

DEENDAYAL PORT AUTHORITY



TENDER DOCUMENTS FOR

**Up-Gradation of Road From Junction Of Tuna Jetty
Road To Take Off Point At Tuna Tekra**

EXECUTIVE ENGINEER (C-I)

DEENDAYAL PORT AUTHORITY

A.O BUILDING, ROOM NO 302

Gandhidham, KUTCH

(GUJARAT STATE).

Mobile – 8758659669

E-mail : constdiv1@gmail.com

INDEX

DC1	:	Bid Reference
NIT	:	Invitation for Bids
SECTION1	:	Instruction toBidders
SECTION2	:	Forms of Bid, Qualification Information
SECTION3	:	Conditions of Contract
SECTION4	:	Contract Data
SECTION5	:	Specifications and Special Conditions
SECTION6	:	Drawing
SECTION7	:	Bill of Quantities
SECTION8	:	Forms of Securities and other Formats

DEENDAYAL PORT AUTHORITY

COMPETITIVE BIDDING

AGREEMENT NO:- _____

BID NO : C-I : 0 1 /2023

Name of work: “

PERIOD OF DOWNLOADING OF BID DOCUMENTS

FROM	: 18.09.2023 TIME 16.00 HRS
TO	: 17.10.2023 TIME12:00HRS.
LAST DATE AND TIME FOR RECEIPT OF BIDS	: 17.10.2023 TIME12:00HRS
TIME AND DATE OF OPENING OF BIDS	: 17.10.2023 TIME 12:05HRS.
PLACEOFOPENINGOFBIDS	: CONSTRUCTION-I DIVISION, A.O BUILDING, Room no 302 Gandhidham, KUTCH (GUJARAT STATE).

OFFICERINVITINGBIDS	:	Executive Engineer(C-I)
		DEENDAYAL PORT AUTHORITY

DEENDAYAL PORT AUTHORITY

NOTICE INVITING TENDER

Tender No. C-I : 01/2023

**NAME OF WORK: Up-Gradaation of Road From Junction Of Tuna Jetty Road To
Take Off Point At Tuna Tekra**

E/Online Tenders are invited by EXECUTIVE ENGINEER (C-I) for the above work as per
the details given in the table below.

Work Description	Tender Fee (In Rs.)	Estimated cost (In Rs.)	EMD (In Rs.)	Date of Pre-Bid Meeting	Last Date and time of online Submission of bid documents	Date and time of online opening
Up-Gradaation of Road From Junction Of Tuna Jetty Road To Take Off Point At Tuna Tekra	5000/- + GST @ 18 % (Payment through Digital mode (Account no 100801000 22427 IFSC code: BARBOGAN KUT, Bank of Baroda , Gandhidham branch	Rs. 51,89,32,630.39	Rs. 50 lakhs in form of Bank Guarantee of Nationalize/ scheduled(except Co-operative)bank having its branch at Gandhidham in prescribed format (As per section 8)	NA	Upto 17.10.2023 12.00 hours	17.10.2023 @12.05 Hrs.

Detailed tender notice along with complete tender documents can be downloaded from website <https://kpt.nprocure.com> from 18.09.2023 @ 12:00 Hrs. Tender Notice is also available on www.deendayalport.gov.in. Technical Bid will be opened on 17.10.2023 @ 12:05 Hrs. Date of opening of price bid shall be notified after scrutiny & evaluation of Technical Bid. For further details and general enquiries prospective bidders may contact **EXECUTIVE ENGINEER (C-I), DEENDAYAL PORT AUTHORITY, 2nd FLOOR, NIRMAN BUILDING, KANDLA-370210, KUTCH DISTRICT, GUJARAT STATE, INDIA, MO: 8758659669**during working hours before the last date and time of downloading of tender documents.

EXECUTIVE ENGINEER(C-I)

Deendayal Port Authority

DEENDAYAL PORT AUTHORITY,

NOTICE INVITING ON LINE TENDER

Details about E/Online tender:

Department Name	Civil Engineering Department
Circle/ Division	CONSTRUCTION-I DIVISION
Tender Notice No.	C-I: O 1 /2023
Name of Work	Up-Gradation of Road From Junction Of Tuna Jetty Road To Take Off Point At Tuna Tekra
Estimated Contract Value (INR)	Rs. 51,89,32,630.39/-
Period of Completion (in Months)	18 Months
Bidding Type	Open
Bid Call (Nos.)	One
Tender Currency Type	Single
Tender Currency Settings	Indian Rupee (INR)
Minimum Pre-Qualifying / Eligibility Criteria :	<p>1. Average annual financial turnover during the last three years ending 31st March of the previous financial years, should be at least Rs. 1556.80 Lakhs.</p> <p>2 Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:</p> <p style="padding-left: 40px;">Three similar completed works, each work costing not less than Rs. 2075.73 Lakhs.</p> <p style="text-align: center;">Or</p> <p style="padding-left: 40px;">Two similar completed works, each work costing not less than Rs. 2594.66 Lakhs.</p> <p style="text-align: center;">Or</p> <p style="padding-left: 40px;">One similar completed work, costing not less than Rs. 4151.46 Lakhs.</p>

Similar Works” means Construction of all type of Embankment/ground filling/ yard/ runways/roads/development of lands/ RCC bridge work with road (separate/combined) if above work executed including allied civil works shall also considered.

If the similar work is executed as sub-contractor, it is mandatory to upload the sub-contract permission letter obtained from the Govt./Public Sector officer in case work belongs to the Govt./Public Sector, or from the owner of the project in case work belongs to private organization. Also the completion certificate/form 3A authenticated by concern Govt./Public Sector officer or owner of the project shall be uploaded along with TDS certificate deducted from that particular work issued by the competent authority shall be submitted along with bid submission.

3. Joint Venture

- I. In case of JV to qualify experience in similar works, merging of work order value executed by two or more of its member JV either as a whole or as member of JV shall not be permitted to qualify eligible works in terms of similar completed works. Only no. of work orders executed by members of JV shall be merged to evaluate experience.
 - II. Lead partner should have executed at least one similar work costing Rs. 2075.73 Lakhs as per Minimum Eligibility Criteria.
 - III. The works reckoned for the above purpose are those executed by the tenderer as prime contractor or proportionately as member of joint venture or as a sub-contractor, authorized and approved by the Employer of the work(s) against which the tenderer has claimed his experience.
 - IV. In the case of bid submitted by JV/ Consortium, the lead partner of the JV shall meet the Minimum Eligibility Criteria of Financial Turnover.
 - V. Bid Security required shall be furnished by lead member of JV.
4. Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated asunder:

Assessed Available Bid capacity= $A \times N \times 2 - B$, Where,
“N” = Number of years prescribed for completion of the subject contract. i.e 18 months construction

period

“A” = Maximum value of works executed in any one year during last seven years (at current price level)

“B” = Value at current price level of existing commitments and ongoing works to be completed in the next ‘N’ years. The Bidder shall furnish statements showing the value of existing commitments and ongoing works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Nodal Office or his nominee-incharge.

Joint Venture	Applicable
Rebate	Applicable (Unconditional rebate submitted online before due date of submission of bid)
Bid Document Fee :	Rs. 5900/- including 18% GST (Payment through Digital mode (Account no 10080100022427 IFSC code: BARBOGANKUT, Bank of Baroda , Gandhidham branch
Bid Security/ EMD (INR):	Rs. 50 lakhs in form of B.G drawn in favour of board of Deendayal Port Authority, issued by nationalize bank /scheduled (except Co-operative) having branch at Gandhidham
Bid Document Downloading Start Date	
Bid Document Downloading End Date	
Date & Place of Pre Bid Meeting	NA
Last Date & Time for Receipt of Online Bids	
Bid Validity Period	120 Days

Condition

Tender Fees in form of **(Payment through Digital mode
(Account no 10080100022427 IFSC code:
BARBOGANKUT, Bank of Baroda , Gandhidham branch**

The bid/tender shall be accompanied by Bank Guarantee of Nationalized/scheduled bank (except Co-operative Bank)having its branch at Gandhidham towards Bid Security (EMD) in prescribed format. The bid/Tender not accompanied with Tender fee and EMD shall not be considered and their technical and price bid will not be opened

The bid/tender shall also be accompanied by Integrity Pact Agreement duly signed by the bidder and two witnesses name, address and signatures (which is also required to be got signed by the bidder).In case of Joint venture, Integrity pact agreement need to be executed in the name of JV and all the parties of JV need to stamp and sign the agreement

The bid/Tender not accompanied with Tender fee, EMD and Integrity Pact Agreement in Preliminary Bid shall not be considered responsive and their technical and price bid will not be opened.

In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under The Ministry of Micro, Small and Medium Enterprises indicating the list of activity related to the subject tender as per National Industrial Classification-2008 mentioned in the table below only shall become eligible for exemption from payment of Tender fee/EMD. Such bidder shall upload the scanned copy of valid certificate in preliminary bid:-

Level	Description
Section – F	Construction
Division – 42	Civil Engineering
Group – 421	Construction of Roads & Railways (All Sub-Classes under this group)
42101	Construction and maintenance of motorways, streets, roads, other vehicular and pedestrian ways, highways, bridges, tunnels and subways

Section – F	Construction
Division – 42	Civil Engineering
Group – 431	Demolition & Site Preparation
Class – 4312	Site preparation
Sub Class – 43123	Clearing of building sites, earth moving: excavation, landfill, leveling and grading of construction sites, trench digging, rock removal, blasting etc.

The above shall be submitted in electronic format through on line (by scanning) while uploading the bid. This submission shall mean that Integrity Pact , EMD and Tender Fee are received. Accordingly offer of only those shall be opened whose EMD and Tender Fee is

received electronically. However, for the purpose of realization, bidder shall send the same in original along with hardcopy of tender (sealed & signed of authorized person), and other PQ documents through R.P.A.D./speed post or in person so as to reach to **EXECUTIVE ENGINEER(C- I),CONSTRUCTION- I DIVISION DEENDAYAL PORT AUTHORITY, ROOMNO.302, 2ndFLOOR, AO BUILDING- ANNEX, GANDHIDHAM KACHCHH-370201** within 7 days from the date of opening.

Remarks	Submission of E.M.D. Tender Fee and other Bid Documents during office hours : upto 23.10.2023 by R.P.A.D /Speed post or in person in the chamber EXECUTIVEENGINEER(C- I), CONSTRUCTION- I DIVISION DEENDAYAL PORT AUTHORITY, ROOM NO.302 ,2ndFLOOR, AO BUILDING- ANNEX, GANDHIDHAM KACHCHH-370201.
Bid Opening Date	Technical Bid will be opened on 17.10.2023@ 12:05 Hrs. Date of opening of Price Bid shall be notified after scrutiny & evaluation of Technical Bid to qualified bidders.
Documents required to be submitted by scanning through online	<ol style="list-style-type: none"> Documents in support of fulfilling qualifying criteria as indicated above. EMD. (Bid Security in form of B.G to be submitted in prescribed format (As per section 8)Tender fee (Payment through Digital mode (Account no 10080100022427 IFSC code: BARBOGANKUT, Bank of Baroda , Gandhidham branch As indicated in clause 1.4 of section 1 – Instructions to bidders.
Officer- Inviting Bids:	EXECUTIVE ENGINEER (C-I), DEENDAYAL PORT AUTHORITY
Bid Opening Authority :	EXECUTIVE ENGINEER (C-I), DEENDAYAL PORT AUTHORITY
Address:	EXECUTIVEENGINEER(C-I), CONSTRUCTION- I DIVISION DEENDAYAL PORT AUTHORITY, ROOM NO.302, 2ndFLOOR, AOBUILDING- ANNEX, GANDHIDHAMKACHCHH-370201
Contract Details :	Mobile – 8758659669

Note :

In case bidders need any clarifications or if training is required to participate in online tenders, they can contact (n)Procure Support team at following address:-

(n)code Solutions – A division of GNFC Ltd.,
(n)Procure Cell,
403, GNFC Infotower, S.G. Road,
Bodakdev, Ahmedabad – 380054 (Gujarat).

Contact Details :

Airtel : +91-79-40007501, 40007512, 40007516, 40007517, 40007525
BSNL : +91-79-2684511, 26854512, 26854513 (EXT: 501, 512, 516, 517, 525)
Reliance : +91-79-30181689
Fax : +91-79-26857321, 40007533
E-mail : nprocure@gnvfc.net
TOLL FREE NUMBER : 1-800-233-1010 (EXT: 501, 512, 516, 517, 525)

SECTION -1

INSTRUCTIONS TO BIDDERS

A. GENERAL

1.1 Scope of Bid

The Executive Engineer, C-I Division, Deendayal Port AUTHORITY, invites bids by E-Tendering for the work of **“Up-Gradation of Road From Junction Of Tuna Jetty Road To Take Off Point At Tuna Tekra** detailed in the table given in NIT. The bidders shall submit on-line bids for the work detailed in the table given in NIT.

The successful bidder will be expected to complete the works by the intended completion date specified in the contract data.

1.2 Source of Funds

- 1.2.1 The employer has arranged the funds from internal resources and will have sufficient funds in Indian currency for execution of the works.

1.3 Eligible bidder.

- 1.3.1 The invitation for Bids is open to all eligible bidders meeting the eligibility criteria as defined in clause no.1.4.3.
- 1.3.2. All bidders shall provide in Section-2 form of Bid and Qualification Information, a statement that the Bidder is not associated, nor has been associated in the past, directly or indirectly, with the consultant or any other entity that has prepared the design, specifications, and other documents for the Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation or supervision of the works, and any of its affiliates, shall not be eligible to bid.
- 1.3.3. Government-owned enterprises may only participate if they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the Employer subject to fulfillment of Minimum Qualifying criteria.
- 1.3.4. Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the employer in accordance with clause 1.36.

1.4 Eligibility Criteria

- 1.4.1.
- a.** Experience of similar works executed during the last seven years, and details like monetary value, clients, and proof of satisfactory completion.
 - b.** Documentary evidence of adequate financial standing and proof from client for satisfactory completion of works.
 - c.** Solvency certificate from Bankers for Rs.--- Lakhs not older than six months as on the date of submission of the bid.
 - d.** Equipment requirement/schedule.
 - e.** Managerial/Manpower requirement.
 - f.** Project Planning and Quality Control procedure to be adopted.
 - g.** Information regarding projects in hand, current litigation, orders regarding exclusion, expulsion or black listing, if any.
 - h.** Trained & Certified workmen proposed to be employed at the work site of the project. The Contractor must undertake to employ of certified worker to the extent of 20% of total strength. Valid certificates by a recognized University, technical Board, or Ministry of Government of India would only be taken cognizance of.
- 1.4.2. If the Employer has not undertaken pre-qualification of potential bidders, all bidders shall include the following information and documents with their bids.
- a.** Copies of original documents defining the constitution or legal status, place of registration, and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder.
 - b.** Total monetary value of construction work performed for each of the last five years.
 - c.** Experience in works of a similar nature and size for each of the last five years, and details of works underway or contractually committed, and Employers who may be contacted for further information on those contracts.
 - d.** Major items of construction equipment proposed to carry out to the contract.
 - e.** Qualifications and experience of key technical site management and technical personal proposed for the contract.
 - f.** Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years.

- g. Evidence of adequacy of working capital for this contract (access to line(s) of credit and availability of other financial resources).
- h. Authority to seek references from the Bidder's bankers.
- i. Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned, and disputed amount.
- j. Proposal for subcontracting components of the works amounting to more than 10 percent of the Bid Price (for each qualification should attached) ;and
- k. The methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures and completion of the work as per technical specifications within the stipulated period of completion as per milestones.
- l. PAN, Registration with Good & Service Tax (GST), Provident Fund Authorities, etc.
- m. Bid security in approved form as prescribed under Clause No.1.16.

1.4.3 To qualify for award of the contract, bidders are advised to note the minimum qualification criteria specified below.

- i. Average annual financial turnover during the last three years ending 31st March of the previous financial year should be at least Rs. 1556.80 Lakhs.
- ii. Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following.
 - a. Three similar completed works, each work costing not less than Rs.2075.73 Lakhs.
 - or**
 - b. Two similar completed works, each work costing not less than Rs. 2594.66 Lakhs.
 - or**
 - c. One similar completed work, costing not less than Rs. 4151.46 Lakhs.

iii Similar Works” means Construction of all type of Embankment/ground filling/ yard/ runways/roads/development of lands/ RCC bridge work (separate/combined) including allied civil works shall also considered if executed along with Embankment/ground filling/ yard/ runways/roads/ development of lands/ RCC bridge work (Pilling Work).

iv In addition to above, the criteria regarding satisfactory performance of the work, Personnel, establishment, plant, equipment ,etc. **(Deleted)**

1.4.4. To qualify for a package of contracts made up of this and other contracts for which bids are invited in the NIT, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

1.4.5. Sub-contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria. Except to the extent state in 4.4 above.

1.4.6 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under:

Assessed Available Bid capacity = $A \times N \times 2 - B$, Where

“N” = Number of years prescribed for completion of the subject contract. “A” =

Maximum value of works executed in any one year during last seven

years (at current price level)

“B” = Value at current price level of existing commitments and ongoing works to be completed in the next ‘N’ years.

Note: To calculate the value of works to current level, following multiplying factors shall be applicable with reference to escalation based on WPI. This is only for arriving the Bid Capacity and not for work experience & turnover.

Financial Year	2022-23	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17
Index	152.5	139.4	123.4	121.8	119.8	114.9	111.60
Multiplying factor	1.00	1.09	1.24	1.25	1.27	1.33	1.37

The Bidder shall furnish statements showing the value of existing commitments and ongoing works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Nodal Officer or his nominee – in – charge.

- 1.4.7 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
- Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements and/or
 - Record or poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc., and/or

1.5 One Bid per Bidder

- 1.5.1. Each bidder shall submit only one bid for one package. A bidder who submits or participates in more than one bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder’s participation to be disqualified.

1.5.2 Joint Venture

Companies/Contractors may jointly undertake contract/contracts. Each entity would be jointly and severally responsible for completing the task as per the contract, however declaration of the Lead member to be indicated by bidders, however JV has to designate ¹³ in their MOU. The firms with at least 26% equity holding each be allowed to jointly meet the eligibility criteria. However, there shall be no limit on the number of partners.

1.6 Cost of Bidding

- 1.6.1. The bidder shall bear all costs associated with preparation and submission of his bid, and the Employers will in no case be responsible and liable for those costs.

1.7 Site Visit

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

B. Bidding Documents

1.8 Content of Bidding Documents

- 1.8.1 These bidding documents comprise the documents listed in the table below and addenda issued in accordance with Clause 1.10:

- DC1 : Bid Reference
- NIT : Invitation for Bids
- SECTION1 : Instruction to Bidders
- SECTION2 : Forms of Bid, Qualification Information
- SECTION3 : Conditions of Contract
- SECTION4 : Contract Data
- SECTION5 : Specifications and Special Conditions
- SECTION6 : Drawing
- SECTION7 : Bill of Quantities
- SECTION8 : Forms of Securities

- 1.8.2 One set of the bidding documents will be issued to the bidder. The document should be completed and returned with the bid.

- 1.8.2.1 Bidding documents shall be downloaded. The documents should be completely filled and submitted through on-line tendering process and one copy shall be submitted within 7 days of Date of opening of tender.

- 1.8.3 The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, technical specifications, bill of quantities, forms, drawings, annexure in the bid document. Failure to comply with the requirements of the bid document shall be at the bidder's own risk. Pursuant to clause 1.26 hereof, bids which are not substantially responsive to the requirements of the bid documents shall be rejected.

1.9 Clarifications of the Bidding Documents

- 1.9.1 A prospective bidder requiring any clarification of the bidding documents may notify the employer in writing or by electronic form and be confirmed by hard copy at the Employer's address indicated in the invitation to bid. The employer will respond to any request for clarification.

1.9.2 Pre - bid meeting

- 1.9.2.1 The bidder or his official representative is invited to attend a pre-bid meeting, which will take place on /2020 @ 12:00 Hrs. at Board Room, A.O. Building, Deendayal Port AUTHORITY, Gandhidham - Kutch, Gujarat.

1.9.2.2 The purpose of the meeting will be to clarify issues and to answer question on any matter that may be clarified at that stage. But written comments/ reply is prevail. Quarries raised after Pre-Bid meeting shall not be entertained.

1.9.2.3 The bidder is requested to submit any questions in writing or by cable to reach the Employer on or before the meeting.

1.9.2.4 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be uploaded on website <http://kpt.nprocure.com> without delay. Any modification of the bidding documents listed in Sub-Clause 1.8.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 1.10 and not through the minutes of the pre- bid meeting.

1.9.2.5 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

1.10. Amendment of Bidding Documents

1.10.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by using addendum.

1.10.2 Any addendum thus issued shall be part of the bidding documents and shall be communicated by uploading online on <http://kpt.nprocure.com>. Prospective bidders shall acknowledge receipt of each addendum by cable to the Employer.

1.10.3 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids, in accordance with Sub- Clause 1.20.2 below.

C. Preparation of Bid

1.11 Language of the Bid

1.11.1 All documents relating to the bid shall be in the English language.

1.12 Documents comprising the Bid

1.12.1 The bid submitted by the bidder shall comprise the following:

A) Technical Bid

- i) Bid Security and tender fee.
- ii) Qualification Information Form and Document (Pursuant to clause 1.4 hereof) and any other materials required to be furnished and submitted by the bidder in accordance with these instructions. The documents listed under Sections 2, 4 and 7 of Sub-Clause 1.8.1 shall be filled in without exception.

B) Financial Bid

- i) Price Bid
- ii) Bill of Quantity dully filled and digitally signed by the Bidder.

1.13 Bid Prices

- 1.13.1 The contract shall be for the whole works as described in Sub-Clause 1.1 based on the priced Bill of Quantities submitted by the Bidder.
- 1.13.2 The bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities.
- 1.13.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid price submitted by the Bidder.
- 1.13.4 The rates and prices quoted by the bidder are subject to adjustment during the performance of the contract. [In accordance with the provisions of clause 3.47 of the conditions of contract.]

1.14 Currencies of Bid and payment

The Unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

1.15 Bid Validity

- 1.15.1 Bids shall remain valid for a period not less than 120 days after the deadline date for bid submission specified in clauses 1.20. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 1.15.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of bid validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be permitted to modify his bid.

1.16 Bid Security (Earnest Money Deposit -EMD)

- A. Earnest money Deposit (EMD) shall be 1% of the Estimate cost put to tender, subject to maximum Rs. 50 Lakhs.
- B. The EMD of Rs. 5 Lakhs be payable either by DD/PO/Banker's cheque drawn in favour of Deendayal Port AUTHORITY payable at Gandhidham .EMD beyond Rs. 5 lakhs be payable in form of Bank Guarantee for the entire amount from any Nationalized Scheduled Bank(except Co-operative Banks) from any branch in India preferably from the local branch where the port is situated. Bank Guarantee submitted as Earnest Money shall be valid for 28 days beyond the validity of the bid/tender. Bank Guarantee shall be verified independently by the Port with the bank before finalization of technical offer. In the event of lack of confirmation of issue of the Bank Guarantee by the Bank, the bid shall stand disqualified.
- C. EMD of unsuccessful bidders other than L1 and L2 is refunded immediately after ranking

of price bids. Earnest money of L2 is refunded immediately after entering in to agreement with L1 and acceptance of performance Guarantee from L1.

- D. EMD is refunded suo-motto with/without any application from the bidders.
- E. The bid security of the successful bidder will be discharged (refunded after he assigned the Agreement and furnished the required Performance security.
- F. The Bid security may be forfeited, if
 - a) The bidder withdraws the bid after bid opening during the period of bid validity.
 - b) The bidder does not accept the correction of the Bid price, pursuant to any arithmetic errors or
 - c) The successful bidder fails within the specified time limit to
 - (i) Sign the Agreement or
 - (ii) Furnish the required Performances security.
 - (iii) In case the contractor fails to commence the work within stipulated time.The forfeiture of the bid security is entirely discretion of employer. No any claims in this regards shall be entertained.

G. *In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under The Ministry of Micro, Small and Medium Enterprises indicating the list of activity related to the subject tender shall become eligible for exemption from payment of Tender fee/EMD. Such bidder shall upload in preliminary bid a scanned copy of valid certificate.*

NIC codes regarding similar work is mentioned below:

Level Description

Section – F Construction

Division – 42 Civil Engineering

Group – 421 Construction of Roads & Railways (All Sub-Classes under this group)

42101 Construction and maintenance of motorways, streets, roads, other vehicular and pedestrian ways, highways, bridges, tunnels and subways

Section – F Construction

Division – 42 Civil Engineering

Group – 431 Demolition & Site Preparation

Class – 4312 Site preparation

Sub Class – 43123 Clearing of building sites, earth moving: excavation, landfill, leveling and grading of construction sites, trench digging, rock removal, blasting etc.

1.17 Alternative proposals by bidders

- 1.17.1 Conditional offer or Alternative offers will not be considered further in the process of tender evaluation.

1.18 Format and signing of bid

- 1.18.1 The Price Bid to be submitted on-line shall be signed digitally by a person or persons duly authorized to sign on behalf of the Bidder.
- 1.18.2 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder in which case such corrections shall be initialed by the person or persons signing the bid.

D Submission of bids

1.19 Sealing and marking of bids.

1.19.1 The bidder shall put Bid security document as per clause No.1.16, hereof in one envelope and properly seal and mark as “Bid Security”. The bidder shall put documents mentioned in clause No: 1.12.1.A (ii) in separate envelope and properly seal and mark as “Technical Bid”.

The bidder shall seal “Financial Bid” as per Clause No: 1.12.1. (B) here of, in separate envelope duly marking the envelope as “Financial Bid”.

These envelopes than be put inside one outer envelope and sealed, duly marking the outer envelope as “Technical Bid and Financial Bid”.

1.19.2 The envelopes shall

(a) be addressed to Nodal Officer/Employer at the following address.

{ Insert address of office for bid submission },and (b)

bear the following identification:

**Bid for “Up-Gradation of Road From Junction Of Tuna Jetty Road To
Take Off Point At Tuna Tekra**

Bid reference no C-I: 0 /2021

DO NOT OPEN BEFORE (time and date for opening, per Clause1. 23)

Name and address of the bidder.

The tender complete in all respect should be put in the tender box (marked tender No C-I: /2020)in the office of The Executive Engineer(C-I) up to/---- upto14.00 hrs. on due date and openat/----- 16.00Hrs on the same date in presence of such of the tenderers who may wish to be present.

1.19.3 In addition to the identification required in Sub-Clause 1.19.2, the inner envelopes shall indicate the name and address of the bidder of to enable the bid to be returned unopened in case it is declared late, pursuant to Clause 1.21, or the bid is declared non-responsive. If the outer envelopes are not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the technical bid and financial bid.

1.20 Deadline for submission of the Bids

- 1.20.1 Bids must be received by the Employer at the address specified above not later than in the event of the specified date for the submission of bids being declared a holiday by the Employer. The bids will be received up to 23.10.2023 the appointed time on the next working day.
- 1.20.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 1.10, in which case all rights and obligations of the Employer

and the bidders previously subject to the original deadline will then be subject to the new deadline.

- 1.20.3 In case of tender document being downloaded from the web site, at the time of submission of (the hard copy of) the tender document. The tenderer shall give an undertaking that no change have been made in document. He shall be issued a printed set of document under acknowledgment with a condition that the printed version of the port tender document will be treated as authentic tender and if any discrepancy is noticed at any stage between the Port's tender document and the one submitted by the tenderer, the conditions mentioned in the Port's printed document shall prevail. V Besides, the tenderer shall be liable for legal action for the lapses. Insert time and date; this should be the same as those given in the invitation for Bids ClauseNo.1.20.

1.21 Late Bids

- 1.21.1 Any bid received by the Employer after the deadline prescribed in Clause 1.20 will be considered as non-responsive.

1.22 Modification and Withdrawal of Bids

- 1.22.1 Bidders may modify or withdraw their bids before the deadline of submission of the on line bid.
- 1.22.2 Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clauses 1.18 & 1.19, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL" as appropriate.
- 1.22.3 No bid may be modified after the deadline for submission of bids.
- 1.22.4 Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity in Clause 1.15.1 above or as extended pursuant to Clause 1.15.2 may result in the forfeiture of the Bid security pursuant to Clause1.16.
- 1.22.5 Bidders may only offer discount to or otherwise modify the prices of their bids by submitting bid modifications in accordance with this clause or included in the original bid submission.

E. BID OPENING AND EVALUATION

1.23 Bid opening

- 1.23.1 On the due date and appointed time as specified in clause 1.20, the Employer will first open Technical bids of all bids received (except those received late) including modifications made pursuant to clause 1.22 in presence of the bidders or their representative who choose to attend. In the event of the specified date for Bid opening being declared a holiday by the Employer, the bids will be opened at the appointed time and location on the next working day.
- 1.23.2 Envelopes marked "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 1.22 shall not be opened. Bidder's name, withdrawals, modifications of technical bid, the presence of bid security and such other details, as the Employer

may consider appropriate will be announced by the Employer at the opening.

1.23.3 If all Bidders have submitted unconditional Bids together with requisite bid security, then all bidders will be so informed then and there. If any Bid contains any deviation from the Bids documents and/or if the same does not contain Bid security in the manner prescribed in the Bid documents, then that Bid will be rejected and the Bidder informed accordingly.

1.23.4 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with sub clause 23.3 and the minutes shall form part of the contract.

1.24 Process to be confidential.

Information relating to the examination, clarification, evaluation and comparison of the bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful bidder has been announced.

1.25 Clarification of Bids

To assist in the examination and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdown of unit rates. The request for clarification and the response shall be writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to conform the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 1.27.

Subject to above para, no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded

Any effort by the Bidder to influence the Employer's bid evaluation, bid comparison or contract award decisions, may result in the rejection of his bid.

1.26 Examination of Bids and Determination of Responsiveness

1.26.1 Prior to detailed evaluation of Bids, the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 1.4 (b) has been properly signed by an authorized signatory (accredited representative)

holding power of Attorney in his favor. The Power of Attorney shall inter alia include a provision to bind the Bidder to settlement of disputes clause; (c) is accompanied by the required Bid security and; (d) is responsive to the requirements of the Bidding documents

1.26.2 A substantially responsive Technical and Financial Bid is one which conforms to all the terms, conditions and specification of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality or performance of the works; (b) which limits in any substantial way, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the

competitive position of other Bidders presenting responsive Bids.

1.26.3 If a Technical Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

1.26.4 The envelop marked as financial bid of those bidders whose technical bid has been determined to be non-responsive shall not be opened and will be returned unopened.

1.27 Correction of Errors.

1.27.1 Bids determined to be responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

(a) Where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and

(b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

1.27.2 The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the bidder.

1.28 NIL

1.29 Evaluation and Comparison of Bids

1.29.1 The Employer will evaluate and compare only the bids determined to be responsive in accordance with Clause 1.26.

1.29.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:

(a) Making any correction for errors pursuant to Clause 1.27;

(b) Making appropriate adjustments to reflect discounts or other price modification offered in accordance with Sub Clause 1.22.5

1.29.3 The estimated effect of the price adjustment conditions under Clause 3.47 of the conditions of contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.

1.29.4 If the Bid of the successful Bidder is seriously unbalanced in relation to the Nodal Officer or his nominee's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities.

F. AWARD OF CONTRACT

1.30 Award Criteria

1.30.1 The Employer will award the Contract to the Bidder whose Bid has been determined to be responsive to the Bidding documents and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 1.3, and (b) qualified in accordance with the provisions of Clause 1.4. The second bidder (i.e.L2) shall be kept in reserve and may be invited to match the bid submitted by the (L1) bidder in case such bidder withdraws or is not selected for any reason.

1.31 Employer's Right to accept any Bid and to reject any or all.

The Employer reserve the right to accept or reject any bid and to cancel the bidding process and reject all bids, at any time prior to the award of contract, without thereby incurring any liability to the affected bidder or bidders of the grounds for Employer's action.

1.32 Notification of Award and Signing of Agreement

1.32.1 The Bidder whose bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion and maintenance of the works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "contract Price").

1.32.2 The notification of award will constitute the formation of the Contract subject only to the furnishing of a performance security in accordance with the provision of Clause 1.33.

1.32.3 The Agreement will incorporate all correspondence between the Employer and the successful bidder. It will be signed by the employer and sent to the successful Bidder (within 28 days of award of work for global tender and within 14 days for domestic tender) following the notification of award along with the Letter of Acceptance. Within (28 days for global tender and within 21 days for domestic tender) of receipt, the successful Bidder will furnish the performance security and sign the Agreement with the Employer.

1.32.4 Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful

1.33. Performance Security

Security deposit shall consist of Performance Guarantee to be submitted at award of work. Performance guarantee should be 5% of Contract price of which should be submitted in form of Bank Guarantee of

Nationalized bank having its branch at Gandhidham, or Demand Draft within (21 days in case of domestic bid and within 28 days in case of global bids) of receipt of letter of acceptance/Intent which will be refunded immediately not later than 14 days from completion of defect liability period.

- 1.33.2. Failure of the successful Bidder to comply with the requirements as mentioned above shall constitute sufficient grounds for cancellation of the award of work and forfeiture of Bid Security/EMD

1.34. Advance Payment

- 1.34.1 The Employer will provide an Advance payment on the Contract Price as stipulated in the Conditions of Contract, subject to maximum amount, as stated in the Contract Clause 3.51.

1.35 Conciliator

- 1.35.1 The Employer proposes that CIDC – SIAC Arbitration Centre be appointed as Conciliator under the contract as provided in sub-clause 3.24.1 of condition of contract. If the bidder disagrees with this proposal, the bidder should so state in the bid.

1.36 Corrupt or Fraudulent Practices

- 1.36.1 The Employer requires that Bidders/Suppliers/Contractors under this contract, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, the Employer:

(a) Defines, for the purpose of these provisions, the terms set forth below as follows:

(I) “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution ;and

(II) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.

(b) Will reject a proposal for award of work if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

(c) Will declare a Bidder ineligible, either indefinitely for a stated period of time, to be awarded a contract/contracts if he at any time determines

that the Bidder has engaged in corrupt or fraudulent practices in competing for or in executing, the contract.

1.36.2 Further more, Bidders shall be aware of the provision stated in sub-clause

SECTION: 2

FORMS OF BID, QUALIFICATION INFORMATION

TABLE OF FORMS

- 1. FORM OF BID**
- 2. CONTRACTOR'S BID**
- 3. PRE-QUALIFICATION OF BIDDERS**
- 4. LETTER OF ACCEPTANCE**
- 5. NOTICE TO PROCEED WITH THE WORK**
- 6. AGREEMENT FORM**

SPECIMEN FOR FORM OF BID
(To be executed on bidder's letter head)

To

The EXECUTIVE ENGINEER (C-I),
Deendayal Port
AUTHORITY,
ROOM NO. 302, 2nd FLOOR, A O
BUILDING-
ANNEX, GANDHIDHAM
KAC HCHH-370201).

We, the undersigned, declare that:

- (a) we have examined and have no reservations to the tender documents, including addenda and clarifications issued
- (b) we offer to execute the work in conformity with the tendering documents and in accordance with the delivery schedules specified in the schedule of requirements in accordance with the tender document
- (c) The total price of our tender, excluding any discounts offered in item(d) below, is [insert the total tender price in words and figures, indicating the various amounts and the respective currencies];[in case of techno-commercial offer it shall be mentioned that 'as filled in the price bid']
- (d) The discounts offered and the methodology for their application are: **Discounts.** if our tender is accepted, the following discounts shall apply. **Methodology of application of the discounts.** The discounts shall be applied using the following method:
- (e) our tender shall be valid for the period of time specified in **[ITB Sub-clause 1.15.1]**, from the date fixed for the tender submission deadline in accordance with **[ITB Sub-clause 1.20.1]** , and it shall remain binding upon us and may be accepted at any time before the expiration of that period or any extended period accordance with **[ITB Sub-clause 1.15.2]**;
- (f) If our tender is accepted, we commit to submit a performance guarantee in accordance with [insert relevant clause no., ITB Sub-clause 1.33] for the due performance of the contract, as specified in specimen form for the purpose.
- (g) We, including any subcontractors or contractors for any part of the contract, (h) We have no conflict of interest in accordance with **[ITB Sub-clause no 1.3.2]**.

- (i) Our firm, its affiliates or subsidiaries has not been declared ineligible by the port, under laws of India or official regulations in accordance with **[ITB Sub- clause no.1.3.4]**
- (j) We understand that this tender, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract agreement is prepared and executed in accordance with **[ITB Sub- clause 1.32]** and as per specimen from the purpose;
- (k) We understand that you are not bound to accept the lowest evaluated tender or any other tender that you may receive.
- (l) We also make specific note clauses of [ITB, NIT] under which the contract is governed.
- (m) In case of out station firms, having a branch in India for liaison purposes, please mention the name of the contact person and Tel. no., Fax. no., and mail-Id and also the complete postal address of the firm.
- (n) We understand that the communication made with the firm at (m), by the port shall be deemed to have been done with us.

Signed: [insert signature of person whose name and capacity are shown]

In the capacity of [insert legal capacity of person signing the form of tender]

Name:[insert complete name of person signing the form of tender]

Duly authorized to sign the tender for and on behalf of: [insert complete name of tenderer]

Dated on _____ day of _____, _____ (insert date of signing)

CONTRACTOR’S BID

Description of the works: - “Up-Gradation of Road From Junction Of
Tuna Jetty Road To Take Off Point At Tuna Tekra

BID

TO ----- (The employer)

Address -----

GENTLEMEN,

We offer to execute the works described above in accordance above with the conditions of Contract accompanying this bid for the contract price of _____(in figures)

_____ (in letters)

The advance payment required / not required as per rule.
We accept appointment of _____as the conciliator’s letter. Or
We do not accept the appointment of _____as the conciliator and proposed instruct that _____be appointed as conciliator who’s daily fees and biographical data are attached.

This bid and your written acceptance of it shall constitute a binding contract between us.
We understand that you are not bound to accept the lowest or any bid you receive.
We undertake that, in competing for(and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force In India namely “prevention of corruption act 1988”
We hereby confirm that this bid complies with the bid validity and security required by the bidding documents.
We attach herewith our copy of permanent account number (PAN)

Yours faithfully,

Authorized Signature:

Name& title of signatory
Name of Bidder
Address

Notes:
To be filled in by the bidder, together with his particulars and date of submission at the bottom of the form of bid.

Pre-Qualification of bidders

The information to be filled in by the bidder in the following pages will be used for purposes of pre-qualification as provided for in the instructions to tenderers.

1. Only for individual bidders

Constitution or legal status of bidder (attach copy)

- Place of registration
- Principal place of business
- Power of attorney of signatory of bid(Attach)

2. Turnover of the firm/JV

YEAR	TURN OVER
2020-21 2021-22 2022-23 Average	

Attachments: Financial reports for the last three years; balance sheets, profit and loss statement, auditors reports (in case of companies/ corporation) etc., list them below and attach copies.

3. Similar works

Particulars	Year	No. of works	Value
Total value completed similar work as defined in the tender document during last 7 years			
	2016-17		
	2017-18		
	2018-19		
	2019-20		
	2020-21		
	2021-22		
	2022-23		

Attachments: Supporting documents, viz., successful completion certificates from clients, other documentations to substantiate the similarity of work as per definition of “similar work” employers reserves the right to verify the information;

4. Information on bid capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

(A) Existing commitments and on-going works.

Description of work	Place & state	Contract no.& date	Name & address of port or Dept.	Value of contract Rs	Stipulated Period of completion	Value of remaining to be completed	Anticipated date of completion
1	2	3	4	5	6	7	8

(B) Works for which bids already submitted

Description of work	Place & state	Name & address of port or Dept.	Value of contract Rs	Stipulated Period of completion	Date when decision is expected	Remarks if any
1	2	3	4	5	6	7

Attach certificates from the nodal officer or his nominee(s)-in-charge.

5. The following contractor’s equipment are essential for carrying out the works. The bidder should list all information requested below.

Item of equipment	Requirement no. capacity	Owned/leased /to be procured	No.s/ capacity	Age/condition	Remarks
1	2	3	4	5	6

6. Qualification and experience of key personnel proposed for administration and execution of the contract. Attach biographical data. Refer also to sub. clause 1.4.2(e) of instructions to bidders and sub. clause 1.9.1 of the condition of contract.

Position	Name	Qualification	Years of experience (general)	Years of experience in the proposed position
Project manager				
Discipline specialist etc.,				

7. Proposed sub-contracts and firms involved.

Sections of the works	Value of sub-contract	Sub-contractor (name and address)	Experience in similar work

8. Information on litigation history in which the bidder is involved.

Other party(ies)	Port / Dept.	Cause of dispute	amount	Remarks involved showing present status

9. Additional information bidder may like to submit.

Duly authorized to sign this authorization on behalf of (insert complete name of tenderer)

Dated on _____ day of _____ [insert date of signing]

LETTER OF ACCEPTANCE
(On letterhead paper of the port)

_____ (date)

TO: _____
(Name and address of the contractor)

Dear Sirs,

Sub: Tender no. C:I :01/2023
“Up-Gradation of Road From Junction Of Tuna Jetty Road To Take Off Point At Tuna Tekra

Ref: Your bid dated _____
And [list the correspondence with the bidder]

This is to notify you that your bid dated _____ for execution of the _____ (name of the contract and identification number, as given in the instructions to bidders) for the contract price of rupees _____ (amount in words and figures as corrected and modified) in accordance with the tender document is here by accepted by the employer/Board.

You are hereby requested to furnish performance security, in the form detailed in tender document for an amount of Rs. _____ within {_____} days of the receipt of this letter of acceptance valid upto 28 days from the date of completion obligations expiry of taking over certificate subject to removal of defects period i.e upto _____ and also sign the contract agreement within {_____} days of the receipt of this letter of acceptance, failing which action as stated in the tender document will be taken.

Detailed letter of acceptance will follow.

Please acknowledge receipt.

Yours faithfully

Authorized signature

ISSUE OF NOTICE TO PROCEED WITH THE WORKS
(Letterhead of the Port)

_____dated

To
(Name and address of the contractors) Dear

Sirs,

Sub.: **Tender for “Up-Gradation of Road From Junction Of Tuna Jetty
Road To Take Off Point At Tuna Tekra**

Ref: Letter of acceptance no. dated

Pursuant to your furnishing the requisite security as stipulated in [clause of general conditions of contract] and signing of the contract for execution of the_____you are hereby instructed to precede with the execution of the said works in accordance with the contract documents. It is hereby notified that the [site] is being handed over to you for execution of work in accordance with the contract documents.

Yours faithfully,

(Signature, name and title of
Signatory authorized to sign on
Behalf of employer/board)

SPECIMEN CONTRACT AGREEMENT

(to be executed on Rs.100 non-judicial stamp paper)

[the successful tenders shall fill in this form in Accordance with the instructions indicated]

THIS CONTRACT AGREEMENT is made

The [insert: number] day of [insert: month], [insert: year]

Between

(1) The Board of Deendayal Port of Authority, an autonomous body of the Ministry of Port Shipping & waterways of the Government of INDIA, incorporated under the Major Port AUTHORITIES Act, 2021 as, under the laws of India and having its principal place of business at A.O. Building, Post Box No. 50, Gandhidham – (Kutch), Gujarat State, India (hereinafter called "the BOARD"), and

(2) [insert name of the contractor], [incorporated under] the laws of [country of contractor] and having its place of business at [insert: address of contractor] (hereafter called "the contractor")

WHEREAS the employer board invited tenders against tender no. [number] for execution of [tender title and brief description] and has accepted a tender by the contractor in accordance with the supply/delivery schedules, in the sum of [insert contract price in words and figures, expressed in the contract currency (ies)] (hereafter called "contract price")

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this agreement words and expressions shall have the same meanings as per respectively assigned to them in the conditions of contract refer to.
2. the following documents shall constitute the contract between the employer/ board and the contractor, and each shall be read and construed as an integral part of the contract:

- (a) This contract agreement;
- (b) Special conditions of contract;
- (c) General conditions of contract;
- (d) Technical requirements (including schedule of requirements and technical specifications, drawings);
- (e) Notice inviting tender;
- (f) Replies issued to the pre-bid queries, addenda if any issued[numbers and date];
- (g) The contractor's bid and original price and delivery schedules;
- (h) The employer/ board's notification of award;
- (i) [correspondence the employer/board has exchanged with the bidder till and after award of contract[specific letters and dates]]
- (j) And [add here any other documents]

ANDWHEREAS

EMPLOYER/BOARD accepted the bid of CONTRACTOR for the provision and the execution of WORK at the CONTRACT PRICE as indicated in CONTRACT upon the terms and subject to the conditions of contract. Now this CONTRACT AGREEMENT witness and it is hereby agreed and declared as follows:

3. In consideration of the payment to be made to CONTRACTOR for work to be executed by him. CONTRACTOR hereby covenants with EMPLOYER/ BOARD what CONTRACTOR shall and will duly provide, execute and complete work and things in CONTRACT, mentioned or described or which are to be implied there from or may be reasonably necessary for completion of work and the times and in the manner and subject to the terms and conditions or stipulations mentioned in CONTRACT.
4. In consideration of the due provision, execution and completion of work by the contractor in accordance with the terms of the contract, the employer/board

does hereby agree with contractor that employer /board will pay to contractor the respective amounts for the work actually done by him ad approved by employer/board as per payment terms accepted in contract and payable to contractor under provision of contract at such manner as provided for in the contract.

5. In consideration of the due provision, execution and completion of work, contractor done hereby agree to pay such sums as may be due to employer/ board for the services rendered by employer/ board to contractor as set forth in contract and such other sums as may become payable to employer/ board towards loss, damage to the employer/ board's equipment, materials etc. and such payments to be made at such time and in such manner as is provided in the contract.

IN WITNESS where of the parties hereto have caused this agreement to be executed in accordance with the laws of [insert name of the contract governing law country] on the day, month and year indicated above.

For and behalf of the employer/ board

Signed: [insert signature]

In the capacity of [insert title or other appropriate designation] In

the presence of [insert identification of official witness]

For any behalf of the contractor

Signed: [insert signature of authorized representatives of the contractor] In

the capacity of [insert title or other appropriate designation]

In the presence of [insert identification of official witness]

SECTION 3

CONDITIONS OF CONTRACT

CONDITIONS OF CONTRACT

A. General

3.1 Definitions

3.1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings capital initials are used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.

Compensation Events are those defined in Clause 3.44

The Completion Date is the date of Completion of the Works as certified by the Nodal Officer or his nominee in accordance with Sub Clause 3.55.1

The Contract is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 3.2.2 below.

The Contract Data defines the documents and other information which comprise the Contract.

The Contractor is a person or corporate body whose Bid to carry out the Works has been accepted by Employer.

The Contractor's Bid is the completed Bidding documents submitted by the Contractor to the Employer.

The Contract Price is the stated in the letter of acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days, months are calendar months.

A Defect is any part of the Works not completed in accordance with the Contract. **The Defects Liability Period** is the Period named in the Contract Data and calculated from the Completion Date.

The Employer is the party who will employ the contractor to carry out the Works. **The Nodal Officer** or his nominee is the person named in the Contract Data (or any other Competent person appointed and notified to the contractor to act in replacement of the Nodal Officer or his nominee) who is responsible for supervising

the Contractor, Administering the Contract, certifying payments due to the Contractor, issuing and valuing Variations to the contract, awarding extensions of time and valuing the Compensation Events.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The Initial Contract Price is the Contract Price listed in the employer's Letter of Acceptance.

The Intended completion Date is the date on which it is intended that the Contractor shall complete the works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Nodal Officer or his nominee by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any integral part of the Works which is to have mechanical, electrical, electronic or chemical or biological function.

The Site is the area defined as such in the Contract Data.

Site Investigation Reports are those which were included in the Bidding documents and are factual interpretative reports about the surface and subsurface conditions at the site.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Nodal Officer or his nominee.

The Start Date is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Date.

A Subcontractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the site.

Temporary Works are works designed, constructed, installed and removed by the Contractor which are needed for construction or installation of the Works.

A Variation is an instruction given by the Nodal Officer or his nominee which varies the Works.

The Works are what the Contract requires the Contractor to construct, install and turn over to the Employer as defined in the Contract Data.

The Trained Work Person are those employed/proposed to be employed by the Contractor at the Project Site, who have participated and are in possession of a valid Competency Certificate through a programme run under the auspices of a University, State Technical Board, Ministry of Government of India.

Board – Board of Trustees of the Deendayal Port, a body corporate under the Major Port Act, 2021 as amended from time to time.

Chairman means the Chairman of the Board of Trustee of Deendayal Port.

“Engineer-in-Charge” means the Nominee of Chief Engineer of the Deendayal Port AUTHORITY.

3.2 Interpretation

In interpreting this Condition of Contract, singular also means plural, male also means female or neuter and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract instructions clarifying queries about the Conditions of Contract.

3.2.1 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).

3.2.2 The documents forming the Contract shall be interpreted in the following order of priority:

1. Agreement
2. Letter of Acceptance and notice to proceed with Works Contractor’s Bid.
3. Contract Data
4. Conditions of Contract including Special Conditions of Contract
5. Specifications
6. Drawings
7. Bill of quantities
8. Any other documents listed in the Contract Data as forming part of the Contract.

3.3 Language and Law

- 3.3.1 The language of the Contract and the law governing the Contract are stated in the Contract Data.

3.4 Nodal Officer or his nominee's Decisions

- 3.4.1 Except where otherwise specifically stated, the nodal officer or his nominee will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

3.5 Delegation

- 3.5.1 The Nodal officer or his nominee may delegate any of the duties and responsibilities to other people except to the Conciliator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

3.6 Communications

- 3.6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act 1872).

3.7 Joint Venture

Companies/Contractors may jointly undertake contract/contracts. Each only would be jointly and severally responsible for completing the task as per the contract, however declaration of the Lead member to be indicated by bidders, however JV has to designate in their MOU. The firms with at least 26% equity holding each be allowed to jointly meet the eligibility criteria. However, there shall be no limit on the number of partners.

3.8 Subcontracting

- 3.8.1 The Contractor may subcontract with the approval of the Nodal Officer or his nominee but may not assign the Contract without the approval of the Employer in writing. Subcontracting does not alter the Contractor's obligations.

3.8.2 Other Contractor

The Contractor shall co-operate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of other contractors. The Contractor shall as referred to in the Contract Data, also provide facilities and services for them as described in the Schedule. The employer may modify the schedule of other contractors and shall notify the contractor of any such modification.

3.9 Personnel

- 3.9.1 The contractor shall employ the key personnel named in the schedule of key personnel as referred to in the contract Data to carry out the functions stated in the schedule or other personnel approved by the Nodal officer or his nominee. The Nodal Officer or his nominee will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal or better than those of the personnel listed in the schedule.
- 3.9.2. If the Nodal Officer or his nominee asks the Contractor to remove a person who is a member of the Contractor's staff of his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connections with the work in the Contract.

3.10 Employer's and Contractor's Risks

- 3.10.1 The Employer carries the risks which this contract states are Employer's risks and the Contractor carries the risks which this Contract states are Contractor's risks.

3.11 Employers Risks

- 3.11.1 The Employers risks are

- (a) In so far as they directly affect the execution of the Works in the country where the Permanent Works are to be executed:
 - (i) War and hostilities (whether war be declared or not), invasion, act of foreign enemies:
 - (ii) Rebellion, revolution, insurrection, or military or usurped power, or civil war,
 - (iii) Ionizing radiations, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste, from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof:
 - (iv) Pressure waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds ;and
 - (v) riot, commotion or disorder, unless solely restricted to the employees of the Contractor or of his Subcontractors and arising from the conduct of the Works;
 - (vi) floods, tornadoes, earthquakes and landslides
- (b) Loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract;
- (c) Loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible; and

(d) Any operation of the forces of nature (in so far as it occurs on the Site) which an experienced contractor:

- (i) could not have reasonably foreseen, or
- (ii) Could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures.

- A. Prevent loss or damage to physical property from occurring by taking appropriate measures, or
- B. Insure against.

3.12 Contractor's risks

3.12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

3.13 Insurance

3.13.1 The Contractor shall provide in the joint names of the employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles state in the Contract Data for the following events which are due to the Contractors risks.

(a) Loss of or damage to the Contractors risks.

(b) Loss of or damage to Equipment;

(c) Loss of or damage property (except the Works, Plant, Materials and Equipment in connection with the Contract, and

(d) Personal injury of death.

3.13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Nodal Officer or his nominee for the Nodal Officer or his nominee's approval before Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

3.13.3. If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment of the premiums shall be a debt due.

3.13.4. Alternate to the terms of insurance shall not be made without the approval of the Nodal Officer or his nominee.

3.13.5. Both parties shall comply with all conditions of the insurance policies.

3.14. Site Investigation Reports

3.14.1 The Contractor, in preparing the Bid, shall rely on the Investigation Report referred to in the Contract Data, supplemented by any information available to the Bidder.

3.15. Queries about the Contract Data.

3.15.1 The Nodal Officer or his nominee will clarify queries on the Contract Data.

3.16. Contractor to Construct the Works.

- 3.16.1. The Contractor shall construct and install the Works in accordance with the Specification and Drawings.

3.17. The Works to Be Completed by the Intended Completion Date.

- 3.17.1. The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor as updated with the approval of the Nodal Officer or his nominee, and complete them by the Intended Completion Date.

3.18. Approval by the Nodal Officer or his nominee.

- 3.18.1. The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Nodal Officer or his nominee, who is to approve them if they comply with the specifications and Drawings.

3.18.2. The Contractor shall be responsible for design of Temporary Works.

3.18.3. The Nodal Officer or his nominee's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

3.18.4. NIL

3.18.5. All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Nodal Officer or his nominee before their use.

3.19. Safety

- 3.19.1 The Contractor shall be responsible for the safety of all activities on the Site.

3.20 Discoveries.

- 3.20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The contractor is to notify the Nodal Officer or his nominee of such discoveries and carry out the Nodal Officer or his nominee's instructions for dealing with them.

3.21 Possession of the Site.

- 3.21.1 The Employer shall give possession of *all parts* of the Site to the Contractor, free from encumbrances. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be a Compensation Event.

3.22. Access to the Site

- 3.22.1. The Contractor shall allow the Nodal Officer or his nominee and any person authorized by the Nodal Officer or his nominee access to the Site to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured, fabricated and/or assembled for the works.

3.23. Instructions

- 3.23.1. The Contractor shall carry out all instructions of the Nodal Officer or his nominee which comply with the applicable laws where the Site is

located.

3.24. Disputes

- 3.24.1. If the Contractor believes that a decision taken by the Nodal Officer or his nominee was either outside the authority given to the Nodal Officer or his nominee by the Contract or that the decision was wrongly taken, the decision shall be referred to the conciliator within 28 days of the notification of the Nodal Officer or his nominee's decision.

3.25. Settlement of Disputes

- 3.25.1. If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with, or arising out of the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after repudiation or after termination of the Contract, including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate or valuation of the Nodal Officer or his nominee, the matter in dispute shall, in the first place be referred to the Disputes Review Board [DRD] in case of contracts valuing more than Rs.5 crores and above, and for contracts valuing less than Rs. 5 crores, the disputes will firstly be settled by the Conciliator, failing which any party may invoke arbitration clause.

Unless the Contract has already been repudiated or terminated or frustrated the Contractor shall in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer shall give effect forthwith to every decision of the Nodal Officer or his nominee unless and until the same shall be revised, as hereinafter provided, by the conciliator or in a Dispute Review Board recommendation / Arbitral Award.

3.25.2. Decision by Conciliator

- (i) The Conciliator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- (ii) Conciliator shall be paid daily at the rate specified in the contract Data together with reimbursable expenses of the types specified in the contract data and the cost shall be divided equally between the Employer and the contractor, whatever decision is reached by the conciliator, either party may refer a decision of the conciliator within 28 days of the conciliator's written decision. If neither party refers the disputes to arbitration within 28 days, the conciliator's decision will be final and binding.

3.25.3 Arbitration

Any dispute in respect of contracts where party is dissatisfied by the Conciliator's decision, shall be decided by arbitration as set forth below:

- (i) A dispute with Dispute review expert shall be finally settled by arbitration in accordance with the Indian Arbitration and Conciliation Act, 1996, or any statutory amendment thereof. The arbitral tribunal shall consist of 3 arbitrators, one each to be appointed by the Employer and the Contractor, and the third to be appointed by the mutual consent of both the arbitrators, failing which by making a reference to CIDC-SIAC Arbitration Centre from their panel.

- (ii) Neither party shall be limited in the proceeding before such arbitrations to the evidence or arguments already put before the Nodal Officer or his nominee or the Board, as the case may be, for the purpose of obtaining said recommendations/decision. No such recommendations/decision shall disqualify the Nodal Officer or his nominee or any of the members of the Board, as the case may be, from being called as a witness and giving evidence before the arbitrators or any matter whatsoever relevant to the dispute.
- (iii) The reference to arbitration shall proceed notwithstanding that the works shall not then be or be alleged to be complete , provided always that the obligations of the Employer, the Nodal Officer or his nominee and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the works. Neither party shall be entitled to suspend the work to which the dispute relates, and payment to the contractor shall be continued to be made as provided by the contract.
- (iv) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause [i], within 14 days after receipt of the notice of the appointment of its arbitrator by the other party, then chairman of the nominated Institution shall appoint arbitrator within 14 days of the receipt of the request by the nominated institution. A certified copy of the chairman's order, making such an appointment shall be furnished to both the parties.
- (v) Arbitration proceedings shall be held at, and the language of the arbitration proceeding and that of all documents and communications between the parties shall be 'English'
- (vi) The decision of the majority of arbitrators shall be final and binding upon both parties. The expenses of the arbitrators as determined by the arbitrators shall be shared equally by the Employer and the Contractor. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its case prior to, during and after the arbitration proceedings shall be borne by each party itself.
- (vii) All arbitration awards shall be in writing and shall state the reasons for the award.
- (viii) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the employer shall not be withheld, unless they are subject matter of the arbitration proceedings.

3.26. Replacement of Conciliator

- 3.26.1 Should the Conciliator resign or die, or should the Employer and the Contractor agree that the conciliator is not fulfilling his functions in accordance with the provisions of the Contract, a new Conciliator will be jointly appointed by the Employer and the Contractor.

In case of disagreement between the Employer and the Contractor, within 30 days the Conciliator shall be appointed by the Appointing Authorities designated in the Contract Data at the request of either party within 14 days of receipt of such request.

B. TIME CONTROL

3.27 Program

- 3.27.1 Within the time stated in the contract data the contractor shall submit to the Nodal officer or his nominee for approval a program showing the general methods arrangements, order, and timing for all the activities in the works along with monthly cash flow forecast.

- 3.27.2. An update of the program shall be a program showing the actual progress achieved on the timing of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 3.27.3. The contractor shall submit to the Nodal Officer or his nominees, for approval an updated program at intervals no longer than the period stated in the contract data. If the contractor does not submit an updates program within this period, the Nodal Officer or his nominee may withhold the amount stated in the contract data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted.
- 3.27.4 The nodal officer or his nominee's approval of the program shall not alter the contractor's obligations. The contractor may revise the program and submit it to the nodal officer or his nominee again at any time. A revise program is to show the effect of variations and compensation events.

3.28 Extension of the intended completion date.

The nodal officer or his nominee shall extend the intended completion date if a compensation event occurs or a variation is issued which makes it impossible for completion to be achieved by the intended completion date without the contractor taking steps to accelerate the remaining work and which would cause the contractor to incur additional cost. The nodal officer or his nominee shall decide whether and by how much to extend the intended completion date within 21 days of the contractor asking the Nodal Officer or his nominee for decision upon the effect of a compensation event or variation and submitting full supporting information. If the contractor has failed to give early warning of a delay or has failed to cooperate in assessing the new intended completion date.

3.29 The Early Warning Provisions shall be as per clause 3.32.

3.30 Delays Ordered by the Nodal Officer or his nominee.

- 3.30.1 The Nodal Officer or his nominee may instruct the contractor to the start or Progress of any activity within the works.

3.31. Management Meeting.

Either the Nodal Officer or his nominee or the contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

- 3.31.2. The Nodal Officer or his nominee shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the employer. The responsibility of the parties for actions to be taken is to be decided by the Nodal Officer or his nominee either at the management meeting or after the management meeting and state in writing to all attended the meeting.

3.32. Early warning

- 3.32.1. The contractor is to warn the Nodal Officer or his nominee at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the contract price or delay the execution of works. The Nodal Officer or his nominee may require the

contractor to provide an estimate of the expected effect of the event or circumstances on the contract price and completion date. The estimates are to be provided by the contractor as soon as reasonably possible.

- 3.32.2. The contractor shall cooperate with the Nodal Officer or his nominee in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Nodal Officer or his nominee.
- 3.32.3. The Defect Liability period for the contract shall be **12months** from the date issue of completion certificate.

C. QUALITY CONTROL

3.33. Identify Defects

- 3.33.1. The Nodal Officer or his nominee shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Nodal Officer or his nominee may instruct the Contractor to search for a Defect and to uncover and test any work that the Nodal Officer or his nominee considers may have a Defect.

3.34. Tests

- 3.34.1. If the Nodal Officer or his nominee instructs the Contractor to carry out a test not specified in the specification to check whether any work has a Defect and the test shows that it does the Contractor shall pay for the test and any samples.

3.35. Correction of Defects

- 3.35.1 The Nodal Officer or his nominee shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 3.35.2. Every time notice of a Defect is given the Contractor shall correct the notified Defect within the length of time specified by the Nodal Officer or his nominee's notice.

3.36. Uncorrected Defects

- 3.36.1 If the Contractor has not corrected a Defect within the time specified in the Nodal Officer or his nominee's notice the Nodal Officer or his nominee will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

D. COST CONTROL

3.37. Bill of Quantities

- 3.37.1. The Bill of Quantities shall contain items for the construction, supply, installation, testing and commissioning work to be done by the Contractor.
- 3.37.2. The bill of quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item as jointly measured by both their representatives.

3.38. Changes in the Quantities

- 3.38.1. If the final quantity of the work done differs from the quantity in the Bill of

Quantities for the particular item by more than + 25 percent provided the change exceeds + 10% of initial Contract Price, the Nodal Officer or his nominee shall adjust the rate (s), to allow for the change, in accordance with Clause 3.40.

3.38.2. The Nodal Officer or his nominee shall not adjust rates from changes in quantities if thereby the initial Contract Price is exceeded by more than 15 percent except with prior approval of the Employer.

3.38.3. If requested by the Nodal Officer or his nominee where the quoted rate (s) of any item(s) is/are abnormally high, the Contractor shall provide the Nodal Officer or his nominee with a detailed cost breakdown of such rate in the Bill of Quantities.

3.39. Variations.

3.39.1. All Variations shall be included in updated programs produced by the Contractor.

3.40. Payment for Variations.

3.40.1. Variation permitted shall not exceed +25% in quantity of each individual item, and +10% of the total contract price, within 14 days of the date of instruction for executing varied work, extra work or substitution, and before the commencement of such work, notice shall be given either (a) by the contractor to the Employer of his intention to claim the extra payment or a varied rate or price, or (b) by the Employer to the contractor of his intention to vary rate or price.

3.40.2. For items not existing in the Bill of Quantities or substitution to items in the Bill of Quantities, rate payable should be determined by methods given below and in the order given below:

- 1) Rates and prices in Contract, if applicable plus escalation as per contract.
- 2) Rates and prices in the schedule of rates applicable to the contract plus ruling percentage.
- 3) Market rates of materials and labour, hire charges of plant and machinery used, plus 10% for overheads and profits of Contractors.

3.40.3. For items in the Bill of quantities but where quantities have increased beyond the variation limits, the rate payable for quantity in excess of the quantity in the Bill of Quantity plus the permissible variation should be:

- 1) Rates and prices in contract, if reasonable plus escalation, failing which (ii) and (iii) below will apply
- 2) Rates and prices in the schedule of Rates applicable to the contract plus ruling percentage,
- 3) Market rates of material and labour, hire charges of plant and machinery used plus 15% for overheads and profits of contractor.

3.40.4. If there is delay in the Employer and the contractor coming to an agreement on the rate of an extra item, rates as proposed by the employer shall be payable provisionally till such time as the rates are finally determined or till date mutually agreed.

3.40.5. If the Nodal officer or his nominee decides that the urgency of varying the work prevent a quotation being given and considers not delaying the work, no quotation shall be given and the variation shall be treated as a Compensation Event.

3.41 Cash flow forecasts.

3.41.1. When the program is updated, the contractor is to provide the Nodal Officer or his nominee with an updated cash flow forecast.

3.42 Payment Certificates.

- 3.42.1 The contractors shall submit to the Nodal Officer or his nominee monthly statements of the estimated value of the work completed less the cumulative amount certified previously.
- 3.42.2 The Nodal Officer or his nominee shall check the Contractors' monthly statement within 14 days and certify the amount to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amount and under conditions set forth in sub clause 3.51.6 of the Contract Data (Secured Advance).
- 3.42.3 The value of work executed shall be determined by the Nodal Officer or his nominee.
- 3.42.4 The value of work executed shall comprise the value of quantities of the items in the Bill of quantities completed.
- 3.42.5 The value of work executed shall include the valuation of variations and Compensation Events.
- 3.42.6 The Nodal Officer or his nominee may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

3.43. Payments.

- 3.43.1 Bills shall be prepared and submitted by the Contractor, joint measurements shall be taken continuously and need to be connected with billing stage. System of 4 copies of measurements, one each for Contractor, Employer and Nodal Officer or his nominee, and signed by both Contractor and Employer shall be followed.
- 3.43.2. 75% of bill amount shall be paid within 14days of submission of the bill. Balance amount of the verified bill should be paid within 28 days of the submission.
- 3.43.3 For delay in payment beyond the periods specified in 3.43.2 above, interest at a pre-specified rate (suggested rate SBI *PLR* + 2%)p.a as on due date of payment) should be paid.
- 3.43.4. Contractor shall submit final Bill within 60 days of issue of defects liability certificate. Client's Nodal Officer or his nominee shall check the bill within 60 days after its receipt and return the bill to Contractor for corrections, if any 50% of undisputed amount shall be paid to the contractor at the stage of returning the bill.
- 3.43.5 The Contractor should re-submit the bill, with corrections within 30 days of its return by the Nodal Officer or his nominee. The re-submitted bill shall be checked and paid within 60 days of its receipt.
- 3.43.6 Interest at a pre-specified rate (suggested rate SBI *PLR*+ 2% p.a. as on due date of payment) shall be paid if the bills is not paid within the time limit specified above.
- 3.43.7 If an amount certified is increased in later certificates as a result of an award by the Conciliator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 3.43.8 Items of the Works for which no rate or price has been entered in will not be paid for by the employer and shall be deemed covered by other rates and prices in the Contract.

3.44. Compensation Events

- 3.44.1 The following mutually agreed Compensation Events unless they are caused by

the Contractor would be applicable.

- (a) The Employer does not give access to a part of the Site by the site. Possession Date stated in the Contract Date.
- (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
- (c) The Nodal Officer or his nominee orders a delay or does not issue drawings, specifications or instructions required for execution of works on time .
- (d) The Nodal Officer or his nominee instructs the Contractor to uncover to carry out additional tests work which is then found to have no Defects .
- (e) The Nodal Officer or his nominee unreasonably does not approve for a subcontract to delete.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of letter of Acceptance from the information issued to Bidders(including the Site Investigation Reports), from information available publicly and form a visual inspection of the site.
- (g) The Nodal Officer or his nominee gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities or the Employer does not work within the dates and other constraints stated in the Contract that cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effect on the Contractor of any of the Employer's Risks.
- (k) The Nodal Officer or his nominee unreasonably delays issuing a Certificate of Completion.
- (l) Other Compensation Events listed in the Contract Date or mentioned in the contract.
- (m) Whenever any compensation event occurs, the contractor will notify the employer, within 14 days and provide a forecast cost of the compensation event.

3.44.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the intended Completion Date, the Contract Price shall be increased and/or the intended Completion Date shall be extended. The Nodal Officer or his nominee shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

3.44.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast has been provided by Contractor, it is to be assessed by the Nodal Officer or his nominee and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable the Nodal officer or his nominee shall adjust the Contract Price based on Nodal Officer or his nominee's own forecast. The Nodal Officer or his nominee will assume that the Contractor will react competently and promptly to the event.

3.45. Tax

3.45.1. The rates quoted by the Contractor shall be deemed to be inclusive of the

sales and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at sources as per applicable law. Any new Taxes, levies, duties imposed after signing the Contract shall be reimbursed by the employer on production of documentary evidence.

3.46. Currencies

3.46.1. All payments shall be made in Indian Rupees unless specifically mentioned.

3.47. Price Adjustment.

3.47.1. Contract price shall be adjusted for increase or decrease in rates and prices of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given. The price adjustment shall apply for the work done from the start date given in the Contract data up to end of the initial intended completion date or extensions granted by the Nodal Officer or his nominee and shall not apply to the work carried beyond the stipulated time for reason attributable to the contractor.

(I) Price adjustment for increase or decrease in the cost shall be paid in accordance with the following formula:

$$V = 0.85 \times Q \times R \times [(P-Po) / Po]$$

Where,

V = Variation in price on account of Labour/ Diesel/ Cement/ Steel/ All Commodities during the month under consideration.

Po = Market rate of Diesel/ Cement/ Steel/ All Commodities on the date of opening of Technical bid. (Consumer Price Index for Labour).

P = Market rate of Diesel/ Cement/ Steel/ All Commodities during the month under consideration. (Consumer Price Index for Labour).

Q = Percentage of Labour/ Diesel/ Cement/ Steel/ All Commodities.

R = Value of work done during the month under consideration.

Note: i) Escalation to be computed for relevant items. Percentage that shall govern the escalation under Q shall be predetermined and indicated in tender document for each component i.e. Labour, Fuel, Cement, Steel, All commodities etc.

	Labour	Diesel	Cement	Steel	All Commodities
Q(%)	40%	10%	5%	3%	42%
P	All India Consumer Price Index for Industrial Workers for the month under consideration as published in the RBI Bulletin / Indian Labour Journal (Base 2016=100 or latest available base)	Retail Price of HSD received at Kandla by M/s. IOCL for the month under consideration	Wholesale Price Index for Cement for the month under consideration as published in RBI Bulletin/Indian Labour Journal (Base 2011-12=100 or latest available base)	Wholesale Price Index for Steel for the month under consideration as published in RBI Bulletin/Indian Labour Journal (Base 2011-12=100 or latest available base)	Wholesale Price Index for All Commodities for the month under consideration as published in RBI Bulletin/Indian Labour Journal (Base 2011-12 = 100 or latest available base)
Po	All India Consumer Price Index for Industrial	Retail Price of HSD received at Kandla by M/s. IOCL as on the	Wholesale Price Index for Cement ruling in the month in	Wholesale Price Index for Steel ruling in the month in which	Wholesale Price Index for All Commodities ruling in the

	Workers as prevalent in the month in which bids are opened & as published in the RBI Bulletin/Indian Labour Journal (Base 2016=100	date of opening of Bids.	which the Bids are opened and as published in RBI Bulletin/Indian Labour Journal (Base 2011-12=100)	the Bids are opened and as published in RBI Bulletin/Indian Labour Journal) (Base 2011-12=100)	month in which the Bids are opened and as published in RBI Bulletin /Indian Labour Journal (Base 2011-12=100)
--	--	--------------------------	---	--	---

3.47.2. NIL

3.47.3. To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amount to cover the contingency of such other rise or fall in costs.

SUBSEQUENT LEGISLATION

If, after the date 28(Twenty eight) prior to the date for submission of tenders for the contract there occur changes to any National or Statute Stature, Ordinance or Decree or other law or any regulation or bye law of any local or other duly constituted authority or introduction of any such statute, ordinance, decree, law, regulation or bye law which causes additional or reduced cost to the contractor in execution of the contract, such additional or reduced cost shall, after due consultation with the employer and the contractor be determined by the nodal officer or his nominee and shall be added to or deducted from the contract price and the nodal officer or his nominee shall notify the contractor accordingly with a copy to the employer.

3.48. Retention

- 48.1 The employer shall retain from each payment due to the contractor the proportion stated in the contract data until completion of the whole of the works.
- 48.2. Retention money shall be deducted at 5%from each running bill, subject to a max. of 5 percent of the contract price. Retention money shall be refunded within 14 days from the date of payment of final bill.

3.49. Liquidated damages

- (A) In case of delay in completion of the contract, liquidated damages (L.D) may be levied at the rate of ½ %of the contract value per week of delay or part there of, subject to a maximum of 10 percent of the contract price.
- (i) The owner if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time for completion , may allowfurtherextensionoftimeatitsdiscretionwithorwithoutthelevyof L.D. In the event of extension of time at its discretion with L.D, the owner will be entitled without prejudice to any other right or remedy available in that behalf per cent (1/2%) of the contract value of the works for each week or part of the week subject to the ceiling defined in sub-clause 3.49.A.
- (ii) The owner, if not satisfied that the works can be completed by the contractor, and in the event of failure on the part of the contractor to complete work with in further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to rescind the contract.
- (iii) The owner, if not satisfied with the progress of the contract and in the event of failure of the contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.

- (iv) In the event of such termination of the contract as described in clauses 3.49A(ii) or 3.49A(iii) or both the owner shall be entitled to recover L.D. up to ten percent (10%) of the contract value and forfeit the security deposit made by the contractor besides getting the work completed by other means at the risk and cost of the contractor.
- (v) The ceiling of LD shall be 10% of the cost of work.
- (vi) In case part / portions of the work can be commissioned and port operates the portion for commercial purpose, the rate of LD will be restricted to the uncompleted value of work, the maximum LD being on the entire contract value.

Note: Contract price for LD shall be inclusive of tender price plus taxes and duties.

3.50. Incentives or Bonus

For early completion of the contract before the stipulated date of completion work of an incentive amount @0.25% of the contract price may be paid to the contractor for every fortnight of early completion, subject to a maximum of (5%) of the contract price. The Port, if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time for completion, may allow extension of time at its discretion, by virtue of which the contractor make himself eligible for incentive, the extension shall be considered only till the actual date of completion and no incentive shall be payable. For calculation of incentive payment, contract price shall be exclusive of tender price plus taxes and duties.

3.51. Advance payment

Mobilization Advance

- (a) The Mobilization advance shall not be sanctioned in less than two installments. The second installment is sanctioned only after proper utilization of advance disbursed in first phase and a certification to this effect by E-I-C.
- (b) The advance shall be limited to 10% of tendered amount.
- (c) Interest free advance shall not be granted. Rate of Interest shall be SBI Lending Rate+2%.
- (d) The mobilization advance shall be released only after obtaining a bank Guarantee bond from a nationalized bank for 110 % (as per latest cvc directions) of amount of advance to be released and valid for the contract period. This shall be kept renewed time to time to cover the balance amount and likely period to complete recovery together with interest.
- (e) The original bank guarantee should be received by DPA directly from the issuing authority by Registered Post [AD]. However, in exceptional cases, where the guarantee is handed over to the customer for any genuine reasons, the branch

should immediately send by Registered Post [AD] an unstamped by the E-I-C.

- (f) The interest on the advance shall be calculated from the date of payment to the date of recovery, both days inclusive.
- (g) It shall be ensured that at any point of time, Bank Guarantee is available for the amount of outstanding advance.
- (h) The recovery should be commenced after 10% of work is completed and the entire amount together with interest shall be recovered by the time 80% of the work is completed. However, the interest recovery shall be effected immediately from the 1st release of payments towards execution of the work.
- (i) If the contractor fails to achieve the targeted progress at the end of 50% of time period the mobilization advance may be recovered by en cashing the bank guarantee, provided no hindrance/delay was caused by the department.

3.52. Performance Securities

Security deposit shall consist of Performance Guarantee to be submitted at award of work. Performance guarantee should be 5% of Contract price of which should be submitted in form of Bank Guarantee of Nationalized/scheduled bank having its branch at Gandhidham, or Demand Draft within (21 days in case of domestics bid and within 28 days in case of global bids) of receipt of letter of acceptance/Intent which will be refunded immediately not later than 14 days from completion of contract period. i.e. one year defect liability and maintenance period of 2nd and 3rd year

- 3.52.2. Failure of the successful Bidder to comply with the requirements as mentioned above shall constitute sufficient grounds for cancellation of the award of work and forfeiture of bid security/EMD.

3.53. NIL

3.54. Cost of Repairs

- 3.54.1 Loss or damage to the works or materials to be incorporated in the works between the start date and the end of the defects correction period shall be remedied by the Contractor at the Contractors cost if the loss or damage arises from the Contractors acts or omissions.

E. FINISHING THE CONTRACT.

3.55. Completion

- 3.55.1. After completion of the work, the contractor will serve a written notice to the Nodal Officer or his Nominee/Employer to this effect. The Nodal officer or his Nominee/Employer upon receipt of this notice shall conduct a complete joint survey of the work within 7 days and prepare a defects list jointly. The defects pointed out by the Nodal Officer or his nominee/Employer would be rectified by the contractor within 14 days and thereafter acceptance report be signed jointly by the contractor and the employer. This joint acceptance report shall be treated as “completion Certificate”.

3.56 Taking over

- 3.56.1 The employer shall take over the site and the works within seven days of the Nodal

Officer or his nominee issuing a certificate of completion.

3.57 Final Account

3.57.1 The Contractor shall supply to the Nodal Officer or his nominee a detailed account of the total amount that the Contractor considers payable under the contract before the end of the Defects Liability period. The Nodal Officer or his nominee shall issue a defects liability certificate and certify any final payment that is due to the contractor within 60 days of receiving the contractor's account if it is correct and complete. If it is not, the Nodal Officer or his nominee shall issue within 15 days a schedule that states the scope of the corrections or additions that are necessary for the correction and certify payment of 50% of the undisputed amount to the contractor.

If the final account is still unsatisfactory after it has been resubmitted the Nodal Officer or his nominee shall decide on the amount payable to the contractor and issue a payment certificate, within 60 days of receiving the contractor's revised account.

3.58 Operating and Maintenance Manuals

3.58.1 If "as built" Drawings and /or operating and maintenance manuals are required the contractor shall supply them by the dates stated in the Contract Data.

3.58.2 If the contractor does not supply the drawings and /or manuals by the dates stated in the contract data, or they do not receive the Nodal Officer or his nominee's approval, the Nodal Officer or his nominee shall withhold the amount stated in the contract data from payments due to the contractor.

3.59 Termination

3.59.1 The employer or the Contractor may terminate the contract if the other party causes a fundamental breach of the contract.

3.59.2 Fundamental breaches of contract include, but shall not be limited to the following:

(a) The contractor stops work for 28 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Nodal Officer or his nominee.

(b) The Nodal Officer or his nominee instructs the contractor to delay the progress of the work and the instruction is not withdrawn within 28 days.

(c) The employer or the contractor becomes bankrupt or goes into liquidation other than for a reconstruction restructure or amalgamation.

(d) A payment certified by the Nodal Officer or his nominee is not paid by the employer to the contractor within 50 days of the date of the Nodal Officer or his nominee's certificate.

(e) The Nodal Officer or his nominee gives Notice the failure to correct a particular defect is a fundamental breach of contract and the contractor fails to correct it within a reasonable period of time determined by the Nodal Officer or his nominee.

(f) The contractor does not maintain a security which is required.

(g) The contractor has delayed the completion of works by the number days for which the maximum amount of liquidated damages can be paid as defined in the contract data and

(h) If the contractor, in the judgment of the employer has engaged in corrupt or fraudulent practices in competing for or in the executing the contract.

(i) If the contractor has contravened clause 1.37 and clause 3.9 of condition of contract. For the purpose of this paragraph: "corrupt practice" means the offering, giving receiving or soliciting of anything of value to influence the action of public

officials in the procurement process or in contract execution. “Fraudulent practice” means

a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the employer, and includes collusive practice. Bidders (prior to or after bid submission) designed to establish bid prices at artificial non- competitive levels and to deprive the employer of the benefits of free and open competition”.

- 3.59.3 When either party to the contract gives notice of a breach of contract to the Nodal Officer or his nominee for a cause other than those listed under sub Clause. 3.59.2 above, the Nodal Officer or his nominee shall decide whether the breach is fundamental or not.
- 3.59.4 Notwithstanding the above, the employer may terminate the contract for convenience subject to payment of compensation to the contractor including loss of profit on uncompleted works. Loss of profit shall be calculated on the same basis as adopted for calculation of extra/additional items.
- 3.59.5 If the contract is terminated the Contractor shall stop work immediately, make the site safe and secure and leave the site as soon as reasonably possible.

3.60. Payment upon Termination.

- 3.60.1 If the contract is terminated because of a fundamental breach of contract by the contractor, the Nodal Officer or his nominee shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the contract data. Additional liquidated damage shall not apply if the total amount due to the employers exceeds any payment due to the contractor, the difference shall be payable to the employer.
- 3.60.2 If the contract is terminated at the employer’s convenience or because of a fundamental breach of contract by the employer, the Nodal Officer or his nominee shall issue a certificate for the value of the work done, the reasonable employed solely on the works, and the contractor’s costs of protecting and securing the works and loss of profit on uncompleted works less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

3.61. Property

- 3.61.1 All materials on the Site, Plant, Equipment, Temporary Works and Works for which payment has been made to the contractor by the Employer, are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor’s default.

3.62 Release from Performance.

- 3.62.1 If the Contract is frustrated by the outbreak of war or by other event entirely outside the control of either the Employer or the Contractor, the Nodal Officer or his nominee shall certify that Contract has been frustrated. The Contractor shall leave the Site and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

3.63 NIL

F. SPECIAL CONDITIONS OF CONTRACT

1. LABOUR

The contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Nodal Officer or his nominee, deliver to the Nodal Officer or his nominee a return in detail, in such form and at such intervals as the Nodal Officer or his nominee may prescribe, showing the staff and numbers of

the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Nodal Officer or his nominee may require.

2. COMPLIANCE WITH LABOUR REGULATIONS:

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactment and rules made there under, regulations, Notifications and by laws of the State or Central Government or local authority and any other labour law (including rules) regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below.

The Contractor shall keep the Employer indemnified in case any action is taken against the employer by competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules /regulations including amendments, if any, on the part of the Contractor the Nodal Officer or his nominee/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Nodal Officer or his nominee shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

SALIENT FEATURES OF SOME MAJOR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.

(a) Workmen Compensation Act 1923:- The act provides for compensation in case of injury by accident arising out of and during the course of employment.

(b) Payment of Gratuity Act 1972:- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more on death at the rate of 15 days wages for every completed year of service. Act is applicable to all establishments employing 10 or more employees.

(c) Employees P.F and Miscellaneous Provision Act 1952:- The Act Provides for monthly contribution by the employer plus workers @ 12%/8.33%. the benefits payable under the Act are:

Pension to family pension retirement or death, as the case may be. (ii) Deposit linked

insurance on the death in harness of the worker, (iii) payment of P.F accumulation on retirement/death etc.

- (d) Maternity Benefit Act 1951:- The Act provides for leave and some other benefits to workmen/ employees in case of confinement or miscarriage etc.
- (e) Contract Labour (Regulation & Abolition) Act 1970:- The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.
- (f) Minimum Wages Act 1948:- The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment Construction of Buildings, Roads, Runways are scheduled employment.
- (g) Payment of Wages Act 1936:- It lays down as to by what date the wages are to be paid when it will be paid and what deductions can be made from the wages of the workers.
- (h) Equal Remuneration Act 1979:- The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- (i) Payment of Bonus Act 1965:- The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to

a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/- per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above upto 3500/- per month shall be worked out by taking wages as Rs.2500/- per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.

(j) Industrial Disputes Act 1947:- The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lockout becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

(k) Industrial Employment's (Standing Orders) Act 1946:- It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The provisions for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get same certified by the designated Authority.

(l) Trade Unions Act 1926:- The Act lays down the procedure for registration of trade union of workmen and employers. The Trade Union registered under the Act have been certain immunities from civil and criminal liabilities.

(m) Child Labour (Prohibition & Regulation) Act 1986:- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of Children in all other occupations and processes. Employment of Child Labor is prohibited in Building and Construction Industry.

(n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979:-

The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter- State migrant workmen, in establishment to which this Act becomes applicable,

are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upon the establishment and back, etc.

(o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service Act 1996 and the Cess Act of 1996:- All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or Construction work and other welfare measures, such as Canteens, First-Aid facilities. Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

(p) Factories Act 1948:- The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrence to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 more persons without the aid of power engaged in manufacturing process.

Contractor

**Executive Engineer (C-I)
Deendayal Port AUTHORITY**

SECTION 4

CONTRACT DATA

CONTRACT DATA

Items marked “N/A does not apply in this contract.

The above insertions should correspond to the information provided in the invitation of bids.

The employer is
Chairman,
Deendayal Port AUTHORITY, Kandla

Address: A.O. Building, P.O. Box No. 50, Gandhidham - 370201, Gujarat State, India

Employer’s authorized representative is Chief Engineer Deendayal Port AUTHORITY.

The nodal officer or his nominee is
EXECUTIVE ENGINEER (C-I),
DEENDAYAL PORT AUTHORITY,
2nd FLOOR, Room No 302,
A.O Building, Gandhidham-370201,
KUTCH DISTRICT, GUJARAT STATE,
INDIA,

Nodal officer’s authorized representative is XEN / AE

The conciliator appointed jointly by the employer and contractor is: **(Not Applicable)**

Name:- **Not Applicable**

Address:- **Not Applicable**

The name and identification number of the contract is **“Up-Gradaation of Road From Junction Of Tuna Jetty Road To Take Off Point At Tuna Tekra**

The works consist of **“Up-Gradaation of Road From Junction Of Tuna Jetty Road To Take Off Point At Tuna Tekra**

The start date shall be_____

The intended completion date for the whole of the work is **18 (Eighteen) Months.**
(Capital and 24 months maintenance after 12 months of defect liability period).

The following documents also form part of the contract The contractor shall submit a program for the works immediately after delivery of the letter of acceptance. Schedule of other contract (3.8)
Schedule of key personal (3.9)

The site possession dates shall be given after the award of work.
The defect liability period is 12 Months (3.35)
The minimum insurance cover for physical property, injury and death is **Rs.20.00 lakhs** per occurrence with the number of occurrences limited to four. After each occurrence, contractor will pay additional premium necessary to make insurance valid for four occurrences always.

Appointing authority for the Arbitrator is Chairman, DPA.

The following events shall also be Compensation Events. (3.44)

1. The Employer terminates the Contract from his convenience. 2.
3. _____.
4. _____.

The period between programme updates shall be 15 days. (3.27)

The language of the contract documents is English (3.3)
The law, which applies to the contract, is law of Union of India (3.3)
The currency of the contract is Indian rupees (3.46)
Fees and types of reimbursable expenses to be paid to the
Dispute Review Expert (3.25)
Appointing authority for the Arbitrator is Chairman, DPA.

Escalation is Payable for contracts as per clause no.3. 47 of section – 3, subjected to
Special condition provision.

SECTION 5

SPECIFICATIONS AND SPECIAL CONDITIONS

5.0 Special Condition

The conditions of contract of Section 1 to 4 (hereinafter called as the General conditions) modified or added to by the following part i.e. Section-5 , conditions of particular application which shall be read and construed with the General Conditions as if they were incorporated therewith.

In so far as any of the conditions of particular application may conflict or be inconsistent with any of the General Conditions, particular Section-5 shall prevail. The provision in special condition which form a part of contract shall have precedence over those specified in the conditions of contract in case of diversity, if any.

5.01.1 The following clauses of the INSTRUCTION TO THE BIDDERS (Section- I) will not be applicable,

- (a) Clause 1.4.1 (h), 1.4.2 (j),1.4.1.C, 1.4.3(iv) 1.42(e), 1.42(K)
- (b) Clause 1.4.4
- (c) Clause 1.4.5 (Sub-contractor Experience & Resources)
- (d) Clause 1.8.2 (Bidding documents)& 1.9.2,(Pre-bid)
- (e) Clause 1.19.1, 1.19.2, 1.19.3 (sealing and marking of bids)
- (f) Clause 1.22.2 & 1.22.5 (Modification of withdrawal of Bid)
- (g) Clause 1.23.2, 1.23.3, 1.23.4 (Withdrawal)
- (h) Clause 1.26.4
- (i) Clause 1.27.1, 1.27.2 (Correction of errors)
- (j) Clause 1.34 (Advance payment)
- (k) Clause 1.35.1 (Conciliator)

5.01.2 The following clauses of Section-II will not be applicable,

- (a) The clauses c, d, g of the SPECIMEN FOR FORM OF BID
- (b) Table at Sr.No.7 of Information required by the employer prequalification of bidders(Section-2)
- (c) Advance payment as well as appointment of conciliator in Contractor Bid.

5.01 The following clauses of the CONDITION OF CONTRACT (Section-III) will not be applicable,

- (a) Clause 3.8.1 (Sub-contracting)
- (b) Clause 3.21.1 (Possession of site)
- (c) Clause 3.24.1 (Disputes)
- (d) Clause 3.25.1, 3.25.2, 3.25.3(Settlement of disputes, decision by Conciliation, Arbitration)
- (e) Clause 3.26.1 (Replacement of Conciliator)
- (f) Clause 3.43.2, 3.43.3, 3.43.4, 3.43.5 ,3.43.6, 3.43.7
- (g) Clause 3.44.1, 3.44.2, 3.44.3(Compensation events)
- (h) Clause 3.45 (Tax),
- (i) Clause 3.50 (Incentive or Bonus)

(j) Clause 3.51(Advance Payment)

5.02 The following clauses (Section-4 & 8) will not be applicable,

- (a) The schedule of the contractors (3.8) (Sec-4)
- (b) The schedule of key personnel (3.9) (Sec-4)
- (c) Conciliator is not applicable under contract date of (section –4)
- (d) The form for Dispute Review Board Agreement (section– 8) & Exception & Deviations(Section-8). , Joint venture partner information form(Section -8)
- (e) The form for specimen Bank Guarantee for advance payment (Section -8).
- (f) The form for specimen Bank guarantee for stage payment (Section-8).

5.04 The following Existing clauses are Modified as under;

5.04.1 Section-I; Clause No. 1.4.1d; Details of Equipment's available with the bidder

5.04.1.1 Section-I; Clause No. 1.4.1e; Managerial/ Manpower Available with the Bidder.

5.04.1.2 Section-I; Clause No. 1.4.2d; Major items of construction equipment available with the bidder

5.04.1.3 Section-2; Table ;5 -The List of Equipment available with bidder.

5.04.1.4Section-2; Table ;6- Qualification and experience of key personnel available with the bidder. Attach biographical data.

5.04.1.5Section –I clause No 1.5.2 and section -3 (Clause No 3.7 are modified as under:-

Companies/Contractors may jointly undertake contract/contracts. The number of partners in JV/Consortium shall be limited to maximum of three. Each entity would be jointly and severally responsible for completing the task as per the contract, however declaration of the Lead member (JV has to designate one partner as Lead Member in their MOU) to be indicated by bidders. The firms with at least 26% equity holding each are allowed to jointly meet the eligibility criteria.

- 1) A legally binding Joint venture / Consortium Agreement signed by authorized signatories of all the partners of the JV/Consortium, as per the proforma at **Annexure-I** shall be enclosed with the bid.
- 2) Power of attorney duly executed and signed by legally authorized signatories of all the partners, authorizing the Lead Partner (a) to submit bid, negotiate and conclude contract and incur all liabilities therewith on behalf of the partner(s) of the JV/Consortium during the bidding process; and (b) in the event of a successful bid, to incur liabilities and receive instructions for and on behalf of the partner(s) of the JV /Consortium and to carry out the entire execution of the contract including payment, exclusively through Lead Partner, as per the proforma at **Annexure-II**, which shall be duly authenticated by a notary public or equivalent certifying authority, shall be enclosed with the bid.
- 3) The bid and in the case of the successful bidder, the Agreement, shall be signed and / or executed in such a manner for making it legally binding on all partners (including operative parts of the ensuing Contract in respect of Agreement of Arbitration, etc.). The Contract shall be signed by legally authorized signatories of all partners.
- 4) The Lead Partner shall be authorized to receive instructions for and on behalf of the partners of the Joint venture and entire execution of the Contract including payment shall be carried out exclusively through the Lead Partner. A Statement to this effect should be included in the Joint Venture Agreement.
- 5) All partners of the Joint Venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a Statement to this effect should be included in the Joint Venture Agreement.

- 6) Bid Security as required shall be furnished by Lead Member of Joint venture.
- 7) Performance Guarantee, as required, will be furnished by Lead Member of Joint venture.
- 8) Participation by a firm in more than one JV /Consortium is not permissible. A firm who submits bid on individual capacity is not eligible to be a partner of a JV /Consortium. In case a firm's name appears in more than one bid then both application may be rejected.
- 9) Each partner must submit the complete documentation, or portions applicable thereto, required qualifying the firm for bidding.
- 10) All the partners of the JV/Consortium shall be jointly and severally liable for due performance, recourse/sanctions within the joint venture in the event of default of any partner and arrangements for providing the required indemnities.
- 11) Notwithstanding demarcation or allotment of work among the partners, each partner shall be liable for non-performance of the whole contract irrespective of their demarcation or share of work.
- 12) The Lead Partner shall be authorized to act on behalf of the JV/Consortium.
- 13) All the correspondences between the Employer and the contractor shall be routed through the Lead Partner.
- 14) In the event of default by the Lead Partner, it shall be construed as default of the Contractor; and Employer will take action under relevant clause(s) of the Bid Document and/or General Terms and Conditions of Contract.
- 15) An undertaking that all the partners are jointly and severally liable to the Employer for the performance of the contract shall be enclosed with the bid.
- 16) In the event of any partner leaving the JV, it shall be intimated to the Employer within 30 days by other partner(s). Failure to do so shall be construed as default of the contractor and the Employer may take action under relevant clause(s) of the Bid Document and/or General Terms and Conditions of Contract.
- 17) The contractor shall not alter its composition or legal status without the prior written permission of the Employer. Failure to do so shall be construed as default of the contractor and the Employer may take action under relevant clause(s) of the Bid Document and/or General Terms and Conditions of Contract.
- 18) One of the partners of JV/Consortium should have downloaded the bid documents.

5.05 Bidders are advised to consider the below points while submitting the offer :

- i) If multiple bidders submit work experience showing the same/particular work, then such experience will be considered of Main Contractor.
- ii) If tenderer/bidder completed the works in private organization as stipulated in Minimum qualification Criteria (work experience) shall be considered only if CA certifying value of work done with TDS certificates (where applicable) / Bank statement will be required with respect to referred work is issued by Competent Authority needs to be enclosed by the tenderer along with the offer.
- iii) The completed works only is considered for qualification. Partly completed works or works are in progress shall not be considered for qualification.
- iv) If the work is completed successfully and contract is under maintenance period, such works are considered as a completed works for evaluation purposes.
- v) In case of any contract having material and labour components are controlled at different heads, in such cases the value of work indicated in work order and respective completion certificates only considered for experience.
- vi) If the tenderer have successfully completed the work (date of completion of work i.e. physically/actually completion irrespective of maintenance period) during last 7 years ending last day of month previous to the one in which applications are invited irrespective of date of commencement / start of work. Such experience of work is also considered for evaluation in work experience.
- vii) If the tenderer has executed "Similar works" in any Contract/Project/BOT

Project/Turnkey Project etc. In those particular Projects/Contracts, if the cost of similar works (separately or combined) meets the requirement of MQC, such experience shall also be considered for evaluation.

- viii) If the similar work is executed as sub-contractor, it is mandatory to upload the sub-contract permission letter obtained from the Govt./Public Sector officer in case work belongs to the Govt./Public Sector, or from the owner of the project in case work belongs to private organization. Also the completion certificate/form 3A authenticated by concern Govt./Public Sector officer or owner of the project shall be uploaded along with TDS certificate deducted from that particular work issued by the competent authority shall be submitted along with bid submission.

5.06. Scope of work:

The work to be performed under the scope of this specification shall broadly include:

- i. Development of area by ground improvement with quarry filling and Construction of RCC wall, Construction of RCC Bridge with pile foundations culverts Asphaltting to Road by DBM and BC
- ii. The above work will be carried-out under the contract scope. Further, if required, the items mentioned in the BOQ shall also be executed in the cargo Jetty inside/outside area at any location as per the directions of the EIC during the entire contract period.

The Contractor has to carry out the site inspection and get acquainted with the work needs to be carried out before quoting. Available data in enclosed however, Contractor has to study in detail independently to assess the quantum and scope of work etc. if required.

Some indication of nature and extent of the works have been given on the drawings and those are preliminary only. Drawings showing complete nature and extent of the works will be furnished to the Contractor progressively during the execution of the work. Quantities indicated in the Schedule of Items are tentative and are subject to change. All items of work shall be executed in accordance with the relevant specification annexed thereto and the provisions of the contract.

5.07. Drawings and Its Approval

- 5.07.1 The drawings enclosed with the tender documents to provide some idea of the job are preliminary for tender purpose only and are by no means complete and final, and do not show the full range of the work under the scope of the contract. Work shall be carried out only on the basis of drawings marked "Released for Construction" with addition, alteration and modifications made to aforesaid drawings from time to time and also according to other drawings that would be supplied to the Contractor from time to time.
- 5.07.2 The contractor has to appoint a Technical Consultant at his own cost to prepare the detailed design and drawings for the work with approval of engineer-in-charge. All the expenses incurred by the Technical Consultant for various activities will be born by the contractor.
- 5.07.3 The consultant shall obtain necessary proof check for the detailed design and drawings for the work through IIT(Indian Institute of Technology) before issue Good for construction Drawing at his own cost. All the expenses incurred by the Technical Consultant for various activities will be born by the contractor.
- 5.07.4 Any further detailed working drawings which the contractor may prepare for a particular part of the work shall be submitted in duplicate for approval of the Nodal Officer or his nominee before the

particular part of the work is taken in hand.

- 5.07.5 The contractor shall at the time of submitting such drawings call to the attention of the Nodal Officer to any alternative detail or modification of the contract drawings which the contractor may wish to make at least 7 days prior to the commencement of the work or part of the work to which such drawings relate.
- 5.07.6 The Nodal Officer will record on the copies as amended his approval, if he requires any of the alterations submitted by the Contractor and will return one copy to the Contractor who shall carry out the work in accordance therewith. The Contractor shall forward to the Nodal Officer three additional copies of the working, drawings as approved.
- 5.07.7 In addition to the aforesaid working drawings, working drawings are also to be submitted. (The same procedure being followed as described above) in respect of any, work proposed. The approval of the Nodal Officer of all or any of the drawings shall not relieve the Contractor of any liability of obligation under the contract in respect of the execution of the work.
- 5.07.8 In all cases where drawings are specified or required to be supplied by the Contractor for the approval of the Engineer for any work included in his contract any alteration to such drawings to satisfy the Engineer's requirement shall be made by the Contractor at no extra cost.
- 5.07.9 Drawings of Temporary Works
- At least one month before the date when the Contractor intends to start erecting, any part of the Temporary works and staging required for carrying out the work, he shall furnish to the Engineer complete drawings of that part of the temporary works and staging for reference. The Contractor shall at the same time, if so required by the Nodal Officer, furnish calculation in respect of such temporary works. The Contractor shall also furnish to the Nodal Officer drawings showing the method proposed for the erection of the various parts of the works.
- 5.07.10 The furnishing to the Nodal Officer of any design for any of the temporary works and staging shall not relieve the contractor of any liability or obligation under the contract in respect of such temporary works and staging. "Approved" means, approved by the Nodal Officer in writing including subsequent confirmation of previous verbal approval.
- 5.07.11 Though the drawings to be supplied will be exhaustive the decision of the Nodal Officer or his nominee regarding any change in the drawings shall be final and binding to contractor and no dispute / claim regarding extra payment shall be allowed on account of such changes.
- 5.07.12 The Contractor shall at his own costs and expenses supply five complete sets of "As Made" drawings on polyester tracing film, three prints and soft copy (Compact Disc) showing details of all the works executed. The drawings and prints shall be delivered to the Employer within one month of completion of various sections of the work or at such other times as directed by the Employer. The drawings shall be fully dimensioned with the Employer's standard title block or as approved by the Employer.

5.08. Workmanship shall be the best possible quality and all work shall be carried out by skilled workmen except for those which normally require unskilled persons. If the laws of the local Government/Municipal of other authority require the employment of licensed or registered workmen for various trades, the contractor shall arrange to have the work done by such licensed/registered personnel.

5.09. All materials to be used in the works shall be subjected to inspection and test. Samples of all materials, proposed to be used, in the permanent works shall be submitted to the Nodal officer or his nominee for approval before those are brought to site.

Samples provided to the Nodal officer or his nominee for their retention are to be in labeled boxes suitable for storage. Materials or workmanship not corresponding in character & quality with approved samples will be rejected by Nodal officer or his nominee.

Samples required for approval and testing must be supplied allowing sufficient time for testing and approval, due allowance being made for the fact that if the first samples are rejected further samples shall be required. Delay in the execution of work due to late submission of samples will not be acceptable as -a reason for delay in the completion of the works. Materials shall be tested before dispatching to the site, where possible. Materials shall also be tested on the site and those may be rejected if found not suitable or not in accordance with the specifications notwithstanding the results of tests at the contractor's work or elsewhere or of test certificates or of any approval given earlier.

5.10. The Contractor shall develop a well-equipped laboratory at the site, so that necessary testing of concrete materials quarry material shall be done at site of work in presence of DPA Officials.

5.11. All materials required to be used in the work shall be got tested from Port Laboratory or government approved lab under supervision of Nodal Officer, Nominee or Technical Advisor and the charges there of shall be borne by the Contractor.

5.12. Before commencement of work the Nodal officer or his nominee and the Contractor shall jointly survey and record all ground levels on the site if required. The Contractor shall supply all necessary equipment and attendance for carrying out such surveys. The contractor shall prepare record drawings showing the agreed levels which shall be signed by the Nodal Officer or his nominee and the Contractor.

5.13. As the work progresses, inspection of cement, aggregate, reinforcing steel and testing of the concrete strength will be done by the Contractor in the presence of the Nodal officer or his nominee. The Contractor's concrete plant and materials stores shall be made accessible to the Nodal officer or his nominee at all times for inspection and for taking samples. The Contractor shall facilitate in all possible ways the inspection and testing of samples by the Nodal officer or his nominee,

Labour shall be provided by the Contractor for carrying out the testing's.

5.14. SUPPLY OF WATER

{i} The contractor shall have to make his own arrangements for the water required for execution of work and for labours etc.

{ii} Water used for mixing and curing shall be clean and free from injurious amounts of oil, acids, alkalis, salts, sugar, organic materials or other substances that may be deleterious to concrete or steel.

{iii}Unfiltered potable water is generally considered suitable for mixing and curing. Mixing and curing with sea water shall not be permitted in any case.

{iv} Periodically samples of water shall be tested as per IS-3025 and as a guide, the following concentrations represent the maximum permissible values:

- (a) To neutralize 200 ml sample of water using Phenolphthalein as an indicator, it should not require more than 2 ml of 0.1 normal NaOH.
- (b) To neutralize 200 ml sample of water using Methyl Orange as an indicator, it should not require more than 10ml. of 0.1 normal HCL.

5.15. Permission for Port Entry

5.15.1 As the work has to be carried out in Custom bound area, Contractor has to fulfil all the formalities of Customs, CISF wherever required. Contractor has to coordinate with other department officials of DPA, Customs, CISF and other related departments to avoid disturbance of day to day operation of the Port and smooth execution of the proposed work.

5.15.2 Only vehicles permitted by the Board will be allowed inside the Port premises. Admission to the Port premises of men and vehicles is regulated by rules and regulations of the Port AUTHORITY in force from time to time and any passes, tokens, permits or licenses for his work men vehicles or plant will have to be obtained by the Contractor from the Security Officer/C.I.S.F. of the Port AUTHORITY directly by making necessary deposits or payments for the same if any.

5.16. NIL

5.17. The contractor shall arrange to supply samples of coarse aggregate and fine aggregate etc. to the Port Laboratory for mix design for concreting works. Mixing of cement concrete works shall be on weigh batching basis as per IS. Requirement. The charges shall be borne by the department.

5.18. Force Major - This will be restricted to natural calamities and acts of God only.

5.19. The flooring works are to be finished with neeru (cement slurry) without any extra cost.

5.20. All the royalties of the materials, quarry fees, octroi, charges, sales tax etc. are payable by the contractor directly to the authorities concerned and the rates tendered shall be deemed to be inclusive of all such charges.

5.21. All royalties of materials, quarry fees, etc., payable by the contractor directly to the Authority concern and rates tendered shall be deemed to be inclusive of all charges. Before claiming security deposit, contractor shall produce "No dues certificate" from the Geologist, Geology and mining department, Bhuj.

5.22. The tenderers are expected to have full knowledge of the site of work and local working condition in the Port before submitting the tenders. The Port is basically an operational area dealing mainly with handling dry/liquid products at cargo jetty. The Nodal Officer or his nominee will give to the Contractor

possession of so much of the site as in the opinion of Nodal Officer or his nominee may be required to enable the Contractor to proceed with the construction without interruption of the work in accordance with the requirement. However, all efforts will be made to handover entire clear site at the starting of work.

No claim / disputes what-so-ever for handing over the site of work late, for starting the work shall be entertained. If the contractor suffers any delay the Nodal Officer or his nominee may grant at his discretion an extension of time for completion of work. However, no claim / disputes etc. arising out of extension of time so granted shall be entertained. The contractor while filling up their rates in the tender should consider the above aspects unfailingly.

5.23. POST TENDER MODIFICATION:

The Tenderers are not expected to make any post tender modification. Hence, the tenderers should not make any correspondence regarding the tender after submission of the same on due date and time. No cognizance of any correspondence shall be taken and if Tenderers persists with the same necessary action will be initiated against him. All the tenders received on or before the due date and time shall be opened, if otherwise found in order.

5.24. To the limited extent and availability that can conveniently be spared by the Board from time to time electric power for lighting and operation of the plant of the contractor can be had from the Board as per Rules & Regulations in force from time to time. The contractor shall draw his needs thereafter at own expenses in the manner approved by the Nodal Officer or his nominee. The Board will recover charges of electricity current consumed by the contraction supplied through Port together with meter rents at the rates fixed by the Board from time to time. The electricity to be paid on this charges shall be borne by the Contractor. Nothing extra shall be account. The electric supply is subject to Board's rules and regulations and convenience as regards shut down for repairs and overhauls of Board's electric system. The contractor shall not claim any damages for stoppages or shortages in current supply for any reasons whatsoever. The contractor has also to install his own generator etc. at his own cost and risk to meet with his full requirement of electric power.

5.25. The contractor shall have to make good all damages done by him to structure nearby while executing the work and no extra payment shall be made to him on that account.

5.26. A Site Order book is to be maintained by the contractor at the site of work. Order and instructions written in the order book shall be deemed to have been legally issued to the contractor and the contractor shall sign each port promptly in the order book as a token of having seen the same. The order book shall be the property of the board and shall be handed over to the Nodal Officer or his nominee of the work in good condition on the completion of the work or whenever required by the Nodal Officer or his nominee.

5.27. The Contractor shall deposit / store any materials in such a way so as not to cause inconvenience to the employees / workers engaged on the Port activities and to nearby activities.

5.28. The stamp paper of requisite value shall be furnished by the contractor within 10 days from the date of issue of letter of acceptance, failing which he will not be permitted to start the work.

5.29. The value of the stamps to be affixed on the agreement shall be of appropriate value prescribed for bond as per latest provision of law enforced on the date of execution contract same shall be borne by the Contractor. However, if the contractor furnishes G.P. Notes or approved guarantees in respect of part of security deposit, the stamp duty chargeable

for the amount shall be as prescribed for agreements and payable in accordance with latest provision by law in force at the time of execution of the contract .All the cost of the stamp duty shall be borne by the Contractor.

5.30. For execution of work, contractor may be permitted to construct temporary offices, store, labour room toilet etc. at his own cost along with necessary letter/ drawing for the permission in written. Nothing will be paid for these purpose and before handing over the site on completion of the work, the contractor has to dismantle all these temporary structure erected by him. Completion certificate will be issued only after compliance of above aspects.

5.30.1 If necessary the services of fire watch for carrying out any hot works, as required by the Port Authority, shall be made free of cost by the Department. However, all the necessary arrangements like obtaining a fire watch permit from the concerned authority, transportation of man and materials, if any, for fire prevention etc. shall have to be done by the Contractor at his own cost. No claim whatsoever on account of delay in arrangements or arrival of fire watch services shall be entertained.

5.30.2 The contractor shall take necessary precautions and prevent the falling of sparks in the seawater while carrying out the work of cutting / welding. In case of any leakages / escape of gas from vessel / flexible line etc. all the work shall be stopped immediately and co-operate the Fire Brigade personnel. It is further clarified that the suitable extension of time shall be granted to Contractor for completion of work on account of such stoppage without any compensation and idle charges. No claims / disputes shall be entertained on that account.

5.31. All the works until handed over to the Nodal Officer or his nominee shall stand at the risk of the contractor who shall be responsible to make good at his own cost all the losses and damage caused by or due to fires, weather, tides or any other reasons. The contractor shall hand over at the time of completion of work the work in good order and conditions and in conformity in every respect with the requirements of the contract and instructions of the Nodal Officer or his nominee.

5.32. GST REGISTRATION

The GST Registration No. should be invariably mentioned in the bid tender quotation failing which bid/ tender quotation will be considered as non – responsive and be liable for discharge.

5.33. GOODS & SERVICE (GST)CLAUSE

The contractor shall quote the price exclusive of GST.

The applicable GST shall be paid extra to the contractor after producing GST Invoice as per the certified Bill by the department as per Goods & Service Tax 2017. However, element of GST shall not consider for evaluation of bid.

5.33.1 TDS ON GST

TDS provision under GST Acts, 2017 are in force from 01.10.2018 and accordingly TDS under GST Act will be deducted @ 2 % (1% CGST and 1 % SGST or 2 % IGST) from payment / credit give to contractor/ professional and other for work order / contract exceeding Rs. 2,50,000/-

5.34. INCOME TAX DEDUCTIONS FROM BILLS

Income Tax deduction @ prevalent rate and surcharge/GST as applicable on the payments to the contractor will be deducted from the bills as directed by the central board of director taxes, Ministry of finance, Government of India.

5.35. During the execution of work , if dewatering is required the same is to be done by the contractor at his own cost and no claim on this account shall be entertained.

5.36. Contractor shall provide 2 nos. of four wheeler tourist vehicle (Innova/Tata sumo / or equivalent) with driver during contract period of 18 months/execution period for the use of employer. This vehicle will be used only for duties related to the

works of this contract. Vehicle must be in very good condition and to the satisfaction of Engineer- In-charges. Necessary fuel/ oil / driver / maintenance etc., will have to be born by the contractor. During the currency of contract in case the contractor does not provide the vehicle the employer will engage the other tourist vehicle and actual charges incurred will be recovered from their due payments or Rs.3000/- per day will be recovered.

5.37. Contractor shall provide office with all furniture, new Two computers and stationery with two office assistance personal minimum graduate knowing computer in the help of DPA official for the construction period of contract.

5.38. ARBITRATION

- (i) Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions here in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim right, matter or any other thing what so ever, in any way arising out of or relating to the contract, design, drawings, specifications, estimates, instructions, order or to the condition or otherwise concerning the work or regarding the execution or failure to execute the same whether arising during the progress of work or after the completion thereof as described here in after shall be referred to the Chairman for sole arbitration by himself or by any Office appointed by him.
- (ii) It will be no objection to any such appointment that the arbitrator is an employee of the Board or the Government, that he had to deal with the matter to which the contract relates and that in course of his duties as an employee of the Board or the Government, he had expressed views on all or any of the matters in dispute or of different.

The arbitrator, who has been dealing with the arbitration case, being transferred or vacating his office or in the event of his death or being unable to act for any reason, the Chairman then holding the office shall arbitrate himself or appoint any officer to act as arbitrator.
- (iii) It is also a term of the contract that no person other than the Chairman himself or any officer appointed by him shall act as arbitrator.
- (iv) It is a term of the contract that only such question and disputes as were raised during progress of work till its completion and not thereafter shall be referred to arbitration. However, this would not apply to the questions and disputes relating to liabilities of parties during the guarantee period after completion of the work.
- (v) It is a term of the contract that the party invoking arbitration shall give a list of disputes with amounts of claim in respect of each said disputes along with the notice seeking appointment of arbitrator.
- (vi) It is also a term of the contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims/disputes in writing, as aforesaid, within 120 days of receiving the intimation from the Nodal officer or his nominee that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Port AUTHORITY shall be discharged and released of all liabilities under the contract in respect of these claims.
- (vii) It is also a term of the contract that the arbitrator shall adjudicate only such disputes/claims as referred to him by the appointing authority and give separate award against each dispute/claim referred to him. The arbitrator will be bound to give claim wise detail and speaking award and it should be supported by reasoning.

- (viii) The award of the arbitrator shall be final, conclusive and binding on all the parties to the contract.
- (ix) The arbitrator from time to time, with the consent of both the parties, enlarge the time for making and publishing the award.
- (x) Arbitration shall be conducted in accordance with the provision of Indian Arbitration Act, 1996 or any statutory modifications or re-enactment thereof and rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause.
- (xi) It is also a term of the contract that if any fees are payable to the arbitrator, this shall be paid equally by both the parties.
- (xii) It is also a term of the contract that the arbitration shall be deemed to have been entered on the reference on the date he issued the first notice to both the parties calling them to submit their statement of claims and counter statement of claims.
- (xiii) Venue of the arbitration shall be such place as may be fixed by the arbitrator at his sole discretion”.

5.39 SPECIAL CONDITION IN RESPECT OF CEMENT

- a) Ordinary Portland Cement of 53 grade complying with the requirements of IS 12269 shall be used in all works. The cement which has set or partially set shall not be used. The cement shall be used in the works only after approval of the engineer in charge.
- b) The contractor shall procure the cement confirming to relevant Indian Standard holding license to use ISI Certification mark for their product.
- c) For verification of such purchase all the bills of manufacturer / supplier / Dealer will have to be furnished to the Nodal officer or his nominee
- d) Supply of cement shall be taken in 50 Kg bags bearing manufacture's name, him registered trade mark, date of manufacture, batch number and ISI marking.
- e) Every consignment of cement must have identification marks on packages indicating date of manufacture and grade and type of cement, cement brought to works shall not be more than 6 weeks old from the date of manufacture.
- f) Every delivery of cement shall be accompanied by a manufacturers test certificate confirming that the supplied cement conforms to relevant specifications.
- g) Nodal officer or his nominee shall be at his liberty to carry out testing of cement at his discretion from Port laboratory or Government approved laboratory as per relevant before / during use. The contractor shall make all the necessary arrangements for the same and all the charges to be borne by the contractor.
- h) Each consignment shall be stored separately so that it can be readily identified and inspected. The arrangement of cement shall be such as to ensure the utilization of cement in the order of its arrival at the stores.
- i) In order to ensure due progress, the contractor shall at all times maintain on the site at least such stock of cement as the Engineer-in-charge may from time to time consider necessary.
- j) Cement in bulk shall be transported to the site in properly designed and approved bulk carriers. The contractor shall provide suitable unloading and storage facilities. The contractor shall submit full details of unloading, handling and storage facilities for the approval of the Engineer-in-charge before any cement in bulk is received by the Contractor.
- k) Cement brought to site and cement remaining unused shall not be removed from site without the permission of the Nodal officer or his nominee.

- l) In case concrete mixing is with Batching Plant, Nodal Officer may allow cement to be used in bags/ silos/ Bulk etc.
- (i) The batching plant shall be capable of separately proportioning each type of material by weight. The batching and mixing shall be carried out preferably in a forced action central batching and mixing plant having necessary automatic controls to ensure accurate proportioning and mixing. Calibration of the batching and mixing plant shall be carried out at regular intervals, as per IS.
- (ii) The contractor shall also maintain a daily production record for that plant, including details of which mixes were supplied and which delivery dockets were dispatched.
- (iii) There should be a record of what materials were used for that day's production including water and admixtures.
- (iv) The production of concrete at each plant shall be systematically controlled. This is to ensure that all the concrete supplied shall be in accordance with these requirements and with the specification.
- (v) Contractor to make a quality manual and keep authenticated copy of all relevant Indian Standards. Work instructions, process control chart, applicable forms/ formats, shall be made and maintained. Contractor shall also follow all applicable regulations like environmental laws, weight and measured permanent etc. Records shall be maintained by the contractor to provide confirmation of the quality and quantity of concrete produced.
- m) The cement may be purchased from the reputed manufacturer like Ultra-tech, ACC, Birla, sanghi or equivalent after approval of Engineer-In-Charge.

5.39.1

SPECIAL CONDITION IN RESPECT OF STEEL REINFORCEMENT

- a) The contractor shall procure the steel reinforcement confirming relevant Indian standard of various diameters holding license to use ISI Certification for their product from Primary Manufacturer/ Supplier/ Dealer. In any circumstances, steel reinforcement produced by re-rolling mills shall not be allowed to use in the work.
- b) Every delivery of Steel reinforcement shall be accompanied by a manufacturer's test certificate conforming that the supplied Steel reinforcement conforms to relevant specifications.
- c) The Reinforcement Bars shall be procured from primary producers like SAIL, VIAZAG, TATA, RINL. If the reinforcement bars of these manufactures are not available in market, the equivalent product may be allowed with prior approval of engineer in-charge. The structural steel shall also procured from SAIL, VIZAG, TATA, RINL or equivalent.
- d) The reinforcement binding wire shall conform to IS : 280 "Mild Steel Wire for General Engineering Purpose", with size 1 mm or more.
- e) Each consignment of Reinforcement brought at site shall be accompanied by a Manufacturer's Batch test certificate.
- f) Reinforcement bars shall be stored on site on timber or concrete supports, suitable space and of sufficient height to keep steel clear of the ground. The reinforcement shall be stored separately size wise.
- g) The testing shall be carried out as per Approved Quality Assurance Plan. The cost of all above tests on Reinforcement shall be deemed to be included in the rates entered in the Bill of Quantities of related items of the work.
- h) For verification of such purchase all the bills of manufacturer/supplier/dealer will have to be furnished to the Nodal officer or his nominee.
- i) The contractor shall have to procure the steel reinforcement of various sizes/diameters as per the working drawings, which shall be supplied only during execution of the work. No claims/disputes arising about details of steel reinforcement so provided shall be entertained.

j) In case, if particular size(s) of steel reinforcement is not available with

- the approved manufacturers, the contractor shall have to intimate the Nodal officer or his nominee in writing along with documentary proof in this regard. Nodal officer or his nominee, at his discretion, may allow to use alternate diameter of reinforcement bars provided that no claims/disputes arising out in respect of payment for difference in rate of steel shall be entertained.
- k) Nodal officer or his nominee shall be at liberty to carry out independent testing of steel reinforcement at his discretion from any of Government Approved laboratory as per relevant I.S. specifications before use. The contractor shall make all the necessary arrangements for same and all the charges to be borne by the contractor.
- l) The contractor shall procure the steel reinforcement bars of standard length as per relevant I.S.
- m) Steel reinforcement which remaining unused shall not be removed from site without the permission of the Nodal officer or his nominee.
- n) Payment for steel reinforcement shall be made on the basis of lengths of bars actually placed & measured in the work multiplied by the standard weight per unit length as given in the relevant IS code. The rates shall include for cutting & wastage, straightening, short & long length, & weight tolerance as per relevant IS codes & placing in position. Authorized laps, chair / separators, lifting hooks stiffening ring shall be measured and paid.

5.39.2 SPECIAL CONDITION IN RESPECT OF ASPHALT

- i) The bitumen and Tack coat brought by the contractor should be as per MoRTH and IRC specifications. Both the items should be tested as per MoRTH's parameters before being put to use and the cost shall be borne by the contractor.
- ii) Bitumen grade VG-30 and Polymer modified bitumen (PMB-40) to be used in the work to be made from a National Oil Company or from JV of National Oil company wherein the test parameters stated in IRC are tested and met and the supplier should have adequate testing facility in India. In any case no Imported Emulsion Bitumen grade VG-30 and Polymer modified bitumen (PMB-40) is allowed to be used in work. (Approved company for emulsion, Bitumen grade VG-30 and PMB-40 is BPCL / HPCL / IOCL / HINCOL)
- iii) For Verification of such purchase all the bills issued by manufacturer will have to be furnished to the Engineer-in-charge.
- iv) Asphalt shall be purchased by the contractor after only start of the work.
- v) Engineer in-charge shall be at liberty to carry out independent testing of asphalt from any of Government Approved laboratory as per relevant I.S. Specifications before use. The contractor shall make all the necessary arrangements for same and all the charges to be borne by the contractor.
- vi) Asphalt brought to site and Asphalt remaining unused shall not be removed from site without prior permission of the Engineer-in-charge.
- vii) Typical Properties of Polymer Modified Bitumen

Typical Properties of Polymer Modified Bitumen

Sr No	Properties	PMB 40	PMB 70	PMB 120
1	Penetration at 25 ^o centigrade	30-50	50-90	90-150
2	Softening Point, ^o C min	60	55	50
3	Elastic Recovery of half thread in Ductilometer at 25 ^o C, % min	75	75	75
4	Flash point, ^o C min	220	220	220
5	Separation, difference in Softening Point, ^o C min	3	3	3
6	Test on residue			
	• Increase in softening point, ^o C max	5	6	7
	• Reduction in penetration at 25 ^o C max	35	35	35
	• Elastic Recovery of Half Thread in Ductilometer at 25 ^o C of residue, & min	30	50	50
7	Ductility at 27 ^o C, cm	+50	+60	+75
8	Viscosity at 150 ^o C, poise	3-9	2-6	1-3

5.40 SETTING OUT

The Contractor shall be responsible for the true and proper setting out of the "Works" and the correctness of the positions, levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments, appliances and labour in connection herewith. If at any time during the progress of the works any error shall appear or arise in the position levels, dimensions or alignment of any part of the works, the Contractor shall immediately notify the Nodal Officer or his nominee who will direct the Contractor in what way the work shall be carried out and the Contractor, on being required to do so by the Nodal Officer shall at his own expense rectify such error to the satisfaction of the Nodal Officer or his nominee at any stage of the work or the checking of any setting out or any line or level by the Nodal Officer or his nominee shall not in any way relieve the Contractor of his obligations under the contract.

The Contractor shall carefully protect and preserve all benchmarks, site rails, pegs and other things used in setting out the works.

5.41 PATENT RIGHTS & ROYALTIES

The Contractor shall hold the Board, its officers, agents and employees absolved (or blameless) from liabilities of any other nature of kind on account of copyright or copyright composition, secret process, patented or unpatented inventions, article or appliances manufactured or used in the performance of this contract including their use by the Board unless otherwise specifically stipulated in this contract.

5.42 WORKING HOURS

Each Tendered shall submit with his tender a programmed for execution of the work. The contractor has to carried-out the work as per general working hours except for declared closed holidays by the Port. However, based on progress of work, if required, round the clock work can be allowed after approval of Engineer-In-Charge.

5.43 NOTICE OF ADDRESS

The Contractor shall notify in writing to the Nodal Officer an address at Kandla/Gandhidham/Adipur for the service on the Contractor any communication or any notice to be given to him under the Contract and any such notice/communication to the Contractor shall be deemed to be duly served if sent by registered post to or left at such address or if delivered to the agent or representative of the Contractor. Any notice/communication to the Contractors shall also be deemed to be duly served if sent by registered Post to or left at the principal place of business or if the Contractor be a company the registered office of the Contractor or at the contractors last known address.

5.44 Concrete cover block with binding wire shall be used in all RCC works of standard size as directed by the Nodal Officer or his nominee c.c. cover block should be well cured for at least seven days before use- No stones or kapchi has to be used instead of cover blocks.

5.45 The welding of structural member Reinforcement shall be done with the best standard of workmanship and strictly in conformity with the requirement laid down in the relevant I.S. code.

5.46 It will be necessary for the contractor to provide insurance cover to his workers and his staff as per rules.

5.47 Contractor's Responsibility

The information given hereunder and provided elsewhere is given in good faith but the Contractor shall satisfy himself regarding all aspects of weather, wind, waves, tides, currents, geological, sub-seabed and other site conditions and no claim will be entertained on the plea that the information supplied by the Engineer-in-charge is erroneous or insufficient.

All the works until handed over to the Nodal Officer or his nominee shall stand at the risk of the contractor who shall be responsible to make good at his own cost all the losses and damage caused by or due to fires, weather, tides or any other reasons. The contractor shall hand over at the time of completion of work the work in good order and conditions and in conformity in every respect with the requirements of the contract and instructions of the Nodal Officer or his nominee.

5.47.1 Site

Deendayal port is situated on the West Coast of India, in the Gulf of Kutch and along the West Bank of Kandla Creek at 70° 13' E longitude and 23° 01' N Latitude. The location and extent of the Site is shown on the Drawing. The work site falls within the notified limits of the Deendayal Port.

5.47.2 Datum

The datum to which all levels shall be referred for the purpose of the works is the jetty Top deck level. Top deck level of jetty/wharf is +9.14m RL.

5.47.3 Tidal Information

The following are the particulars of tidal levels related to the chart datum at Kandla Tidal Station.

Highest High water(HHW)	: (+)9.50m
Mean High water Springs(MHWS)	: (+)6.60m
Mean High Water Neaps(MHWN)	: (+)5.70m
Mean Sea Level (MSL)	: (+)3.88m
Mean Low Water Neaps(MLWN)	: (+)1.81m
Mean Low Water Springs(MLWS)	: (+)0.78m Lowest Low Water(LLW)
	: (-)0.90m

The actual water level at the site may be slightly different from the figures given above. The contractor shall not be entitled to any extra payment, should the levels indicated above prove, during the execution of the works, to be either too high or too low or for delay or damage due to specially high tides or floods.

5.48 PLANT

The contractor shall be responsible for the supply, use and maintenance of all construction plant and equipment and he shall ensure that it is suitable for the work and is maintained in such a manner as to ensure its efficient working. The Nodal Officer or his nominee may direct that plant which is not efficient and is prejudicial to the quality of the work be removed from the site and replaced by plant to his satisfaction.

5.49 QUALIFIED PERSONNEL

Fully qualified and experienced concrete quality control Engineers shall be employed by

the Contractor and shall be available on site at all times when important work is taking place. Operators for mechanical vibrators, mixers and foreman in charge of placing of concrete shall be fully trained and experienced in their classes of work.

5.50 CLASS OF CONCRETE

All the requirements of each Class of concrete for all RCC works shall be as per IS- 2911 & 4651 & 456

However, based on the actual mix design concrete shall be carried out considering above minimum cement content no any extra claim shall be entertained for cement if more is required.

5.50.1 DECLARED ACCEPTED PROPORTIONS

The proportions finally accepted and approved by the Nodal Officer or his nominee which he considers will produce concrete having the properties required by the foregoing clause and elsewhere in the specifications, shall be known as declared proportions but no agreement by the Nodal Officer or his nominee to such declared proportions shall be the Contractor's responsibility to use in the works at all times, only concrete having properties as laid down the foregoing clause, and elsewhere in the specifications, and in all respects satisfactory to the Nodal Officer or his nominee.

5.50.2 NO DEVIATION FROM DECLATRED PROPORTIONS

No deviation from declared proportions will be allowed unless and until the Nodal Officer or his nominee shall give his written authorization for the adoption of revised proportions for any class of concrete.

5.50.3 MEASUREMENT OF INGREDIENTS

The proportioning of ingredients of concrete for each batch of concrete shall be performed by an Automatic weight batching plant / or an approved weight batching machine. Water shall be fed into the mixer from a tank provided with means of adjusting the flow of water so that water supplied may be as determined for each class of concrete. Due allowance shall be made for the weight of water carried by the aggregates and the amount of water added to the mixer may be reduced as required. For this purpose the moisture content of coarse and fine aggregate shall be ascertained (as per IS 2386 Pt. III) daily and at any other times when alteration of the moisture content may be expected for fresh deliveries of aggregates/inclement weather or any other reason.

5.50.4 MIXING

The ingredients and water shall be thoroughly mixed to uniform consistency in approved type pan or drum mixer. The use of continuous mixer will not be allowed. If the Contractor should find it expedient to use small type mixers for special or outlying portions of the work rather than to supply from the main batching plant, he may subject to the approval of the Nodal Officer or his nominee, use smaller approved concrete producing units of the weigh batch type. In such cases the mix shall be adjusted to whole bags of cement and no splitting of bags will be allowed. The "time period" allowed for the mixing shall be as laid down in the foregoing table of relevant IS or as directed by the Nodal Officer or his nominee.

5.50.5 DISCHARGE FROM MIXER

The concrete shall be discharged from the mixer on to a level, clean and water-tight platform or fed into water-tight containers. The areas surrounding the mixer shall be paved and kept clean.

5.50.6 TRANSPORTATION OF CONCRETE

The concrete shall be transported from the mixer to its place of the works as rapidly as possible and in such a manner that there shall be no separation or loss of its ingredients. In no circumstances shall more than half an hour elapse between the time water is added to the mix and the time when the concrete shall be permitted to be used in the works after initial set has taken place. The use of concrete distributing chutes at an angle of more than

45 degrees from the horizontal will not be permitted without the approval of the Nodal Officer or his nominee.

5.50.7 POURING

Authorization to pour concrete shall be obtained from the Nodal Officer or his nominee at least one day in advance of each pour. The arrangements for placing concrete shall be subject to the approval of the Nodal Officer or his nominee. In no case shall the concrete be dropped or thrown from a height of more than 2 meters. Concreting of beams, slabs and similar members shall be carried out in one continuous operation to the full depth of the member and the sequence of placing shall be so arranged as to avoid disturbance to partially set concrete.

Freshly laid concrete shall not be wheeled over or otherwise disturbed when placing concrete adjacent to a construction joint, special care shall be taken not to disturb the dowels or other reinforcing bars projecting from the existing concrete. Concreting shall proceed continuously over the area between the construction joints. Fresh concrete shall not be placed against concrete which has been in position for more than 30 minutes unless a proper construction joint is formed.

5.50.8 COMPACTION OF CONCRETE

The contractor shall compact the placed concrete thoroughly by means of sufficient number of approved mechanical vibrators of adequate power and having a frequency of not less than 6000 impulses per minute. The vibrator shall be allowed to sink freely under its own weight until it enters the previous lift.

It shall be withdrawn immediately at the same rate and used at a new location. Concrete once vibrated shall not be vibrated again. The Contractor shall ensure that the concrete is thoroughly worked around the reinforcement and against external shutters and the shuttering suitably tamped so that all entrained air is expelled and the concrete surface when exposed is found good and free from air pockets, honey-combing or other defects.

5.50.9 CONCRETING IN INCLEMENT WEATHER

In the event of rain, storm or any other severe condition concreting shall be stopped and appropriate temporary stop ends, vee grooves, etc. placed as may be necessary. During wet weather, the concrete shall be adequately protected as soon as it is placed in position. The contractor shall always have in readiness approved framed sheeting, tarpaulins etc. for the protection of green concrete from damage due to rain, storms or other weather-conditions. The Nodal Officer or his nominee may order the cutting out and replacement of the damaged concrete, all at the expenses of the Contractor.

5.50.10 CONSTRUCTION JOINTS

The joints shall be in the position as shown on the drawings or as approved and ordered by the Nodal Officer or his nominee. The cost of all shuttering for such joints shall be deemed to be included in the rates named in the bill of quantities.

The work of joints, vertical or horizontal, shall be carried out in a suitable manner as approved by the Nodal Officer or his nominee. Any skin or laitance shall be thoroughly removed and the surface roughened by hammering, brushing and washing so as to accomplish exposure of the surface of aggregate. The joints shall be thoroughly washed with clean fresh water and blown off with compressed air. The moist surface shall be covered by neat cement slurry or with a layer not less than 4 mm thick of 1:1 cement mortar of medium consistency, while placing of fresh concrete.

5.50.11 CURING

All concrete shall be protected during hardening from the harmful effects of sunshine, and drying winds. All exposed faces of concrete shall be kept continuously moist with clean fresh water for a period as laid down in Indian Standard Specifications. However in lieu thereof the contractor may use curing compound of approved quality free of cost in conformity to IS 9103 with prior approval of the Nodal Officer or his nominee. The contractor shall remain extremely vigilant and employ proper equipment and workmen for curing.

The decision of the Nodal Officer or his nominee regarding the adequacy of curing is final. In case any lapse on the part of the Contractor is noticed by the Nodal Officer or his nominee, he will inform the Contractor or his supervisor verbally, or in writing to correct the deficiency in curing. If no satisfactory action is taken by the Contractor, the Nodal Officer or his nominee will be at liberty either to employ sufficient means through any agency to make good the deficiency and recover the cost thereof from the Contractor.

5.51 SCREENING

All the surfaces of slabs or other members not requiring to shuttering are to be screened with cement sand mortar approved by the Nodal Officer and to be laid in an approved manner and within a tolerance of plus minus 3 mm of true level and grade.

5.52 CONCRETE BELOW SPECIFIED CRUSHING STRENGTHS

Should the test cubes fail to meet the minimum specified crushing strength for each class of concrete, the Nodal Officer may take one of the following decisions.

- (a) Instruct the contractor to carry out additional tests at his own cost.
- (b) Accept the work at his discretion and in such a case may make a reduction in the rate of the appropriate item.
- (c) Reject the work in which case the contractor shall pull down and rebuild at his own cost the relevant section of work.

5.53 FAULTY WORK

Faulty work due to any reason shall be demolished and re-constructed by the Contractor at his own cost.

5.54 PROGRESS REPORTS

Daily and weekly progress reports on concreting shall be submitted to the Nodal Officer in an approved Form.

5.55 MORTAR AND GROUT

5.55.1 CEMENT MORTAR

The proportions by weight of cement to fine aggregate in mortar shall be as shown on the Drawings or as otherwise directed. The mortar shall be thoroughly mixed with just sufficient water to make a homogeneous and Workable mix.

The use of plasticizers or other additives will not be permitted without the prior approval of the Nodal Officer or his nominee and the Contractor shall carry out at his own cost such tests on additive as the Nodal Officer or his nominee may direct. Mortar shall be used within half an hour of adding the water to the dry ingredients. Precast members shall be jointed to each other with cement mortar 1:1 ratio at contact surface.

5.55.2 GROUT

Except where otherwise specified or directed by the Nodal Officer or his nominee, grout shall be colloidal grout produced in plant approved by the Nodal Officer or his nominee. Neat cement shall be used unless otherwise shown on the drawings or directed by the Nodal Officer or his nominee, where the proportion by weight of cement to fine aggregate will be specified.

5.55.3 SHUTTERING AND FORMWORK

5.55.3.1 GENERAL

All shuttering and support required for construction of concrete works shall be designed by the contractor and relevant drawings together with calculations for strengths and deflection shall be submitted to the Nodal Officer or his nominee for approval before commencement of the work. Shuttering shall be of steel plates only.

5.55.3.2 FIXING

The contractor shall fix all the form work in perfect alignment. The form work shall be securely braced so as to be able to withstand without appreciable displacement, deflection or movement of any kind, weight of the constitution or movement of persons, material and plant. All the joints should be watertight to prevent leakage of cement slurry from the concrete. Wedges and clamps are to be used wherever practicable. Side and bottom shuttering will have to be provided for casting of precast units.

5.55.3.3 REMOVING

Forms or shuttering shall not be disturbed until the concrete has sufficiently hardened. The proper time for removal of form work shall be in accordance with IS- 456-2000 or as directed by Nodal Officer or his nominee.

5.55.3.4 FINISH /ALIGNMENT

Shuttering shall be such as to produce a first class fair face on the concrete free from board marks or any other disfigurements, and shall be used for all surfaces exposed and unexposed. All shuttering is to be aligned within a tolerance of 3mm.

5.55.3.5 SPECIAL PROVISION

Wherever concreting of narrow members is required to be carried out within shuttering of considerable depth, temporary openings in the sides of the shuttering shall, if so directed by the Nodal Officer, be provided to facilitate the pouring and consolidation of the concrete. Small temporary openings shall be provided as necessary at the bottom of shuttering of columns, walls and deep beams to permit the expulsion of rubbish, etc. All corners of beams, columns and slabs shall unless otherwise shown on the drawings, be provided with chamfers of 20 x 20 mm or as directed by the Nodal Officer or his nominee.

5.55.3.6 PREPARATION FOR CONCRETING

Before any concreting is commenced, shuttering and centering shall be carefully examined and the space to be occupied by the pour, thoroughly be cleaned out. The inside of shuttering shall be treated with a coating of an approved substance to obviate adhesion and where necessary to prevent absorption from the concrete, the shuttering shall be thoroughly wetted shortly before concreting is commenced.'

5.55.3.7 CONTRACTOR'S RESPONSIBILITY

Any, damage resulting from premature removal of shuttering or from any other cause shall be made good by the Contractor at his own expense.

5.55.3.8 CLEANING AND TREATMENT OF FORMS

All parts of the forms shall be thoroughly cleaned of old concrete, wood shavings, saw dust, dirt and dust sticking to them before they are fixed in position. All rubbish, loose concrete, chippings, shavings, saw dust etc., shall be scrupulously removed from the interior of the forms before concrete is poured. Compressed air jet and/ or water jet along with wire brushes, brooms etc., shall be used for cleaning. The inside surface of the form work shall be treated with approved non- staining oil or other compound before it is placed in position. Care shall be taken that oil or other compound does not come in contact with reinforcing steel or construction joint surfaces. They shall not be allowed to accumulate at the bottom of the form work. The oiling of the form work will be inspected just prior to placement of concrete and redone wherever necessary.

5.55.3.9 RE-USE OF FORM

Before re-use, all forms shall be thoroughly scraped, cleaned, joints and planes examined and when necessary repaired, and inside surface treated as specified herein before. Form work shall not be used/ re-used if declared unfit or unserviceable by the Nodal Officer or his nominee.

5.56 REINFORCED CONCRETE

5.56.1 GENERAL

The following clauses shall be read in conjunction with the section relating to Concrete.

5.56.2 STORAGE

The reinforcement bars shall be stored on the site on timber or concrete supports suitably spaced and of sufficient height to keep the steel clear off the ground. It shall be protected from rusting, oil, grease and distortions. The stacks shall be easily measurable. Steel needed for immediate use shall only be removed from storage.

5.56.3 BAR BENDING SCHEDULES

The Contractor shall submit to the Nodal Officer or his nominee for approval Bar Bending Schedules with working drawings, showing clearly the arrangement proposed by the Contractor to match available stock of reinforcing steel. Upon receipt of the Nodal Officer or his nominee final approval of the Bar Bending, Schedule and drawings, the Contractor shall submit requisite copies of the drawings after incorporating necessary modifications or corrections, for final record and distribution. Approval of such detailed drawings by the Nodal Officer or his nominee shall not relieve the Contractor of his responsibility for correctness nor of any of his obligations to Meet the other requirements of the Contract.

5.56.4 BENDING REINFORCEMENT

Bending of reinforcement shall strictly be in accordance with the approved drawings, or IS: 2502 or as ordered by the Nodal Officer or his nominee. No reinforcement bar shall be bent when in position without the approval of the Nodal Officer or his nominee, whether or not it is partly embedded in the hard concrete.

5.56.5 BINDING WIRE

All bars shall be bound tightly together where they cross, with annealed steel wire 1.5 mm in diameter. The free ends of the binding wire shall be bent inwards.

5.56.6 PLACING AND FIXING

All types of reinforcement shall be correctly placed and fixed in position entirely to the satisfaction of the Nodal Officer or his nominee. The cost of providing tying wire as well as space blocks rods shall be deemed to be covered in the rate for reinforce cement steel.

5.56.7 SPLICING REINFORCEMENT

Where splicing and/ or overlapping in reinforcement are required, the bars shall be provided with such splices or overlaps as are shown on the drawings or as directed by the Nodal Officer or his nominee.

5.56.8 WELDING OF REINFORCEMENT

Welding of reinforcement shall be in accordance with the approved drawings or as desired/ordered by the Nodal Officer or his nominee and in accordance with IS: 2751 and IS: 456

5.56.9 COVER OF REINFORCEMENT

Cover to reinforcement shall not be less than that specified or shown on the drawing. Where two bars cross, the outer shall have the minimum cover.

5.56.10 REINFORCEMENT TO BE CLEAN

All steel reinforcement before the concrete is deposited, shall be clean, free from dust, loose scales, oil, rusts, grease or any other deleterious materials. Particular care shall be taken to avoid contamination with oil.

5.56.11 DEPOSITING, CONCRETE

No concrete shall be deposited until all shuttering, concrete and reinforcement have been inspected and approved by the Nodal Officer or his nominee. On each concreting gang, a competent steel fitter shall be available who shall ensure that the reinforcement and other embedded fittings are kept in position during placing and compaction of the concrete.

5.57 WATCHING & LIGHTING

The contractor shall in connection with the works, provide and maintain at his own expenses, all lights, guards, fencing and watching whether on shore or afloat when and where necessary or as required by the Nodal Officer or his nominee or by any Competent Statutory or other authority for preparation of works or for the safety and convenience of the public or others.

5.58 ALLOTMENT OF SITE

The Nodal Officer will, after the issue of written order to Contractor to commence the work, give to the contractor possession of so much of the site as in the opinion of the Nodal Officer may be required to enable the contractor to commence and proceed with the construction of the works in accordance with the programme submitted by the contractor and stated from time to time as the proceed, give to the Contractor possession of such portions of the site as may, in the opinion of the Nodal Officer or his nominee, be required to enable the contractor to proceed with the construction of the works without interruption if the work in accordance with the said programme. Nodal Officer reserves the right to take back from the contractor the portions of "Site" which, in the Nodal Officer's opinion, is considered unnecessary for the purpose of the "Works".

If the contractor suffers any delay from failure in accordance with the terms of this Clause, the Nodal Officer shall grant an extension of the time for completion of the work without financial repercussions on either side.

5.59 ALLOTMENT OF WORK SITE

1. SITE OF WORK.

The allotment of the site is immediately hand over to contractor after the work order for the work is issued. The sites shall be hand over to contractor as per the availability

Necessary permission for above said area shall be granted by the DPA in consultation of Engineer-in charge. No claim / disputes what-so-ever for any reason if site is not handing over for starting the work at time. If the contractor suffers any delay the Nodal Officer or his nominee may grant at his discretion an extension of time for completion of work. However, no claim / disputes etc. arising

out of extension of time so granted shall be entertained. No claim regarding extra payment/ escalation shall be allowed on account of such Extension. Hence, the contractor while filling up their rates in the tender should consider the above aspects unfailingly.

2. WORKING AREA

Area for setting up batching plant, pre-cast yard, laboratory, office, storage of steel and cement, , reinforcement yard, stacking of query materials etc. shall be provided if available with DPA. The area to be used with due care that no damage to be done to the existing structure. If any damage is done the contractor shall repair the portion in its original shape at his own cost.

Necessary permission for above said area shall be granted by the of DPA in consultation of Engineer-in charge/C.E. Contractor has to make suitable platforms for stacking of materials and setting up of equipment. The necessary barricading, lights, sign boards and flags etc., wherever necessary has to be provided by the contractor.

3. HUTMENT AREA FOR LABOURS

Area for temporary hutments, canteens, crèche, etc. for labour shall be allotted outside Cargo Jetty area free of cost. However, if any leveling/dressing as well as filling required in the said area, contractor has to carried-out the same at his own cost. The necessary barricading, lights, sign boards and flags etc., wherever necessary has to be provided by the contractor.

5.60 PROGRESS PHOTOGRAPHS

The contractor at his own cost shall supply to the Nodal Officer or his nominee two copies of color photographs of works in progress as directed by the Nodal Officer or his nominee from time to time. The negatives of the photographs shall become the property of the Port AUTHORITY. The photographs shall be half plate size. The photographs shall be mounted in albums and shall be suitably inscribed. Two albums shall be handed over to the Nodal Officer or his nominee. No prints of the negatives may be supplied to any person or persons without the permission of the Nodal Officer or his nominee.

5.61 AMENDMENTS

The Board may, from time to time, add to or amend the regulation and on any question regarding the application, interpretation or effect of these regulation the decision of the Chief Labour Commissioner or Deputy Chief Labour commissioner of the Government of India or any other person authorized by the Board in that behalf shall be final.

5.62 INFLAMMABLE STORES

The contractor is to comply with all local regulation in respect of sage storage of all inflammable stores, explosive or other materials involving risk to third parties and is to take all precautions required in the transport and use of such materials. The contractor is to submit to the Nodal Officer or his nominee for approval all drawings and documents required for the sanctioning of storage sheds or other accommodation and is to built all such storage to the proper requirement at his cost.

5.63 FIRE HAZARDS

The contractor shall be required to comply with the petroleum act 1934 and petroleum rules 1976 during progress of the construction work. Fire watch services as required shall be given free of cost but arrangement from Marine / Concerned Department shall have to be made by the Contractor.

5.64 CONSULTANT FOR QUALITY MONITORING AND DETAILED DESIGN, DRAWINGS FOR ROADBASE, PAVEMENT AND RCC STRUCTURES

- i. The contractor shall engage at his own cost for Consultant for the Work having requisite experience of Government or semi Government organization. The Consultant has to prepare the design and drawings of work, carry out the work on round the clock basis and shall certify all requirement and tests as required under relevant IS or/and Codes. However available services of DPA civil laboratory can be availed at prescribed rates, if desired. The Consultant shall be engaged by Contractor at his own cost with prior approval of the Engineer-in-charge or his nominee.

Following are the brief scope of consultant but not limited to:

- a) Consultant shall visit site and conduct detailed survey of site for preparation of design for road base layers and flexible pavements. The consultant shall carried- out the Geo-technical investigation and associated data for design purpose and prepare report for carried out in said area accordingly road and RCC structures design and drawings shall be prepared. The cost is included in the quoted rate. All the expenses towards site investigation and designing and drawings , all arrangements are borne by the Contractor at his own cost.
- b) The Estimate DTP's and tender drawing have already been prepared by DPA. Consultant has to prepare the detailed design and drawings in accordance with Tender invited. And shall also prepare design drawings, during the progress of work also.
- c) The consultant shall obtain necessary proof check for the detailed design and drawings for the work through IIT(Indian Institute of Technology) before issue Good for construction Drawing at his own cost.
- d) To assist DPA for monitoring, quality of the work, by carrying out inspection, laboratory testing, quality audit, verification of site records regarding quality of materials and its certification and any other means required in this connection. Inspection of construction equipment's deployed by the contracting agency in order to assess their suitability for the work.
- e) To deploy required experienced Technical Personnel on the site for TPI & QA to ensure that quality of the work is maintained as per provision of relevant IS codes and specifications of work.
- f) To suggest various measures for achieving required quality in the work. To sort out all problem regarding quality of work, during the course of execution and to give proper suggestions.
- g) Reporting, Documentation, Quality certification etc.

All materials required to be used in the work shall be got tested from Government / Govt. Approved lab under supervision of Third party inspection agency and the charges there of shall be borne by the contractor. The contractor shall extend all necessary assistance, service as may be required, without any extra cost, necessary test shall be carried-out if directed by the third party agency deputed by Deendayal Port AUTHORITY or as directed by Engineer-In-charge.

- ii. Contractor has to obey the instructions given by TPI during execution of the work including necessary testing / inspection etc. This work may also be inspect by any Government / Vigilance Department and they may order for certain testing / inspection of executed work etc. Contractor has to assist to them and also bear the expenses for such testing and results. The test results/observations are binding on the contractor. Such incidental costs are included in the quoted bid.

5.65 NIL

5.66 PAINTS

All synthetic paints and distempers used on the works shall be approved by the Nodal Officer or his nominee. Test certificates on, covering capacity dry film thickness and viscosity and drying time may be required.

The maximum slump for the different structural members is given below : -

1	Pile	-	140 to 160mm
2	Precast Beam & Slab	-	40mm
3	Cast-in-situ Beams & Slabs	-	40mm
4	Pourable concrete cast-in-site	-	120mm
5	Footing foundation		50mm
6	Columns, pillars, post etc.		50mm
7	Walls, pilaster, railing etc.		60mm

The cubes casted at site shall be tested at Port Laboratory or Government approved laboratory and test results all conform to IS 456: 2000 (latest edition). Testing charges of the cubes shall be borne by the contractor. If the result is not satisfactory the concrete work will have to be dismantled and redone by the contractor at his own cost.

For casting of c/c cubes, the contractor has to arrange his own moulds.

The Nodal Officer reserves the right to ask contractor to cast additional c/c cubes at the different stages and works for testing, if required at 3/7 days period. No separate payment shall be made to the contractor on account of the cost of the labour and materials required for casting of the cubes required for 3/7 days testing. The testing charges for these cubes shall be borne by contractor. The contractor may set up cube testing facilities at site of work for testing 3/7 days cube.

Test cubes shall be casted, cured and stored as per relevant IS.

5.67 Barricading, including proper lighting arrangement in the night at the required places shall have to be provided by the contractor at his own cost, including necessary arrangements for proper movement of traffic by carefully maintained approaches and road diversions with suitable sign boards for indications of road signs etc. as directed by the Engineer-in-Charge.

5.68 All the grass, shrubs, plants and foreign matter etc. in the alignment of the site and within the site of work shall have to be cleared, if required without any extra cost.

5.69 The Engineer-in-charge may delete any number of items included in his tender (contract) without assigning any reasons and without any financial liability.

5.70 All the tools, plants, scaffolding, ladder etc. and other machinery etc. required temporary for the purpose of execution of work will have to be arranged by the contractor at his own cost, and storing of such tools, plants etc. will have to be made by him.

5.71 Unless otherwise specifically mentioned the rates quoted for all items include for all lead and lift and no extra claims shall be entertained on this account.

5.72 The contractor shall have to obtain quarry permits from the office of the Geologist, Department of Geology and Mines, Bhuj-Kutch before quarrying any secondary materials like Quarry spall, crushed metal, sand, earth, murrum, rubble etc.

5.73 Nothing extra shall be paid for change of quarry against lead etc.

5.74 Contractor has to execute the work without disturbing the operation. Contractor has to take proper safety precautions and get permissions for the activities such as welding, gas cutting etc., from the competent authorities/bodies before execution of work.

5.75 Contractor has to coordinate with other department officials of DPA, Customs, CISF and other related departments to avoid disturbance of day to day operation of the Port and smooth execution of the proposed work.

5.76 Contractor has to take full responsibility of safety, security and formalities of custom bound area etc. for all the shifts during execution of work.

5.77 SPECIFICATIONS FOR RESTORATIVE REPAIRS

The specifications provided under this clause are applicable for all the items of the work to be executed under this tender where the nature of work calls for the same even if the same is not specifically **mentioned in the specifications of the respective items.**

5.77.1 Specifications for various items of Schedule of Quantities & Rates –

Notes –

- (i) The headings/ title shown against the various sub-clauses of this clause are the brief / indicative description of items of Schedule of Quantities and Rates and shall be read as complete item for the purpose of heading of the respective sub-clause and the specification provided under the sub-clause shall be accordingly used for execution of the item.
- (ii) The specifications shall be followed for the respective item of work but the same shall not be treated as limiting one for complete execution of the item.
- (iii) Whenever the specifications for any material, workmanship, etc. is not provided in the relevant item, then specifications to be adopted for the same shall be as per following order (a) manufacture's specifications (b) specifications covered elsewhere in "Specifications" of the tender (c) Relevant IS Code.
- (iv) All Manufactured materials shall be received at site in factory sealed containers with labels legible and intact.

5.78 Action where no Specifications are specified

In the case of any class of work for which there are no such specifications, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there is no such specification in Bureau of Indian Standards, the work shall be carried out as per manufacturer's specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer or his nominee.

5.79 DEFECT LIABILITY:

The defect liability period for the work is 12 months from the date of completion of work as per completion certificate issued by the Engineer in charge. The contractor will be responsible to rectify all the defects observed during defect liability period at his own cost, failing which same will be rectified by the Engineer in charge and amount will be recovered from the Running bills paid to contractor for execution of Maintenance work.

5.80 All the labour acts, rules and regulations in force from time to time are to be followed by the contractor and the contractor has to obtain license/ Registration from the Assistant Labour Commissioner (C), as per rules , during the course of execution of work.

5.81 The prospective bidders may raise query relating to bidding conditions, bidding

process, and / or rejection of bid. The reason for rejecting the tender or non issue a tender to prospective bidder will be disclosed where written enquires are made by the concerned bidder.

5.82 Filling Work

5.82.1 The work to be performed under the scope of this specification shall broadly include:-

Filling the area with quarry spall with settlement of ground. Some indications of nature and extent of the works have been given on the drawings and those are preliminary only. Complete nature and extent of the works will be furnished to the Contractor progressively during the execution of the work. Quantities indicated in the Schedule of Items are tentative and are subject to change. All items of work shall be executed in accordance with the relevant specification annexed thereto and the provisions of the contract.

5.82.2 The layout and levels of all structures etc. shall be made by the Contractor at his own cost from the nearby existing structures/facilities and bench mark reference pillar, as directed by the Engineer-in-Charge. He shall give all help with instruments, materials, and men to the engineer-in-Charge for checking the detailed layout and correctness of the layout and level. The approval of the Engineer-in-Charge shall not be deemed to imply any warranty and shall not relieve the contractor of his sole responsibility in carrying out the work correctly.

5.82.3 All materials to be used in the works (i.e. Road work/filling) shall be subjected to inspection and test. Samples of all materials, proposed to be used, in the permanent works shall be submitted to the Engineer-in-Charge for approval before those are brought to site. Samples required for approval and testing must be supplied allowing sufficient time for testing and approval, due allowance being made for the fact that if the first samples are rejected further samples shall be required. Delay in the execution of work due to late submission of samples will not be acceptable as a reason for delay in the completion of the works. Materials shall be tested before dispatching to the site, where possible. Materials shall also be tested on the site and those may be rejected if found not suitable or not in accordance with the specifications notwithstanding the results of tests at the contractor's work or elsewhere or of test certificates or of any approval given earlier.

5.82.4 Nothing extra shall be paid for change of quarry against lead etc.

5.82.5 No claim what so ever extra use of quarry spall/metal due to settlement or slippage of original ground etc shall be considered. This aspect may be kept in the mind before filling the rates.

5.82.6 During the execution of works dewatering manually or by pumping is to be done by the contractor at his own cost, if found necessary and no claim on this account shall be entertained.

5.82.7 The contractor shall arrange to supply periodically samples of Granular material, aggregates required for FILLING WORK etc. to the Port Laboratory/Govt. approved lab for testing as per relevant I.S. and as per MOST specifications. However all the materials shall be arranged by the contractor free of cost for testing, Testing charges will be born by the contractor for testing of materials in Port Laboratory/Govt. approved lab.

5.82.8 The contractor shall carry out the work maintaining proper camber, slope and gradient to the road, plot or berm as directed by the Engineer-in- charge.

5.82.9 If deemed fit by Engineer-in-charge the contractor shall be not allowed to use settled seawater only for watering of layers of G.S.B/quarry spall

5.82.10 As per site condition the approach etc. will be required which the contractor shall provide & maintain at his own cost. Contractor shall consider these aspects while quoting the rates in tender. Nothing extra will be paid for the same.

5.82.11 METHODOLOGY FOR USE OF FLYASH/SLAG WITH LIME FOR GROUND IMPROVEMENT

1. INTRODUCTION

Coal fly ash, or Pulverized Fuel Ash (PFA) has been used for many years in road construction as a fill material, in concrete, lean mix sub-bases and in more recent years as a binder and aggregate in hydraulically bound materials.

2. APPLICATIONS FOR FLY ASH FLY ASH AS A FILL MATERIAL

FLY ASH has been used for many years as an alternative to virgin aggregates for embankments, especially in road construction projects (UKQAA b, 2007). FLY ASH is used for fill applications because:

- It is lightweight when compared to most materials, having a particle density of 2.10 to 2.3 and a dry bulk density ranging from 1100kg/m³ to 1450kg/m³. This leads to savings in material, transport costs and reduces settlement in underlying soils.

Table 1: Compressive strength in mpa of treated fly ash Age of 1:1 sealed cylindrical specimens cured @ 20°C.

	Fly ash with 2.5% cao	Fly ash with 5% cao
7 days	1.5	2
28 days	4	4
91 days	5	7.5

3. METHOD STATEMENT FOR IMPROVEMENT

- Since, the CBR of the virgin/marshy and the existing roads varies from 6.5 to 22; it is found that the virgin/marshy ground needs improvement to enhance the CBR.
- Virgin/Marshy ground will be excavated up to 600 mm, dewatered to make the surface dry.
- Mixed Fly Ash + Slag added with 2% of lime will be placed in a layer of 300 mm compacted.
- The CBR of the mixed materials will be in the range of 20-40.
- The cube strength of the mixed materials with added 2% lime varies from 7.5 to 10 Mpa, which is as good as cement bound macadam.
- These materials will also break the capillary action of water in the subgrade, and provide a stable base for transfer of loads, as the settlement of the mix will be less than 1%.

The site investigation reports shows the CBR of the virgin/marshy and the existing roads varies from 6.5 to 22, So it is found that the virgin/marshy ground needs improvement to enhance the CBR.

Procedure

Step-2: Setting Out

After the site has been cleared, the limits of embankment is set out to true lines, curves, slopes, grades, and sections as shown on the drawings. The limits of the embankment are marked by fixing batter pegs on both sides at regular intervals as guides before commencing the construction.

Step-3: Excavation

The virgin/marshy ground will be excavated up to foundation level of the road.

Step-4: Dewatering

If there is water present at the foundation level of the road, the water is removed by pumping or any other means as directed and the area of road foundation is kept dry.

Step-5: Preparation of mix

The slag (50%) + Fly ash (50%) added with 2% of lime will be mixed with water at the plant and then transported to the site. The moisture content of the mix shall be checked prior to commencement of compaction. The tolerance value is OMC plus or minus 2% as per IRC-SP-58.

Step-6: Compacting the ground supporting the road.

The mixed slag (50%) + Fly ash (50%) added with 2% of lime be placed in a layer of 300mm leveled, scarified, and then compacted by rolling so as to achieve required M.D.D.

Step-7: Finishing Operations

Finishing operations shall-include the work of shaping and dressing the road bed to conform to the alignment, levels, cross-sections and dimensions shown on the drawing. Top surface will be roughened and moistened slightly before the application of top soil in order to provide satisfactory bond.

Quality Control

The quality of compacted material shall be controlled through periodic checks on the compaction process or the end product, by taking one test at every 1000 Sq.m.

For carrying out the work, the contractor has to build the temporary path/road/barricade of mud/any other foreign material along the main road work/RCC wall to restrict the sea water to enter the work site without any extra cost.

5.83 Item Construction of sub-base(Quarry Spall) by Providing, laying, Spreading and compacting...

GRANULAR SUB-BASE

1. SCOPE:

This work shall consist of supplying, laying and compacting well graded materials on prepared sub-grade or side shoulders in accordance with the requirement of these specifications as mentioned in the items of Bill of quantities. Material shall be laid in one or more layer in side shoulder according to adjacent layers in line, grade and cross section shown on the drawing or as directed by Engineer In-Charge. Each layer consolidated up to 200 mm compacted thicknesses.

2. Materials :

2.1. Materials to be used for the work shall be quarry spalls having C.B.R. value not less than 30 %. Materials shall be free from organic or other deleterious construction and confirm to grading given below:

Grading for Course Graded	
<u>I. S. Sieve</u>	<u>Present by weight passing the I.S. Sieve Grading - I</u>
75.00mm	100%
53.00mm	---
26.50mm	55-75%
9.50mm	----
4.75mm	10-30%
2.36mm	---
0.425mm	---
0.075mm	< 10%
(Minimum CBR Value)	30%

Note: The material passing 425 micron (0.425mm) sieve shall be tested according to IS 2720 (Part - V) shall have liquid limit and P.I. Value not more that 25% and 6% respectively.

2.2 PHYSICAL REQUIRMENTS

The fraction of material passing 22.4mm sieve shall give CBR Value as specified when tested in accordance with IS 2720 (Part - XVI) after preparing the samples at maximum dry density and optimum moisture content responding to Is 2720 (part - VII) and soaking the same in water for 4 days.

3. CONSTRUCTION OPERATION:

3.1 Immediately prior to the laying of sub-base, the sub-grade already finished to MOST specification for roads and Bridges works IV Revision as applicable shall be prepared by removing all vegetation and other extraneous matter, lightly sprinkled with water if necessary and rolled with one pass of 80-100 KN smooth wheeled roller.

3.2 SPREADING, COMPACTING, AND WATERING:

The sub base materials of grading specified in the item shall be spread on a prepared sub-grade from the stack along the side of roadway. In no case shall be the materials be dumped in heaps directly on the surface prepared to receive the materials nor shall handing over un-compacted or partially compacted sub-grade be permitted.

If the sub base material specified in clause 2.1 above is not meeting the requirement the contractor shall make arrangement for mixing mechanically by the mix in place method.

The thickness of loose layers shall be so regulated that the maximum thickness of the layer after consolidation does not exceed 200mm.

Moisture content of the loose material shall be checked accordance with IS 2720 (Part-II) and suitable adjusted by sprinkling additional water by trailer mounted water tank or other approved means so that at the time of compaction it is from 1 % above 2% below the optimum moisture content corresponding to IS 2720 (Part - VIII) while adding water, due allowance shall be made for evaporation losses after water has been added, the material shall be processed by mechanical or other approved means if so directed by the Engineer-in-charge until the layer is uniformly wet.

Immediately thereafter, rolling shall be started with Vibratory roller of 80-100 KN. Static Weight. The rolling shall be commenced at the edge and progress towards the centered longitudinally, except that on super - elevated portions it shall progress from the lower to the upper edge parallel to the centered line of pavement or on shoulders. During rolling, the grade and camber shall be checked and any high spots or depressions, which become apparent, corrected by removing or adding fresh materials. The speed of roller shall not exceed 5 Km. Per hour. The rolling shall be continued till the density achieved is at least 98 % of the maximum dry density for the materials determined as per IS 2720 (Part -VIII). The surface of any layer of materials on compaction shall be well closed; free from movement under compaction shall be closed free from movement under compaction equipment and from compaction planes, ridges, cracks, or loose materials. All loose segregated or other defective area shall be made from good to the full thickness or layer and re-completed.

4. SURFACE FINISH AND QUALITY CONTROL OF WORK:

The surface finish of construction shall confirm to the requirements of clause-902 of MOST specifications for Roads and Bridges works IV Revision, Control on the quality of material and work shall be exercised by the Engineer-in-charge in accordance, with section 900 of MOST specifications for Road and Bridge works, IV Revision.

5. ARRANGEMENTS FOR TRAFFIC:

During the period of construction, arrangement of traffic shall be maintained as directed by Engineer – in – charge.

6. MEASUREMENT FOR PAYMENT:

Granular sub-base (Quarry Spalls) shall be measured as finished work in position of cubic meter. For ascertaining the compacted thickness, the required initial working levels shall be taken at interval of every 10 meters before spreading of Granular materials and final levels shall be taken after compaction and compaction of laid surface in accordance to the initial working levels. The average thickness of any area shall be the arithmetical mean of the different of levels before and after construction. Provided that the thickness of the finished work shall be limited to the specified thickness of the said course, the quantity shall be worked out by the average and area method.

The initial and final levels for sub-base course shall be taken separately in presence of authorized representative of the contractor

5.84 Providing, laying and spreading and compacting graded stone aggregate to WET MIX MACADAM -----etc., complete.

5.84.1 SCOPE :

This work consisting of laying and compacting clean, black stone crushed graded aggregate and granular material, premixed with water to a dense mass on a prepared sub grade/ sub base / base or existing pavement/ side shoulders as the case may be in accordance with the requirement of these specifications. The material shall be laid in layers as necessary to lines, grades and cross section shown on the approved drawings or as directed by the Engineer in charge.

The thickness of single compacted Wet Mix Macadam layer shall not be more than 150 mm thickness.

5.84.2 MATERIALS :

(I) Aggregates

- Physical requirements: Coarse aggregate shall be machine crushed black stone aggregates. The aggregates shall confirm to the physical requirement as of Table No -1

TABLE NO -1: PHYSICAL REQUIREMENTS OF COARSE AGGREGATES FOR WET MIX MACADAM FOR SUB BASE / BASE COURSES.

TEST	TEST METHOD	IS CODE	REQUIREMENT
01	Los Angeles Abration value or Agg. Impact value	IS 2386 (Part- 4)	40 % Maximum
		IS 2386(Part- 4) Or IS- 5640	30 % Maximum
02	Combined Flakiness and Elongation indices (Total)	IS 2386 (Part- 1)	30 % Maximum

- Aggregates may satisfy requirement of either of the two tests:
 - To determine this combined proportion, the flaky stone from a representative sample should first be separated out. The flakiness index is weight of flaky stone metal divided by weight of sample. Only the elongated particles be separated out form remaining (non-flaky) stone metal. Elongation index is weigh of elongated particles divided by total non-flaky particles. The value of flakiness index and elongation index so found are added up. If the water absorption value of the coarse aggregate is greater than 2 present, the soundness test shall be carried out on the material delivered to site as per IS- 2386 (Part- 5)
- (ii) Grading requirement: The aggregate shall confirm to the grading given in table No- 2

Table No- 2 :GRADDDING REQUIREMENT OF AGGREGATE FOR WET MIX MACADAM

IS Sieve Designation	Percentage by weight passing the IS sieve
53.0 mm	100 %
45.0 mm	95-100 %
26.5 mm	---
22.4 mm	60- 80 %
11.2mm	40 – 60 %
4.75mm	25 - 40 %
2.36mm	15 – 30 %
600 micron	8 – 22 %
75 micron	0 – 8 %

The nominal size of aggregate to be used in a given test would depend on availability. Materials finer than 425 micron shall have plasticity index (PI) not exceeding 6.

5.84.3 Construction operation

- (I) Preparation of mix : - Wet mix macadam shall be prepared in an approved mixing plant of suitable capacity having provision for controlled addition of water and forced/ positive mixing arrangements like pugmill or pan type mixer of concrete batching plant. For small quantity of work , the Engineer in charge may permit the mixing to be done in concrete mixers.

Optimum moisture for mixing shall be determined in accordance with IS- 2720 (Part- 8) after replacing the aggregate fraction retained on 22.4 mm sieve with materials of 4.75 mm to 22.4 mm size. While adding water, due allowance should be made for evaporation losses . However, at the time of compaction, water in the wet mix should not vary from the optimum value by more than agreed limits 0.50 % . The mixed material should be uniformly wet and no segregation should be permitted.

(II) Spreading of mix : Immediately after mixing , the aggregates shall be spread uniformly and evenly upon the prepared sub- grade/ sub- base/ base in required quantities by paver finisher or motor grader (mechanical) as directed by the Engineer in charge.

The surface of the aggregate shall be carefully checked with templates and all high or low spots remedied by removing or adding aggregate as may be required. The layer may be tested by depth blocks during construction. No segregation of larger and fine particle should be allowed. The aggregates spread should be of uniform gradation with no pockets of the materials.

(III)Compaction : After the mix has been laid to the required thickness, grade and cross fall / camber . The same shall be uniformly compacted , to the full depth with the vibratory roller of approved type. The speed of the roller shall not exceed 5 km/ hr.

Rolling shall commence from the lower edge and progress gradually towards the upper edge, uniformly overlapping each preceding track by atleast 1/3rd with until the entire surface has been rolled. Alternate trips of the roller shall be terminated in stops atleast 1.00 m away from any preceding stop.

Rolling should not be done when the sub-grade is soft or yielding or when it cause a wave like motion in the sub base/ base course sub grade. If irregularities developed during rolling which exceed 12 mm when tested with a 3 meter straight edge, the surface should be loosened and premixed material added or removed as required before rolling again so as to achieve uniform surface confirming to the desired grade and cross fall. In no case should the use of unmixed material be permitted to make up the depressions.

Rolling shall be continued till the density achieved is atleast 98 % of the maximum dry density for the materials as determined by the method outline in IS -2720 (Part -8)

After completion, the surface of any finished layer shall be well closed, free from movement under compaction equipment or any compaction plants, ridges, cracks and loose materials. All loose, segregated or otherwise defective area shall be made good to the full thickness of the layer and recompacted.

(IV)Setting And Drying :After final compaction of wet mix macadam course, the road shall be allowed to dry for 24 Hours.

5.84.4 Opening to traffic :

Preferable no vehicular traffic of any kind should be allowed on the finished wet mix macadam surface till it has dried and the wearing course laid. In exceptional cases construction traffic may be allowed with approval of Engineer for short duration once the

course is completely dried provided vehicles mover over the full width avoiding any roughing or uneven compaction.

5.84.5 Rectification of surface Irregularity.

Where the surface irregularity of the wet mix macadam course exceeds the permissible tolerances or where the course is otherwise defective due to sub base soil getting mixed with the aggregates, the full thickness of the layer shall be rectified over the full affected area, re-shapped with added premixed material or removed and replaced with fresh premixed materials as applicable and re-compacted in accordance with MOST specifications fourth revision. The area treated in the aforesaid manner shall not be less than 5 m long and 2 m wide. In no case shall depressions be filled up with unmixed and ungraded materials or fines.

5.84.6 Surface finish and quality control of work

- (a) Surface evenness: The surface finish of construction shall conform to the requirements of Clause 902 of MOST.
- (b) Quality Control: Control on the quality of materials and works shall be exercised by the Engineer in accordance with section 900 of MOST.

5.84.7 Arrangement for Traffic: During the period of construction, arrangement of traffic shall be done as directed by Engineer in charge.

5.84.8 Measurements for payment

Wet mix macadam shall be measured as finished work in position in cubic meters as per book of specification for road and bridges work (fourth revision).

5.84.9 TACK COAT

5.84.10 Scope; The work shall consist of application of a single coat of low viscosity liquid bituminous material to an existing road surface preparatory to the superimposition of bituminous mix. When specified in the contract or instructed by the Engineer in charge.

5.84.11 Materials:

Binder: The binder used for tack coat shall be bituminous emulsion complying with IS 8887 of a type and grade as specified in the contract as directed by the Engineer in charge.

5.84.12 Construction operation :

- i. **Equipment** : The tack coat distributor shall be a self propelled or towed bitumen pressure sprayer, equipped for spraying the material uniformly as specified rate.
- ii. **Preparation of the Base** : The surface on which the tack coat is to be applied shall be cleaned and free from dust, and any extraneous material before the application of the binder. Immediately before the application of Tack Coat, the surface shall be swept clean with a mechanical broom, and high pressure air jet, or by other means as directed by Engineer.
- iii. **Application of Binder** : The application of tack coat shall be at the rate specified in the Contract, and shall be applied uniformly. Bitumen at 4 Kg/10 Sq.m. is to be applied on the WMM surface treated with Primer.

The normal range of spraying temperature for a bituminous emulsion shall be 20oC-70oC and for a cutback 50oC-80oC if RC-70/MC is used. Where geosynthetic is proposed for use, the provision of clause 703.3.2 and 703.4.4. apply. The method of application of tack coat will depend on the type of equipment to be used, size of nozzles, pressure at the spray bar, and speed of forward movement. The contractor shall demonstrate at a spraying trial, that the equipment and method to be used is capable of producing a uniform spray, within tolerance specified.

Where the material to receive an overlay is a freshly laid bituminous layer that has not been subjected to traffic or contaminated by dust, a tack coat is not mandatory where the overlay is completed within two days.

5.84.13 Curing of Tack Coat :-

The Tack Coat shall be left to cure until all the volatiles have evaporated before any subsequent construction is started. No plant or vehicles shall be allowed on the Tack Coat other than those essential for the construction.

5.84.14 Quality Control work:-

Control on the quality of materials and works shall be exercised by the Engineer in accordance with Section 900.

5.84.15 Arrangement for Traffic :-

During the period of construction, arrangement of traffic shall be done as directed by Engineer in Charge.

5.84.16 Measurement of Payment :-

Tack coat shall be measured in terms of surface area of application in square meters.

5.85 Providing & laying Dense Bituminous Macadam etc. complete.

5.85.1 Scope; This work shall consist of construction of layers of 50mm thick (compacted) on a previously prepared base/sub base

5.85.2 Materials

i. Bitumen:

The bitumen (binder) shall be straight run bitumen (60/70) or VG-30 of penetration grade as per Indian Standard Specifications for “Paving Bitumen” IS: 73.

ii. Coarse Aggregates

The coarse aggregates shall consist of crushed stone, crushed gravel/single or other stones. They shall be clean, strong, durable, of cubical shape and free from disintegrated pieces, organic or other deleterious matter and adherent coating. The aggregates shall preferably be hydrophobic and of low porosity. If hydrophilic aggregates are to be used, the bitumen shall be treated with anti-stripping agents of approved quality in suitable doses. The aggregates shall satisfy the physical requirement of set for the in Table given below.

If crushed gravel/shingle is used, not less than 90 percent by weight of the gravel/shingle pieces retained on 4.75mm sieve shall have at least two fractured faces. The portion of the total aggregate passing 4.75mm sieve shall have a sand equivalent value of not less than 50 when tested in accordance with the requirement of IS:2720 (Part-37).

PHYSICAL REQUIREMENTS OF AGGREGATES FOR DENSE BITUMINOUS MACADAM

*Aggregates may satisfy requirements of test mentioned above.

iii. **Fine Aggregate:**

Sr. No.	Test	Test method	Requirement
1.	Los angles Abration valve*	IS-2386(Part-4)	35% maximum
2.	Aggregate Impact Valve*	IS-2386(Part-4)	30% maximum
3.	Flakiness and Elongation Indices(Total)	IS-2386(Part-1)	30% maximum
4.	Coating & Stripping of Bitumen Aggregate Mixture	AASHTO T 182	Minimum retained Coating 95%
5. I) II)	Soundness : Loss with sodium sulphate Loss with Magnesium sulphate.	IS-2386(Part-5) 5 cycles 5 cycles	12% maximum 18% maximum
6.	Water absorption	IS:2386(Part-3)	2% maximum

Fine aggregates shall be the fraction passing 2.36mm sieve and retained on 75-micron sieve, consisting of crusher-run screening, gravel sand or a mixture of both. These shall be clean, hard, durable, uncoated, dry and free from any injurious, soft or flaky pieces and organic or other deleterious substances.

Aggregate gradations:

The combined coarse and fine aggregates shall produce a mixture to conform to the grading set forth in Table below.

Table Aggregates Gradation for Dense Bituminous Macadam

IS Sieve Designation	Per cent passing the sieve by weight
37.5mm	100
26.5mm	90-100
19 mm	71-95
13.2mm	56-80
4.75mm	38-54
2.36mm	28-42
300 micron	7-21
75 micron	2-8

The aggregate mix, as used in work, shall not vary from the low limit on one sieve to the high limit on the adjacent sieve but shall be well graded.

iv. **Mix Design**

1. Requirement for the mix:

Apart from conformity with grading and quality requirements of individual ingredients, the mix shall meet the requirements set out in the table given below:

REQUIREMENTS FOR DENSE BITUMINIOUS MACADAM

Sr. No.	Description	Requirements
1	Minimum stability	9-0
2	Minimum flow (mm)	2
3	Per cent air voids	3-6
4	minimum voids in mineral aggregate (VMA)	10-12 percent
5	Per cent voids in mineral aggregates filled by bitumen (VFB)	65-75
6	Binder content, percent by weight of total mix	5 %

2 Job Mix Formula: Binder Content for DBM for premixing shall be 5% by weight of total mix. The Contractor shall get the job mix formula for the mix derived at KPT laboratory before starting the work. For which sample of all ingredients of the mix shall be furnished by the contractor as required. The mix design shall be worked out based on a correct and truly representative sample of the material that will actually be used in the specific work.

3 Permissible variations from the job mix formula: The Contractor shall have the responsibility for ensuring proper proportioning of materials in accordance with the approved job mix formula and producing a uniform mix. The permissible variations of individual percentages of various ingredients in the actual mix from the job mix formula may be within the limits as specified in Table given below. These variations are intended to apply to individual specimens taken for quality control tests

5.85.3 Construction Operations

- i. **Weather and seasonal limitations :** DBM shall not be take up during rainy or foggy weather or when the base course is damp or wet, or during dust storm or when the atmospheric temperature in shade is 10 degree C or less.
- ii. **Preparation of the base :** The base on which Dense bituminous Macadam is to be laid shall be prepared, shaped and conditioned to the specified levels, lines, grades and cross Section as directed by the Engineer.

The surface shall be thoroughly swept clean free from dust and foreign matter using mechanical broom and dust removed by mechanical means or blown off by compressed air shall be used. In portion where mechanical means cannot reach other approved methods shall be used.

- iii. **Tack coat:** A tack coat shall be applied as per description of item.

iv. Preparation of mix:

(A) General: Dense Bituminous macadam mix shall be prepared in a drum mix plant of adequate capacity and capable of yielding a mix of proper and uniform quality mix shall be used for preparing the mix.

The plant shall be having uniform quality mix shall be used for preparing the mix. The Plant shall be having co ordinate set of essential units such as dryer for heating the aggregates device for feeding by weight of volume, the required quantities of aggregates for binder heating and control unit for metering out the correct quantity of heater binder capable of producing a homogenous mix with uniform coating of all particles of mineral aggregates with binder. For details relating the drum mix plant the technical requirements of drum mix plant given at and may be required.

(B) TEMPERATURE

- i. The temperature of the binder at the time of mixing at plant shall be in the range of 150 degree to 177 degree
And that of the aggregate in the range of 155 degree to 163 degree, provided that the difference in the temperature between the binder and the aggregate at not time exceeds 14 degree centigrade.
- ii. Mixing shall be through to endure that the homogenous mixture is obtained in which all the particles of the mineral aggregate are coated uniformly and the discharge temperature of the mix shall be between 130 degree centigrade to 160 degree centigrade at plant.
- iii. The Mix shall be transported from the mixing plant to the point of use in suitable tipper vehicles. The vehicles employed for the transport shall be cleaned and be covered in transit if required and directed by Engineer In charge. Any tipper causing the excessive segregation of materials by its spring suspension or other contributing factors or that which shows undue delay shall be removed from the work until such condition are corrected.

Description of ingredients	Permissible variation by weight of total mix in percentage.
Aggregate passing 19mm sieve and largest sieve	Plus/minus 8
Aggregate passing 13.2mm sieve	Plus/minus 7
Aggregate passing 4.75mm sieve	Plus/minus 6
Aggregate passing 2.36mm sieve	Plus/minus 5
Aggregate passing 300micron sieve	Plus/minus 4
Aggregate passing 75 micron sieve	Plus/minus 2
Binder Content	Plus/minus 0.3
Mixing Temperature	Plus/minus 10 C

v.Spreading:

The mix transported from the drum mix plant to the site shall be spread immediately by means of self-propelled mechanical paver with suitable screeds capable of spreading, tamping, and finishing the mix true to the specified lines, grades and cross-sections. The temperature of the mix at the time of laying shall be in the range of 120 degree centigrade to 160 degree centigrade.

Mix with a temperature less than 120 degree centigrade shall not be put in to paver spreader Longitudinal joints and edges shall be constructed true to the delineating line parallel to the center line of the road. Longitudinal and transverse joints shall be offset by at least 250mm from those in the binder lower courses and the joint of the top-most layer shall not be allowed to fall within the wheel path. All transverse joints shall be cut vertically to the full thickness of the previously laid mix with asphalt cutter/pavement breaker and surface painted with hot bitumen before placing fresh material. Longitudinal joints shall be preferably hot joints. Cold longitudinal joints shall be properly heated with joint heater to attain a suitable temperature of about 80 degree C before laying of adjacent material.

vi. Rolling and Compaction:

After the spreading of the mix by paver it shall be thoroughly compacted by rolling immediately with a set of vibratory rollers moving at the speed of not more than 5 km per hour immediately following close to the paver. Generally the initial or break down rolling shall be done with 80 to 100 Kn static weight smooth wheeled roller. The intermediate rolling shall be done with 80 to 100 kn static weight vibratory roller. The finish rolling shall be done with 60 to 80 KN weight smooth wheeled tandem roller. All the compaction operation i.e., Break down rolling can be accomplished by using vibratory tandem roller of 80 to 100 kN static weight. During initial breakdown rolling and finishing rolling, no vibratory compaction shall be restored to. The exact

pattern of rolling shall be established after trial compaction as approved by Engineer. Any displacement occurring as a result of reversing of the direction of roller or from any other causes shall be corrected at once as specified and/or removed and made good. The roller shall not be permitted to stand on pavement which is not been fully compacted and where temperature is still more than 70 degree C. Necessary precautions shall be taken to prevent dropping of oil, grease, petrol or other foreign matter on the pavement either when the roller are operating or standing.

The wheels of roller shall be kept moist to prevent the mix from adhering to them. But in no case shall fuel/ lubrication oil be used for this purpose nor excessive water poured on wheels. Rolling shall commence longitudinally from edges and proceed toward the center except that on super elevated in unidirectional camber portions, it shall progress from the lower to upper edge parallel to centerline of the road pavement. The roller shall proceed of the fresh material with rear or fixed wheel leading so as to minimize the pushing of the mix and each pass of the roller shall overlap the preceding one by half the width of the rear wheel.

Rolling shall be continued till the density achieved is at least 98 percent of that of laboratory Marshal specimen and all roller marks are eliminated. Skin patching an area that has been rolled will not be permitted. Rolling operation shall be completed in all respects before the temperature of the mix falls below 100 degree C.

5.85.4 Opening to traffic:

Traffic may be allowed after completion of final rolling when the mix has cooled down to the surrounding temperature. The Dense Bituminous Macadam shall be provided with an appropriate wearing course as early as possible prior to regular opening the normal traffic and/or impending rain.

5.85.5 Surface finish and Quality control of work

The surface finish of construction shall conform to the requirements of MOST specifications Book.

5.85.6 Arrangements of Traffic

During the period of construction, arrangement of traffic shall be done as directed by Engineer in charge.

5.85.7 Measurements for payment

The payment shall be made on tonnage basis of the weight of mix of aggregate and bitumen for this purpose the contractor shall have to install a weigh bridge of suitable capacity as required by the Engineer in charge for the purpose of weighment of dumpers at suitable place at his own cost. Weight of each and every empty dumper and weight of each and every loaded dumper for each trip will be taken and recorded in bound and numbered register on plant site and on site of work before put in to use. Weigh bridge installed by the contractor will be periodically got calibrated and verified from weigh and measure authority. If there will be difference lesser weight will be paid to the contractor which will also apply while weighing of dumpers of private/KPT weigh bridge during cross checking of empty and loaded weight, during changing the usual adopted directed of dumper on WeighBridge at plant, etc.

Weight of mixed materials will be done in presence of responsible person, not less than the rank of sub-Engineer/Junior Engineer (Civil) OF THE Kandla Port Trust. Record of each dumper will be maintained separately in bound and numbered register will be maintained by the

departmental representatives and signed by the contractor or his representative and proper gate system shall be established for the vehicles/dumpers coming to the plant site and outgoing from the plant site as well as coming at work site and outgoing from the work site. The location of KM and meter in which individual dumpers are unloaded is to be recorded carefully at site of work.

In case of asphalt base coat of thickness 50mm and above, the initial level before commencement and final level after completion of the work may be taken, for working out the average thickness of pavement laid, also the actual area of work done will be measured and the quantity of the work actually done shall be computed in cubical content basis. Theoretical tonnage of the mix shall then be worked out on the basis of designed density, for broad cross check on actual tonnage of total mix used in the work. The cross profile may be taken at closed length up to 3.00m length. The decision of Engineer-in-charge is binding in such case.

5.86 Providing and laying Bituminous Concrete. (BC)

5.86.1 Scope; This work shall consist of construction in a single course of 40mm thick (compacted) bituminous concrete on previously prepared bituminous bound surface.

5.86.2 Materials

- i. Bitumen:** Bitumen shall be paving bitumen of suitable penetration grade of PMB-40 grade.
- ii. Course Aggregates:** Coarse aggregate shall be crushed material retained on 2.36mm sieve and shall be crushed stone. It shall be clean, strong, durable, of fairly cubical shape.
- iii. Fine aggregate:** Fine aggregate shall be fraction passing 2.36mm sieve and retained on 75 Micron sieve consisting of crusher run screening. It shall be clean, hard, durable, uncoated, dry and free from injurious, soft or flaky pieces and organic or other deleterious substances.
- iv. Filler:** stone dust shall be used as a filler. It shall be graded within the limit indicated in table 500-9 of MOST specification (fourth revision).
- v. Aggregate gradations for Bituminous Concrete:** The combined coarse and fine aggregate and filler when used shall produce a mixture to conform to the grading set forth in table.

Aggregates Gradation for Bituminous Concrete

IS Sieve Designation	Per cent passing the sieve by weight
19mm	100
13.2mm	79-100
9.5mm	70-88
4.75mm	53-71
2.36mm	42-58
1.18mm	34-48
600 micron	26-38
300 micron	18-28
150 micron	12-20
75 micron	4-10

The aggregate mix as used in work shall not vary from the lower limit on one sieve to the high limit on adjacent sieve but shall be well graded.

5.86.3 Mix Design

- i. **Requirement of mix:** Apart from conformity with the gradity and quality requirements of individual ingredients, the mix shall meet the requirements set out as per specifications for road and bridges work (fourth revision)
- ii. **Job mix formula:** The binder content for Bituminous Concrete mix for premixing shall be 5.5% by weight of total mix. Remaining as per item no. of DBM.
- iii. **Permissible variations from the job mix formula:** As per item no. 9 of DBM and MOST specification for road and bridges work (fourth revision).

5.86.4 Construction Operations Methods :

- i. **Weather and seasonal limitations :** The work of laying shall not be take up during rainy or foggy weather or when the base course is damp or wet, or during dust storm or when the atmospheric temperature in shade is 10 degree C or less.
- ii. **Preparation of the base :** As per item no. 6 of DBM and MOST specification for road and bridges work (fourth revision).

5.86.5 MIXING AND TRANSPORTATION OF THE MIXTURE :

As per item no. 6 of DBM and MOST specification for road and bridges work (fourth revision).

5.86.6 Spreading: As per item no. 6 of DBM and MOST specification for road and bridges work (fourth revision).

5.86.7 Rolling: As per item no. 6 of DBM and MOST specification for road and bridges work (fourth revision)..

5.86.8 Opening to Traffic: The newly laid surface shall not be opened to traffic for at least 24hrs. after laying and the completion of compaction.

5.86.9 Surface Finish and Quality Control of Work

As per Clause 902 of MOST specifications.

5.86.10 Measurements for payment: As per item no. 9 of DBM and MOST specification for road and bridges work (fourth revision).

5.87 TECHNICAL REQUIREMENT OF DRUM MIX PLANT

5.87.1 GENERAL

The drum mix plant shall be of reputed make and proven design, sturdy and structure and capable of producing desired quality of mix as per specified for laying bituminous road surface and have following essential arrangements :

5.87.2 COLD STORAGE FEEDER

The cold aggregate feeder arrangement should have bins of sufficient capacity capable of storing difference size of aggregate and fines to ensure continuous un-interrupted supply of aggregate matching the capacity of the plant. Each bins should have independent bolt feeders driven by a variable speed motor and a control gate to ensure accurate aggregate feed to meet design mix formula. It is pre-requisite that only properly screened and graded materials are fed to the bins.

There should be gathering conveyor to receive and transport materials discharge from bins with separate drive arrangements.

There should be suitable arrangements like baffle plant at the discharge and of gathering conveyor for rejection of any oversize metal above the permissible limit. The conveyor should be fitted with suitable electronic weigh bridge device for weighing quantity of cold aggregate being for to dryer drum.

The plant should have a mineral filler arrangement with suitable control device to accurately proportion the flow of filler material in to dryer drum at appropriate stage.

5.87.3 DRYER DRUM

It should be the drum type with smooth rotation arrangement to give rated output and capable of reducing the moisture content of the aggregate to desirable limit of 2 % to 6 % and achieving the Hot Mix Temperature (up to 1600 C as per requirement) with such design that no blue smoke is omitted from the exhaust. The drum may have optional for feeding reclaimed materials. There should be arrangement to restrict burner flame up to certain length in the drum bitumen is injected.

It should be fitted with positive displacement bitumen pump driven by variable speed motor automatically controlled from control cabin, capable of feeding desired quantity of oil circulation system should be in built feature to keep bitumen pump and pipes sufficiently hot to avoid clogging of pipes.

5.87.4 BURNER

The burner used should be capable of burning the fuel efficiency and develop the requirement temperature. It should be fitted with remote control system, to detect flames fail and also electric spark igniting system or some other suitable arrangement. Burner operation should have thermostatic control of flame within the specified temperature range.

5.87.5 BITUMEN HEATER

It should consist of an insulated tank of adequate capacity fitted with effective and positive control of temperature, for allowing continues circulation of bitumen between bitumen heater and proportion units. Suitable arrangements should be provided for recording the temperature at the tank and in circulation system.

5.87.6 FUEL SYSTEM

Fuel tanks should be of sufficient capacity and fitted with suitable type of fuel pump to receive the fuel from storage tank supply to line heater and burner.

5.87.7 CYCLONE SYSTEM

Cyclone unit is required to control dust discharge within the admissible standard of pollution level.

5.87.8 OPERATION CONTROL UNIT

The drum mix plant must have centralized system with operation from a control cabin located adjacent to the drum mix plant. The control system should be capacity of following.

- 1) Automatic control of speed of each bin feeder conveyer and gate, so as to control and regulate the flow of various grades of materials to ensure content and accurate proportion of aggregate.
- 2) Pre-set and control the percentage of flow of aggregate and asphalt required as per design mix.
- 3) Automatic detection of plant operation failure, display of aggregate temperature , asphalt and mix temperature, aggregate, flow etc., fully automatic aggregate blending flow etc. fully automatic aggregates blending bitumen/ aggregate ration control system.
- 4) Control for pre-setting the moisture content of aggregate displayed digitally.
- 5) Entire control system should be such that if desired it would be operated manually also.

5.87.9 SURGE SILO

The plant may have optional arrangement to store hot mix material for at least equipment to 30 % of rate capacity to cater for any delay in loading the tippers. Temporary storage silo should have adequate automatic Hydraulic unloading arrangements operated either from the control cabin or manually with necessary safety control.

5.88 The contractor shall arrange to supply periodically samples of course aggregates, fine aggregate, Granular material, aggregates required for Wet Mix macadam, B M, DBM, BC etc. to the Port Laboratory for testing as per relevant I.S. and as per MOST specifications. However all the materials shall be arranged by the contractor free of cost for testing However, testing charges will be recovered from the contractor for testing of materials in Port Laboratory.

5.89 The mix design for the W.M.M.,BM, D.B.M. and B.C. shall be as suggested by the Port Laboratory. For this purpose, the contractor shall supply the requisite quantity of aggregates, bitumen etc. to the laboratory free of cost. However, no other charges will be recovered from the contractor for this purpose.

5.90 The department shall be at liberty to collect the samples from mixes of bitumen material and mixed aggregate from D.B.M. and B.C. by core etc. and get them tested at the plant/at the Port Laboratory to ascertain bitumen content and density therein. For this purpose the samples will be taken at random during the execution of work. The bitumen content of the samples will be arrived at by the "EXTRACTION METHOD" / "STRIPPING METHOD". The department will take as many samples as it decides. The quantity of asphalt used in the work shall be cross checked by averaging bitumen content in all the samples of the respective cases and applying the same for full quantity of work without prejudice to the right of department to reject the work at any stage.

5.91 The aggregate and bitumen are to be as per Mix Design to be given by Port Laboratory the aggregate gradation shall be as per Port stipulation and in work proportion of difference sizes of aggregates which should be stored in bins separately and should be mixed with

asphalt regulated as per Port stipulation and bottom doors of bins will be regulated as per requirement of aggregates. Moreover, while laying the asphalt mix at site of work, it should be ensured that uniform job mix is to be laid through out the length of the road. If above stipulations are not met - with during execution of work, the work will not be allowed to be further continued by Engineer - in - charge.

- 5.92** Bitumen content for Bitumen mixes will be regulated by mechanical means and Contractor shall have to install asphalt content reading instrument at plant site. In addition to above, the bitumen content in the job mix at plant site and site of work will be determined by the standard laboratory test (Extraction method/Stripping Method). All the facilities, for checking bitumen content in job mix plant at plant/paver site and sieve analysis of aggregates, has to be provided by the Contractor without any extra cost.
- 5.93** All the arrangements regarding continuous display of reading/measurement of temperature of bitumen, aggregates and job mix etc. at drum mix plant as well as at site of work are required to be made by the Contractor at his own cost.
- 5.94** The contractor has to give an undertaking that the distance between drum mix plant site and the paver finisher site will not be more than 30 Km. Accordingly the contractor has to install the drum mix plant at site before filling the tender.
- 5.95** The contractor has to arrange all the testing equipment at drum mix plant site as well as paver finisher site as per the instructions of the Engineer-in-charge.
- 5.96** If during progress of work movement of traffic is allowed on completed surface, the contractor will have to repair the said damage caused to road surface at his own cost for which no claim shall be entertained.
- 5.97** For checking asphalt content of mix at plant, petrol for washing should be readily available. Also an automatic weighing scale is to be used for determining the bitumen content of samples taken from dumper being loaded with mix.
- 5.98** While loading the different size of aggregates in the bins it should be ensured that these aggregates don't get mixed with each other i.e. not spill in other aggregates bin.
- 5.99** The contractor should ensure that the required temperature of Bitumen and aggregates is always maintained at Plant, and see that they are not over-heated at any stage. The plant will be allowed to start/restart only when the required temperature is attained.
- 5.100** After loading of mix in the dumper at plant till the dumper reach at the site and unload, if there is breakdown of dumper. (i.e. gets punctured or out of order etc.) The contractor should then ensure that suitable steps are taken immediately so that temperature of mix is not affected, otherwise the Engineer - in - charge is at liberty to reject such trip.
- 5.101** The storage tank of asphalt at Paver Plant, should be in good condition, leak proof, suitable covered, having proper ladder/approach etc. The tank should be calibrated duly certified with required measuring/Dip Rods and must have adequate capacity for storage of at least one Bitumen tanker.

5.102 The taking of Initial Dip and Final Dip of Asphalt in tank daily before start of work and after closing of work is to be arranged by contractor for maintaining account of asphalt. Further, the department is at liberty to take intermediate dips as and when required during progress of work and during unloading of asphalt tanker.

5.103 The Gate Pass issued at plant for each trip of mix being an important document is to be maintained / handled carefully by staff of contractor. Any misplacement, etc. of Gate Pass shall result in cancellation of trip.

5.104 Density test of compacted layer shall be carried out as per MOST specifications or as directed by Engineer-in-Charge. The cost on the arrangement for the test at site of work shall be borne by the contractor. All the testing charges for test shall be borne by the contractor.

5.105 . Bored cast in situ R.C.C. piles

5.105.1 Soil Characteristics

On the basis of the soil investigation report supplied to the contractor he shall acquaints himself fully with the nature of the soil encountered and shall satisfy himself of the following strata and the load carrying capacity of each type of pile.

5.105.2 Borings

Boring Equipment and accessories shall generally conform to IS 2911 – relevant section. Boring may be done by either rotary or percussion equipment using reversed or direct mud circulation method or by grabbing equipment. However direct mud circulation will be preferred. The walls of the piles shall be stabilized by use of casing of MS linear up to depth as directed by the Engineer-in-charge and below MS liner by using bentonite slurry. The size of cutting tool shall not be less than the diameter of the pile by more than 75 mm.

5.105.3 Equipment and Accessories

The contractor shall provide all equipment and accessories including consumable and temporary works for handling, fabricating, pitching, during guiding and extraction of liners if necessary.

The contractor shall submit to the Engineer-in-charge for his approval full details of his proposed piling equipment accessories, piling gantry temporary works and construction, including the sequence of construction of the piles and cleaning up of work area. The contractor shall make such amendments or alterations as the Engineer-in-charge may direct and no driving or boring shall start unless the method has been approved by the Engineer-in-charge.

Labour

The contractor shall maintain at the site qualified and experienced foremen and necessary gangs of trained workmen experienced in all piling work.

5.105.4 Storage of Materials

5.105.4.1 General

The relevant clauses pertaining to storage of material' under specification for 'Concrete plain and reinforced' as per relevant IS codes

will apply.

Liners

Steel liners will be stored, off the ground on sturdy racks, in such a manner as to enable quick and easy inspection.

5.105.4.2 Execution

General

Piling installation shall generally be in accordance with IS 2911.

To avoid deflection of piles during construction stage, the contractor has to provide at his own expense temporary bracings of structural steel immediately after casting of bored in-situ piles till the piles are interconnected by RCC deck beams. The design and provision of temporary bracing shall be entirely the contractor's responsibility.

5.105.4.3 Sequence of Piling

Pile shall be installed in such sequence that the carrying capacity of previously installed piles is not reduced not is there an appreciable upheaval of ground causing unusual soil resistance to rest of the pile driving. The contractor shall submit the sequence order and programme chart to the Engineer-in-charge.

5.105.4.4 Bottom level for piles

The liner should be driven to refusal. The boring within the liner shall be continued by chiseling, grabbing etc. to a level to be approved by the Engineer's representative. The embodiments indicated in the drawing are in the strata to be approved by the Engineer.

The walls of the piles shall be stabilized by use of casing of MS liner up to depth as shown in the drawing and below MS liner by bentonite slurry as directed by the Engineer-in-charge. Jetting shall not be done except when permitted by the Engineer.

The portion of the pile without liner shall be stabilized, by drilling mud / fluid. The density and composition of the fluid shall be such as to suit the requirements of ground conditions and to maintain the fine materials from the boring in suspension. At the last stage of boring or in intermediate hard layers, chisel or a chopper shall be used. The drilling mud to be used for stabilization shall conform to the specifications given to Appendix-A of IS 2911 – 1979 (Part I / Sec.2)

5.105.4.5 Bored Piles

For all types of bored piles the tenderers shall submit, in view of sub-soil water being present in the bore hole, particulars of concrete placement method so as to reduce to a minimum, the contact of fresh concrete with ground water. It is imperative that the borehole shall exclude any sub-soil material before reinforcement and concrete are placed inside the casing/bore hole. Details of the concrete placing equipment and / or any other process intended to be used by the tenderer for such condition shall be fully described.

Pile liners shall be driven with single or double acting or differential acting steam or air hammer or as approved by the Engineer-in-charge. Driving equipment shall be maintained in efficient operating condition.

So that the length of the stroke and the number of blows per minute for which the hammer was designed shall be obtained.

5.105.4.6 Concreting of piles

Concreting of piles shall be done in accordance with the methods prescribed in IS 2911-1979 (Part I / sec.2) and as specified and ordered by the Engineer-in-charge. Before concreting the pile, the bore hole shall be flushed with fresh drilling fluid / mud (Bentonite) using sweet potable water.

All plants, materials and operations employed in the formation of piles shall be such as to ensure that the piles remain of full cross-section. The concrete shall be properly graded and well compacted without excess water, admixture of soil or other extraneous matter.

5.105.4.7 Workmanship & Construction of piles

Concrete shall be placed and compacted until green concrete is obtained above the cut-off level. the depth between the cut-off level and the required level shall be filled up with sand so that the next pile does not move out of place during construction, if required , to construct the pile cap, the ground will be excavated to expose the top portion of the piles, which will be excavated to expose the top portion of the piles, which will be dismantled neatly up to the cut-off level, removing all cracked, loose and unsound concrete. Wherever required the top surfaces of the piles will be kept rough to ensure bond with the pile cap in which they will be ultimately embedded. Any defective concrete in the head of completed piles shall be cut away and made good with new concrete. The reinforcement rods of the pile should project out of the top by a minimum length of 1000 mm or as specified, to be later on embedded in the pile cap concrete.

Loosening of soil localized compaction of soil due to driving of piles, if occurring may create conditions when determination of load bearing capacity by the usual method of set sometimes giving erroneous results. The pile, in such cases shall be driven to the required 'set' or suitable strata as decided by the Engineer. Concreting of each pile shall be done in one continuous operation, concrete shall be placed by means of a tremie pipe of 200 / 250 mm dia.

5.105.4.8 Tremie method of concreting

The tremie pipes and funnels shall be filled and lifted just 15 cm above bottom before releasing the concrete column to facilitate flushing out the bottom. The concrete levels in the tremie shall be checked every few meter in order to note the difference, If any, between the theoretical quantity that should have been placed and actual quantity that has gone in. This is to locate the position of over-cut or caving in during boring.

In addition to the normal precautions to be taken in tremie concreting as per relevant section of IS 2911 the following specifications shall be particularly applicable for the use of tremie concrete in piles.

(i) The concrete shall be coherent, rich in cement content and slump as approved by the Engineer-in charge.

(ii) The tremie shall be large enough with due regard to the size of the aggregate. For 20 mm aggregate the tremie pipe shall be of 200 mm diameter, aggregate more than 20 mm shall not be used.

(iii) The hopper and tremie shall be closed system embedded in the placed concrete, through which water cannot pass.

(iv) The first charge of concrete shall be placed with a sliding plug pushed down the tube ahead of it or with a steel plate of adequate charge to prevent mixing to concrete and water. However, the plug shall not be left in the concrete as a lump.

(v) The tremie pipe shall always remain penetrated well into the concrete with an adequate margin of safety against withdrawal of the pipe when surged to discharge the concrete.

(vi) The pile shall be concreted wholly by tremie and the method of deposition shall not be changed part way up the pile, to prevent the laitance from being entrapped within the pile.

(vii) All tremie tubes shall be scrupulously cleaned after use.

5.105.4.9 Actual consumption of cement in the pile shall be treated as theoretical requirement for the purpose of accounting.

5.105.4.10 Finishing pile heads (cut-off-level)

The top of the pile shall be brought up above the finished level to permit a laitance and weak concrete to be removed and to ensure that it can be properly keyed into the cap as per the instructions of the Engineer-in-charge. Any defective concrete in the head of the completed pile shall be cut away and made good with new concrete.

5.105.4.11 Dowels

The contractor shall provide necessary dowels as directed by the Engineer.

5.105.4.12 Founding Stratum

Piles shall be taken down to strata capable of withstanding the full design loading of the piles as directed by Engineer-in-charge.

5.105.4.13 Obstructions

If any obstruction to installation is encountered, the installation shall cease and the contractor shall notify the Engineer-in-charge and submit for his approval proposals, for overcoming the difficulties.

Notwithstanding any such approval, the contractor will be entirely responsible for ensuring that the piles are completed to the required lines position and depth.

5.105.4.14 Volume Check

Concreting shall start as soon as possible after driving the linear or completion of boring. The volume of concrete placed shall be observed in the initially cast piles and the average figure obtained shall be used to check whether there is undue deviation in concrete consumption for the subsequent piles. If actual quantity is found to be considerably less, special investigation shall be conducted and appropriate measure taken.

5.105.4.15 Inspection

For bored piles, the contractor shall have the Engineer to inspect the borehole for proper plumb, location, and other requisites. The depth of the bore hole shall be measured by means of chain to which a plumb weighing not less than 1000 gm is attached. The contractor shall provide all the equipment required for the above inspection and he shall co-ordinate this work with the Engineer. Concreting shall start only after the Engineer has approved the borehole. All facilities, equipment and labour required for inspection by the Engineer mentioned above shall

be provided by the contractor promptly and free of cost.

5.105.4.16 Tolerance

In addition to relevant section of IS 2911 the following tolerances shall apply:

The permissible positional deviation should not be greater than 75 mm or $D/10$ whichever is more in case of piles having diameter more than 600 mm from the designed position at the working level of the piling rig, vertical piles shall not deviate more than 1.5% and raker piles not more than 4%. Piles deviating from these tolerances will be liable to rejection. The contractor shall take such remedial measures as may be ordered by the Engineer, even during the stage of boring. The cost of the remedial measures will have to be borne in all respects by the contractor. No payment will be made for or in connection with any pile so rejected.

5.105.4.17 Defective Piles

In case of piles deviating beyond the tolerance limits specified and to such an extent that the resulting eccentricity cannot be taken care of by a redesign of the pile cap, the pile shall be rejected and replaced or supplemented by one or more additional piles at the expenses of the contractor, as directed by the Engineer-in-charge. In such case it shall be the responsibility of the contractor to submit design calculation for the stability of the sub-structure and the superstructure at his own cost. Further nothing extra shall be paid to the contractor for whatsoever extra work involved in the sub-structure and superstructure on this account.

Any pile considered defective by the Engineer-in-Charge shall be removed or left in place as directed by the Engineer-in-charge. Additional piles shall be provided to replace them as directed by the Engineer-in-charge. Payment shall be made for the defective piles and super structure as per original design instead of additional work.

The additional use of cement, reinforcement bars M.S. shall be measured for consumption purpose only.

5.105.4.18 Record of Installation of piles

A record shall be maintained by the contractor in a Performa approved by the Engineer of the entire penetration for every pile and the behaviour of such pile during its entire process of construction. Such records shall be submitted to the Engineer regularly as the job progress. Any sudden change in the rate of penetration which cannot be described to the nature of the ground or any deviation from the designed location, alignment or load carrying capacity of any pile or any upheaval or subsidence noticed on any pile driven under this contract or already existing, during construction of the piles, shall be promptly reported to the Engineer and adequate corrective measures shall be taken free of charge as decided by the Engineer.

Upon completion of the pile driving all records together with the records of such additional borings or other subsurface information that were obtained during the process of installation shall also be filed with the Engineer.

5.105.4.19 SIX test cubes (2 sets of 3 cubes each) shall be taken from each pile; one set for testing 28 days strength and the other for testing 7 days strength or any other age as may be desired by the Engineer-in-charge. The number and frequency of casting test cubes from concrete used for other members shall be as specified in IS 454. for this purpose, pre-cast concrete and cast-in-situ concrete works shall be treated as separate sections. Extra cubes wherever required by the Engineer-in-charge shall be taken and tested at the cost of port.

5.105.4.20 Contractor has to carry out the minimum 4 Nos. Dynamic Pile Load Test during the progress of the piling work. The load test to be carried out simultaneously as per the progress of the piling work as directed by Engineer-in-charge. All the expenses towards dynamic load test including all arrangements are included in the quoted bid.

5.105.4.21 Testing of Concrete

After the concrete in the piles has hardened completely, the Engineer may direct the Contractor to take continues cores of the concrete. The cores shall be taken with a diamond core cutter, size AWX and AWM of the Diamond core of Drill Manufacturer Association. This core cutter will give a core of 30 mm dia. The contractor will be paid separately for the cores ordered to be taken, if required. If these cores reveal defects in the concreting of the pile, the engineer may order that the contractor shall take at his own cost, remedial measures. The core so taken has to be filled in with cement grout and the cost of such filling should be included in the rate for coring.

5.105.4.22 cover to any reinforcement of piles shall be minimum 75 mm or as approved by the Engineer-in-Charge. Suitable concrete cover blocks shall be provided at intervals not exceeding 1.2 m throughout the length of the pile. The main reinforcement shall be made up into cages well wired with links/stirrups including MS stiffening rings and spot welded to make them stiff enough to withstand handling without damage. All other requirement of concrete and reinforcing bars, i.e. materials quality, workmanship etc, shall be as specified to reinforced concrete work in the Concrete

5.106 Pre-contract Integrity Pact Agreement(as per agreement form enclosed) duly signed by the bidder and two witnesses need to be scanned and uploaded in the Preliminary bid failing which the bid will be considered as non-responsive. Shri S.K.Sarkar IAS (Retd.) and Shri Saurabh Chandra, IAS(Retd.)has been appointed as Independent External Monitor for Integrity, whose address is as under:

Shri S.K.Sarkar. IAS(Retd.)
B-104, Narantra Aptt.,
Plot8B, Sec 07, Dwarka,
New Delhi – 110 075
Mobile No. : 9811149324
Email: sksarkar1979@gmail.com

Shri Saurabh Chandra, IAS(Retd.)
A-9 Sector-30,
Noida(UP) 201301
Mobile No 9871322133
email: saurabh7678@yahoo.co.in

5.107 The bidder have to sign and seal and upload the scanned copy of Integrity Pact form (as per agreement form enclosed) along with the technical proposal as a token of acceptance. Original hard copy of the same along with the tender documents shall have to forwarded

subsequently so as to reach the office of Executive Engineer (C-I) within 7 days of opening of the tenders failing which tender shall be considered irrelevant, However, the agreement is to be executed during the issuance of Pre- Acceptance letter.

5.108 While evaluating tenders, regards would be paid to National Defense Security consideration.

5.109 Removal of rejected / sub standard materials

(a) Whenever any material brought by the contractor to the site of work is rejected, entry thereof should invariably be made in the site order book under the signature of Assistant Engineer, giving the approximate quantity of such materials.

(b) As soon as the material is removed, a certificate to that effect shall be recorded by the JE/AE against the original entry, giving the date of removal and mode of removal, including the registration No of the truck and a copy of gate pass wherever applicable.

5.110 EXTRA SUBSTITUTED AND DEVIATED ITEMS OF WORK.

Any changes in the contract are broadly classified as deviations. While No changes should be done with an intention to cause any undue benefit to the contractor but in the interest of the work for valid reasons or when situation so demands quantities of agreement items can be increased or decreased, extra items can be executed , agreement items can be substituted materials/ T & P which was not stipulated can be issued and period of completion can be extended for which necessary provisions and unambiguous procedure should be incorporated in the contract to regulate rates/ payments for such deviations.

5.111 The contractor has to carry out the plantation at least 100 saplings with proper tree guard (Metal Tree Guard, with Anti-corrosive paint) and maintain them till the completion of maintenance/ defect liability period including providing arrangements for trimming the plantations, watering, temporary guarding etc. and number of tress shall be same till defect liability period. The cost of the same has to be borne by the contractor. In the event of failure of carrying out such work the department has to done the same at the risk and cost of the contractor.

5.112 On award of the contract, the contractor to whom the contract has been awarded has to provide at least 10 (Ten) bonded copies of Agreement including the Technical bid, Price bid and the correspondence exchange between the parties till the award of the work. One full set including indexing, insertion of page nos. certification with index will be provided by the Department. The cost of above ten sets is to be borne by the contractor.

5.113 Contractor/service provider/supplier etc. has to ensure timely and proper filling of GSTR 1 so that Deendayal Port AUTHORITY can avail input tax credit in timely manner. In case DPA not allowed input tax credit due to failure on part of the contractor/service provider/supplier etc., it will be a financial loss to the DPA and

therefore same shall be recovered from the payment/deposit of the contractor/service provider/supplier.

5.114 Submission of Fraudulent documents shall be treated as major violation of tender procedures and in such cases the port shall reserve to forfeit of EMD/SD/BG of bidder

5.115 The contractor shall be registered under the Building and Other Constructions Workers(Regulation of Employment and Conditions of Service) Act, 1996

5.116 The payment from 2nd bill to pre-final bill, shall be released, subject to the condition that the documentary evidence (Copy of paid Challan in Govt. Treasury) of the Welfare cess @ 1% of work done or as amended by Statutory Authority from time to time, paid to concerned Authority is submitted for the previous bill.

5.117 The documentary evidence Copy of paid Challan in Govt. Treasury) of the Welfare cess @ 1% of work done or as amended by Statutory Authority from time to time, paid on final bill shall be submitted before releasing the Performance Guarantee.

5.118 Special Conditions For Environmental Protection

- (i) The Contractor shall strictly follow-up the Environmental rules as per the Environmental protection Act 1986. While execution of work and as directed by Engineer In Charge.
- (ii) All the Construction materials eg. Cement, Aggregates, sand & fill materials which are to be used in construction work shall be covered with Tarpaulin or other fabric material as directed by Engineer In Charge.
- (iii) The contractor should stacked and dispose the waste material in such a manner which are not destroy the environment.
- (iv) The contractor shall sprinkles the water to minimise the dust emission.
- (v) Machine mixers, vibrators, way batchers plant, diesel generator sets and other vehicles engines shall not be left running when not in use.
- (vi) Emission of NO₂ and SO₂ shall be maintained within the work site area as per the International Regulations (MARPOL).
- (vii) To prevent the minimise vibration and noise from machineries / vehicles during construction activities the contractor shall take the remedial action to minimise noise pollution as under:- (i) Provide adequate silencers attached with all vehicles and machineries. (ii) Install suitable mufflers on engine exhaust and compressor component. (iii) The diesel generators set shall be used of noise less.
- (viii) The contractor (s) shall stacked/stored the construction materials at adequate distance from coastal area.
- (ix) The contractor shall provide the barrier to prevent the construction material from mixing up with surface / ground water.
- (x) The contractor (s) should discharge Waste water generated during Construction work as per CPCB/GPCB regulations.

5.119 For maintenance work, documentary evidence, for payments made to workers through their respective bank account, is required to be submitted monthly along with the bill.

5.120 Bidders who wish to participate in the tender will have to procure/should have legally valid Digital Certificate, as per Information Technology Act-200, using which they can sign their electronic bids. The bidders can procure the Digital Certificate from (n)code solutions a division of GNFC Ltd, who are

licensed certifying authority by Government of India. All bids should be digitally signed. For details regarding Digital signature certificate and related matters, the bidders may contact the following address (n) code solutions

A Division of GNFC

301 GNFC Info tower,

Bodakdev, Ahmedabad

Tel 917926857316/17/18

Mobile 9327084190/9898589652

Email: nprocure@gnvfc.net.

The accompaniments to the tender documents as described under clause 1.4 shall be scanned and submitted on-line along with tender documents. However, the originals/attested hard copies along with tender documents(except Price Bid signed on bottom of each page in token of acceptance of Tender conditions and shall have to be forwarded subsequently so as to reach the office of XEN(C-I) within 7 days of opening of the tenders

5.121 All labour and other Acts, Rules and Regulations applicable from time to time shall be followed by the contractor

5.122 The contractor has to carry out the maintenance work for 2nd and 3rd year timely, if contractor fails to execute the work timely than double recovery for the quantum of the work as per the rate quoted by contractor and same shall be carried-out departmentally

Contractor

**Executive Engineer (C-I)
DEENDAYALPORTAUTHORITY**

SECTION 6

DRAWING

SECTION 7

BILL OF QUANTITIES

SECTION 8

FORMS OF SECURITIES AND OTHER FORMATS

FORMS OF SECURITIES AND OTHER FORMATS

Acceptable forms of securities are annexed. Bidders should not complete the performance and advance payment security forms at this time. Only the successful bidder will be required to provide performance and advance payment securities in accordance with one of the forms, or in a similar form acceptable to the employer.

Specimen EMD (Bank Guarantee Format)

[The Bank shall fill in this Bank Guarantee Form in association with the instructions indicated. To be executed on Rs. 300/- non Judicial Stamp Paper]

(Bank's name and address of Issuing Branch or Office)
Beneficiary's Bank details are as under:
AccountNo 10080100022427
ISFC Code : BARB0GANKUT
Beneficiary: _____(Name and Address of Employer/Board)

Date: _____

Tender Guarantee No.: _____
We have been informed that [name of the Tenderer] (hereinafter called "the Tenderer") has submitted to you its Tender dated (hereinafter called "the Tenderer") for the execution of [name of contract] under Invitation for Tenders No.[Number]. Furthermore, we understand that, according to your conditions, Tenders must be supported by an EMD.
At the request of the Tenderer, we [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [amount in figures] ([amount in words]) upon receipt by us your first demand in writing accompanied by a written statement stating that the Tenderer is in breach of its obligation(s) under the Tender conditions, because the Tenderer:
(a) Has withdrawn its Tender during the period of tender validity specified by the Tenderer in the Form of Tender; or
(b) Having been notified of the acceptance of its Tender by the Employer/Board during the period of Tender validity, (i) fails or refuses to execute the Form of Agreement, if required, or (ii) fails pr refuses to furnish the performance guarantee, in accordance with the Instructions to Tenderers.
This guarantee will expire unless otherwise extended or informed by the Employer/ Board:
(a) If the Tenderer is the successful Tenderer, upon our receipt of copies of the contract signed by the Tenderer and the performance guarantee issued to you upon the instruction of the Tenderer; or
(b) If the Tenderer is not the successful Tenderer, upon the earlier of
(i) Our receipt of a copy of your notification to the Tenderer of the name of the successful Tenderer; or
(ii) Twenty-eight days after the expiration of the Tenderer's tender or any extended period thereof;
Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

[Signature(s)]
[Authorization letter from the issuing bank that the signatory of this BG is authorized to do so should also be enclosed]

**SPECIMEN BANK GUARANTEE PERFORMANCE
GUARANTEE / SECURITY DEPOSIT**
(To be executed on Rs.300/- non-judicial Stamp Paper)

[The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instruction indicated]

In consideration of the Board of Deendayal Port Authority incorporated by the Major Port AUTHORITIES Act, 2021 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Deendayal Port Authority, its successors and assigns) having agreed to release Performance Guarantee / Security Deposit to _____ (hereinafter called the "contractor")

(Name of the contractor/s)

from the demand under the terms and condition of the contract, vide from the demand under the condition of the contract, vide _____'s letter No

(Name of the Department)

Date _____ made between the contractors and the Board for execution of _____ covered under Tender No. _____

_____ dated _____ (hereinafter called "the said contract") for the payment of Security Deposit in cash or Lodgement of Government Promissory Loan Notes for the due fulfillment by the said contractors of the terms and condition of the said contract, on production of a bank Guarantee for Rs. _____ (Rupees _____) only we, the (Name of

_____ the Bank and Address) _____ (hereinafter

referred to as "the Bank") at the request of the contractors do hereby under take to pay

to the Board an amount not exceeding Rs. _____ (Rupees _____) only against any loss or damage caused to or suffered by the Board by reason of any breach by the contractors of any of the terms and conditions of the said contract.

1. We, _____, do hereby
(Name of Bank) (Name of Branch)

Undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Board by reason of the contractors failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to any amount not exceeding Rs.

_____ (Rupees
_____) only.

3 We, _____, undertake to pay to the

(Name of Bank and Branch)

Board any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4. We, _____ further agree with the Board that the

(Name of Bank and Branch)

guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the__

(Name of the user department)

of the said certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractors and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall be the request of the Board but at the cost of the Contractors, renew or extend this guarantee for such further period or periods as the Board may require from time to time.

5. We, _____ further agree with the Board that the

(Name of Bank and Branch)

Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the board against the said Contractors and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to the contractors or for any forbearance, act or omission on the part of the Board or any indulgence shown by the board to the Contractors or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. It is also hereby agreed that the Courts in [**Gandhidham**] would have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

8. We, _____ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.
9. Notwithstanding anything contained herein:
- (a) Our liability under this Bank Guarantee shall not exceed Rs. _____ (Rupees _____ only);
 - (b) This Bank Guarantee shall be valid up to _____; and
 - (c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____ (date of expiry of Guarantee)."

Date _____ day of _____ 20

For (Name of Bank)

(Name)

Signature

SPECIMEN BANK GUARANTEE FOR ADVANCE PAYMENT

(To be executed on Rs.100/- non-judicial Stamp Paper)

[The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instruction indicated]

In consideration of the Board of Deendayal Port Authority incorporated by the Major Port AUTHORITIES Act , 2021 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Deendayal Port Authority, its successors and assigns) having agreed to release advance payment to (hereinafter called the "contractor")

(Name of the contractor/s)

from the demand under the terms and condition of the contract, vide from the demand under the condition of the contract, vide _____'s letter No

(Name of the Department)

Date _____ made between the contractors and the Board for execution of

_____ covered under Tender No. _____

_____ dated _____ (hereinafter called "the said contract") for the payment of Advance Payment in cash or Lodgement of Government Promissory Loan Notes for the due fulfillment by the said contractors of the terms and condition of the said contract, on production of a _____ bank Guarantee for Rs. _____ (Rupees _____) only we, the (Name of the Bank and _____ Address) _____

_____ (hereinafter

Referred to as "the Bank") at the request of the contractors do hereby undertake to pay

_____ to the Board an amount not exceeding Rs.

_____ (Rupees _____) only against any loss or damage

caused to or suffered by the Board by reason of any breach by the contractors of any of the terms and conditions of the said contract.

2. We, _____, do hereby

(Name of Bank)

(Name of Branch)

Undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Board by reason of the contractors failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to any amount not exceeding Rs.

_____ (Rupees

_____) only.

- 3 We, _____, undertake to pay to the
(Name of Bank and Branch)
Board any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
4. We, _____ further agree with the Board that the
(Name of Bank and Branch)
guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the__
(Name of the user department)
of the said certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractors and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall be the request of the Board but at the cost of the Contractors, renew or extend this guarantee for such further period or periods as the Board may require from time to time.
5. We, _____ further agree with the Board that the
(Name of Bank and Branch)
Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the board against the said Contractors and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to the contractors or for any forbearance, act or omission on the part of the Board or any indulgence shown by the board to the Contractors or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7. It is also hereby agreed that the Courts in [**Gandhidham**] would have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

8. We, _____ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.
9. Notwithstanding anything contained herein:
- (a) Our liability under this Bank Guarantee shall not exceed Rs. _____ (Rupees _____ only);
 - (b) This Bank Guarantee shall be valid upto _____; and
 - (c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____ (date of expiry of Guarantee)."

Date _____ day of _____ 20

For (Name of Bank)

(Name)

Signature

DISPUTES REVIEW BOARD AGREEMENT

(To be executed on Rs100/- non-judicial Stamp Paper)

THIS AGREEMENT, made and entered into this.....Day of..... 20
.....Between..... (“the Employer/ Board”) and
... (“the contractor”), and the Disputes Review Board (“the DR
Board”) consisting of one/three DR Board Members, (Members from either party,
i.e. contractor and Employer/Board)

(1)

.....(2)

.....(3)

.....[Note:

Delete whatever is not applicable]

WITNESSETH, that

WHEREAS, the Employer/Board and the contractor have contracted for the execution
of Project name) (the
“contract”) and WHEREAS, the contract provides for the establishment and operation
of the DR Board NOW THEREFORE, the parties hereto agree as follows:

1. The parties agree to the establishment and operation of the DR Board in
accordance with this DR Board Agreement.
2. Expect for providing the services required hereunder, the DR Board Members should
not give any advice to either party or to the Nodal Officer or his nominee concerning
conduct of the works.

The DR Board Members:

- (a) Shall have no financial interest in any party to the contract or the Nodal Officer
or his nominee, or a financial interest in the contract, except for payment for
services on the DR Board.

- (b) Shall have had no previous employment by, or financial ties to, any party to the contract, or the Nodal Officer or his nominee, expect for fee based consulting services on other projects, all of which must be disclosed prior to appointment to the DRBoard.
 - (c) Shall have disclosed in writing to the parties prior to signature of this Agreement any all recent or close professional or personal relationships with any director, officer, or employee of any party to the Nodal Officer or his nominee, and any and all prior involvement in the project to which the contractrelates;
 - (d) Shall not, while a DR Board Member be employed whether as a consultant or otherwise by either party to the contract, or the Nodal Officer or his nominee, expect as a DR BoardMember.
 - (e) Shall not, while a DR Board Member, engage in discussion or make any agreement with any party to the contract, or with the Nodal Officer or his nominee, regarding employment whether as a consultant or otherwise either after the contract is completed or after services as a DRBoard Members.
 - (f) Shall be and remain impartial and independent of the parties and shall disclose in writing to the Employer/Board, the contractor, the Nodal Officer or his nominee, and one another any fact or circumstances which might be such to cause either the Port or the contractor to question the continued existing of the impartiality and independence required of DR Board Members.
3. Except for its participation in the DR Board activities as provided in the contract and in this Agreement none of the Employer / Board, the contractor, the Nodal Officer or his nominee, and one another any fact or circumstances which might be such to cause either the Employer/Board or the contractor to question the continued existence of the impartiality and independence required of DR BoardMembers.

4. The contractor shall:
 - a) Furnish to each DR Board Member one copy of all document which the DR Board may request including contract document, progress report, variation orders, and other document, pertinent to the performance of the contract.
 - b) In co-operation with the Employer/Board, co-ordinate the site visits of the DR Board, including conference facilities and secretarial and copying services.
5. The DR Board shall serve throughout the operation of the contract. It shall begin operation following execution of this Agreement, and shall terminate its activities after issuance of the taking over certificate and the DR Board's issuance of its Recommendation on all disputes referred to it.
6. DR Board Member, shall not assign or subcontract any of their work under this Agreement.
7. The DR Board Members are independent and not employees or agents of either the Employer/Board or the Contractor.
8. The DR Board Members are absolved of any personal or professional liability arising from the activities and the Recommendations of the DR Board.
9. Fees and expenses of the DR Board Member[s] shall be agreed to and shared equally by the Employer/Board and the Contractor. If the DR Board requires special services, such as accounting, data research and the like, both the parties must agree and cost shall be shared by them as mutually agreed.
10. DR Board's site visit:
 - a. The DR Board shall visit the site and meet with representative of the Employer/Both and the contractor and the nodal officer or his nominee at regular intervals, at times of critical construction events, and at the request of either party. The timing of site visit shall be fixed by the DR Board.

- b. Site meeting shall consist of an informal discussion of the status construction of the works followed by an inspection of the work, both attended by personal from the employer/Board, the contractor and the nodal officer or hisnominee
- c. If request by either parties or the DR Board, the employer/Board will prepare minutes of the meeting and circulate them for comments of the parties and the nodal officer or hisnominee.

11. Procedure for disputes referred to the DRBoard:

- a) If either party objects to any action or inaction of the other party or the Nodal Officer or his nominee, the objecting party may file a written Notice of Dispute to the other party with a copy to the Nodal Officer or his nominee stating that it is given pursuant to clause [number] and stating clearly and in detail the basis of thedispute.
- b) The party receiving the Notice of Dispute will consider it and respond in writing within 7 days afterreceipt.
- c) This response shall be final and conclusive on the subject, unless a written appeal to the response is filed with the responding party within 7 days of receiving the response. Both parties are encouraged to pursue the matter further to attempt to settle the dispute. When it appears that the dispute cannot be resolved without the assistance of the DR Board either party may refer the dispute to the DR Board by written Request for Recommendation to the Board, the other party & the Nodal Officer or his nominee stating that it is made pursuant to [insert relevant clauseno.]
- d) The Request for recommendation shall state clearly and detail the specific issues of the dispute to be considered by the DRBoard.
- e) When a dispute is referred to the DR Board, and the DR Board is satisfied that the dispute requires the DR Board's assistance, the DR Board shall decide when to conduct a hearing on dispute. The DR Board may request that written documentation and arguments from both parties be submitted to each DRBoard Members before the hearing begins. The parties shall submit insofar as possible agreed statements of the relevantfacts.

f) During the hearing, the contractor, the Employer/ Board, the Nodal Officer or his nominee shall each have ample opportunity to be heard and to offer evidence. The DR Board's Recommendation for resolution of the dispute will be given in writing, to the Employer/ Board, the contractor and the Nodal Officer or his nominee as soon as possible, and in any event not more than 28 days after the DR Board's final hearing on the dispute.

12. Conduct of Hearing:

- a) Normally hearing will be conducted at the sites, but any location that would be more convenient and still provide all required facilities and access to necessary documentation may be utilized by the DR Board. Private sessions of the DR Board may be held at any location convenient to the DR Board.
- b) The Employer/ Board, the Nodal Officer or his nominee and contractor shall have representatives at all hearing.
- c) During the hearing, no DR Board Member shall express any opinion concerning the merit of any facet of the case.
- d) After the hearing are concluded, the DR Board shall meet privately to formulate its Recommendation. All DR Board deliberation shall be conducted in private, with all individual views kept strictly confidential. The DR Board's Recommendations, together with an explanation of its reasoning shall be submitted in writing to both parties and to the Nodal Officer or his nominee. The pertinent contract provision, applicable laws and regulations, and the facts and circumstances involved in the dispute.

The DR Board shall make every effort to reach a unanimous Recommendation. If this proves impossible, the majority shall decide, and the dissenting member may prepare a written minority report for submission to both parties.

[Notes: Delete if it is one member DR Board]

13. If during the contract period, the Employer/ Board and the contractor are of the opinion that the Disputes Review Board is not performing its function properly, the Employer/ Board and the contractor may together disband the Disputes Review Board. In such an event, the disputes shall be referred to Arbitration straightaway.

The Employer/Board and the contractor shall jointly sign a notice specifying that the DR Board shall stand disbanded with effect from the date specified in the notice. The notice shall be posted by a registered letter with AD or delivery of the letter, even if he refuses to do so.-

<p style="text-align: center;">SPECIMEN FORMAT FOR DECLARATION <i>(To be executed on bidder's letter head)</i></p>

To _____
(Project Title)

Ref: _____

The undersigned, having studies the pre-qualification submission for the above mentioned project, hereby states:

- (a) The information furnished in our bid is true and accurate to the best of myknowledge.
- (b) That in case of being pre-qualified, we acknowledge that the Employer may invite us to participate in due time for the submission of tender on the basis of provisions made in the tender documents tofollow.
- (c) When the call for tenders is issued, if the legal, technical or financial conditions, or the contractual capacity of the firm or joint venture changes, we commit ourselves to inform you and acknowledge your sole right to review the pre-qualificationmade.
- (d) We enclose all the required pre-qualification data format and all other evaluation.
- (e) We also state that no changes have been made by us in thedownloaded tender document and also understand that in the event of any discrepancies observed, the printed tenderdocument No. _____ is full and final for all legal/contractual obligations (delete if notrequired].

Date:
Place:
Name of theApplicant: _____

Represented by (Name&Capacity) _____

**SPECIMEN LETTER OF AUTHORITY FROM BANK
FOR ALL BGs**
(To be executed on Bank's Letter Head)

Date:

To,
The Board of AUTHORITY of Port [insert
port],

Dear Sir,

Sub: Our Bank Guarantee No. _____
dated _____
for Rs. _____ favouring yourselves
issued on a/c of M/s. _____
(Name of contractor)

.....

We confirm having issued the above mentioned guarantee favouring
yourselves, issued on account of M/s. _____ validity for
expiry upto date _____ and claim expiry date upto _____

We also confirm 1) _____ 2) _____ is/are
empowered to sign such Bank Guarantee on behalf of the Bank and his/their signatures
is/are binding on the Bank.

Name of signature of Bank Officer

SPECIMEN LETTER OF AUTHORITY FOR SUBMISSION OF BID (To be executed on Rs.100/- non Judicial Stamp Paper)
--

To
The (PORT Address)

Dear Sir,

We-----
----- do hereby confirm that Shri..... (Name, designation
and Address) is/are authorized to represent us to bid, negotiate and conclude the
agreement on our behalf with you against tender no.----- and his specimen
signature is appended hereto..

We confirm that we shall be bound by all and whatsoever our said signatory shall commit.

We understand that the communication made with him by the Employer/Board shall be deemed to have been done with us in respect of this Tender.

[specimen signature]

Yours faithfully,

Signature:

Name & Designation:

For & on behalf of:

PROFORMA OF JOINT VENTURE/CONSORTIUM AGREEMENT
(To be submitted on Non-judicial Stamp Paper of appropriate value)

This Joint Venture /Consortium Agreement is made and entered into on this day of2019 by and between (i) M/s. **(Name of the firm to be filled-in)**.....,(ii)M/s.....**(Name of the firm to be filled-in)** ,
..... , primarily for the work under the Deendayal Port AUTHORITY.

All the partners of the Joint Venture /Consortium hereinafter individually referred to as the parties and collectively as the Joint Venture/Consortium‘.

1. Formation of Joint Venture/Consortium

1.1. (i)M/s... **(Name of the firm to be filled in)** is engaged in
..... **(Details of the works undertaken by the party)**

(ii) M/s... **(Name of the firm to be filled in)** is engaged in
... **(Details of the works undertaken by the party)**

(iii)

1.2. On behalf of Board of AUTHORITYees of Deendayal Port (hereinafter referred to as -Employer|]), the Chief Engineer, DEENDAYAL Port AUTHORITYhasinvited bids from the experienced, resourceful and bonafid Developers with proven technical and financial capabilities of executing the work **Development of four lane road common corridor from LC 236B to 16th CB along railway line(Phase-I)**

1.3. The parties have been exploring together the ways and means of collaboration for the purpose of an offer to be made for the said project of the Deendayal Port AUTHORITY and have mutually agreed to enter into a Joint Venture/Consortium Agreement to submit a common bid for the project and to carry out the project works in the event of award of the contract, in association with each other and (.....**Name of Partner to be filled in**) shall be the Lead Partner and (i) (.....**Name of Partner to be filled in**.....), (ii) (.....**Name of Partner to be filled in**.....), shall be the otherpartner(s).

NOW THEREFORE IT HAS BEEN AGREED TO BETWEEN THE PARTIES AS FOLLOWS

1.4. The Joint Venture/Consortium will be known as...(.....**Name of JV to be filled in**)
.....and shall consist of (i) (.....**Name of the firm to be filled in**.....), (ii) (.....**Name of the firm to be filled-in**.....), ,
parties to the present agreement.

1.5. The recitals are true and correct and form an integral part of this agreement and are representations of the parties to which they relate and have been relied upon by the parties to enter into the presentagreement.

1.6. Notwithstanding the date of signature of this agreement, its effective date will be the date of submission ofbid.

1.7. All costs incurred by the parties before the date of award of contract will be borne by

the parties concerned. All costs in implementation of this Joint Venture/Consortium Agreement after award of contract till the expiry of this agreement will be borne by the parties as hereinafter provided.

1.8. The Joint Venture/Consortium will be dissolved and this agreement will cease to have effect on completion of this project, maintenance and fulfilment of all other conditions under the contract, upon receipt of payment of all amounts from the Employer and on settlement of accounts between the parties as hereinafter provided.

1.9. The contract, if awarded by the Employer, Letter of Acceptance shall be issued in the name of (**...Name of JV/Consortium to be filled in....**) and the Contract shall be signed by legally authorized signatories of all the parties.

1.10. All the parties of the JV/Consortium shall be jointly and severally liable during the bidding process and the bid document shall be signed by legally authorized signatory of all the parties.

1.11. The financial contribution of each partner to the JV/Consortium operation shall be:

(i) M/s..... (**Name of the partner to be filled-in**) -

(ii) M/s..... (**Name of the partner to be filled-in**) -

(iii)

1.12. All the parties of the JV/Consortium shall be jointly and severally liable for the execution of the project in accordance with the Contract terms, in the event of award of contract. The delineation of duties, responsibilities and scope of work shall be:

a) The Lead Partner shall provide suitable experienced personnel at site, for general planning, site management and equipment operations, during entire period of contract execution.

b) (**.....Name of Partner to be filled-in**) shall carry out the following works -----

c) (**.....Name of Partner to be filled-in.....**) shall carry out the following works

d)

.....

1.13. The parties hereto agreed that each of them shall duly and properly perform all the functions and all costs related to their respective works.

1.14. The parties hereto shall be at liberty to enter into liaison work/correspondence with statutory and local authorities as the circumstances warrant individually or collectively.

1.15. It is hereby agreed and undertaken that, all the parties are jointly and severally liable to the -Board of Port of Deendayal for the performance of the contract.

1.16. Notwithstanding demarcation or allotment of work between JV/Consortium partners, JV/Consortium each partner shall be liable for non performance of the whole contract irrespective of their demarcation or share of work.

1.17. The Lead Partner shall be authorized to act on behalf of the JV/Consortium.

1.18. All the correspondences between the Employer and the JV /Consortium shall be routed through the LeadPartner.

1.19. The Lead Partner is authorized: (a) to submit bid, negotiate and conclude contract and incur all liabilities therewith on behalf of the partner(s) of the JV /Consortium during the bidding process; and (b) in the event of a successful bid, to incur liabilities and receive instructions for and on behalf of the partner(s)of the JV/Consortium and to carry out the entire execution of the contract including payment, exclusively through Lead Partner.

1.20. In the event of default of the Lead Partner, it shall be construed as default of the Developer/Contractor; and Employer shall be entitled to take action under relevant clause(s) of the Department Bid Document and/or Conditions ofContract.

1.21. All the parties of the JV/Consortium shall be jointly and severally liable for due performance, recourse/sanctions within the joint venture in the event of default of any partner and arrangements for providing the requiredindemnities.

1.22. The JV/ Consortium shall have a separate JV/Consortium Bank account (distinct from the Bank account of the individual partners) to which individual partners shall contribute their share capital / or working capital. The financial obligation of the consortium shall be discharged through the said JV/ Consortium Bank account only and also all payment received by consortium from the Deendayal Port AUTHORITY shall be through that accountonly.

The parties hereto have mutually agreed to the terms and conditions set forth herein above and have assured each other to duly perform the reciprocal promises and obligations on either side for effective implementation of the JV/Consortium for proper and due completion of the works envisaged, in the event of award of contract to the JV/Consortium and have affixed their signature in this indenture on this theday of.....20...

(i) Signature Name

Designation seal &

Common seal of the firm

(ii) Signature Name

Designation seal

&

Common seal of the firm

Witness1

Witness2

**PROFORMA OF POWER- OF-ATTORNEY FOR LEAD MEMBER OF JV/ CONSORTIUM
((To be submitted on Non-judicial Stamp Paper of appropriate value)**

By this Power-of-Attorney **executed** on **this**day of(month) of 2018, we,

(i) (.....*Name of legally authorized signatory of first partner to be filled in.....*), (ii) (.....*Name of legally authorized signatory of second partner to be filled in*),

..... hereby jointly authorize and

agree the Lead Partner, M/s (... *Name of the lead partner to be filled in*), (a) to submit bid, negotiate and conclude contract and incur all liabilities therewith on behalf of the partner(s) of the JV /Consortium during the bidding process; and (b) in the event of a successful bid, to incur liabilities and receive instructions for and on behalf of the partner(s) of the JV /Consortium and to carry out the entire execution of the contract including payment for the work **of-Development of four lane road common corridor from LC 236B to 16th CB along railway line(Phase-I)**exclusively through Lead Partner.

(i) Signature Name
Designation seal &
Common seal of the firm

(ii) Signature Name
Designation seal &
Common seal of the firm

.....

.....

Signature, name and seal of the certifying authority/Notary Public

JOINT VENTURE PARTNER INFORMATION FORM

[The Tenderer shall fill in this Form in accordance with the instructions indicated below].
Date: [insert date (as day, month and year) of Tender Submission]
Tender No.: [insert number of Tendering process]

Page_____of_____pages

1. Tender's Legal Name: [insert Tenderer's legal name]
2. JV's Party legal name: [insert JV's Party legal name] JV's Legal Lead Partner {insert name and address}
3. JV's Party Country of Registration: [insert JV's Party country of registration and details of registration]
4. JV's Party year of Registration: [insert JV's Party year of registration]
5. JV's Party Legal Address in Country of Registration: [insert JV's Party legal address in country of registration]
6. JV's Party Authorized Representative information Name: [insert name of JV's Party authorized representative] Address:[insert address of JV's Party authorized representative] Telephone/Fax numbers:[insert telephone/fax numbers of JV's Party authorized representative] Email Address: :[insert email address of JV's Party authorized representative]
7. Attached are copies of original documents of [check the box(es) of the attached original documents] <div><div><input type="checkbox"/></div>Articles of incorporation or registration of firm named in 2, above, in accordance with tender document.</div> <div><div><input type="checkbox"/></div>In case of government owned entity from India, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with Tender Documents</div> <div><div><input type="checkbox"/></div><u>PAN Number</u></div> <div><div><input type="checkbox"/></div><u>Sales Tax / VAT registration</u></div> <div><div><input type="checkbox"/></div><u>numberService Tax Registration</u></div> <div><div><input type="checkbox"/></div><u>Number</u></div> <div>Any other documents required for statutory compliance</div>

Duly authorized to sign this Authorization on behalf of: [insert complete name of Tenderer]
Dateon_____dayof_____,_____ [insert date of signing]

EXCEPTIONS AND DEVIATIONS

As pointed out in the Tender Call Notice, Bidder may stipulate here exceptions and deviations to the bid conditions, if considered unavoidable.

Sr. No.	PageNo. ofBid Document	Clause No. of Bid Document	Subject Deviation

Note: however, the Bidders to note that unacceptable deviations, if any, the bid shall be liable for rejection. Bidder is discouraged to deviate from bid conditions, specifications, delivery schedules, and commercial terms as per the tender document.

Duly authorized to sign this authorization on behalf of: [insert complete name of Tenderer]
Dateon_____dayof_____,_____ [insert date ofsigning]

INTEGRITY PACT

Between

Deendayal Port Authority (DPA) hereinafter referred to as **"The Principal"**
and

..... (Name of The bidders and consortiummembers)
hereinafter referred to as **"The Bidder / Contractor"**

Preamble

The Principal intends to award, under laid down organizational procedures, contract(s) / concession(s) for Tender No The Principal values full compliance with all relevant laws of the land rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

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

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

- (1) The Bidder(s) / Contractor(s) commits themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commits themselves to observe the following principles during participation in the tender process and during the contract execution.
- a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in tender process or the execution of the contract or to any third person any material or other benefit, which he / she is not legally entitled to, in order to obtain in exchange of advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b. The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids, or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c. The Bidder(s) / Contractor(s) will not commit any offence, under the relevant Prevention of Corruption Act / Indian Penal Code / PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition, or personal gain, or pass on to others, any information or document provided by the Principal, as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d. The Bidder(s) / Contractor(s) of foreign origin shall disclose the name and address of the Agents / Representatives in India, if any. Similarly, the Bidder(s) / Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to Indian agent / representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at (page Nos. 7-20)
 - e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries, in connection with the award of the contract.
 - f. Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.
- (2) The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

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

If the Bidder(s) / Contractor(s), before award or during execution has committed a transgression through a violation of Section-2 above, or in any other form, such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder (s) / Contractor(s), from the tender process, or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is placed at (Page No. 7-20).

Section 4 - Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s), from the tender process prior to the award, according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit / Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor, liquidated damages of the Contract Value or the amount equivalent to Security Deposit / Performance Bank Guarantee, whichever is higher.
- (3) The Bidder(s) agrees and undertakes to pay the said amounts, without protest or demur, subject only to condition that, if the Bidder(s) / Contractor(s) can prove and establish that the termination of the contract, after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder/Contractor shall compensate the principal, only to the extent of the damage in the amount proved.

Section 5 - Previous transgression

- (1) The Bidder declares that, no previous transgressions occurred in the last three years with any other company in any country confirming to the anti-corruption approach or with any other Public Sector Enterprises in India, that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of Business dealing".

Section 6 - Equal treatment of all Bidders / Contractors

- (1) In case of a Joint Venture, all the partners of the Joint Venture will enter into agreement with identical conditions as this on which all Bidders.
- (2) There is no provision of sub-contract in the tender, any violation of the same, Contractor shall be held solely responsible for the same.

Section 7 - Criminal charges against violating Bidders / Contractors

If the principal obtains knowledge of conduct of a Bidder or Contractor or of an employee, or a representative, or an associate of a Bidder or Contractor, which constitutes corruption, or if the Principal has substantive suspicion, in this regard, the Principal will inform the same to the Chief Vigilance Officer (CVO) and the CVO will take further necessary action as deemed fit in accordance with the CVC Manual.

Section 8 - External Independent Monitor

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representative of the parties and performs his / her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders / Contractors as confidential. He / she reports to the Chairperson of the Board of the Principal.
- (3) The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Bidder / Contractor will also grant the Monitor, upon his / her request and demonstration of a valid interest, unrestricted and unconditional access to the project documentation. The Monitor is under contractual obligation, to treat the information and documents of the Bidder / Contractor with confidentiality.
- (4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) with confidentiality. The Monitor has also signed declaration on "Non-Disclosure of Confidential Information" and of "Absence of Conflict of Interest". In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, DPA and recuses himself / herself from that case
- (5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder / Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he / she will so inform the Management of the Principal and request

the management to discontinue, or take corrective action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- (7) The Monitor will submit a written report to the Chairperson of the Board of the Principal, within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- (8) If the Monitor has reported to the Chairperson of the Board of the Principal, a substantiated suspicion of an offence under relevant IPC / PC Act and the Chairperson of the Board of the Principal has not, within reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (9) The word "**Monitor**" would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidder and exclusion from future business dealings.

If any claim is made / lodged during this time, the same shall be binding and continue be valid despite the lapse of this Pact as specified above, unless it is discharged / determined Chairperson of the Principal.

The Pact duration in respect of unsuccessful Bidders shall expire after 6 months of the award of the contract.

Section 10 - Other Provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Gandhidham, Gujarat.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Bidder / Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement, turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

- (5)

Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.
- (6)

In the event of any contradiction between the Integrity Pact and its Annexure,the Clause in the Integrity Pact will prevail.

(For & on behalf of the Principal)

(For & on behalf of theBidder/Contractor)

(Office Seal)

(Office Seal)

Place : Gandhidham Date :/_____/20____

Witness-1:

(Name & Address)

Witness-2:

(Name & Address)

SPECIMEN BANK GUARANTEE PERFORMANCE
GUARANTEE/ SECURITY DEPOSIT STAGE PAYMENT

(To be executed on Rs.1000 non-judicial Stamp Paper)
(The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instructions indicated)

In consideration of the Board of Trustees of the Port of [insert name of Port] incorporated by the Major Port Trusts Act, 1963 as amended by Major Port Trust (Amendment) Act 1974 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Trustees of the Port of [insert name of Port], its successors and assigns) having agreed to ~~accept~~ ^{release stage payment of} _____ (hereinafter called the "Contractor")

(Name of the Contractor/s)

from the demand under the terms and conditions of the Contract, vide _____'s letter No _____

(Name of the Department)

date _____ made between the Contractors and the Board for execution of _____ covered under Tender No _____ dated _____ (hereinafter called "the said contract") for the payment of Security Deposit in cash or Lodgement of Government Promissory Loan Notes for the due fulfilment by the said Contractors of the terms and conditions of the said Contract, on production of a Bank Guarantee for Rs. _____ (Rupees _____) only we, the (Name of the Bank and Address) _____

_____ (hereinafter referred to as "the Bank") at the request of the Contractors do hereby undertake to pay to the Board an amount not exceeding Rs. _____ (Rupees _____) only against any loss or damage caused to or suffered or which would be caused to or suffered by the Board by reason of any breach by the Contractors of any of the terms and conditions of the said contract

2 We, _____ do hereby

(Name of Bank)

(Name of Branch)

undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Board stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Board by reason of any breach by the Contractors of any of the terms and conditions of the said contract or by reason of the Contractors failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to any amount not exceeding Rs. _____ (Rupees _____) only

1. We, _____ (Name of Bank and Branch) _____ undertake to pay to the Board any money so demanded notwithstand- ing any dispute raised by the Contractor(s), in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.

2. We, _____ further agree with the Board that
(Name of Bank and Branch)

the guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the _____

(Name of the user department)

of the said contract that the terms and conditions of the said contract have been fully and properly carried out by the said Contractor(s) and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall be at the request of the Board but at the cost of the Contractor(s), renew or extend this guarantee for such further period or periods as the Board may require from time to time.

3. We, _____ further agree with the Board
(Name of Bank and Branch)

that the Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said Contractor(s) and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to the Contractor(s) or for any forbearance, act or omission on the part of the Board or any indulgence shown by the Board to the Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

4. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

5. It is also hereby agreed that the Courts in [insert city] would have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

6. We, _____ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. *Notwithstanding anything contained herein
- a) Our liability under this Bank Guarantee shall not exceed Rs. _____
(Rupees _____ only).
- b) this Bank Guarantee shall be valid upto _____ and
- c) we are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____ (date of expiry of Guarantee) *

Date _____ day of _____ 20

For (Name of Bank)

(Name)

Signature