



KAMARAJAR PORT LIMITED

[A Company of Chennai Port Authority]
(Ministry of Ports, Shipping and Waterways – Government of India)
Vallur Post, Near NCTPS, Chennai – 600 120.
CIN: U45203TN1999PLC043322

E- Procurement Mode

TENDER

FOR

**WIDENING AND RESURFACING OF BITUMINOUS ROAD
INSIDE THE KAMARAJAR PORT PREMISES**

Tender No: 2026025107

VOLUME -I

Technical Bid

Due Date of Submission: 15:00 Hrs up to 23.03.2026

Date & Time of Opening: 15:30 Hrs on 24.03.2026

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ONLINE BID REFERENCE

TENDER NO.2026025107

**TENDER FOR “WIDENING AND RESURFACING OF BITUMINOUS ROAD INSIDE THE
KAMARAJAR PORT PREMISESON” THROUGH e-PROCUREMENT MODE**

PERIOD OF DOWNLOADING
BIDDING DOCUMENT:

FROM 26.02.2026 TO 23.03.2026

TIME & DATE OF
PRE BID MEETING:

NO PRE-BID MEETING. HOWEVER QUERIES WILL BE
RECEIVED AND REPLIED AS PER CLAUSE 10 OF ITB

START DATE & TIME OF
ONLINE BID SUBMISSION:

16.03.2026 TIME 15.00 HOURS

LAST DATE & TIME FOR
ONLINE SUBMISSION OF BID:

23.03.2026 TIME 15.00 HOURS

TIME & DATE OF
OPENING OF TECHNICAL BID:

24.03.2026 TIME 15.30 HOURS

PLACE OF OPENING:

PORT ADMINISTRATIVE BUILDING,
KAMARAJAR PORT LIMITED,
VALLUR POST, CHENNAI - 600120.

TIME & DATE OF
OPENING OF PRICE BID:

INTIMATED LATER, AFTER EVALUATION OF
TECHNICAL BID

Deputy General Manager (Civil)
Kamarajar Port Limited,
Chennai-600 120

NOTICE INVITING TENDER

1.0 Kamarajar Port Limited Invites **Percentage Rate Basis tender** from reputed GST registered contractors for **“WIDENING AND RESURFACING OF BITUMINOUS ROAD INSIDE THE KAMARAJAR PORT PREMISES”** under two cover system at an estimated cost of **Rs 1,45,83,438/- Excluding GST** through e-Procurement mode on website: e-procure.gov.in.

Tender No:	2026025107
Name of the work	Widening and resurfacing of bituminous road inside the Kamarajar Port Premises on Percentage Rate Basis.
Estimated value of work put to tender (in INR)	Rs 1,45,83,438/-Excluding GST
Bid Security / EMD	Rs 2,91,700/- in the form of Demand Draft
Period of contract	Six (06) Months.
Period of Online issue of tender documents	FROM 26.02.2026 TO 23.03.2026
Last date of Receiving Queries / Clarifications	09.03.2026 TIME 15.00 HOURS
Pre-bid Meeting, time and Place	NOT APPLICABLE
Last date & time for online submission of Bid	23.03.2026 TIME at 15.00 HOURS
Date, time and Place of opening of Technical Bid	24.03.2026 TIME 15.30 HOURS at Port Administrative Building, Kamarajar Port Limited, Vallur Post, Chennai-600120.

- 1.1 The complete tender document including drawings can be downloaded from KPL website: www.kamarajarport.in and e-procurement portal link and submit online as tender offer on or before the due date and time of submission.
- 1.2 The offer (both Techno-Commercial & Price) must be valid for a minimum of 90 days from the last date of online submission of offer; otherwise the offer shall be rejected as non-responsive.
- 1.3 Bidding is open to all eligible bidders meeting the eligibility criteria as defined in **Clause No.5** of Instructions to bidders. Bidders are advised to note the minimum qualification criteria specified below to qualify for the award of the contract.
 - i) Average annual financial turnover of the firm during the last three years ending 31.03.2025 should be at least **Rs 43,75,032/-**
 - ii) Experience of having successfully completed similar works during last 7 years (ending last day of month previous to the one in which tender applications are invited) i.e., should be either of the following
 - (a) Three similar completed works each costing not less than **Rs58,33,376/-**

(excluding GST) (40% of Estimated cost)OR

(b) Two similar completed works each costing not less than **Rs 72,91,719/-**

(excluding GST) (50% of Estimated cost)OR

(c) One similar completed work each costing not less than **Rs 1,16,66,751/-**

(excluding GST) (80% of Estimated cost)

NOTE: “**Similar Work**” means “**Construction of bituminous road** in Port Sector / State Government / Central Government / Central or State PSU’s / Central or State Government Institutions”.

The value of similar works completed by the bidder will be brought to current cost level by enhancing the actual value of work with the multiplication factor as detailed below for assessing the eligibility of the bidder under experience.

The base year shall be taken as 2025-2026.

Year	Multiplication factor
FY 2025-2026	1.00
FY 2024-2025	1.07
FY 2023-2024	1.14
FY 2022-2023	1.21
FY 2021-2022	1.28
FY 2020-2021	1.35
FY 2019-2020	1.42

Note:

1. Bidder should indicate actual figures of costs and amount for the works executed by them in the schedule without accounting for the above mentioned factors.
2. The financial year of completion for the similar completed works shall be taken into account while applying multiplication factors for arriving current cost level.

Documentary proof such as copy of work order/ agreement and completion certificate for the technical experience and audited balance sheet, Profit & Loss account statements for annual turnover certified by Chartered Accountant for meeting qualification criteria, either in ‘Original’ or ‘Notarized’ / self attested shall be submitted along with the technical bid link through e-procurement mode. In case of self attested documents, the bidder has to produce the original document for verification before award of work.

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- iii) The contractor shall submit letter of satisfactory performance of their plants & equipment machines. Also furnish that their Personnel are qualified and minimum numbers to be employed.
- iv) Documentary evidence for having valid GST/PAN details as under:
- a. GST Registration Certificate No. _____
- b. PAN No. _____
- v) Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value.

Available Bid Capacity

The bidder should possess the bidding capacity as calculated by the specified formula. The formula generally used is:

Available bid capacity = $(A \times M \times N) - B$, where

A= Maximum value of Engineering (Civil Works) executed in any one year during the last five years (updated to current cost level by enhancing the actual value of work at simple rate of 7% (seven percent) per annum, calculated from the date of completion to the date of Bid/Tender opening), taking into account the completed as well as works in progress.

M = Multiplier Factor (usually 1.5)

N= Number of years prescribed for completion of the work.

B= Value (updated at the current price level) of the 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 on-going works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Engineer-in charge

- 1.4 Normally the contract will be awarded to the lowest bidder. However, the Employer/Board do not bind themselves to accept the lowest or any tender and reserve the right to accept any tender in part or to reject any tender without assigning any reason there for.
- 1.5 **The due date of submission of offers will be 23.03.2026 @ 15.00 Hrs**, unless otherwise notified. In the event of changes in the schedules, the Kamarajar Port Limited notifies the same through its web site/e Portal.
- 1.6 If the offers are not received according to the instructions detailed here above, they shall be liable for rejection.

- 1.7 For more details visit Port website: www.kamarajarport.in or www.eprocure.gov.in or contact Senior Manager(Civil) at 044-27950030-40.
- 1.8 The bidder who need clarification on any specific issue if any shall submit the same addressed to the Deputy General Manager (Civil), Chennai – 600 120 before the date and time indicated in bid reference table. No queries / clarifications shall be encouraged after the date and time indicated in the bid reference table. The bidder queries would be clarified through e-procurement portal and notification in this regard will be issued under tender section through our website www.kamarajarport.in.
- 1.9 Documentary evidence for having valid ESI/EPF details as under:
1. ESI No. _____
 2. EPF No. _____
 3. GST No.
 4. MSME / NSIC Registration Copy _____

Deputy General Manager (Civil)
Kamarajar Port Limited,
Chennai-600 120

INSTRUCTIONS FOR ONLINE BID SUBMISSION

Bidders to follow the following procedure to submit the bids online through the e-Procurement portal <http://eprocure.gov.in>.

The bidder shall obtain e-token from a licensed Certifying Authority of National Information Centre (NIC) such as MTNL / SIFY / TCS / nCode / eMudhra to get access for Online Bid Submission through the e-procurement site <http://eprocure.gov.in>.

- (i) Bidder should do the registration in the tender site using the “Click here to Enroll” option available.
- (ii) Bidder can use “My Space” area to update standard documents in advance as required for various tenders and use them during bid submission. This will facilitate the bid submission process by reducing time.
- (iii) Bidder should read the tenders published in the site and download the required documents / tender schedules for the tenders.
- (iv) Bidder then logs into the site by giving the user id/password chosen during registration and password of the DSC/e-token.
- (v) Only one DSC should be used for one bidder. If a bidder uses more than one DSC token, the bid would summarily be rejected.
- (vi) Bidder should read the Tender schedules carefully and submit the documents as per the Tender.
- (vii) If there are any clarifications, the same may be clarified during the pre-bid meeting.
- (viii) Bidder should take into account the corrigenda, if any published before submitting the bids online.
- (ix) Bidder must in advance prepare the bid documents to be submitted as indicated in the tender schedule and they should be in the required format. If there is more than one document, they can be clubbed together.
- (x) Bidder selects the tender which he is interested using search option & then moves it to my favorites’ folder.
- (xi) From the folder, appropriate tender can be selected and all the details can be viewed.
- (xii) The bidder should read the terms & conditions and accept the same to proceed further to submit the bids.
- (xiii) The Bidder has to select the payment option as offline to pay the EMD and tender document cost as applicable.

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- (xiv) The details of the DD instrument / any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the bid submitted will not be acceptable.
- (xv) The bidder has to enter the password of the DSC / e-token and the required bid documents have to be uploaded one by one as indicated.
- (xvi) The bidder has to submit the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected / will not be accepted by the system.
- (xvii) The tendering system will give a successful bid updating message and then a bid summary will be shown with the bid no., the date and time of submission of the bid and all other relevant details. The bidder has to submit the relevant documents required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected.
- (xviii) The bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid.
- (xix) The bid summary will act as a proof of bid submission for the subject tender and will also act as an entry point to participate in the bid opening date.
- (xx) For any clarifications regarding the Tender, the bid number can be used as a reference.
- (xxi) Bidder should log into the site well in advance for bid submission so as to submit the bid in time (i.e.) on or before the bid submission time. If there is any delay, due to other issues, bidder only is responsible.
- (xxii) Each document to be uploaded online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced by scanning at low resolution and the same can be uploaded.
- (xxiii) The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission.
- (xxiv) All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not be view able by unauthorized persons during bid submission & cannot be viewed by any one until the prescribed date & time of bid opening.
- (xxv) The confidentiality of the bids would be maintained. Secured Socket Layer 128-bit encryption technology is used. Data storage encryption of sensitive fields is done.
- (xxvi) Any document that is uploaded to the server is subjected to symmetric encryption using a generated symmetric key. Further this key is subjected to asymmetric
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encryption using buyer's public keys. Overall, the submitted tender documents become readable only after the tender opening by the authorized individual.

(xxvii) For any queries, the bidders are asked to contact by mail cppp-nic@nic.in or by phone 1-800-233-7315 well in advance.

(xxviii) Bidder is required to submit their tender through online in the form of Two Cover System on or before schedule bid due date of closing and time as notified in NIT. The tender received after the due date and time will not be entertained.

(xxix) Tender Document can be submitted online only in the designated e-procurement portal eprocare.gov.in on or before the due date and time. The time of opening of technical bid will be as notified in the NIT.

(xxx) Bidder should submit the tender as per specification of work, drawings and in accordance with the instructions to bidders, General Conditions of Contract and Special Conditions of Contract.

Deputy General Manager (Civil)

Kamarajar Port Limited,

Chennai-600 120

SECTION - 1

**INSTRUCTIONS TO BIDDERS
(ITB)**

SECTION – 1

INSTRUCTIONS TO BIDDERS

A. GENERAL

1. Scope of Work

Kamarajar Port Limited, hereinafter termed “the Employer”, invites bids for the **“Widening and resurfacing of bituminous road inside the Kamarajar Port Premises”** detailed in the table given in NIT. The bidders may submit bids for the works detailed in the table given in NIT.

The details of the works covered under this bid are as detailed below:

Kamarajar Port has proposed to widen the bituminous road about the length of 1800m from the existing width of 3.75m to 5.00m, by using Granular Sub Base (GSB), Wet Mix Macadam (WMM), Dense Bituminous Macadam (DBM) and Bituminous concrete (BC) materials as shown in cross-sectional drawing placed in section -7 . Further, it is proposed to resurface the existing entire bituminous with bituminous concrete by providing kerb stone on other side.

The following are the proposed items of work

- (i) Earth works in excavation and Preparation & consolidation of Sub Grade with power road roller as per section -301 of MoRT & H specifications.
- (ii) Providing sub-base with Granular Sub Base materials to a thickness of 200 mm as per section -401 of MORTH’s specifications.
- (iii) Providing WMM over sub- base to a thickness of 250 mm as per existing road specifications as per section -406 of MORTH’s specifications.
- (iv) Providing and applying prime coat using bitumen emulsion conforming to IS: 8887 over WMM surface as per section -502 of MORTH’s specifications.
- (v) Providing and laying Dense Graded Bituminous Macadam of 50mm thick as per section -505 of MORTH’s specifications.
- (vi) Providing and applying tack coat using bitumen emulsion conforming to IS: 8887 over bituminous surface as per section -503 of MORTH’s specifications.
- (vii) Providing and laying Bituminous concrete of 25mm as per section -507 of MORTH’s specifications.
- (viii) Providing and fixing precast cement concrete in kerb in grade 1:1.5:3 cement concrete (M-20) in position as per sub-head – 16.58 of Central Public Work Department (CPWD) specifications – 2019
- (ix) Painting the Kerb wall with Epoxy paint as per sub-head- 13.24A of Central Public Work Department (CPWD) specifications – 2019
- (x) Providing and laying of hot applied thermoplastic paint on road surface both side & stopper lines, 2.5mm thick as per sub-head- 16.51 of Central Public Work Department (CPWD) specifications – 2019

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- (xi) Supply and fixing of retroreflective road marker or road studs as per sub-head- 16.64 of Central Public Work Department (CPWD) specifications – 2019
 - (xii) Manufacturing supplying and fixing Retro Reflective Sign Boards as per sub-head- 16 of Central Public Work Department (CPWD) specifications – 2019
 - (xiii) Providing and laying cement concrete in mix of 1:4:8 and 1:1.5:3 for providing the side drain to connect the existing drain.

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

2. Availability of the project Area & Engineer-in charge

- 2.1. The Employer shall provide the area that can be conveniently spared, adjacent to the site of work, at its discretion, subject to availability, for works and other appurtenant works to the contractor at free of cost.
- 2.2. The Employer will provide the land required for site offices, installation of testing laboratories etc., except labor camps at free of cost adjacent to the proposed Project site, during the tenure of the contract or such extended period, if any, subject to availability
- 2.3. The Employer may nominate their own personnel or engage any other person to act as Engineer-in charge for the project.
- 2.4. Throughout these bidding documents, the terms 'Bid' and 'Tender' and their derivatives (bidder/ bidder, bid/ tender, bidding/ tendering, etc.) are synonymous.

3. Source of Funds

- 3.1. The funds shall be made available from internal resources and the Authority has sufficient funds in Indian Currency for execution of the works.

4. Eligible Bidders

- 4.1. The invitation for Bids is open to all eligible bidders meeting the eligibility criteria as defined in **Clause No.5**
- 4.2. The Bidder shall provide in **Section 6**, Forms 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 who has prepared the design, specifications, and other documents for the present tender.
- 4.3. 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.

4.4. Bidder shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Employer in accordance with **Clause No. 33**.

5. Eligibility and Qualification Criteria:

5.1. To be qualified for award of the contract, bidders shall provide evidence satisfactory to the Employer of their capability and adequacy of resources to carry out the contract effectively. Bids shall include the following documents and information on the relevant information forms attached in **Section 6** with the Bid Document.

5.2. Qualification will be based on meeting all the minimum criteria in Clause 5, regarding the applicant's in general and particular experience, personnel and equipment capabilities, and financial position, as demonstrated by the applicant's responses in the forms attached to the letter of application.

5.3. The applicant shall meet the following minimum criteria:

- i) The applicant in the same name and style should have achieved an Average annual financial turnover of the firm during the last three years Audited Balance Sheet ending 31.03.2025 should be at least **Rs 43,75,032/-**
- ii) Experience of having successfully completed similar works during last 7 years (ending last day of month previous to the one in which tender applications are invited) i.e., should be either of the following
 - (a) Three similar completed works each costing not less than **Rs 58,33,376/- (excluding GST)** or
 - (b) Two similar completed works each costing not less than **Rs 72,91,719/- (excluding GST)** or
 - (c) One similar completed work each costing not less than **Rs 1,16,66,751/- (excluding GST)**

“**Similar Work**” means “**Construction of bituminous road** in Port Sector / State Government / Central Government / Central or State PSU's / Central or State Government Institutions”.

The value of similar works completed by the bidder will be brought to current cost level by enhancing the actual value of work with the multiplication factor as detailed below for assessing the eligibility of the bidder under experience.

The base year shall be taken as 2025-2026.

Year	Multiplication factor
FY 2025-2026	1.00
FY 2024-2025	1.07
FY 2023-2024	1.14
FY 2022-2023	1.21
FY 2021-2022	1.28
FY 2020-2021	1.35
FY 2019-2020	1.42

Note:

1. Bidder should indicate actual figures of costs and amount for the works executed by them in the schedule without accounting for the above-mentioned factors.
2. The cost of materials issued at free of cost by client/ Employer is not considered as part of the contract value and shall not be taken into account for arriving the value of similar works completed by the bidder to meet the minimum eligibility criteria as per Clause-5.3 of Section-I.
3. The financial year of completion for the similar completed works shall be taken into account while applying multiplication factors for arriving current cost level. Documentary proof such as copy of work order/ agreement and completion certificate for the technical experience duly and **audited balance sheet, Profit & Loss account statements for annual turnover certified by Chartered Accountant** for meeting qualification criteria, either in 'Original' or duly 'Notarized'/ self attested shall be submitted along with the technical bid link through e-procurement mode. In case of self attested documents, the bidder has to produce the original document for verification before award of work.
 - i) The Contractor should have in their procession sufficient tools and plants and/or proper tie-up with other suppliers of Plants and Equipment to complete this work.
 - ii) The Contractor should have required bid capacity as defined in **Clause 5.7** of this Section to execute this work.
- 5.4. All the bidders shall upload the following documents and information duly filled along with documentary evidence (Notarized) to qualify technically as per the forms in **Section-6**.
 - i) Bid Submission Letter (On letter head of the bidding firm) (**Form-1**)
 - ii) Power of Attorney for Authorized Signatory of the firm (**Form-2**)

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- iii) Average annual financial turnover of the firm during the last three (3) years ending 31.03.2025 along with audited balance sheets/profit & loss account **(Form-3)**.
 - iv) Experience on similar works executed during the last seven (7) years; and details like monetary value, clients, proof of satisfactory completion **(Form-4)**.
 - v) Information regarding projects under current contract commitments/work in progress **(Form-5)**.
 - vi) List of major items of construction equipment proposed to carry out the contract **(Form-6)**.
 - vii) Personnel / Staff proposed for the project **(Form-7)**
 - viii) Claims/ current litigation/Arbitration if any, **(Form-8)**
 - ix) Proposed site organization **(Form-9)**
 - x) The proposed methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion **(Form-10)**.
 - xi) Bid Security Declaration Form **(Form-11) – Not Applicable**
 - xii) Performance Security Deposit (Bank Guarantee) **(Form-12)** - Draft.
 - xiii) Form of Contract Agreement **(Form-13)**-Draft.
 - xiv) Integrity Pact **(Form-14)**
 - xv) Profile of the bidder (**Form 15**)
- 5.5. **Sub-Contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria.**
- 5.6. The Bidders should provide accurate information on any litigation or arbitration resulting from contracts completed or under execution by him over the last five years.
- 5.7. Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value.

Available Bid Capacity

The bidder should possess the bidding capacity as calculated by the specified formula. The formula generally used is:

Available bid capacity = (A x M x N) - B, where

A= Maximum value of Engineering (Civil Works) executed in any one year during the last five years (updated to current cost level by enhancing the actual value of work at simple rate of 7% (seven percent) per annum, calculated from the date of completion to the date of Bid/Tender opening), taking into account the completed as well as works in progress.

M = Multiplier Factor (usually 1.5)

N= Number of years prescribed for completion of the work.

B= Value (updated at the current price level) of the 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 on-going works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Engineer-in charge

5.8. Even though the bidders meet the above qualifying criteria, they are liable for disqualification, if they have:

- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.,

6. One Bid per Bidder

6.1. Each bidder shall submit only one bid for the tender. 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.

6.2. **Joint Venture : No joint Venture is allowed in this contract.**

7. Cost of Bidding

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

8. Site Visit

8.1. The bidder is advised to visit and inspect the site of works and its surroundings and obtain for himself on his own responsibility all information that may be necessary for preparing the tender and entering into a contract for the execution of the works. The costs of visiting the site shall be borne by the bidder. Permission, if required, to visit the site, will be given during the tender period on application to:

The Deputy General Manager (Civil)

Kamarajar Port Limited,
Vallurpost, Chennai - 600120.
Telephone: 044 27950049.

8.2. The Bidder and any of his personnel or agents will be granted permission by the Engineer-in charge to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the bidder, his personnel and agents, will release and indemnify the Engineer-in charge or his representatives from and against all liability in respect of such inspection and will also be responsible for death or personal injury, loss or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.

8.3. It is the responsibility of bidders to visit the site as set out in the **Clause 8.1** above and obtain all information necessary for the purpose of preparing Tenders. Bidders must inspect and fully satisfy themselves as to:

- The requirements and extent of the Works.
- The means of access to the Site.
- The topographical features of the Site which may affect the tender.

B. BIDDING DOCUMENTS**9. Content of Bidding Documents**

9.1. The tender documents contain the schedules stated below, and should be read in conjunction with any Addenda/ Amendments issued in accordance with **Clause 11**:

Technical Bid

Sl. No	Contents
1	Online Bid Reference
2	Notice Inviting Tenders
3	Instruction for online bid submission

4	Section 1 Instruction to the bidders
5	Section 2 General Conditions of Contract& Special conditions of contract.
6	Section 3 General Description of Work and Other Conditions
7	Section 4 Contract data
8	Section 5 Technical Specifications of Materials and Works
9	Section 6 Forms
10	Section 7 Drawings

Price bid (Bill of quantities).

9.2.The bidding documents can be downloaded from KPL Website/e-procure.gov.in the bidder.

9.3.The bidder is expected to examine carefully all instructions, conditions of contract, general description of work and other conditions, technical specifications, drawings, forms, bill of quantities and annexure in the bid document. Failure to comply with the requirements of the bid document shall be at the bidders' own risk. Pursuant to clause 25 hereof, bids which are not substantially responsible to the requirements of the bid documents shall be rejected.

10. Clarification of the Bidding Documents

10.1. Pre-bid meeting

No pre bid meeting will be conducted. However, clarifications may be sent to this office on or before 7 days before the start of submission date of the tender document. Notification in this regard will be issued through www.ennoreport.gov.in and the e-procurement portal link prior to the deadline for submission of bids.

11. Amendment of Bidding Documents

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

11.2. Any addendum/corrigendum thus issued shall be part of the bidding documents and shall be published in the e-procurement portal/ KPL website. The amendment/addendum so issued will part of the tender document and shall be biding upon the bidders.

11.3. 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 20.2** below.

C. PREPARATION OF BIDS**12. Language of the Bid**

12.1. The bid, and all correspondence and documents related to the bid exchanged by the bidder and the Employer shall be written in the English language. Supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an authenticated translation of the relevant passages in the above stated language, in which case, for purposes of interpretation of the bid, the English translation shall prevail.

13. Documents comprising the Bid

13.1. The bid submitted by the bidder shall comprise the following:

A) Technical Bid

- i) The documents stated in the **Clause 9.1** including the addition if any.
- ii) Qualification Information Form and Document (pursuant to **Clause 5** hereof) and any other materials required to be furnished and submitted by the bidder in accordance with these instructions. The documents listed under the **Clause 5.4** and as per the **forms in Section 6** shall be filled in without exception and uploaded through **e-Procurement on website: e-procure.gov.in.**

B) Financial Bid

Percentage should be quoted in a spread sheet file (.xls format) available in e-procurement Portal only. Any indication of 'Quoted Percentage' in the online technical bid documents shall lead to rejection of the bid outright.

For evaluation purpose the uploaded offer documents will be treated as authentic and final. No hard copy shall be submitted for reference purpose. The financial bid submitted through e-procurement mode only will be taken up for the purpose for evaluation.

The Quoted Percentage in e-portal is as per the terms and conditions specified in the tender during finalization of L1, L2, L3.... **Bidders quoted Percentage for the BOQ** shall be considered for ascertaining the L1, L2, L3... etc. position.

14. Bid Prices

14.1. The contract shall be for the whole works as described in **Clause 1.1** of this Section, based on the Priced Bill of Quantities submitted by the Bidder.

14.2. The Bidder shall fill in Percentage above or below all rates and prices in the Bill of Quantities.

- 14.3. All duties, taxes (Other than GST), EPF, ESI and other levies payable by the contractor under this contract, or for any other cause shall be included in the Percentage quoted by the bidder in the BOQ.
- 14.4. The GST will be reimbursed by KPL only on reflection of GST Paid by contractor in KPL's GST portal. Tax deducted at source shall be as per statutory requirement such as IT Act, GST Act, Tamil Nadu workers welfare Cess etc as applicable. The Employer will perform such duties in regard to the deduction of such taxes at source 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. Notwithstanding the payment from KPL, Contractor shall remit the GST value and file returns with Statutory Authorities timely.

15. Currencies of Bid and payment

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

16. Bid Validity:

- 16.1. Bids shall remain valid for a period not less than 90 days after the deadline date for bid submission specified in **Clause 20**. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 16.2. In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by fax. A bidder agreeing to the request will not be permitted to modify his bid.

17. Bid Security (Earnest Money Deposit – EMD)

- A. The bidder shall have to submit the **Earnest Money Deposit of Rs 2,91,700/-** (in the form of Demand Draft in favour of **“Kamarajar Port Limited”** from any **Nationalized/Schedule Bank (except Cooperative Banks)** encashable at **Chennai**.
- B. EMD of unsuccessful bidders other than L1, and L2 will be refunded immediately after ranking of price bids. Earnest Money of L2 will be refunded immediately after entering in to agreement with L1 and acceptance of performance Guarantee from L1.
- C. EMD is refunded suo-motto without any application from the bidders.

D. The Bid Security of the successful bidder will be discharged after he has signed the Agreement and furnished the required Performance Security.

Bidders registered with MSME / NSIC with valid certificate holder shall be exempted from submission of EMD.

Note: A copy of the registration certificate with MSME / NSIC should be submitted along the submission of tender for claiming exemption from submission of EMD.

E. 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 Clause 27; or
- c) The successful Bidder fails within the specified time limit to
 - i) Sign the Agreement or
 - ii) Furnish the required performance security

Any bid not accompanied by the Bid Security (EMD) shall be rejected by the Authority as non-responsive.

18. Alternative Proposals by Bidders

18.1 Conditional offer or Alternative offers shall not be considered in the process of tender evaluation and leads to rejection of Tender.

D. SUBMISSION OF BIDS

19. e-Procurement

Bidders shall submit their bid on ***online only through e-Procurement Mode.***
The documents and information required for fulfilling the eligibility criteria as specified in the **Notice Inviting Tender Clause.**

20. Deadline for Submission of Bids

20.1 Bids must be uploaded in the website **www.eprocure.gov.in** not later than **23.03.2026 at 15 00 Hrs.**

20.2 The employer may extend the deadline for submission of the bid by issuing an amendment in accordance with **Clause 11**, 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.

20.3 The bid document being downloaded from web site and uploaded through e-Tender website **www.eprocure.gov.in**, the bidder shall give an undertaking that no change have been made in document.

21.0 Modification and Withdrawal of Bids

21.1 The bidders may modify, substitute or withdraw their tender after submission by

giving notice in writing before the deadline prescribed in **Clause 20 through e-Procurement Mode.**

21.2 No bid shall be modified after the deadline for submission of bids.

21.3 Withdrawal of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 16.1 above or as extended pursuant to Clause 16.2 may result in disqualification from bidding Pursuant to **Clause 17.1 of section I.**

E.BID OPENING AND EVALUATION

22.0 Bid Opening

22.1 On the due date and appointed time as specified in **Clause 20**, the Employer will first open Technical bids *in e-Procurement Mode* including modifications made pursuant to **Clause 21**. In the event of, the specified date for bid opening declared a holiday by the Employer; the bids will be opened at the appointed time and location on the next working day. The bid will be opened at Kamarajar Port Limited, Port Admin building, Vallur Post, Chennai-600 120 and status of the opening can be viewed in e-procurement mode.

23.0 Process to be Confidential

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

24.0 Clarification of Bids

24.1 To assist in the examination, evaluation and comparison Bids, the Employer may, at his discretion, ask any bidder for clarification of his Bid, including breakup of unit rates. The request for clarification and the response shall be in writing or by fax, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids.

24.2 Subject to **Sub-Clause 24.1**, 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. If the Bidder wishes to bring additional information to the notice of the Employer, he should do so in writing.

24.3 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.

25.0 Examination of Technical Bids and Determination of Responsiveness of Technical Bid

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- 25.1 Prior to evaluation of Technical Bids, the Employer will determine whether each bid (a) meets the eligibility criteria defined in the **Clause 5**. (b) has been properly signed by an authorized signatory (accredited representative) holding Power of Attorney in his favour. The Power of Attorney shall inter-alia include a provision to bind the bidder to settlement of disputes Clause; (c) is submitted with the required Bid Security and; (d) is responsive to requirements of the bidding documents.
- 25.2 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 Employers' 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.

26.0 Evaluation and Comparison of Financial Bids

- 26.1 The Employer will evaluate and compare only the Bids determined to be responsive in accordance with **Clause 25**.
- 26.2 The estimated effect of the price adjustment conditions under **Clause 47 (Section 3)**, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.
- 26.3 If the Bid of the successful Bidder is seriously unbalanced in relation to the Employer estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those price with the implementation/construction methods and schedule proposed.

F.AWARD OF CONTRACT

27.0 Award Criteria

- 27.1 Subject to **Clause 28**, the Employer will award the Contract to the Bidder whose Bid has been determined to be responsive to 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 4**, and (b) qualified in accordance with the provisions of **Clause 5** and pursuant to **Clause 25**. The second bidder (i.e. L₂) shall be kept in reserve and may be invited to match with the bid submitted by the (L₁) bidder, in case, such bidder(s) withdraws or is not selected for any reason, in exceptional circumstances.

28.0 Employer's Right to accept any Bid and Reject any or all Bids

Notwithstanding **Clause 27** above, the Employer reserves the right to accept or reject any bid and to cancel the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidders on the grounds for the Employer's action.

29.0 Notification of Award and Signing of Agreement

29.1 The Bidder who's Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by fax or confirmed by registered letter. This letter (herein after and in 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 Work by the Contractor as prescribed by the Contract (herein after and in the Contract called the "Contract Price")

29.2 The notification of award will constitute the formation of the contract, subject only to the furnishing of a performance security in accordance with the provisions of **Clause 30**.

29.3 The notification of award will be cancelled if the preferred bidder failed to furnish the performance security and sign the Agreement; the Employer reserves the Right to take further action on the Bid

29.4 The Agreement will incorporate all correspondence between the Employer and the successful Bidder. It will be signed by the Employer and the successful Bidder within stipulated period, following the notification of award. Within **14 days** of receipt of this letter, the successful Bidder will furnish the performance security and sign the Agreement with the Employer.

29.5 All costs, charges and expenses including stamp duty in connection with the contract as well as preparation and completion of agreement shall be borne by the contractor. Until such contract agreement is executed, this tender downloaded by the bidder including additional together with the written acceptance shall form a binding contract between the KPL and the Contractor and shall be the contract. The successful bidder shall sign all the pages of the downloaded documents and return to employer for their sign and its Form of Contract Agreement.

29.6 Upon furnishing the Performance Security and entered the contract Agreement with employer by the successful Bidder, the Employer will promptly issue Notice to proceed the work.

30.0 Performance Guarantee:

30.1 Performance Guarantee shall consist of two parts;

- i)** Performance Security Deposit to be submitted at award of work and
- ii)** Retention Money to be recovered from Running Bills.

30.1 Performance Guarantee should be 10% of Contract price of which Performance Security Deposit 5% of contract price should be submitted as Demand Draft or Bank Guarantee from any Nationalized Bank (except Cooperative Banks) encashable at Chennai within 14 days of Issue of letter of acceptance by KPL and balance 5% recovered as Retention Money from Running Bills. Recovery of 5% of Retention Money is to commence from the first bill onwards @ 5 % of bill value from each bill subject to a maximum of 5% percent of the contract price.

30.2 Retention Money of 5% be refunded within 14 days from the date of payment of final bill. Balance Performance Security Deposit of 5% to be refunded immediately not later than 14 days of completion of defect liability period pursuant to Clause 32.3 of Section-2.

30.3 Failure of the successful bidder to comply with the requirements of Clause 30.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

31.0 Advance Payment

No Advance payment is contemplated in this Tender.

32.0 Conciliator

The Employer proposes that CIDC-SIDC Arbitration Centre be appointed as Conciliator under the Contract as provided in **Clause 25.3 of Section 2** of condition of contract. If the bidder disagrees with this proposal, the bidder should so state in the bid.

33.0 Corrupt or Fraudulent Practices:

33.1 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 the employer 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 or 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.

33.2 Furthermore, bidder shall be aware of the provisions stated in **Sub Clause 57.2** of the Conditions of Contract.

34.0 INTEGRITY PACT –

The integrity pact available in the tender document is an integral part of this tender document and all bidders have to execute the same and upload during bid submission. In case a bidder do not execute the integrity pact, his bid shall be liable for rejection. The names of the IEM's (Independent external Monitors) are given below:

Name	Phone Numbers	e-mail id
Shri.Jatinderbir Singh, IAS (Retd) House No No.1186, Sector 77, Mohali – 140 308 (Punjab)	9968607788	jatinderbir@gmail.com
Shri.MuvvalaKondala Rao, IFoS(Retd) 201, Kalakuj – B, Cooperative Society, Lane 6, Dahanukar Colony, Kothrud, Pune – 411038, Maharashtra	9422161512	mkraomuvvala@gmail.com

35 The following documents also form a part of this tender document:

1.KPL's Work Manual 2024 and amendments, if any (available in www.kamarajarport.in)

2. Policy & Procedure for Suspension and banning of business dealings against erring and defaulting agency in KPL. (available in <https://www.kamarajarport.in/content/innerpage/manuals.php>)

Any amendments/versions of the above issued from time to time shall form a part of document.

4. GFR 2017 (General Financial Rules - 2017), Manual for Procurement of Works- updated June 2022. Any amendments/versions of the above from time to time shall be considered.

36. Temporary Work:

If any temporary item of work is needed for the execution of the contract, the required details shall be submitted by the bidder with the proposals and connected drawings along with the tender.

- 37.** The area where the construction works have to be executed is inside the port area, due care shall be taken to avoid hindrance to other movement. During the construction period necessary safety measures have to be taken for the men working at site. The bidder shall inspect and examine the site and its surroundings and shall satisfy himself before submitting his tender nature of the site, the stacking and movement of the traffic, the quantities and nature of work and materials necessary for the completion of the works and the means of access to the site, the accommodation he may require and in general, shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his tender. No extra charges consequent to wrong assumptions / assessment by the bidder or otherwise shall be allowed. The bidder shall take into account all these aspects before quoting their rates and shall not hold the Employer responsible for any details that might have been omitted to be mentioned in the tender schedule which may affect the pricing of the tender and any claim by the bidder on this account will not be entertained by the KPL.
38. Drains, pipes, cables, overhead wires and similar services encountered in the course of the work shall be guarded from injury by the contractor at his own cost, so that they may continue in full and uninterrupted use to the satisfaction of the Engineer or his representative and the contractor shall not store materials or otherwise occupy any part of the site in a manner to hinder the operation of such services.
39. If any damage be done by the contractor to any mains, pipes, cables or lines (whether above or below structure) whether or not shown in the drawing, the contractor must make good or bear the cost of making good the same without delay, to the satisfaction of the Engineer or his representative.
40. KPL shall not be held liable for any damages or compensation payable under the law in respect or in consequence of any accident or injury to any workmen or other persons in the employment of the contractor or any sub-contractor and the contractor shall indemnify and keep indemnified the Employer against all such damages and compensation and against all claims, demands, proceedings, costs, charges, expenses whatsoever in respect thereof or in relation thereto.

SECTION - 2

PART – I - GENERAL CONDITIONS OF CONTRACT

PART – II - SPECIAL CONDITIONS OF CONTRACT

SECTION - 2

PART I – GENERAL CONDITIONS OF CONTRACT

B. General

1. Definitions

In the contract (as hereinafter defined) the following words and expressions shall have the meaning hereby respectively assigned to them except where the context otherwise required. Terms which are defined in the Contract Data are also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

- 1.1. "**Board**" -The Board means the Board of Directors, Kamarajar Port Limited or their successors or Assignees.
- 1.2. "**Employer**" means Kamarajar Port Limited (KPL)
- 1.3. "**Engineer-in charge**" means the Officer nominated or appointed by Kamarajar Port Limited for the work
- 1.4. "**Engineer-in charge's representative**" means the officer appointed by Kamarajar Port Limited in writing who shall direct and supervise and to perform the duties set forth in **sub -Clause 5** hereof and be in-charge of the works.
- 1.5. **The Conciliator** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instances as provided for in **Clauses 24 and 25..**
- 1.6. **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.
- 1.7. **Compensation Events** are those defined in **Clause 42** here under.
- 1.8. **The Completion Date** is the date of completion of the Works as certified by the Engineer-in charge or Engineer in charge's representative in accordance with **Sub Clause 53.**
- 1.9. 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 2.3** below.
- 1.10. The **Contract Data** defines the documents and other information, which comprise the Contract.
- 1.11. The **Contractor** is a person or corporate body whose Bid to carry out the Works has been accepted by the Employer.
- 1.12. The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

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- 1.13. The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted as per the completed cost of works in accordance with the provisions of the Contract.
 - 1.14. **Days** are calendar days; months are calendar months.
 - 1.15. A **Defect** is any part of the Works not completed in accordance with the Contract.
 - 1.16. **The Defects Liability Period** is the period named in the Contract Data and calculated from the Completion Date.
 - 1.17. The **Engineer-in charge and/or Engineer-in charge's representative** is the person (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer-in charge or Engineer-in charge's representative) 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.
 - 1.18. **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
 - 1.19. The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.
 - 1.20. 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 Engineer-in charge or Engineer-in charge's representative by issuing an extension of time.
 - 1.21. **Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works.
 - 1.22. Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function
 - 1.23. The Site is the area defined as such in the Contract Data.
 - 1.24. Site Investigation Reports are those, which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site.
 - 1.25. **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer-in charge or Engineer-in charge's representative.

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- 1.26. 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 Dates.
- 1.27. 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.
- 1.28. Temporary Works are works designed, constructed, installed, and removed by the Contractor, which are needed for construction or installation of the Works.
- 1.29. A Variation is an instruction given by the Engineer-in charge or Engineer-in charge's representative which varies the Works.
- 1.30. The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.
- 1.31. 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.

2. Interpretation

- 2.1. In interpreting these Conditions 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 unless specifically defined. The Engineer-in charge or Engineer-in charge's representative will provide instructions clarifying queries about the Conditions of Contract.
- 2.2. 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).
- 2.3. The documents forming the Contract shall be interpreted in the following order of priority:

1	Section 1 Instruction to the bidders
2	Section 2 General Conditions of Contract& Special conditions of contract.
3	Section 3 General Description of Work and Other Conditions
4	Section 4 Contract data
5	Section 5 Technical Specifications of Materials and Works
6	Section 6 Forms
7	Section 7 Drawings

3. Language and Law

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

4. Engineer-in charge or Engineer-in charge's representative's Decisions

Except where otherwise specifically stated, the Engineer-in charge or Engineer-in charge's representative will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

The duties of the Engineer-in charge's Representative are to watch and supervise the works and to test and examine any materials to be used or workmanship employed in connection with the works. He shall have no authority to relieve the contractor of any of his duties or obligations under the contract not except as expressly provided here under or elsewhere in the contract to order any work involving delay or any extra payment by the employer or to make any variation of or in the works. The Engineer-in charge may from time to time in writing delegate to the Engineer-in charge's representative any of the powers and authorities vested in the Engineer-in charge and shall furnish to the contractor, a copy of all such written delegations of powers and authorities. Any written instruction or approvals given by the Engineer-in charge's representative to the contractor within the terms of such delegation (but not otherwise) shall bind the contractor and the employer as though it had been given by the Engineer-in charge, provided as follows.

- i. Failure of the Engineer-in charge's Representative to disapprove any work or materials shall not prejudice the power of the Engineer-in charge thereafter to disapprove such work or materials and to order the pulling down or removal or breaking up thereof;
- ii. If the contractor shall be dissatisfied by reason of any decision of the Engineer-in charge's Representative, he shall be entitled to refer the matter to the Engineer-in charge who shall thereupon confirm / reverse or vary the contents of such decisions.

The Engineer-in charge or Engineer-in charge's representative may delegate any of his duties and responsibilities to other people except to the Conciliator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

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).

7. Joint Venture.

No Joint Venture shall be entertained in this contract.

8. Subcontracting

8.1. The Contractor shall not subcontract or sublet the whole of the works, except where otherwise provided by the contract. The contractor shall not sublet any part of the works without the prior written consent of the Engineer-in charge (which shall not be unreasonably withheld) and such consent, if given shall not relieve the contractor of any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the contractor, his agents, servants or workmen, Provided always that the provision of labor on piece work basis shall not be deemed to be subletting or assignment of benefit or interest under this clause.

8.2. Other Contractors

The Contractor shall cooperate 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 refer 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.

9. Personnel

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 Engineer-in charge or Engineer-in charge's representative. The Engineer-in charge or Engineer-in charge's representative will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

9.2. If the Engineer-in charge or Engineer-in charge's representative asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the

Contract.

9.3. Employment of Technical Staff

- a) The contractor shall employ following technical staff when ever required to cater various stages of the work as directed by the Engineer-in-charge or Engineer-in-charge representative.

Sl. No	Requirement of Technical staff	Minimum Experience	Qualification	Experience (Minimum requirement)	No. of persons
1.	Project Manager	5 years	Degree in Civil Engineering	Should have held the specific responsibility at least for in last 5 years in Civil Construction works	01
2.	Quality Assurance/ Quality Control Engineer (Civil)	5 Years for Degree and 3 Years for Degree	Degree/ Diploma in Civil Engineering	Should have held the specific responsibility at least for in last 5 years on QA / QC works	01

Notes:

- a) The contractor shall provide a deployment schedule of the key personnel along with the construction schedule and the same will be approved by KPL Engineer-in-charge.
- b) Rate of recovery in case of non-compliance shall recovered from the contractor's bills are Rs.10,000/- Per month per person. In case contractor failed / to replace the above technical staff Engineer-in charge shall take the action as per the Contract agreement.
- c) The Engineer-in-charge or his nominee will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.
- d) If the Engineer or his nominee asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

The technical staff should be available at site, at all times during the course of execution of work. He will take instructions from the Engineer-in charge as and when required by him.

The decision of the Engineer-in charge as to the period for which the required technical staff was not employed by the contractor and as to the reasonableness

of the amount to be deducted on this account shall be final and binding on the contractor as to the amount and the contractor's liability to pay the said amount act.

10. Employer's and Contractor's Risks

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.

11. Employer's Risks

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 travelling 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 it.

12. Contractor's Risks

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.

13. Insurance

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 stated in the Contract Data for the following events which are due to the Contractor's risks:

- a) loss of or damage to the Works, Plant and Materials;
- b) loss of or damage to Equipment;
- c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- d) personal injury or death.

13.2. Policies and certificates for insurance shall be delivered by the Contractor to the Engineer-in charge or Engineer-in charge's representative for the Engineer-in charge or Engineer-in charge's representative's approval before the 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.

13.3. If the Contractor does not provide any of the policies and certificates required, the Employer may effect 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 is due, the payment of the premiums shall be a debt due.

13.4. Alterations to the terms of insurance shall not be made without the approval of the Engineer-in charge or Engineer-in charge's representative.

13.5. Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

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

15. Queries about the Contract Data

The Engineer-in charge or Engineer-in charge's representative will clarify queries on the Contract Data.

16. Contractor to Construct the Works

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

17. The works to be completed by the intended completion date

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 Engineer-in charge or Engineer-in charge's representative, and complete them by the Intended Completion Date.

18. Approval by the KPL Engineer-in charge

18.1. The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer-in charge or Engineer-in charge's representative, who is to approve them if they comply with the Specifications and Drawings.

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

18.3. The Engineer-in charge or Engineer-in charge's representative's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4. No payment will be made for the temporary works required for the proper completion of the permanent works.

18.5. All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer-in charge or Engineer-in charge's representative before their use.

19. Safety

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

20. Discoveries

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 Engineer-in charge or Engineer-in charge's representative of such discoveries and carry out the Engineer-in charge or Engineer-in charge's representative's instructions for dealing with them.

21. Possession of the Site

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 Compensation Event.

22. Access to the Site

22.1. The Contractor shall allow the Engineer-in charge or Engineer-in charge's representative and any person authorized by the Engineer-in charge or Engineer-in charge's representative 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 / assembled for the works.

23. Instructions

23.1. The Contractor shall carry out all instructions of the Engineer-in charge or Engineer-in charge's representative, which comply with the applicable laws where the Site is located.

24. Disputes

24.1. If the Contractor believes that a decision taken by the Engineer-in charge or Engineer-in charge's representative was either outside the authority given to the Engineer-in charge or Engineer-in charge's representative 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 Engineer-in charge or Engineer-in charge's representative's decision. Employer's decision will be final and binding on the contract.

25. Settlement of Disputes

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 other termination of the Contract, including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate or valuation of the Engineer-in charge or Engineer-in charge's representative, the matter in dispute shall, in the first place be referred to the Disputes Review Board [DRB] in case of contracts valuing more than Rs.5 Crores and above, and for contracts valuing less than Rs. 5 crores, the dispute 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 Employer shall give effect forthwith to every such decision of the Engineer-in charge or Engineer-in charge's representative unless and until the same shall be revised, as hereinafter provided, by the Conciliator or in a Dispute Review Board Recommendation/Arbitral Award.

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.

25.3 Arbitration

Any dispute in respect of contracts where party is dissatisfied by the conciliator's decision shall be decided by arbitration as per 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 arbitrator, failing which by making a reference CIDC – SIAC Arbitration Centre from their panel.
- (ii) Neither party shall be limited in the proceedings before such arbitrators to the evidence nor arguments already put before the Engineer-in charge or Engineer-in charge's representative or the Board, as the case may be, forth purpose of obtaining said recommendations/decision. No such recommendation/decision shall disqualify the Engineer-in charge or Engineer-in charge's representative 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 Engineer-in charge or Engineer-in charge's representative 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 works 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 arbitrators in pursuance of Sub-Clause (i), within 14days 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 Chennai, Tamil Nadu, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be 'English'.
- (vi) The decision of the majority of the 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 forth 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.

26. Replacement of Conciliator.

- 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 authority designated in the contract data at the request of either party within 14 days of receipt of such request.

C. Time Control

27. Programme

- 27.1. Within the time stated in the Contract Data the Contractor shall submit to the Engineer-in charge or Engineer-in charge's representative for approval of a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast.
- 27.2. An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.

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- 27.3. The Contractor shall submit to the Engineer-in charge or Engineer-in charge's representative, for approval, an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer-in charge or Engineer-I n charge's representative 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 Programme has been submitted.
- 27.4. The Engineer-in charge or Engineer-in charge's representative's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer-in charge or Engineer-in charge's representative again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

28. Extension of the Intended Completion Date

- 28.1. The Engineer-in charge or Engineer in charge's representative 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.
- 28.2. The Engineer-in charge or Engineer-in charge's representative shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Engineer-in charge or Engineer-in charge's representative for a 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 dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.
- 28.3. The Engineer-in charge or Engineer in charge's representative shall provide Provisional Extension of Time (EOT) with right to levy of Liquidated damages till the completion of work based on the requests of the contractor with revised construction schedule. On completion of the work, Final Extension of time shall be granted by the competent authority based on the joint statement signed by both the parties (Contractor and Engineer- in-charge or Engineer-in-charge representative) as per the procedure laid in KPL work procedure manual 2014.

- 29.** The Early Warning provisions shall be as per Clause 32.

30. Delays Ordered by the Engineer-in charge

The Engineer-in charge may instruct the Contractor to delay the start or progress of any activity within the Works.

31. Management Meetings

- 31.1. The Engineer-in charge and 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.
- 31.2. The Engineer-in charge 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 Engineer-in charge or Engineer-in charge's representative either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

32. Early Warning

- 32.1. The Contractor is to warn the Engineer-in charge 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 Engineer-in charge or Engineer-in charge's representative may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.
- 32.2. The Contractor shall cooperate with the Engineer-in charge or Engineer-in charge's representative 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 Engineer-in charge.

32.3. Defects Liability Period

The defect Liability period for the contract shall be **12 months** from the date of issue of completion certificate.

D. Quality Control**33. Identifying Defects**

The Engineer-in charge 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 Engineer-in charge or Engineer-in charge's representative may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer-in charge considers may have a Defect.

34. Tests

If the Engineer-in charge 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. If there is no Defect the test shall be a Compensation Event.

35. Correction of Defects

35.1. The Engineer-in charge or Engineer-in charge's representative 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.

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 Engineer-in charge notice.

36. Uncorrected Defects

If the Contractor has not corrected a Defect within the time specified in the Engineer-in charge notice, the Engineer-in charge or Engineer-in charge's representative will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

E. Cost Control

37. Bill of Quantities

37.1. The Bill of Quantities shall contain items for the Design, Drawings, construction, Procurement of materials, installation, testing work to be done by the Contractor.

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. The payment will be made on completion, approval and acceptance of the above Engineering works by KPL at the rates quoted in the Bill of Quantities.

37.3 The description of the item of work given in the schedule of quantities should be read along with the specifications, drawings and the conditions of contract.

37.4 It is to be expressly understood that the measured work is to be taken net according to the drawing or as may be directed from time to time by the KPL Engineer or his representative and that the value of the work done will be calculated by the Measurement of various items at the respective rates without additional charges for any necessary incidental or contingent work connected therewith as detailed in specifications and conditions of contract.

37.5. The quantities given under the Bill of Quantities are those upon which the approximate estimated cost of work are based, but they are subject to alterations, omissions, deduction and additions and not necessarily show the actual quantities of work to be done and can be increased or decreased at the discretion of the Engineer. However, the consequent variation in the total contract value will be limited to 10% under normal circumstances. The rates quoted shall be firm for

such variation. In case the variation results in the total contract value exceeding the prescribed percentage, the revision of rates, if any, shall be applicable only for that portion of contract carried out in excess of the permissible percentage.

37.6 The Quantities provided in the Bill of Quantities (BOQ) is to be operated for executing the work wherever required inside the Port apart from scope of work indicated in Clause 1.1 under Section-1

37.7 KPL has right to omission or addition of any work in the general layout drawing. Any claim in this regard will not be entertained by the KPL during the contract period and in the event of extension of time.

38. Change Orders

38.1. Item Rate Contracts.

The following procedures will be adopted in the finalization of rates for Variation, Extra and Substituted items.

38.2. Variations

- i. Variation means variation in quantities of items, i.e. where there is increase or decrease in the quantities of items of work in the agreement. In other words, the nomenclature remains the same but the quantities vary with those provided in the agreement.
- ii. Variation **beyond $\pm 10\%$** of the Contract Value shall require the approval of Competent Authority.
- iii. The rates payable for the variations up to 25% in respect of individual items in the contract shall be as per the contract rates (*i.e. Estimated rates (+/-) Contractor's Quoted Percentage in BoQ*)
- iv. Variation of Quantities **exceeding 25%** of the Individual BOQ Items to be duly intimated by the contractor to KPL and shall require the approval of Competent Authority before the commencement of execution of these items by KPL,
- v. The rates payable for variations in quantities in excess of 25% in respect of individual items shall be worked out at market rates prevailing at the time of commencement of execution of these items by KPL.
- vi. The quantities indicated in the BOQ are only approximate, which may vary as per the site conditions. Without prejudice to the other provisions existing in the contract, the overall variation in the contract value on account of the variation of individual items shall be limited to plus(+) or minus(-) 25%.

38.3. Extra /Substituted Items

Extra Items:

Extra items are those which are not expressly or impliedly included in the original contract.

- a) Extra Items that are completely new and are in addition to the items contained in the schedule of quantities of the contract.
- b) Items which are not available in the agreement but are required to complete the work.
- c) Provisions of extra items in a contract must be utilized exclusively within the scope of work and in no case be extended to other works under any circumstances.
- d) Where extra items cannot be avoided, the approvals shall be regulated on the following lines:
 - (i) The circumstances under which the necessity for an extra item had arisen shall be clearly indicated and the orders for executing such extra items shall be authorized by the Head of the Execution Department concerned as per DOP.
 - (ii) In case there are any agreed variations in the contract with reference to the computation of extra item rates, such rates shall be calculated in accordance with the terms of agreed variations.
 - (iii) In the absence of any specific provision in this regard, extra items shall be calculated in accordance with the relevant clause of the General Conditions of Contract.
 - (iv) Extra item rates can also be proposed on the basis of similar items appearing in any of the accepted tenders if in the opinion of the Executing Department such rates are reasonable (or) from CPWD SSR/ TN PWD SSR (or) from Central or State PSU's**
 - (v) The rates for the extra items shall also be worked out at market rates prevailing at the time of commencement of execution of these items.
 - (vi) The proposal for extra items shall be prepared and after obtaining the signature of the contractor, shall be sent for concurrence of Finance and the sanction of Competent Authority. If the proposal is in order, the concurrence/sanction shall be at the earliest possible time to avoid disruption in progress of work.
 - (vii) Total cost of extra items sanctioned up-to-date along with anticipated value of work done under the contract under reference shall be given in the proposal before it is sent for sanction.

Substituted Item:

Substituted items are items which are taken up in lieu of those already provided in the contract. For substituted items, the agreement rate of the original item will be adjusted for the difference in market rates (prevailing at the time of commencement of execution of these items) of original and substituted items.

39. Cash flow forecasts

When the Program is updated, the Contractor is to provide the Engineer-in charge or Engineer-in charge's representative with an updated cash flow forecast.

40. Payment Certificates

- 40.1. The Contractor shall submit to the Engineer-in charge or Engineer-in charge's representative monthly statements of the estimated value of the work completed less the cumulative amount certified previously.
- 40.2. The value of work executed shall be determined by the Engineer-in charge or Engineer-in charge's representative.
- 40.3. The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- 40.4. The value of work executed shall include the valuation of Variations and Compensation Events.
- 40.5. The Engineer-in charge or Engineer-in charge's representative 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.

41. Payments

- 41.1. Submission of "Request for Inspection" (RFI) before commencement of any work at site. Subsequently on completion of particular Item of work, preparation of "Joint Measurement Record" (JMR) to be prepared by Contractor and the work done measurements are jointly recorded along with KPL's Engineer which is duly signed and the same shall be submitted for Contractor's Bill for Payment.
- 41.2. Bills shall be prepared and submitted by the Contractor. Joint measurements shall be taken continuously and need not be connected with billing stage. The system of 3 copies of measurements, one each for Contractor, Engineer-in charge, Engineer-in charge's Representative and signed by both Contractor and Engineer-in charge's Representative shall be followed.
- 41.3. Payment to the contractor shall be made on the recorded measurements based on the reduced levels taken at site and the contractor will have to submit bills in the prescribed form once in a month and payment will be made ordinarily once in a month.

- 41.4. On completion of the work or on the prior termination of the contract final measurements will be taken and account adjusted accordingly.
- 41.5. Contractor shall submit final Bill within 60 days of issue of defects liability certificate. Client's Engineer-in charge or Engineer-in charge's representative shall check the bill within 60 days after its receipt and return the Bill to Contractor for corrections if any, 50% of the undisputed amount shall be paid to the contractor at the stage of returning the bill.
- 41.6. The contractor should re-submit the bill, with corrections within 30 days of its return by the Engineer-in charge or Engineer-in charge's representative. The resubmitted bill shall be checked and paid within 60 days of its receipt.
- 41.7. If an amount certified is increased in a later certificate because of award by the Conciliator or an Arbitrator, the Contractor shall not 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.

42. Invocation / Forfeiture of Bank guarantees

The various situations of breach of contractor attract invocation /forfeiture of performance guarantee.

Failure of the successful bidder to comply with the requirements of the tender constitutes sufficient grounds for cancellation of the award.

43. Compensation Event

43.1 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 Data.
- (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
- (c) The Engineer-in charge or Engineer-in charge's representative orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
- (d) The Engineer-in charge or Engineer-in charge's representative instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
- (e) The Engineer-in charge or Engineer-in charge's representative unreasonably does not approve for a subcontract to be let.

(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 from a visual inspection of the site.

(g) The Engineer-in charge or Engineer-in charge's representative 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 effect on the Contractor of any of the Employer's Risks.

(j) The Engineer-in charge or Engineer-in charge's representative unreasonably delays issuing a Certificate of Completion.

(l) Other Compensation Events listed in the Contract Data or mentioned in the contract.

Whenever any compensation event occurs, the Contractor will notify the Employer, within 14 days and provide a forecast cost of the compensation event.

43.2. 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 Engineer-in charge or Engineer-in charge's representative 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.

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

44. Tax

44.1 The rates quoted by the Contractor shall be deemed to be basic unit rate. The GST will be reimbursed by KPL only on reflection of GST Paid by contractor in KPL's GST portal. Tax deducted at source shall be as per statutory requirement such as

IT Act, GST Act, Tamil Nadu workers welfare Cess etc as applicable. The Employer will perform such duties in regard to the deduction of such taxes at source 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. Notwithstanding the payment from KPL, Contractor shall remit the GST value and file returns with Statutory Authorities timely.

45. Currencies

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

46. Price Adjustment - Clause Deleted

47. Price adjustment/ Escalation - Clause Deleted (Any other relevant clause also not applicable)

48. Liquidated Damages / Cancellation

In case of delay in completion of the contract as per milestone indicated in clause 1.2 of Section-1, liquidity damages (L.D) may be levied at the rate of ½% of the contract value per week of delay or part thereof, subject to a maximum of 10 percent of the contract price.

The employer, if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time for completion, may allow further extension of time at its discretion with or without the levy of L.D. In the event of extension granted being with L.D, the employer will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the contractor as agreed damages equivalent to half Per cent (1/2%) of the contract value of the works for each week or part of the week subject to the ceiling defined.

1. The Employer, 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 within 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.
2. The employer, 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.
3. In case part/portions of the work completed and Port operate utilizes the portion of completed work, the rate of L.D will be restricted to the uncompleted value of work, the maximum LD being on the entire contract value of each BOQ's.

49. Incentives or Bonus – Deleted.

50. Advance Payment: No advance payment will be paid.

51. performance Guarantee & Security Deposit

Please Refer Clause 30 of Section-1.

52. Cost of Repairs

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 periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

F. Finishing the Contract

53. Completion

After completion of the work, the contractor will serve a written notice to the Engineer-in charge or Engineer-in charge's representative/Employer to this effect. The Engineer-in charge or Engineer-in charge's representative/Employer upon receipt of this notice shall conduct a complete joint survey of the work along with the contractor within 7 days and prepare a defects list jointly. The defects pointed out by the Engineer-in charge or Engineer-in charge's representative/Employer/ Designer supervision representative would be rectified by the Contractor within 14 days and there after accept report to be signed jointly by the contractor and the Employer. This joint acceptance report shall be treated as 'Completion Certificate'.

54. Taking Over

The Employer shall take over the Site and the Works within seven days of the Engineer-in charge or Engineer-in charge's representative issuing a certificate of Completion.

55. Final Account

The Contractor shall supply to the Engineer-in charge or Engineer-in charge's representative a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer-in charge or Engineer-in charge's representative shall issue a Defect Liability Certificate and certify any final payment (excluding SD) 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 Engineer-in charge or Engineer-in charge's representative 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 undisputed amount to the contractor. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer-in charge or Engineer-in charge's

representative shall decide on the amount payable to the Contractor and issue a payment certificate, within 60 days of receiving the Contractor's revised account.

56 Operating and Maintenance Manuals

56.1 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.

56.2 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 Engineer-in charge or Engineer-in charge's representative's approval, the Engineer-in charge or Engineer-in charge's representative shall withhold the amount stated in the Contract Data from payments due to the Contractor.

57. Termination

57.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

57.2 Fundamental breaches of Contract include, but shall not be limited to the following:

- (i) 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 Engineer-in charge or Engineer-in charge's representative;
- (ii) the Engineer-in charge or Engineer-in charge's representative instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;
- (iii) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (iv) a payment certified by the Engineer-in charge or Engineer-in charge's representative is not paid by the Employer to the Contractor within 50 days of the date of the Engineer-in charge or Engineer-in charge's representative's certificate;
- (v) the Engineer-in charge or Engineer-in charge's representative gives Notice that 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 Engineer-in charge or Engineer-in charge's representative;
- (vi) the Contractor does not maintain a security which is required;
- (vii) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the tender document; and
- (viii) 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.

(ix) If the Contractor has contravened **Clause 33**.

For the purpose of this paragraph: “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. “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 Borrower 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 Borrower of the benefits of free and open competition.”

57.3 When either party to the Contract gives notice of a breach of contract to the Engineer-in charge or Engineer-in charge’s representative for a cause other than those listed under Sub Clause 57.2 above, the Engineer-in charge or Engineer-in charge’s representative shall decide whether the breach is fundamental or not.

57.4 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.

57.5 **The Performance Security will be forfeited and credited to the Port’s account in the event of a breach of contract by the contractor.**

58. Payment upon Termination

58.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer-in charge or Engineer-in charge’s representative 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 Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.

58.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer-in charge or Engineer-in charge’s representative shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and 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

59. Property

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.

60. Release from Performance

If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Engineer-in charge or Engineer-in charge's representative shall certify that the Contract has been frustrated. The Contractor shall make the Site safe 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.

61. Additional Clause**61.1 Site Order and Instruction**

A work order book shall be maintained on the site, and it shall be the property of Employer and the Contractor or his authorized representative shall promptly sign orders given therein by the Engineer-in charge or Engineer-in charge's representative and comply with them. The compliance shall be reported by Contractor to the Engineer-in charge in sufficient time so that it can be checked. The blank work order book with machine numbered pages in duplicate with a perforated sheet for three copies will be provided by the contractor for this purpose. Whenever any instructions are written in the work order book, the Contractor shall be supplied the first carbon copy, one copy shall be supplied to the Employer, or his site representative and remaining copies shall be retained by the Engineer-in charge.

61.2 Notice to Engineer-In-Charge

The contractor shall give to the Engineer-in charge normally 48 hours notice except in exceptional cases of urgency, of his intention to set out or give levels or check for any part of the works so that timely arrangement may be made for checking or issuing instructions. He shall indicate therein by which date the information, if any, is required by him.

62. Force Majeure

62.1 The Contractor shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the

result of an event of Force Majeure.

- 62.2 For purposes of this Clause, “Force Majeure” means an event of situation beyond the control of the Contractor that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of Contractor. Such events may include, but not be limited to, acts of the Employer in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 62.3 If a Force Majeure situation arises, the Contractor shall promptly notify the Employer in writing of such condition and the cause thereof. Unless otherwise directed by the Employer in writing, the Contractor shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

63. Custody of Drawings:

The Drawings shall remain in sole custody of the Engineer-in charge or Engineer-in charge’s representative but two copies of these shall be furnished to the Contractor free of cost. The contractor shall provide and make at his own expense any further copies required by him. At the completion of the contract the contractor, shall return to the Engineer-in charge or Engineer-in charge’s representative all drawings provided under the contract, if so desired by the Engineer-in charge or Engineer-in charge’s representative .

The contractor shall give adequate notice in writing to the Engineer-in charge or Engineer-in charge’s representative of any further drawing or specification that may be required for the execution of the works or otherwise under the contract.

In case alternative design submitted by the contractor is accepted by the Employer’s Engineer and works executed as per alternative design, the original tracing and copies of drawings which may be with the Contractor shall be handed over to the Engineer-in charge or Engineer-in charge’s representative on completion of the work and such tracings and drawings shall become the property of the Employer’s Engineer. One copy of the Drawings furnished to the contractor or prepared by the Contractor and approved by the Employer’s Engineer in case of contractor’s alternative designs as aforesaid shall be kept by the Contractor at the site and the same shall at all the reasonable times be available for inspection and use by the Engineer-in charge or Engineer-in charge’s representative and by any person authorized by the Employer’s Engineer in writing.

The Engineer-in charge or Engineer-in charge's representative shall have full power and authority to supply to the contractor, from time to time during the progress of the works such further Drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the works. Such supplementary drawings, issued / approved during the currency of contract will also form part of the contract and the Contractor shall carryout and be bound by the same.

64. Housing for Labour

Save in so far as the Contract otherwise provides, the Contractor shall provide and maintain such accommodation and amenities as he may consider necessary for all his staff and labour, employed for the purposes of or in connection with the Contract, including all fencing, water supply(both for drinking and other purposes), electricity supply, sanitation, cookhouses, fire prevention and fire-fighting equipment, furniture other requirements in connection with such accommodation or amenities **at their cost outside the Port premises. No labour camps shall be allowed inside the Port premises.**

65. Dismantled Materials:

The contractor shall treat all materials obtained during dismantling of a structure excavation of the site for work etc. as Board property and such materials shall be disposed of to the best advantage of Board according to the instructions writing issued by the Engineer-in charge or Engineer-in charge's representative

66. Contractor to keep the site clean:

During the execution of the works the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no long required.

67. Extraordinary Traffic:

The contractor shall use every reasonable means to prevent any of the access roads communicating with or on routes to the site from being damaged or injured by any traffic of the contractor or any of his subcontractors and in particular shall select routes, choose and use vehicle Crushed Stone Aggregate also restrict and distribute loads so that any such extraordinary traffic will inevitable access from the moving of plant and materials from and to the site shall be limited as far as reasonably and so that no unnecessary damage or injury may be occasioned to such approach.

The contractor's attention is drawn to the fact that the other contractors employed by the Employer will be working in the vicinity of the construction of structures. Hence, the contractors shall allow other agencies for work if any and shall allow such agencies the use of scaffolding the similar conveniences which any building contractor might have put up and shall further give such agencies facilities to carry out their rates. Works like punching the walls, floors and making them good, required during the electrification shall be done by the building contractors for which they may not be made any special payment by the Port. The contractor's working arrangement should be in such a manner as to cause no hindrance to the other contractors working nearby or to the functions of the Harbour and to enable other contractors / department / other agencies to work contemporaneously on separate contracts.

68. Interference with Traffic and adjoining properties:

All operations necessary for the execution and completion of the Works and the remedying of any defects therein shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with:

- a) the convenience of the public, or
- b) the access to, use and occupation of public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person.

The Contractor shall save harmless and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to any such matters in so far as the Contractor is responsible there for.

69. Supply of plant, materials and labour:

69.1 Except where otherwise specified in the contract, the contractor shall at his own expenses supply and provide all the constructional plant, temporary works, materials both for temporary and permanent works under the contract, labour (including the supervision thereof) transport to or from site and in and about the works and other things of every kind required for the construction, completion and maintenance of the works.

69.2 The contractor shall not hire out any item of plant or equipment brought by him, in connection with the execution of the work under the contract to any other party in connection with any work of the latter in the Port without the written permission of the Engineer-in charge or Engineer-in charge's representative and such permission may or may not be granted by the Engineer-in charge or Engineer-in charge's representative.

69.3 The contractor shall at his own costs make due arrangements for the proper watch and safety of all materials and plant supplied to him by the Board / or brought by him for use on this work. He shall not remove such constructional plant or materials from the site without the permission of the Engineer-in charge or Engineer-in charge's representative.

69.4 If any of the materials supplied or constructional plant hired out by the department are lost or damaged in any way due to negligence or carelessness on the part of the contractor or his employees, the cost thereof determined by the Engineer-in charge or Engineer-in charge's representative shall be recovered from the contractor from any moneys due to him or to become due to him.

70. Clearance of site on completion:

Upon completion of works, the contractor shall clear away and remove from the site all the constructional plant, temporary works remaining thereon, any unused materials provided by the contractor, and surplus materials and rubbish of every kind and leave the site and works clean and in a workman-like condition to the satisfaction of the Engineer-in charge or Engineer-in charge's representative .If the contractor fails to remove any such constructional plant, temporary works or unused materials within such reasonable time after completion of works as may be allowed by the Employer's Engineer, then the Employer may sell the same and shall after deduction from the proceeds, cost, charges and expenses of and in connection with such sale, pay the balance if any, to the contractor. The Employer shall not at any time be liable for the loss or injury to any of the said constructional plant, temporary works or materials.

71. Use of explosives: NOT APPLICABLE

72. Levels:

The contractor shall provide all assistance, instruments, labour and materials as are normally required for taking levels for the work. The contractor shall provide at his own expense experienced attendants for the Engineer-in charge or Engineer-in charge's representative his representative to assist him in taking levels and checking of alignments.

73. Inflammable stores:

The contractor shall comply with all Central and Local regulations in respect of storage of all inflammable stores or other materials safe involving risk to third parties and shall take all special precautions required in the transport and use of such materials. The contractors shall submit to the Engineer-in charge or Engineer-in charge's representative for approval, all drawings and documents required for the construction of storage sheds to the proper requirements.

74. Accidents - Reporting of:

The contractor shall within 24 hours of the occurrence of any accident at or about the site or in connection with the execution of the work, report such accident to the Employer's Engineer. The contractor shall also report such accidents to the competent authorities to whom such report is required by laws.

75. Materials brought to site:

Materials required for the works, whether brought by the Contractor or supplied by the Employer shall be stored by the contractor only at a place approved by the Engineer-in charge or Engineer-in charge's representative. The storage and safe custody of materials shall be the responsibility of the contractor. All materials brought to the site shall become and remains the property of the Employer and shall not be removed off the site without the prior written approval of the Engineer-in charge or Engineer-in charge's representative. But whenever the works are finally completed and advance, if any, in respect of any such materials is fully recovered, the contractor shall at his own expense forthwith remove from the site all surplus materials originally supplied by him and upon such removal, the same shall revert to and become the property of the contractor.

76. Access to site:

The Engineer-in charge or Engineer-in charge's representative and any person authorised by him shall at all times have access to the works and to the site and to all workshops and places where work is being prepared or when materials, manufactured articles, or machinery are being obtained for the works and the Contractor shall afford every facility for every assistance in or in obtaining the right to such access.

77. Inspection register :

An inspection register is required to be maintained at the site of work, duly issued by the Engineer-in charge or Engineer-in charge's representative and docketed by from the Engineer-in charge or Engineer-in charge's representative office. Which must be produced whenever called upon to do so by the Engineer-in charge or Engineer-in charge's representative or his representative during their inspection of the work. It will be the responsibility of the officer's assistant to ensure that the observations of the inspection officers for each and every visit are available in the inspection register either through recorded notes or through pasting the inspection notes. The Engineer-in charge or Engineer-in charge's representative's assistant shall carry over such observation and defects, on which action is to be taken by the contractor, to the site order book with cross-reference in the inspection register. The observations recorded in the inspection register by Employer's Engineer or Engineer-in charge or Engineer-in charge's representative is reviewed during subsequent inspections to ensure their compliance.

78. Work during Night or on Sundays and authorized Holidays:

Subject to any provisions to the contrary contained in the contract, none of the permanent works shall be carried out during night or authorized holidays without prior permission in writing of the Engineer-in charge or Engineer-in charge's representative.

79. Action where no specification of work is available:

In the case of any class of work for which there is no specification, such work shall be carried out in accordance with the relevant Indian Standards and in the absence of Indian Standards, any equivalent international standards and in the event of there being no standard specifications then in such case, the work shall be carried out in all respects in accordance with the instructions and requirements of the Employer's Engineer.

80. Safety Code

The Contractor shall scrupulously adhere to and observe the following safety codes:

- i. Hoisting machines and tackles used in the Works including their attachments, anchorage and supports shall be in perfect condition as per stipulations of the relevant Rules. The ropes used in hoisting or lowering materials or as means or suspension shall be of durable quality and adequate strength and free from defects.
- ii. Workers employed shall be provided with protective footwear and rubber hand gloves and other gears. Those engaged in welding work shall be provided with welder's protective eye shield and gloves.
- iii. No paint containing lead or lead products shall be used except in the form of paste or ready-made paint. Suitable facemasks should be supplied for use by the Workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped. Necessary and adequate facilities shall be provided by the Contractor to enable the Working painters to wash during the period of cessation of Work.

All Safety Rules shall be strictly followed while Working on live electrical systems or installations as stipulated in the relevant Rules.

81. Life Saving Appliances and First Aid

The Contractor shall provide and maintain upon the Works, sufficient, proper and efficient life saving appliances and first aid equipment to the approval of the Engineer-in charge or Engineer-in charge's representative. The appliances and equipment shall be available for use at all times.

82. Details to be Confidential, Drawings and Photographs

82.1 The Contractor shall treat the details of the Contract as private and confidential, save in so far as may be necessary for the purpose there of, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Engineer-in charge or Engineer-in charge's representative.

82.2 No photograph of the Works or any part thereof or plant employed there on shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his Sub-Contractors unless otherwise specifically mentioned in the Contract without the approval of the Engineer-in charge or Engineer-in charge's representative .

SECTION-2

PART-II- 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 labor, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Engineer-in charge or Engineer-in charge's representative, deliver to the Engineer-in charge or Engineer-in charge's representative a return in detail, in such form and at such intervals as the Engineer-in charge or Engineer-in charge's representative may prescribe, showing the staff and the numbers of the several classes of labor from time to time employed by the Contractor on the Site and such other information as the Engineer-in charge or Engineer-in charge's representative may require.

2. COMPLIANCE WITH LABOUR REGULATIONS

- 2.1. During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labor enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labor law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labor law in future either by the State or the Central Government or the local authority. Salient features of some of the major labor 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 the 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 Engineer-in charge or Engineer-in charge's representative /Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/ Engineer-in charge or Engineer-in charge' representative 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.

- 2.2. 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.

CESS FOR TNCWWB

As per the provisions of the Tamil Nadu Manual Workers (Regulation of Employment and Conditions of Work) Act, 1982 and Tamil Nadu Manual Workers (Construction Workers) Welfare Schemes, 1994 and G.O.(MS) No . 295, Dt.17.12.2013 of Labour and Employment (12)Department, payment of cess to TNCWWB at 1% of the building or other construction works undertaken by Kamarajar Port Limited.

A recovery of 1% of the billed amount shall be effected progressively from each running bill as well as the final bill of the contractor for the works which are covered under the above mentioned Cess act. Hence the bidder shall include the component of Cess while quoting the irrates for individual items of Bill of quantities.

3. SALIENT FEATURES OF SOME MAJOR LABOUR 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 or on death the rate of 15 days wages for every completed year of service. The 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 contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are:
 - (i) Pension or family pension on 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 women 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 labor 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 labor.

- 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, and Runways are scheduled employments.
- 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.
- j) **Industrial Disputes Act 1947:** The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) **Industrial Employment (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 Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets the same certified by the designated Authority.
- l) **Trade Unions Act 1926:** The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given 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 Labour 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 an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home up to 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 occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.
- q) **Employees State Insurance ESI Act, 1948:** The ESI Act, 1948, is applicable to Factories using power and employing 10 or more personnel and establishment employing 20 or more persons and drawing wages/Salary up to Rs.21,000/- per month (Rs.25,000/- per month in case of persons with disability) effective from 01.01.2017 and the employee's contribution rate (w.e.f 01.07.2019) is 0.75% of the wages and that of employer's is 3.25% of the wages paid/payable in respect of the employees in every wage period. Accordingly, the contractual/casual employees drawing wages up to Rs.21,000/- per month (Rs.25,000/- in case of PWD) employed either directly by Port or through contractor are covered under ESI Act, 1948.

Note: Any Amendments / Circular / Orders issued by the Central / State governments to the above Acts / Regulations will form part of the document and should be abided by the contractor.

SECTION - 3

GENERAL DESCRIPTION OF WORKS AND OTHER CONDITIONS.

SECTION – 3

GENERAL DESCRIPTION OF WORKS AND OTHER CONDITIONS

Scope of Work

It is proposed to carry out the following Civil works for the **“Widening and resurfacing of bituminous road inside the Kamarajar Port Premises”** detailed in the table given in NIT. The bidders may submit bids for the works detailed in the table given in NIT.

The details of the works covered under this bid are as detailed below:

Kamarajar Port has proposed to widen the bituminous road about the length of 1800m from the existing width of 3.75m to 5.00m, by using Granular Sub Base (GSB), Wet Mix Macadam (WMM), Dense Bituminous Macadam (DBM) and Bituminous concrete (BC) materials as shown in cross-sectional drawing placed in section -7 . Further, it is proposed to resurface the existing entire bituminous with bituminous concrete by providing kerb stone on other side.

- (i) Earth works in excavation and Preparation & consolidation of Sub Grade with power road roller as per section -301 of MoRT & H specifications.
- (ii) Providing sub-base with Granular Sub Base materials to a thickness of 200 mm as per section -401 of MORTH’s specifications.
- (iii) Providing WMM over sub- base to a thickness of 250 mm as per existing road specifications as per section -406 of MORTH’s specifications.
- (iv) Providing and applying prime coat using bitumen emulsion conforming to IS: 8887 over WMM surface as per section -502 of MORTH’s specifications.
- (v) Providing and laying Dense Graded Bituminous Macadam of 50mm thick as per section -505 of MORTH’s specifications.
- (vi) Providing and applying tack coat using bitumen emulsion conforming to IS: 8887 over bituminous surface as per section -503 of MORTH’s specifications.
- (vii) Providing and laying Bituminous concrete of 25mm as per section -507 of MORTH’s specifications.
- (viii) Providing and fixing precast cement concrete in kerb in grade 1:1.5:3 cement concrete (M-20) in position as per sub-head – 16.58 of Central Public Work Department (CPWD) specifications – 2019
- (ix) Painting the Kerb wall with Epoxy paint as per sub-head- 13.24A of Central Public Work Department (CPWD) specifications – 2019
- (x) Providing and laying of hot applied thermoplastic paint on road surface both side & stopper lines, 2.5mm thick as per sub-head- 16.51 of Central Public Work Department (CPWD) specifications – 2019

- (xi) Supply and fixing of retroreflective road marker or road studs as per sub-head- 16.64 of Central Public Work Department (CPWD) specifications – 2019
- (xii) Manufacturing supplying and fixing Retro Reflective Sign Boards as per sub-head- 16 of Central Public Work Department (CPWD) specifications – 2019
- (xiii) Providing and laying cement concrete in mix of 1:4:8 and 1:1.5:3 for providing the side drain to connect the existing drain.

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

Along with the offer, the bidder should submit a bar chart indicating their programme of work. The contractor shall whenever require by the Engineer, also provide in writing for his information a detailed description of the arrangements and methods which the contractor proposes to adopt for the execution of the works.

1. The contractor is deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for works and of the rates and prices quoted in the priced Bill of Quantities and the schedule of rates and prices (if any) which rates and prices shall except insofar as they are otherwise provided in the contract, cover all his obligations under the contract apart from all matters and things necessary for the proper completion and maintenance of the work. The rate quoted shall be inclusive of all taxes, (excluding GST) levies, duties, cost of insurance etc. apart from the cost of materials to be procured by the contractor and also labour, tools, plants, fuel, consumables, etc.
2. If any temporary item of work is needed for the execution of the contract, the required details shall be submitted by the bidder with the proposals and connected drawings along with the tender. No payment shall be made for any temporary items of work. The Engineer-in charge or Engineer-in charge's representative shall be at liberty to make any modifications to the temporary works in accordance with the conditions of the contract and the contractor shall carry out such modifications. In the event of the contractor considering that such modifications required by the Engineer-in charge or Engineer-in charge's representative will affect the security of the temporary works, or increase the contractor's liability under the contract, he shall give notice in writing to the Engineer-in charge within seven days of receipt of such communication. The Engineer-in charge will thereupon consider the matter and

communicate his decision, which shall be final and binding on the contractor. Notwithstanding the approval by the Engineer-in charge or Engineer-in charge's representative of any submitted design for any of the temporary works the contractor shall remain entirely responsible for such works in all respects.

3. The description of the item of work given in the schedule of quantities should be read along with the specifications, drawings and the conditions of contract.
4. It is to be expressly understood that the measured work is to be taken net according to the drawing or as may be directed from time to time by the Engineer-in charge or Engineer-in charge's representative and that the value of the work done will be calculated by the measurement of various items at the respective rates without additional charges for any necessary incidental or contingent work connected therewith as detailed in specifications and conditions of contract.
5. The area where the construction works have to be executed is inside the port area, due care shall be taken to avoid hindrance to other movement. During the construction period necessary safety measures have to be taken for the men working at site. The bidder shall inspect and examine the site and its surroundings and shall satisfy himself before submitting his tender nature of the site, the stacking and movement of the traffic, the quantities and nature of work and materials necessary for the completion of the works and the means of access to the site, the accommodation he may require and in general, shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his tender. No extra charges consequent to wrong assumptions / assessment by the bidder or otherwise shall be allowed. The bidder shall take into account all these aspects before quoting their rates and shall not hold the Employer responsible for any details that might have been omitted to be mentioned in the tender schedule which may affect the pricing of the tender and any claim by the bidder on this account will not be entertained by the KPL. In case any additional investigations are required to be done at site by the bidder, he may do so at his own cost with the prior approval of the Engineer. The site will be handed over in one stage. In case if there is delay in handing over the site, due to the port activities, the Engineer-in charge at his discretion may grant extension of time, as he considers reasonable for the proper completion of work. The bidder has to take into account all the delays due to the port activities. The grant of such extension of time however will not bestow on the contractor any right to claim compensation / extra payment for idling of plant,

labour and overhead loss etc., even at a future date for any reasons whatsoever. No claim towards idle time charges will be entertained by the Port for any reasons whatsoever.

6. Drains, pipes, cables, overhead wires and similar services encountered in the course of the work shall be guarded from injury by the contractor at his own cost, so that they may continue in full and uninterrupted use to the satisfaction of the Engineer-in charge or Engineer-in charge's representative thereof and the contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.
7. If any damage be done by the contractor to any mains, pipes, cables or lines (whether above or below structure) whether or not shown in the drawing, the contractor must make good or bear the cost of making good the same without delay, to the satisfaction of the Engineer-in charge or Engineer-in charge's representative.
8. KPL shall not be held liable for any damages or compensation payable under the law in respect or in consequence of any accident or injury to any workmen or other persons in the employment of the contractor or any sub-contractor and the contractor shall indemnify and keep indemnified the Employer against all such damages and compensation and against all claims, demands, proceedings, costs, charges, expenses whatsoever in respect thereof or in relation thereto.
9. The contractor shall indemnify and keep indemnified the Employer against all losses and claims for injuries or damage to any person or any property whatsoever (other than surface or other damage to land being or crop being on the site suffered by tenants or occupiers) which may arise out or in consequence of the construction and maintenance of the works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto. Provided always that nothing herein contained shall be deemed to render the contractor liable for or in respect of or to indemnify the Employer against any compensation or damages for or with respect to:
 - i. The permanent use or occupation of the land by the works or any part thereof or surface or other damages as aforesaid.
 - ii. The right of the Employer to construct the works or any part thereof on over under or in through any land.
 - iii. Interference whether temporary or permanent with any right of light, airway or water or other easement or quasi easement which is the unavoidable result of the construction of the works in accordance with the contract.

iv. Injuries or damage to persons / property resulting from any act or neglect done or committed during the currency of the contract by the Employer, its agents, servants or other contractors (not being employed by the contractor) or for in respect of any claims, demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto provided further that for the purposes of this clause, the expression "the site" shall be deemed to be limited to the area defined in the specification or shown in the drawings in which land crops will be distributed or damaged as an inevitable consequence to carry out the works.

The contractor shall within 24 hours of the occurrence of any accident at or about the site or in connection with the execution of the work, report such accident to the Engineer's representative. The contractor shall also report such accidents within the prescribed time to the competent authorities to whom such report is required to be made by law.

10. Contractor's Working Area

10.1 The Employer shall provide the area that can be conveniently spared, adjacent to the site of work, at its discretion, subject to availability, for Yard works and other appurtenant works to the contractor at free of cost.

10.2 The Employer will provide the land required for site offices, installation of testing laboratories etc., except labor camps at free of cost adjacent to the proposed Project site, during the tenure of the contract or such extended period, if any, subject to availability.

11. Compliance with rules and regulations:

11.1 The contractor shall at all times during the currency of the contract conform to and comply with the regulations and by-laws of the State or Central Government or of the KPL and of all other local authorities, the provisions, contained in the various labour acts enacted by the State Legislature and Central Parliament in force and the rules made there under including those under Minimum Wages Act, Factories Acts, the Indian Electricity Act and Rules framed under it, Workmen's Compensation Act, Provident Fund Regulation Act, Employees Provident Act, 1961 and Schemes made under the said act, Health and Sanitary arrangements for worker and safety code and the Contract (Regulation and Abolition) Central Rules 1971 etc. for welfare and protection of workers or for the safety of the public and other insurance provisions. KPL shall not be liable for the failure of the contractor in conforming to the provisions of

the Acts, Rules and Regulations referred to in the above para and in case of any contravention of the provision of the Acts, Rules and Regulations etc. The contractor shall keep Employer indemnified against any loss, cost and damages in the event of any action being taken for contravention.

12. **Port Rules**

12.1 The Contractor shall observe the conservancy rules relating to the Harbour and shall always take such necessary additional steps to keep the Harbour waters free of noxious or unhygienic matters coming from his works as are required by the Employer. Under no circumstances shall inflammable material be allowed to spill into the Harbour area.

12.2 The Contractor shall always observe and comply with the working rules and regulations of the Port in force or as issued from time to time.

13 **Entry of Labour in Port premises**

13.1 Only vehicles licensed by the Port will be allowed inside the Port premises. Two-wheelers are not allowed to enter the port premises.

13.2 Online RFID gate pass system is available for admission into the Port premises and is regulated by issue of RFID tags, passes for the contractor, his staff, labour, and materials on payment basis. These passes shall be accompanied by RFID identity cards valid for daily, weekly, monthly and yearly basis on the period of the contract. The identity card contains personal details of the labourer (including photograph), Aadhaar number, name of the work, name of the contractor, duration, etc. In case the contract is extended, necessary endorsement should be made by the concerned Engineer or his representative on the identity card regarding the extension of the contract period. The contractor is solely responsible for all the details incorporated in the passes and the identity cards and the KPL is indemnified against their misuse. **The entry passes shall be produced at the time of entry and any other time when demanded by the CISF personnel or department officials.**

The standard operating procedure is available in the RFID link in port website www.kamarajarport.in/content/innerpage/rfid.php

13.3 **Customs and security arrangements**

The contractor shall comply with all the regulations imposed by the customs and Port Security Authorities in respect of the passage of plant, vehicles, materials and personal through customs barriers.

13.4 **Fair Wages**

The contractor shall pay the labour engaged by him on the work not less than fair wages which expression shall mean whether for the time or piece work, the labour rates of wages as fixed by the Central Public Works Department as fair wages of the State payable to the different categories of labourers or those as notified under the Minimum Wages Act for the district for corresponding employees of the Employer whichever may be higher.

"The Engineer of the works or his authorized representative will make necessary arrangements for witnessing the payment by the contractor to his labourers. The contractor should arrange for that and get the certificate from the department as required in terms of the CPWD contract labour regulations".

13.5 **Festival and Religious Customs**

The contractor shall allow his labourers to avail the Government notified national and local festival holidays and also such closed holidays for the Port declared by the Employer and also have due regard to local religious and social customs in respect of labour employed by him.

13.6 **Wage Records**

The contractor shall, maintain records of wages and other remuneration paid to his employees in such forms as may be convenient and to the requirement of the Engineer and Conciliation Officer, Central Ministry of Labour, Government of India or such other authorized persons appointed by the State Government. The Contractor shall also exhibit the different notices as required under the Minimum Wages Act, 1949, Payment of Wages Act, 1936 and other Act / Rules and Regulation made there under from time to time.

13.7 **Returns of Labour**

The contractor shall, if required by the Engineer, deliver to the Engineer's Representative or at his office, a return in detail in such form and at such intervals as the Engineer may prescribe showing the supervisory staff and the numbers of the various classes of labour from time to time employed by the contractor on the site and such information in respect of constructional plant as the Engineer's representative may require.

13.8 **Removal of workmen**

The contractor shall employ in and about the execution of the work only such persons those are careful, skilled and experienced in their several trades and calling to the approval of the Engineer. The Engineer shall be at liberty to object to and to require the contractor to remove from the above works any person employed by the contractor in or about the execution of the works who in the

opinion of the Engineer misconducts himself or is incompetent or is negligent in the proper performance of his duties and such persons shall not be again employed in the works without permission of the Engineer.

13.9 **Contractor's temporary structures**

The contractor may at his own expenses and subject to the approval of the Engineer, construct temporary offices, stores, workshops in the area allotted to him and remove the same as per the order of the Engineer on completion of the contract. No hire charges are payable for the area allotted during the contract period or such extended time as granted by the Engineer. However, the hire charges for the land area utilized by the contractor after completion of the contract period or such extended time shall be recovered from the contractor at the rate fixed by the Port from time to time.

13.10 **Employment of the Government Retired persons**

No Engineer of gazetted rank or other class I & II officers employed in Engineering or administrative duties in an Engineering department of the Government of India / Port is allowed to work as a contractor for a period of 2 years of his retirement from Government / Port service without the previous permission of Government of India or by the Port as the case may be. The contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government of India / Port as the case may be as aforesaid before submission of the tender or engagement in the contractor's service as the case may be.

14 **Defects liability:**

14.1. **Defects Liability Period**

The contractor shall be responsible to make good and remedy at his own expense within the period as may be stipulated by the Engineer, any defects which may develop or may be noticed before the expiry of the period i.e. **twelve (12) months** from the certified date of completion and intimation of which has been sent to the contractor within seven days of the expiry of the said period by a letter sent by hand delivery or by registered post.

14.2. **Default of the contractor in compliance:**

In case of default on the part of the contractor in carrying out such order, the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidentals thereto shall be borne by the contractor and shall be recoverable from him by the Employer or may be deducted by the Employer from any moneys due or which may become due to the

contractor. The Port also reserves the right, to encash the Bank Guarantee deposited in the Port favour towards Performance Security Deposit for recovering the dues, claims, charges etc., payable to the Port by the Contractor.

15. **Cost of Remedying Defects:**

During the course of the execution of the contract, if any damage is caused to the Employer's properties by the contractor, the same shall be rectified by the Contractor at his own cost to the satisfaction of the Engineer-in charge within a reasonable time as specified by the Engineer.

15.1 **Contractor's failure to carry out the rectification of damages caused to the Employer's property**

In case of default on the part of the Contractor in carrying out such rectification of damages to the Employer's properties within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and if such Work is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Contractor, be determined by the Engineer-in charge and shall be recoverable from the Contractor by the Engineer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer-in charge shall notify the Contractor accordingly. The Port also reserves the right, to encash the Bank Guarantee deposited in the Port favour towards Performance Security Deposit for recovering the dues, claims, charges etc., payable to the Port by the Contractor.

16. **Special risks:**

The contractor shall be under no liability whatsoever whether by way of indemnity or otherwise for or in respect of destruction of or damage to the works (Save any work condemned under the provisions of **Section-5, Part-III, clause23.1,"Removal of improper works and material"** and default of contractor in compliance with that hereof prior to the occurrence of any special Risks hereinafter mentioned) or temporary works or to property whether of the Employer or third parties or for in respect of injury or loss of life which is the consequence whether direct or indirect of war, hostilities (whether war be declared or not) invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war or (otherwise than among the contractor's own employees) riot, commotion or disorder (hereinafter

comprehensively referred to as "the said special risks").

17. **Projectile, missile, etc.:**

Destruction, damage, injury or loss of life caused by the explosion or impact whenever and wherever occurring of any mine, bomb-shell, grenades or other projectile, Missile, ammunition or explosive of war shall be deemed to be a consequence of the said Special Risks.

18. **Increased costs arising from special Risks:**

The Employer shall reimburse to the contractor any increased cost of or incidental to the execution of the works (other than such as may be attributable to the cost of reconstructing work, condemned under the provisions of contract. Default of contractor in compliance to that thereof prior to the occurrence of any special risks) which is howsoever attributable to or consequent on or the result of or in any way whatsoever connected with Special Risks (subject however to the provisions of this clause hereinafter contained in regard to outbreak of war) but the contractor shall as soon as such increase of cost shall come to his knowledge, forthwith notify the Engineer-in charge thereof in writing.

19. **Outbreak of war:**

If during the currency of the contract, there is an outbreak of war (whether war is declared or not) in any part of the world which whether financially or otherwise materially affects the execution of the works, the contractor shall unless and until the contract is terminated under the provisions contained in this clause, use his best endeavors to complete the execution of the works provided always that the Employer shall be entitled at any time after such outbreak of war to terminate this contract by giving notice in writing to the contractor and upon such notice being given, this contract shall (save as to the rights of the parties under this clause and to the operation of Clause, "**Settlement of disputes by arbitration**" hereof) terminate but without prejudice to the rights of either party in respect of any antecedent breach thereof.

20. **Date of commencement and completion of work:**

The work shall be taken to have been commenced from the date on which the contractor takes over the site or the twenty first (21)st days of receipt of the letter of acceptance by the contractor, whichever is earlier and the contractor shall complete entire scope of the works within **06 (Six) months** from this date. However, each milestone for completion is as per clause 1.2 of Section-1.

21. **Taking-over certificate:**

When the whole of the Works of each BOQ have been fully completed and have

satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer-in charge also after full filling the requirements as specified in **Clause 3, Part-I, Section -5**. Such notice shall be deemed to be a request by the contractor for the Engineer-in charge to issue a Taking-Over Certificate in respect of works. The Engineer-in charge shall within Thirty (30) days from the date of delivery of such notice either issue to the Contractor a Taking over Certificate or give instruction in writing to the Contractor specifying all the works, which in the Engineer's opinion is required to be done by the contractor before the issue of such certificate.

22. Supply of materials:

No materials will be supplied free by the KPL unless otherwise stated elsewhere and it is the responsibility of the contractor to procure and supply all the materials required for the work at their cost.

23. Service available at cost:

23.1. Supply of water for the works:

The contractor shall make his own arrangements for water at his own cost from outside. KPL will not provide water supply for the work.

23.2. Electricity Supply for Works: - No Electrical supply required for work, if required, shall be at cost as per extant rules of KPL

23.3. Supply of drinking water

The contractor has to make his own arrangements and no drinking water will be supplied by the Employer.

23.4. Construction Water and fuel for plants and machinery

The contractor shall make his own arrangements for the supply of water, fuel, etc., at his own cost for the plants and machinery etc.

23.5. Financial background

The work covered under this contract is a time bound work and the work will have to be completed within the stipulated period. The contractor shall be financially sound so as to ensure sufficient cash flow for the monthly work.

25. Working Condition

25.1 Access to the Site

The access of men and materials to the site has to be through any of the designated Gates of the Port. The contractor has to comply with all necessary formalities as per Port rules for movement of men material and equipment on to

the site.

25.2 **Port Requirement**

The normal port operations will be continued throughout the progress of the works and the contractor shall carryout their works without any hindrance to others.

25.3 **Clearance of site on completion**

After completion of the contract the contractor shall remove at his own cost all balance materials of construction, shutter, scaffolding, Electrical and any other equipment, plant or materials introduced by the contractor.

25.4 **Environmental Considerations**

The contractor shall refrain from using plant, which makes excessive noise, particularly during the hours of darkness, which shall be limited to 45db(A) at a distance of 100 m from the working area and other plants.

The information furnished hereinafter and provided elsewhere is given in good faith, but the Bidder shall satisfy himself regarding the weather, tides, etc., and no claim will be entertained due to any error in the information supplied.

Section 4
CONTRACT DATA

CONTRACT DATA

The Employer is	Kamarajar Port Limited (KPL)	1.2 of sec – 2 Part – I
The Engineer-in charge is	Officer nominated or appointed by Kamarajar port Ltd for the works.	1.13 of sec –2 Part – I
The Engineer-in charge 's representative is	Officer nominated or appointed by Kamarajar port Ltd in writing who shall direct and supervise and to perform the duties set forth in sub clause 5 hereof and be in charge of the works. .	1.14 of sec – 2 Part – I
The Conciliator appointed jointly by the Employer and Contractor is:	* Name: * Address: * (to be filled in after the Conciliator has been appointed)	1.5 of Sec 2, Part -1 –
The Name and Identification/location no. of this contract	“Widening and resurfacing of bituminous road inside the Kamarajar Port Premises on Percentage Rate Basis”	
Signing of Agreement	Within 14 days of receipt of Letter of Acceptance, the successful bidder should furnish the performance security and sign the agreement with the Employer.	29.4 of Sec.-1
Remitting of Performance Security	Within 14 days from date of letter of acceptance.	30.0 of Sec.-1
Notice to proceed the works	Upon furnishing the Performance Security and entered the contract Agreement with employer by the successful Bidder, the Employer will promptly issue Notice to proceed the work.	29.6 of sec 1

Start Date	The work shall be taken to have been commenced from the date on which the Notice to proceed with the works to be issued by KPL.	20.0 of Sec.-3
Programme for the work .	The contractor shall submit a Program for the works within 14 days of delivery of the letter of Acceptance.	Clause 1 and 27.1 of sec -3
Programme Update	The period between Programme updates shall be 30 days	27.2 and 27.3 of Sec-3 Part – I
The Intended Completion Date for the Whole of the works	06 Months (Six Months) from the Start Date	1.21 of Sec.-2 Part – I
Defects Liability Period	Twelve (12) months from the date of issue of completion certificate	14.1 of Sec-2 Part –II
Minimum Insurance	(a) Loss of or damage to the works, Plant and Materials- The Contractor is to insure for full contract value. (b) loss of or damage to Equipment – All the equipment should be properly insured. (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract-The minimum insurance cover for physical property, injury and death is Rs.3,00,000/- 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 and	13 of Sec-2 Part – I

	(d) personal injury or death-Insurance is to be taken for all staff and employees employed in the project	
Termination of Contract	Refer Clause No. 57 of Section 2 Part I	57 of Sec.-2 Part 1
language	The language of the Contract documents is English	12.1 of Sec-1
Contract Law	The law which applies to the Contract is the law of Union of India under the jurisdiction of Madras High Court	3 of Sec-3 Part 1
Liquidated Damages	Levied at the rate of 0.5% of the contract value per week of delay or part thereof, subject to maximum of 10% of the contract Price.	48.1 of Sec.-2 Part – I
Advances	No Advance payment will be made under this contract.	31 of Sec.-1
ECS payment	As per the Payment Clause	
Entry of contractor	Ref Clause No. 13.3 of Section 3	13.3 of Section 3
Electricity & Water Charges	Refer Clause No. 23.1 & 23.2 Section 3	23.1&23.2 of Section 3
Employment of Technical Staff	Refer Clause 9.3 of Section 2 of Part 1	9.3 of Section 2 of Part 1
ESI Contribution	Refer Clause 3 q of Section 2 of Part II	3q of Section 2 of Part II
Cess for TNCWWB	Refer Clause 2.2 of Section 2 of Part II	2.2 of Section 2 of Part II

SECTION -5

**TECHNICAL SPECIFICATION OF
MATERIALS AND WORKS**

SECTION - 5

PART I - MATERIAL AND WORKMANSHIP

1. General provision

1.1. Standards

Unless otherwise specified in the Contract, the relevant provisions of the appropriate Bureau of Indian Standards / Indian Road Congress shall apply for all materials and workmanship. Where relevant BIS / IRC Standards do not exist, the latest version of the relevant British Standard Specification or Standard of the American Society for Testing Materials shall apply. Equivalent standards from other countries may be used provided they are demonstrated to be equal to or more onerous than the standard quoted. In such a case, the standard shall be provided with an acceptable translation.

IRC : Indian Road Congress

IS / BIS : Indian Standards

BSS : British Standard Specification

Cp : British Standard Code of Practice

ASTM : Standard of the American Society for Testing Materials

AASHTO : American Association of State Highways and Transportation
Officials

Standard products

If mention is made in the Contract of named products of individual manufacturers, this indication of the standard or type and workmanship of goods, which are satisfactory to the Engineer. The Contractor may substitute similar Products of at least equal quality and suitability, subject to the approval of the Engineer-in charge provided that the Contractor has submitted with his Tender proposals for such substitution with full particulars of the proposed alternative products; otherwise, the Contractor's proposals may not be considered. Proposals by the Contractor for the supply of manufactured products shall be accompanied by certification that the manufacture's products are approved by the relevant standards authority.

2. Test certificates

Where specified, each consignment of materials or products intended for use in the Permanent works shall be accompanied by a manufacturer's test certificate showing that it conforms in all respects to the appropriate standards and

specifications. If no such certificates are enclosed, the Engineer-in charge shall have the materials or products tested by a nominated testing authority. The costs of such tests shall be borne by the Contractor.

3. As-built drawing

During performance of work under this contract, the Contractor shall keep at the site of the works, records as a set of transparencies which shall be kept marked up in detail to indicate such changes or additions as may be requested by the Engineer-in charge or required to suit field or other conditions. Whenever, requested by the Engineer-in charge during the execution of the works, the contractor shall submit copies of these up to-date drawings. After completion of the project in all respects, the contractor shall submit as-executed drawings incorporating all changes made by the Engineer-in charge during execution, in the form of CDs along with one set of hard copies.

4. Works to be kept dry

If certain parts of the Works or Temporary works are liable to flooding at any stage, the Contractor shall be responsible for preventing such flooding and for promptly rectifying any damage to the works or Temporary works so occasioned by flooding.

5. Materials and workmanship

5.1 Quality of materials, workmanship and testing facilities

All materials are intended to form or forming part of the works. All workmanship and all work under the Contract shall be in accordance with the Contract and with the instructions of the Engineer-in charge. Those materials, which shall conform to the relevant standards, shall be subject to the approval of the Engineer-in charge and shall be subjected from time to time to such tests as the Engineer-in charge may direct. Tests shall be carried out either at the contractor's laboratory or at any other place as directed by the Engineer-in charge. The Contractor shall provide without delay, all such attendance, assistance, facilities and equipment as are required for examining, measuring, sampling and testing of work and the quality, weight and quantity of materials and things intended to form or forming part of the works as and where required by the Engineer-in charge. The Contractor shall re do/replace such work, materials and things rejected by the Engineer-in charge.

5.2 Sampling

Samples shall be taken in accordance with the relevant standards and in such a

way and number that they can be considered to be representative of the full quantity of materials from which they are taken. Samples submitted for approval of materials to be supplied, or of the standard of workmanship and subsequently approved will be kept by the Engineer-in charge's Representative who may reject all materials or workmanship not corresponding in quality and character with the approved samples. Suitable labeled boxes or containers for the transport and storage of samples shall be provided by the Contractor.

5.3 **Testing**

All materials intended to form part of the Works shall, unless otherwise directed by the Engineer-in charge, be tested in accordance with relevant standards and with the requirements of this specification. The contractor shall carry out such tests of his own as is necessary to ensure compliance with the Specifications.

The Contractor shall be entitled to be represented at all tests carried out by or on behalf of the Engineer-in charge in order to determine whether workmanship and materials meet the requirements of the Specifications. Sufficient notice shall be given to the Contractor to enable him should he so wish to be present during any control test. Should the Contractor not wish to witness or be present at any control test, it shall be assumed that the Contractor accepts the validity of the results of that test.

5.4 **Prevention of damage to materials**

The Contractor shall take adequate measures to prevent damage, contamination and the like at any stage and by any cause to all materials intended to form part of the works.

5.5 **Costs of compliance**

The costs incurred by the Contractor in complying with the provisions of **Clause 5** shall be borne by the Contractor provided that the Employer shall reimburse to the Contractor.

- The cost of testing if the testing is ordered by the Engineer-in charge to be carried out by an independent person or agency at any place other than the Site or the place of manufacture or fabrication of the materials or things to be tested and is not specifically required by the Contractor to be carried out by an independent person or agency.
- The cost of core drilling if such drilling is required by the Engineer-in charge to obtain samples from the Works and not specifically required by the Contract;
- Such cost if any, of finished or partially finished work is ordered by the

Engineer-in charge to be tested under load to ascertain whether the design of such work is appropriate for the purposes which it is intended to fulfil and such test is not clearly intended or provided for in the contract.

Notwithstanding the above provisions, the costs incurred by the Contractor in complying with the provisions of this Clause shall entirely be borne by the Contractor if the test shows workmanship, materials or things not in accordance with the provisions of the Contract or the Engineer's instructions.

5.6 Compliance - no reason for extension of time

Compliance by the Contractor with the provisions of this Clause shall not give the Contractor any right to extension of time for the completion of the works.

5.7 Inspection before concealment

Whenever work requiring inspection or testing is subsequently to be concealed, due notice shall be given to the Engineer-in charge so that inspection may be made or tests witnessed before concealment. Failure to give such notice may necessitate the Contractor's uncovering the work for inspection purposes and reinstating it all at his own expense.

6. Levels and dimensions

The Contractor shall carryout his own surveys and measurements to verify existing levels and dimensions of existing features shown on the drawings, as and when deemed necessary by him. Wherever dimensions or levels are shown on the Drawings such dimensions or levels shall take precedence over dimensions scaled from the Drawings and scaled dimensions shall be used only in the absence from the Drawings and/or elsewhere of other more precise information. Large scale Drawings shall be used in preference to drawings of a smaller scale. In the event of discrepancies between the Drawings and the specifications, the specifications shall have precedence over the Drawings. Whenever there is any doubt or in-consistency regarding the levels/datum's etc., indicated in the drawings, the same shall be got clarified from the Engineer-in charge before proceeding with the works. The Engineer's decision will be final and binding on the contract.

7. Setting out

7.1. Setting out the works

Setting out the works shall be done by the Contractor by such dates as to permit timely commencement of the work. The Contractor shall furnish, install and maintain all markers, buoys, shore beacons and other items necessary to define

the works. The setting out of the Works under Contract shall be executed by the Contractor with the Engineer's Representative in attendance.

7.2. Checking of setting out

The Contractor shall provide the Engineer's Representative with sufficient equipment, duly calibrated in the field, labor and materials to enable the Engineer's Representative to check the Contractor's setting out, at any time the Engineers' Representative may direct.

7.3. Data for setting out the works

The levels shown in the Drawings are referred to Chart Datum (C.D.) unless otherwise stated in the Drawings. Prior to commencement of work, the Contractor shall engage a qualified Surveyor to check the locations and levels of the existing reference points at the Site and install additional reference points for his works, which will not be affected by construction operations. Coordinates and levels of existing reference points will be provided by the Engineer-in charge but the Contractor shall carry out all additional survey and leveling work necessary for setting out the works in fulfillment of his obligations.

8. Conditions of site

Before carrying out any work, the Contractor shall inspect the Site in conjunction with the Engineer's Representative to establish its general condition which shall be agreed and recorded in writing, and where, in the opinion of the Engineer-in charge or his Representative it is deemed necessary, by means of photographs. The boundary of the land provided for the execution of the works will be defined by the Engineer's Representative and the Contractor shall provide erect and maintain from commencement to final completion, approved markers indicating the boundary of the working area at regular intervals as the Engineer's Representative may require.

PART – II – SPECIFICATION OF WORKS

All the materials and works are to be in confirmation / as per the BIS / CPWD / MORTH Specification otherwise it is specifically described.

1. PREAMBLE**1.1 General**

1.1.1 The Technical specifications covering the materials and the workmanship aspects as well as method of measurements and payments are included in this section. These specifications cover the items of civil and non-civil works coming under scope of this document. All work shall be carried out in conformity with the same. These specifications are not intended to cover the minute details. The works shall be executed in accordance with good practices followed for achieving high standards of workmanship, thus ensuring safety and durability of the construction. All codes and standards referred to in these specifications shall be the latest thereof, unless otherwise stated.

1.1.2 Inclusive Documents

The provisions of special conditions of contract, those specified elsewhere in the tender document, as well as execution drawings and notes, or other specifications issued in writing by the Engineer shall form part of the technical specifications of this project.

1.1.3 Measurement And Payment

The methods of measurement and payment shall be as described under various items and in the Bill of Quantities. Where specific definitions are not given, the methods described in B.I.S. Code will be followed. Should there be any detail of construction or materials which has not been referred to in the Specification or in the Bill of Quantities and Drawings but the necessity for which may be implied or inferred there from, or which is usual or essential to the completion of the work in the trades, the same shall be deemed to be included in the rates and prices entered by the contractor in the Bill of Quantities.

1.1.4 Defective Works

All defective works are liable to be demolished, rebuilt and defective materials replaced by the contractor at his own cost. In the event of such works being accepted by carrying out repairs etc., as specified by the Engineer, the cost of repairs will be borne by the contractor.

1.2 SITE INFORMATION

1.2.1 The information given hereunder and provided elsewhere in these documents is given in good faith by the Employer but the Contractor shall satisfy himself regarding all aspects of site conditions and no claim will be entertained on the plea that the information supplied by the Employer is erroneous or insufficient.

1.2.2 The area in which the works are located is mostly plain to rolling terrain. The approximate longitude and latitude of region being 80°-20' east and

13°-15' north respectively.

1.2.3 General Climatic Conditions

The variation in temperature in this region is as under

- 1) During summer months, maximum Temperature is about 37° C and minimum about 30° C.
- 2) During winter months, minimum temperature is about 22° C and maximum about 27° C.

The normal annual rainfall in the area is in the order of about 1200 mm a good portion of which is concentrated during the months of October to December each year.

1.2.4 Seismic Zone

The works are located in seismic zone III as defined in IRC-6-1966

1.2.5 Exposure conditions at site

The exposure condition at the site is considered to be saline atmosphere. Material selection, protection of various components and other provisions are to be made with this view.

1.3 Specifications of items of work with relevant specifications

The Technical Specifications Contained herein shall be read in conjunction with the Latest version of Ministry of Road Transport and Highway (MoRT & H) specifications for road and Bridge works with any additions published by MoRTH & H on behalf of the Govt of India & the Latest version of CPWD specifications with any additions published by Director General of Works, CPWD, Nirman Bhawan, New Delhi, Govt of India.

1 EXCAVATION, PREPARATION AND CONSOLIDATION OF SUB GRADE FOR ROADWAY AND DRAINS :-

Relevant Specifications - Section-301- MoRT & H specifications for road and Bridge works (Fifth revision or Latest revision) with amendment if any

- 1.1 Contractor shall be responsible for the true and proper setting out of the work in relation to original points, lines and levels of reference and for corrections of the level dimension and alignment of all parts of work.
- 1.2 All excavations shall be carried out to give exact length, width and depth as per profiles indicated in the drawings or as directed by the Engineer-in-Charge. The phasing and method of excavation shall be to the approval of Engineer-in-Charge. The contractor shall provide suitable arrangements to prevent water from any source entering into excavated pits at his cost.
- 1.3 Necessary shoring and timbering shall be provided as per IS:3764 for preventing slipping of the soil in trenches and for protecting the safety and stability of the existing structures. Dewatering, if required shall also be carried out to keep the excavated surface dry for construction. The cost for pumping or bailing out water by using pump set will be paid separately. Excavation taken wider or deeper than required shall be filled

back with crusher run screening or selected materials approved by the Engineer-in-Charge, thoroughly compacted in layers of thickness not more than 20 cm or as decided by the Engineer-in-Charge.

2 GRANULAR SUB-BASE :-

Relevant Specifications - Section-401- MoRT & H specifications for road and Bridge works (Fifth revision or Latest revision) with amendment if any

2.1 Scope

This work shall consist of laying and compacting 20mm thick well-graded material on prepared subgrade in accordance with the requirements of these Specifications. The material shall be laid in one or more layers as sub-base (termed as subbase hereinafter) as necessary according to lines, grades and cross-sections shown on the drawings or as directed by the Engineer.

2.2 Materials:

The material to be used for the work shall be natural sand, crushed gravel, crushed stone, or combination thereof depending upon the grading required. The material shall be free from organic or other deleterious constituents and shall conform to the quality standards as prescribed in the specifications.

The gradings for Granular Sub-Base (GSB) should be as per the Gradings table No 400-1 of Section-401 - MoRT & H specifications for road and Bridge works (Fifth revision or Latest revision).

2.3 Construction Operations

2.3.1 Preparation of subgrade :

Immediately prior to the laying of sub-base, the subgrade shall be prepared by removing all vegetation and other extraneous matter, lightly sprinkled with water, if necessary and rolled with two passes of 80–100 kN smooth wheeled roller.

2.3.2 Spreading and compacting :

The sub-base material of grading specified in the Contract shall be spread on the prepared subgrade with the help of a motor grader of adequate capacity, its blade having hydraulic controls suitable for initial adjustment and for maintaining the required slope and grade during the operation or other means as approved by the Engineer.

Moisture content of the loose material shall be checked in accordance with IS:2720 (Part 2) and suitably adjusted by sprinkling additional water from a truck mounted or trailer mounted water tank and suitable for applying water uniformly and at controlled quantities to variable widths of surface or other means approved by the Engineer so that, at the time of compaction, it is from 1 percent above to 2 percent below the optimum moisture content corresponding to IS:2720 (Part 8). 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 until the layer is uniformly wet.

Immediately thereafter, rolling shall start. For a compacted single layer upto 200 mm the compaction shall be done with the help of a vibratory roller of minimum 80 to 100 kN static weight with plain drum or pad foot-drum or heavy pneumatic tyred roller of minimum 200 to 300 kN weight having a minimum tyre pressure of 0.7 MPa or equivalent capacity roller capable of achieving the required compaction. Rolling shall commence at the lower edge and proceed towards the upper edge longitudinally for portions having unidirectional crossfall and super-elevation shall commence at the edges and progress towards the centre for portions having crossfall on both sides.

Each pass of the roller shall uniformly overlap not less than one-third of the track made in the preceding pass. During rolling, the grade and crossfall (camber) shall be checked and any high spots or depressions which become apparent, corrected by removing or adding fresh material. The speed of the roller shall not exceed 5 km per hour.

Rolling shall be continued till the density achieved is at least 98 percent of the maximum dry density for the material determined as per IS:2720 (Part 8). The surface of any layer of material on completion of compaction shall be well closed, free from movement under compaction equipment and from compaction planes, ridges, cracks or loose material. All loose, segregated or otherwise defective areas shall be made good to the full thickness of layer and re-compacted.

2.4 **Surface Finish and Quality Control of Work:**

The surface finish of construction shall conform to the requirements of Clause 902 of MoRT & H Specifications. Control on the quality of materials and works shall be in accordance with Section 900 of MoRT & H Specifications

3 WET MIX MACADAM SUB-BASE/BASE:-

Relevant Specifications - Section-406- MoRT & H specifications for road and Bridge works (Fifth revision or Latest revision) with amendment if any

3.1 **Scope :**

This work shall consist of laying and compacting 250mm thick clean, crushed, graded aggregate and granular material, premixed with water, to a dense mass on a prepared sub-grade/subbase/ base or existing pavement as the case may be in accordance with the requirements of these Specifications. The material shall be laid in one or more layers as necessary to lines, grades and cross-sections shown on the approved drawings or as directed by the Engineer.

The thickness of a single compacted Wet Mix Macadam layer

shall not be less than 75 mm. When vibrating or other approved types of compacting equipment are used, the compacted depth of a single layer of the sub-base course may be upto 200 mm with the approval of the Engineer.

3.2 **Materials-**

3.2.1 Aggregates

3.2.1.1 Physical requirements :

Coarse aggregates shall be crushed stone. If crushed gravel/shingle is used, not less than 90 percent by weight of the gravel/shingle pieces retained on 4.75 mm sieve shall have at least two fractured faces. The aggregates shall conform to the physical requirements set forth in Table 400-9 of MoRT & H Specifications.

If the water absorption value of the coarse aggregate is greater than 2 percent, the soundness test shall be carried out on the material delivered to site as per IS:2386 (Part-5).

3.2.1.2 Grading requirements :

The aggregates shall conform to the grading given in Table 400-10 of MoRT & H Specifications.

3.3 **Construction Operations**

3.3.1 Preparation of base :

The surface of the sub-base to receive the Wet Mix Macadam course shall be prepared to the specified grade and camber and cleaned of dust, dirt and other extraneous material. Any ruts or soft yielding places shall be corrected in an approved manner and rolled until firm surface is obtained.

3.3.2 Provision of lateral confinement of aggregates :

While constructing wet mix macadam, arrangement shall be made for the lateral confinement of wet mix. This shall be done by laying materials in adjoining shoulders along with that of wet mix macadam layer and following the sequence of operations described in Clause 407.4.1 of MoRT & H Specifications.

3.3.3 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 arrangement like pugmill or pan type mixer of concrete batching plant.

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 material 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. The mixed material should be uniformly wet and no segregation should be permitted.

3.3.4 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.

In no case shall these be dumped in heaps directly on the area where these are to be laid nor shall their hauling over a partly completed stretch be permitted.

The mix may be spread by a paver finisher. The paver finisher shall be self-propelled, of reputed make, proven design and adequate capacity.

In exceptional cases where it is not possible for the paver to be utilized, mechanical means like motor grader may be used with the prior approval of the Engineer. The motor grader shall be capable of spreading the material uniformly all over the surface. For portions where mechanical means cannot be used, manual means as approved by the Engineer shall be used only in restricted areas.

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 particles should be allowed. The aggregates as spread should be of uniform gradation with no pockets of fine materials.

The Engineer may permit manual mixing and /or laying of wet mix macadam where small quantity of wet mix macadam is to be executed. Manual mixing/laying in inaccessible/ remote locations and in situations where use of machinery is not feasible can also be permitted. Where manual mixing/laying is intended to be permitted, the same shall be indicated in the Contract.

3.3.5 Compaction :

After the mix has been laid to the required thickness, grade and crossfall/camber the same shall be uniformly compacted to the full depth with suitable roller. For a compacted single layer upto 200 mm, the compaction shall be done with the help of vibratory roller of minimum static weight of 80 to 100 kN with an amplitude not exceeding 0.7 mm or equivalent capacity roller. The speed of the roller shall not exceed 5 km/h. In portions having unidirectional cross fall/superelevation, rolling shall commence from the lower edge and progress gradually towards the upper edge. Thereafter, roller should progress parallel to the center line of the road, uniformly over-lapping each preceding track by at least one-third width until the entire surface has been rolled. Alternate trips of the roller shall be terminated in stops at least 1 m away from any preceding stop.

In portions in camber, rolling should begin at the edge with the roller running forward and backward until the edges have been firmly compacted. The roller shall then progress gradually towards the center parallel to the center line of the road uniformly overlapping each of the preceding track by at least

one-third width until the entire surface has been rolled.

Any displacement occurring as a result of reversing of the direction of a roller or from any other cause shall be corrected at once as specified and/or removed and made good.

Along forms, kerbs, walls or other places not accessible to the roller, the mixture shall be thoroughly compacted with mechanical tampers or a plate compactor. Skin patching of an area without scarifying the surface to permit proper bonding of the added material shall not be permitted.

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

Rolling shall be continued till the density achieved is at least 98 percent of the maximum dry density for the material as determined by the method outlined 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 planes, ridges, cracks and loose material.

All loose, segregated or otherwise defective areas shall be made good to the full thickness of the layer and recompact.

3.4 **Setting and drying :**

After final compaction of wet mix macadam course, the road shall be allowed to dry for 24 hours.

4 PRIME COAT OVER GRANULAR BASE

Relevant Specifications - Section-502- MoRT & H specifications for road and Bridge works (Fifth revision or Latest revision) with amendment if any

4.1 **Scope:**

The work consists of application of single coat of low viscosity bituminous material @ 0.7 kg/sqm on the WMM layer laid preparatory to superimposition of bituminous macadam to be laid.

The primer shall not be applied to a wet surface or during a dust storm or when the weather is foggy, rainy or windy or when the temperature in the shade is less than 10°C. Surfaces which are to receive emulsion primer should be damp, but no free or standing water shall be present.

The primer distributor shall be a self propelled or towed

bitumen pressure sprayer equipped for spraying the material uniformly at the specified rate and temperatures. Small areas, inaccessible to the distributor or narrow strips shall be sprayed with a pressure hand sprayer, or as directed by the Engineer-in-Charge

4.2 **Preparation of surface**

The surface finish of WMM on which bituminous works are to be placed, shall be free from dust. All the loose materials shall be removed from the surface to be primed. Immediately prior to applying the primer the surface shall be carefully swept clean by means of mechanical broom and dust removed by air jet, or other means approved by the Engineer – in-charge, care being taken not to disturb the interlocked aggregate. This is best achieved when the surface layer is slightly moist (lightly sprayed with water and the surface allowed to dry) and the surface should be kept moist until the primer is applied.

4.3 **Application of primer**

The rate of application of the primer shall be 0.7 kg/Sqm. The bituminous primer shall be sprayed uniformly on the prepared surface. The sprayer used for applying primer shall be operated in such a way that will ensure an even distribution of primer on the surface

4.5 **Curing of primer**

The primed surface shall be allowed to cure for at least 24 hours or such other period as is found to be necessary to allow all the volatiles to evaporate before any subsequent surface treatment or mix is laid. Any unabsorbed primer shall first be blotted with an application of sand, using the minimum quantity possible. A primed surface shall not be opened to traffic other than that necessary to lay the next course. A very thin layer of clean sand may be applied to the surface of the Primer, to prevent the primer picking up under the wheels of the paver and the trucks delivering bituminous material to the paver.

4.6 **Measurement for payment**

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

5 BITUMEN EMULSION TACK COAT:

Relevant Specifications - Section-503- MoRT & H specifications for road and Bridge works (Fifth revision or Latest revision) with amendment if any

5.1 **General**

(i) The work consists of application of a single coat of bitumen emulsion @ 0.25 kg/Sqm over the already primed surface.

(ii) The tack coat distributor shall be a self-propelled or towed bitumen pressure sprayer, equipped for spraying the material uniformly at specified rate. Small areas, inaccessible to the distributor or narrow strips shall be sprayed with pressure hand sprayer, or as directed by the Engineer-in-charge.

5.2 **Preparation of Base**

The surface on which tack coat is to be applied shall be clean and free from dust, dirt, and any extraneous material. Immediately before the application of the tack coat, the surface

shall be swept clean with a mechanical broom and high pressure air jet, or by other means as directed by the Engineer-in-charge.

5.3 **Application of Tack coat**

The rate of application of the tack coat shall be @ 0.25 kg/Sqm. The bitumen emulsion shall be sprayed uniformly on the prepared surface. The sprayer used for applying tack coat shall be operated in such a way that will ensure an even distribution of primer on the surface. The normal range of spraying temperatures for a bituminous emulsion shall be 20oC to 70oC. Excessive deposits of emulsion on the surface caused by stopping and starting the sprayer or distribution by leakage should not be allowed, spraying shall in all case be carried out parallel to the centre line of the surface. Tack coat shall be applied just ahead of the oncoming bituminous macadam and bituminous concrete construction and 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.

5.4 **Measurement for payment**

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

5.5 **Rate**

The contract unit rate for tack coat shall be payment in full for carrying out the required operations as specified above. The rate quoted shall also include cost of labour, material, plants and equipments etc. required for surface preparation and providing tack coat.

6 DENSE GRADED BITUMINOUS MACADAM

Relevant Specifications - Section-505- MoRT & H specifications for road and Bridge works (Fifth revision or Latest revision) with amendment if any

6.1 **Scope**

This clause specified the construction of Dense Bituminous Macadam, (DBM), for use mainly, but not exclusively, in base/binder and profile corrective courses. The work shall consist of construction in a single layer of DBM of 50mm thick on a previously prepared base or sub-base.

6.2 **Construction operations**

Laying shall be suspended while free standing water is present on the surface to be covered, or during rain, fog and dust storms. After rain, the bituminous surface, prime or tack coat, shall be blown off with a high pressure air jet to remove excess moisture, or the surface let to dry before laying shall start. Laying of bituminous mixtures shall not be carried out when the air temperature at the surface on which it is to be laid is below 10oC or when the wind speed at any temperature exceeds 40 km per hour at 2m height unless specially approved by the Engineer-in-Charge.

6.3 **Preparation of base**

The base on which Bituminous Macadam is to be laid shall be

prepared, shaped and compacted to the required profile in accordance with clause 501.8 and 902.3 of MORT&H's Specification for Road and Bridge works or as directed by the Engineer-in-Charge. The surface shall be thoroughly swept clean by a mechanical broom, and the dust removed by compressed air. In locations where mechanical broom cannot access, other approved methods shall be used as directed by the Engineer-in-Charge. A prime coat shall be applied in accordance with Clause 4 above.

6.4 **Applying Tack Coat**

Tack coat shall then be applied as per Clause 5 above over the surface thus prepared.

6.5 **Mixing and transportation of the mixture**

Mixing

Pre-mixed bituminous materials, including bituminous macadam and bituminous concrete shall be prepared in a hot mix plant of adequate capacity and capable of yielding a mix of proper and uniform quality with thoroughly coated aggregates. Appropriate mixing temperatures can be found in Table 500-2 of MORT & H's Specification for Road and Bridge works; the difference in temperature between the binder and the aggregate should at no time exceed 140 C. In order to ensure uniform quality of the mix and better coating of aggregates, the hot mix plant shall be calibrated from time to time. Manufacturing and rolling temperatures (Table 500-2 of MORT & H's Specification) Instead of installing a hot mix plant for the work at work site, the contractor shall be permitted to use an existing plant conforming to the above specifications, in the nearby locality subject to the following conditions.

a) All materials required for the bituminous works shall be stored at the hot mix plant premises sufficiently in advance and stacked, measured and got approved by the Engineer-in-Charge before use in the work. Conveyance for the inspection / supervision of the material / works by the department staff at the plant site shall be arranged by the contractor without any extra cost to the department.

b) Storage tank of adequate capacity for storing bitumen required for the work shall be arranged by the contractor at his risk and cost so that the progress of the work is not affected for want of bitumen.

c) The contractor shall maintain a record of daily consumption and balance quantities of all materials measured for use in the work and also bitumen supplied from the department, at the plant site which shall be jointly signed by the representative of the Engineer-in-Charge and the contractor before starting each day's work and its closing on the day.

d) The contractor shall take all precautionary measures to ensure the required temperature of the mix at the time of placing the same at work site.

6.6 **Transporting**

Bituminous materials shall be transported in clean insulated vehicles, and unless otherwise agreed by the Engineer-in-charge shall be covered while in transit or awaiting tipping. Subject to

the approval of the Engineer-in-charge a thin coating of diesel or lubricating oil may be applied to the interior of the vehicle to prevent sticking and to facilitate discharge of the material.

6.7 **Spreading**

(i) Except in areas where a mechanical paver cannot access, bituminous materials shall be spread, levelled and tamped by an approved self-propelled paving machine. As soon as possible after arrival at site, the materials shall be supplied continuously to the paver and laid without delay.

(ii) The rate of delivery of material to the paver shall be regulated to enable the paver to operate continuously. The travel rate of the paver and its method of operations, shall be adjusted to ensure an even and uniform flow of bituminous material across the screed, free from dragging, tearing and segregation of the material. In areas with restricted space where a mechanical paver cannot be used, the material shall be spread, raked and levelled with suitable hand tools by experienced staff and compacted to the satisfaction of the Engineer-in-Charge..

(iii) The minimum thickness of material laid in each paver pass shall be in accordance with the minimum values given in the relevant parts in MORT&H's Specification for Road and Bridge works.

6.8 **Rolling**

The compaction shall carry out in accordance with the provisions of clause 7.8.1.3.5 of MoRT & H Specifications shall apply, as modified by the approved laying trials. Rolling shall be continued until the specified density is achieved, until there is no further movement under the roller. The required frequency of testing is defined in Clause 903 of MORT & H's Specification for Road and Bridge works.

6.9 **Compaction**

(i) Bituminous materials shall be laid and compacted in layers which enable the specified thickness, surface level, regularity requirements and compaction to be achieved.

(ii) Compaction of bituminous materials shall commence as soon as possible after laying. Compaction shall be substantially completed before the temperature falls below the minimum rolling temperatures stated in relevant part of the MORT&H's Specification for Road and Bridge works. Rolling of the longitudinal joints shall be done immediately behind the paving operation. After this, rolling shall commence at the edges and progress towards the center longitudinally except that on super elevated and unidirectional cambered portions, it shall progress from the lower to the upper edge parallel to the center line of the pavement. Rolling shall continue until all roller marks have been removed from the surface. All deficiencies in the surface after laying shall be made good by the attendants behind the paver, before initial rolling is commenced. The initial rolling shall be done with 80-100 KN dead weight smooth-wheeled rollers. The finish rolling shall be done with 80-100 KN vibrating tandem rollers.

(iii) Where compaction is to be determined by density of cores

the requirements to prove the performance of rollers shall apply in order to demonstrate that the specified density can be achieved. In such cases the Contractor shall nominate the plant, and the method by which he intends to achieve the specified level of compaction and finish at temperatures above the minimum specified rolling temperature. Laying trials shall then demonstrate the acceptability of the plant and method used.

(iv) Bituminous materials shall be rolled in a longitudinal direction, with the driven rolls nearest the paver. The roller shall first compact material adjacent to joints and then work from the lower to upper side of the layer, overlapping on successive passes by at least one-third of the width of the rear roll.

(v) In portions super elevated and uni-directional camber, after the edge has been rolled, the roller shall progress from the lower to the upper edge.

(vi) Rollers should move at a speed of not more than 5 km per hour. The roller shall not be permitted to stand on pavement which has not been fully compacted, and necessary precautions shall be taken to prevent dropping of oil, grease, petrol or other foreign matter on the pavement either when the rollers are operating or standing. The wheels of rollers shall be kept moist with water, and the spray system provided with the machine shall be in good working order, to prevent the mixture from adhering to the wheels. Only sufficient moisture to prevent adhesion between the wheels of rollers and the mixture should be used. Surplus water shall not be allowed to stand on the partially compacted pavement.

6.10 **Joints**

(i) Where longitudinal joints are made in pre-mixed bituminous materials, the materials shall be fully compacted and the joint made flush.

(ii) All joints shall be offset at least 300mm from parallel joints in the layer beneath or as directed, and in a layout approved by the Engineer-in-Charge. Joints in the wearing course shall coincide with either the lane edge or the lane marking, whichever is appropriate. Longitudinal joints shall not be situated in wheel track zones.

6.11 **Measurement for payment**

(i) Bituminous Macadam shall be measured as finished work in cubic meters on the basis of level measurements.

(ii) For one cubic meter of compacted volume of Bituminous Macadam, quantity of each type of aggregate and bitumen used for the work shall be as per clause 7.10 of MoRT & H specifications.

7 BITUMINOUS CONCRETE WEARING COURSE

Relevant Specifications - Section-508- MoRT & H specifications for road and Bridge works (Fifth revision or Latest revision) with amendment if any

7.1 **Scope**

The work consists of providing 25mm thick Bituminous Concrete Wearing Course on the already laid Dense Bituminous Concrete surface.

7.2 **Mix design**

The mix for bituminous concrete shall be design mix. The mix shall meet the requirements set out in Table 500-17 of MORT & H's Specification for Road and Bridge works

7.3 **Job Mix Formula**

7.3.1 The contractor shall inform the Engineer-in-Charge in writing, at least 7 days before the start of the work, of the job mix formula proposed for use in the works, and shall give the following details:

- i. Source and location of all materials.
- ii. Proportions of all materials expressed as follows each is applicable
 - a. Binder type, and percentage by weight of total mixture.
 - b. Coarse aggregates/fine aggregate/ mineral filler as percentage by weight of total aggregate including mineral filler.
- iii. A single definite percentage passing each sieve for the mixed aggregate.
- iv. The individual grading of the individual aggregate fractions, and the proportion of each in the combined grade.
- v. The results of tests enumerated in Table 500-16 as obtained by the Contractors.
- vi. Where the mixer is a batch mixer, the individual weights of each type of aggregate, and the binder per batch.
- vii. Test results of physical characteristics of aggregates to be used.
- viii. Mixing temperature and compacting temperature.

7.3.2 While establishing the job mix formula, the contractor shall ensure that it is based on a correct and truly representative sample of the materials that will actually be used in the work and that the mixture and its different ingredients satisfy the physical and strength requirements of these specifications.

7.3.3 Approval of the job mix formula shall be based on independent testing by the Engineer-in-Charge for which samples of all ingredients of the mix shall be furnished by the Contractor as required by the Engineer-in-Charge.

7.3.4 The approved job mix formula shall remain effective unless and until a revised job mix formula is approved. Should a change in the source of materials be proposed, a new job mix formula shall be forwarded to the Engineer-in-Charge for

approval before the placing of the material.

7.4 **Plant Trials- Permissible Variation in Job Mix Formula**

7.4.1 Once the laboratory job mix formula is approved, the Contractor shall carry out plant trials at the mixer to establish that the plant can be set up to produce a uniform mix conforming to the approved job mix formula. The permissible variations of the individual percentages of the various ingredients in the actual mix from the job mix formula to be used shall be within the limits as specified in Table 500-18 of MORT& H's Specification for Road and Bridge works below.

7.4.2 These variations are intended to apply to individual specimens taken for the quality control test in accordance with Section 900 of MORT&H's specification for Road and Bridge works as per Table 500-18 of MORT& H's Specification.

7.5 **Laying Trials**

7.5.1 Once the plant trials have been successfully completed and approved, the Contractor shall carryout laying trials, to demonstrate that the proposed mix can be successfully laid, and compacted all in accordance with the specifications hereinafter. The laying trial shall be carried out on a suitable area, approved by the Engineer-in-Charge. The area of the laying trials shall be a minimum of 100 Sq.m of construction, and it shall be similar to that of the proposed road of it shall be in all respects, particularly compaction, the same as the proposed construction on which the bituminous material is to be laid.

7.5.2 The Contractor shall previously inform the Engineer-in-Charge of the proposed method for laying and compacting the material. The plant trials shall then establish if the proposed laying plant, compaction plant, and methodology is capable of producing satisfactory results. The density of the finished paving layer shall be determined by taking cores, no sooner than 24 hours after laying, or by other approved method.

7.5.3 Once the laying trials have been approved, the same plant and methodology shall be applied to the laying of the material on the work, and no variation of either shall be acceptable, unless approved in writing by the Engineer-in-Charge, who may at his discretion require further laying trials.

7.6 **Construction operations**

Laying shall be suspended while free standing water is present on the surface to be covered, or during rain, fog and dust storms. After rain, the bituminous surface, prime or tack coat, shall be blown off with a high pressure air jet to remove excess moisture, or the surface let to dry before laying shall start. Laying of bituminous mixtures shall not be carried out when the air temperature at the surface on which it is to be laid is below 10oC or when the wind speed at any temperature exceeds 40km

per hour at 2m height unless specially approved by the Engineer-in-Charge.

7.6.1 Preparation of base

The base on which Bituminous concrete material is to be laid shall be prepared as directed by the Engineer-in-Charge. The surface shall be thoroughly swept clean by a mechanical broom, and the dust removed by compressed air. In locations where mechanical broom cannot access, other approved methods shall be used as directed by the Engineer-in-Charge.

7.6.2 Applying Tack Coat

In case the Bituminous Macadam surface over which the Bituminous concrete is to be laid is fresh and has not been subjected to traffic or contaminated by dust, a tack coat is not mandatory where the overlay is completed within two days. Otherwise, tack coat shall be provided as directed by the Engineer-in-Charge.

7.6.3 Mixing and transportation of the mix

The provisions as specified in Clause 6.5 & 6.6 shall apply.

7.6.4 Spreading

The provisions as specified in Clause 6.7 shall apply.

7.6.5 Rolling

(i) Rolling for compaction shall be carried out in accordance with the provisions of clause 6.8

(ii) Rolling shall be continued until the specified density is achieved, until there is no further movement under the roller. The required frequency of testing is defined in Clause 903 of MORT & H's Specification for Road and Bridge works.

7.6.6 Surface finish and quality control.

The surface finish of completed construction shall conform to the requirements of Clause 902 of MORT&H's Specification for Road and Bridge works or as directed by the Engineer-in-Charge. For control on the quality of materials and works carried out, relevant provisions of Section 900 of MORT&H's Specification for Road and Bridge works shall apply.

7.7 Measurement for payment

(i) Bituminous concrete shall be measured as finished work in cubic meters on the level measurements.

(ii) For one cubic meter of compacted volume of bituminous concrete, quantity of each type of aggregate and filler and bitumen used for the work shall be as per the proportion of ingredients determined in the mix design.

7.8 Rate

The contract unit rate for premixed bituminous courses shall be payment in full for carrying out the required operations including full compensation for, but not necessarily limited to:

(i) Making arrangements for traffic control.

- (ii) Preparation of the surface to receive the material.
- (iii) Providing all materials to be incorporated in the work including arrangement for stock yards, all royalties, fees, rents wherever necessary and all leads and lifts;
- (iv) Mixing, transporting, laying and compacting the mix as specified.
- (v) All labour, tools, equipment, plant including installation of hot mix plant, power supply units and all machinery, incidental to complete the work to these specifications.
- (vi) Carrying out the work in part widths of the road if so directed by the Engineer-in-Charge.
- (vii) Carrying out all tests for control of quality; and
- (viii) The rate shall cover the provision of bitumen at the rate specified in the contract.
- (ix) The rates are to include for all necessary testing, mix design, transporting and testing of samples, and cores. If there is no laboratory at work site, the Contractor must arrange to carry out all necessary testing at an outside Laboratory, approved by the Engineer-in-Charge, and all costs incurred are deemed to be included in the rate quoted.
- (x) The cost of all plant and laying trials as specified to prove the mixing and laying methods is deemed to be included in the Contractor's quoted rate.

8 SCARIFYING THE EXISTING BITUMINOUS ROAD

Relevant Specifications - Section-16.11- Central Public Work Department (CPWD) specifications - 2019

- 8.1 All dirt, dust, cacked up mud, slush, animal droppings, vegetation and all other rubbish shall be removed from the bituminous surface.
- 8.2 The bituminous surface shall be scarified to a depth of approximately 5 cm with such additional picking of high parts of the road as may be necessary to the required camber and gradient as directed by the Engineer- in-Charge.

9 CEMENT CONCRETE PRECAST KERB

Relevant Specifications - Section-16.58- Central Public Work Department (CPWD) specifications - 2019

9.1 Laying

9.1.1 Trenches shall first be made along the edge of the wearing course of the road to receive the kerb stones of cement concrete of specified grade. The bed of the trenches shall be compacted manually with steel rammers to a firm and even surface and then the stones shall be set in cement mortar of specified proportion.

9.1.2 The kerb stones with top 20 cm. wide shall be laid with their length running parallel to the road edge, true in line and gradient at a distance of 30 cm. from the road edge to allow for the channel and shall project about 12.5 cm. above the latter. The channel stones with top 30 cm. wide shall be laid in position in chamber with finished road surface and with

sufficient slope towards the road gully chamber. The joints of kerb and channel stones shall be staggered and shall be not more than 10 mm. Wherever specified all joints shall be filled with mortar 1:3 (1 cement : 3 coarse sand) and pointed with mortar 1:2 (1 cement: 2 fine sand) which shall be cured for 7 days.

9.1.3 The necessary drainage openings of specified sizes shall be made through the kerb as per drawings or as directed by the Engineer-in-Charge for connecting to storm water drains.

9.2 Finishing

Berms and road edges shall be restored and all surplus earth including rubbish etc. disposed off as directed by the Engineer-in-charge. Nothing extra shall be paid for this.

9.3 Measurements

It shall be measured in cubic meters with Length of the finished work (for specified width and height of stone) shall be measured in running metre along the edge of the road correct to a cm.

9.4 Rate

The rate shall include the cost of all the materials and labour involved in all the operations described above

10 PANTING KERB WALL WITH EPOXY PAINT

Relevant Specifications - Section-13.24A - Central Public Work Department (CPWD) specifications - 2019

11 ROAD MARKINGS STRIPS WITH THERMOPLASTIC PAINT

Relevant Specifications - Section-16.51 - Central Public Work Department (CPWD) specifications - 2019

12 RETRO REFLECTIVE SIGN BOARD

Relevant Specifications - Section-16.49 - Central Public Work Department (CPWD) specifications - 2019

13 REFLECTIVE PAVEMENT MARKERS (RPM) OR ROAD STUDS

Relevant Specifications - Section-16.64 - Central Public Work Department (CPWD) specifications - 2019

14 CEMENT CONCRETE

Relevant Specifications - SUB HEAD - 4 - Central Public Work Department (CPWD) specifications - 2019

15 QUANTITIES OF MATERIALS TO BE USED FOR VARIOUS WORKS FOR ITEMS

Quantities of materials to be used for various items of works shall be as given below.

a)	Wet Mix Macadam	For one Cubic Metre
	45 to 22.40mm metal	0.40m ³
	22.4 to 2.36mm	0.53m ³
	2.36 to 75 micron	0.40m ³
b)	Tack coat @ 0.40Kg/m²	For Ten Square Metre
	Bitumen Emulsion (MS/RS)	4.00 Kg
c)	Tack coat @ 0.25Kg/m²	For Ten Square Metre
	Bitumen Emulsion (MS/RS)	2.50 Kg
d)	Bituminous Macadam	For one Cubic Metre
	Bitumen VG 30 grade	73.00 Kg
	25 to 10 mm metal	0.57m ³
	10 to 5 mm	0.57m ³
	5mm and below	0.28m ³
e)	Bituminous Concrete	For one cubic Metre
	Bitumen VG 30 grade Minimum bitumen content	5% by weight of total mix
	Aggregates and filler	As per mix design

SECTION 6
FORMS

FORM 1

FORMAT OF BID SUBMISSION LETTER

(On letter head of the bidding firm)

Reference No.

Date:

From:

.....
.....

To:

The Deputy General Manager (Civil),
Kamarajar Port Limited,
Vallur Post,
Chennai – 600120.
Tamil Nadu

Dear Sir,

Subject: Submission of tender for “Widening and resurfacing of bituminous road inside the Kamarajar Port Premises on Percentage Rate Basis.”

Reference: Tender No: 2026025107

- 1) Having examined the completeness of bid documents including Invitation of Bid, Instruction to bidders, Conditions of contract, Technical specifications, Bill of Quantities, Drawings, Forms and Annexures for the execution of the above named works, we, the undersigned offer to execute and complete such works and remedy any defects therein in conformity with the said Bid document being awarded to us.
- 2) I/We undertake, if our bid is accepted, to:
 - i) Furnish Performance Guarantee within 21 (Twenty-one) days of receipt of the Letter of Acceptance/Work order.
 - ii) Enter into Contract Agreement within 21 (Twenty-one) days of receipt of the Letter of Acceptance/Work order. Form of contract agreement is in Section 5 (Form 13).
- 3) Unless and until a formal agreement is prepared and executed, this bid together with your written acceptance thereof shall constitute a binding contract between us, but without prejudice to your right to withdraw such acceptance under the provisions of the conditions of contract.

- 4) I(Name of the Bidding Firm)..... submit herewith our bid through e-procurement portal for selection of our firm/organization as contractor for the above mentioned contract. The submission comprises, separately **of:**
- i) Technical Bid &
 - ii) Financial Bid
- 5) I 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”.
- 6) I certify that in preparation and submission of Technical and Financial information, we have not taken any action which is or which constitutes a corrupt or fraudulent practice as defined in the tender documents.
- 7) Our Bid is valid for the period of Ninety (90) days from the date of submission deadline fixed for the tender and will be binding on us.
- 8) I have not made any tampering or changes in the bid documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we understand the bid will invite summary rejection and forfeiture of bid security/ the contract will be liable to be terminated along with forfeiture of contract performance security, even if LOA has been issued.
- 9) I understand that, the Kamarajar Port Limited is not bound to accept any bid that the Kamarajar Port Limited may receive.

Yours faithfully,

.....

Signature of authorized signatory of firm/Lead member (Seal)

Address:

.....

.....

Enclosures: **Forms 2 to 15 (whichever applicable)**

FORM 2

FORMAT FOR POWER OF ATTORNEY FOR AUTHORISED SIGNATORY OF THE FIRM

POWER OF ATTORNEY*

(To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant stamp Act. The stamp paper to be in the name of the company who is issuing the power of Attorney)

Know all men by these presents, we (Name of firm with address of the registered office) do hereby constitute, appoint and authorize Mr./Ms.(name and residential address who is presently employed with us and holding the position of as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to **“Widening and resurfacing of bituminous road inside the Kamarajar Port Premises on Percentage Rate Basis”** including signing and submission of all documents and providing information/responses to Deputy General Manager (Civil), KPL, Chennai, representing us in all matters, dealing with KPL in all matters in connection with our bid for the said project. We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Dated this the day of 2026.

(Signature of authorized Signatory)

.....

(Signature and Name in Block letters of Signatory)

Seal of Company

Witness

Witness 1:

Name:

Address:

Occupation:

Witness 2:

Name:

Address:

Occupation:

*Notes:

- i. *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant (s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.*

FORM 3**Firm's Audited Financial Data: Turnover of the firm**

Amounts in Rupees

Sl. No.	Particulars	Turnover in Rupees
1	FY 2024- 2025	
2	FY 2023- 2024	
3	FY 2022 - 2023	
	Average of 3 years	

Note:

- i. Bidder shall submit the copy of the Audited Balance Sheets/Profit & Loss Accounts of their firm/s for the last three- year as required in eligibility criteria **Clause 5.3 (i) of Section 1**. The copy of document should be duly certified by Chartered Account, subject to production of the originals when demanded.

DATE:

BIDDER'S SIGNATURE WITH STAMP

FORM 4**SIMILAR WORKS EXECUTED DURING LAST SEVEN (7) YEARS**

Please provide information only for the similar projects for which the Employer as a corporate entity legally contracted your firm, or where your firm participated as one of the major companies within a consortium/JV.

Contractor's Experience in similar projects only:

Sl. No	Project Name	Project Value	Contract Period		
			Date of commencement	Date of Actual completion	Date of scheduled completion
1.					
2.					
3.					
4.					
5.					
6.					
7.					

Note:

- i. Copy of the document proof for the completed works (the best illustrated above) issued by the employer/competent authority to the bidder should be enclosed as required in eligibility criteria **clause 5.3(ii) of Section 1**. The copy of document should be duly notarized, subject to production of the originals when demanded.
- ii. Separate sheet for each completed works should be attached by the bidder.

DATE:

BIDDER'S SIGNATURE WITH STAMP

FORM 5**SUMMARY OF CURRENT CONTRACT
COMMITMENTS / WORKS IN PROGRESS**

Name of Contract and client	Value of work	Value of pending work	Completion Date	
			Scheduled	Estimated

NOTE:

Bidder shall provide information on their current commitment on all contracts that have been awarded or for which a letter of intent or acceptance has been received or for contracts approaching completion but for which, full completion certificate has yet to be issued.

DATE:

BIDDER'S SIGNATURE WITH STAMP

FORM 6

LIST OF EQUIPMENTS PROPOSED FOR THE WORK

The bidder will provide adequate information to demonstrate clearly that they have the capability to meet the requirements for each and all items of equipment listed below.

List of equipment	Nos. proposed for this work	Owned	Proposed to be hired

DATE:

BIDDER'S SIGNATURE WITH STAMP

FORM 7

PERSONNEL / STAFF PROPOSED FOR THE PROJECT

(Here specify the summary of the experienced Key Personnel proposed to be employed for the work)

Sl. No	Position	Name	Qualification	Years of experience (general)	Years of experience in the proposed position

DATE:

BIDDER'S SIGNATURE WITH STAMP

FORM-8

CLAIMS / ARBITRATION

(Here briefly state the details of client /Arbitration/suits/appeals/other legal proceedings)

Sl. No	Name of the work	Value of claims	Whether award announced, if so in whose favour.

DATE:

BIDDER'S SIGNATURE WITH STAMP

FORM 9

PROPOSED SITE ORGANISATION CHART

(Here narrate Description of the Site Organisation with a Chart shall be provided)

DATE:

BIDDER'S SIGNATURE WITH STAMP

FORM 10

METHODOLOGY PROPOSED FOR EXECUTION OF WORKS

DATE:

BIDDER'S SIGNATURE WITH STAMP

KAMARAJAR PORT LIMITED

FORM -11 - NOT APPLICABLE

Bid Securing Declaration Format

FORM 12

FORMAT FOR PERFORMANCE SECURITY

(BANK GUARANTEE)

(On non-judicial stamp paper of the appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank. The executing bank shall be from a Nationalized / Scheduled Bank in India)

From:

.....
.....Name and Address of the Bank.....
.....

To:

The Deputy General Manager (Civil),
Kamarajar Port Limited,
Vallur Post,
Chennai – 600120.
Tamil Nadu

This DEED OF GUARANTEE executed atby (Name of the Bank) having its Head/Registered Office at (hereinafter referred to as “the Guarantor” which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns;

In favour of

The Board of Directors of Kamarajar Port Limited (hereinafter called “the KPL”) having its office at Vallur Post, Chennai – 600 120 which expression shall unless it is repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns;

WHEREAS, M/s(Name of Bidder/contractor, if individual)....., (hereinafter called “the Contractor” which expression shall unless it be repugnant to the subject or context of thereof include its executors, administrators, successors and assigns; has successfully bid and has been selected as Contractor in respect of the works contract “**Widening and resurfacing of bituminous road inside the Kamarajar Port Premises**”(hereinafter called to as “the Contract”) and the KPL has issued Letter of Acceptance for Award of Contract to the Successful bidder. WHEREAS the KPL has sought an unconditional and irrevocable Bank Guarantee for an

amount of Rs.....(Rupeesonly) by way of Security for execution of the Contract Agreement for the Contract within a period ofdays from the date of issue of the letter of Acceptance for Award of Contract and for guaranteeing the contract and the Guarantor has agreed to provide a Guarantee being these presents;

NOW THIS DEED WITNESSETH that in consideration of the premises, weBank hereby guarantees as follows:

The Successful bidder shall execute the Contract Agreement before(date) and shall perform the contract of **“Widening and resurfacing of bituminous road inside the Kamarajar Port Premises”** in accordance with the bid documents.

- i. We, the Guarantor, shall without demur, pay to the KPL an amount not exceeding Rs.....(Rupees.....only) within three (3) days of receipt of a written demand thereof from the KPL stating that the Successful Bidder has failed to meet its performance obligations as stated in Clause (i) above.
- ii. The above payment shall be made by us without any reference to the Successful Bidder or any other person and irrespective of whether the claim of the Company is disputed by the Successful bidder or not.
- iii. This Guarantee shall be valid and shall remain in force for a period of Twelve (12) months Plus Defect Liability Period of twelve (12) months and a period of 60 days i.e., up to and inclusive of(date).
- iv. In order to give effect to this Guarantee, the KPL shall be entitled to treat the Guarantor as the principal debtor and the obligations of the Guarantor shall not be affected by any variations in the terms and conditions of the Contract or other documents by the KPL or by the extension of time of performance granted to the Successful Bidder or any postponement for any time of the power exercisable by the KPL against the Successful Bidder or forebear or enforce any of the terms and conditions of the Contract and we shall not be relieved from our obligations under this Guarantee on account of any such variation, extension, forbearance or omission on the part of the KPL or any indulgence by the KPL to the Successful Bidder to give such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.
- v. This Guarantee shall be irrevocable and shall remain in full force and effect until all our obligations under the guarantee are duly discharged.
- vi. The Guarantor has power to issue this guarantee and the undersigned is duly authorised to execute this Guarantee pursuant to the power granted under

.....

vii. It is also hereby agreed that the courts in Chennai would have exclusive jurisdiction in respect of claims, if any, under this guarantee.

viii. 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).

d) This Guarantee is **encashable**(Name of the Branch and address to be given).

IN WITNESS WHEREOF the Guarantor has set its hands hereunto on the day, month and year first herein above written.

Date.....

.....
(Signature of Authorized person of Bank)

Place:.....

.....
(Name in Block letters)

.....
(Designation)

..... (Address).....

Bank's Seal

Authorization No.....

Witness:

1. Signature

Name & Address & Seal

2. Signature

Name & address & Seal

FORM 13

FORM OF AGREEMENT

(Subject to modifications as required by the EMPLOYER)

Contract Agreement No.....of 2026

This CONTRACT AGREEMENT is made this _____ day of _____ **2026**

BETWEEN

1. The Kamarajar Port Limited, an Autonomous Body of the Ministry of Shipping of the Government of INDIA, incorporated under the Companies Act, 1956 as Amended thereafter, under the Laws of India and having its principal place of business at Vallur (Post), Chennai-120 (hereinafter called “the Port”)

AND

2. _____ [incorporated under] the laws of [country of contractor] and having its principal place of business at [address of contractor] (hereinafter called “the (contractor)”).

Whereas the Employer invited Tenders against Tender for “**Widening and resurfacing of bituminous road inside the Kamarajar Port**” and has accepted a Tender by the Contractor in accordance with the contract schedule, in the sum of _____ [Contract Price in words and figures, expressed in the Contract currency(ies)] [hereinafter called “the Contract Price”]

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of contract referred to.
2. The following documents shall constitute the contract between the KAMARAJAR PORT LIMITED 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 clarifications, addenda is any issued [Numbers and dates];
 - (g) The contractor’s Bid and original price;
 - (h) The Employer/Board’s Notification of Award;
 - (i) [Correspondence the Employer/Board had exchanged with the bidder till and after award of contract [specific letters and dates]
 - (j) And [add any other document(s)]

AND WHEREAS

KAMARAJAR PORT LIMITED 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 witnessed 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 KAMARAJAR PORT LIMITED that 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 at 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 KAMARAJAR PORT LIMITED does hereby agree with CONTRACTOR that KAMARAJAR PORT LIMITED will pay to contractor the respective amounts for the work actually done by him and approved by EMPLOYER as per payment Terms accepted in CONTRACT and payable to CONTRACTOR under provision of Contract at such time and at such manner as provided for in the CONTRACT.

AND

In consideration of the due provision, execution and completion of WORK, CONTRACTOR does hereby agree to pay such sums as may be due to KAMARAJAR PORT LIMITED towards loss, damage to the Site area / existing pipelines and other equipment, materials etc. and such payments to be made at such time and in such manner as is provided in the CONTRACT.

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

For and on behalf of the Kamarajar Port Limited, Chennai	For and on behalf of the Contractor
Signed:	Signed:
Designation:	Designation:
In the presence of	In the presence of
Witness:	Witness:
1.	1.
2.	2.

FORM 14
DRAFT INTEGRITY PACT

(The Integrity Pact agreement shall be executed in Rs. 100/- non judicial stamp paper and shall be enclosed along with original bid security and reach Kamarajar Port Limited (KPL) corresponding address before opening Technical bid as per date and time given in the Tender.)

This pre-bid pre-contract Agreement (herein after called the Integrity Pact)
BETWEEN

Kamarajar Port Limited, represented by the **Managing Director, Kamarajar Port Limited, Chennai** hereinafter referred to as “THE PRINCIPAL” / “EMPLOYER”

AND

M/s. NAME OF CONTRACTOR represented by PROPRIETOR/AUTHORISED REPRESENTATIVE hereinafter referred to as “The BIDDER / CONTRACTOR”.

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for “**Widening and resurfacing of bituminous road inside the Kamarajar Port Premises**” The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with the Bidder/s and Contractor/s.

In order to achieve these goals, the Principal will appoint an External Independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling the PRINCIPAL/EMPLOYER to obtain the desired said stores / equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and Enabling BIDDERS / CONTRACTORS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the PRINCIPAL/EMPLOYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:-

Commitments of the PRINCIPAL/EMPLOYER

The PRINCIPAL/EMPLOYER undertakes that no official of the Principal/Employer connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER / CONTRACTOR, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

The PRINCIPAL/EMPLOYER will, during the pre-contract stage, treat all BIDDERS / CONTRACTORS alike, and will provide to all BIDDERS / CONTRACTORS the same information and will not provide any such information to any particular BIDDER / CONTRACTOR which could afford an advantage to that particular BIDDER / CONTRACTOR in comparison to other BIDDER / CONTRACTOR and could obtain an advantage in relation to the tender process or the contract execution.

All the officials of the PRINCIPAL/EMPLOYER will report to the Chairman cum Managing Director / Chief Vigilance Officer of Kamarajar Port Limited any attempted or completed breaches of the above commitments as well as any substantial, suspicion of such a breach.

If the PRINCIPAL/EMPLOYER obtains information on the conduct of any of its employees with full and verifiable facts and the same is prima facie found to be correct which is a criminal offence under the Indian Penal Code / Prevention of Corruption Act, or if there be a substantive suspicion in this regard, the Principal will inform its Chief Vigilance Officer and in addition can initiate disciplinary actions.

Commitments of the BIDDER / CONTRACTOR

The Bidder / Contractor commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the post contract stage.

- i. The Bidder / Contractor will not enter with other Bidder / Contractors 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.
- ii. The Bidder/Contractor will not commit any offence under the Indian Penal Code, 1860 /Prevention of Corruption Act, 1988 further the Bidder / Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- iii. The Bidder / Contractor will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or any other advantage, commission, fees, brokerage or inducement to any official of the Principal/Employer, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- iv. The Bidder/Contractor further undertakes that it has not given, offered or promised to give directly or indirect any bribe, gift, consideration, reward, favour, any material or immaterial benefit or any other advantage, commission, fees, brokerage or inducement to any official of the Principal/Employer or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Principal for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Principal.

- v. The Bidder / Contractor of foreign origin shall disclose the name and address of the Agents /representatives in India, if any. Similarly the Bidder/Contractor of Indian Nationality shall furnish the name and address of the foreign principals, if any.
- vi. Bidder / Contractors shall disclose the payments to be made by them to agents or any other intermediary, in connection with this bid/contract.
- vii. The Bidder / Contractor further confirms and declares to the Principal/ Employer that the Bidder / Contractor is the original manufacturer/integrator/ authorized government sponsored export entity of the stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the Principal/Employer or any of its functionaries, whether officially or unofficially to the award of the contract to the Bidder / Contractor, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- viii. The Bidder / Contractor, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the Principal/Employer or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- ix. The Bidder / Contractor will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- x. The Bidder / Contractor will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- xi. The Bidder / Contractor shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the Principal/Employer as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder /Contractor also undertake to exercise due and adequate care lest any such information is divulged.
- xii. The Bidder / Contractor commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- xiii. The Bidder / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- xiv. If the Bidder/Contractor or any employee of the Bidder/Contractor or any person acting on behalf of the Bidder/Contractor, either directly or indirectly, is a relative of any of the officers of the Principal/Employer, or alternatively, if any relative of an officer of the Principal/Employer has financial interest / stake in the Bidder / Contractor's firm, the same shall be disclosed by the Bidder / Contractor at the time of filing of tender. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act1956.
- xv. The Bidder / Contractor shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Principal/Employer.

-
- xvi. The person signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.
- xvii. In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organization may adopt any mediation rules for this purpose.

Previous Transgression

The Bidder / Contractor declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged here under or with any Public Sector Enterprises in India or any Government Department in India that could justify Bidder / Contractor's exclusion from the tender process. If the Bidder / Contractor makes incorrect statement on this subject, the Bidder / Contractor can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Sanction for Violations

Any breach of the aforesaid provisions by the Bidder / Contractor or any one employed by it or acting on its behalf (whether with or without the knowledge of the Bidder / Contractor shall entitle the Principal / Employer to take all or any one of the following actions, wherever required:-

- (i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER / CONTRACTOR, However, the proceedings with the other BIDDER / CONTRACTOR (s) would continue.
- (ii) The Earnest Money Deposit (in pre-contract stage) and / or Security Deposit / Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the PRINCIPAL/EMPLOYER and the PRINCIPAL/EMPLOYER shall not be required to assign any reason therefore.
- (iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER / CONTRACTOR.
- (iv) To recover all sums already paid by the PRINCIPAL/EMPLOYER, and in case of an Indian BIDDER / CONTRACTOR with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India , while in case of a BIDDER / CONTRACTOR from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER / CONTRACTOR from the PRINCIPAL/EMPLOYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- (v) To encash the advance bank guarantee and performance bond / warranty bond, if furnished by the BIDDER / CONTRACTOR, in order to recover the payments, already made by the PRINCIPAL/EMPLOYER, along with interest.
- (vi) To cancel all or any other Contracts with the BIDDER / CONTRACTOR. The BIDDER / CONTRACTOR shall be liable to pay compensation for any loss or damage to the PRINCIPAL/EMPLOYER resulting from such

cancellation/rescission and the PRINCIPAL/EMPLOYER shall be entitled to deduct the amounts payable from the money(s) due to the BIDDER / CONTRACTOR.

- (vii) To debar the BIDDER / CONTRACTOR from participating in future bidding processes of the Principal for a minimum period of five years, which may be further extended at the discretion of the PRINCIPAL/EMPLOYER.
- (viii) To recover all sums paid in violation of this Pact by BIDDER/CONTRACTOR(s) to any middleman or agent or broker with a view to securing the contract.(ix) In cases where irrecoverable Letters of Credit have been received in respect of any contract signed by the PRINCIPAL/EMPLOYER with the BIDDER / CONTRACTOR, the same shall not be opened.
- (x) Forfeiture of Performance Bond in case of a decision by the PRINCIPAL/EMPLOYER to forfeit the same without assigning any reason for imposing sanction for violation of this pact.
- (xi) The Bidder / Contractor accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- (xii) If the Bidder / Contractor can prove that he has restored /recouped the damage caused by him and has installed a suitable corruption prevention system, in such a case, it will be discretion of the Principal to revoke the exclusion prematurely.
- (xiii) The PRINCIPAL/EMPLOYER will be entitled to take all or any of the actions mentioned at Para (i) to (xii) above of this Pact also on the Commission by the BIDDER / CONTRACTOR or any one employed by it or acting on its behalf(whether with or without the knowledge of the BIDDER / CONTRACTOR), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of corruption Act, 1988 or any other statute enacted for prevention of corruption.
- (xiv) The decision of the PRINCIPAL / EMPLOYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER / CONTRACTOR shall be final and conclusive on the BIDDER / CONTRACTOR. However, the BIDDER /CONTRACTOR can approach the Independent Monitor (s) appointed for the purposes of this Pact.

Fall Clause

The BIDDER / CONTRACTOR undertakes that it has not supplied / is not supplying similar product / systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry / Department of the Govt. of India or PSU and if it is found at any stage that similar product / systems or subsystems was supplied by the BIDDER / CONTRACTOR to the Principal at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER / CONTRACTOR to the PRINCIPAL / EMPLOYER, if the contract has already been concluded.

Independent Monitors

The Principal/Employer has appointed two Independent External Monitors (hereinafter referred to as Monitors)

Shri.Jatinderbir Singh, IAS (Retd) House No No.1186, Sector 77, Mohali – 140 308 (Punjab)	9968607788	jatinderbir@gmail.com
Shri.MuvvulaKondala Rao, IFoS(Retd) 201, Kalakuj – B, Cooperative Society, Lane 6, Dahanukar Colony, Kothrud, Pune – 411038, Maharastra	9422161512	mkraomuvvula@gmail.com

- (a) The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- (b) The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- (c) Both the parties accept that the Monitors have the right to access all the documents relating to the project / procurement, including minutes of meetings.
- (d) As soon as the Monitor notices, or has reason to believe, a violation of this pact, he will so inform the authority designated by the Principal and the Chief Vigilance Officer of Kamarajar Port Limited.
- (e) The BIDDER / 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 BIDDER / CONTRACTOR. The BIDDER / CONTRACTOR will also grant the Monitor, upon his request and demonstration of a valid interest unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the Bidder / Contractor / Subcontractor(s) with confidentiality.
- (f) The Principal / Employer will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor, the option to participate in such meetings.
- (g) The Monitor will submit a written report to the designated Authority of Principal / Employer / Chief Vigilance Officer of Kamarajar Port Limited within 8 to 10 weeks from the date of reference or intimation to him by the Principal / Employer / Bidder / Contractor and should the occasion arise, submit proposals for correcting problematic situation.
- (h) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or to take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- (i) If the Monitor has reported to the Principal substantiated suspicion of an offence under the Indian Penal Code, 1860 / Prevention of Corruption Act, 1988 and the Principal / Employer has not, within reasonable time, taken visible action to proceed against such offence or reported to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (j) The word 'Monitor' would include both singular and plural.

Facilitation of Investigation

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

Other Provisions

Changes and supplements as well as termination notices need to be made in writing Side agreements have not been made.

Law and Place of Jurisdiction

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the PRINCIPAL / EMPLOYER.

Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

Validity

The validity of this Integrity Pact shall be from date of its signing and extend up to 5years or the complete execution of the contract to the satisfaction of both the PRINCIPAL and the Bidder / Contractor including warranty period whichever is later. In case Bidder /Contractor is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by the Kamarajar Port Limited. Should one or several provisions of this Pact turn out to be invalid, the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

Equal treatment of all Bidders / Contractors /Sub-Contractors

(a) The Bidder / Contractor undertake to demand from all sub-contractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

(b) The Principal will enter into agreements with identical conditions as this one with all Bidders / Contractors and Sub-Contractors.

(c) The Principal will disqualify from the tender process all Bidder / Contractors who do not sign this pact or violate its provisions.

The parties hereby sign this Integrity Pact at Chennai on 05.03.2024.

The Principal represented
by the CMD, Kamarajar Port Limited

BIDDER / CONTRACTOR

Name of the Officer
Designation

Name :
Designation :

Witness 1
Name & address
Witness 2

Witness 1
Name & address
Witness 2

Name & address

Name & address :

Place:
Date:

Place:
Date :

FORM 15

PROFILE OF THE BIDDER

General Information	
TYPE OF VENDOR	Person / Organisation / Group
Sub-Type of the Vendor	Person: Mr./ Ms./ MrMs./ Artificial Juridical Person Organisation: Company / Firm / Government / Local Authority Group: Association of Persons (AOP) / Body of Individuals (BoI) / Hindu Undivided Family (HUF) / Trust (AOP) / Krish (Trust Krish)
Registered Name of the Vendor	
Type of the Vendor	MSME / MSME (SC) / MSME (ST) / Others
Address of the Registered Office or Head Office	
Mailing Address of the Vendor	
PAN	
GSTN Number	
Phone Number (with STD code)	
Fax Number	
E-mail ID	
Type of Entity	
Date of Establishment	
Name of the Chief Executive	--
Name of Authorized Signatory	
Phone No. and Email ID of the Authorized Signatory	
Name of Contact Person	
Phone No. and Email ID of the Contact Person	
Other details, if necessary	
RTGS / NEFT Details	
Name of the Bank	
Bank (Branch) Postal Address	
Bank Account Number	
Nature of the Account	
RTGS* - Code of the Branch	
NEFT** - Code of the Branch	
MICR Code	

RTGS* - Real Time Gross Settlement", NEFT** - *National Electronic Fund Transfer". These "IFSC" Codes are unique numbers of each Branch - "Indian Financial Service Code". For some Branches both the codes are the same and some Banks, may maintain one Code No. for RTGS and another Code No. for NEFT. Hence, please fill -up both the rows, even if it is the same.

Name and Designation of Signatory:
Name of Firm:
Address:

Seal & Signature of Authorized Person

LETTER OF ACCEPTANCE
(On letter head paper of the port)

_____ (date)

To:

(Name and address of the contractor)

Dear Sirs,

Sub: Tender for “**Widening and resurfacing of bituminous road inside the Kamarajar Port Premises**” – Reg.

Ref : Your bid dated _____ and (list of correspondence with the bidder)

This is to notify you that your Bid dated _____ for execution of the work of “**Widening and resurfacing of bituminous road inside the Kamarajar Port Premises**” for the contract price of Rupees _____ (amount in words and figures as corrected and modified in accordance with the Tender document is hereby accepted by the Employer/Board).

You are here by 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 21 days from the date of completion of all contractual obligations expiry of taking over certificate 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,

Deputy General Manager (C)
Kamarajar Port Limited,

Chennai

SPECIMEN LETTER OF AUTHORITY FROM BANK FOR ALL BGs

(To be executed on Bank's Letter Head)

Date:

To,

Deputy General Manager (Civil)
Kamarajar Port Limited
Chennai

Dear Sir,

Sub: Our Bank Guarantee No. _____ dated _____ for Rs. _____
favouring yourselves issued on a/c of M/s. (Name of the 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

SECTION 7
DRAWINGS

KAMARAJAR PORT LIMITED

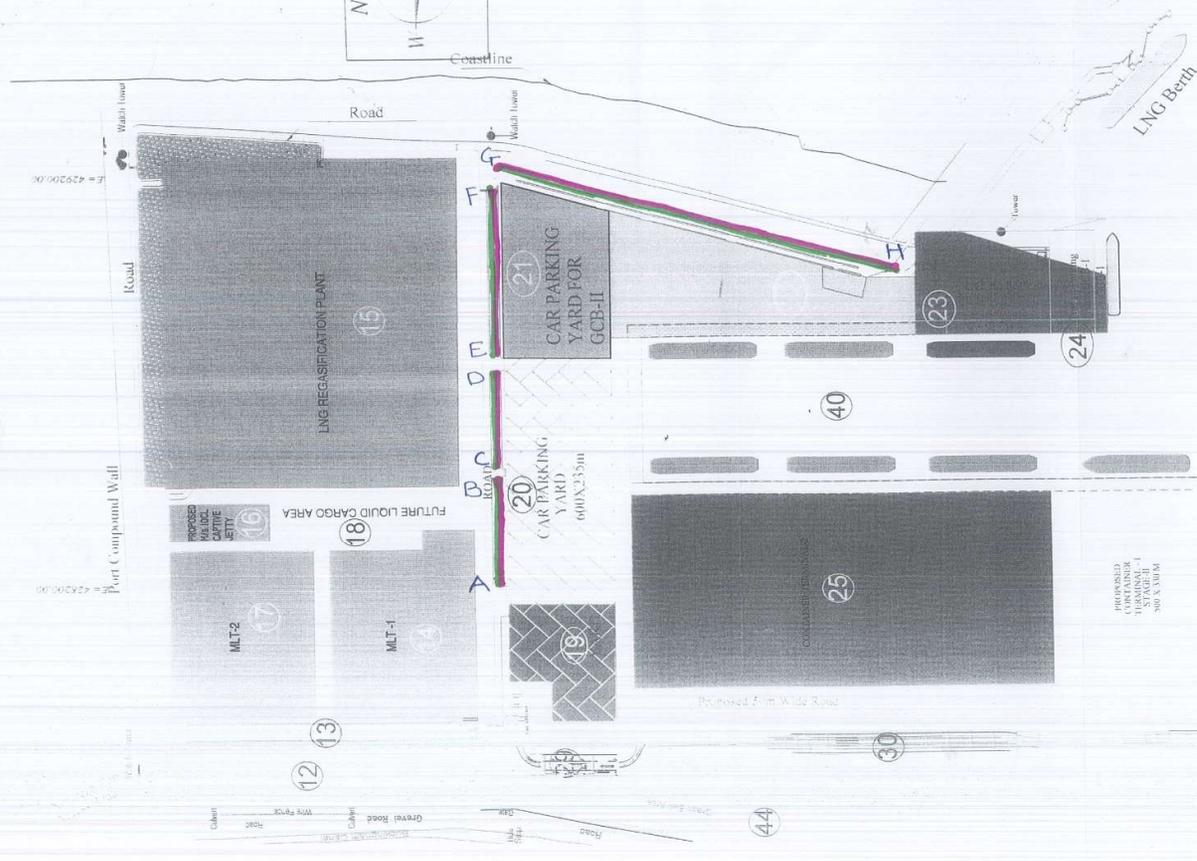
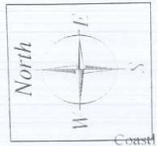
(A Company of Chennai Port Authority)

**Name of Work – “Widening and resurfacing of bituminous road inside the
Kamarajar Port Premises”**

LIST OF DRAWINGS

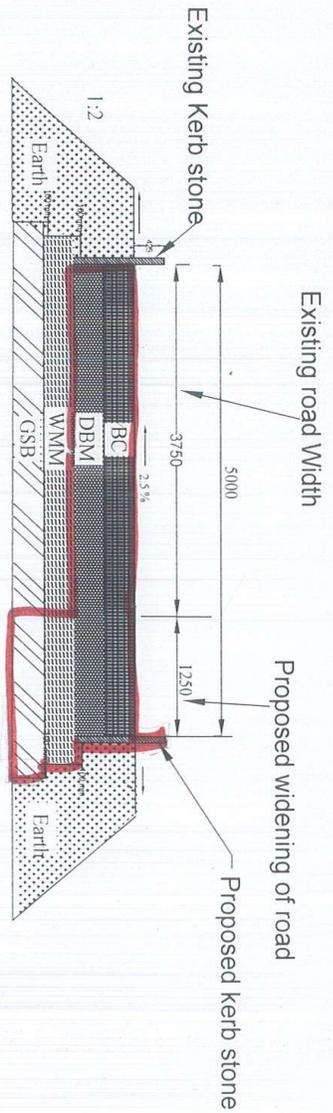
S.No	Drawing No.	Description of Drawing
1	2026025107/01	Location drawing
2	2026025107/02	Road Cross- section and proposed widening

Note: “Good for Construction” and Supplementary drawings will be issued during the execution time by KPL



AB = 274m
 CD = 241m
 EF = 355m
 GH = 931m
 Total = 1801m

= Existing Bituminous Road
 = Proposed road widening.



TYPICAL C/S OF WIDENING OF DEDICATED ROAD

LAYERS

1. BITUMINOUS CONCRETE (BC) - 25MM
2. DENSE BITUMINOUS MACADAM (DBM) - 50MM
3. WET MIX MACADAM (WMM) - 250MM
4. GRANULAR SUB BASE (GSB) - 200MM
5. EARTH
6. KERB STONE

NOTES

1. All Dimensions are in mm.



PROJECT :	WIDENING OF CAR DEDICATED ROAD FROM ADDITIONAL CAR PARKING YARD TO GCB - II		
TITLE :	CROSS SECTION OF DEDICATED ROAD		
DWG NO. :	KPL/OP/B/95-07/2025-26	SCALE :	Npt to Scale
DM (C) :	<i>[Signature]</i> Sr. Mgr (C/ES)	DGM (C) :	<i>[Signature]</i> Sr. Mgr (C/ES)
DATE :	28-11-2025	DATE :	28-11-2025