required. All such factors should be considered prior to the inclusion of a bonus clause in the Contract.

28 RIGHTS OF THE EMPLOYER TO FORFEIT CONTRACT PERFORMANCE SECURITY:

28.1 Whenever any claim against the CONTRACTOR for the payment of a sum of money arises out or under the CONTRACT, the EMPLOYER shall be entitled to recover such sum by appropriating in part or whole the Contract Performance Security of the CONTRACTOR. In the event of the security being insufficient or if no security has been taken from the CONTRACTOR, then the balance or the total sum recoverable, as the case may be shall be deducted from any sum then due or which at any time thereafter may become due to the CONTRACTOR. The CONTRACTOR shall pay to the EMPLOYER on demand any balance remaining due.

29 FAILURE BY THE CONTRACTOR TO COMPLY WITH THE PROVISIONS OF THE CONTRACT:

29.1 If the CONTRACTOR refuses or fails to execute the WORK or any separate part thereof with such diligence as will ensure its completion within the time specified in the CONTRACT or extension thereof or fails to perform any of his obligation under the CONTRACT or in any manner commits a breach of any of the provisions of the CONTRACT it shall be open to the EMPLOYER at its option by written notice to the CONTRACTOR:

- a) TO DETERMINE THE CONTRACT in which event the CONTRACT shall stand terminated and shall cease to be in force and effect on and from the date appointed by the EMPLOYER on that behalf, whereupon the CONTRACTOR shall stop forthwith any of the CONTRACTOR's work then in progress, except such WORK as the EMPLOYER may, in writing, require to be done to safeguard any property or WORK, or installations from damage, and the EMPLOYER, for its part, may take over the work remaining unfinished by the CONTRACTOR and complete the same through a fresh contractor or by other means, at the risk and cost of the CONTRACTOR, and any of his sureties if any, shall be liable to the EMPLOYER for any excess cost occasioned by such work having to be so taken over and completed by the EMPLOYER over and above the cost at the rates specified in the schedule of quantities and rate/prices.
- b) WITHOUT DETERMINING THE CONTRACT to take over the work of the CONTRACTOR or any part thereof and complete the same through a fresh contractor or by other means at the risk and cost of the CONTRACTOR. The CONTRACTOR and any of his sureties are liable to the EMPLOYER for any excess cost over and above the cost at the rates specified in the Schedule of Quantities/ rates, occasioned by such works having been taken over and completed by the EMPLOYER.

29.2 In such events of Clause 29.1(a) or (b) above.

- a) The whole or part of the Contract Performance Security furnished by the CONTRACTOR is liable to be forfeited without prejudice to the right of the EMPLOYER to recover from the CONTRACTOR the excess cost referred to in the sub-clause aforesaid, the EMPLOYER shall also have the right of taking possession and utilising in completing the works or any part thereof, such as materials equipment and plants available at work site belonging to the CONTRACTOR as may be necessary and the CONTRACTOR shall not be entitled for any compensation for use or damage to such materials, equipment and plant.
- b) The amount that may have become due to the CONTRACTOR on account of work already executed by him shall not be payable to him until after the expiry of Six (6) calendar months reckoned from the date of termination of CONTRACT or from the taking over of the WORK or part thereof by the EMPLOYER as the case may be, during which period the responsibility for faulty materials or workmanship in respect of such work shall, under the CONTRACT, rest exclusively with the CONTRACTOR. This amount shall be subject to deduction of any amounts due from the CONTRACT to the EMPLOYER under the terms of the CONTRACT authorised or required to be reserved or retained by the EMPLOYER.

29.3 Before determining the CONTRACT as per Clause 29.1(a) or (b) provided in the judgement of the EMPLOYER, the default or defaults committed by the CONTRACTOR is/are curable and can be cured by the CONTRACTOR if an opportunity given to him, then the EMPLOYER may issue Notice in writing calling the CONTRACTOR to cure the default within such time specified in the Notice.

29.4 The EMPLOYER shall also have the right to proceed or take action as per 29.1(a) or (b) above, in the event that the CONTRACTOR becomes bankrupt, insolvent, compounds with his creditors, assigns the CONTRACT in favour of his creditors or any other person or persons, or being a company or a corporation goes into voluntary liquidation, provided that in the said events it shall not be necessary for the EMPLOYER to give any prior notice to the CONTRACTOR.

29.5 Termination of the CONTRACT as provided for in sub- clause 29.1(a) above shall not prejudice or affect their rights of the EMPLOYER which may have accrued upto the date of such termination.

30 CONTRACTOR REMAINS LIABLE TO PAY COMPENSATION IF:

30.1 In any case in which any of the powers conferred upon the EMPLOYER BY CLAUSE 29.0 thereof shall have become **action not taken under clause 29:** exercisable and the same had not been exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in .the event of any further case of default by the CONTRACTOR for which

by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his Contract Performance Security, and the liability of the CONTRACTOR for past and future compensation shall remain unaffected. In the event of the EMPLOYER putting in force the power under above sub-clause (a), (b) or (c) vested in him under the preceding clause he may, if he so desired, take possession of all or any tools, and plants, materials and stores in or upon the works or the site thereof belonging to the CONTRACTOR or procured by him and intended to be used for the execution of the WORK or any part thereof paying or allowing for the same in account at the CONTRACT rates or in case of these not being applicable at current market rates to be certified by the ENGINEER-IN-CHARGE whose certificate thereof shall be final, otherwise the ENGINEER-IN-CHARGE may give notice in writing to the CONTRACTOR or his clerk of the works, foreman or other authorised agent, requiring him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice), and in the event of the CONTRACTOR failing to comply with any such requisition, the ENGINEER-IN-CHARGE may remove them at the CONTRACTOR's expense or sell them by auction or private sale on account of the CONTRACTOR and at his risk in all respects without any further notice as to the date, time or place of sale and the certificate of the ENGINEER-IN-CHARGE as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the CONTRACTOR.

31 CHANGE IN CONSTITUTION:

- 31.1 Where the CONTRACTOR is a partnership firm, the prior approval of the EMPLOYER shall be obtained in writing, before any change is made in the constitution of the firm. Where the CONTRACTOR is an individual or a Hindu undivided family business concern, such approval as aforesaid shall, likewise be obtained before such CONTRACTOR enters into any agreement with other parties, where under, the reconstituted firm would have the right to carry out the work hereby undertaken by the CONTRACTOR. In either case if prior approval as aforesaid is not obtained, the CONTRACT shall be deemed to have been allotted in contravention of clause 37 hereof and the same action may be taken and the same consequence shall ensure as provided in the said clause.

32 TERMINATION OF CONTRACT:

- 32.1 **TERMINATION OF CONTRACT FOR DEATH:** If the CONTRACTOR is an individual or a proprietary concern and the individual or the proprietor dies or if the CONTRACTOR is a partnership concern and one of the partner dies then unless, the EMPLOYER is satisfied that the legal representative of the individual or the proprietary concern or the surviving partners are capable of carrying out and completing CONTRACT, he (the EMPLOYER) is entitled to cancel the CONTRACT for the uncompleted part without being in any way liable for any compensation payment to the estate of the deceased CONTRACTOR and/or to the surviving partners of the CONTRACTOR'S firm on account of the cancellation of CONTRACT. The decision of the EMPLOYER in such assessment shall be final and binding on the parties. In the event of such cancellation, the EMPLOYER shall not hold the estate of the deceased CONTRACTOR and/or the surviving partners of the CONTRACTOR'S firm liable for any damages for non-completion of CONTRACT.
- 32.2 **TERMINATION OF CONTRACT IN CASE OF LIQUIDATION / BANKRUPTCY ETC.** If the Contractor shall dissolve or become bankrupt or insolvent or cause or suffer any receiver to be appointed of his business of any assets thereof compound with his Creditors, or being a corporation commence to be wound up, not being a member's voluntary winding up for the purpose of amalgamation or reconstruction, or carry on its business under a Receiver for the benefits of its Creditors any of them, EMPLOYER shall be at liberty :- To terminate the contract forthwith upon coming to know of the happening of any such event as aforesaid by notice in writing to the Contractor or to give the Receiver or liquidator or other person, the option of carrying out the contract subject to his providing a guarantee up-to an amount to be agreed upon by EMPLOYER for due and faithful performance of the contract.
- 32.3 **TERMINATION OF CONTRACT FOR NON-PERFORMANCE AND SUBSEQUENTLY PUTTING THE CONTRACTOR ON HOLIDAY:** In case of termination of CONTRACT herein set forth (under clause 29.0) except under conditions of Force Majeure and termination after expiry of contract, the CONTRACTOR shall be put under holiday [i.e. neither any enquiry will be issued to the party by BCPL. against any type of tender nor their offer will be considered by BCPL against any ongoing tender (s) where contract between GAIL and that particular

CONTRACTOR (as a bidder) has not been finalized] for three years from the date of termination by BCPL to such CONTRACTOR.

33 MEMBERS OF THE EMPLOYER NOT INDIVIDUALLY LIABLE :

- 33.1 No Director, or official or employee of the EMPLOYER/ CONSULTANT shall in any way be personally bound or liable for the acts or obligations of the EMPLOYER under the CONTRACT or answerable for any default or omission in the observance or performance of any of the acts, matters or things which are herein contained.

34 EMPLOYER NOT BOUND BY PERSONAL REPRESENTATIONS:

- 34.1 The CONTRACTOR shall not be entitled to any increase on the scheduled rates or any other right or claim whatsoever by reason of any representation, explanation statement or alleged representation, promise or guarantees given or alleged to have been given to him by any person.

35 CONTRACTOR'S OFFICE AT SITE:

- 35.1 The CONTRACTOR shall provide and maintain an office at the site for the accommodation of his agent and staff and such office shall be open at all reasonable hours to receive instructions, notice or other communications. The CONTRACTOR at all time shall maintain a site instruction book and compliance of these shall be communicated to the ENGINEER-IN CHARGE from time to time and the whole document to be preserved and handed over after completion of works.

36 CONTRACTOR'S SUBORDINATE STAFF AND THEIR CONDUCT

- 36.1 The CONTRACTOR, on or after award of the WORK shall name and depute a qualified engineer having sufficient experience in carrying out work of similar nature, to whom the equipments, materials, if any, shall be issued and instructions for works given. The CONTRACTOR shall also provide to the satisfaction of the ENGINEER-IN- CHARGE sufficient and qualified staff to superintend the execution of the WORK, competent sub-agents, foremen and leading hands including those specially qualified by previous experience to supervise the types of works comprised in the CONTRACT in such manner as will ensure work of the best quality, expeditious working. Whenever in the opinion of the ENGINEER-IN- CHARGE additional properly qualified supervisory staff is considered necessary, they shall be employed by the CONTRACTOR without additional charge on accounts thereof. The CONTRACTOR shall ensure to the satisfaction of the ENGINEER-IN-CHARGE that SUB- CONTRACTORS, if any, shall provide competent and efficient supervision, over the work entrusted to them.
- 36.2 If and whenever any of the CONTRACTOR's or SUB- CONTRACTOR'S agents, sub-agents, assistants, foremen, or other employees shall in the opinion of ENGINEER-IN- CHARGE be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties of that in the opinion of the EMPLOYER or the ENGINEER-IN-CHARGE, it is undesirable for administrative or any other reason for such person or persons to be employed in the works, the CONTRACTOR, is so directed by the ENGINEER-IN-CHARGE, shall at once remove such person or persons from employment thereon. Any person or persons so removed from the works shall not again be employed in connection with the WORKS without the written permission of the ENGINEER-IN- CHARGE. Any person so removed from the WORK shall be immediately re-placed at the expense of the CONTRACTOR by a qualified and competent substitute. Should the CONTRACTOR be requested to repatriate any person removed from the works he shall do so and shall bear all costs in connection herewith.
- 36.3 The CONTRACTOR shall be responsible for the proper behaviour of all the staff, foremen, workmen, and others, and shall exercise a proper degree of control over them and in particular and without prejudice to the said generality, the CONTRACTOR shall be bound to prohibit and prevent any employees from trespassing or acting in any way detrimental or prejudicial to the interest of the community or of the properties or occupiers of land and properties in the neighborhood and in the event of such employee so trespassing, the CONTRACTOR shall be responsible therefore and relieve the EMPLOYER of all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the ENGINEER-IN-CHARGE upon any matter arising under this clause shall be final. The CONTRACTOR shall be liable for any liability to EMPLOYER on account of deployment of CONTRACTOR's staff etc. or incidental or arising out of the execution of CONTRACT. The CONTRACTOR shall be liable for all acts or omissions on the part of

his staff, Foremen and Workmen and others in his employment, including misfeasance or negligence of whatever kind in the course of their work or during their employment, which are connected directly or indirectly with the CONTRACT.

- 36.4 If and when required by the EMPLOYER and CONTRACTOR's personnel entering upon the EMPLOYER's premises shall be properly identified by badges of a type acceptable to the EMPLOYER which must be worn at all times on EMPLOYER's premises. CONTRACTOR may be required to obtain daily entry passes for his staff/employees from EMPLOYER to work within operating areas. These being safety requirements, no relaxations on this account shall be given to CONTRACTOR.

37 SUB-LETTING OF WORKS:

- 37.1 No part of the CONTRACT nor any share or interest therein shall in any manner or degree be transferred, assigned or sublet by the CONTRACTOR directly or indirectly to any person, firm or corporation whatsoever without the consent in writing, of the ENGINEER/EMPLOYER except as provided for in the succeeding sub-clause.
- i) SUB-CONTRACTS FOR TEMPORARY WORKS ETC.: The EMPLOYER may give written consent to Sub-contract for the execution of any part of the WORK at the site, being entered in to by CONTRACTOR provided each individual Sub- contract is submitted to the ENGINEER-IN-CHARGE before being entered into and is approved by him.
 - ii) LIST OF SUB-CONTRACTORS TO BE SUPPLIED: At the commencement of every month the CONTRACTOR shall furnish to the ENGINEER-IN- CHARGE list of all SUB-CONTRACTORS or other persons or firms engaged by the CONTRACTOR and working at the SITE during the previous month with particulars of the general nature of the Subcontract or works done by them.
 - iii) CONTRACTOR'S LIABILITY NOT LIMITED BY SUB- CONTRACTORS: Notwithstanding any sub-letting with such approval as aforesaid and notwithstanding that the ENGINEER-I N-CHARGE shall have received copies of any Subcontracts, the contractor shall be and shall remain solely responsible for the quality, proper and expeditious execution of the Contract in all respects as if such sub-letting or Subcontracting had not taken place, and as if such work had been done directly by the CONTRACTOR. The CONTRACTOR shall bear all responsibility for any act or omission on the part of sub-contractors in regard to work to be performed under the CONTRACT.
 - iv) EMPLOYER MAY TERMINATE SUB-CONTRACTS: If any SUB-CONTRACTOR engaged upon the works at the site executes any works which in the opinion of the ENGINEER-IN-CHARGE is not in accordance with the CONTRACT documents, the EMPLOYER may by written notice to the CONTRACTOR request him to terminate such subcontract and the CONTRACTOR upon the receipt of such notice shall terminate such Subcontract and dismiss the SUB-CONTRACTOR(S) and the later shall forthwith leave the works, failing which the EMPLOYER shall have the right to remove such SUB- CONTRACTOR(S) from the site.
 - v) NO REMEDY FOR ACTION TAKEN UNDER THIS CLAUSE: No action taken by the EMPLOYER under the clause shall relieve the CONTRACTOR of any of his liabilities under the CONTRACT or give rise to any right or compensation, extension of time or otherwise failing which the EMPLOYER shall have the right to remove such SUB-CONTRACTOR(S) from the site.

38 POWER OF ENTRY:

- 38.1 If the CONTRACTOR shall not commence the WORK in the manner previously described in the CONTRACT documents or if he shall at any time in the opinion of the ENGINEER-I N-CHARGE.
- i) fail to carry out the WORK in conformity with the CONTRACT documents, or
 - ii) fail to carry out the WORK in accordance with the Time Schedule, or
 - iii) substantially suspend work or the WORK for a period of fourteen days without authority from the ENGINEER IN-CHARGE, or
 - iv) fail to carry out and execute the WORK to the satisfaction of the ENGINEER-IN-CHARGE, or
 - v) fail to supply sufficient or suitable construction plant, temporary works, labour, materials or things, or
 - vi) Commit, suffer, or permit any other breach of any of the provisions of the CONTRACT on his part to be performed or observed or persist in any of the above mentioned breaches of the CONTRACT for fourteen days, after notice in writing shall have been given to the CONTRACTOR by the ENGINEER-IN-CHARGE requiring such breach to be remedied, or
 - vi) if the CONTRACTOR shall abandon the WORK , or

vii) If the CONTRACTOR during the continuance of the CONTRACT shall become bankrupt, make any arrangement or composition with his creditors, or permit any execution to be levied or go into liquidation whether compulsory or voluntary not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction **then** in any such case, the EMPLOYER shall have the power to enter upon the WORK and take possession thereof and of the materials, temporary WORK, construction plant, and stock thereon, and to revoke the CONTRACTOR's licence to use the same, and to complete the WORK by his agents, other CONTRACTORS or workmen or to relate the same upon any terms and to such other person, firm or corporation as the EMPLOYER in his absolute discretion may think proper to employ and for the purpose aforesaid to use or authorise the use of any materials, temporary work, CONSTRUCTION PLANT, and stock as aforesaid, without making payment or allowance to the CONTRACTOR for the said materials other than such as may be certified in writing by the ENGINEER-IN-CHARGE to be reasonable, and without making any payment or allowance to the CONTRACTOR for the use of the temporary said works, construction plant and stock or being liable for any loss or damage thereto, and if the EMPLOYER shall by reason of his taking possession of the WORK or of the WORK being completed by other CONTRACTOR (due account being taken of any such extra work or works which may or be omitted) then the amount of such excess as certified by the ENGINEER-IN-CHARGE shall be deducted from any money which may be due for work done by the CONTRACTOR under the CONTRACT and not paid for. Any deficiency shall forthwith be made good and paid to the EMPLOYER by the CONTRACTOR and the EMPLOYER shall have power to sell in such manner and for such price as he may think fit all or any of the construction plant, materials etc. constructed by or belonging to and to recoup and retain the said deficiency or any part thereof out of proceeds of the sale.

39 CONTRACTOR'S RESPONSIBILITY WITH THE MECHANICAL, ELECTRICAL, INTERCOMMUNICATION SYSTEM, AIR CONDITIONING CONTRACTORS AND OTHER AGENCIES:

39.1 Without repugnance of any other condition, it shall be the responsibility of the CONTRACTOR executing the work of civil construction, to work in close cooperation and coordinate the WORK with the Mechanical, Electrical, Air-conditioning and Intercommunication Contractor's and other agencies or their authorised representatives, in providing the necessary grooves, recesses, cuts and opening etc., in wall, slabs beams and columns etc. and making good the same to the desired finish as per specification, for the placement of electrical, intercommunication cables, conduits, air-conditioning inlets and outlets grills and other equipments etc. where required. For the above said requirements in the false ceiling and other partitions, the CONTRACTOR before starting-up the work shall in consultation with the Electrical, Mechanical, Intercommunication, Air-conditioning contractor and other agencies prepare and put-up a joint scheme, showing the necessary openings, grooves, recesses, cuts, the methods of fixing required for the WORK of the aforesaid, and the finishes therein, to the ENGINEER-IN-CHARGE and get the approval. The CONTRACTOR before finally submitting the scheme to the ENGINEER-IN-CHARGE, shall have the written agreement of the other agencies. The ENGINEER-IN-CHARGE, before communicating his approval to the scheme, with any required modification, shall get the final agreement of all the agencies, which shall be binding. No claim shall be entertained on account of the above. The CONTRACTOR shall confirm in all respects with provision of any statutory regulations, ordinances or byelaws of any local or duly constituted authorities or public bodies which may be applicable from time to time to the WORK or any temporary works. The CONTRACTOR shall keep the EMPLOYER indemnified against all penalties and liabilities of every kind, arising out of non-adherence to such stains, ordinances, laws, rules, regulations, etc.

40 OTHER AGENCIES AT SITE:

40.1 The CONTRACTOR shall have to execute the WORK in such place and conditions where other agencies will also be engaged for other works such as site grading, filling, and levelling, electrical and mechanical engineering works, etc. No claim shall be entertained due to WORK being executed in the above circumstances.

41 NOTICE:

- 41.1 TO THE CONTRACTOR: Any notice hereunder may be served on the CONTRACTOR or his duly authorised representative at the job site or may be served by registered mail direct to the address furnished by the CONTRACTOR. Proof of issue of any such notice could be conclusive of the CONTRACTOR having been duly informed of all contents therein.
- 41.2 TO THE EMPLOYER: Any notice to be given to the EMPLOYER under the terms of the CONTRACTOR shall be served by sending the same by Registered mail to or delivering the same at the respective site offices of M/S. BRAHMAPUTRA CRACKERS & POLYMERS LTD. addressed to the HEAD/SITE-IN-CHARGE.

42 RIGHT OF VARIOUS INTERESTS:

- 42.1 The EMPLOYER reserves the right to distribute the work between more than one agency(ies). The CONTRACTOR shall cooperate and afford other agency(ies) reasonable opportunity for access to the WORK for the carriage and storage of materials and execution of their works.
- 42.2 Wherever the work being done by any department of the EMPLOYER or by other agency(ies) employed by the EMPLOYER is contingent upon WORK covered by this CONTRACT, the respective rights of the various interests involved shall be determined by the ENGINEER-IN-CHARGE to secure the completion of the various portions of the work in general harmony.

43 PATENTS AND ROYALTIES:

- 43.1 The CONTRACTOR, if licensed under any patent covering equipment, machinery, materials or compositions of matter to be used or supplied or methods and process to be practised or employed in the performance of this CONTRACT, agrees to pay all royalties and licence fees which may be due with respect thereto. If any equipment, machinery, materials, composition of matters, be used or supplied or methods and processes to be practised or employed in the performance of this CONTRACT, is covered by a patent under which the CONTRACTOR is not licensed then the CONTRACTOR before supplying or using the equipment, machinery materials, composition method or processes shall obtain such licences and pay such royalties and licence fees as may be necessary for performance of this CONTRACT. In the event the CONTRACTOR fails to pay any such royalty or obtain any such licence, any suit for infringement of such patents which is brought against the CONTRACTOR or the EMPLOYER as a result such failure will be defended by the CONTRACTOR at his own expense and the CONTRACTOR will pay any damages and costs awarded in such suit. The CONTRACTOR shall promptly notify the EMPLOYER if the CONTRACTOR has acquired the knowledge of any plant under which a suit for infringement could be reasonably brought because of the use by the EMPLOYER of any equipment, machinery, materials, process, methods to be supplied hereunder. The CONTRACTOR agrees to and does hereby grant to EMPLOYER, together with the right to extend the same to any of the subsidiaries of the EMPLOYER as irrevocable, royalty free licence to use in any country, any invention made by the CONTRACTOR or his employee in or as result of the performance of the WORK under the CONTRACT.
- 43.2 All charges on account of royalty. tollage, rent, octroi terminal or sales tax and/or other duties or any other levy on materials obtained for the work or temporary work or part thereof (excluding materials provided by the EMPLOYER) shall be borne by the CONTRACTOR.
- 43.3 The CONTRACTOR shall not sell or otherwise dispose of or remove except for the purpose of this CONTRACT, the sand, stone, clay, ballast, earth, rock or other substances, or materials obtained from any excavation made for the purpose of the WORK or any building or produce upon the site at the time of delivery of the possession thereof, but all such substances, materials, buildings and produce shall be the property of the EMPLOYER provided that the CONTRACTOR may with the permission of the ENGINEER-IN-CHARGE, use the same for the purpose of the work by payment of cost of the same at such a rate as may be determined by the ENGINEER-IN-CHARGE.
- 43.4 The EMPLOYER shall indemnify and save harmless the CONTRACTOR from any loss on account of claims against CONTRACTOR for the contributory infringement of patent rights arising out and based upon the claim that the use of the EMPLOYER of the process included in the design prepared by the EMPLOYER and used in the operation of the plant infringes on any patent right. With respect to any subcontract entered into by CONTRACTOR pursuant to the provisions of the relevant clause hereof, the CONTRACTOR shall obtain from the SUB-CONTRACTOR an undertaking to provide the EMPLOYER with the same patent protection that CONTRACTOR is required to provide under the provisions of this clause.

44 LIENS:

- 44.1 If, at any time there should be evidence or any lien or claim for which the EMPLOYER might have become liable and which is chargeable to the CONTRACTOR, the EMPLOYER shall have the right to retain out of any payment then due or thereafter to become due an amount sufficient to completely indemnify the EMPLOYER against such lien or claim and if such lien or claim be valid, the EMPLOYER may pay and discharge the same and deduct the amount so paid from any money which may be or may become due and payable to the CONTRACTOR. If any lien or claim remain unsettled after all payments are made, the CONTRACTOR shall refund or pay to the EMPLOYER all money that the latter may be compelled to pay in discharging such lien or claim including all costs and reasonable expenses. EMPLOYER reserves the right to do the same.
- 44.2 The EMPLOYER shall have lien on all materials, equipments including those brought by the CONTRACTOR for the purpose of erection, testing and commissioning of the WORK.
- 44.3 The final payment shall not become due until the CONTRACTOR delivers to the ENGINEER-IN-CHARGE a complete release or waiver of all liens arising or which may arise out of his agreement or receipt in full or certification by the CONTRACTOR in a form approved by ENGINEER-IN-CHARGE that all invoices for labour, materials, services have been paid in lien thereof and if required by the ENGINEER-IN-CHARGE in any case an affidavit that so far as the CONTRACTOR has knowledge or information the releases and receipts include all the labour and material for which a lien could be filled.
- 44.4 CONTRACTOR will indemnify and hold the EMPLOYER harmless, for a period of two years after the issue of FINAL CERTIFICATE, from all liens and other encumbrances against the EMPLOYER on account of debts or claims alleged to be due from the CONTRACTOR or his SUB-CONTRACTOR to any person including SUB- CONTRACTOR and on behalf of EMPLOYER will defend at his own expense, any claim or litigation brought against the EMPLOYER or the CONTRACTOR in connection therewith. CONTRACTOR shall defend or contest at his own expense any fresh claim or litigation by any person including his SUB-CONTRACTOR, till its satisfactory settlement even after the expiry of two years from the date of issue of FINAL CERTIFICATE.

45 DELAYS BY EMPLOYER OR HIS AUTHORISED AGENTS:

- 45.1 In case the CONTRACTOR's performance is delayed due to any act or omission on the part of the EMPLOYER or his authorized agents, then the CONTRACTOR shall be given due extension of time for the completion of the WORK, to the extent such omission on the part of the EMPLOYER has caused delay in the CONTRACTOR's performance of his WORK.
- 45.2 No adjustment in CONTRACT PRICE shall be allowed for reasons of such delays and extensions granted except as provided in TENDER DOCUMENT, where the EMPLOYER reserves the right to seek indulgence of CONTRACTOR to maintain the agreed Time Schedule of Completion. In such an event the CONTRACTOR shall be obliged for working by CONTRACTOR's personnel for additional time beyond stipulated working hours as also Sundays and Holidays and achieve the completion date/interim targets.

46 PAYMENT IF THE CONTRACT IS TERMINATED:

- 46.1 If the CONTRACT shall be terminated as per Tender pursuant to Clause no. 29 of GCC, the CONTRACTOR shall be paid by the EMPLOYER in so far as such amounts or items shall not have already been covered by payments of amounts made to the CONTRACTOR for the WORK executed and accepted by ENGINEER-IN-CHARGE prior to the date of termination at the rates and prices provided for in the CONTRACT and in addition to the following:
- i) The amount payable in respect of any preliminary items, so far as the Work or service comprised therein has been carried out or performed and an appropriate portion as certified by ENGINEER-IN-CHARGE of any such items or service comprised in which has been partially carried out or performed.
 - ii) Any other expenses which the CONTRACTOR has expended for performing the WORK under the CONTRACT subject to being duly recommended by ENGINEER-IN-CHARGE and approved by EMPLOYER for payment, based on documentary evidence of his having incurred such expenses.
- 46.2 The CONTRACTOR will be further required to transfer the title and provide the following in the manner and as directed by the EMPLOYER.
- a) Any and all completed works.

- b) Such partially completed WORK including drawings, informations and CONTRACT rights as the CONTRACTOR has specially performed, produced or acquired for the performance of the CONTRACTOR.

47 NO WAIVER OF RIGHTS:

- 47.1 Neither the inspection by the EMPLOYER or any of their officials, employees, or agents nor any order by the EMPLOYER for payment of money or any payment for or acceptance of the whole or any part of the Work by the EMPLOYER nor any extension of time, nor any possession taken by EMPLOYER shall operate as a waiver of any provision of the CONTRACT, or of any power herein reserved to the EMPLOYER, or any right to damages herein provided, nor shall any waiver of any breach in the CONTRACT be held to be a waiver of any other subsequent breach.

48 CERTIFICATE NOT TO AFFECT RIGHT OF EMPLOYER AND LIABILITY OF CONTRACTOR:

- 48.1 No interim payment certificate(s) issued by the Engineer-in- Charge of the EMPLOYER, nor any sum paid on account by the EMPLOYER, nor any extension of time for execution of the work granted by EMPLOYER shall affect or prejudice the rights of the Employer against the CONTRACTOR or relieve the CONTRACTOR of his obligations for the due performance of the CONTRACT, or be interpreted as approval of the WORK done or of the equipment supplied and no certificate shall create liability for the EMPLOYER to pay for alterations, amendments, variations or additional works not ordered, in writing, by EMPLOYER or discharge the liability of the CONTRACTOR for the payment of damages whether due, ascertained, or certified or not or any sum against the payment of which he is bound to indemnify the EMPLOYER.

49 LANGUAGE AND MEASURES:

- 49.1 All documents pertaining to the CONTRACT including Specifications, Schedules, Notices, Correspondence, operating and maintenance Instructions, DRAWINGS, or any other writing shall be written in English language. The Metric System of measurement shall be used in the CONTRACT unless otherwise specified.

50 TRANSFER OF TITLE:

- 50.1 The title of Ownership of supplies furnished by the CONTRACTOR shall not pass on to the EMPLOYER for all Supplies till the same are finally accepted by the EMPLOYER after the successful completion of PERFORMANCE TEST and GUARANTEE TEST and issue of FINAL CERTIFICATE.
- 50.2 However, the EMPLOYER shall have the lien on all such works performed as soon as any advance or progressive payment is made by the EMPLOYER to the CONTRACTOR and the CONTRACTOR shall not subject these works for use other than those intended under this CONTRACT.

51 RELEASE OF INFORMATION:

- 51.1 The CONTRACTOR shall not communicate or use in advertising, publicity, sales releases or in any other medium, photographs, or other reproduction of the Work under this CONTRACT or description of the site dimensions, quantity , quality or other information, concerning the Work unless prior written permission has been obtained from the EMPLOYER.

52 BRAND NAMES:

- 52.1 The specific reference in the SPECIFICATIONS and documents to any material by trade name, make or catalogue number shall be construed as establishing standard or quality and performance and not as limited competition. However, TENDERER may offer other similar equipments provided it meets the specified standard design and performance requirements.

53 COMPLETION OF CONTRACT:

- 53.1 Unless otherwise terminated under the provisions of any other relevant clause, this CONTRACT shall be deemed to have been completed at the expiration of the PERIOD OF LIABILITY as provided for under the CONTRACT.

54 SPARES:

- 54.1 The CONTRACTOR shall furnish to the EMPLOYER all spares required for COMMISSIONING of the plants, recommendatory and/or mandatory spares, which are required essential by the manufacturer/supplier. The same shall be delivered at SITE, 3(Three) months before COMMISSIONING. Also the CONTRACTOR should furnish the manufacturing drawings for fast wearing spares.
- 54.2 The CONTRACTOR guarantees the EMPLOYER that before the manufacturers of the equipments, plants and machineries go out of production of spare parts for the equipment furnished and erected by him, he shall give at least twelve (12) months' advance notice to the EMPLOYER, so that the latter may order his requirement of spares in one lot, if he so desires.

SECTION-V PERFORMANCE OF WORK

55 EXECUTION OF WORK:

- 55.1 All the Works shall be executed in strict conformity with the provisions of the CONTRACT Documents and with such explanatory detailed drawings, specification and instructions as may be furnished from time to time to the CONTRACTOR by the ENGINEER-IN-CHARGE whether mentioned in the CONTRACT or not. The CONTRACTOR shall be responsible for ensuring that works throughout are executed in the most substantial, proper and workmanlike manner with the quality of material and workmanship in strict accordance with the SPECIFICATIONS and to the entire satisfaction of the ENGINEER-IN-CHARGE. The CONTRACTOR shall provide all necessary materials equipment labour etc. for execution and maintenance of WORK till completion unless otherwise mentioned in the CONTRACT.

56 CO-ORDINATION AND INSPECTION OF WORK:

- 56.1 The coordination and inspection of the day-to-day work under the CONTRACT shall be the responsibility of the ENGINEER-IN-CHARGE. The written instruction regarding any particular job will normally be passed by the ENGINEER-IN-CHARGE or his authorised representative. A work order book will be maintained by the CONTRACTOR for each sector in which the aforesaid written instructions will be entered. These will be signed by the CONTRACTOR or his authorised representative by way of acknowledgement within 12 hours.

57 WORK IN MONSOON AND DEWATERING:

- 57.1 Unless otherwise specified elsewhere in the tender, the execution of the WORK may entail working in the monsoon also. The CONTRACTOR must maintain a minimum labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No extra rate will be considered for such work in monsoon.
- 57.2 During monsoon and other period, it shall be the responsibility of the CONTRACTOR to keep the construction work site free from water at his own cost.

58 WORK ON SUNDAYS AND HOLIDAYS:

- 58.1 For carrying out Work on Sundays, and Holidays, the CONTRACTOR will approach the ENGINEER-IN-CHARGE or his representative at least two days in advance and obtain permission in writing. The CONTRACTOR shall observe all labour laws and other statutory rules and regulations in force. In case of any violations of such laws, rules and regulations, consequence if any, including the cost thereto shall be exclusively borne by the CONTRACTOR and the EMPLOYER shall have no liability whatsoever on this account.

59 GENERAL CONDITIONS FOR CONSTRUCTION AND ERECTION WORK:

- 59.1 The working time at the site of work is 48 hours per week. Overtime work is permitted in cases of need and the EMPLOYER will not compensate the same. Shift working at 2 or 3 shifts per day will become necessary and the CONTRACTOR should take this aspect into consideration for formulating his rates for quotation. No extra claims will be entertained by the EMPLOYER on this account. For carrying out work beyond working hours the CONTRACTOR will approach the ENGINEER-IN-CHARGE or his authorized representative and obtain his prior written permission.

- 59.2 The CONTRACTOR must arrange for the placement of workers in such a way that the delayed completion of the WORK or any part thereof for any reason whatsoever will not affect their proper employment. The EMPLOYER will not entertain any claim for idle time payment whatsoever.
- 59.3 The CONTRACTOR shall submit to the EMPLOYER/ENGINEER-IN- CHARGE reports at regular intervals regarding the state and progress of WORK. The details and proforma of the report will mutually be agreed after the award of CONTRACT. The CONTRACTOR shall provide display boards showing progress and labour strengths at worksite, as directed by the ENGINEER-IN-CHARGE.

60 ALTERATIONS IN SPECIFICATIONS, DESIGN AND EXTRA WORKS:

- 60.1 The WORK covered under this CONTRACT having to be executed by the CONTRACTOR on a lumpsum firm price/item rate quoted by him, the EMPLOYER will not accept any proposals for changes in VALUE OF CONTRACT or extension in time on account of any such changes which may arise to the CONTRACTOR's scope of WORK as a result of detailed Engineering and thereafter during the execution of WORK. The only exception to this will be a case where the EMPLOYER requests in writing to the CONTRACTOR to upgrade the SPECIFICATIONS or the size of any major pieces of equipments, plant or machinery beyond what is normally required to meet the scope of WORK as defined in the CONTRACT DOCUMENT. In such cases, a change order will be initialled by the CONTRACTOR at the appropriate time for the EMPLOYER's prior approval giving the full back-up data for their review and for final settlement of any impact on price within 30 (thirty) days thereafter.
- 60.2 The ENGINEER-IN-CHARGE shall have to make any alterations in, omission from, additions to or substitutions for, the Schedule of Rates, the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the WORK and the CONTRACTOR shall be bound to carry out the such altered/ extra/ new items of WORK in accordance with any instructions which may be given to him in writing signed by the ENGINEER-IN- CHARGE, and such alterations, omissions, additions or substitutions shall not invalidate the CONTRACT and any altered, additional or substituted work which the CONTRACTOR may be directed to do in the manner above specified as part of the WORK shall be carried out by the CONTRACTOR on the same conditions in all respects on which he agreed to do the main WORK. The time of completion of WORK may be extended for the part of the particular job at the discretion of the ENGINEER-IN- CHARGE, for only such alterations, additions or substitutions of the WORK, as he may consider as just and reasonable. The rates for such additional, altered or substituted WORK under this clause shall be worked out in accordance with the following provisions:-
- I. For Item Rate Contract
- a) If the rates for the additional, altered or substituted WORK are specified in the CONTRACT for the WORK, the CONTRACTOR is bound to carry on the additional, altered or substituted WORK at the same rates as are specified in the CONTRACT.
 - b) If the rates for the additional, altered or substituted WORK are not specifically provided in the CONTRACT for the WORK, the rates will be derived from the rates for similar class of WORK as are specified in the CONTRACT for the WORK. The opinion of the ENGINEER-IN- CHARGE, as to whether or not the rates can be reasonably so derived from the items in this CONTRACT will be final and binding on the CONTRACTOR.
 - c) If the rates for the altered, additional or substituted WORK cannot be determined in the manner specified in sub-clause(s) and (b) above, then the CONTRACTOR shall, within 7 days of the date of receipt of order to carry out the WORK, inform the ENGINEER-IN-CHARGE of the rates which it is his intention to charge for such class of WORK, supported by analysis of the rate or rates claimed, and the ENGINEER-IN-CHARGE shall determine the rate or rates on the basis of the prevailing market rates, labour cost at schedule of labour rates plus 10% to cover contractor's supervision, overheads and profit and pay the CONTRACTOR accordingly. The opinion of the ENGINEER- IN-CHARGE as to current market rates of materials and the quantum of labour involved per unit of measurement will be final and binding on the CONTRACTOR.
 - d) Where the item of work will be executed through nominated specialist agency as approved by the ENGINEER-IN-CHARGE, then the actual amount paid to such nominated agency supported by documentary evidence and as certified by ENGINEER-IN-CHARGE shall be considered plus 10% (ten percent) to cover all contingencies, overhead, profits to arrive at the rates.

- e) Provisions contained in the Sub-clause (a) & (d) above shall, however, not apply for the following:- Where the value of additions of new items together with the value of alterations, additions/deletions or substitutions does not exceed by or is not less than plus/minus ($\pm$)25% of the VALUE OF CONTRACT. The item rates in the Schedule of Rates shall hold good for all such variations between the above mentioned limits, irrespective of any increase/decrease of quantities in the individual items of Schedule of Rates. Where the value of addition of new items together with the value of alterations, additions/deletions or substitutions reduces more than 25% of the contract value but is within the following limits the tenderer shall be paid compensation for decrease in the value of work, as follows: S.No. Range of Variation Percentage compensation for decrease in the value of work in the respective range. a) Beyond (+) 25% No increase and/or upto & inclusive of decrease shall be (+) 50% applicable for the Schedule of Rates (The rates quoted for this increase shall be valid). b) Beyond (-) 25% upto & For reduction beyond inclusive of (-) 50% 25%contractor shall be compensated by an amount equivalent to 10% of the reduction in value of the contract as awarded. For example if the actual contract value is 70% of awarded value then compensation shall be 10% of (75-70) i.e. 0.5% of awarded contract value.

- II. For Lumpsum Contracts: CONTRACTOR shall, within 7 days of the date of receipt of order to carry out the WORK, inform the ENGINEER-IN- CHARGE of the rates which it is his intention to charge for such class of WORK, supported by analysis of the rate or rates claimed, and the ENGINEER-IN-CHARGE shall determine the rate or rates on the basis of the prevailing market rates, labour cost at schedule of labour rates plus 10% to cover contractor's supervision, overheads and profit and pay the CONTRACTOR accordingly. The opinion of the ENGINEER- IN-CHARGE as to current market rates of materials and the quantum of labour involved per unit of measurement will be final and binding on the CONTRACTOR.

61 DRAWINGS TO BE SUPPLIED BY THE EMPLOYER

- 61.1 The drawings attached with tender are only for the general guidance to the CONTRACTOR to enable him to visualize the type of work contemplated and scope of work involved. The CONTRACTOR will be deemed to have studied the DRAWINGS and formed an idea about the WORK involved.
- 61.2 Detailed working drawings on the basis of which actual execution of the WORK is to proceed, will be furnished from time to time during the progress of the work. The CONTRACTOR shall be deemed to have gone through the DRAWINGS supplied to him thoroughly and carefully and in conjunction with all other connected drawings and bring to the notice of the ENGINEER-IN-CHARGE discrepancies, if any, therein before actually carrying out the Work.
- 61.3 Copies of all detailed working drawings relating to the WORK shall be kept at the CONTRACTOR's office on the site and shall be made available to the ENGINEER-IN- CHARGE at any time during the CONTRACT. The drawings and other documents issued by the EMPLOYER shall be returned to the EMPLOYER on completion of the WORK.

62 DRAWINGS TO BE SUPPLIED BY THE CONTRACTOR:

- 62.1 The drawings/date which are to be furnished by the CONTRACTOR are enumerated in the special conditions of contract, and shall be furnished within the specified time.
- 62.2 Where approval/review of drawings before manufacture/ construction/fabrication has been specified, it shall be CONTRACTOR's responsibility to have these drawings prepared as per the directions of ENGINEER-IN-CHARGE and got approved before proceeding with manufacture/construction/fabrication as the case may be. Any change that may have become necessary in these drawings during the execution of the work shall have to be carried out by the CONTRACTOR to the satisfaction of ENGINEER-IN-CHARGE at no extra cost. All final drawings shall bear the certification stamp as indicated below duly signed by both the CONTRACTOR and ENGINEER-IN-CHARGE. "Certified true for _____ (Name of Work) Agreement No. _____ Signed: _____ (CONTRACTOR) (ENGINEER-IN-CHARGE)
- 62.3 The DRAWINGS submitted by the CONTRACTOR shall be reviewed by the ENGINEER-IN-CHARGE as far as practicable within 3 (Three) weeks and shall be modified by the CONTRACTOR, if any modifications and/or corrections are required by the ENGINEER-IN-CHARGE. The CONTRACTOR shall incorporate such modifications and/or corrections and submit the final drawings for approval. Any delays arising out of

failure by the CONTRACTOR to rectify the drawing in good time shall not alter the Contract Completion Time.

- 62.4 As built drawings showing all corrections, adjustments etc. shall be furnished by the CONTRACTOR in six copies and one transparent for record purposed to the EMPLOYER.

63 SETTING OUT WORKS:

- 63.1 The ENGINEER-IN-CHARGE shall furnish the CONTRACTOR with only the four corners of the Works site and a level bench mark and the CONTRACTOR shall set out the Works and shall provide an efficient staff for the purpose and shall be solely responsible for the accuracy of such setting out.
- 63.2 The CONTRACTOR shall provide, fix and be responsible for the maintenance of all stakes, templates, level marks, profiles and other similar things and shall take all necessary precautions to prevent their removal or disturbance and shall be responsible for the consequence of such removal or disturbance should the same take place and for their efficient and timely reinstatement. The CONTRACTOR shall also be responsible for the maintenance of all existing survey marks, boundary marks, distance marks and center line marks, either existing or supplied and fixed by the CONTRACTOR. The work shall be set out to the satisfaction of the ENGINEER-IN-CHARGE. The approval there of joining with the CONTRACTOR by the ENGINEER- IN-CHARGE in setting out the work, shall not relieve the CONTRACTOR of any of his responsibility.
- 63.3 Before beginning the Works, the CONTRACTOR shall at his own cost, provide all necessary reference and level posts, pegs, bamboos, flags, ranging rods, strings and other materials for proper layout of the works in accordance with the schemes for bearing marks acceptable to the ENGINEER-IN-CHARGE. The center, longitudinal or face lines and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct mark at the centre to enable theodolite to be set over it. No work shall be started until all these points are checked and approved by the ENGINEER-IN-CHARGE in writing but such approval shall not relieve the CONTRACTOR of any of his responsibilities. The CONTRACTOR shall also provide all labour, material and other facilities, as necessary, for the proper checking of layout and inspection of the points during construction.
- 63.4 Pillars bearing geodetic marks located at the sites of units of WORKS under construction should be protected and fenced by the CONTRACTOR.
- 63.5 On completion of WORK, the CONTRACTOR must submit the geodetic documents according to which the WORK was carried out.

64 RESPONSIBILITY FOR LEVEL AND ALIGNMENT:

- 64.1 The CONTRACTOR shall be entirely and exclusively responsible for the horizontal and vertical alignment, the levels and correctness of every part of the WORK and shall rectify effectively any errors or imperfections therein, such rectifications shall be carried out by the CONTRACTOR, at his own cost, when instructions are issued to that effect by the ENGINEER- IN-CHARGE.

65 MATERIALS TO BE SUPPLIED BY CONTRACTOR:

- 65.1 The CONTRACTOR shall procure and provide within the VALUE OF CONTRACT the whole of the materials required for the construction including steels, cement and other building materials, tools, tackles, construction plant and equipment for the completion and maintenance of the WORK except the materials which will be issued by the EMPLOYER and shall make his own arrangement for procuring such materials and for the transport thereof. The EMPLOYER may give necessary recommendation to the respective authority if so desired by the CONTRACTOR but assumes no further responsibility of any nature. The EMPLOYER will insist on the procurement of materials which bear ISI stamp and/or which are supplied by reputed suppliers.
- 65.2 The CONTRACTOR shall properly store all materials either issued to him or brought by him to the SITE to prevent damages due to rain, wind, direct exposure to sun, etc. as also from theft, pilferage, etc. for proper and speedy execution of his works. The CONTRACTOR shall maintain sufficient stocks of all materials required by him.
- 65.3 No material shall be despatched from the CONTRACTOR's stores before obtaining the approval in writing of the ENGINEER-IN-CHARGE.

66 STORES SUPPLIED BY THE EMPLOYER:

- 66.1 If the SPECIFICATION of the WORK provides for the use of any material of special description to be supplied from the EMPLOYER's stores or it is required that the CONTRACTOR shall use certain stores to be provided by the ENGINEER-IN-CHARGE, such materials and stores, and price to be charged there for as hereinafter mentioned being so far as practicable for the convenience of the CONTRACTOR, but not so as in any way to control the meaning or effect of the CONTRACT, the CONTRACTOR shall be bound to purchase and shall be supplied such materials and stores as are from time to time required to be used by him for the purpose of the CONTRACT only. The sums due from the CONTRACTOR for the value of materials supplied by the EMPLOYER will be recovered from the running account bill on the basis of the actual consumption of materials in the works covered and for which the running account bill has been prepared. After the completion of the WORK, however, the CONTRACTOR has to account for the full quantity of materials supplied to him as per relevant clauses in this document.
- 66.2 The value of the stores/materials as may be supplied to the CONTRACTOR by the EMPLOYER will be debited to the CONTRACTOR's account at the rates shown in the schedule of materials and if they are not entered in the schedule, they will be debited at cost price, which for the purpose of the CONTRACT shall include the cost of carriage and all other expenses whatsoever such as normal storage supervision charges which shall have been incurred in obtaining the same at the EMPLOYER's stores. All materials so supplied to the CONTRACTOR shall remain the absolute property of the EMPLOYER and shall not be removed on any account from the SITE of the WORK, and shall be at all times open for inspection to the ENGINEER-IN-CHARGE. Any such materials remaining unused at the time of the completion or termination of the CONTRACT shall be returned to the EMPLOYER's stores or at a place as directed by the ENGINEER-IN-CHARGE in perfectly good condition at CONTRACTOR's cost.

67 CONDITIONS FOR ISSUE OF MATERIALS:

- 67.1 Materials specified as to be issued by the EMPLOYER will be supplied to the CONTRACTOR by the EMPLOYER from his stores. It shall be responsibility of the CONTRACTOR to take delivery of the materials and arrange for its loading, transport and unloading at the SITE of WORK at his own cost. The materials shall be issued between the working hours and as per the rules of the EMPLOYER as framed from time to time.
- 67.2 The CONTRACTOR shall bear all incidental charges for the storage and safe custody of materials at site after these have been issued to him.
- 67.3 Materials specified as to be issued by the EMPLOYER shall be issued in standard sizes as obtained from the manufacturers.
- 67.4 The CONTRACTOR shall construct suitable Godowns at the SITE of WORK for storing the materials safe against damage by rain, dampness, fire, theft etc. He shall also employ necessary watch and ward establishment for the purpose.
- 67.5 It shall be duty of the CONTRACTOR to inspect the materials supplied to him at the time of taking delivery and satisfy himself that they are in good condition. After the materials have been delivered by the EMPLOYER, it shall be the responsibility of the CONTRACTOR to keep them in good condition and if the materials are damaged or lost, at any time, they shall be repaired and/or replaced by him at his own cost according to the instructions of the ENGINEER-IN-CHARGE.
- 67.6 The EMPLOYER shall not be liable for delay in supply or non-supply of any materials which the EMPLOYER has undertaken to supply where such failure or delay is due to natural calamities, act of enemies, transport and procurement difficulties and any circumstances beyond the control of the EMPLOYER. In no case, the CONTRACTOR shall be entitled to claim any compensation or loss suffered by him on this account.
- 67.7 It shall be responsibility of the CONTRACTOR to arrange in time all materials required for the WORK other than those to be supplied by the EMPLOYER. If, however, in the opinion of the ENGINEER-IN-CHARGE the execution of the WORK is likely to be delayed due to the CONTRACTOR's inability to make arrangements for supply of materials which normally he has to arrange for, the ENGINEER-IN-CHARGE shall have the right at his own discretion to issue such materials, if available with the EMPLOYER or procure the materials from the market or as elsewhere and the CONTRACTOR will be bound to take such materials at the rates decided by the ENGINEER-IN-CHARGE. This, however, does not in any way absolve the CONTRACTOR from responsibility of making arrangements for the supply of such materials in part or in

full, should such a situation occur nor shall this constitute a reason for the delay in the execution of the WORK.

- 67.8 None of the materials supplied to the CONTRACTOR will be utilised by the CONTRACTOR for manufacturing item which can be obtained as supplied from standard manufacturer in finished form.
- 67.9 The CONTRACTOR shall, if desired by the ENGINEER-IN-CHARGE, be required to execute an Indemnity Bond in the prescribed form for safe custody and accounting of all materials issued by the EMPLOYER.
- 67.10 The CONTRACTOR shall furnish to the ENGINEER-IN-CHARGE sufficiently in advance a statement showing his requirement of the quantities of the materials to be supplied by the EMPLOYER and the time when the same will be required by him for the works, so as to enable the ENGINEER-IN-CHARGE to make necessary arrangements for procurement and supply of the material.
- 67.11 Account of the materials issued by the EMPLOYER shall be maintained by CONTRACTOR indicating the daily receipt, consumption and balance in hand. This account shall be maintained in a manner prescribed by the ENGINEER-IN-CHARGE along with all connected papers viz. requisitions, issues, etc., and shall be always available for inspection in the CONTRACTOR's office at SITE.
- 67.12 The CONTRACTOR should see that only the required quantities of materials are got issued. The CONTRACTOR shall not be entitled to cartage and incidental charges for returning the surplus materials, if any, to the stores wherefrom they were issued or to the place as directed by the ENGINEER-IN-CHARGE.
- 67.13 Materials/Equipment(s) supplied by EMPLOYER shall not be utilised for any purpose(s) than issued for.

68 MATERIAL PROCURED WITH ASSISTANCE OF EMPLOYER/RETURN OF SURPLUS:

- 68.1 Notwithstanding anything contained to the contrary in any or all the clauses of this CONTRACT where any materials for the execution of the CONTRACT are procured with the assistance of the EMPLOYER either by issue from EMPLOYER's stock or purchases made under order or permits or licences issued by Government, the CONTRACTOR shall hold the said materials as trustee for the EMPLOYER and use such materials economically and solely for the purpose of the CONTRACT and not dispose them off without the permission of the EMPLOYER and return, if required by the ENGINEER-IN-CHARGE, shall determine having due regard to the condition of the materials. The price allowed to the CONTRACTOR, however, shall not exceed the amount charged to him excluding the storage charges, if any. The decision of the ENGINEER-IN-CHARGE shall be final and conclusive in such matters. In the event of breach of the aforesaid condition, the CONTRACTOR shall, in terms of the licences or permits and/or criminal breach of trust, be liable to compensate the EMPLOYER at double rate or any higher rate, in the event of those materials at that time having higher rate or not being available in the market, then any other rate to be determined by the ENGINEER-IN-CHARGE and his decision shall be final and conclusive.

69 MATERIALS OBTAINED FROM DISMANTLING:

- 69.1 If the CONTRACTOR in the course of execution of the WORK is called upon to dismantle any part for reasons other than those stipulated in Clauses 74 and 77 hereunder, the materials obtained in the WORK of dismantling etc., will be considered as the EMPLOYER's property and will be disposed off to the best advantage of the EMPLOYER.

70 ARTICLES OF VALUE FOUND:

- 70.1 All gold, silver and other minerals of any description and all precious stones, coins, treasure relics, antiquities and other similar things which shall be found in, under or upon the SITE, shall be the property of the EMPLOYER and the CONTRACTOR shall duly preserve the same to the satisfaction of the ENGINEER-IN-CHARGE and shall from time to time deliver the same to such person or persons indicated by the EMPLOYER.

71 DISCREPANCIES BETWEEN INSTRUCTIONS:

- 71.1 Should any discrepancy occur between the various instructions furnished to the CONTRACTOR, his agent or staff or any doubt arises as to the meaning of any such instructions or should there be any misunderstanding between the CONTRACTOR's staff and the ENGINEER-IN-CHARGE's staff, the CONTRACTOR shall refer the matter immediately in writing to the ENGINEER-IN-CHARGE whose decision thereon shall be final and conclusive and no claim for losses alleged to have been caused by such discrepancies between instructions, doubts, or misunderstanding shall in any event be admissible.

72 ACTION WHERE NO SPECIFICATION IS ISSUED:

72.1 In case of any class of WORK for which there is no SPECIFICATION supplied by the EMPLOYER as mentioned in the Tender Documents such WORK shall be carried out in accordance with Indian Standard Specifications and if the Indian Standard Specifications do not cover the same, the WORK should be carried out as per standard Engineering Practice subject to the approval of the ENGINEER-IN-CHARGE.

73 INSPECTION OF WORKS:

73.1 The ENGINEER-IN-CHARGE will have full power and authority to inspect the WORK at any time wherever in progress either on the SITE or at the CONTRACTOR's premises/workshops wherever situated, premises/ workshops of any person, firm or corporation where WORK in connection with the CONTRACT may be in hand or where materials are being or are to be supplied, and the CONTRACTOR shall afford or procure for the ENGINEER-IN- CHARGE every facility and assistance to carry out such inspection. The CONTRACTOR shall, at all time during the usual working hours and at all other time at which reasonable notice of the intention of the ENGINEER-IN- CHARGE or his representative to visit the WORK shall have been given to the CONTRACTOR, either himself be present or receive orders and instructions, or have a responsible agent duly accredited in writing, present for the purpose. Orders given to the CONTRACTOR's agent shall be considered to have the same force as if they had been given to the CONTRACTOR himself. The CONTRACTOR shall give not less than seven days notice in writing to the ENGINEER-IN-CHARGE before covering up or otherwise placing beyond reach of inspection and measurement of any work in order that the same may be inspected and measured. In the event of breach of above the same shall be uncovered at CONTRACTOR's expense for carrying out such measurement or inspection.

73.2 No material shall be dispatched from the CONTRACTOR's stores before obtaining the approval in writing of the Engineer-in-Charge. The CONTRACTOR is to provide at all time during the progress of the WORK and the maintenance period, proper means of access with ladders, gangways etc. and the necessary attendance to move and adopt as directed for inspection or measurements of the WORK by the ENGINEER- IN-CHARGE.

73.3 The CONTRACTOR shall make available to the ENGINEER-IN- CHARGE free of cost all necessary instruments and assistance in checking or setting out of WORK and in the checking of any WORK made by the CONTRACTOR for the purpose of setting out and taking measurements of WORK.

74 TESTS FOR QUALITY OF WORK:

74.1 All workmanship shall be of the respective kinds described in the CONTRACT DOCUMENTS and in accordance with the instructions of the ENGINEER-IN-CHARGE and shall be subjected from time to time to such test at CONTRACTOR's cost as the ENGINEER-IN-CHARGE may direct at the place of manufacture or fabrication or on the site or at all or any such places. The CONTRACTOR shall provide assistance, instruments, labour and materials as are normally required for examining, measuring and testing any workmanship as may be selected and required by the ENGINEER-IN-CHARGE.

74.2 All the tests that will be necessary in connection with the execution of the WORK as decided by the ENGINEER- IN-CHARGE shall be carried out at the field testing laboratory of the EMPLOYER by paying the charges as decided by the EMPLOYER from time to time. In case of non- availability of testing facility with the EMPLOYER, the required test shall be carried out at the cost of CONTRACTOR at Government or any other testing laboratory as directed by ENGINEER-IN-CHARGE.

74.3 If any tests are required to be carried out in conjunction with the WORK or materials or workmanship not supplied by the CONTRACTOR, such tests shall be carried out by the CONTRACTOR as per instructions of ENGINEER-IN-CHARGE and cost of such tests shall be reimbursed by the EMPLOYER.

75 SAMPLES FOR APPROVAL:

75.1 The CONTRACTOR shall furnish to the ENGINEER-IN-CHARGE for approval, when requested or if required by the specifications, adequate samples of all materials and finished to be used in the WORK. Such samples shall be submitted before the WORK is commenced and in ample time to permit tests and examinations thereof. All materials furnished and finishes applied in actual WORK shall be fully equal to the approved samples.

76 ACTION AND COMPENSATION IN CASE OF BAD WORK:

76.1 If it shall appear to the ENGINEER-IN-CHARGE that any work has been executed with unsound, imperfect or unskilled workmanship, or with materials of any inferior description, or that any materials or articles provided by the CONTRACTOR for the execution of the WORK are unsound, or of a quality inferior to that contracted for, or otherwise not in accordance with the CONTRACT, the CONTRACTOR shall on demand in writing from the ENGINEER-IN-CHARGE or his authorized representative specifying the WORK, materials or articles complained of notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct the WORK so specified and provide other proper and suitable materials or articles at his own cost and in the event of failure to do so within the period specified by the ENGINEER-IN-CHARGE in his demand aforesaid, the CONTRACTOR shall be liable to pay compensation at the rate of 1 % (One percent) of the estimated cost of the whole WORK, for every week limited to a maximum of 10% (ten percent) of the value of the whole WORK, while his failure to do so shall continue and in the case of any such failure the ENGINEER-IN-CHARGE may on expiry of notice period rectify or remove and re-execute the WORK or remove and replaced with others, the materials or articles complained of to as the case may be at the risk and expense in all respects of the CONTRACTOR. The decision of the Engineering-in-charge as to any question arising under this clause shall be final and conclusive.

77 SUSPENSION OF WORKS:

- 77.1 Subject to the provisions of sub-para (ii) of this clause, the CONTRACTOR shall, if ordered in writing by the ENGINEER-IN-CHARGE, or his representative, temporarily suspend the WORKS or any part thereof for such written order, proceed with the WORK therein ordered to be suspended until, he shall have received a written order to proceed therewith. The CONTRACTOR shall not be entitled to claim compensation for any loss or damage sustained by him by reason of temporary suspension of the WORKS aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of the WORKS as aforesaid will be granted to the ONTRACTOR should he apply for the same provided that the suspension was not consequent to any default or failure on the part of the CONTRACTOR.
- 77.2 In case of suspensions of entire WORK, ordered in writing by ENGINEER-IN-CHARGE, for a period of more than two months, the CONTRACTOR shall have the option to terminate the CONTRACT.

78 EMPLOYER MAY DO PART OF WORK:

78.1 Upon failure of the CONTRACTOR to comply with any instructions given in accordance with the provisions of this CONTRACT the EMPLOYER has the alternative right, instead of assuming charge of entire WORK, to place additional labour force, tools, equipments and materials on such parts of the WORK, as the EMPLOYER may designate or also engage another CONTRACTOR to carry out the WORK. In such cases, the EMPLOYER shall deduct from the amount which otherwise might become due to the CONTRACTOR, the cost of such work and material with ten percent (10%) added to cover all departmental charges and should the total amount thereof exceed the amount due to the CONTRACTOR, the CONTRACTOR shall pay the difference to the EMPLOYER.

79 POSSESSION PRIOR TO COMPLETION:

79.1 The ENGINEER-IN-CHARGE shall have the right to take possession of or use any completed or partially completed WORK or part of the WORK. Such possession or use shall not be deemed to be an acceptance of any work completed in accordance with the CONTRACT agreement. If such prior possession or use by the ENGINEER-IN- CHARGE delays the progress of WORK, equitable adjustment in the time of completion will be made and the CONTRACT agreement shall be deemed to be modified accordingly.

80 DEFECTS LIABILITY PERIOD (TWELVE MONTHS PERIOD OF LIABILITY FROM THE DATE OF ISSUE OF COMPLETION CERTIFICATE):

80.1 The CONTRACTOR shall guarantee the installation/WORK for a period of 12 months from the date of completion of WORK as certified by the ENGINEER-IN-CHARGE which is indicated in the Completion Certificate. Any damage or defect that may arise or lie undiscovered at the time of issue of Completion Certificate, connected in any way with the equipment or materials supplied by him or in the workmanship, shall be rectified or replaced by the CONTRACTOR at his own expense as deemed necessary by the

ENGINEER-IN-CHARGE or in default, the ENGINEER- IN-CHARGE may carry out such works by other work and deduct actual cost incurred towards labour, supervision and materials consumables or otherwise plus 100% towards overheads (of which the certificate of ENGINEER-IN-CHARGE shall be final) from any sums that may then be or at any time thereafter, become due to the CONTRACTOR or from his Contract Performance Security, or the proceeds of sale thereof or a sufficient part on thereof.

80.2 If the CONTRACTOR feels that any variation in WORK or in quality of materials or proportions would be beneficial or necessary to fulfil the guarantees called for, he shall bring this to the notice of the ENGINEER- IN-CHARGE in writing. If during the period of liability any portion of the WORK/equipment, is found defective and is rectified/ replaced, the period of liability for such equipment/ portion of WORK shall be operative from the date such rectification/ replacement are carried out and Contract Performance Guarantee shall be furnished separately for the extended period of liability for that portion of WORK/ equipment only. Notwithstanding the above provisions the supplier's, guarantees/warranties for the replaced equipment shall also be passed on to the EMPLOYER.

80.3 LIMITATION OF LIABILITY Notwithstanding anything contrary contained herein, the aggregate total liability of CONTRACTOR under the Agreement or otherwise shall be limited to 100% of Agreement / Contract Value. However, neither party shall be liable to the other party for any indirect and consequential damages, loss of profits or loss of production.

81 CARE OF WORKS:

81.1 From the commencement to completion of the WORK, the CONTRACTOR shall take full responsibility for the care for all works including all temporary works and in case any damages, loss or injury shall happen to the WORK or to any part thereof or to any temporary works from any cause whatsoever, shall at his own cost repair and make good the same so that at completion the WORK shall be in good order and in conformity in every respects with the requirement of the CONTRACT and the ENGINEER-IN-CHARGE's instructions.

81.2 DEFECTS PRIOR TO TAKING OVER: If at any time, before the WORK is taken over, the ENGINEER-IN-CHARGE shall: a) Decide that any works done or materials used by the CONTRACTOR or by any SUB-CONTRACTOR is defective or not in accordance with the CONTRACT, or that the works or any portion thereof are defective, or do not fulfill the requirements of CONTRACT (all such matters being hereinafter, called 'Defects' in this clause), and b) As soon as reasonably practicable, gives to the CONTRACTOR notice in writing of the said decision, specifying particulars of the defects alleged to exist or to have occurred, then the CONTRACTOR shall at his own expenses and with all speed make good the defects so specified. In case CONTRACTOR shall fail to do so, the EMPLOYER may take, at the cost of the CONTRACTOR, such steps as may in all circumstances, be reasonable to make good such defects. The expenditure so incurred by the EMPLOYER will be recovered from the amount due to the CONTRACTOR. The decision of the ENGINEER-IN-CHARGE with regard to the amount to be recovered from the CONTRACTOR will be final and binding on the CONTRACTOR. As soon as the WORK has been completed in accordance with the CONTRACT (except in minor respects that do not affect their use for the purpose for which they are intended and except for maintenance there of provided in clause 80.1 of General Conditions of Contract) and have passed the tests on completion, the ENGINEER-IN-CHARGE shall issue a certificate (hereinafter called Completion Certificate) in which he shall certify the date on which the WORK have been so completed and have passed the said tests and the EMPLOYER shall be deemed to have taken over the WORK on the date so certified. If the WORK has been divided into various groups in the CONTRACT, the EMPLOYER shall be entitled to take over any group or groups before the other or others and there upon the ENGINEER-IN-CHARGE shall issue a Completion Certificate which will, however, be for such group or groups so taken over only. In such an event if the group /section/ part so taken over is related, to the integrated system of the work, not withstanding date of grant of Completion Certificate for group/ section/ part. The period of liability in respect of such group/ section/ part shall extend 12 (twelve) months from the date of completion of WORK.

81.3 DEFECTS AFTER TAKING OVER: In order that the CONTRACTOR could obtain a COMPLETION CERTIFICATE he shall make good, with all possible speed, any defect arising from the defective materials supplied by the CONTRACTOR or workmanship or any act or omission of the CONTRACT or that may have been noticed or developed, after the works or groups of the works has been taken over, the period allowed for carrying out such WORK will be normally one month. If any defect be not remedied within a

reasonable time, the EMPLOYER may proceed to do the WORK at CONTRACTOR's risk and expense and deduct from the final bill such amount as may be decided by the EMPLOYER. If by reason of any default on the part of the CONTRACTOR a COMPLETION CERTIFICATE has not been issued in respect of any portion of the WORK within one month after the date fixed by the CONTRACT for the completion of the WORK, the EMPLOYER shall be at liberty to use the WORK or any portion thereof in respect of which a completion certificate has not been issued, provided that the WORK or the portion thereof so used as aforesaid shall be afforded reasonable opportunity for completing these works for the issue of Completion Certificate.

82 GUARANTEE/TRANSFER OF GUARANTEE:

82.1 For works like water-proofing, acid and alkali resisting materials, pre-construction soil treatment against termite or any other specialized works etc. the CONTRACTOR shall invariably engage SUB-CONTRACTORS who are specialists in the field and firms of repute and such a SUB-CONTRACTOR shall furnish guarantees for their workmanship to the EMPLOYER, through the CONTRACTOR. In case such a SUB-CONTRACTOR/ firm is not prepared to furnish a guarantee to the EMPLOYER, the CONTRACTOR shall give that guarantee to the EMPLOYER directly.

83 TRAINING OF EMPLOYER'S PERSONNEL:

83.1 The CONTRACTOR undertakes to provide training to Engineering personnel selected and sent by the EMPLOYER at the works of the CONTRACTOR without any cost to the EMPLOYER. The period and the nature of training for the individual personnel shall be agreed upon mutually between the CONTRACTOR and the EMPLOYER. These engineering personnel shall be given special training at the shops, where the equipment will be manufactured and/ or in their collaborator's works and where possible, in any other plant where equipment manufactured by the CONTRACTOR or his collaborators is under installation or test to enable those personnel to become familiar with the equipment being furnished by the CONTRACTOR. EMPLOYER shall bear only the to and fro fare of the said engineering personnel.

84 REPLACEMENT OF DEFECTIVE PARTS AND MATERIALS:

84.1 If during the progress of the WORK, EMPLOYER shall decide and inform in writing to the CONTRACTOR, that the CONTRACTOR has manufactured any plant or part of the plant unsound or imperfect or has furnished plant inferior to the quality specified, the CONTRACTOR on receiving details of such defects or deficiencies shall at his own expenses within 7 (seven) days of his receiving the notice, or otherwise within such time as may be reasonably necessary for making it good, proceed to alter, re-construct or remove such work and furnish fresh equipments upto the standards of the specifications. In case the CONTRACTOR fails to do so, EMPLOYER may on giving the CONTRACTOR 7 (seven) day's notice in writing of his intentions to do so, proceed to remove the portion of the WORK so complained of and at the cost of CONTRACTOR's, perform all such works or furnish all such equipments provided that nothing in the clause shall be deemed to deprive the EMPLOYER of or affect any rights under the CONTRACT, the EMPLOYER may otherwise have in respect of such defects and deficiencies.

84.2 The CONTRACTOR's full and extreme liability under this clause shall be satisfied by the payments to the EMPLOYER of the extra cost, of such replacements procured including erection/installation as provided for in the CONTRACT; such extra cost being the ascertained difference between the price paid by the EMPLOYER for such replacements and the CONTRACT price portion for such defective plants and repayments of any sum paid by the EMPLOYER to the CONTRACTOR in respect of such defective plant. Should the EMPLOYER not so replace the defective plant the CONTRACTOR's extreme liability under this clause shall be limited to the repayment of all such sums paid by the EMPLOYER under the CONTRACT for such defective plant.

85 INDEMNITY

85.1 If any action is brought before a Court, Tribunal or any other Authority against the Employer or an officer or agent of the EMPLOYER, for the failure, omission or neglect on the part of the CONTRACTOR to perform any acts, matters, covenants or things under the CONTRACT, or damage or injury caused by the alleged omission or negligence on the part of the CONTRACTOR, his agents, representatives or his SUB-CONTRACTOR's, or in connection with any claim based on lawful demands of SUB-CONTRACTOR's workmen suppliers or employees, the CONTRACTOR, shall in such cases indemnify and keep the

EMPLOYER and/or their representatives harmless from all losses, damages, expenses or decrees arising out of such action.

86 CONSTRUCTION AIDS, EQUIPMENTS, TOOLS & TACKLES:

86.1 CONTRACTOR shall be solely responsible for making available for executing the WORK, all requisite CONSTRUCTION EQUIPMENTS, Special Aids, Barges, Cranes and the like, all Tools, Tackles and Testing Equipment and Appliances, including imports of such equipment etc. as required. In case of import of the same the rates applicable for levying of Custom Duty on such Equipment, Tools, & Tackles and the duty drawback applicable thereon shall be ascertained by the CONTRACTOR from the concerned authorities of Government of India. It shall be clearly understood that EMPLOYER shall not in any way be responsible for arranging to obtain Custom Clearance and/or payment of any duties and/or duty draw backs etc. for such equipments so imported by the CONTRACTOR and the CONTRACTOR shall be fully responsible for all taxes, duties and documentation with regard to the same. Tenderer in his own interest may contact, for any clarifications in the matter, concerned agencies/Dept./Ministries of Govt. of India. All clarifications so obtained and interpretations thereof shall be solely the responsibility of the CONTRACTOR.

SECTION-VI CERTIFICATES AND PAYMENTS

87 SCHEDULE OF RATES AND PAYMENTS:

87.1 CONTRACTOR'S REMUNERATION: The price to be paid by the EMPLOYER to CONTRACTOR for the whole of the WORK to be done and for the performance of all the obligations undertaken by the CONTRACTOR under the CONTRACT DOCUMENTS shall be ascertained by the application of the respective Schedule of Rates (the inclusive nature of which is more particularly defined by way of application but not of limitation, with the succeeding sub-clause of this clause) and payment to be made accordingly for the WORK actually executed and approved by the ENGINEER-IN-CHARGE. The sum so ascertained shall (excepting only as and to the extent expressly provided herein) constitute the sole and inclusive remuneration of the CONTRACTOR under the CONTRACT and no further or other payment whatsoever shall be or become due or payable to the CONTRACTOR under the CONTRACT.

87.2 SCHEDULE OF RATES TO BE INCLUSIVE: The prices/rates quoted by the CONTRACTOR shall remain firm till the issue of FINAL CERTIFICATE and shall not be subject to escalation. Schedule of Rates shall be deemed to include and cover all costs, expenses and liabilities of every description and all risks of every kind to be taken in executing, completing and handing over the WORK to the EMPLOYER by the CONTRACTOR. The CONTRACTOR shall be deemed to have known the nature, scope, magnitude and the extent of the WORK and materials required though the CONTRACT DOCUMENT may not fully and precisely furnish them. Tenderer's shall make such provision in the Schedule of Rates as he may consider necessary to cover the cost of such items of WORK and materials as may be reasonable and necessary to complete the WORK. The opinion of the ENGINEER-IN-CHARGE as to the items of WORK which are necessary and reasonable for COMPLETION OF WORK shall be final and binding on the CONTRACTOR, although the same may not be shown on or described specifically in CONTRACT DOCUMENTS. Generality of this present provision shall not be deemed to cut down or limit in any way because in certain cases it may and in other cases it may not be expressly stated that the CONTRACTOR shall do or perform a work or supply articles or perform services at his own cost or without addition of payment or without extra charge or words to the same effect or that it may be stated or not stated that the same are included in and covered by the Schedule of Rates.

87.3 SCHEDULE OF RATES TO COVER CONSTRUCTION EQUIPMENTS, MATERIALS, LABOUR ETC.: Without in any way limiting the provisions of the preceding sub-clause the Schedule of Rates shall be deemed to include and cover the cost of all construction equipment, temporary WORK (except as provided for herein), pumps, materials, labour, insurance, fuel, consumables, stores and appliances to be supplied by the CONTRACTOR and all other matters in connection with each item in the Schedule of Rates and the execution of the WORK or any portion thereof finished, complete in every respect and maintained as shown or described in the CONTRACT DOCUMENTS or as may be ordered in writing during the continuance of the CONTRACT.

87.4 SCHEDULE OF RATES TO COVER ROYALTIES, RENTS AND CLAIMS: The Schedule of Rates (i.e., VALUE OF CONTRACT) shall be deemed to include and cover the cost of all royalties and fees for the articles and processes, protected by letters, patent or otherwise incorporated in or used in connection with the

WORK, also all royalties, rents and other payments in connection with obtaining materials of whatsoever kind for the WORK and shall include an indemnity to the EMPLOYER which the CONTRACTOR hereby gives against all actions, proceedings, claims, damages, costs and expenses arising from the incorporation in or use on the WORK of any such articles, processes or materials, octroi or other municipal or local Board Charges, if levied on materials, equipment or machineries to be brought to site for use on WORK shall be borne by the CONTRACTOR.

87.5 SCHEDULE OF RATES TO COVER TAXES AND DUTIES: No exemption or reduction of Customs Duties, Excise Duties, Sales Tax, Sales Tax on works Contract quay or any port dues, transport charges, stamp duties or Central or State Government or local Body or Municipal Taxes or duties, taxes or charges (from or of any other body), whatsoever, will be granted or obtained, all of which expenses shall be deemed to be included in and covered by the Schedule or Rates. The CONTRACTOR shall also obtain and pay for all permits or other privileges necessary to complete the WORK.

87.6 SCHEDULE OF RATES TO COVER RISKS OF DELAY: The Schedule of Rates shall be deemed to include and cover the risk of all possibilities of delay and interference with the CONTRACTOR's conduct of WORK which occur from any causes including orders of the EMPLOYER in the exercise of his power and on account of extension of time granted due to various reasons and for all other possible or probable causes of delay.

87.7 SCHEDULE OF RATES CANNOT BE ALTERED: For WORK under unit rate basis, no alteration will be allowed in the Schedule of Rates by reason of works or any part of them being modified, altered, extended, diminished or committed. The Schedule of Rates are fully inclusive of rates which have been fixed by the CONTRACTOR and agreed to by the EMPLOYER and cannot be altered. For lumpsum CONTRACTS, the payment will be made according to the WORK actually carried out, for which purpose an item wise, or work wise Schedule of Rates shall be furnished, suitable for evaluating the value of WORK done and preparing running account bill. Payment for any additional work which is not covered in the Schedule of Rates, shall only be released on issuance of change order.

88 PROCEDURE FOR MEASUREMENT AND BILLING OF WORK IN PROGRESS:

88.1 BILLING PROCEDURE: Following procedures shall be adopted for billing of works executed by the CONTRACTOR.

88.1.1 All measurements shall be recorded in quadruplicate on standard measurement sheets supplied by EMPLOYER and submitted to EMPLOYER/CONSULTANT for scrutiny and passing.

88.1.2 EMPLOYER/CONSULTANT shall scrutinize and check the measurements recorded on the sheets and shall certify correctness of the same on the measurement sheets.

88.1.3 ENGINEER-IN-CHARGE shall pass the bills after carrying out the comprehensive checks in accordance with the terms and conditions of the CONTRACTS, within 7 days of submission of the bills, complete in all respects and send the same to the Employer to effect payment to the CONTRACTOR.

88.1.4 GAIL shall make all endeavour to make payments of undisputed amount of the bills submitted based on the joint measurements within 15 (Fifteen) days from the date of certification by the Engineer-in-Charge.

88.1.5 Measurements shall be recorded as per the methods of measurement spelt out in EMPLOYER/CONSULTANT SPECIFICATIONS / CONTRACT DOCUMENT. EMPLOYER/CONSULTANT shall be fully responsible for checking the measurements quantitatively and qualitatively as recorded in the Measurement Books/ Bills.

88.1.6 While preparing the final bills overall measurements will not be taken again. Only volume of work executed since the last measured bill alongwith summary of final measurements will be considered for the final bill. However, a detailed check shall be made as to missing measurements and in case there are any missing items or measurements the same shall be recorded.

88.1.7 COMPUTERISED BILLING SYSTEM : GAIL (India) Limited has introduced Computerised Billing System whereby when the Bills are submitted in GAIL by a Contractor, a receipt number is generated. The Contractor can know the status of the Bill through GAIL's website. **(Not applicable in case of BCPL)**

88.2 SECURED ADVANCE ON MATERIAL: Unless otherwise provided elsewhere in the tender, no 'Secured Advance' on security of materials brought to site for execution of contracted items(s) shall be paid to the Contractor whatsoever.

- 88.3 DISPUTE IN MODE OF MEASUREMENT: In case of any dispute as to the mode of measurement not covered by the CONTRACT to be adopted for any item of WORK, mode of measurement as per latest Indian Standard Specifications shall be followed.
- 88.4 ROUNDING-OFF OF AMOUNTS: In calculating the amount of each item due to the CONTRACTOR in every certificate prepared for payment, sum of less than 50 paise shall be omitted and the total amount on each certificate shall be rounded off to the nearest rupees, i.e., sum of less than 50 paise shall be omitted and sums of 50 paise and more upto one rupee shall be reckoned as one rupee.

89 RUNNING ACCOUNT PAYMENTS TO BE REGARDED AS ADVANCE:

- 89.1 All running account payments shall be regarded as payment by way of advance against the final payment only and not as payments for WORK actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the CONTRACT, or any part thereof, in this respect, or of the accruing of any claim by the CONTRACTOR, nor shall it conclude, determine or affect in any way the powers of the EMPLOYER under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or affect the CONTRACT. The final bill shall be submitted by the CONTRACTOR within one month of the date of physical completion of the WORK, otherwise, the ENGINEER-IN-CHARGE's certificate of the measurement and of total amount payable for the WORK accordingly shall be final and binding on all parties

90 NOTICE OF CLAIMS FOR ADDITIONAL PAYMENTS:

- 90.1 Should the CONTRACTOR consider that he is entitled to any extra payment for any extra/additional WORKS or MATERIAL change in original SPECIFICATIONS carried out by him in respect of WORK he shall forthwith give notice in writing to the ENGINEER-IN-CHARGE that he claims extra payment. Such notice shall be given to the ENGINEER-IN-CHARGE upon which CONTRACTOR bases such claims and such notice shall contain full particulars of the nature of such claim with full details of amount claimed. Irrespective of any provision in the CONTRACT to the contrary, the CONTRACTOR must intimate his intention to lodge claim on the EMPLOYER within 10 (ten) days of the commencement of happening of the event and quantify the claim within 30 (thirty) days, failing which the CONTRACTOR will lose his right to claim any compensation/reimbursement/damages etc. or refer the matter to arbitration. Failure on the part of CONTRACTOR to put forward any claim without the necessary particulars as above within the time above specified shall be an absolute waiver thereof. No omission by EMPLOYER to reject any such claim and no delay in dealing therewith shall be waiver by EMPLOYER of any of this right in respect thereof.
- 90.2 ENGINEER-IN-CHARGE shall review such claims within a reasonably period of time and cause to discharge these in a manner considered appropriate after due deliberations thereon. However, CONTRACTOR shall be obliged to carry on with the WORK during the period in which his claims are under consideration by the EMPLOYER, irrespective of the outcome of such claims, where additional payments for WORKS considered extra are justifiable in accordance with the CONTRACT provisions, EMPLOYER shall arrange to release the same in the same manner as for normal WORK payments. Such of the extra works so admitted by EMPLOYER shall be governed by all the terms, conditions, stipulations and specifications as are applicable for the CONTRACT. The rates for extra works shall generally be the unit rates provided for in the CONTRACT. In the event unit rates for extra works so executed are not available as per CONTRACT, payments may either be released on day work basis for which daily/hourly rates for workmen and hourly rates for equipment rental shall apply, or on the unit rate for WORK executed shall be derived by interpolation/ extrapolation of unit rates already existing in the CONTRACT. In all the matters pertaining to applicability of rate and admittance of otherwise of an extra work claim of CONTRACTOR the decision of ENGINEER-IN-CHARGE shall be final and binding.

91 PAYMENT OF CONTRACTOR'S BILL:

- 91.1 No payment shall be made for works estimated to cost less than Rs.10,000/- till the whole of the work shall have been completed and a certificate of completion given. But in case of works estimated to cost more than Rs.10,000/-, that CONTRACTOR on submitting the bill thereof be entitled to receive a monthly

payment proportionate to the part thereof approved and passed by the ENGINEER-IN-CHARGE, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the CONTRACTOR. This payment will be made after making necessary corrections/deductions as stipulated elsewhere in the CONTRACT DOCUMENT for materials, Contract Performance Security, taxes etc.

91.2 Payment due to the CONTRACTOR shall be made by the EMPLOYER by Account Payee cheque forwarding the same to registered office or the notified office of the CONTRACTOR. In no case will EMPLOYER be responsible if the cheque is mislaid or misappropriated by unauthorised person/persons. In all cases, the CONTRACTOR shall present his bill duly pre-receipted on proper revenue stamp payment shall be made in Indian Currency.

91.3 In general payment of final bill shall be made to CONTRACTOR within 60 days of the submission of bill on joint measurements, after completion of all the obligations under the CONTRACT.

92 RECEIPT FOR PAYMENT:

92.1 Receipt for payment made on account of work when executed by a firm, must be signed by a person holding due power of attorney in this respect on behalf of the CONTRACTOR, except when the CONTRACTOR's are described in their tender as a limited company in which case the receipts must be signed in the name of the company by one of its principal officers or by some other person having authority to give effectual receipt for the company.

93 COMPLETION CERTIFICATE:

93.1 APPLICATION FOR COMPLETION CERTIFICATE: When the CONTRACTOR fulfils his obligation under Clause 81.1 he shall be eligible to apply for COMPLETION CERTIFICATE. The ENGINEER-IN-CHARGE shall normally issue to the CONTRACTOR the COMPLETION CERTIFICATE within one month after receiving any application therefore from the CONTRACTOR after verifying from the completion documents and satisfying himself that the WORK has been completed in accordance with and as set out in the construction and erection drawings, and the CONTRACT DOCUMENTS. The CONTRACTOR, after obtaining the COMPLETION CERTIFICATE, is eligible to present the final bill for the WORK executed by him under the terms of CONTRACT.

93.2 COMPLETION CERTIFICATE: Within one month of the completion of the WORK in all respects, the CONTRACTOR shall be furnished with a certificate by the ENGINEER-IN-CHARGE of such completion, but no certificate shall be given nor shall the WORK be deemed to have been executed until all scaffolding, surplus materials and rubbish is cleared off the SITE completely nor until the WORK shall have been measured by the ENGINEER-IN-CHARGE whose measurement shall be binding and conclusive. The WORKS will not be considered as complete and taken over by the EMPLOYER, until all the temporary works, labour and staff colonies are cleared to the satisfaction of the ENGINEER-IN-CHARGE. If the CONTRACTOR fails to comply with the requirements of this clause on or before the date fixed for the completion of the WORK, the ENGINEER-IN-CHARGE may at the expense of the CONTRACTOR remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean off such dirt as aforesaid, and the CONTRACTOR shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

93.3 COMPLETION CERTIFICATE DOCUMENTS: For the purpose of Clause 94.0 the following documents will be deemed to form the completion documents:

- (i) The technical documents according to which the WORK was carried out. Six (6) sets of construction drawings showing therein the modification and correction made during the course of execution and signed by the ENGINEER-IN-CHARGE.
- (ii) COMPLETION CERTIFICATE for 'embedded' and 'covered' up work.
- (iii) Certificates of final levels as set out for various works.
- (iv) Certificates of tests performed for various WORKS.
- (v) Material appropriation, Statement for the materials issued by the EMPLOYER for the WORK and list of surplus materials returned to the EMPLOYER's store duly supported by necessary documents.

94 FINAL DECISION AND FINAL CERTIFICATE:

94.1 Upon expiry of the period of liability and subject to the ENGINEER-IN-CHARGE being satisfied that the WORKS have been duly maintained by the CONTRACTOR during monsoon or such period as hereinbefore provided in Clause 80 & 81 and that the CONTRACTOR has in all respect duly made-up any subsidence and performed all his obligations under the CONTRACT, the ENGINEER-IN- CHARGE shall (without prejudice to the rights of the EMPLOYER to retain the provisions of relevant Clause hereof) otherwise give a certificate herein referred to as the FINAL CERTIFICATE to that effect and the CONTRACTOR shall not be considered to have fulfilled the whole of his obligations under CONTRACT until FINAL CERTIFICATE shall have been given by the ENGINEER-IN- CHARGE notwithstanding any previous entry upon the WORK and taking possession, working or using of the same or any part thereof by the EMPLOYER.

95 CERTIFICATE AND PAYMENTS ON EVIDENCE OF COMPLETION:

95.1 Except the FINAL CERTIFICATE, no other certificates or payments against a certificate or on general account shall be taken to be an admission by the EMPLOYER of the due performance of the CONTRACT or any part thereof or of occupancy or validity of any claim by the CONTRACTOR.

96 DEDUCTIONS FROM THE CONTRACT PRICE:

96.1 All costs, damages or expenses which EMPLOYER may have paid or incurred, which under the provisions of the CONTRACT, the CONTRACTOR is liable/will be liable, will be claimed by the EMPLOYER. All such claims shall be billed by the EMPLOYER to the CONTRACTOR regularly as and when they fall due. Such claims shall be paid by the CONTRACTOR within 15 (fifteen) days of the receipt of the corresponding bills and if not paid by the CONTRACTOR within the said period, the EMPLOYER may, then, deduct the amount from any moneys due i.e., Contract Performance Security or becoming due to the CONTRACTOR under the CONTRACT or may be recovered by actions of law or otherwise, if the CONTRACTOR fails to satisfy the EMPLOYER of such claims.

SECTION-VII TAXES AND INSURANCE

97 TAXES, DUTIES, OCTROI ETC:

97.1 The CONTRACTOR agrees to and does hereby accept full and exclusive liability for the payment of any and all Taxes, Duties, including Excise duty, octroi etc. now or hereafter imposed, increased, modified, all the sales taxes, duties, octrois etc. now in force and hereafter increased, imposed or modified, from time to time in respect of WORKS and materials and all contributions and taxes for unemployment compensation, insurance and old age pensions or annuities now or hereafter imposed by any Central or State Government authorities which are imposed with respect to or covered by the wages, salaries, or other compensations paid to the persons employed by the CONTRACTOR and the CONTRACTOR shall be responsible for the compliance of all SUB-CONTRACTORS, with all applicable Central, State, Municipal and local law and regulation and requirement of any Central, State or local Government agency or authority. CONTRACTOR further agrees to defend, indemnify and hold EMPLOYER harmless from any liability or penalty which may be imposed by the Central, State or Local authorities by reason or any violation by CONTRACTOR or SUB-CONTRACTOR of such laws, suits or proceedings that may be brought against the EMPLOYER arising under, growing out of, or by reason of the work provided for by this CONTRACT, by third parties, or by Central or State Government authority or any administrative sub-division thereof. Tax deductions will be made as per the rules and regulations in force in accordance with acts prevailing from time to time.

98 SALES TAX/TURNOVER TAX:

98.1 Tenderer should quote all inclusive prices including the liability of Sales Tax/Turnover Tax whether on the works contract as a whole or in respect of bought out components used by the CONTRACTOR in execution of the CONTRACT. EMPLOYER shall not be responsible for any such liability of the CONTRACTOR in respect of this CONTRACT.

99 STATUTORY VARIATIONS

99.1 Tenderer should quote prices inclusive of excise-duty and sales tax applicable on finished product. Any statutory variations in Excise Duty and sales tax on finished product during the contractual completion period, shall be to the Employer's account for which the Contractor will furnish documentary evidence(s) in support of their claims to GAIL. However, any increase in the rate of these taxes and duties (E.D. and S.T.) beyond the contractual completion period shall be to Contractor's account and any decrease shall be passed on to GAIL.

100 INSURANCE:

100.1 GENERAL CONTRACTOR shall at his own expense arrange secure and maintain insurance with reputable insurance companies to the satisfaction of the EMPLOYER as follows: CONTRACTOR at his cost shall arrange, secure and maintain insurance as may be necessary and to its full value for all such amounts to protect the WORKS in progress from time to time and the interest of EMPLOYER against all risks as detailed herein. The form and the limit of such insurance, as defined here in together with the under works thereof in each case should be as acceptable to the EMPLOYER. However, irrespective of work acceptance the responsibility to maintain adequate insurance coverage at all times during the period of CONTRACT shall be that of CONTRACTOR alone. CONTRACTOR's failure in this regard shall not relieve him of any of his responsibilities and obligations under CONTRACT. Any loss or damage to the equipment, during ocean transportation, port/custom clearance, inland and port handling, inland transportation, storage, erection and commissioning till such time the WORK is taken over by EMPLOYER, shall be to the account of CONTRACTOR. CONTRACTOR shall be responsible for preferring of all claims and make good for the damage or loss by way of repairs and/or replacement of the parts of the Work damaged or lost. CONTRACTOR shall provide the EMPLOYER with a copy of all insurance policies and documents taken out by him in pursuance of the CONTRACT. Such copies of document shall be submitted to the EMPLOYER immediately upon the CONTRACTOR having taken such insurance coverage. CONTRACTOR shall also inform the EMPLOYER at least 60(Sixty) days in advance regarding the expiry cancellation and/or changes in any of such documents and ensure revalidation/renewal etc., as may be necessary well in time. Statutory clearances, if any, in respect of foreign supply required for the purpose of replacement of equipment lost in transit and/or during erection, shall be made available by the EMPLOYER. CONTRACTOR shall, however, be responsible for obtaining requisite licences, port clearances and other formalities relating to such import. The risks that are to be covered under the insurance shall include, but not be limited to the loss or damage in handling, transit, theft, pilferage, riot, civil commotion, weather conditions, accidents of all kinds, fire, war risk (during ocean transportation only) etc. The scope of such insurance shall cover the entire value of supplies of equipments, plants and materials to be imported from time to time. All costs on account of insurance liabilities covered under CONTRACT will be to CONTRACTOR's account and will be included in VALUE OF CONTRACT. However, the EMPLOYER may from time to time, during the currency of the CONTRACT, ask the CONTRACTOR in writing to limit the insurance coverage risk and in such a case, the parties to the CONTRACT will agree for a mutual settlement, for reduction in VALUE OF CONTRACT to the extent of reduced premium amounts CONTRACTOR as far as possible shall cover insurance with Indian Insurance Companies, including marine Insurance during ocean transportation.

100.1.1 EMPLOYEES STATE INSURANCE ACT: The CONTRACTOR agrees to and does hereby accept full and exclusive liability for the compliance with all obligations imposed by the Employee State Insurance Act 1948 and the CONTRACTOR further agrees to defend, indemnify and hold EMPLOYER harmless for any liability or penalty which may be imposed by the Central, State or Local authority by reason of any asserted violation by CONTRACTOR or SUB-CONTRACTOR of the Employees' State Insurance Act, 1948, and also from all claims, suits or proceeding that may be brought against the EMPLOYER arising under, growing out of or by reasons of the work provided for by this CONTRACTOR, by third parties or by Central or State Government authority or any political sub- division thereof. The CONTRACTOR agrees to fill in with the Employee's State Insurance Corporation, the Declaration Forms, and all forms which may be required in respect of the CONTRACTOR's or SUB- CONTRACTOR's employees, who are employed in the WORK provided for or those covered by ESI from time to time under the Agreement. The CONTRACTOR shall deduct and secure the agreement of the SUB- CONTRACTOR to deduct the employee's contribution as per the first schedule of the Employee's State Insurance Act from wages

and affix the Employees Contribution Card at wages payment intervals. The CONTRACTOR shall remit and secure the agreement of SUB-CONTRACTOR to remit to the State Bank of India, Employee's State Insurance Corporation Account, the Employee's contribution as required by the Act. The CONTRACTOR agrees to maintain all cards and Records as required under the Act in respect of employees and payments and the CONTRACTOR shall secure the agreement of the SUB-CONTRACTOR to maintain such records. Any expenses incurred for the contributions, making contributions or maintaining records shall be to the CONTRACTOR's or SUB-CONTRACTOR's account. The EMPLOYER shall retain such sum as may be necessary from the total VALUE OF CONTRACT until the CONTRACTOR shall furnish satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948, have been paid. This will be pending on the CONTRACTOR when the ESI Act is extended to the place of work.

- 100.1.2 **WORKMEN COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE:** Insurance shall be effected for all the CONTRACTOR's employees engaged in the performance of this CONTRACT. If any of the work is sublet, the CONTRACTOR shall require the SUB-CONTRACTOR to provide workman's Compensation and employer's liability insurance for the later's employees if such employees are not covered under the CONTRACTOR's Insurance.
- 100.1.3 **ACCIDENT OR INJURY TO WORKMEN:** The EMPLOYER shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the Employment of the CONTRACTOR or any SUB-CONTRACTOR save and except an accident or injury resulting from any act or default of the EMPLOYER, his agents or servants and the CONTRACTOR shall indemnify and keep indemnified the EMPLOYER against all such damages and compensation (save and except and aforesaid) and against all claims, demands, proceeding, costs, charges and expenses, whatsoever in respect or in relation thereto.
- 100.1.4 **TRANSIT INSURANCE** In respect of all items to be transported by the CONTRACTOR to the SITE of WORK, the cost of transit insurance should be borne by the CONTRACTOR and the quoted price shall be inclusive of this cost.
- 100.1.5 **COMPREHENSIVE AUTOMOBILE INSURANCE** This insurance shall be in such a form as to protect the Contractor against all claims for injuries, disability, disease and death to members of public including EMPLOYER's men and damage to the property of others arising from the use of motor vehicles during on or off the 'site' operations, irrespective of the Employership of such vehicles.
- 100.1.6 **COMPREHENSIVE GENERAL LIABILITY INSURANCE:**
- a) This insurance shall protect the Contractor against all claims arising from injuries, disabilities, disease or death of member of public or damage to property of others due to any act or omission on the part of the Contractor, his agents, his employees, his representatives and Sub- Contractor's or from riots, strikes and civil commotion.
 - b) Contractor shall take suitable Group Personal Accident Insurance Cover for taking care of injury, damage or any other risks in respect of his Engineers and other Supervisory staff who are not covered under Employees State Insurance Act.
 - c) The policy shall cover third party liability. The third party (liability shall cover the loss/ disablement of human life (person not belonging to the Contractor) and also cover the risk of damage to others materials/ equipment/ properties during construction, erection and commissioning at site. The value of third party liability for compensation for loss of human life or partial/full disablement shall be of required statutory value but not less than Rs. 2 lakhs per death, Rs. 1.5 lakhs per full disablement and Rs. 1 lakh per partial disablement and shall nevertheless cover such compensation as may be awarded by Court by Law in India and cover for damage to others equipment/ property as approved by the Purchaser. However, third party risk shall be maximum to Rs. 10(ten) lakhs to death.
 - d) The Contractor shall also arrange suitable insurance to cover damage, loss, accidents, risks etc., in respect of all his plant, equipments and machinery, erection tools & tackles and all other temporary attachments brought by him at site to execute the work.
 - e) The Contractor shall take out insurance policy in the joint name of EMPLOYER and Contractor from one or more nationalised insurance company from any branch office at Project site.

- f) Any such insurance requirements as are hereby established as the minimum policies and coverages which Contractor must secure and keep in force must be complied with, Contractor shall at all times be free to obtain additional or increased coverages at Contractor's sole expenses.

100.1.7 ANY OTHER INSURANCE REQUIRED UNDER LAW OR REGULATIONS OR BY EMPLOYER: CONTRACTOR shall also carry and maintain any and all other insurance(s) which he may be required under any law or regulation from time to time without any extra cost to EMPLOYER. He shall also carry and maintain any other insurance which may be required by the EMPLOYER.

101 DAMAGE TO PROPERTY OR TO ANY PERSON OR ANY THIRD PARTY

101.1 CONTRACTOR shall be responsible for making good to the satisfaction of the EMPLOYER any loss or any damage to structures and properties belonging to the EMPLOYER or being executed or procured or being procured by the EMPLOYER or of other agencies within in the premises of all the work of the EMPLOYER, if such loss or damage is due to fault and/or the negligence or willful acts or omission of the CONTRACTOR, his employees, agents, representatives or SUB-CONTRACTORS.

101.2 The CONTRACTOR shall take sufficient care in moving his plants, equipments and materials from one place to another so that they do not cause any damage to any person or to the property of the EMPLOYER or any third party including overhead and underground cables and in the event of any damage resulting to the property of the EMPLOYER or of a third party during the movement of the aforesaid plant, equipment or materials the cost of such damages including eventual loss of production, operation or services in any plant or establishment as estimated by the EMPLOYER or ascertained or demanded by the third party shall be borne by the CONTRACTOR. Third party liability risk shall be Rupees One lakh for single accident and limited to Rupees Ten lakhs.

101.3 The CONTRACTOR shall indemnify and keep the EMPLOYER harmless of all claims for damages to property other than EMPLOYER's property arising under or by reason of this agreement, if such claims result from the fault and/or negligence or willful acts or omission of the CONTRACTOR, his employees, agents, representative of SUB-CONTRACTOR.

SECTION-VIII LABOUR LAWS

102 LABOUR LAWS:

102.1 No labour below the age of 18 (eighteen) years shall be employed on the WORK.

102.2 The CONTRACTOR shall not pay less than what is provided under law to labourers engaged by him on the WORK.

102.3 The CONTRACTOR shall at his expense comply with all labour laws and keep the EMPLOYER indemnified in respect thereof.

102.4 The CONTRACTOR shall pay equal wages for men and women in accordance with applicable labour laws.

102.5 If the CONTRACTOR is covered under the Contract labour (Regulation and Abolition) Act, he shall obtain a licence from licensing authority (i.e. office of the labour commissioner) by payment of necessary prescribed fee and the deposit, if any, before starting the WORK under the CONTRACT. Such fee/deposit shall be borne by the CONTRACTOR.

102.6 The CONTRACTOR shall employ labour in sufficient numbers either directly or through SUB-CONTRACTOR's to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the CONTRACT and to the satisfaction of the ENGINEER-IN-CHARGE.

102.7 The CONTRACTOR shall furnish to the ENGINEER-IN- CHARGE the distribution return of the number and description, by trades of the work people employed on the works. The CONTRACTOR shall also submit on the 4th and 19th of every month to the ENGINEER-IN-CHARGE a true statement showing in respect of the second half of the preceding month and the first half of the current month (1) the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act 1961 on Rules made thereunder and the amount paid to them.

102.8 The CONTRACTOR shall comply with the provisions of the payment of Wage Act 1936, Employee Provident Fund Act 1952, Minimum Wages Act 1948. Employers Liability Act 1938. Workmen's Compensation Act 1923, Industrial Disputes Act 1947, the Maternity Benefit Act 1961 and Contract Labour

Regulation and Abolition Act 1970, Employment of Children Act 1938 or any modifications thereof or any other law relating thereto and rules made thereunder from time to time.

102.9 The ENGINEER-IN-CHARGE shall on a report having been made by an Inspecting Officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the money due to the CONTRACTOR any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non- fulfillment of the Conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said regulations.

102.10 The CONTRACTOR shall indemnify the EMPLOYER against any payments to be made under and for the observance of the provisions of the aforesaid Acts without prejudice to his right to obtain indemnity from his SUB-CONTRACTOR's. In the event of the CONTRACTOR committing a default or breach of any of the provisions of the aforesaid Acts as amended from time to time, of furnishing any information or submitting or filling and Form/ Register/ Slip under the provisions of these Acts which is materially incorrect then on the report of the inspecting Officers, the CONTRACTOR shall without prejudice to any other liability pay to the EMPLOYER a sum not exceeding Rs.50.00 as Liquidated Damages for every default, breach or furnishing, making, submitting, filling materially incorrect statement as may be fixed by the ENGINEER-IN- CHARGE and in the event of the CONTRACTOR's default continuing in this respect, the Liquidated Damages may be enhanced to Rs.50.00 per day for each day of default subject to a maximum of one percent of the estimated cost of the WORK put to tender. The ENGINEER-IN-CHARGE shall deduct such amount from bills or Contract Performance Security of the CONTRACTOR and credit the same to the Welfare Fund constitute under these acts. The decision of the ENGINEER-IN-CHARGE in this respect shall be final and binding.

103 IMPLEMENTATION OF APPRENTICES ACT, 1961:

103.1 The CONTRACTOR shall comply with the provisions of the Apprentices Act, 1961 and the Rules and Orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the CONTRACT and the ENGINEER-IN-CHARGE may, at his discretion, cancel the CONTRACT. The CONTRACTOR shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions, of the Act.

104 CONTRACTOR TO INDEMNIFY THE EMPLOYER:

104.1 The CONTRACTOR shall indemnify the EMPLOYER and every member, office and employee of the EMPLOYER, also the ENGINEER-IN-CHARGE and his staff against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of or in connection with the matters referred to in Clause 102.0 and elsewhere and all actions, proceedings, claims, demands, costs and expenses which may be made against the EMPLOYER for or in respect of or arising out of any failure by the CONTRACTOR in the performance of his obligations under the CONTRACT DOCUMENT. The EMPLOYER shall not be liable for or in respect of or arising out of any failure by the CONTRACTOR in the performance of his obligations under the CONTRACT DOCUMENT. The EMPLOYER shall not be liable for or in respect of any demand or compensation payable by law in respect or in consequence of any accident or injury to any workmen or other person. In the employment of the CONTRACTOR or his SUB-CONTRACTOR the CONTRACTOR shall indemnify and keep indemnified the EMPLOYER against all such damages and compensations and against all claims, damages, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

104.2 PAYMENT OF CLAIMS AND DAMAGES: Should the EMPLOYER have to pay any money in respect of such claims or demands as aforesaid the amount so paid and the costs incurred by the EMPLOYER shall be charged to and paid by the CONTRACTOR and the CONTRACTOR shall not be at liberty to dispute or question the right of the EMPLOYER to make such payments notwithstanding the same, may have been made without the consent or authority or in law or otherwise to the contrary.

104.3 In every case in which by virtue of the provisions of Section 12, Sub-section (i) of workmen's compensation Act, 1923 or other applicable provision of Workmen Compensation Act or any other Act, the EMPLOYER is obliged to pay compensation to a workman employed by the CONTRACTOR in execution of the WORK, the EMPLOYER will recover from the CONTRACTOR the amount of the compensation so paid, and without prejudice to the rights of EMPLOYER under Section 12, Sub- section (2) of the said act,

EMPLOYER shall be at liberty to recover such amount or any part thereof by deducting it from the Contract Performance Security or from any sum due to the CONTRACTOR whether under this CONTRACT or otherwise. The EMPLOYER shall not be bound to contest any claim made under Section 12, Sub-section (i) of the said act, except on the written request of the CONTRACTOR and upon his giving to the EMPLOYER full security for all costs for which the EMPLOYER might become liable in consequence of contesting such claim.

105 HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS:

105.1 In respect of all labour directly or indirectly employed in the WORKS for the performance of the CONTRACTOR's part of this agreement, the CONTRACTOR shall comply with or cause to be complied with all the rules and regulations of the local sanitary and other authorities or as framed by the EMPLOYER from time to time for the protection of health and sanitary arrangements for all workers.

105.2 The CONTRACTOR shall provide in the labour colony all amenities such as electricity, water and other sanitary and health arrangements. The CONTRACTOR shall also provide necessary surface transportation to the place of work and back to the colony for their personnel accommodated in the labour colony.

SECTION-IX APPLICABLE LAWS AND SETTLEMENT OF DISPUTES

106 ARBITRATION:

106.1 Unless otherwise specified, the matters where decision of the Engineer-in-Charge is deemed to be final and binding as provided in the Agreement and the issues/disputes which cannot be mutually resolved within a reasonable time, all disputes shall be referred to arbitration by Sole Arbitrator. The Employer [GAIL (India) Ltd.] shall suggest a panel of three independent and distinguished persons to the bidder/contractor/supplier/buyer (as the case may be) to select any one among them to act as the Sole Arbitrator. In the event of failure of the other parties to select the Sole Arbitrator within 30 days from the receipt of the communication suggesting the panel of arbitrators, the right of selection of the sole arbitrator by the other party shall stand forfeited and the EMPLOYER (BCPL) shall have discretion to proceed with the appointment of the Sole Arbitrator. The decision of Employer on the appointment of the sole arbitrator shall be final and binding on the parties. The award of sole arbitrator shall be final and binding on the parties and unless directed/awarded otherwise by the sole arbitrator, the cost of arbitration proceedings shall be shared equally by the parties. The Arbitration proceedings shall be in English language and venue shall be New Delhi, India. Subject to the above, the provisions of (Indian) Arbitration & Conciliation ACT 1996 and the Rules framed there under shall be applicable. All matter relating to this contract are subject to the exclusive jurisdiction of the court situated in the state of Delhi. Bidders/suppliers/contractors may please note that the Arbitration & Conciliation Act 1996 was enacted by the Indian Parliament and is based on United Nations Commission on International Trade Law (UNCITRAL model law), which were prepared after extensive consultation with Arbitral Institutions and centers of International Commercial Arbitration. The United Nations General Assembly vide resolution 31/98 adopted the UNCITRAL Arbitration rules on 15 December 1976.

106.2 FOR THE SETTLEMENT OF DISPUTES BETWEEN GOVERNMENT DEPARTMENT AND ANOTHER AND ONE GOVERNMENT DEPARTMENT AND PUBLIC ENTERPRISE AND ONE PUBLIC ENTERPRISE AND ANOTHER THE ARBITRATION SHALL BE AS FOLLOWS: "In the event of any dispute or difference between the parties hereto, such dispute or difference shall be resolved amicably by mutual consultation or through the good offices of empowered agencies of the Government. If such resolution is not possible, then, the unresolved dispute or difference shall be referred to arbitration of an arbitrator to be nominated by Secretary, Department of Legal Affairs ("Law Secretary") in terms of the Office Memorandum No.55/3/1/75-CF, dated the 19th December 1975 issued by the Cabinet Secretariat (Department of Cabinet Affairs), as modified from time to time. The Arbitration Act 1940 (10 of 1940) shall not be applicable to the arbitration under this clause. The award of the Arbitrator shall be binding upon parties to the dispute. Provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to Law Secretary whose decision shall bind the parties finally and conclusively.

107 JURISDICTION:

107.1 The CONTRACT shall be governed by and constructed according to the laws in force in INDIA. The CONTRACTOR hereby submits to the jurisdiction of the Courts situated at Guwahati for the purposes of

disputes, actions and proceedings arising out of the CONTRACT, the courts at Guwahati only will have the jurisdiction to hear and decide such disputed, actions and proceedings.

SECTION-X SAFETY CODES

108 GENERAL:

108.1 CONTRACTOR shall adhere to safe construction practice and guard against hazardous, and unsafe working conditions and shall comply with EMPLOYER's safety rules as set forth herein. Prior to start of construction, CONTRACTOR will be furnished copies of EMPLOYER's "Safety Code" for information and guidance, if it has been prepared.

109 SAFETY REGULATIONS:

109.1 In respect of all labour, directly employed in the WORK for the performance of CONTRACTOR's part of this agreement, the CONTRACTOR shall at his own expense arrange for all the safety provisions as per safety codes of C.P.W.D., Indian Standards Institution. The Electricity Act, The Mines Act and such other acts as applicable.

109.2 The CONTRACTOR shall observe and abide by all fire and safety regulations of the EMPLOYER. Before starting construction work CONTRACTOR shall consult with EMPLOYER's safety Engineers or ENGINEER-IN-CHARGE and must make good to the satisfaction of the EMPLOYER any loss or damage due to fire to any portion of the work done or to be done under this agreement or to any of the EMPLOYER's existing property.

110 FIRST AID AND INDUSTRIAL INJURIES:

110.1 CONTRACTOR shall maintain first aid facilities for its employees and those of its SUB-CONTRACTOR.

110.2 CONTRACTOR shall make outside arrangements for ambulance service and for the treatment of industrial injuries. Names of those providing these services shall be furnished to EMPLOYER prior to start of construction and their telephone numbers shall be prominently posted in CONTRACTOR's field office.

110.3 All critical industrial injuries shall be reported promptly to EMPLOYER, and a copy of CONTRACTOR's report covering each personal injury requiring the attention of a physician shall be furnished to the EMPLOYER.

111 GENERAL RULES:

111.1 Smoking within the battery area, tank farm or dock limits is strictly prohibited. Violators of the no smoking rules shall be discharged immediately.

112 CONTRACTOR'S BARRICADES:

112.1 CONTRACTOR shall erect and maintain barricades required in connection with his operation to guard or protect:-

- a) Excavations
- b) Hoisting Areas.
- c) Areas adjudged hazardous by CONTRACTOR's or EMPLOYER's inspectors.
- d) EMPLOYER's existing property subject to damage by CONTRACTOR's Operations.
- e) Rail Road unloading spots.

112.2 CONTRACTOR's employees and those of his SUB- CONTRACTOR's shall become acquainted with EMPLOYER's barricading practice and shall respect the provisions thereof.

112.3 Barricades and hazardous areas adjacent to, but not located in normal routes of travel shall be marked by red flasher lanterns at nights.

113 SCAFFOLDING:

113.1 Suitable scaffolding should be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and if the ladder is used

for carrying material as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 in 4 (1 horizontal and 4 vertical).

- 113.2 Scaffolding or staging more than 4 metres above the ground or floor, swing suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise retarded at least one metre high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 113.3 Working platform, gangway and stairway should be so constructed that they should not sag unduly or unequally and if the height of platform of the gangway or the stairway is more than 4 metres above the ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as in ii) above.
- 113.4 Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum heights shall be 1 metre.
- 113.5 Safe-means of access shall be provided to all working platforms and other working places, every ladder shall be securely fixed. No portable single ladder shall be over 9 metres in length while the width between side rails in rung ladder shall in no case be less than 30 cms for ladder upto and including 3 metres in length. For longer ladder this width should be increased 5mm for each additional foot of length. Uniform steps spacing shall not exceed 30 cms. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed to cause danger or inconvenience to any person or public. The CONTRACTOR shall also provide all necessary fencing and lights to protect the workers and staff from accidents, and shall be bound to bear the expenses of defense of every suit, action or other proceeding of law that may be brought by any person for injury sustained owing to neglect of the above precautions and pay any damages and costs which may be awarded in any such suit or action or proceeding to any such person or which may with the consent of the CONTRACTOR be paid to compromise any claim by any such person.

114 EXCAVATION AND TRENCHING:

- 114.1 All trenches 1.2 metres or more in depth, shall at all times be supplied with at least one ladder for each 50 metres length or fraction thereof. Ladder shall be extended from bottom of the trenches to atleast 1 metre above the surface of the ground. The sides of the trenches which are 1.5M in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides to collapse. The excavated materials shall not be placed within 1.5 metres of the edge of the trench or half of the trench width whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or under-cutting shall be done.

115 DEMOLITION/GENERAL SAFETY:

- 115.1 Before any demolition work is commenced and also during the progress of the demolition work
- All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - No electric cable or apparatus which is liable to be a source of danger shall remain electrically charged.
 - All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
- 115.2 All necessary personal safety equipment as considered adequate by the ENGINEER-IN-CHARGE, should be kept available for the use of the persons employed on the SITE and maintained in condition suitable for immediate use, and the CONTRACTOR shall take adequate steps to ensure proper use of equipment by those concerned.
- Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective gloves.
 - Those engaged in white washing and mixing or stacking or cement bags or any material which are injurious to the eyes be provided with protective goggles.

- c) Those engaged in welding and cutting works shall be provided with protective face & eye shield, hand gloves, etc.
- d) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- e) When workers are employed in sewers and manholes, which are in use, the CONTRACTOR shall ensure that the manhole covers are opened and are ventilated atleast for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or
- f) board to prevent accident to the public.
- g) The CONTRACTOR shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 years are employed on the work of lead painting, the following precautions should be taken.
 - 1) No paint containing lead or lead product shall be used except in the form of paste or readymade paint.
 - 2) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
 - 3) Overalls shall be supplied by the CONTRACTOR to the workmen and adequate facilities shall be provided to enable the working painters to wash them during and on cessation of work.

115.2.1 When the work is done near any place where there is risk of drowning, all necessary safety equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

115.2.2 Use of hoisting machines and tackles including their attachments, anchorage and supports shall conform to the following standards or conditions:

- a. These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good working order.
- b. Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.
- b) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding, winch or give signals to the operator.
- c) In case of every hoisting machine and of every chain ring hook, shackle, swivel, and pulley block used in hoisting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gears referred to above shall be plainly marked with the safe working load of the conditions under which it is applicable and the same shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond safe working load except for the purpose of testing.
- d) In case of departmental machine, the safe working load shall be notified by the ENGINEER-IN-CHARGE. As regards CONTRACTOR's machines, the CONTRACTOR shall notify the safe working load of the machine to the ENGINEER-IN-CHARGE whenever he brings any machinery to SITE of WORK and get it verified by the Engineer concerned.
- e) Motors, gears, transmission lines, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as to reduce to minimum the accidental descent of the load, adequate precautions should be taken to reduce the minimum risk of any part or parts of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves, and boots as may be necessary should be provided. The workers shall not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

115.2.3 All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffolds, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

- 115.2.4 These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work-spot. The person responsible for compliance of the safety code shall be named therein by the CONTRACTOR.
- 115.2.5 To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the CONTRACTOR shall be open to inspection by the Welfare Officer, ENGINEER-IN- CHARGE or safety Engineer of the Administration or their representatives.
- 115.2.6 Notwithstanding the above clauses there is nothing in these to exempt the CONTRACTOR for the operations of any other Act or rules in force in the Republic of India. The work throughout including any temporary works shall be carried out in such a manner as not to interfere in any way whatsoever with the traffic on any roads or footpath at the site or in the vicinity thereto or any existing works whether the property of the Administration or of a third party. In addition to the above, the CONTRACTOR shall abide by the safety code provision as per C.P.W.D. Safety code and Indian Standard Safety Code from time to time.

116 CARE IN HANDLING INFLAMMABLE GAS:

- 116.1.1 The CONTRACTOR has to ensure all precautionary measures and exercise utmost care in handling the inflammable gas cylinder/inflammable liquids/paints etc. as required under the law and/or as advised by the fire Authorities of the EMPLOYER.

117 TEMPORARY COMBUSTIBLE STRUCTURES:

- 117.1 Temporary combustible structures will not be built near or around work site.

118 PRECAUTIONS AGAINST FIRE:

- 118.1.1 The CONTRACTOR will have to provide Fire Extinguishers, Fire Buckets and drums at worksite as recommended by ENGINEER-IN-CHARGE. They will have to ensure all precautionary measures and exercise utmost care in handling the inflammable gas cylinders/ inflammable liquid/ paints etc. as advised by ENGINEER-IN-CHARGE. Temporary combustible structures will not be built near or around the work-site.

119 EXPLOSIVES:

- 119.1.1 Explosives shall not be stored or used on the WORK or on the SITE by the CONTRACTOR without the permission of the ENGINEER-IN-CHARGE in writing and then only in the manner and to the extent to which such permission is given. When explosives are required for the WORK they will be stored in a special magazine to be provided at the cost of the CONTRACTOR in accordance with the Explosives Rules. The CONTRACTOR shall obtain the necessary licence for the storage and the use of explosives and all operations in which or for which explosives are employed shall be at sole risk and responsibility of the CONTRACTOR and the CONTRACTOR shall indemnify the EMPLOYER against any loss or damage resulting directly or indirectly therefrom.

120 MINES ACT:

- 120.1.1 SAFETY CODE: The CONTRACTOR shall at his own expense arrange for the safety provisions as required by the ENGINEER-IN-CHARGE in respect of all labour directly employed for performance of the WORKS and shall provide all facilities in connection therewith. In case the CONTRACTOR fails to make arrangements and provides necessary facilities as aforesaid, the ENGINEER-IN- CHARGE shall be entitled to do so and recover the costs thereof from the CONTRACTOR.
- 120.1.2 Failure to comply with Safety Code or the provisions relating to report on accidents and to grant of maternity benefits to female workers shall make the CONTRACTOR liable to pay Company Liquidated Damages an amount not exceeding Rs.50/- for each default or materially incorrect statement. The decision of the ENGINEER-IN-CHARGE in such matters based on reports from the Inspecting Officer or from representatives of ENGINEER-IN-CHARGE shall be final and binding and deductions for recovery of such Liquidated Damages may be made from any amount payable to the CONTRACTOR from all the provisions of the Mines Act, 1952 or any statutory modifications or re-enactment thereof the time being in force and any Rules and Regulations made there under in respect of all the persons employed by him under this CONTRACT and shall indemnify the EMPLOYER from and against any claim under the

Mines Act or the rules and regulations framed there under by or on behalf of any persons employed by him or otherwise.

121 PRESERVATION OF PLACE:

121.1.1 The CONTRACTOR shall take requisite precautions and use his best endeavors to prevent any riotous or unlawful behaviour by or amongst his worker and others employed or the works and for the preservation of peace and protection of the inhabitants and security of property in the neighborhood of the WORK. In the event of the EMPLOYER requiring the maintenance of a Special Police Force at or in the vicinity of the site during the tenure of works, the expenses thereof shall be borne by the CONTRACTOR and if paid by the EMPLOYER shall be recoverable from the CONTRACTOR.

122 OUTBREAK OF INFECTIOUS DISEASES:

122.1.1 The CONTRACTOR shall remove from his camp such labour and their facilities who refuse protective inoculation and vaccination when called upon to do so by the ENGINEER-IN-CHARGE's representative. Should Cholera, Plague or other infectious diseases break out the CONTRACTOR shall burn the huts, beddings, clothes and other belongings or used by the infected parties and promptly erect new huts on healthy sites as required by the ENGINEER-IN-CHARGE failing which within the time specified in the Engineer's requisition, the work may be done by the EMPLOYER and the cost thereof recovered from the CONTRACTOR.

123 USE OF INTOXICANTS:

123.1.1 The unauthorized sale of spirits or other intoxicants, beverages upon the work in any of the buildings, encampments or tenements owned, occupied by or within the control of the CONTRACTOR or any of his employee is forbidden and the CONTRACTOR shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition. In addition to the above, the CONTRACTOR shall abide by the safety code provision as per C.P.W.D. safety code and Indian Standard Code framed from time to time.

PROFORMA OF INDEMNITY BOND FOR SUPPLY OF MATERIALS BY EMPLOYER

(To be executed on non-judicial stamped paper of appropriate value)

WHEREAS Brahmaputra Cracker & Polymer Ltd. (hereinafter referred to as BCPL) which expression shall unless repugnant to the context includes their legal representatives, successors and assigns having their registered office at Hotel Brahmaputra Ashok, M. G. Road, Guwahati - 781001 has entered into a CONTRACT with _____ (hereinafter referred to as the CONTRACTOR which expression shall unless repugnant to the context include their legal representatives, successors and assigns) for _____ on the terms and conditions as set out, inter-alia, in the CONTRACT No..... Dated..... and various documents forming part thereof hereinafter collectively referred to as the "CONTRACT" which expression shall include all amendments, modifications and/or variations thereto.

AND WHEREAS i) BCPL has agreed to supply to the CONTRACTOR, equipment, plants and materials (finished, semi-finished and raw) for the purpose of EXECUTION of the said CONTRACT by the CONTRACTOR (the equipment, plants and materials to be supplied by BCPL to the CONTRACTOR, hereinafter for the sake of brevity referred to as the "said materials") and pending execution by the CONTRACTOR of the CONTRACT incorporating the said materials, the said materials shall be under the custody and charge of the CONTRACTOR and shall be kept, stored, altered, worked upon and/or fabricated at the sole risk and expense of the CONTRACTOR.

ii) As a pre-condition to the supply of the said materials by BCPL to the CONTRACTOR, BCPL has required the CONTRACTOR to furnish to BCPL an Indemnity Bond in the manner and upon terms and conditions hereinafter indicated. NOW, THEREFORE, in consideration of the premises aforesaid the CONTRACTOR hereby irrevocably and unconditionally undertakes to indemnify and keep indemnified BCPL from and against all loss, damage and destruction (inclusive but not limited to any or all loss or damage or destruction to or of the said materials or any item or part thereof by theft, pilferage, fire, flood, storm, tempest, lightning, explosion, storage, chemical or physical action or reaction, binding, warping, exposure, rusting, faulty workmanship, faulty fabrication, or faulty method or technique of fabrication, strike, riot, civil commotion, or other act or omission or commission whatsoever within or beyond the control of the CONTRACTOR, misuse and misappropriation (inclusive but not limited to the misuse or misappropriation by the CONTRACTOR and the Contractor's servants and/or agents) whatsoever to, or of in the said materials or any part of them thereof from the date that the same or relative part of item thereof was supplied to the CONTRACTOR upto and until the date of return to BCPL of the said materials or relative part of item thereof or completed fabricated works(s) incorporating the said material and undertake to pay to BCPL forthwith on demand in writing without protest or demur the value as specified by BCPL of the said material or item or part thereof, lost, damaged, destroyed, misused and/or misappropriated, as the case may be or, together with BCPL'S costs and expenses (inclusive of but not limited to handling, transportation, cartage, insurance, freight, packing and inspection costs/or expenses upto) and aggregate limit of Rs. _____ (Rupees _____ Only). AND THE CONTRACTOR hereby agrees with BCPL that: i) This Indemnity/Undertaking shall be a continuing Indemnity/ Undertaking and shall remain valid and irrevocable for all claims of BCPL arising hereunder upto and until the midnight of _____. However, if the CONTRACT for which this Indemnity/Undertaking is given is not completed by this date, the CONTRACTOR hereby agrees to extend the Indemnity/Undertaking till such time as is required to fulfill the CONTRACT.

ii) This Indemnity/Undertaking shall not be determined by any change in constitution or upon insolvency of the CONTRACTOR but shall be in all respects and for all purposes be binding and operative until payment of all moneys payable to BCPL in terms of hereof.

iii) The mere statement of allegation made by or on behalf of BCPL in any notice or demand or other writing addressed to the CONTRACTOR as to any of the said material or item or part thereof having been lost , damaged, destroyed, misused or misappropriated while in the custody of the CONTRACTOR and/or prior to completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials shall be conclusive of the factum of the said material or item or part thereof having been supplied to the CONTRACTOR and/or the loss, damage, destruction, misuse or misappropriation thereof, as the case may be, while in the custody of the CONTRACTOR and/or prior to the completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials without necessity on the part of BCPL to produce any documentary proof or other evidence whatsoever in support of this.

iv) The amount stated in any notice of demand addressed by BCPL to the CONTRACTOR as to the value of such said materials lost, damaged, destroyed, misused or misappropriated, inclusive relative to the costs and expenses incurred by BCPL in connection therewith shall be conclusive of the value of such said materials and the said cost and expenses as also of the amount liable to be paid to BCPL to produce any voucher, bill or other documentation or evidence whatsoever in support thereof and such amount shall be paid without any demur and on demand and no dispute shall be raised concerning the same. The undersigned has full power to execute this Indemnity Bond on behalf of the

CONTRACTOR under the Power of Attorney dated
(SIGNED BY COMPETENT AUTHORITY)

Place:
Dated:
Official seal of the CONTRACTOR

PROFORMA FOR CONTRACT AGREEMENT

LOA No. BCPL / Dated -----

Contract Agreement for the work of ----- of Brahmaputra Cracker & Polymer Ltd. (BCPL) made on -----
- between (Name and Address)-----, hereinafter called the "CONTRACTOR" (which term shall unless
excluded by or repugnant to the subject or context include
its successors and permitted assignees) of the one part and BCPL hereinafter called the "EMPLOYER" (which
term shall, unless excluded by or repugnant to the subject or context include its successors and assignees) of
the
other part. WHEREAS

A. The EMPLOYER being desirous of having provided and executed certain work mentioned, enumerated or
referred to in the Tender Documents including Letter Inviting Tender, General Tender Notice, General
Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, Plans, Time Schedule of
completion of jobs, Schedule of Rates, Agreed Variations, other documents has called for Tender.

B. The CONTRACTOR has inspected the SITE and surroundings of WORK specified in the Tender Documents
and has satisfied himself by careful examination before submitting his tender as to the nature of the surface,
strata, soil, sub-soil and ground, the form and nature of site and local conditions, the quantities, nature and
magnitude of the work, the availability of labour and materials necessary for the execution of work, the means
of access to SITE, the supply of power and water thereto and the accommodation he may require and has
made local and independent enquiries and obtained complete information as to the matters and thing
referred to, or implied in the tender documents or having any connection therewith and has considered the
nature and extent of all probable and possible situations, delays, hindrances or interferences to or with the
execution and completion of the work to be carried out under the CONTRACT, and has examined and
considered all other matters, conditions and things and probable and possible contingencies, and generally all
matters incidental thereto and ancillary thereof affecting the execution and completion of the WORK and
which might have influenced him in making his tender.

C. The Tender Documents including the Notice Letter Inviting Tender, General Conditions of Contract, Special
Conditions of Contract, Schedule of Rates, General Obligations, SPECIFICATIONS, DRAWINGS, PLANS, Time
Schedule for completion of Jobs, Letter of Acceptance of Tender and any statement of agreed variations with
its enclosures copies of which are hereto annexed form
part of this CONTRACT though separately set out herein and are included in the expression "CONTRACT"
wherever herein used.

AND WHEREAS The EMPLOYER accepted the Tender of the CONTRACTOR for the provision and the execution
of the said WORK at the rates stated in the schedule of quantities of the work and finally approved by
EMPLOYER (hereinafter called the "Schedule of Rates") upon the terms and subject to the conditions of
CONTRACT.

NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED AND DECLARED AS FOLLOWS:- 1. In
consideration of the payment to be made to the CONTRACTOR for the WORK to be executed by him, the
CONTRACTOR hereby covenants with

EMPLOYER that the CONTRACTOR shall and will duly provide, execute and complete the said work and shall do
and perform all other acts and things in the CONTRACT mentioned or described or which are to be implied
there from or may be reasonably necessary for the completion of the said WORK and at the said times and in
the manner and subject to the terms and conditions or
stipulations mentioned in the contract.

2. In consideration of the due provision execution and completion of the said WORK, EMPLOYER does hereby
agree with the CONTRACTOR that the EMPLOYER will pay to the CONTRACTOR the respective amounts for the

WORK actually done by him and approved by the EMPLOYER at the Schedule of Rates and such other sum payable to the CONTRACTOR under provision of CONTRACT, such payment to be made at such time in such manner as provided for in the CONTRACT. A N D

3. In consideration of the due provision, execution and completion of the said WORK the CONTRACTOR does hereby agree to pay such sums as may be due to the EMPLOYER for the services rendered by the EMPLOYER to the CONTRACTOR, such as power supply, water supply and others as set for in the said CONTRACT and such other sums as may become payable to the EMPLOYER towards the controlled items of consumable materials or towards loss, damage to the EMPLOYER'S equipment, materials construction plant and machinery, such payments to be made at such time and in such manner as is provided in the CONTRACT. It is specifically and distinctly understood and agreed between the EMPLOYER and the CONTRACTOR that the CONTRACTOR shall have no right, title or interest in the SITE made available by the EMPLOYER for execution of the works or in the building, structures or work executed on the said SITE by the CONTRACTOR or in the goods, articles, materials etc., brought on the said SITE (unless the same specifically belongs to the CONTRACTOR) and the CONTRACTOR shall not have or deemed to have any lien whatsoever charge for unpaid bills will not be entitled to assume or retain possession or control of the SITE or structures and the EMPLOYER shall have an absolute and unfettered right to take full possession of SITE and to remove the CONTRACTOR, their servants, agents and materials belonging to the CONTRACTOR and lying on the SITE. The CONTRACTOR shall be allowed to enter upon the SITE for execution of the WORK only as a licensee simpliciter and shall not have any claim, right, title or interest in the SITE or the structures erected thereon and the EMPLOYER shall be entitled to terminate such license at any time without assigning any reason. The materials including sand, gravel, stone, loose, earth, rock etc., dug up or excavated from the said SITE shall, unless otherwise expressly agreed under this CONTRACT, exclusively belong to the EMPLOYER and the CONTRACTOR shall have no right to claim over the same and such excavation and materials should be disposed off on account of the EMPLOYER according to the instruction in writing issued from time to time by the ENGINEER-IN-CHARGE In Witness whereof the parties have executed these presents in the day and the year first above written. Signed and Delivered for and on Signed and Delivered for and on behalf of EMPLOYER.

on behalf of the CONTRACTORS.

BRAHMAPUTRA CRACKER & POLYMER LIMITED

(NAME OF THE CONTRACTOR)

Date : _____

Date : _____

Place: _____

Place: _____

IN PRESENCE OF TWO WITNESSES

1. _____

1. _____

2. _____

2. _____

PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY DEPOSIT
(To be stamped in accordance with the Stamp Act)

Ref.-----

Bank Guarantee No.-----

Date-----

To
Brahmaputra Cracker & Polymer Ltd.
Main Fire Station Building, BCPL Project Site,
Lepetkata-786006, Dibrugarh
Assam

Dear Sir (s),

In accordance with Letter inviting Tender under your reference No.-----

M/s-----having their Registered/Head Office at-----
----- (hereinafter called the Bidder) wish to participate in the said tender
for-----

As an irrevocable Bank Guarantee against Earnest Money Deposit for an amount of -----is required to be submitted by the Bidder as a condition precedent for participation in the said Tender which amount is liable to be forfeited on the happening of any contingencies mentioned in the Tender Document.

We, the -----Bank at----- having our Head Office -----

(Local Address) guarantee and undertake to pay immediately on demand without any recourse to the bidder by Brahmaputra Cracker & Polymer Limited., the amount -----
-----without any reservation, protest, demur and recourse. Any such demand made by BCPL, shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder.

This guarantee shall be irrevocable and shall remain, valid upto----- (This date should be 180 days (One hundred & eighty days) after the date finally set out for closing of tender). If any further extension of this guarantee is required the same shall be extended to such required period on receiving instructions from M/s----- on whose behalf this guarantee is issued.

In Witness whereof the Bank, through its authorized officer, has set its hand and stamp on this -----
-----day of -----2013 ----- at -----

WITNESS :
(SIGNATURE)
(NAME)

(SIGNATURE)
(NAME)

(OFFICIAL ADDRESS)

Designation with Bank Stamp
Attorney as per _____
Power of Attorney No.
Date: _____

PROFORMA FOR BANK GUARANTEE FOR SECURITY DEPOSIT
(ON NON-JUDICIAL PAPER OF APPROPRIATE VALUE)

To
Brahmaputra Cracker & Polymer Ltd.
Main Fire Station Building, BCPL Project Site,
Lepatkata-786006, Dibrugarh
Assam

Dear Sirs,

M/s _____ have been awarded the work of _____ for Brahmaputra Cracker & Polymer Limited, Dibrugarh – 786006, Assam. The Contracts conditions provided that the CONTRACTOR shall pay a sum of Rs----- (Rupees as Initial / full Security Deposit in the form therein mentioned). The form of payment of Security Deposit includes guarantee executed by Nationalized Bank, undertaking full responsibility to indemnify Brahmaputra Cracker & Polymer Limited, in case of default.

The said-----has approached us and at their request and in consideration of the premises we having our office at ----- have agreed to give such guarantee as hereinafter mentioned.

1. We _____ hereby undertake and agree with you that if default shall be made by M/s ----- in performing any of the terms and conditions of the tender or in payment of any money payable to Brahmaputra Cracker & Polymer Limited, we shall on demand pay to you in such manner as you may direct the said amount of Rupees----- only or such portion thereof not exceeding the said sum as you may from time to time require.
2. You will have the full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said -----and to enforce or to forbear from endorsing any powers or rights or by reason of time being given to the said -----which under law relating to the sureties would but for provision have the effect of releasing us.
3. Your right to recover the said sum of ₹. ----- (Rupees -----) from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said M/s ----- --and/or that any dispute or disputes are pending before any officer, tribunal or court.
4. The guarantee herein contained shall not be determined or affected by the liquidation or winding up dissolution or changes of constitution or insolvency of the save said but shall in all respects and for all purpose be binding and operative until payment of all money due to you in respect of such liabilities is paid.
5. This guarantee shall be irrevocable and shall remain valid upto-----If any further extension of this guarantee is required the same shall be extended to such required period on receiving instructions from M/s----- on whose behalf this guarantee is issued.
6. We have power to issue this guarantee in your favour under Memorandum and Articles of Association and the undersigned has full power to do under the Power of Attorney dated ----- granted to him by the Bank.

Yours faithfully,

_____ Bank

By its Constituted Attorney Signature of a
person duly authorized to sign on behalf of
the Bank.

THE ASSAM VALUE ADDED TAX RULES, 2005
FORM-32 [See Rule 28(3)]
FORM OF PARTICULARS TO BE SUBMITTED BY THE CONTRACTEE

To,
THE ASSISTANT COMMISSIONER OF TAXES
DIBRUGARH

Sir,

Whereas I/We Brahmaputra Cracker and Polymer Limited, Lepetkata, Dibrugarh, Assam (Name and address) have entered into contract, with _____ (Name of the contractor).

And whereas, I/We furnish hereunder the following particulars relating to the said contract:-

1. Full name and address & Taxpayer Identification No. of the contractor (in block letters)

2. Date of the contract: _____.(FOA No. _____)

3. Total and break up value of the contract: Total Contract Value Rs. _____
(Break-up not mentioned in the contract)

4..Place where the contract is to be executed : _____

5. Date by which the contract is under taken to be to be completed: _____

6. Brief description of the works to be carried out : _____

7. Details of the goods to be supplied by the contractee as free issue and the value thereof: _____

I/We declare that as stated above, I/We M/s. Brahmaputra Cracker and Polymer Limited, Lepetkata (Assam) have entered in a works contract involving transfer of property in goods (whether as goods or is some other form).

I/We further declare that to the best of my/our knowledge and belief, the information furnished above is correct, complete and is truly stated and nothing has been concealed.

Place : DIBRUGARH

Date : _____

(Signature with seal of the contractee)

SCHEDULE OF RATE (SOR)

ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA, DIBRUGARH, (ASSAM)

TENDER NO: **BCPL/DIB/C&P/SER/20130139/SD**

Quoted Item Rate offer shall be inclusive of all required materials, labour, consumables, taxes, royalties, carriage charges etc. complete. The tenderer shall quote his rates on the item rate basis and also carry over the same in this section.

Contractor has to submit FRCC “Forest Royalty Clearance Certificate” from respective department of Govt. of Assam after completion of work in all respect.

Jobs shall be done strictly as per detailed specifications (APWD specifications are considered), drawings and as per tender provisions.

ROAD WORKS OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING & SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA DIBRUGARH, ASSAM

Item No.	DESCRIPTION OF WORK	UNIT	QTY	RATE (in ₹.)		AMOUNT (in ₹.)
				RATE IN FIG.	RATE IN WORDS	
1.00	ROAD CROSSING OF IT/ TELEPHONE CABLES:					
1.01	EARTH WORK EXCAVATION:					
	Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified.					
	(A) Up to a depth of 2.00m below the existing ground level.					
	(a) In ordinary soil	Cum	163.80			
2.00	FULL BRICK WORK:					
2.01	Brick work in cement mortar with 1st class brick including racking out joints and curing complete as directed.					
	(I) In Sub-structure upto plinth level including dewatering if necessary					
	(b) In proportion 1:4.	Cum	14.92			
3.00	CEMENT PLASTERING:					
3.01	10 mm thick Cement plaster in single coat on fair side of brick/concrete walls for interior plastering up to 1st floor level including arises or rounded angles not exceeding 80mm girth					

ROAD WORKS OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING & SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA DIBRUGARH, ASSAM

Item No.	DESCRIPTION OF WORK	UNIT	QTY	RATE (in ₹.)		AMOUNT (in ₹.)
				RATE IN FIG.	RATE IN WORDS	
	and finished even and smooth including curing complete as directed.					
	a) In cement mortar 1:3	Sqm	90.72			
4.00	DEMOLISHING WORK:					
4.01	Demolishing brickwork including stacking of serviceable materials and disposal of unserviceable materials as directed for all levels	Cum	14.62			
5.00	NON PRESSURE NP2 CLASS PIPE:					
5.01	Providing and laying non-pressure NP-2 class (light duty) RCC pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1cement 2fine sand) including testing of joints etc complete	Rm	420.00			
6.00	WBM Grade 2 :(Using stone screening Type-B 11.20mm for gr 2)					
6.01	Providing,laying,spreading and compacting stone aggregates of specific sizes to WBM specification including spreading to uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming,crushable screening to fill -up the interstices of coarse aggregate, watering and compacting to the required density Grading 2 as per technical specification Cl.405					

ROAD WORKS OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING & SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA DIBRUGARH, ASSAM

Item No.	DESCRIPTION OF WORK	UNIT	QTY	RATE (in ₹.)		AMOUNT (in ₹.)
				RATE IN FIG.	RATE IN WORDS	
	By Mechanical means	cum	3990.92			
7.00	WBM GRADE 3 (USING STONE SCREENING TYPE-A 13.20MM FOR GR 3)					
7.01	Providing, laying, spreading and compacting stone aggregates of specific sizes to WBM specification including spreading to uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming, crushable screening to fill -up the interstices of coarse aggregate, watering and compacting to the required density(95% proctor density) Grading 3 as per technical specification Cl.405					
	By Mechanical means	cum	3990.92			
8.00	PRIME COAT:					
	Medium Porosity					
8.01	Providing and applying prime coat with Bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90-1.2kg/Sqm. Using mechanical means as per Technical Specification Clause 502.	Sqm	53212.30			
9.00	TACK COAT:					
9.01	Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.20 kg per sqm on the prepared					

ROAD WORKS OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING & SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA DIBRUGARH, ASSAM

Item No.	DESCRIPTION OF WORK	UNIT	QTY	RATE (in ₹.)		AMOUNT (in ₹.)
				RATE IN FIG.	RATE IN WORDS	
	bituminous/granular surface cleaned with mechanical broom. (Including cost of testing of materials at site and laboratory as directed by the deptt.)					
	(I)With Bitumen emulsion CSS-1h					
	(c) Granular surfaces treated with primer	sqm	53212.30			
10.00	PREMIX CARPETING:					
10.01	Open - Graded Premix Surfacing (Providing, laying and rolling of open - graded premix surfacing of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either using penetration grade bitumen to required line, grade and level to serve as wearing coarse on a previously prepared base, including mixing in a suitable plant laying and rolling with a smooth wheeled roller 8-10 T capacity to the reqd. level and grade. (including carriage up to initial lead of 5.0 km from quarry and carriage of mixed materials up to 10.0 Km initial lead from mixing plant)(Including cost of testing of materials at site and laboratory as directed by the deptt.)					
	A ' Without anti stripping agent					
	II) ' Mechanical method using CRMB 55 and HMP of appropriate capacity not less than 75 tonnes / hour.	sqm	53212.30			
11.00	SEAL COAT:					
11.01	Seal Coat (Providing and laying seal coat sealing the voids in a					

ROAD WORKS OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING & SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA DIBRUGARH, ASSAM

Item No.	DESCRIPTION OF WORK	UNIT	QTY	RATE (in ₹.)		AMOUNT (in ₹.)
				RATE IN FIG.	RATE IN WORDS	
	bituminous surface laid to the specified levels, grade and cross fall using Type A and B seal coats) (including carriage up to initial lead of 5.0 km from quarry)(Including cost of testing of materials at site and laboratory as directed by the deptt.)					
	(a) Without anti stripping agent					
	Case - I : Type A (Providing and laying liquid seal coat comprising of a layer of bituminous binder (paving bitumen 90/100 or 80/90 or VG-30 grade, followed by a cover of crushed stone chipping of specified grade.(including carriage up to initial lead of 5.0 km from quarry)	sqm	53212.30			
12.00	CONSTRUCTION OF EARTHEN SHOULDERS:					
12.01	Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lift and leads, transporting to site, spreading, grading to required slop and compacted to meet requirement to the satisfaction of EIC.					
	(ii) Private land	Cum	3044.07			
13.00	PCC WORKS:					
13.01	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid					

ROAD WORKS OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING & SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA DIBRUGARH, ASSAM

Item No.	DESCRIPTION OF WORK	UNIT	QTY	RATE (in ₹.)		AMOUNT (in ₹.)
				RATE IN FIG.	RATE IN WORDS	
	separately).					
	(a) In prop 1cement: 3 sand :6 coarse aggregate by volume	cum	81.54			
14.00	CEMENT PLASTERING					
14.01	10 mm thick Cement plaster in single coat on fair side of brick/concrete walls for interior plastering up to 1st floor level including arises or rounded angles not exceeding 80mm girth and finished even and smooth including curing complete as directed.					
	a) In cement mortar 1:3	Sqm	1223.10			
15.00	SHUTTERING WORKS:					
15.01	Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc., height of propping and centering below supporting floor to ceiling not exceeding 4.0M and removal of the same for in-situ reinforced concrete and plain concrete work in:					
	Foundation, footings, bases of columns, pile cap, raft and mass concrete works etc.					
	(b) Using 25mm thick plank	Sqm	597.96			
16.00	EARTHWORK IN FILLING & SITE GRADING WORK.					
16.01	Earthwork in filling with borrow earth for all heights and depths					

ROAD WORKS OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING & SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA DIBRUGARH, ASSAM

Item No.	DESCRIPTION OF WORK	UNIT	QTY	RATE (in ₹.)		AMOUNT (in ₹.)
				RATE IN FIG.	RATE IN WORDS	
	for site grading or at any other place as directed to proper levels, slopes, grades and camber with selected earth obtained from approved borrow areas for all leads and lifts, including excavation of earth at borrow areas, clearing and stripping at borrow areas (if necessary), loading, unloading, transportation etc. clearing and stripping as per specifications, uprooting of vegetation, roots and disposal of the shrubs, bushes roots etc., breaking clods, spreading in layers not exceeding 15 cms loose thickness, watering, ramming and compacting unserviceable materials if any, as per drawings, specifications and directions of Engineer-in-charge. (Borrow areas shall be arranged by the contractor. Contractor shall bear all expenses towards royalties; right of way etc. complete and the rate quoted shall include all royalties, right of way etc. complete). (Quoted Item Rate offer shall be inclusive of all required materials, labour, consumables, taxes, royalties, carriage charges, clearing and stripping of tea bushes, cutting of trees (if any) etc. complete.)					
	(c) with earth(predominantly non plastic) by truck carriage	Cum	20000			

TOTAL AMOUNT=Rs.

Total Amount in Fig. =Rs.

Total Amount in Words = (Rupees

TECHNICAL SPECIFICATIONS

TENDER NO: BCPL/DIB/C&P/SER/20130139/SD

(CIVIL WORKS)

1.0 SCOPE OF WORK:

The scope of work envisaged under this tender covers includes:

REMAINING ROAD WORK OF WBM- GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/TELEPHONE CABLE FOR BCPL TOWNSHIP AT LEPETKATA , DIBRUGARH, (ASSAM) as per tender specifications, drawings and standards etc. In general, the scope of work covers the following but not limited to:

Technical Specification of Road work:

1. *Widths of Formation or Road Way:*
The widths of formation or roadway are the width of pavement or carriage way including separator (if any) and shoulder. It is the widths of the road embankment excluding the road side drain.
2. *Setting out of work:*
Methodology:
 1. ***Establish working bench marks at 250 m intervals on the road in question with the help of Reference Bench Mark in the area.***
 2. ***Establish centre line of the carriageway and have it referenced by marker pegs and chainage boards, set near the road land boundary at 50 m intervals. (In hills and on curves in plains, the intervals of reference pegs should be 20 m)***
 3. ***Prepare a schedule of reference dimensions and maintain the markers until the works reach finished formation level.***
 4. ***Verify the dimensions and levels, shown on the drawings or mentioned in contract documents, on the site and inform of any apparent errors or discrepancies.***
 5. ***The lines and levels of formation, side slopes, drainage works , carriage way and shoulders should be carefully set out and frequently checked, care being taken to ensure that correct gradients and cross sections are obtained everywhere.***
3. *Site Clearance:*
 - A. ***Methodology :***
 1. ***The road land should be cleared of all materials unsuitable for the work by cutting, removing and disposing of all materials, such as trees, bushes, shrubs, stumps , roots, grass, weeds, top organic soil not exceeding 150 mm in thickness, rubbish etc. This should be in advance of earthwork operation.***
 2. ***Excavation below the ground level arising out of removal of trees, stumps, etc be filled in layers with suitable materials and compacted thoroughly with the help of hand rammers etc.***
 3. ***All trees, stumps, etc failing within the excavation and embankment lines should be cut to such depth below ground level that in no case these fall within 500 mm of the sub-grade. Beyond three limits, they needs to be cut down to 1 m ground level.***

4. Excavation:

A. Methodology:-

1. *The limits of excavation should be set out true to lines, curves, slopes, grades and sections as shown on the drawings. The work of excavation should be carried out in conformity with the drawings.*
2. *Undertake stripping of top soil before excavation if so required under the contract and stack it suitably for reuse.*
3. *After excavation, the sides of excavated area should be trimmers and the area contoured to minimize erosion and ponding, allowing natural drainage to take place.*
4. *In case in situ soil to be used for sub-grade, loosen the soil and compact to a thickness of 300 mm with a suitable roller to 100 per cent standard proctor compaction density.*
5. *In hilly area, special attention needs to be paid to side slopes and side drains in cutting.*

B. Quality Control Requirements :

(1) Horizontal Alignments :

(i) *The horizontal alignments should be reckoned with respect to the centre line of the carriageway as shown on the drawings. The edges of the roadways as constructed should be correct within a tolerance limit of (+,-) 30 mm.*

(ii) *No point on the slopes shall vary from the designated slopes by more than 150 mm measured at right angle to the slope.*

(2) Surface Level :

The tolerance for surface level of the finished cut formation should be (+,-) 25 mm.

(3) Surface Regularity :

The maximum permitted number of surface irregularities shall be as given below :

Irregularity	4 mm		7 mm	
Length (m)	300	75	300	75
Number of irregularities.	50	25	6	3

(4) Density of Compaction :

The density of compaction should be minimum 97 per cent of standard proctor compaction density i.e. Maximum Dry Density MDD. Where in situ – soil is used density of compaction should be 100 per cent of standard proctor compaction density.

(5) Quality Control Test. :

The Quality Control test would basically consist of testing the density of compaction. The frequency of test will be 1 test per 2000 m² are comprising 6 measurements.

5.. Embankment (Core) / Sub grade :

A. Methodology :

1. **Obtain materials (Soil) for embankment from approved sources, (sand contain 65%, i.e. 35% soil should be passed through 75 mm micron sieve, CBR should be 7).**
2. **After clearing the site, mark the limits of embankment by fixing batter pegs on both sides at regular intervals as guides.**
3. **Remove stagnant water, if any from the foundation of the embankment.**
4. **Where available embankment materials (Soil) are not conducive to plant growth top soil from area of cutting and areas to be covered by foundation embankment should be stripped depth not exceeding 150 mm and stacked for later use.**
5. **Where necessary, the original ground should be leveled to facilitate placement of first layer of embankment and compacted to achieve a field density not less than 97 percent of standard Proctor compaction density. It is necessary to further ensure than the top 500 mm of the embankment constituting the sub grade should be compacted to 100 per cent standard proctor compaction density.**
6. **The soil should be spread in layer not exceeding 150 mm compacted thickness Each layer should be thoroughly compacted to the specified requirements and finished paralld to the final cross section of the embankment .**
7. **Compaction should be O.M.C. (9-15 %). if water is required to be added , it should be added uniformly and mixed thoroughly . If the soil is too wet, it to be dried by aeration and exposure to sun till the M.C. is acceptable for compaction.**
8. **Maintain Camber / Cross Road 1 in 40 or 2.5% to drain of the rain water.**

B. Quality Control requirements :

1. Materials :

(a) The material used in embankment, sub grade shoulders, etc shall be soil moorum, gravel, a mixture of these or other approved materials. It shall be free of logs, stumps, roots, rubbish etc.

The Following types of materials shall be considered unsuitable :-

- (i) Material from swamps, marshes and bogs,
- (ii) Peat. Log stump and perishable materials.
- (iii) Materials susceptible to spontaneous combustion
- (iv) Materials are a frozen condition.
- (v) Clay having liquid limit exceeding 70 and plasticity index exceeding 45
- (vi) Materials with salt resulting in leaching action.
- (vii) Expansive clay with free swelling index exceeding 50 per cent
- (viii) Materials with a soluble sulphate content exceeding 0.5 percent by mass.

(b) The Size of coarse material shall not ordinarily exceed 75 mm when placed in embankment and 50 mm when placed in sub grade.

(c) The materials should satisfy the density requirement given below

Density of requirement of embankments / sub grade materials

Type of work	Laboratory Dry unit weight.
1 Embankment	Not less than 1.52 gm. / c.c.
2 Sub grade	Not less than 1.65 gm/ c.c.

2. **Horizontal Alignment:**

The Alignment will be reckoned with respect to the centre line of the carriageway as shown on the drawings, The edges of the roadway as constructed shall be correct within a tolerance limit of (+,-) 30 mm there from.

3. **Surface :**

The tolerance in surface level for sub grade will be (+,-) 25 mm.

4. **Surface Regularity :**

The maximum permitted number of surface irregularities shall be given as below :

Irregularity	4 mm		7 mm	
Length (m)	300	75	300	75
Number of irregularities.	50	25	6	3

5. **Density of Compaction:**

The density of compaction should satisfy the requirement given below:-

	Type of Work / material	Relative compaction
1.	Embankment	Not less than 97 % standard proctor.
2	Sub-grade and earth shoulders	Not less than 100 % Standard proctor

6. **Quality Control Test:**

The quality control tests and their frequency for earthwork in embankment / sub-grade would be as per given below :

	Test	Frequency
(A)	Borrow Area (i) Sand Content (ii) Plasticity Index (Attreberg limits) (iii) Compaction (iv) Natural moisture content (v) CBR	1 test per 4000 cum 1 test per 4000 cum 1 test per 4000 cum 1 test per 5000 cum 1 test per 5000 cum
(B)	Construction operation (i) Moisture content prior to compaction. (ii) Thickness of layer.	1 test /250 cum/Min 4 tests per day regularly.

	(iii) Density of compaction.	2 set of tests per 2000 sqm. Comprising 6 measurement s.
--	------------------------------	---

2.0 DESCRIPTION:

QA/QC PROCEDURE AND EQUIPMENT REQUIREMENT FOR PROPOSED SITE GRADING WORK FOR BCPL TOWNSHIP, REMAINING ROAD WORK OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/ TELEPHONE CABLE FOR BCPL TOWNSHIP FOR BCPL AT LAPETKATA, DIBRUGARH. (ASSAM)

Job procedure and quality control(as per Quality Assurance Handbook for Rural roads Vol 1 of National Rural roads Development Agency)

(1) WATER BOUND MACADAM SUB-BASE/BASE/SURFACING(sl no 405)

A Methodology

1. The surface to receive the WBM course should be prepared to the lines, grade and cross fall. It should be made free of dust and extraneous material. Large irregularities, where predominant, should be made good by providing profile corrective course.
2. Where the WBM is laid over a fine grained soil subgrade, it is advisable to lay a 100 mm thick intervening layer of screenings or coarse sand.
3. Any existing bituminous surface over which WBM is to be laid shall be completely removed before laying WBM layer.
4. The coarse aggregate should meet the physical and grading requirements laid down in Table 405.1 and Table 405.2. Coarse aggregate can be crushed or broken stone, crushed slag, over burnt brick aggregate, kankar, laterite meeting the prescribed requirements.
5. The spreading of coarse aggregate shall be done from stockpiles along the side of the roadway or directly from vehicles. In no case the aggregate shall be dumped in heaps directly on the surface prepared to receive the aggregates nor shall hauling over uncompacted or partially compacted base be permitted.
6. The coarse aggregate shall be spread uniformly on the prepared subgrade, sub-base or base, as the case may be, to proper profile (by using templates placed across at 6.0 m intervals) in such quantities that would give the required compacted thickness. The thickness of compacted layer should be 100 mm for Grading 1 and 75 mm for Grading 2 and 3. The appropriate quantity of aggregates is given in Table 405.4. The surface should be checked with templates and all high or low spots remedied.
7. Roll the surface with suitable road rollers till aggregates are partially compacted with sufficient void space left for application of screenings. However, where screenings are not to be applied as in the case of soft aggregates, compaction shall be continued until the aggregates are thoroughly keyed. Rolling shall proceed from inner edge to outer edge at the super-elevated portions and from the edges towards the centre in other portions. The edge should be first compacted with roller running forward and backward.

8. Check the profile transversely and longitudinally with templates/ straight edge. Correct the irregularities by loosening the surface, adding or removing the needed amount of aggregates and re-rolling until the entire surface conforms to the specified camber/ cross fall and grade.
9. Apply screenings to completely fill the interstices maintaining a slow and uniform rate, in three or more applications. The screenings should not be damp at the time of application.
10. Do not apply screenings so fast and thick as to form cakes or ridges on the surface.
11. Continue dry rolling and brooming till no more screenings can be forced into the voids of coarse aggregates.
12. Sprinkle water on the surface taking care that the underlying layer is not damaged.
13. Sprinkling, sweeping and rolling should continue till aggregates are thoroughly keyed, well bonded and firmly set in its full depth and a grout has been formed of screenings.
14. In case the screenings are not of crushable type such as moorum or gravel, it is necessary to add binding material (PI between 4 and 6) after application of screenings. The binding material should be applied in two or more layers at a slow and uniform rate. Generally, the quantity required for 10 m² of 75 mm thickness of WBM is 0.06 to 0.09 m³ and for 100 mm thickness, the corresponding quantity would be 0.08 to 0.10 m³.
In case WBM surface is not to be covered with Bituminous surfacing, PI of binding material shall be between 4 and 10.
15. The process of water sprinkling, sweeping and rolling should continue till the resulting slurry forms a wave ahead of roller.
16. The compacted WBM course should be allowed to completely dry and set before the next pavement course is laid or traffic is allowed.
17. The earthen shoulders should be constructed simultaneously with the WBM construction in accordance with Sub-Section 407.
18. The finished surface of WBM should conform to the prescribed tolerances given in Para B. Where the surface irregularity exceeds the tolerances, the WBM layer should be scarified to its full depth over the affected area and corrected by adding or removing and replacing with fresh material.

B Quality Control Requirements

1. Materials

(i) Coarse Aggregate

(a) Physical requirements

Physical requirements of coarse aggregate for water bound macadam for sub-base, base and surfacing should conform to the requirements given in Table 405.1. If the water absorption of aggregate is greater than 2 per cent, Soundness test should be carried out.

TABLE 405.1: PHYSICAL REQUIREMENTS OF COARSE AGGREGATES FOR WBM

Test	Sub-base	Base	Surfacing
Aggregate Impact value	Less than 50	Less than 40	Less than 30
Flakiness index	Less than 30	Less than 25	Less than 20
Soundness test			
-Loss with Sodium Sulphate	Less than 12%	Less than 12%	Less than 12%
-Loss with Magnesium Sulphate	Less than 18%	Less than 18%	Less than 18%

Aggregates like brick bats, kankar, laterite etc. which get softened in presence of water shall be tested for Aggregate Impact Value under wet conditions in accordance with IS:5640.

(b) Grading :

The coarse aggregates should conform to the grading specified in the Contract and meet the requirements given in Table 405.2.

3. Section-400

57

Quality Assurance Handbook for Rural Roads

(i) Screenings

The use of screenings shall be omitted in the case of soft aggregates like brick metal, kankar, laterite etc.

(a) Physical Requirements

Screenings should normally consist of same material as the coarse aggregate. However, where economic considerations so warrant, non-plastic material such as moorum or gravel with LL less than 20 and PI less than 6 may be used. Fraction passing 75 micron should not exceed 10 percent.

(b) Grading

The screening shall conform to the grading specified in Table 405.3.

TABLE 405.2: GRADING REQUIREMENTS OF COARSE AGGREGATE FOR WBM

Note: The compacted thickness for layer with Grading 1 shall be 100 mm while for layer with Grading 2 and 3, it shall be 75 mm.

Grading 1 shall be used for sub-base only. For base course, Grading 2 or 3 shall be used. For surfacing, Grading 3 shall be used.

Grading No. Size Range IS Sieve Designation Per cent by weight passing

1. 90 mm to 45 mm 125 mm 100

90 mm 90-100

63 mm 25-60

45 mm 0-15

22.4 mm 0-5

2. 63 mm to 45 mm 90 mm 100

63 mm 90-100

53 mm 25-75

45 mm 0-15

22.4 mm 0-5

3. 53 mm to 22.4 mm 63 mm 100

53 mm 95-100

45 mm 65-90

22.4 mm 0-10

11.2 mm 0-5

TABLE 405.3: GRADING FOR SCREENINGS

Grading Classification Size of Screenings IS Sieve Designation Per cent by weight passing the IS Sieve

- A. 13.2 mm 13.2 mm 100
- 11.2 mm 95-100
- 5.6 mm 15-35
- 180 micron 0-10
- B. 11.2 mm 11.2 mm 100
- 5.6 mm 90-100
- 180 micron 15-35

Approximate quantities of coarse aggregate and screenings required for 100 mm compacted thickness of WBM Grading 1, and 75 mm compacted thickness of WBM Grading 2 and 3 are given in Table 405.4.

58

(iii) Binding Material

Application of binding material may not be necessary when the screenings used are of crushable type. Binding material if used as a filler material shall comprise of a suitable material approved by the Engineer having a Plasticity Index (PI) of value less than 6 for subbase/base course and 4 –10 for surfacing course as determined in accordance with IS:2720 (Part 5). The quantity of binding material will depend upon the type of screenings. For estimation of quantities, the following may be adopted: 75 Quantity for 75 mm compacted thickness WBM = 0.06 – 0.09 m³ / 10 m².

Quantity for 100 mm compacted thickness WBM = 0.08 – 0.10 m³ / 10 m².

2. Horizontal Alignment

The edges of the WBM sub-base/ base will be correct within a tolerance limit of (±) 30 mm in plain and rolling terrain and (±) 50 mm in hilly terrain. The edge of carriageway with WBM surfacing shall be correct within a tolerance limit of (±) 20 mm in plain and rolling terrain and (±) 30 mm in hilly terrain.

3. Surface Level

The tolerance in surface levels of the WBM would be as under:

- (a) Sub-base course (+) 10 mm, (-) 20 mm
- (b) Base course (±) 15 mm
- (c) Surfacing Course (±) 10 mm

(A grid of 10 m by 2.5 m may be formed to check the surface levels).

TABLE 405.4: APPROXIMATE QUANTITIES OF COARSE AGGREGATE AND SCREENINGS REQUIRED FOR 100/

75 mm COMPACTED THICKNESS OF WBM SUB-BASE/BASE/ SURFACING COURSE FOR 10 m² AREA

Course Aggregate Screenings

Classification Size Compacted Loose Stone Screenings Crushable screenings

Range thickness Quantity m³ such as Moorum

in mm or gravel

Grading For WBM Properties Loose

classification Sub-base/ Base Quantity m³

& Size mm course

(loose quantity)

m³

Grading 1 90 to 100 1.21 to Type A13.2 0.27 to 0.30 LL<20:PI<6 0.30 to 0.32

45 mm 1.43 Percent passing

0.075 mm <10

Grading 2 63 to 75 0.91 to 1.07 Type A13.2 0.12 to 0.15 -do- 0.22 to 0.24

45 mm

Grading 2 63 to 75 0.91 to 1.07 Type B11.2 0.20 to 0.22 -do- 0.22 to 0.24

45 mm

Grading 3 53 to 75 0.91 to 1.07 Type B11.2 0.18 to 0.21 -do- 0.22 to 0.24

22.4 mm

3. Section-400

59

Quality Assurance Handbook for Rural Roads

4. Surface Regularity

The maximum allowable difference between the road surface and 3 m straight edge shall be as per Table 405.5.

TABLE 405.5: MAXIMUM PERMITTED UNDULATIONS MEASURED WITH 3 M STRAIGHT EDGE

Type of Construction Maximum permissible difference

Longitudinal Profile BasCross Profile

WBM Grade 1 15 mm 12 mm

WBM Grade 2/Grade 3 12 mm 8 mm

5. Quality Control Tests

5.1 Tests Prior to Construction

The quality control tests to be carried out prior to construction are indicated in Table 405.6.

Table 405.6: QUALITY CONTROL TESTS PRIOR TO CONSTRUCTION

Type of Test Frequency

1. Aggregate Impact Value Test (IS:2386 Part 4) One test from each identified source.

2. Aggregate Water Absorption Test (IS:2386 Part 3) -do-

3. Soundness Test of Aggregates (where water -doabsorption, as at 2 above, exceeds 2%) (IS:2386 Part 5).

4. Grading, LL and PI of Crushable Screenings -do- (IS:2720 Part 5) (where Screenings are to be used from the same source as the Stone Aggregates, this test is not needed).

5. LL and PI of the Binding Material, when used. -do-

5.2 Tests During Construction

The quality control tests to be carried out during construction are indicated in Table 405.7.

TABLE 405.7 : QUALITY CONTROL TESTS DURING CONSTRUCTION

Type of Test Frequency

1. Grading of Stone Aggregates and Screenings Atleast 2 tests to be carried out for a day's work.
(IS:2386 Part 1)
2. Flakiness Index of Stone Aggregates (IS:2386 Part 1 -do-
3. PI of Crushable Screenings/binding material Atleast 2 tests to be carried out for a day's work.
(IS:2720 Part 5)
4. Aggregate impact value (IS:2386-Part 4) At random one test per km
5. Thickness of Compacted layer. At random

60

5.3 Quality Control Checks by AE/EE

The quality control checks to be carried out by the AE/EE are indicated in Table 405.8.

TABLE 405.8 : QUALITY CONTROL CHECKS BY AE/EE

Stage Test Frequency Designation of

Inspecting Officer

1. Top of the (i) Volumetric analysis (a) One test for each 200 m length of the layer. AE
Finished WBM (b) One test for each 500 m length of the layer. EE Layer
- (ii) Plasticity Index One test for each 500 m length of the layer AE (mean of two tests)
- (iii) Surface Regularity Random Checking EE and Transverse Profile

C Do's and Don'ts

1. Check aggregates for Soundness test when water absorption is more than 2 percent.
2. Soft aggregate should be tested for wet aggregate impact value.
3. Construct shoulders simultaneously along with WBM layers.
4. Use inverted choke over fine grained soil sub-grade.
5. Remove BT surface before WBM is laid on an existing black top road.
6. Remove defective macadam to full depth and replace by fresh material and recompact.
1. Do not use any material derived from rocks e.g. phyllites, shales or slates.
2. Do not use local soil and clayey material as screenings or binding material unless it meets the requirements of PI mentioned in para B1 (iii).
3. Do not use binding material if screenings are of crushable type.
4. Do not spread coarse aggregate more than 3 days in advance of any subsequent operations.
5. Do not roll if sub-grade is soft or yielding or causes a wave like motion while rolling.
6. Do not lay WBM layer on lime treated sub-base until it has attained its strength.
7. Do not use screenings to make up depressions.
8. Do not allow traffic till WBM is fully set.

(2) Prime Coat

A. Methodology

- 1) On prepared surface of granular base apply prime coat with bitumen emulsion (SSI)
- 2) Spray primer at the rate of 0.90 -1.2 kg/sqm

(3) Tack Coat

A. Methodology

1) Providing and applying tack coat with bitumen emulsion distributor at the rate of 0.20 kg/sqm on prepared bituminous / granular surface cleaned with a mechanical broom with bitumen emulsion CSS-1h.

(4) 20 mm THICK PREMIX CARPET(sl no 508)

508.1 Open graded Premix Surfacing using Bitumen

A. Methodology

1. Prepare the base on which premix carpet is to be laid to the specified lines, grade and crosssection.
2. Apply a prime coat followed by tack coat over a granular base preparatory to laying of the carpet.
3. The quantities of material required for 20 mm thick premix carpet should be as indicated in Table 508.1.1.

TABLE 508.1.1 : QUANTITIES OF MATERIAL REQUIRED FOR 10 m2 AREA

Aggregate Quantity

- (a) Nominal size 13.2 mm (passing 22.4 mm sieve and 0.18 m3 retained on 11.2 mm sieve)
- (b) Nominal size 11.2 mm (passing 13.2 mm sieve and 0.09 m3 retained on 5.6 mm sieve)

Total 0.27 m3

Binder

- (a) For 0.18 m3 of 13.2 mm nominal size stone at 52 kg 9.5 kg bitumen per m3
- (b) For 0.09 m3 of 11.2 mm nominal size stone at 56 kg 5.1 kg bitumen per m3

Total 14.6 kg

Prepare the mix in a hot mix plant of suitable size with separate dryer arrangement for aggregate.

4. Mixing should be thorough to ensure that a homogenous mixture is obtained. The temperature of bitumen at the time of mixing should be in the range of 150°C to 163°C and that of aggregates 155°C to 163°C, provided that the difference between the temperature of aggregate and the binder should not exceed 140°C. If modified bitumen is used, temperature should be as recommended in Subsection 512. The temperature at the time of discharge of the mixture should be between 130°C and 160°C.
5. Locate hot mix plant near the work site. The mixed material should be transported quickly to the site of work and laid uniformly by suitable means.
6. The premixed material shall be spread on the road surface with Pavers.
7. Commence rolling with 80-100 kN rollers (three-wheel or tandem type), beginning from the edge

and progressing towards the centre longitudinally. (On superelevated portions, rolling should progress from lower to upper edge parallel to centre line of pavement). Continue rolling operations till a smooth uniform surface is achieved and all roller marks are eliminated. Each pass should have an overlap of at least one-third of the track made in the preceding pass.

8. Correct any high spots or depressions noticed after the roller has passed over the whole area once by removing or adding premixed material and recompact.

9. Provide a seal coat to the surface immediately after laying the carpet as per details in Sub-section 510.

10. Ordinarily, the road may be opened to traffic after laying the seal coat with restrictions given in Subsection 510.

B. Quality Control Requirements

1. Materials

(a) Aggregates

Aggregates shall conform to the physical requirements indicated in Table 508.1.2

TABLE 508.1.2 PHYSICAL REQUIREMENTS OF STONE AGGREGATE

(b) Binder

The binder shall be a penetration grade bitumen of a suitable grade S-65/90 depending on climatic condition of the area or of the type as specified in the Contract. Where modified binder is specified Subsection 512 should be followed.

2. Horizontal Alignment

The edges of the carriageway with Premix Carpet should be correct within a tolerance limit of ($\pm$) 20 mm in plain and rolling terrain and ($\pm$) 30 mm in hilly terrain.

3. Surface Level

The tolerance in surface level of the surface dressing would be ($\pm$) 6 mm for machine laid work and ($\pm$) 10 mm for work executed manually.

4. Surface Regularity

The maximum allowable difference between the pavement course and a 3 m straight edge shall not exceed 8 mm for both the longitudinal profile and the cross profile.

5. Quality Control Tests

5.1 Tests Prior to Construction

The quality control tests to be carried out prior to construction are indicated in Table 508.1.3.

Property Test Specification

Particle shape Flakiness index (IS:2386 Part 1) Max. 25 %

Strength Aggregate Impact Value (IS:2386 Part 4) Max. 30 %

Durability Soundness (IS:2386 Part 5)

Sodium sulphate Max. 12 %

Magnesium sulphate Max. 18 %

Water absorption Water Absorption (IS:2386 Part 3) Max. 1 %

Stripping Coating and stripping of bitumen aggregate Minimum retained mixture. (IS:6241) coating 95 %

(b) Binder

The binder shall be a penetration grade bitumen of a suitable grade S-65/90 depending on climatic condition of the area or of the type as specified in the Contract. Where modified binder is specified Subsection 512 should be followed.

2. Horizontal Alignment

The edges of the carriageway with Premix Carpet should be correct within a tolerance limit of ($\pm$) 20 mm in plain and rolling terrain and ($\pm$) 30 mm in hilly terrain.

3. Surface Level

The tolerance in surface level of the surface dressing would be ($\pm$) 6 mm for machine laid work and ($\pm$) 10 mm for work executed manually.

4. Surface Regularity

The maximum allowable difference between the pavement course and a 3 m straight edge shall not exceed 8 mm for both the longitudinal profile and the cross profile.

5. Quality Control Tests**5.1 Tests Prior to Construction**

The quality control tests to be carried out prior to construction are indicated in Table 508.1.3.

Property Test Specification

Particle shape Flakiness index (IS:2386 Part 1) Max. 25 %

Strength Aggregate Impact Value (IS:2386 Part 4) Max. 30 %

Durability Soundness (IS:2386 Part 5)

Sodium sulphate Max. 12 %

Magnesium sulphate Max. 18 %

Water absorption Water Absorption (IS:2386 Part 3) Max. 1 %

Stripping Coating and stripping of bitumen aggregate Minimum retained mixture. (IS:6241) coating 95 %

5.2 Tests During Construction

The quality control tests to be carried out during construction are indicated in Table 508.1.4.

Table 508.1.3: QUALITY CONTROL TESTS PRIOR TO CONSTRUCTION**Type of Test Frequency**

1. Quality of Binder (Straight-run Bitumen)

(a) Penetration Test (IS:73) One set of tests per lot

(b) R&B Softening Point Test (IS:73) -do-

(c) Ductility Test (IS:73) -do-

2. Quality of Binder (Bitumen Emulsion)

(a) Viscosity (IS:8887) -do-

(b) Residue on 600 micron sieve (IS:8887) -do-

(c) Storage Stability Test (IS:8887) -do-

3. Quality of Binder (Modified Bitumen) (IS 15462)

(a) Penetration Test -do-

(b) Softening Point Test -do-

(c) Elastic Recovery Test -do-

(d) Separation Test -do-

4. Aggregate Impact Value Test (IS:2386 Part 4) One test per km length on representative

sample from each source identified by the Contractor

5. Flakiness Index Test (IS:2386 Part 1) -do-

6. Bitumen Stripping of Aggregate Test (IS:6241) -do-

7. Water Absorption (IS:2386 Part 3) -do-

TABLE 508.1.4: QUALITY CONTROL TESTS DURING CONSTRUCTION

Type of Test Frequency

1. Grading of Aggregates (IS:2386 Part 1) At least two tests per day

2. Binder Content before seal coat At least two tests per day

3. Temperature of Binder Regular close intervals

4. Thickness of layer Regularly at close intervals

5. Aggregate impact value (IS:2386-Part 4) At random one test per km

5.3 Quality Control Checks by AE/EE

The quality checks to be exercised by AE/EE are indicated in Table 508.1.5.

TABLE 508.1.5: QUALITY CONTROL CHECKS BY AE/EE

Stage Test Frequency Designation of

Inspecting Officer

1. Finished Pre Mix (i) Binder Content before providing seal One test for every 500 m
AE

Carpet Surfacing coat length of the layer

(ii) Visual inspection of finished surface Full length EE

(iii) Surface Regularity and Random Checking AE

Transverse profile

3. Section-500

Quality Assurance Handbook for Rural Roads

C. Do's and Don'ts

1. Ensure that aggregates for premix carpet and seal coat conform to the prescribed physical and grading requirements and are clean and dry.

2. Exercise strict control over mixing and laying temperature as per specifications using appropriate thermometers.

3. Rolling operations should be completed before the temperature of the mix falls below 100°C.

1. Do not allow manual mixing.

2. Do not undertake the work in foggy, rainy or windy weather or when the atmospheric temperature in the shade is less than 10°C or when the surface is wet.

3. Do not allow the premix material to adhere to the roller wheels. Do not use excess water for the purpose. Light sprinkling should do.

4. Do not allow the roller to stand on newly laid material.

5. Do not allow any traffic without laying seal coat over the premix carpet.3

(5) SEAL COAT

The seal coat shall be any of the three types mentioned below:

Type A : Liquid seal coat comprising of an application of layer of bituminous binder followed by a cover of stone chips.

A. Methodology

Apply seal coat immediately after laying the premix carpet. The surface should be clean and free of dust and extraneous material before application of the seal coat.

1. Type A Seal coat with bitumen:

(i) Apply heated bitumen with a temperature between 150°C and 163°C uniformly with the help of a bitumen sprayer.

(ii) Immediately thereafter, spread stone chips over the bitumen layer at a uniform rate, preferably, with the help of a mechanical grit spreader so as to cover the surface completely.

(iii) Commence rolling with 80-100 kN rollers (3-wheel or tandem type), beginning from the edge and progressing towards the centre longitudinally. On super elevated portions, rolling should progress from lower to upper edge parallel to centre line of pavement. If required, spread additional chips by hand to make up irregularities. Continue rolling operations until all aggregate particles are firmly embedded and present a uniform closed surface.

B. Quality Control Requirements

1. Materials

(a) Aggregates

Aggregate shall conform to the physical requirements indicated in Table 508.1.2. Quantities and grading requirements for aggregates are given in Table 510.1.

3. Section-500

Quality Assurance Handbook for Rural Roads

(b) Binder

The requirements of Sub-section 508.1 and 508.2 shall apply. The quantities required for seal coat are given in Table 510.2.

TABLE 510.1 : QUANTITY AND GRADATION REQUIREMENT OF AGGREGATE FOR SEAL COAT

**Type of seal coat Quantity of aggregate Gradation requirement
required per 10 sqm area**

100% passing sieve 100% retained sieve designation.

Type A 0.09 cum 11.2 mm 2.36 mm

Type B 0.06 cum 2.36 mm 180 microns

Type C 0.09 cum 9.5 mm 2.36 mm

TABLE 510.2: QUANTITIES OF BINDER REQUIRED FOR SEAL COAT

Type of seal coat Per 10 sqm area

Bitumen in kg Bituminous Emulsion in kg

Type A 9.8 12 to 14

2. Quality Control Tests

The quality control tests and their frequencies would be as per Tables 507.5, 507.6, 507.7 for Type

A Seal Coat and 508.1.3, 508.1.4

C. Do's and Don'ts

1. Use angular fragments of clean, hard, tough and durable rock of uniform quality throughout as an aggregate for seal coat.
2. Ensure that Stone chippings conform to the specified size and are dry and clean at the time of mixing.
3. Ensure that the seal coat results in a smooth, uniform and closed surface.
4. Maintain requisite temperature control at the time of mixing and rolling if bitumen is used as a binder
1. Do not use soft or disintegrated stone, organic or other deleterious material as an aggregate for seal coat.
2. Do not undertake the work in foggy, rainy or windy weather or when the atmospheric temperature in the shade is less than 10°C.
3. Do not allow the premix material to adhere to the roller wheels. Use light sprinkling of water for this purpose. Do not use lubricating oil on the wheels of the roller to prevent mix from adhering.
4. Do not allow traffic on Type A seal coat till the following day.

DETERMINATION OF TEMPERATURE OF BINDER

The temperature of bituminous binder shall be determined with the help of a calibrated metallic contact thermometer with digital (LCD/LED) display. The range of thermometer for different types of bituminous material and their accuracy shall be as under:

- (1) Melted Bitumen : ambient to 200°C accuracy + 1°C
- (2) Cutback bitumen : ambient to 100°C accuracy + 0.5°C
- (3) Bitumen emulsion : ambient to 80°C accuracy + 0.5°C

ANNEX- II

RATE OF SPREAD OF BINDER IN SURFACE DRESSING AND MODIFIED PENETRATION MACADAM

Light metal trays of 200 mm x 200 mm and 30 mm depth are weighed and numbered. These are placed at intervals along the road in the path of bitumen distributor between the wheel tracks. After the distributor has passed over, the trays are removed and wrapped in weight sheets of paper so that they can be handed, stocked and weighed as soon as convenient. The spacing and the number of trays can be varied to suit the particular conditions at the construction site, but at least five trays should normally be used. The tray test gives a measure of variation in rate of spread of bitumen along the road and a good approximation to the average rate of spread of bitumen.

The trays are weighted correct to first place of decimal. The maximum longitudinal distribution error in

rate of spread of bitumen should be within +10 per cent of the specified rate of spread of bitumen. Similarly transverse distribution of bitumen can be checked by placing a number of trays to collect bitumen sprayed over each 50 mm width of spray bar. The variation in transverse distribution should be within + 20 per cent from the mean. The extreme 150 mm width at either side of the sprayed area need not be taken into account.

ANNEX- III

DETERMINATION OF IN-SITU DENSITY OF BITUMINOUS COURSE

The metallic tray of the field density is kept on a level spot of the bituminous surface and a hole, 100 mm in diameter, is cut up to the full thickness of the layer. All bituminous materials removed from the hole are carefully collected and weighted. The thickness of the layer is also recorded. A known weight of dry standard sand passing 600 micron sieve and retained on 300 micron sieve, is taken in the sand-pouring cylinder. The cylinder is kept directly over the hole, and the shutter of the cylinder is released without any jerk and closed when the hole is filled with the sand. The quantity of the residual sand in the cylinder as well as the quantity filling the cone of the cylinder are separately weighed.

The In-situ density of the layer is calculated as follows:

$$\text{In-situ density} = (A \cdot D) / (W - (W1 + W2)) \text{ g/cc}$$

Where,

A = Weight of bituminous materials removed from the hole cut in the layer, g

W = Initial weight of sand taken in the cylinder, g

W1 = weight of sand filling the cone of the cylinder, g

W2 = weight of sand remaining in the cylinder, g

D = bulk density of sand, g/cc

Prior calibration for depth of hole, in necessary.

ANNEX- IV

D. RATE OF SPREAD OF AGGREGATE IN SURFACE DRESSING

The rate of spread of aggregate by the aggregate spreader or any other suitable means can be checked by measuring the area covered by each lorry/truck/any other device of known capacity. This can also be checked by removing the spread aggregate from small areas of the road surface and weighing them. A 200 mm square metal frame is laid on the new surface dressing, and all the aggregate within the enclosed area are collected, washed in solvent to remove bitumen and then weighed, and the rate of spread of aggregate is calculated. It is measured along the road at intervals of between 4 m to 8 m. The variation in the rate of spread of aggregate should be within + 20 per cent of the mean.

Annex-III & IV

Quality Assurance Handbook for Rural Roads

ANNEX- V

DETERMINATION OF BITUMEN CONTENT IN BITUMINOUS MIX

The test is intended for determination of bitumen content in the bituminous mix by cold solvent extraction

method. The mineral aggregate recovered from the test can be used for checking their gradation. A representative bituminous mix sample of about 500 g by weight is accurately weighed and placed in the bowl of extraction apparatus and covered with commercial grade of trichloroethylene. Sufficient time (not more than one hour) is allowed for dissolving the bitumen in solvent. The filter ring of the extractor is dried, weighed and then fitted around the edge of the bowl. The cover of the bowl is clamped tightly. A beaker is placed under the drain to collect the extract. The machine is revolved slowly and then gradually the speed is increased to a maximum of 3600 rpm. The speed is maintained till the solvent ceases to flow from the drain. The machine is allowed to stop, 200 ml of solvent is added and the above procedure is repeated. A number of 200 ml solvent additions (not less than three) are used till the extract is clear and not darker than light straw colour. The filter ring from the bowl is removed, dried first in air and then in oven at 115°C to constant weight, and weighed. The fine materials that might have passed through the filter paper are collected back from the extract preferably by centrifuging. The material is washed and dried to constant weight as before. The percentage of binder in the bituminous mix is calculated as follows:

$W1 - (W2 + W3 + W4)$

Percentage of Binder = _____ x 100

W1

W1 = weight of sample, g

W2 = weight of sample after extraction, g

W3 = weight of fine material recovered from the extract, g

W4 = increase in weight of filter ring, g

4. SECTION 500: BITUMINOUS CONSTRUCTION

4.1 Prime Coat

1. Material

Check that Slow Setting bituminous emulsion with required viscosity and quantity as per Table 502.1 has been used and that where bituminous cutback has been used, it is only in situations of sub-zero temperatures or in emergency applications.

2. Application of Bituminous Primer

- (i) Check if the surface to be primed has been properly prepared.
- (ii) Check that only self-propelled or towed sprayer is used and that spraying with the use of a perforated canister has not been resorted to.
- (iii) Check if the rate of spray of primer has been checked by a tray test at least twice a day.
- (iv) Check if the sprayed primer is cured for atleast 24 hours before opening to traffic.

4.2 Tack Coat

1. Material

- (i) Check, if the type of binder used for tack coat is a bituminous emulsion of RS-1 grade and not a straight-run bitumen.

(ii) Check, if a bituminous cutback is used, it is only in areas of sub-zero temperature or in emergency applications.

(iii) Check that the rate of application of bituminous emulsion has been selected on the basis of the type of receiving surface as per MORD Specifications.

2. Application of Binder

(i) Check, if the surface receiving the tack coat has been properly prepared.

(ii) Check that only self-propelled or towed sprayer is used and that spraying with the use of a perforated canister has not been resorted to.

(iii) Check, if the rate of spray of binder has been checked by a tray test, atleast twice a day.

(iv) Check that the tack coat has been left to cure until all volatiles have evaporated and that no traffic is allowed to ply on the tack coat.

4.3 Bituminous Wearing Course-Surface Dressing

1. Aggregate

(i) Check, if the size of aggregate in use is appropriate to the surface on which it is being laid and the anticipated traffic on the road.

(ii) Check, visually, if the flaky aggregates do not exceed the permissible limit.

(iii) Check the aggregate for gradation (atleast one test per km length) to see if it meets the specified requirements.

(iv) Check, that the aggregates are not undergoing any amount of crushing.

(v) Check, if the 'Average Least Dimension' of the aggregate has been determined scientifically and rate of spread of aggregate is according to the Design Chart.

(vi) Where pre-coated stone chips are used, check if the mixing of stone chips and paving bitumen was carried out in a suitable mixer and that the stone chips and bitumen were heated to the specified temperatures.

(vii) Check if the pre-coated chips were allowed to cure for atleast one week or until they become non-sticky, before spreading.

2. Bitumen

(i) Check, if the bitumen is of specified penetration/ viscosity grade and is heated to the required temperature, using a calibrated thermometer.

(ii) Check, if the surface receiving the surface dressing has been properly prepared and where required, properly primed.

3. Rate of Spread of Aggregate

Check the rate of spread of aggregate as explained earlier.

4. Rate of Spread of Binder

(i) Check, if the rate of spray of bituminous binder has been scientifically determined by using the design chart (considering the climate, the type of receiving surface and type of materials used etc.) and that a tray test is being used to determine the actual rate of spray of bitumen in the field.

(ii) Check if spraying of bituminous binder was carried out by a Pressure Distributor or at least by hand held lance sprayer at proper temperature.

5. Checking Completed Surface

For completed surface dressing, check:-

- (i) If the size of aggregate used is appropriate to the type of receiving surface and the anticipated traffic.
- (ii) If the proportion of flaky and elongated aggregates is not more than the permissible limits.
- (iii) If there is any ravelling/ loss of aggregate/ streaking.
- (iv) If the edges of surface dressing are within a tolerance limit of ± 20 mm in plain and rolling terrain and ± 30 mm in hilly terrain.
- (v) If the surface regularity was measured with a 3 m Straight Edge.

4. Section-500

Quality Assurance Handbook for Rural Roads

4.4 Bituminous Wearing Course : Premix Carpet/Mix Seal Surfacing

1. Aggregate

- (i) Check for the gradation of aggregate at the hot mix plant; also visually check if the proportion of flaky and elongated aggregates is within specified limits.
- (ii) Check the temperatures of heated aggregate, heated binder and the mix at the hot mix plant to be within the specified limits, using appropriate thermometers.
- (iii) Check the temperature of the mix at the time of laying the mix.

2. Equipment

Check that the hot mix plant used for the preparation of premix has a separate dryer arrangement for aggregate and is of appropriate capacity and type.

3. Checking Completed Project

For completed projects, check:-

- (i) The thickness of layer by making test pits at random.
- (ii) The binder content from test results.
- (iii) The edges to be within ± 20 mm in plain and rolling terrain and ± 30 mm in hilly terrain.
- (iv) Surface regularity at random, using a 3 m straight edge.
- (v) The types of visible surface defects, if any.

QA/QC PROCEDURE AND EQUIPMENT REQUIREMENT FOR PROPOSED SITE GRADING WORK FOR BCPL TOWNSHIP, REMAINING ROAD WORK OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/ TELEPHONE CABLE FOR BCPL TOWNSHIP FOR BCPL AT LAPETKATA, DIBRUGARH. (ASSAM)

List of own equipments/machineries to be deployed by the contractor for road construction works.

- 1.Compaction : 80-100 kN smooth-wheeled Roller
- 2.Applying Prime Coat : Hand-held lance with sprayer operated by compressor
- 3.Heating Bitumen : Bitumen Boiler of small capacity
4. Applying Binder : Hand-held lance with sprayer, operated by Compressor
- 5.Mixing of aggregates and bitumen in : Hot Mix Plant, capacity with specified quantities of around 75 tonnes/hour.
- 6.Transporting from the Hot Mix Plant to site : Dumper or miller
7. Spreading of Premix material : Mechanical Pavers.

LIST OF MANDATORY TEST

QA/QC PROCEDURE AND EQUIPMENT REQUIREMENT FOR PROPOSED SITE GRADING WORK FOR BCPL TOWNSHIP, REMAINING ROAD WORK OF WBM GRADE-2 & GRADE-3, PRIME COAT, TACK COAT, CARPETING AND SEAL COAT AT BCPL & CISF TOWNSHIP AND ROAD CROSSING OF IT/ TELEPHONE CABLE FOR BCPL TOWNSHIP FOR BCPL AT LAPETKATA, DIBRUGARH. (ASSAM)

Tests for quality control

WATER BOUND MACADAM SUB-BASE / BASE / SURFACING

Sec No. Title Test Ref No.

A) Materials

- 405.1 Aggregate Impact Value (Dry and Wet) 401.5
- 405.2 Water Absorption of Aggregates 402.4
- 405.3 Soundness with Sodium Sulphate 402.5
- 405.4 Soundness with Magnesium Sulphate 402.6
- 405.6 Gradation Analysis of Aggregates and Screenings 402.1
- 405.7 Liquid Limit and Plastic Limit of Binder Material 301.2

B) Construction & Workmanship

- 405.8 Grading of Stone Aggregates and Screenings 401.1
- 405.9 Flakiness Index of Stone Aggregates 402.3
- 405.10 Plasticity Index of Crushable Screenings/Binding Material 301.2
- 405.11 Aggregate Impact Value 401.5
- 405.12 Layer Thickness 402.10
- 405.13 Volumetric Analysis 405.13
- 405.14 Horizontal Alignment 301.9
- 405.15 Surface Levels 301.10
- 405.16 Surface Regularity 301.11

405.13 Volumetric Analysis

Purpose

The test is conducted to make sure that adequate quantity and composition of material have been used in the construction.

Procedure

1. Dig a pit 0.5 m x 0.5 m in the area where random checking is to be carried out. Take out all the WBM material from the pit. One of the test procedures given below can be used.

2. Test 1

Refill the pit with the dug material without compacting. If the pit can be filled by using not more than 65% of the dug material, it is indicative of adequate compaction and use of specified quantity of all materials combined together.

3. Test 2

(i) Separate out the portions of the WBM material passing and retained on 11.2 mm size sieve when type B Screenings have been used. When Type A Screenings have been used, the proportions of WBM material passing and retained on 13.2 mm size sieve should be determined.

82

(ii) Measure the loose volumes of the two portions using cylinders of known volume and compare the combined volume with the combined specified quantities of Coarse Aggregate + Screenings + Binding Material.

(iii) The volume of material retained on 11.2 mm size sieve (or 13.2 mm size sieve, as the case may be) shall be compared with the specified quantities of coarse aggregate viz 0.91 to 1.07 cu. M per 10 sq m for WBM gradings 2 and 3. Due allowance shall be made for crushing during rolling.

(iv) The material passing 11.2 mm size sieve (or 13.2 mm size sieve, as the case may be) shall be compared with the specified quantities of Stone Screenings and Binding Material or Crushable Screenings as the case may be.

(v) For the Coarse Aggregates, the quantity may be checked by conducting an Aggregate Impact Test and determining the presence of any oversize aggregate.

(vi) For the finer fractions passing 425 micron size sieve, the plasticity index shall be determined to check that it is less than 6.

Tack coat

Sec No. Title Test Ref No.

A) Materials

503.1 Rapid Setting Emulsion 502.2 to 502.4

503.2 Viscosity of Bitumen Emulsion (Using Saybolt – Furol Viscometer) 502.2

503.3 Residue (Bitumen Emulsion) on 600 Micron IS Sieve 502.3

503.4 Storage Stability Tests 502.4

503.5 Flash Point Test for Bitumen Cutback 502.5

503.6 Viscosity of Bitumen Cutback 502.6

B) Construction & Workmanship

503.7 Temperature of Binder 502.7

503.8 Rate of Spread of Binder 502.8

506 MODIFIED PENETRATION MACADAM

Sec No. Title Test Ref No.

A) Materials

506.1 Quality of Binder – Straight –run Bitumen

506.1(a) Penetration Test 504.1 (a)

506.1 (b) R&B Softening Point 504.1 (b)

506.1 (c) Ductility of Bitumen 504.1 (c)

506.2 Quality of Binder – Modified Bitumen
 506.2 (a) Penetration Test 504.2 (a)
 506.2 (b) R&B Softening Point 504.2 (b)
 506.2 (c) Elastic Recovery Test 504.2 (c)
 506.2 (d) Separation Test 504.2 (d)
 506.3 Aggregate Impact Value 401.5
 506.4 Flakiness Index 402.3
 506.5 Bituminous Stripping of Aggregate Test 504.5
 506.6 Water Absorption of Aggregates 402.4
 506.7 Soundness with Sodium Sulphate 402.5
 506.8 `Soundness with Magnesium Sulphate 402.7

B) Construction & Workmanship

506.9 Rate of Spread of Binder 502.8
 506.10 Rate of Spread of Aggregates 505.10
 506.11 Grading of Aggregates 401.1
 506.12 Temperature of Binder during Spraying 502.7
 506.13 Thickness of Compacted Layer 401.10
 506.14 Horizontal Alignment 301.9
 506.15 Surface Level 301.10
 506.16 Surface Regularity 301.11

118

SURFACE DRESSING

Sec No. Title Test Ref No.

A) Materials

507.1 Quality of Binder – Straight –run Bitumen
 507.1(a) Penetration Test 504.1 (a)
 507.1 (b) R&B Softening Point 504.1 (b)
 507.1 (c) Ductility of Bitumen 504.1 (c)
 507.2 Quality of Binder – Bitumen Emulsion
 507.2 (a) Viscosity 502.2
 507.2 (b) Residue on 600 Micron IS Sieve 502.3
 507.2 (c) Storage Stability Test 502.4
 507.3 Quality of Binder – Modified Bitumen
 507.3 (a) Penetration Test 504.2 (a)
 507.3 (b) R&B Softening Point 504.2 (b)
 507.3 (c) Elastic Recovery Test 504.2 (c)
 507.3 (d) Separation Test 504.2 (d)
 507.4 Aggregate Impact Value 401.5
 507.5 Flakiness Index 402.3
 507.6 Bituminous Stripping of Aggregate Test 504.5
 507.7 Water Absorption of Aggregates 402.4
 507.8 Soundness with Sodium Sulphate 402.5

507.9 Soundness with Magnesium Sulphate 402.6

B) Construction & Workmanship

507.10 Rate of Spread of Binder 502.8

507.11 Rate of Spread of Aggregates 505.10

507.12 Grading of Aggregates 401.1

507.13 Temperature of Binder during Spraying 502.7

507.14 Horizontal Alignment 301.9

507.15 Surface Level 301.10

507.16 Surface Regularity 301.11

Section - 500

119

Quality Assurance Handbook for Rural Roads

508.1 20 mm Thick Premix Carpet using Bitumen

Sec No. Title Test Ref No.

A) Materials

508.1.1 Quality of Binder – Straight –run Bitumen

508.1.1(a) Penetration Test 504.1 (a)

508.1.1 (b) R&B Softening Point 504.1 (b)

508.1.1 (c) Ductility of Bitumen 504.1 (c)

508.1.2 Quality of Binder – Bitumen Emulsion

508.1.2 (a) Viscosity 502.2

508.1.2 (b) Residue on 600 Micron IS Sieve 502.3

508.1.2 (c) Storage Stability Test 502.4

508.1.3 Quality of Binder – Modified Bitumen

508.1.3 (a) Penetration Test 504.2 (a)

508.1.3 (b) R&B Softening Point 504.2 (b)

508.1.3 (c) Elastic Recovery Test 504.2 (c)

508.1.3 (d) Separation Test 504.2 (d)

508.1.4 Aggregate Impact Value 401.5

508.1.5 Flakiness Index 402.3

508.1.6 Bituminous Stripping of Aggregate Test 504.5

508.1.7 Water Absorption of Aggregates 402.4

508.1.8 Soundness with Sodium Sulphate 402.5

508.1.9 Soundness with Magnesium Sulphate 402.6

B) Construction & Workmanship

508.1.10 Grading of Aggregates 401.1

508.1.11 Binder Content Before Seal Coat 504.10

508.1.12 Temperature of Binder 502.7

508.1.13 Thickness Before and After Compaction 401.10

508.1.14 Horizontal Alignment 301.9

508.1.15 Surface Levels 301.10

508.1.16 Surface Regularity 301.11

120

Sec No. Title Test Ref No.

A) Materials

- 510.1 Gradation Analysis 401.1
- 510.2 Flakiness Index of Aggregate 402.3
- 510.3 Aggregate Impact Value 401.5
- 510.4 Soundness with Sodium Sulphate 402.5
- 510.5 Soundness with Magnesium Sulphate 402.6
- 510.6 Water Absorption 402.4
- 510.7 Coating and Stripping of Bitumen Aggregate Mixture 504.5
- 510.8 Temperature of Binder 502.7
- 510.9 Penetration on Paving Bitumen/Modified Emulsion 504.2 (a)
- 510.10 Softening Point on Paving Bitumen / Modified Emulsion 504.2 (b)
- 510.11 Ductility on Paving Bitumen 504.1 (c)
- 510.12 Elastic Recovery of Modified Bitumen 504.2 (d)
- 510.13 Viscosity 502.2
- 510.14 Residue on 600 Micron 502.3
- 510.15 Storage Stability Test for Emulsion 502.4

B) Construction & Workmanship

- 510.16 Rate of Spread of Binder 502.8
- 510.17 Rate of Spread of Aggregates 505.

SCHEDULE OF APPROVED MAKE OF MATERIALS

1.O.P/ P.P. Cement : Top Cem/Vinay/ACC/Surya Gold/Star/
Max/CCI
/Dalmia /Lafarge

2. Bitumen : IOCL/Hindustan
Petroleum/ESSER/Shalimar

LIST OF DRAWINGS

Sl. No.	DRAWING TITLE	DRAWING NUMBER
1.	LAYOUT OF ROAD	RAA/BCPL/BRW/T-01
2.	DETAIL OF ROAD SECTION	RAA/BCPL/BRW/T-02
3.	LAYOUT OF ROAD	RAA/CISF/BRW/T-01