



**DREDGING CORPORATION OF INDIA LIMITED
DREDGE HOUSE, HB COLONY MAIN ROAD
SEETHAMMADHARA,
VISAKHAPATNAM - 530 022**

Email: hodops@dcil.co.in, Web: www.dredge-india.com

**Tender Ref no.
DCI/HO/OPS/IDCO-Dredging & Reclamation/Paradip
Dt. 01-04-2026**

**TENDER FOR
“DREDGING & RECLAMATION WORK
FOR ESTABLISHMENT OF AN INDUSTRIAL ESTATE
AT PARADIP, ODISHA, INDIA”.**

**GENERAL MANAGER (OPS) I/C
DREDGE HOUSE,
DREDGING CORPORATION OF INDIA LIMITED**

April 2026

**DREDGING CORPORATION OF INDIA LIMITED
VISAKHAPATNAM**

NOTICE INVITING e-GLOBAL TENDER (NIT)

Ref: DCI/HO/OPS/IDCO-Dredging & Reclamation/Paradip/2026

Dtd:01-04-2026

Global e-TENDER

NAME OF WORK: Dredging & Reclamation Work for Establishment of an Industrial Estate at Paradip, Odisha, India.

Due Dates & Information:

| | | | |
|-----|---|---|--|
| 1. | Name of Work | : | Dredging & Reclamation work for establishment of an Industrial Estate at Paradip, Odisha, India. |
| 2. | Type of Bid | : | Open / e-Global |
| 3. | Period of Contract | : | 11 months from the date of placing of LoA |
| 4. | Availability of Bids for downloading. | : | 01-04-2026 to 28-04-2026 at 1500 hrs. (4 weeks/28 days) |
| 5. | Last date for receipt of pre-bid queries by DCI from bidders. | : | 13-04-2026 upto 1500 Hrs |
| 6. | Pre-bid meeting scheduled on | : | 15-04-2026 at 1100 Hrs at through VC link https://dcil21.webex.com/meet/dotsectt . Parties may also send their authorized representatives to DCI Head Office at the address given in the tender document. |
| 7. | Last date & time for online submission of bids | : | 28-04-2026 upto 1500 Hrs |
| 8. | Validity of offer | : | 180 days from the date of opening of Tender |
| 9. | Date, time and place of opening of Techno-commercial bids | : | 28-04-2026 at 1530 Hrs in CPP portal |
| 10. | Earnest Money Deposit (EMD) | : | Rs.1,00,00,000/- (Rupees one Crores only) The above EMD shall be paid through e-payment/ Bank Guarantee as per the format given in Annexure -III under Section VIII. Bank details for e-payment are as per details given below: Bank Name: CANARA BANK DCI Current account No. 35833070000014 Branch Name: DCILTD, H B Colony Main Road, Seethammadhara, Visakhapatnam – 530022. IFSC/ RTGS No: CNRB0013583. (e-receipt to be uploaded along with technical bid). Remittance of Tender document cost & EMD by NEFT/RTGS to DCI account shall be confirmed with treasury@dcil.co.in and |

| | | |
|-----|---------------------------------|---|
| | | <p>confirmation email shall be submitted along with the bid.</p> <p>In case of BG submission, the scanned copy of the BG shall be uploaded along with the Technical Bid.</p> <p>The original (hard copy) BG issued by any Nationalized/Scheduled Banks by GoI, payable at Visakhapatnam, shall reach DCI (DCI Head office) within 7 days of the from the opening date of Techno-Commercial (unpriced) bids, failing which, bid will not be accepted. DCI will not be liable to pay interest on Earnest Money Deposit, under any circumstance, what so ever.</p> |
| 11. | Cost of Tender Documents | <p>Rs. 8,850/- (Rupees Eight Thousand Eight Hundred and Fifty only) Including 18% GST (Non-refundable) by way of NEFT/RTGS to DCI Current Account and the payment receipt in the form of e-challan copy to be uploaded along with technical Bid, failing which, bid will not be accepted.</p> |
| 12. | Condition | <p>Integrity pact Agreement & Bid Security / EMD and copies / receipt of tender fees shall be submitted in electronic format through on line (by scanning) while uploading the Cover-I (preliminary bid) of the bid. If not, their bid will not be considered for evaluation.</p> <p>Integrity Pact Agreement need to be submitted online during Preliminary bid stage (Cover-I) duly scanned, stamped, signed and dated along with two witness name, address and signatures (to be furnished by the bidder) as per format available in tender document during preliminary bid stage (Cover-I) failing which bid submitted by the bidder will be considered non-responsive.</p> |

Detailed notice inviting tender along with complete tender documents can be downloaded from website CPP Portal (Eprocure.gov.in) and from <http://dredge-india.com> from 01-04-2026 to 28-04-2026 @ 15:00 hrs. Tender Notice is also available on IDCO (Industrial Development Corporation, Govt. of Odisha) and Indian Oil Corporation Ltd (IOCL) Tender websites. Technical Bids will be opened on 28-04-2026 @ 15:30 hrs. Date of opening of price bid shall be notified after scrutiny & evaluation of Technical Bid. For further details and general enquiries prospective bidders may contact to the address given below, (Email: hodops@dcil.co.in). Contact No.0891-2871344/ 397 during working hours before the last date and time of downloading of tender documents.

General Manager (OPS) I/c
Dredging Corporation of India Ltd.,
Dredge House, H B Colony Main Road
Seethammadhara, Visakhapatnam – 530 022
Andhra Pradesh (INDIA)
Ph No. 0(+)91-891- 2871-344/397,****
E-mail ID: hodops@dcil.co.in

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SECTION – I
NOTICE INVITING e -TENDER (NIT)

Ref: DCI/HO/OPS/IDCO-Dredging &Reclamation /Paradip/2026

Dtd. 01-04-2026

1.0 INTRODUCTION

Odisha Industrial Infrastructure Development Corporation (IDCO) is setting up an Industrial Estate near the Village of Pratappur at Paradip in Odisha on a land Parcel of 780 Acres acquired for the purpose. The proposed Dredging and Reclamation of the 685 Acres of land at 780 Acres Plot for subject work is a low-lying area and is located in the village Pratappur, near Paradip, Orissa state. It is proposed to raise the level of the reclamation ground by filling the dredged material. .

IDCO awarded the work to M/s. Dredging Corporation of India Limited (DCI) for carrying out the dredging and reclamation works.

Dredging Corporation of India Limited is inviting the Global e-Tender for finalization of the competent dredging agency for executing the dredging and reclamation project and perform the duties as “Sub-contractor” to DCI, for IDCO .

DCI, is a premier dredging company in India providing maintenance and capital dredging services, Land Reclamation and allied marine services to Major ports and other maritime organizations of India since 1976. DCI helps to ensure continuous availability of the desired depths in the shipping channels of the major and minor Ports, Indian Navy, Fishing Harbours and other maritime organizations and also helps in creating new ports. DCI’s Head Office is strategically situated on the east coast of India at Visakhapatnam and Regional/Project office at various locations in India.

DCI has taken up Dredging and Reclamation work, and intends to engage a suitable Dredging Agency with suitable dredgers of required capacity and ancillary equipment’s to transport the dredged material upto a distance of about 10 kms from the borrow areas and to complete the Dredging and reclamation work within the stipulated period by complying with all relevant statutory approvals.

In this connection DCI is inviting Electronic online Global tenders (e-tenders) in the prescribed proforma through e-Procurement/Central Public Procurement (CPP) portal, in Single Stage Two Cover bidding procedure [Techno Commercial Bid and Financial Bid] (a composite tender), from experienced, resourceful and bonafide dredging firms with proven technical and financial capabilities.

2.0 BRIEF SCOPE OF WORK

- 2.1 The scope of work envisaged under this bid is mobilization of suitable capacity and Number of dredger(s) and other marine support equipment/crafts & facilities, suitable length and dia of discharge/return water pipelines and booster systems, for transport of dredge spoils to the reclamation site, design and implementation of the backwash and drainage system from the reclamation site, environmental monitoring as per EC, Forest, Wildlife, CRZ etc. approvals and other statutory approvals and organize all other logistics required to carry out the dredging and reclamation work and along with the environmental monitoring programme at dredging, pipeline approaches and reclamation site including compaction as indicated below:

2.1.1 The broad nature of work is:

i. Dredging

Dredging in the identified Borrow Areas upto the maximum specified depth(s) below Chart Datum and transporting the dredged material by means of pipelines and required booster pumps to the proposed site of the Industrial Estate about 10 KM from the area of dredging site/borrow areas. The volume of dredging for the reclamation quantum of approx. 10 Million CuM. shall be transported from the identified Borrow Areas. The type of dredged material is expected to be fine silty Sand with pockets of silty Clay to Clayey Silt as per the available Soil Investigation Data which is enclosed at Document -2 under Section X. In this regard Bidders shall ensure the Soil data /soil parameters by conducting their own confirmatory tests without any additional time and cost implication on DCI. And any variation in this regard, DCI will not be responsible and it is the sub-contractor's responsibility to account for it.

ii. Reclamation

The dredged material from the borrow areas is to be transported to the site of the Industrial Estate with a total reclamation area of approx. 685 acres as shown in **Drawings at DWG 2A & DWG 2B under Section IX** by suitable means of pipelines and booster systems and other ancillary systems. Suitable bunds for retaining the dredged material and settling of solids, arrangements for backwash management and drainage of water, compaction of fill material to the required level of fill level by meeting the required compacting parameters, environmental monitoring etc. as per statutory approvals and shall be monitored. The filling is to be carried out to the required levels and suitable methods of compaction contained within bunds with specified slopes and slope protection measures as per Design and as per the Tender Document.

iii. Pipelines for transporting and Backwash/ return water

Suitable number of pipelines and diameter may be adopted by the sub-contractor as per the selection of suitable capacity of the dredge equipment's to meet the tender requirements and timelines. The tentative pipelines drawings are shown at **DWG-2B, DWG-4 under Section IX**

iv. Environmental Regulations:

The dredging and reclamation works are to be carried out as per Environment Clearance (EC), Forest, Wildlife, Coastal Regulation Zone (CRZ) and other statutory approvals from Ministry of Environment, Forests and Climate change (MoEF &CC), GOI and Odisha State governing rules. Guidelines as per the EC, Forest, Wildlife, CRZ and (Environmental Impact Assessment)EIA Reports, which have been provided in the Tender Document, and covers in brief as below.

- a. Identified Areas for dredging and the specified depths upto which dredging is allowed.
- b. Identified pipeline corridor for the reclamation pipeline to the site of reclamation.
- c. Backwash management and identified drainage areas
- d. Entry and exit routes to the dredging Areas/ pumping areas.
- e. Standard HSE aspects that are to be followed during execution of the Works.

The Bidder has to prepare and submit the detailed Environmental Management Plan (EMP) to ensure effective monitoring including mitigating measures before commencement works and shall get approved from DCI for executing the works. The details are given **DPR under DOC -1 of Section X**

3.0 ELIGIBILITY CRITERIA FOR SUBMISSION OF BIDS:

The agencies who intend to participate shall meet the following qualifying requirements and shall submit substantiating documents in support of their claim, along with their bid.

3.1 Bidders should satisfy the following conditions

3.2 Pre-qualification criteria – Technical

3.2.1 The Bidder should have successfully executed/completed “**similar works**” during the preceding 7 (Seven) years, ending last day of the month previous to the month in which the last date of bid submission falls (in case of extended Bid Submission date, original Bid Submission date shall be considered), as follows:

- (i) Three similar completed works, with each completed work of reclamation having quantity of not less than 4.0 Million Cubic Meter or value of work not less than the amount equal to **INR 458 Crores** each (Rupees Four hundred and Fifty Eight crores each).

OR

- (ii) Two similar completed works, with each completed work of reclamation having quantity of not less than 5.0 Million Cubic Meter or value of work not less than the amount equal to **INR 573 Crores** each (Rupees Five Hundred and Seventy Two crores and Fifty Lakhs each).

OR

- (iii) One similar completed work, with the completed work of reclamation having the quantity of not less than 8.0 Million Cubic Meter or value of work not less than the amount equal to **INR 916 Crores** (Rupees Nine Hundred and Sixteen crores).

Date of completion should fall within the qualifying period as mentioned above.

3.2.2 The above completed values of the Contracts shall be **exclusive of GST/Service Tax** or Taxes as applicable in the country of execution.

Note:

- i. If the value of the work is in a currency other than specified in the above PQ Criteria, the exchange rate on the date of completion of the work shall be considered. Bidder shall submit the exchange rate(s) published by Reserve Bank of India (RBI), along with their bid, as applicable.*
- ii. For arriving at cost of similar work, the value of work executed shall be brought to current costing level by enhancing the actual value of work at simple rate of seven percent per annum, calculated from the date of completion to the date of Bid opening.*

3.3 Pre-qualification criteria — Equipment:

3.3.2 The Bidder shall by Absolute Ownership/Disponent Ownership/Charter/Lease whose un-expired terms remain valid and effective until completion of the Work from the date of submission of the Bid possess the following equipment for deployment at site for meeting the timelines of the Project (including any extension(s) thereof):

- i. Two Cutter Suction Dredgers (CSD) with suitable cutter power and corresponding capacity of dredge pumps, fitted with necessary arrangements, capable of pumping the dredged material, through pipelines, to a distance of about 10 Kms to the reclamation site, with/ without booster pump(s), along with Ancillary Craft(s),
- ii. One Trailer Suction Hopper Dredger (TSHD) with Hopper Capacity not less than 15,000 cum, capable of pumping the dredged material, through pipelines, to a distance of about 10 Kms to the reclamation site, with/ without booster pump(s).
- iii. Bidder can propose the equipment comprising a combination of CSDs & TSHD(s) subject to a maximum of 03 dredgers at any given time during the contract period) complying with CRZ approval requirements in respect of pipelines. The bidder shall also submit a detailed methodology substantiating the selection of equipment, demonstrating its adequacy to complete the work within the stipulated contractual timelines. However, hopper capacity of the offered TSHD shall not be less than 15000 CuM.

Note:

- (i). CRZ approval obtained for pumping the dredged material from dredging/ borrow areas to reclamation site (approx. 10 kms away) through max. of 03 nos. pipelines (i.e., 03 designated take-off points ashore) and max. of 02 nos. of back-wash water pipelines from reclamation site to sea. The originally approved pipeline route has been modified, and revised Coastal Regulation Zone (CRZ) approval is currently in process. Bidders are

instructed to base their estimates on the modified pipeline route proposed for revision. A draft of the revised pipeline route is enclosed with this tender for reference.

- (ii). Equipment proposed at sl.no. i&ii are based on the Estimation worked out for completion of work within the timelines.

3.3.3 In case the dredging firm does not own the dredger(s)/craft(s) and plans to execute the dredging work by other modes of arranging the dredger by wet leasing, hiring etc., bidder shall enter into an "Irrevocable Agreement" on Rs. 200/- stamp paper (non-judicial) with the Employer firm to substantiate that the equipment so chartered /hired will be placed at the disposal of the bidder and shall not be withdrawn till completion of the work if they secure the contract. If the equipment is planned to be hired/ chartered from Parent organization/Group company of bidder, "Irrevocable Letter of Authority" (in form of legal binding) to be issued on the Employer's/Parent's letter head to effect the above stating that the equipment shall not be withdrawn till the satisfactory completion of the project. If the Irrevocable Agreement / Irrevocable Letter of Authority is signed by a person other than the Employer/Proprietor (as specified in Registration Certificate of equipment), Power of Attorney/Authorization for signing the above documents shall be issued in his favour by the Authorized signatory and same shall also be furnished. All the above documents shall be duly notarized and submitted in Original to DCI along with Original Integrity Pact within 7 (Seven) days after the Techno-commercial Bid opening. Scanned copy of the Irrevocable Agreement/Irrevocable Letter of Authority shall be submitted along with the Bid.

However, DCI shall not entertain any consequential third-party claims whatsoever on account of the above Irrevocable Agreement / Irrevocable Letter of Authority between the bidder and the charterer.

3.3.4 In case the dredging firm (bidder) does not own the dredger(s)/craft(s) for execution of the Dredging and Reclamation Works (even if the owner of dredger(s) /craft(s) is parent/ group company of bidder), the bidder shall deposit an additional Performance Security of 5% in addition to the Performance Security indicated in the Tender Documents which will be returned without interest after satisfactory completion of dredging and reclamation works, in case the firm gets the contract.

3.3.5 Bidder to submit the Certificate of Registry, Certificate of Class issued by Govt. approved authority/IACS towards the Dredging equipment(s) and valid insurance for verification of equipment(s).

3.3.6 All original documents executed by a foreign firm/ bidder, such as Powers of Attorney or Irrevocable Agreements, Irrevocable Letters of Authority, etc., must be duly **apostilled** under the Hague Convention and for documents originating in non-Hague member countries, **legalization by the jurisdictional Indian Consulate** is mandatory, in order to ensure their legal enforceability and validity within India. Documents in a language other than English must be accompanied by a notarized/certified English translation.

3.4 Similar Nature of Work

“**Similar Works**” in Clause No. 3.2 above shall mean Works wherein the Bidder has carried out the Reclamation works for development of Land at Islands, On-Shore, Off-shore or any land body etc through dredging at Port/Harbour/River/Channel/Sea shore/any water body and further.

Note: Dry excavation and Dry land filling works shall not be considered as similar work.

3.5 Financial Experience Criteria

3.5.1 The Annual Turnover of the Bidder shall be equal to or more than **INR 344 Crs (Rupees Three Hundred and Forty Four Crores) or equivalent USD** during at least one of the last three preceding Financial Years i.e. 2022-23, 2023-24 and 2024-25 in case of Indian Bidders or bidders following the Financial Year calendar from April to March or Financial Years of 2023, 2024 and 2025 in case of Foreign Bidders/Bidders following the Financial Year Calendar from January to December.

Further, in case annual turnover indicated in foreign currencies, the same shall be converted to INR at the exchange rate indicated in the annual report and if not indicated, exchange rate to INR as on the date of completion of the respective financial year shall be considered. Bidder shall submit the authenticated exchange rate(s) obtained from bank, along with their bid, as applicable.

For fulfilling the Annual Turn Over criteria an audited Balance Sheet and Profit & Loss account of the Bidder shall be considered as acceptable proof.

3.5.2 With regard to participation of Indian tenderer(s), the Indian firm /companies owning Indian flag dredgers shall have right of first refusal before the contract is given to any foreign company only if the bid of the Indian company is within 20% of the lowest technically qualified and they shall have to undertake the work by entering into a contract exactly similar to the contract which would have been entered into with the lowest tenderer i.e. the contract shall be on a commercial format. If more than one Indian company/ firms owning Indian Flag Dredgers participate in the tender, the right of first refusal will go to that Indian company which has quoted the lowest and is within 20% of the lowest technically qualified offer subject to obtaining security clearance. If an Indian flag vessel is not available, then “Indian controlled ships” shall be accorded higher priority in the Right of First refusal than Non-Indian Flag Vessels. (Note: DGS Circular no. 2 of 2021 dated 14.01.2021 shall be applicable for exercise of right of first refusal-grant of license to foreign flag vessel. In this regard, guideline issued by DG Shipping issued from time to time shall be applicable.)

If a Bidder, an Indian subsidiary / company of a foreign company, is qualifying for bidding based on the qualifications of its Parent Firm, the bidder will not be eligible for the right of first refusal

under this clause even if all the dredgers belong to the bidder are Indian Flag / Indian Controlled ships.

In case the lowest tender is from an Indian company, the contract will be awarded to the Indian company.

Indian Tenderer means Indian Citizen/ Indian domestic Company /Society either having Indian flag vessel(s) or proposing in the tender for converting foreign flag vessels to Indian flag vessels before commencing the work. An Indian dredging company shall be a company registered under the Companies Act 1956 or Companies Act 2013 engaged in dredging work and having dredgers under Indian flag or vessels registered as Indian controlled tonnage ships in accordance with DGS order No.10 of 2014.

Where the Contract is awarded to an Indian tenderer pursuant to the exercise of the Right of First Refusal, and such tenderer shall not be allowed to execute or attempt to execute the Work by deploying a foreign-flagged dredger at the Site.

3.5.3 DCI does 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 thereof.

3.6 Documentation

- a) The bidder in his own interest, shall furnish complete documentary evidence, to justify that the bidder meets the Pre-Qualification Criteria as given above.
- b) Notwithstanding any other condition/provision in the Tender Documents, bidders are required to submit complete documents pertaining to the PQC along with their offer. Failure to meet the PQC will render the Bid liable for summary rejection. DCI reserves the right to complete the evaluation based on the details furnished by the Bidder, with or without seeking any additional supporting documents/clarifications.
- c) The Bidder shall furnish documentary proof in form of the copy of work order(s)/ contract agreement(s)/ relevant pages of contract document(s) mentioning the value and the scope of work, completion certificate(s) by Previous Employer indicating executed value, quantities and certificate(s) of completion of works from Previous Employer, fulfilling the qualification criteria.
- d) Executed value mentioned in the completion certificate should be exclusive of GST/Service Tax/Taxes as applicable in the executing country. In case the value of job submitted by the bidder does not have clarity with regard to inclusion/ exclusion of GST/Service Tax/Taxes, the amount appearing in the certificate shall be considered exclusive of GST/Service Tax/Taxes and shall be evaluated accordingly.

- e) If the Bidder has executed the work for a private organization, the bidder has to submit TDS (Tax Deduction Certificate) against the executed work.
- f) A job executed by a bidder for its own project/work can't be considered as experience for the purpose of meeting requirement of PQC of the Tender document. However, jobs executed for Subsidiary/ Fellow subsidiary / Holding company will be considered as experience for the purpose of meeting PQC subject to submission of tax paid invoice(s) duly certified by Statutory Auditor of the bidder towards payments of statutory tax in support of the job executed for Subsidiary/ Fellow subsidiary / Holding company. Such bidders to submit these documents in addition to the documents specified under various Clauses of PQC.
- g) For fulfilling the Financial Criteria, annual audited financial statements (Balance Sheet, Profit and Loss Account, Auditor Report and all other Schedules / notes to Balance sheet and Profit & Loss Account) of the bidder shall be considered as acceptable proof.
- h) Similarly, for Foreign Bidder, Order Value(s), in multiple currencies shall be converted at the exchange rate as on date of award of such proposed qualifying work(s). Notwithstanding anything stated herein, DCI reserves the right to assess Bidders capability and capacity.
- i) Download of Bidding Document and/or submission of bids by itself shall not amount to qualification of the Bidder or their bid submitted on singly or in Joint Venture/Consortium. DCI will not be responsible for any costs or expenses incurred by the agency in connection with preparation or delivery of Bidding Document including costs and expenses incurred by the bidder during bidding
- j) Telefax/ E-mail bids shall not be accepted.
- k) DCI reserves the right to accept/ reject any tender in part or full, without assigning any reason whatsoever.
- l) Canvassing in any form, by the agency himself or by any other agency on their behalf may lead to disqualification of their bid.
- m) The submission of authentic documents is the prime responsibility of the Bidder. Wherever, DCI has concern/apprehension regarding the authenticity/correctness of a document, DCI reserves the right to get the documents verified from the Issuing Authorities/any relevant source. If documents (part or full) are found forged, such bids will be summarily rejected, EMD shall be forfeited, orders (if any) placed against subject tender shall be terminated and bidder may be debarred from the future tenders. For the purpose of verification, Bidders shall submit the complete Client details with names, addresses, phone nos., e-mails etc.

3.7 Other Requirements:

- 3.7.1 Bank Solvency Certificate issued by the banker in favour of the bidder shall be, for a value of Rs 458 Crores or equivalent USD at the time of submission of bid.
- 3.7.2 Bids of those Bidders who are blacklisted or are on Holiday List or the Negative List of DCI /Ministry/any Govt. organization/enterprise/agency at the time of submission of Bids shall not be considered for evaluation.
- 3.7.3 The tenders shall be accompanied by EMD as specified in the table above. The tender will not be considered without EMD. EMD payment shall be made by the bidders as per the Tender document.
- 3.7.4 Bidders shall have Indian ESI registration directly in their own name and submit copy of the same registration certificate along with the Bid.
- 3.7.5 If ESI registration is not available during bidding as mentioned above, necessary undertaking shall be given by the Bidder as per the tender provisions that once the job is awarded, the successful bidder shall arrange for the ESI registration as per the statutory requirements.
- 3.7.6 All bidders shall be required to submit the Power of Attorney (PoA) in the name of the Authorized Signatory who is submitting the Bid in pursuant with Clause 18.3 (ix) of ITB..
- 3.7.7 Copy of PAN Card
- 3.7.8 Certificate of Incorporation of the bidder.
- 3.7.9 PF (PROVIDENT FUND) Registration

Bidders shall have Indian PF Registration in their own name and shall submit Copy of the PF Registration Certificate along with the Bid.

In case of Foreign bidders who do not have PF registration number during Bidding and they happen to become successful Bidder, they shall arrange for PF Registration within 30 days of award of job.

If PF registration of foreign bidders is not available during bidding as mentioned above, necessary undertaking shall be given by the Bidder as per the tender provisions that once the job is awarded, the successful bidder shall arrange for the PF registration as per the statutory requirements.

4. EARNEST MONEY DEPOSIT (EMD)

- i. The Earnest Money Deposit / Bid Security shall be in any of the following forms at the Bidder's

discretion:

a) An unconditional Bank Guarantee in favour of “Dredging Corporation of India Ltd. (As per the Format in **Annexure III attached under Section VIII** with the Bid Document), issued by a Bank.

b) **Online through RTGS/ NEFT**

Bank Name: CANARA BANK

DCI Current account No. 35833070000014

Branch Name: DCILTD, H B Colony Main Road, Seethammadhara, Visakhapatnam – 530022.

IFSC/ RTGS No: CNRB0013583.

(e-receipt to be uploaded along with technical bid).

Remittance of Tender document cost & EMD by NEFT/RTGS to DCI account shall be confirmed with treasury@dcil.co.in and confirmation email shall be submitted along with the bid.

c) In case of **Foreign Bidders, Swift Transfer (ST)** shall also be accepted.

ii. Bids not accompanied with EMD shall be summarily rejected.

iii. The Bank Guarantee/ Insurance Surety Bond for EMD shall be valid for 60 days **beyond the bid validity**. DCI shall not pay interest on Earnest Money Deposit, under any circumstances, whatsoever.

iv. **Scanned copy of EMD Instrument (i.e. B.G/NEFT/RTGS/ST/Insurance surety Bond) must be uploaded along with offer. The original of BG/ NEFT/RTGS/ST/Insurance surety Bond should reach the office of Tender Issuing Authority in sealed envelope super-scribing tender name, tender number, date of opening and bidder’s name, within 7 (seven) days after opening date of Techno-Commercial (unpriced) bids.**

v. EMD shall be released to the bidders in the following circumstances:

a) EMD of bidders whose price bids are not opened/ disqualified during techno- commercial bid evaluation (unsuccessful Bidder) shall be released by DCI after approval of Price-Bid Opening.

b) EMD of bidders qualified in the techno-commercial bid but unsuccessful for placement of Purchase Order shall be released after final approval of the placement of Purchase Order by the competent authority.

- vi. EMD of the successful bidder shall be released by DCI on receipt of requisite **Performance Security and after execution of Contract Agreement.**
- vii. Notwithstanding anything contained herein, the EMD will be forfeited in any of the following cases:
 - a. If a Bidder withdraws his Bid during the “Period of Bid validity” and/or
 - b. If a Bidder has indulged in corrupt/ fraudulent /collusive/ coercive practice and/or
 - c. Violates any other condition, mentioned elsewhere in the Bid Document, which may lead to forfeiture of EMD and/or in the case of a successful Bidder, if the Bidder fails:
 - (i) to acknowledge receipt of the “Work order” or “Letter of Acceptance [LOA]” and/or
 - (ii) to furnish “**Performance Security” and after execution of Contract Agreement**

5. GENERAL

Bidder to note and comply the following before bidding:

- (1) Offers from following types of bidders will not be accepted
 - a) Who are in the Holiday/ Suspension /Banning List / Negative list of **DCI or its Administrative Ministry, MoPSW, MoP & NG, IDCO or the Govt. of Odisha** on the original due date of submission of bid/ during the process of evaluation of the bids.
 - b) Bidders who are under liquidation, court receivership or similar proceedings. In this connection, Bidder shall submit an Affidavit stating that they are not under liquidation, court receivership or similar proceedings.
 - c) DCI or their subsidiary Company or companies under the management of DCI for execution of the same project for which they are working as Employer, with the exception of participation as TPIA for the same job.
 - d) Bidder(s) who are undergoing insolvency resolution process or liquidation or bankruptcy proceeding under Insolvency and Bankruptcy Code, 2016 (Code).
 - e) Bidder(s) whose insolvency resolution process or liquidation or bankruptcy proceeding is initiated under the above Code at any stage of evaluation of the bid.
- (2) The subject tender is an e-tender & can be downloaded through CPP Portal and also available at www.dredge-india.com. The tender document will not be issued in person or sent by post. Mere obtaining tender document through CPP Portal website shall, however, not be construed that the bidder/agency is considered qualified.
- (3) Bidders are mandated to get enrolled on CPP Portal and enroll their Digital Signature Certificate (DSC).

- (4) Bidders are advised to read the instructions for participating in the e-tendering from the website www.dredge-india.com The Help Documentation placed at Home Page provides necessary guidance to bidders for using the e-Tendering site. A user ID will be issued to each prospective bidder by e-Procurement administrator for participation in e-tendering. Special Instruction to Bidder for e tendering procedure is enclosed as part of tender document.
- (5) Bidder shall download the Bidding Document in his own name and submit the bid directly. The Bidding Document is non-transferable. Bids submitted by Bidder/s who have not downloaded the bidding document either directly or through their authorized person will be rejected. Please note that the person having Power of Attorney to do bidding process on behalf of the bidder shall only submit/upload the bid document using their own DSC.
- (6) As far as possible Bidders are requested to be get clarified all the queries related to tender before the bid opening and ensure compliance of all provisions of the bidding document.
- (7) The bidder is expected prior to the submission of its/his/their bid, as a prudent and experienced Sub-contractor to make its/his/their own assessment of all the requirements of the work and of the accuracy, correctness and completeness of any estimate, data, or information furnished by DCI in the Tender Documents and of the availability, suitability, propriety, adequacy and/or soundness of any suggestion made by DCI in the Tender Documents as hereinabove referred to.
- (8) All documents furnished by the bidder in support of meeting the Bidder's Pre-Qualification Criteria (PQC) shall be self-certified.

All documents submitted by the bidder towards meeting PQC shall be furnished in a separate booklet titled as "Documentation against Bidder Pre-Qualification Criteria" with proper indexing.

- (9) Submission of authentic documents is the prime responsibility of the bidder. Wherever DCI has concern or apprehension regarding the authenticity/ correctness of any document, DCI reserves the right to get the documents verified from issuing authority/any relevant source. If documents (part or full) are found forged, such offers will be summarily rejected, EMD will be forfeited, orders if any placed against subject tender will be terminated and may be debarred from future tenders. For the purpose of verification of documents, bidders shall submit complete client details with names, address, phone number, e-mail ID etc.
- (10) DCI reserves the right to carry out capacity & capability assessment of the bidder using in-house information and past performance.
- (11) Relevant supporting documents towards other requirements specified are also to be uploaded along with bid failing which bid is liable for rejection.
- (12) DCI reserves the right to reject any or all of the tenders or any parts of the tender so received and may cancel the tender in part or full, extend the due date of Tender submission etc. without assigning any reason.

- (13) In case any Bidder is found to be involved in cartel formation, his Bid will not be considered for evaluation / placement of order. Such Bidder will also be debarred from bidding in future.
- (14) Canvassing in any form by the Bidder or by any other agency on their behalf may lead to disqualification of their Bid.
- (15) Legal dispute, if any, shall only be within the jurisdiction of Local Court at Cuttack unless mentioned otherwise.
- (16) All communication will be made through e-Tendering web site through CPP portal
- (17) However, DCI reserve the right to take cognizance of the communication made outside e-Tendering Portal under exceptional circumstances.
- (18) Bidder cannot make any claim against DCI towards its expense incurred in connection with the preparation and delivery of their bids, participating in the discussion and other expenses incurred during bidding process.
- (19) Offers not meeting statutory requirement are liable for rejection.
- (20) Bidders are advised to visit CPP portal/Announcement section/ Information for DSC/ Bidders Manual Kit/ FAQ of e-Tender Portal before bidding.
- (21) Any Addendum/Corrigendum/Sale date extension in respect of above Tender shall be issued on CPP portal website: and no separate notification shall be issued in the press. Bidders are therefore requested to regularly visit CPP Portal website to keep themselves updated. Failure of Bidder to submit tender without taking cognizance of Corrigendum / Amendment (if any) issued by DCI shall make bid liable for rejection.
- (22) DCI does not take any responsibility for the correctness of tender documents obtained from any other source. Bidders are advised to visit above mentioned website before submitting their offer for official version of the tender document including any corrigendum / amendment if any, which shall be binding to the bidder.
- (23) Fax/ e-mail bids shall not be accepted.
- (24) The terms “Pre-qualification Criteria (PQC)” and “Bidder Qualification Criteria (BQC)” shall have the same meaning in the Bidding Document.
- (25) The terms ‘Sl.No.’, ‘Sr.No.’, ‘Cl.No.’ and ‘Clause No.’ used in this NIT document shall have the same meaning.
- (26) Bidder to quote the NIT/Bidding Doc. no. in all Correspondences.
- (27) Clarification, if any, can be obtained from DCI.
- (28) In case a Foreign Bidder submits any of the Bidder’s Pre-Qualification support documents in

any language other than English, then it will be the responsibility of such foreign vendor to also provide the English translation copy of the same duly certified, stamped and signed by their Local Chamber of Commerce. Translation from agencies approved by relevant embassy/high commission or other accredited agencies shall also be acceptable.

- (29) Bidders shall submit the following documents in Original to DCI within Seven (07) **days** after the date of Un-priced Bid opening:
- i. Original Power of Attorney.
 - ii. Original copy of Integrity Pact Agreement
 - iii. Original EMD Document
 - iv. Original Memorandum of Understanding (MoU) (if applicable)
 - v. Copy of e-receipt of Tender Fee
- (30) The bidder is also expected prior to finalization of its/his/their bid to visit and examine the job site and its surroundings and to familiarize itself/himself/themselves of the ground realities, the availability, existence and suitability of facilities and sources of supply required for the work(s) and the environmental conditions which can be encountered, and collect all data and other information which the bidder may require for preparation and formulation of its/his/their bid. The Sub-contractor will not be entitled to make any claim against DCI or to raise any objection or defense to any claim based on the ignorance of existing or expected conditions, or on the lack of adequate information, or of any plan, estimate or expectation based on a different perception or expectation or information.
- (31) The tenderer shall be deemed before tendering to have undertaken a thorough study of the proposed work, the job site(s) involved, the site conditions, soil conditions of the borrow and reclamation area, the terrain, the climatic conditions, the labour, power, material, and equipment availability, transport and communications facilities, the availability and suitability of Soil in borrow areas, the availability of land for right of way and temporary office and accommodations, quarters, and all other facts and facilities necessary or relevant for the formulation of the bid, supply of materials and the performance of work.
- (32) Unsolicited clarifications to the offer and / or change in the prices during the validity period would render the bid liable for rejection.
- (33) Techno-commercial part of the Bids shall be opened on the specified due date. Time and date of opening of Price Bids shall be notified through e portal to the qualified and acceptable bidders at a later date. Bidders may view the Bid opening through CPP /E-procure portal.
- (34) Bidders shall quote their most competitive rates. Negotiations will not be conducted with the bidders as a matter of routine. However, DCI reserves the right to conduct negotiations as deemed fit.
- (35) Bidder should make sure that their Price- Bid (BOQ) contains only prices. Rates mentioned elsewhere shall not be taken into cognizance. Offer shall be liable for rejection if any condition directly or implied, recorded in Priced Bid (BOQ).

- (36) After opening of the technical bids but before the opening of the price bids, the bids may be rejected for unsatisfactory performance or adverse comments, with necessary proof/ evidence, which have come to the notice of DCI after the issue of the tender enquiry.
- (37) Refer ITB of the tender document /Special Instruction to Bidder (SITB) of e-tender web site for more details.
- (38) **The offer of the Bidder shall remain valid for 06 (Six) months (180 days)** from the date of Opening of technical bid . On account of exigencies if bidders are asked to extend their validity the same should be without any deviation including change in the prices.. If a bidder still deviates or changes price, its offer would be rejected.

(39) **Integrity Pact (IP)**

Integrity Pact shall cover this tender throughout its various phases, and IP would be deemed as a part of the contract though an appropriate provision. The bidders should sign and submit “Integrity Pact” (02 sets) to be executed on Rs.200/- non-judicial stamp paper between the bidder and should submit at Head office of Dredging Corporation of India Limited, in a closed envelope super scribed “Integrity Pact” along with Name of the Tendered work, within 07 days from the date of bid opening . If Original hard copy is not submitted at DCI Head office, such bid shall be liable for rejection. IP would be implemented through either of the following Independent External Monitors (IEM) for this tender.

1. Shri. Prahlad Kumar Sinha, IP&TAFS (Retd.)
A-303 Sanskrit Vihar, 10th Avenue,
Gaur City 2, Greater Noida West,
Gautam Budh Nagar, U.P-201318
Mobile: +91-9432677066, 9717466666
Email- pekay66@gmail.com
2. Shri. Aditya Kumar Mittal, IRSE (Retd.)
Flat C-2/10 (3102), Vanashree CHS,
Plot 1&2, Sector 58A, Palm Beach Road,
Near Seawood Estates, Nerul (West),
Navi Mumbai – 400 706
Mobile: +91-9560527000,
Email- adityakumarmittal@gmail.com

For full details of the scheme of IP, you may visit the website of Central Vigilance Commission, New Delhi.

The Integrity Pact has been included to this subject Tender and to be signed on Rs.200/- non-judicial stamp paper and submitted by the Bidders in 2 (two) sets of original as per the **Annexure XII under Section VIII**. This Integrity Pact will form part of the Tender Document.

REPRESENTING MATTER TO INDEPENDENT EXTERNAL MONITORING IN CASE OF TENDERS/ CONTRACTS WHICH ARE OF Rs.1 CRORE AND ABOVE VALUE: Signatories

to the Integrity Pact with regard to a Tender/ Contract can represent a matter with regard to the tender / Contract to the Independent External Monitors (IEMs, under the Integrity Pact Provisions), as mentioned under clauses of Annexure XII Persons signing the Integrity Pact shall not approach for Negotiations/ Conciliation/ Arbitration/ Adjudication while representing matters to the IEMs and he/ she will await their decision in the matter.

- (40) Bidders from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority in line with requirements specified by Government of India. The bidder shall complete the registration process before last date of bid submission and submit documentary evidence in this regard, failing which their bids will be rejected.
- (41) Notwithstanding any other condition/ provision in the tender documents, bidders are required to submit complete documents pertaining to PQC along with their offer. Failure to meet the PQC will render the bid to be summarily rejected. DCI reserves the right to complete the evaluation based on the details furnished by the bidder, with or without seeking any additional supporting documents /clarifications
- (42) DCI shall not be responsible if for any technical reason the bidder is not able to upload the documents or the cost of document/EMD though debited in bidder account but not credited to DCI account within the due date of submission.
- (43) The Cover B containing the preamble along with Financial Bid / Schedule of Rates / Bill of Quantities (BOQ) of only those bidders who have been qualified in the Technical Bid, will be opened through CPP portal at a later date. The date and time of opening of Part -II - Price Bid/ Bill of Quantities shall be informed to the technically qualified bidders and the Price Bid/Bill of Quantities/ schedule of Rates will be opened online.
- (44) Tenders which are in any way incomplete will not be considered. DCI reserves the right to waive any informality thereof or to reject any or all the tenders without assigning any reasons.
- (45) If any information furnished by the tenderer is found to be concealed or false at a later stage, the contract will be terminated forthwith without prejudice to the rights thereon, consequent on termination with forfeiture of Performance Security Deposit and the sub-contractor will be banned to participate in further DCI tenders for three years period.

(46) **Queries**

Bidders may mail their bid related queries to the following e-mail ids or CPP Portal and contact at the below address for clarifications regarding tender conditions and replies for which will be uploaded in CPP portal by this office within the due date specified in NIT.

Email Id: hodops@dcil.co.in

(47) **Pre-bid Meeting**

A pre-bid meeting will be held in Physical as per the schedule mentioned in NIT. This meeting will be held on this date unless otherwise notified. The tenderers are advised to examine the tender document carefully and if there be or appear to be any ambiguity or discrepancy in the documents, or any clarifications needed in the Tender Documents, these shall be referred to DCI in writing well in advance so as to reach by the due date and time fixed. It is to be noted that your queries should be in word format only to the email: hodops@dcil.co.in no queries seeking clarifications will be entertained after the pre-bid meeting.

Pre-bid meeting will be conducted through VC (link) and also physically at DCI Head Office.

6.0 DCI RESERVES THE RIGHT

Notwithstanding anything stated anywhere in the tender, DCI reserves the right to:

- a. Accept or reject any or all Tenders without assigning any reason whatsoever.
- b. Cancel the tender enquiry at any stage without assigning any reason.
- c. Accept the tender in whole or part.
- d. Reject the tender received with counter conditions.

**General Manager (OPS) I/c
Dredging Corporation of India Ltd.,
Corporate Office, H B Colony Main Road,
Seethammadhara, VISAKHAPATNAM – 530 022
ANDHRA PRADESH (INDIA),
PhoneNo.91-0891—2871344/397
E-mail ID: hodops@dcil.co.in**

CHECK LIST TO THE TENDER SCHEDULE

(for documents to be submitted by the tenderer for acceptance of the tender)

- | | | | |
|----|---|-----|----------------|
| 1. | EMD | -- | Submitted / NA |
| 2. | Cost of the Tender | --- | Submitted / NA |
| 3. | Proof of Technical and Financial experience in Executing similar nature of works completed during Last 7 years, as per eligibility Criteria for evaluation of Technical bids. | -- | Submitted/ NA |
| 4. | Proof of Average Annual turnover | -- | Submitted / NA |
| 5. | Proof of registration of sub-contractor | -- | Submitted / NA |
| 6. | Proof of GST/PF Registrations | -- | Submitted / NA |
| 7. | Annexures as per Tender conditions | -- | Submitted / NA |

Seal and Signature of the Bidder

SECTION II
INSTRUCTIONS TO BIDDERS

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SECTION – II
INSTRUCTIONS TO BIDDERS (ITB)

A GENERAL

1. SCOPE OF BID

In connection with the Notice Inviting Tender (NIT), Dredging Corporation Of India Limited, (hereinafter referred as “DCI” or “Contractor ” invites e-Bids for “Dredging & Reclamation work for establishment of an Industrial Estate at Paradip, Odisha, India” under Single Stage Two Bid System (Part-I: Techno-Commercial Bid and Part -II: Price Bid) for the scope covered under the Bidding Document (hereinafter for the purpose of these instructions collectively referred to as the “WORKS” as specified in the bid document.

2. CARTEL FORMATION

In case any Bidder is found to be involved in cartel formation, his bid will not be considered for evaluation / placement of order. Such bidder will also be debarred from bidding in future.

3. ELIGIBLE BIDDERS

3.1 A bidder may be a firm or a company, who, have been issued the Bidding Document intends to submit bid, in response to Notice Inviting Tender (NIT) on Global Open competitive basis.

3.2 A bidder who is on Holiday/ Negative list of DCI on due date of submission of bid/ during the process of evaluation of the bids, the offers of such bidders shall not be considered for bid opening/evaluation/award.

B. CONTENTS OF BIDDING DOCUMENT

4. BIDDING DOCUMENT

4.1 The Bidding Document shall in general consist of the following and should be read in conjunction with any amendment issued in accordance with Clause No 6.0 of ITB.

- Notice Inviting Tender (NIT) / Letter Inviting Bid
- Instructions to Bidder (ITB) and its attachments.
- Bidding Forms
- General Conditions of Contract (GCC)
- Special Conditions of Contract (SCC) and its Annexures & Amendments if any
- Schedule of Rates (SOR)/ Bill Of Quantities (BOQ)
- Technical Specifications / Standards.
- Drawings,
- Documents
- Annexures, if any

4.2 Although all the details presented in this Bidding Document have been compiled with reasonable care, the bidder is expected to examine the Bidding Document, including all instructions, forms,

terms, specifications and drawings in the Bidding Document and it includes all the documents as per Table of Contents. In case of any ambiguity or incompleteness, the bidder must bring it to the attention of DCI immediately and prior to submission of Bid.

- 4.3 Bidding document once issued in case of limited competitive bidding is non-transferable. However, in case of Open Competitive Bidding, since the Bidding Document is available for free downloading on the portal, any bidder may submit the Bid and the same shall be evaluated in line with the provisions of the Bidding Document.
- 4.4 Bidders shall treat the Bidding Documents and contents therein as strictly confidential.
- 4.5 The Bidding Document is and shall remain the exclusive property of DCI without any right to Bidder to use them for any purpose except for the purpose of bidding.

5. CLARIFICATION OF BIDDING DOCUMENT, PRE-BID MEETING & SITE VISIT

Bidders may mail their bid related queries to hodops@dcil.co.in and contact at address and contact numbers provided in the tender for clarifications and replies for which will be uploaded in the CPP portal. Bidders are advised to visit CPP portal & DCI's website on frequent basis for any Addenda/ Corrigenda to the tender.

- 5.1 Bidder's authorized representative(s) shall attend the Pre-Bid meeting on the prescribed day in NIT either through VC or physically at our DCI Head Office Visakhapatnam. During the pre-bid meeting, all the technical and commercial issues submitted by the bidders through pre bid queries will be discussed and subsequently Pre-Bid clarifications will be hosted. Hence, bidders shall treat the Pre-Bid meeting as utmost important. It is to be noted, any form of additional queries after pre bid meeting cannot be entertained.
- 5.2 Based on the pre-bid meeting / discussions and queries, necessary Addendums may be issued, if deemed necessary by DCI.
- 5.3 DCI's responses to Bidder's queries / clarifications raised will be furnished as expeditiously as possible.
- 5.4 Bidder in their own interest shall submit bids fully complying to bidding document requirements and DCI shall reserve the right to proceed with the available compliant bids for evaluation without raising any technical/ commercial queries.
- 5.5 Bidder is advised to visit and examine the Project Site and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for execution of the Works. All costs towards the same including the cost of visiting the Site

shall be at the bidder's own expense. Claims of any kind due to variation or ignorance of site conditions and environmental conditions shall not be eligible in any circumstances.

- 5.6 Bidder and any of its personnel will be granted permission by DCI to enter upon its premises and lands/ Project Site for the purpose of such visit, but only upon the express condition that the bidder and its personnel will relieve and indemnify DCI and its personnel from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred because of or during the course of or as a result of the inspection. Bidder shall refer the relevant conditions and contact details related to site visit.

6.0 AMENDMENT OF BIDDING DOCUMENT

- 6.1 At any time prior to the deadline for submission of bids, DCI may, for any reason whether at his own initiative or in response to the clarification requested by the prospective bidder(s), issue amendment in the form of Amendment/ Addendum.
- 6.2 Any addendum issued shall be part of the Bidding Documents and shall be uploaded on DCI website /CPP site
- 6.3 To give bidders reasonable time in which to take an addendum into account in preparing their bids, DCI may extend the deadline for the submission of bids, pursuant to Clause 20.3 of ITB..
- 6.4 For Amendment / Addendum issued during the bidding period, bidder shall consider the impact in his bid.
- 6.5 DCI may also for any reason issue amendment subsequent to receiving the bids. Any amendment thus issued shall become part of Bidding Document. Bidder shall follow the instructions issued along with Amendment with regard to submission of impact on quoted price / revised price, if any.

7.0 Deleted.

C PREPARATION OF BIDS

8. COST OF BIDDING

All direct and indirect costs associated with the preparation and submission of bid (including clarification meetings and site visit, if any), shall be to Bidder's account and DCI will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process

9. LANGUAGE OF BID

- 9.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the bidder and DCI, shall be in the English language. Supporting documents and printed literature that are part

of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language, in which case, for purposes of interpretation of the Bid, such translation shall govern.

- 9.2 In case a bidder submits any of the Bidder Qualification support documents in any language other than English, then it will be the responsibility of such foreign vendor to also provide the English translation. Copy of the same duly certified, stamped and signed by their Local Chamber of Commerce. Translation by Indian Embassy/ High Commission or authorized/ approved translation agencies (by Indian embassy/ high commission or any other authority) shall also be acceptable.

10. **DOCUMENTS COMPRISING THE BID**

Electronic Bids (e-bid) in two parts i.e. PART-I (Techno-commercial part) & PART-II (Priced part) as detailed below shall be submitted in e-tendering portal in accordance with the instructions and terms & conditions enclosed with the Bidding Document.

10.1 **PART-I - TECHNO-COMMERCIAL / UNPRICED BID**

- (a) List of Document required in the UNPRICED BID **clause no 18 of ITB**
Note: The above shall be uploaded in “TECHNO-COMMERCIAL PART” folder in e- tendering portal

10.2 **SUBMISSION OF PHYSICAL DOCUMENTS (BID SECURITY [PART-III])**

- (a) The Bid Security shall be submitted in original as per clause 16.9 of ITB or any extension thereof as duly notified in writing by DCI, at the address mentioned in the conditions.

Note: Scanned copy of Bid security shall be uploaded in “FEE FOLDER” in e-tendering portal.

10.3 **PART-II (Priced Bid)**

- a. Schedule of Prices/ Schedule of Rates with prices filled in. The rates are to be filled in accordance with instructions provided in preamble to Schedule of prices, in e-tendering portal, without making any changes in the format/names of the file/ worksheet.
- b. Deviations to terms and conditions, presumptions, overwriting etc. shall not be stipulated in Price part of bid. In case of any conditions stipulated in price bids, the bids of such bidders shall be summarily rejected and shall not be considered for further evaluation. Evaluation shall be carried out excluding such bidder(s.)

Note: Part-II shall be uploaded in “FINANCE” folder in e-tendering portal.

11. **INTEGRITY PACT: Please refer at Clause 39 of NIT.**

12. DETAILED SCOPE OF WORK

- 12.1 The work required to be carried out by the Sub-contractor for filling the dredged material in the reclamation area of 685 Acres to develop the Industrial estate at Paradip, Orissa , through dredging and pumping the dredged soil of quantity of about 10 Million Cum from the identified borrow areas, for raising the reclamation area of 685 Acres from the existing ground level, by pumping dredged soil through pipeline about upto 10 kms away from the borrow area.
- 12.2 The entire Dredging and reclamation works shall be carried out as per specifications, relevant Indian and International applicable codes and standards, drawings, charts as mentioned under **Section IX and Section X in compliance with** Bidding Document and as per instructions of DCI and shall be as follows but not limited to the following:
- 12.3 Sub-contractor shall mobilize suitable type, capacity and number of Cutter Suction Dredger(s) and Trailer Suction Dredger(s) or any suitable dredge equipment in capacity as per tender requirement for a reclamation quantity of 8.20 M.CuM with $\pm 20\%$ variation (after required compaction) and transporting the dredged material of about 10 M.CuM to a distance of about 10 kms away from the borrow area. In case required to transport the dredged material to the required length of up to 10 kms or more as per site requirement, sub-contractor may provide suitable required number of booster pumping stations of required capacity for conveying the dredged material at the specified rate inclusive of effective maintenance during the period of dredging and reclamation at various areas. All facilities including providing power to Booster stations, lighting, site establishing Offices or any other required to complete the intended work etc. shall be to the Scope of the Sub-contractor.
- 12.4 Sub-contractor shall carryout the reclamation work by transporting dredged material at reclamation site till finished specified levels from the existing reclamation ground level as shown Reclamation chart to raise or achieve the required finished level of entire reclamation area of 685 Acres by spreading/ levelling and achieving the specified compaction requirements or parameters before handing over of the site including stable slopes.
- 12.5 Mobilization and installation of necessary length and diameter of pipelines (both on-shore & floating) and with required number of booster station(s) as per necessity, along with required accessories, to transport the dredged material to the reclamation sites, which is located about 10 kms away with all necessary arrangements for laying pipeline(s) for the draining of the backwash water from reclamation site into the sea at designated location. Disposal of backwash water/ return water is to be done through pipeline Pumping only and is to be disposed of inside sea. Distance of disposal of backwash water/ return water inside sea is indicative only. Party shall ensure proper protective measures for protection of environment and marine culture without any additional cost to DCI.
- 12.6 On account of idling of Dredge equipment/ ancillary crafts / accessories etc., no payment will be made to the party.

- 12.7 Mobilization of earth moving equipment such as vibrators, rollers, dozers, trucks, excavator etc, for rolling and compaction of filled up soil to achieve the required compaction parameters till the required finished ground level.
- 12.8 Mobilization of required marine spread/ ancillary crafts, anchor handling vessels, tug boats for shifting of dredge equipment, work boats, routine boats and survey vessels etc with necessary accessories to carry out the operation as per the technical specifications.
- 12.9 Mobilization of experienced and qualified personnel and suitable equipment for carrying out topographic and hydrographic surveys, carrying out necessary surveys, at the dredging site and at the reclamation sites to ascertain the ground levels before commencement of the work and also during execution for ascertaining the progress of Work and till final handing over of reclamation site. Further Shifting of Bench Mark and establishing of permanent Benchmarks are Sub-contractor's Scope without any additional cost. DCI will give the reference point only.
- 12.10 Clearing of bushes/trees and any obstructions coming while laying pipelines without effecting to the local Environment and within the limits of EC guidelines and under intimation and concurrence of DCI. Collecting and documenting all data to ascertain the quantum of work for site clearing, cutting & removal of trees, removal of other structures at site and relocating or reconstruction of grid pillars and permanent pillars under intimation and concurrence of DCI.
- 12.11 Construction of temporary approach roads, construction of all temporary structures and viaducts at various places over the creeks and water bodies if any as per requirement while laying and assembly of pipelines from dredging site to the reclamation area for pumping the dredged soil along with for placing / installation of booster stations and also for Backwash pipelines etc, with prior approval of DCI.
- 12.12 Arranging and providing site offices including all amenities, with all necessary infrastructure facilities of power, drinking water, Medicare, drainage, etc. for the personnel of DCI/Engineer and Sub-contractor
- 12.13 Supply of all materials, equipment, tools, tackles, obtaining clearances for Crew members/ Equipment etc from concerned government departments, statutory authorities, etc. are in the scope of sub-contractor.
- 12.14 Drinking water & electricity etc. shall be in the scope of supply of sub-contractor.
- 12.15 During dredging spillage of oil in sea due to dredging, protection of flora and fauna, marine culture etc., Responsibility of Sub-contractor without any additional cost.
- 12.16 Establishing fully equipped site Laboratory with NABL accreditation with all necessary facilities and equipment manned by qualified engineers and technicians for the various

testing requirements at site and to prepare day to day lab test reports and shall submit to DCI for review and for further necessary instructions.

12.17 Construction of Peripheral Bunds: In connection with the construction of peripheral bund to reclaim the dredged material at reclamation site, it is the sub-contractor's responsibility to carry out design of suitable size and capacity of peripheral bund with suitable slopes for stability and free board above the required finished fill height for filling the dredged material etc, supply of all materials and construction of peripheral bunds around the reclamation site including the slope protection and required lining to make the peripheral bund stable and shall make impervious to the ingress of water with suitable protective measures. In this regard sub-contractor has to submit design calculations and method of construction of peripheral bund along with method statement. **Enclosed DWG 6 under Section IX.**

12.18 Carrying out the required number of Electric Piezocone penetration tests (ECPTu) etc. at specified intervals of entire 685 acres in 50m x 50m grid and field compaction tests with insitu density to ascertain that the compaction requirements of entire thickness of fill material are met with after completion of entire filling with the dredged material with compaction. In case not achieved the desired strength of filled up soil, remedial measures shall be adopted till achieving the desired bearing pressure / compact ness of 7 kg /cm² where ever the level being tested with in the stipulated time period.

12.19 Removal of all temporary structures laid over the Creeks and other water bodies/ canals after completing the activities of reclamation and after handing over of the same under intimation and concurrence of DCI.

12.20 Final clearing of site, removal of all construction materials, debris etc. from the completed reclamation areas, dredging areas, on-shore & off-shore pipelines for dredged material and backwash water transportation, etc under intimation and concurrence of DCI.

12.21 Mobilizing experienced/ qualified personnel to monitor entire dredging and reclamation works and providing adequate organizational set up with experienced senior personnel in the areas of technical, administration, finance/accounts and contracts management along with necessary supporting staff and logistics under intimation and concurrence of DCI.

12.22 Arranging and providing all the required fuel and spare parts for the vessels and equipment deployed by the sub-contractor and ensure operation of vessels deployed without breakdown.

12.23 Maintaining proper documentation at site and proper handing over to DCI/Client.

12.24 Preparation and submission of interim, final and as built up drawings and reports.

13. **BID PRICE**

- 13.1 The prices must be quoted strictly in the format provided in the Bid, planning and execution Document. Conditional discount, if offered, shall not be considered for evaluation.
- 13.2 The offer shall include, mobilisation and demobilisation of Trailer suction Dredgers/Cutter Suction Dredgers/Suitable machinery for removing soil with floating/ shore pipeline and other required crafts including, pipeline, Boosters, all items/materials, labour, tools, fabrication, transportation, insurance, taxes, duties, consumables, overhead, profit etc. necessary for dredging the material from the borrow areas and pumping to about 10million cum to a distance of about 10kms, till raising the finished compacted level as per requirement as described in the Bid Document. For further details, Bidder shall refer to Preamble to Schedule of Prices and other terms and conditions of the bid for compliance.
- 13.3 Unless stated otherwise in the Bidding Document, the Contract shall be for the total works as described in Bidding Document, based on the Schedule of Rates/ Prices submitted by the bidder and accepted by DCI.
- 13.4 Bidder shall quote for all the items of Schedule of Rates/Prices after careful analysis of cost involved for the performance of the complete item considering all parts of the Bid Document. In case any activity is not specifically covered in description of item under 'Schedule of Rates/Prices' but is required to complete the work as per Scope of Work, Scope of Supply, Specifications, Standards, Drawings, General Conditions of Contract, Special Condition of Contract or any other part of Bidding Document, the rates/ prices quoted shall be deemed to be inclusive of cost incurred for such activity.
- 13.5 Rates/ prices quoted by the bidder, shall remain firm, fixed and valid till the completion of the Works and will not be subjected to variation on any account except as otherwise specifically provided in the Bidding Documents.
- 13.6 Discount, if any, must be indicated in the column provided in Schedule of Rates/Prices only, provided in the Bidding Document.
- 13.7 All duties, taxes, and other levies payable shall be as per Special Conditions of Contract.
- 13.8 It shall be the duty of the Sub-contractor to duly observe and comply with all laws, rules, regulations, orders and formalities applicable to GST & Customs Duty, etc. on the import, manufacture, sale and/or supply of any material to DCI and performance of the works under the Contract. The Sub-contractor shall keep DCI indemnified from and against any and all claims, demands, prosecutions, actions, proceedings, penalties, damages, demurrages and/or other levies whatsoever made or levied by any Court, Tribunal or the Customs or other Authorities with respect to any alleged breach, evasion or infraction of such duties, taxes, charges or levies or any breach or infraction of any applicable laws, rules, regulations, orders or formalities concerning

the same and from the consequence thereof.

14. **CURRENCY OF BID AND PAYMENT**

14.1 The Bidder shall indicate the prices in Indian Rupees. The Bidder shall not quote in any currency other than Indian Rupees.

15. **PERIOD OF VALIDITY OF BIDS**

15.1 The bid shall be valid for acceptance for a minimum period of 180 days from the date of opening of Part-I (Technical & Commercial aspects of Bid).

15.2 Bids shall remain valid for the period specified in the Bid document after the bid submission deadline date prescribed in accordance with **Clause 20 of ITB**. A bid with shorter validity shall be rejected by DCI as non-responsive. Bidders shall not be entitled during the above period, without the consent of DCI in writing, to revoke or cancel their Bid or to vary the Bid given or any term thereof. In case of bidders revoking or cancelling their Bid or varying any terms in regard thereof without the consent of DCI in writing, DCI shall forfeit Bid security, submitted along with the bid and shall reject their bids. Such Bidder may also be put on Holiday list/ Negative List.

15.3 In exceptional circumstances, prior to the expiration of the bid validity period, DCI may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with **Clause 16.1 of ITB**, it shall also be extended for 3 (Three) months beyond the deadline of the extended validity period. A bidder may refuse the request without forfeiting its bid security. A bidder granting the request shall not be permitted to modify its bid.

16. **BID SECURITY or EMD**

16.1 Bidder shall furnish as part of its bid, a Bid Security/ EMD, in original form and, in the amount and currency specified in the bid document.

16.2 Bids not accompanied with EMD shall be rejected.

16.3 DCI shall not pay any interest on Bid Security furnished. Further, in case bank guarantee submitted is found to be fake, bid of such bidder shall be rejected and may initiate action as deemed necessary as per DCI's Policy.

16.4 EMD may be given in the form of an unconditional bank guarantee in favour of "Dredging Corporation of India Limited (**Details as per Attachment-III under Section VIII**), issued by any Nationalized/ Scheduled Bank in India.

16.5 The bid security shall be valid for three Months beyond the validity period of the bid, or beyond any period of extension if requested under **Clause 15.3 of ITB**.

- 16.6 EMD/ Bid securities shall be released to the bidders in the following
- i. EMD/ Bid securities of bidders whose price bids are not opened/ disqualified during techno- commercial bid evaluation (unsuccessful Bidder) shall be released immediately by DCI after approval of price bid opening.
 - ii. EMD/ Bid securities of bidders qualified in the techno-commercial bid but unsuccessful for placement of LoA/Work Order shall be released after final approval of the placement of LoA/Work Order by the competent authority.
 - iii. EMD/ Bid securities of the successful bidder shall be released on receipt of acceptable Performance Bank Guarantee.
 - iv. In case DCI decides to cancel / annul the enquiry at any stage during the bidding process but before the award (as applicable), EMD/ Bid securities of the bidders shall be returned at the earliest from the date of such decision.

16.7 The offer shall be rejected, EMD shall be forfeited and the Bidder shall be put on "Holiday/ Suspension/ banning list", as applicable of DCI, in case:

- a) The bidder alters / modifies / withdraws the bid suo-moto after opening the bid(s) within the validity period and / or submits multiple bids/ alternative bids.
- b) If the successful bidder fails to accept arithmetical corrections
- c) If the Information/ documents submitted by the bidder in the bid is found to be false/ forged, the successful bidder fails to execute the order.

16.8 In case of Bank guarantees, if these are sent directly by the Bank, a certified copy of the said BG shall be enclosed along with the techno-commercial offer.

16.9 Original EMD, as applicable, shall be submitted to DCI within Seven (7) days after the date of opening of techno-commercial (unpriced) bids, failing which their bid shall not be considered, as per provisions of respective clause notwithstanding the fact that a copy of EMD was uploaded earlier by the bidder on the e-tendering portal.

17. DUTIES AND TAXES

17.1 Custom Duties, if any, levied upon the work, dredger, equipment etc. are to be borne by the bidders and shall be inclusive of the Item Rate percentage quoted and this will not be separately paid for. The Sub-contractor shall bear all Taxes both corporate and personnel, including but not limited to taxes on income levied on the Sub-contractor or on their affiliated companies on account of payments received by them from DCI for the works done under the Contract.

17.2 It shall be the responsibility of the Sub-contractor to submit to the concerned Indian Statutory Authorities the returns and all connected documents required for this purpose. The

Sub-contractor shall also provide DCI such information as they may require in regard to the Sub-contractor's income and expenditure for this purpose.

17.3 The GST will be paid on indication of GST Registration number on the invoice / sub-contractor's bill itself. However, in the absence of GST Registration, the GST will be reimbursed on submission of documentary proof in support of GST to the concerned authorities by the sub-contractor.

17.4 In the event of any conflict or inconsistency in provision of Taxes / GST related clauses in the bidding document; the enacted GST shall prevail over the interpretation of existing clauses.

17.5 In case of foreign bidder, TDS will be grossed up and captured accordingly.

18. DOCUMENTS COMPRISING BID

18.1 If specified in the NIT (Notice Inviting Tender) / bidding document, bidder(s) intending to participate shall fulfill the Bidder Qualification Criteria specified in the Detailed NIT/ bidding document. The experience and finance details submitted by the Bidders shall be evaluated with respect to the Qualification Criteria specified in the NIT/ Bidding document. Bidders are requested to submit all qualification details along with relevant supporting documents in the first instance itself as DCI may finalize the qualification based on details submitted without asking for any additional details. In view of this, Bidder, in their own interest, must submit experience details for as many jobs as possible that, in his opinion, meet the Bidder Qualification Criteria.

18.2 Bids of only those bidders who are found to qualify based on the Qualification Criteria specified in the NIT shall be considered for detailed Techno-commercial evaluation. Decision of DCI in this regard shall be final and binding

18.3 The “Techno Commercial Bid” prepared by the Bidder shall comprise the following documents:

- ❖ **Techno Commercial Bid (Part I) ; and**
 - ❖ **Financial/ Price Bid (Part –II)**
- i. A Bid Form except the Price Schedule completed in accordance with format, **at Annexure II under Section VIII**
 - ii. A list of works tendered for and in hand/being executed as on the date of submission of tender.

- iii. A detailed list of vessels/ equipment/ pipe line /boosters etc., available with the tenderer and which is proposed for deployment for the work under consideration including their specifications.
- iv. Documentary evidence established in accordance with NIT, PQC that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted including audited balance sheet for the last three years ending 31st March 2025 and Profit & Loss duly supported by ITR & GST returns for Indian bidders and ending 2025 for foreign bidders.
- v. The requisite Earnest money deposit for Rs 1,00,00,000/- (Rupees One crores only) for participating in the tender in the form of e-challan (e- receipt to be enclosed)/ Bank Guarantee/ Insurance surety bond furnished in accordance with NIT. In case of Bank Guarantee / Insurance surety bond submission towards EMD, in addition to uploading the copy online, Original as per format provided at **Annexure III** shall be submitted in hard Copy to DCI within 07 days from the date of bid opening ,without which the bid shall be rejected.
- vi. Cost of tender deposit in the form of e-Challan (e- receipt to be enclosed).
- vii. Copy of PAN Number issued by Income Tax Authorities and copy of GST Registration Certificate.
- viii. Copy of Registration with Provident Fund Authorities and copy of ESI certificate.
- ix. Pursuant to NIT Cl. 5, Power of Attorney on stamp paper, in favour of the person authorized to sign the tender document. In addition to uploading the copy online, Notarized /apostilled/ legalized Original copy of Power of Attorney shall be sent to DCI to reach within 07 days from the date of bid opening without which bid is liable for rejection.
- x. Copies of original document defining the constitution or legal status, place of registration and principal place of business of the company or partnership.
- xi. Copies of original certificates of registration etc., of dredgers/ crafts proposed to be offered to DCI, including copy of the existing insurance policy covering H&M, crew, Third Party, wreck removal/oil pollution, war risk etc., pursuant to Clause Copy of clear title of the ownership of the TSHD & CSD(s) & other requisite dredging spread proposed for deployment. If the tenderer is not the owner of the dredger(s)/ craft(s), necessary documents in support of the authorization or lease granted by the Owner (authorized signatory in case craft owned by a firm, if not by proprietor) of the dredgers/ crafts to the tenderer to offer and operate the dredgers/ crafts by the tenderer to execute the intended work. This authorization or lease shall be executed on a Rs.200/- stamp paper duly notarized. If the equipment to be deployed is within group companies, letter from the

group company confirming chartering of vessel may be considered and the letter to be notarized/ apostilled/legalised. Original of same shall be submitted to DCI in hard copy along with Integrity Pact within 07 days from the date of bid opening.

- xii. Bank Solvency Certificate for Rs. 458 Crores in line with NIT.
- xiii. The tenderer will have to give a certificate that he is not related to any officer of DCI/IDCO or any officer of the rank of Asst. Secretary or above in the Ministry of Shipping, Government of India. The Sub-contractor should give a declaration along with his tender about the names of the relatives, who are employed with DCI/IDCO (**Annexure-VIII under Section VIII**)
- xiv. The Tenderer shall give an undertaking that they have not made any payment or illegal gratification to any person/ authority connected with the bid process so as to influence the bid process and have not committed any offence under the Prevention of Corruption Act in connection with the bid. (**Annexure-IX under Section VIII**)
- xv. The Tenderer shall disclose any payments made or proposed to be made to any intermediaries (agents etc.) in connection with the bid (**Annexure-IX Under Section VIII**)
- xvi. The Tenderer shall disclose any information regarding any current litigation in which the tenderer is involved (**Annexure-X Under Section VIII**)
- xvii. Vendor Code Creation form (**Annexure –XI Under Section VIII**)
- xviii. Downloaded/ Purchased Tender Document (complete set) duly signed on all the pages by tenderer.
- xix. The bidders should sign and submit an “Integrity Pact” to be executed on Rs.200/- non-judicial stamp paper between the bidder and DCI in a separate envelope super scribed “Integrity Pact” within 07 days from the date of bid opening. Bids not accompanied by a duly signed “Integrity Pact” shall be liable for rejection. (**Annexure XII Under Section VIII**)
- xx. The dredging work assigned to the bidder to be commenced by as per Scope of Work. Contract period is 11 months from the date of issue of LoA including Mobilization period. The total work shall be completed and site shall be handed over by April 2027. Sub-contractor has to submit detailed Dredging and reclamation methodology including achieving the fill level with required compaction and Environmental monitoring programme for completing the work with proposed equipment in aforesaid period in line with Scope of work including bar chart along with tender submission pursuant to tender clauses.

- xxi. Bidder shall submit undertaking that the bid is not submitted with any deviations/exceptions to tender conditions directly or indirectly. If any deviations/exceptions are there, same shall be mentioned specifically in the covering letter of the bid itself.
- xxii. DCI reserves its right to inspect dredgers/ crafts proposed for deployment and seek any other details/ documents, at any stage of tender/ contract, as per the requirement, to ascertain their competence. Bidder shall facilitate the vessel(s) inspection by the Inspection Team at his own cost.
- xxiii. Bidder shall furnish a list of the supervisory personnel he intends to deploy with their Bio-data/ Curriculum Vitae.
- xxiv. An overall project schedule, including deployment using critical path method shall be furnished along with the bid. The Bidder shall indicate the project key-dates for all activities.
- xxv. Unpriced copies of Schedule of Prices with details of quantities only as specified in the Bid Document shall be enclosed with technical bids.
- xxvi. Letter of Authority as per pro-forma enclosed as **Annexure- 1 Under Section VIII** to the bid.
- xxvii. Detailed dredger deployment schedule indicating total dredger days planned item-wise.
- xxviii. Bidder may request for any clarification / information on the tender conditions which shall be replied during the pre-bid meeting and subsequently in writing. After the pre-bid clarifications are issued, no exceptions/ deviations from Bid Document specifications and conditions are permissible. **Conditional bids are liable to be summarily rejected.** Bidder shall enter 'Nil' in the "Proposal Form –A- Exceptions and Deviations,**Annexure-XV under Section VIII**" while submitting the bid.
- xxix. Any other information required in terms of this Bid Documents.

D. SUBMISSION AND OPENING OF BIDS

19. SEALING AND MARKING OF BIDS

The bidder shall submit the, original Bid Security, as per the requirement of clause 10.2 of ITB, in separate sealed envelopes, duly marking the envelopes as per following:

Original Bid Security

Name of Work: -----
Bidding Document No.: -----
Due date & Time of Submission: -----
From: [Name & Address of Bidder] -----

- 19.1 The envelope shall bear the name and address of the bidder and bear a warning not to open before the time and date for bid opening
- 19.2 If envelope is not sealed and marked as required, DCI will assume no responsibility for the misplacement or premature opening of the envelope.
- 19.3 Bidders shall submit bids (Part-I & Part-II) electronically through e-tendering (CPP) portal by logging in to website CPP portal before the bid submission date and time. Bidders are required to register themselves at CPP Portal.
- 19.4 Bidders are required to upload the bid along with all supporting documents & priced part on e- tendering portal by logging in to CPP Portal.
- 19.5 Bidders to refer Bidders Manual Kit - Open Source Software Link available on the website to get acquainted with the E-Tendering System in advance and obtain/seek clarifications, if any from e- tendering (CPP) Portal Helpdesk, whose contact information is provided in the E-Tendering website.
- 19.6 Various links such as “Help for Sub-contractor”, “Information about DSC”, “FAQ”, “Resources Required”, “Bidders Manual Kit” etc. are available in CPP portal , facilitating vendors to participate in the bidding process. Bidder are advised to download & utilize the available information/documents under these links for activities like Registration in CPP portal, obtaining User ID & Password, uploading & submission of e-bids etc.
- 19.7 Bidders are advised in their own interest to carefully go through Instructions for E-tendering and other related document available against various help links so as to ensure bids are uploaded in E- tendering website well before the closing date and time of bid submission.
- 19.8 The bidder is required to make a proposal in a format as outlined in bid document to achieve the objective of maintaining a uniform proposal structure from all bidders.
- 19.9 The bid shall be submitted by uploading relevant document in respective covers/folders

provided in the e- tendering website.

20. DEADLINE FOR SUBMISSION OF BIDS

- 20.1 Bidders shall submit their bids electronically in the e-tendering portal, within the date and time specified in the bid document.
- 20.2 Bid Security in accordance with ITB clause 19 in original, must be received by DCI at the address and no later than the date and time for submission in accordance to ITB clause 10.2.
- 20.3 DCI may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with Clause 6 of ITB, in which case all rights and obligations of DCI and bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

21 LATE BIDS

- 21.1 E-tendering system shall close immediately after the deadline for submission of bid. Any bids being submitted in physical form shall not be considered for opening / evaluation / award and will be returned to such bidders.
- 21.2 In the event the Bid Security in original, in accordance with ITB clause 24, are not submitted within the deadline, the bids shall be declared late and shall not be considered for further evaluation, notwithstanding the fact that the bid has been submitted in electronic form within the deadline. DCI will not be responsible for any sort of delays for bid submission for whatsoever reasons.

22 WITHDRAWAL, SUBSTITUTION, AND MODIFICATION OF BIDS

- 22.1 The bidder may modify, re-submit or withdraw its e-bid after the bid submission, but, before the due date and time for submission of Bid following the electronic bid submission procedures.
- 22.2 No bid shall be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity or any extension thereof.

23 BID OPENING

- 23.1 DCI shall verify the availability of requisite scanned copy of Original BID SECURITY in e-Bid . Techno-commercial e-Bid of those bidders shall be considered for evaluation, who have uploaded the requisite Bid Security in e- tendering Portal and submitted the Original to DCI within the specified timeline.

23.2 The order of part wise opening of bids shall be as follows;

- (i) On scheduled date and time of UNPRICED bid opening,
 - (a) Scanned Copy of Bid Security uploaded in e-tendering Portal shall be opened first and verified that whether Bid Security has been furnished as per bid requirement
 - (b) Upon meeting the requirement of Bid Security as per Clause 19 of ITB, opening of documents of Part-I, submitted in electronic form shall be processed on the e-Procurement module of the e-tendering portal.
 - (c) If a bidder has not complied with Bid Security requirement a) above, such bidder's offer (Part - I) is not proceeded for further opening and rejected out rightly.
- (ii) Part-II of bid of only those bidders, whose bids are determined to be technically acceptable/qualified, DCI shall be opened. Bidders selected for opening of their priced bids shall be informed about the date, time and place of price bid opening.

E EVALUATIONS AND COMPARISON OF BIDS

24. CONFIDENTIALITY

- 24.1 A bidder may seek clarification regarding the bidding document provisions, bidding process and/ or rejection of his bid. DCI shall respond to such requests within a reasonable time. However, such information relating to the evaluation of bids and recommendation of contract award shall not be disclosed to any other persons not officially concerned with the bidding process.
- 24.2 Any attempt by a bidder to influence DCI in the evaluation of the bids or Contract award decisions shall render their Bid liable for rejection.
- 24.3 Notwithstanding Clause 24.2 of ITB, from the time of bid opening to the time of Contract award, if a bidder wishes to contact DCI on any matter related to the bidding process, it shall be done so in writing only
- 24.1 After the receipt of bids, if required, DCI may inspect the facilities available with the bidder to ensure suitability and satisfactory working conditions of the dredgers and of the equipment listed to be used by the bidder for the work. The bidder shall ensure that aforesaid team shall at all the times have access to visit and inspect dredgers, equipment etc.
- 24.2 DCI reserves the right to accept price part of the offer (Part II) of only such bidders whose technical and commercial aspects of the proposals (Part I) are acceptable and complete.
- 24.3 DCI's decision in this regard shall be final and binding on the bidder. DCI may not open price part of the offer (Part II) of the bidders whose technical and commercial aspect of the proposal is not acceptable or incomplete.

25. DETERMINATION OF RESPONSIVENESS

- 25.1 DCI's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in Clause 10 of ITB.
- 25.2 A substantially responsive bid is one that meets the requirements of the Enquiry/Bidding Documents without deviation.
- 25.3 Bidder should not be under liquidation, court receivership or similar proceedings. Bidder shall submit self-certificate in this regard. Failure to do so or the bidder is under court receivership or similar proceedings, their bids shall not be considered.

26. CLARIFICATION OF BIDS

- 26.1 Bidders should ensure that the Bid submitted is substantially responsive Bid in the first instance itself. Evaluation may be completed based on the content of the Bid itself without seeking any subsequent additional information which may result in rejection of Bid. However, DCI may, at its discretion, may request bidder to submit the necessary information or documentation, within a reasonable period of time, to withdraw material deviation, reservation, or rectify omission in the bid related to documentation requirements. Requesting information or documentation on such account shall not be related to any aspect of the price of the Bid. DCI's request for clarification and the response shall be in writing.
- 26.2 No change, including any voluntary increase or decrease, in the prices or substance of the bid shall be sought, offered, or permitted. Bidder shall not be allowed to submit any price implication or revised price after submission of Bid unless the same is called for by DCI in writing.
- 26.3 Any clarification submitted by a bidder that is not in response to a request by DCI shall not be considered. Failure of the bidder to comply with the request may result in the rejection of its Bid.
- 26.4 If a bidder does not provide clarifications of its bid by the date and time set in DCI's request for clarification, its bid shall be evaluated with available information which may result in rejection of their bid.

27. EVALUATION OF TECHNO-COMMERCIAL BIDS

- 27.1 Prior to price opening of bids, DCI will determine whether each bid is accompanied with required Bid Security, as applicable;
 - i) Fulfills the technical, financial, commercial experience and other requirements as specified in the bidding document.

- ii) Considering any clarifications and/ or requirement pursuant to clause 26 of ITB;
- iii) Any other relevant factor, if any that DCI deems necessary or prudent to be taken into consideration.

27.2 DCI reserve the right to use in-house information for assessment of capability of bidder and their performance on jobs completed/ in progress for evaluation purpose

28. OPENING OF PRICE BID

28.1 Priced Bid (Part-II) of only those bidders whose bids is determined to be technically acceptable/qualified by DCI shall be opened. Bidders selected for opening of their priced bids shall be informed about the date, time and place of price bid opening.

29. CORRECTION OF ARITHMETICAL ERRORS

29.1 DCI shall correct arithmetical errors on the following basis:

Where bidders have been asked to quote unit rates based on SOR, the prices quoted by bidders shall be checked for arithmetic correction, if any, based on rate and amount filled by the bidder in the SOR/price schedule formats. If some discrepancies are found between the rate / amount given in figures/words, the price in words shall prevail.

Also, in case of differences in lump sum prices versus its break-up, provisions defined in the Schedule of rates / Preamble to Schedule of Prices shall prevail,

29.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with Clause 29.1 of ITB above, shall result in the rejection of the Bid and Bid Security shall be forfeited.

30. DCI'S RIGHT TO ACCEPT ANY BID, AND TO REJECT ANY OR ALL BIDS

30.1 DCI reserves the right to accept or reject any or all the bids at his discretion and may annul the Bidding process, without thereby incurring any liability to bidders.

F. AWARD OF CONTRACT

31. AWARD CRITERIA

31.1 Subject to Clause 32.1 of ITB, DCI shall award the Contract to the bidder who has been determined to be the lowest evaluated bid "Sub-contractor". However, if in the opinion of DCI, the total price or certain item rates quoted by the recommended bidder are considered high, DCI may invite such bidder for price negotiation. Recommended bidder shall attend such negotiation meetings and if requested by DCI shall provide the analysis of rates/break-up of amount quoted by him for any or all items of Schedule of Rates/ Prices to demonstrate

the reasonability. As a result of negotiation, bidder may offer rebate on his earlier quoted Price.

32. NOTIFICATION OF AWARD

- 32.1 Prior to the expiration of the period of bid validity, DCI shall notify the successful bidder, in writing, that its bid has been accepted. The notification letter (hereinafter and in the General Conditions of Contract called the “Letter of Acceptance (LOA)” shall specify the sum that DCI will pay the Sub-contractor in consideration of the execution and completion of the Works.
- 32.2 Until a formal contract is prepared and executed, the notification of award along with this Bidding Document together with the annexed documents, modifications, deletions agreed upon shall constitute a binding contract between the successful bidder and DCI.

33. SIGNING OF THE CONTRACT

Promptly upon issue of LOA, the successful bidder shall sign, the Contract Agreement within **28** days from the date of issue of LOA on a non-judicial stamp paper of appropriate value. The cost of non-judicial stamp paper shall be borne by the successful bidder. This agreement shall be in the Proforma indicated at **Annexure-IV under Section VIII** of the bid.

The Contract document shall consist of the following:

- i) Form of Contract on non-judicial stamp paper
- ii) Detailed Letter of Award /Letter of Acceptance/Work Order along with enclosures.
- iv) Original Bidding Document.
- v) Amendment/ Corrigendum to Bidding Document issued, if any.

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SECTION III
GENERAL CONDITIONS OF CONTRACT (GCC)

1.0 GENERAL PROVISIONS

1.1 DEFINITIONS: In the conditions of contract (“these conditions), which include particular conditions and these General conditions, the following words and expressions shall have the meanings stated words indicating persons or parties include corporations and other legal entities, expect where the context requires otherwise

1.1.1 “The contract” means the contract agreement, special conditions of contract, general conditions of contract, technical requirements (including schedule of requirements and technical specifications, drawings), Notice Inviting Tender, replies issued to pre-bid queries, addenda issued if any, Sub-contractor’s bid and original price and delivery schedules, DCI’s/ notification of award, correspondence DCI had exchanged with the bidder till and after award of the contract and further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance

1.1.2 “Contract agreement ‘means the contract agreement (if any) referred to in Sub-Clause 1.6 [contract Agreement].

1.1.3 “Letter of Acceptance” means the letter of formal acceptance, signed by DCI,of the tender/offer submitted by the tenderer, including any annexed documents.

1.1.4 “Letter of Tender” means the document entitled letter of tender, which was completed by the sub-contractor and includes the signed offer to DCI for the works.

1.1.5 “Specification” means the document entitled specification, as included in the contract and any additional and modifications to the specification in accordance with the contract such document specifies the works.

1.1.6 “Drawings” means the drawings of the works, as included in the contract, and any additional and modified drawings issued by (or on behalf of) DCI in accordance with the contract.

1.1.7” Schedules” means the document(s)entitled schedules, completed by the sub-contractor and submitted with the letter of tender, as included in the contract such document may include the bill of quantities data, lists, and schedules of rates and or prices.

1.1.8 “Tender” means the letter of tender and all other documents, which the sub-contractor submitted with the letter of tender, as included in the contract.

1.1.9 “Appendix to Tender” means the completed pages entitled appendix to tender, which are appended, to form part of the letter of tender.

- 1.1.10 **“Bill of Quantities”** means the documents so named (if any) which are comprised in the schedules.
- 1.1.11 **“Sub-Contractor’s documents”** means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Sub-contractor under the Contract.
- 1.1.12. **“Party”** means DCI and the Sub-Contractor as the context requires.
- 1.1.13 **“IDCO”** means Odisha Industrial and Infrastructure Corporation, Govt. of Odisha, and is CLIENT to this Project
- 1.1.14 **“IOCL”** means Indian Oil Corporation, and for this work Prime Client and releases the certified billed amounts in to Escrow account
- 1.1.15 **“CONTRACTOR”** means DCI for IDCO
- 1.1.16 **“ENGINEER”** means the person(s)/agency nominated by DCI or DCI itself.
- 1.1.17. **“Sub-contractor’s Representative”** means the person named by the **sub-contractor** in the contract or appointed from time to time by the sub-contractor under sub-clause 4.3 {Sub-Contractor’s Representative}, who acts on behalf of the contractor.
- 1.1.18. **“DCI’s personnel/representative”** includes the ENGINEER, the representatives or officers or assistants referred to in sub-clause 3.2 {Delegation by the Engineer} and also all other staff, labour and other employees of the Engineer and of DCI; and any other personnel notified to the sub-contractor by DCI or by the Engineer as DCI’s personnel or representative. Any reference in this Contract to DCI’s personnel or representatives shall be construed **solely as references to persons expressly authorized in writing by DCI, and no such person shall have any independent authority to bind DCI**, except to the extent specifically provided in such written authorization.
- 1.1.19. **“Sub-contractor’s personnel”** means the sub-contractor’s representative and all personnel whom the sub-contractor utilizes on site, who may include the staff, labour and other employees of the labour and of each subcontractor and any other personnel assisting the contractor in the execution of the works.
- 1.1.20. **“Sub-contractor”** means the Dredging agency finalized as per this tender; or any person named in the contract as a subcontractor, or any person appointed as a subcontractor, for a whole or part of the works: and the legal successors in title to each of these persons.
- 1.1.21. **“Commencement date”** means the date as agreed between the Parties as per clause 7.1 of GCC

- 1.1.22. **“Time for completion”** the time for completion of works or a section (as the case may be) under Sub clause 7.2 (time for completion) and extension under sub clause 7.4 of GCC (extension of time for completion) , calculated from the commencement date.
- 1.1.23. **Tests on completion”** means the tests which are specified in the contract or agreed by with parties or instructed as a variation, and which are carries out under clause 8 of GCC (tests on completion} before the works or a section (as the case may be) are taken over by DCI/IDCO
- 1.1.24. **“Base Date”** means the date of issue of LoA for the tendered work
- 1.1.25. **“Taking-Over certificate”** means a certificate issued under clause 9 of GCC (DCI’s taking over).
- 1.1.26. **“Tests after completion”** means the tests (if any), which are specified in the contract, and which are carried out in accordance with the provisions of the particular conditions after the works or a section (as the case may be) are taken over by DCI.
- 1.1.27. **“Defects notification period”** means the period for notifying defects in the works or a section (as the case may be) under sub-clause 10.1 (completion of outstanding work and Remediating defects), as stated in the appendix to tender (with any extension under. Sub-clause 10.3 (extension of defects notification period) calculated from the date of which the works or section is completed as certifies under sub-clause 9.1(Taking over of the works) .
- 1.1.28. **“Performance certificate”** means the certificate issued under sub-clause 10.9 (performance certificate).
- 1.1.29. **“Day “**means a calendar day and “year’ means 365 days.
- 1.1.30. **"Accepted contract Amount"** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- 1.1.31. **"Contract Price"** means the price defined in Sub- Clause 13.1 [The Contract Price], and includes adjustments in accordance with the Contract.
- 1.1.32. **"Cost"** means all expenditure reasonably incurred (or to be incurred) by the Sub-contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

- 1.1.33. "**Final Payment**" means the payment certificate issued under Sub-Clause 13.09 [Issue of Final Payment].
- 1.1.34. "**Currency**" means Rupees in which part (or all) of the Contract Price is payable, i.e., Indian Rupees - INR.
- 1.1.35. "**Monthly Payment** " means a payment certified under Clause 13.5 [Monthly payment], other than the Final Payment
- 1.1.36. "**Provisional Sum**" means a sum (if any), which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub- Clause 12.5 [Provisional Sums].
- 1.1.37. "**Security Deposit**" means the accumulated retention moneys, which DCI retains under Sub-Clause 13.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 13.10 [Retention Money].
- 1.1.38. "**Statement**" means a statement submitted by the Sub-contractor as part of an application, under Clause 13 [Contract Price and Payment] for a payment certificate.
- 1.1.39. "**Sub-contractor's Equipment**" means all apparatus, machinery, vehicles and other things required for the execution and completion of the works and the remedying of any defects. However, Sub-contractor's Equipment excludes Temporary Works, DCI/IDCO Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.40. "**Goods**" means Sub-contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.41. "**Materials**" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the sub-contractor under the Contract.
- 1.1.42. "**Permanent Works**" means the permanent works to be executed by the sub-contractor under the Contract.
- 1.1.43. "**Plant**" means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works.

- 1.1.44. "**Section**" means a part of the Works specified in the Appendix to Tender as a Section (if any).
- 1.1.45. "**Temporary Works**" means all temporary works of every kind (other than sub-contractor's equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
- 1.1.46. "**Works**" mean the Permanent Works and the Temporary Works, or either of them as appropriate. Works inter alia mean Dredging and Reclamation by pumping the dredged soil through pipelines and also backwash through pipeline and by raising the reclamation level to the required level as per specifications as indicated and by constructing peripheral bunds and maintaining the said depth/width and incidental work including but not limited to designing, engineering, financing, equipping, maintaining data, preparing charts/carrying out surveys and all other works which the sub-contractor is expected to carry out or which the sub-contractor is required to perform or do for achieving the required depth/width or to meet the specifications stipulated in the Contract.
- 1.1.47. "**Sub-contractor's Documents**" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the sub-contractor under the Contract.
- 1.1.48. "**Country**" means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed - India.
- 1.1.49. "**Force Majeure**" is defined in Clause 18 [Force Majeure].
- 1.1.50. "**Laws**" means the laws of the Republic of India - all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.
- 1.1.51. "**Performance Security**" means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security].
- 1.1.52. "**Site**" means the places where the Permanent Works are to be executed and to which Plant and materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.53. "**Unforeseeable**" means not reasonably foreseeable by an experienced sub-contractor by the date for submission of the Tender.

1.1.54. "**Variation**" means any change to the Works, which is instructed or approved as a variation under Clause 12 [Variations and Adjustments].

1.1.55. "**Sub-contractor's Equipment**" means all apparatus, machinery, vehicles, vessels, facilities and other things required for the execution of the Works but does not include Materials or Plant.

1.1.56. "**The Client**" means IDCO

1.2 Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and
- (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.3 Communications

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices and requests, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Appendix to Tender; and
- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Appendix to Tender. However:
 - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
 - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

1.4 Law and Language

The Contract shall be governed by the law of the Republic of India .

If there are versions of any part of the Contract, which are written in more than one language, the version, which is in the ruling language stated in the Appendix to Tender, shall prevail.

The language for communications shall be that stated in the Appendix to Tender. If no language is stated there, the language for communications shall be the language in which the Contract (or most of it) is written.

1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) The contract Agreement (if completed),
- (b) The Letter of Acceptance / Firm work order
- (c) The priced Bill of Quantities,
- (d) Bid Clarification,
- (e) The Technical Specification, Special conditions of contract and Information in Appendix to Tender.
- (f) The General conditions of contract.
- (g) The Drawings and Annexure.
- (h) All Post bid correspondence and any other document forming part of contract

If any ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

1.6 Contract Agreement

The Parties shall enter into a Contract Agreement within **28 days from the date of issue of the Letter of Acceptance/ work order**, unless they agree otherwise. The Contract Agreement shall be in the format annexed to the bid. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the tenderer

1.7 Assignment

The sub-contractor shall not assign the contract or any part thereof or any benefit or interest therein or there under (otherwise than by a change in favour of the sub-contractor's Banker of any money due to or to become due under this contract without the prior written consent of DCI.

1.8 Care and Supply of Documents

The Specification and Drawings shall be in the custody and care of DCI. Unless otherwise stated in the Contract, copy of the Contract and of each subsequent Drawing shall be supplied to the sub-contractor, who may make or request further copies at the cost of the sub-contractor.

Each of the sub-contractor's Documents shall be in the custody and care of the sub-contractor, unless and until taken over by DCI. Unless otherwise stated in the Contract, the

sub-contractor shall supply to the Engineer six copies of each of the sub-contractor's Documents.

The sub-contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Sub-contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. DCI's Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect of a technical nature in a document, which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.9 Delayed Drawings or Instructions

The sub-contractor shall give notice to the Engineer whenever the works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the sub-contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and details of the nature and amount of the delay or disruption likely to be suffered if it is late.

If the sub-contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the sub-contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 19.1 [Sub-contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or determine these matters.

However, if and to the extent that the Engineer's failure was caused by any error or delay by the Sub-contractor, including an error in, or delay in the submission of, any of the Sub-contractor's Documents, the Sub-contractor shall not be entitled to such extension of time, Cost or profit.

1.10 DCI's Use of Sub-contractor's Documents

As between the Parties, the Sub-contractor shall retain the copyright and other intellectual property rights in the Sub-contractor's Documents and other design documents made by or on behalf of the Sub-contractor.

The Sub-contractor shall be deemed (by signing the Contract) to give to DCI a non-terminable transferable non-exclusive royalty-free License to copy, use and Communicate

the Sub-contractor's Documents, including making and using modifications of them. This License shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Sub-contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) in the case of Sub-contractor's Documents, which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Sub-contractor.

The Sub-contractor's Documents and other design documents made by (or on behalf of) the Sub-contractor shall not, without the Sub-contractor's consent, be used, copied or communicated to a third party by (or on behalf of) DCI for purposes other than those permitted under this Sub-Clause.

1.11 Sub-contractor's use of DCI's Documents

As between the Parties, DCI shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) DCI. The Sub-contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without DCI's consent, be copied, used or communicated to a third party by the Sub-contractor, except as necessary for the purposes of the Contract.

1.12 Confidential Details

The Sub-contractor shall disclose all such confidential and other information as the Engineer may reasonably require in order to verify the Sub-contractor's compliance with the Contract.

1.13 Compliance with Laws

The Sub-contractor shall, in performing the Contract, comply with applicable Laws of the Republic of India. Unless otherwise agreed between the parties:

the Sub-contractor at his cost shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Sub-contractor shall indemnify and hold DCI harmless against and from the consequences of any failure to do so.

DCI will arrange to obtain the project permits such as dredging permit, reclamation permits, permits for pipeline route and other environmental permits.

1.14 Details to be Confidential

The Sub-contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable laws. The Sub-contractor shall not publish, permit to be published or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous agreement of DCI.

2.0 Role of DCI:

2.1. Right of Access to the Site

After obtaining the permissions from the Client, IDCO, DCI shall give the Sub-contractor right of access to and possession of, all parts of the Site within the time (or times) stated in the Appendix to Tender. The right and possession may not be exclusive to the Sub-contractor. If, under the Contract, DCI /IDCO is required to give (to the Sub-contractor) possession of any foundation, structure, plant or means of access, DCI/IDCO shall do so in the time and manner stated in the Specification/Appendix to Tender. However, DCI /IDCO may withhold any such right or possession until the Performance Security has been received.

If no such time is stated in the Appendix to Tender, DCI /IDCO shall give the Sub-contractor right of access to, and possession of, the Site within such times as may be required to enable the Sub-contractor to proceed in accordance with the programme submitted under Sub-Clause 7.3 [Programme].

If the Sub-contractor suffers delay and/or incurs Cost as a result of a failure by DCI /IDCO to give any such right or possession within such time, the Sub-contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause [Sub-contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub Clause 3.4 [Determinations] to agree or determine these matters.

However, if and to the extent that DCI 's / IDCO failure was caused by any error or delay by the Sub-contractor, including an error in, or delay in the submission of, any of the Sub-contractor's Documents, the Sub-contractor shall not be entitled to such extension of time or Cost or or profit.

2.2 Permits, Licenses or Approvals

DCI shall (where he is in a position to do so) provide reasonable assistance to the Sub-contractor at the request of the Sub-contractor

- (a) in obtaining copies of the Laws which are relevant to the Contract but are not readily available, and
- (b) for the Sub-contractor's applications for any permits, Licenses or approvals required by the Laws of the Republic of India :

- (i) which the Sub-contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],
- (ii) for the delivery of Goods, including clearance through customs, and
- (iii) for the export of Sub-contractor's Equipment when it is removed from the Site.

(c) All permits and approvals of the project other than Environmental /CRZ clearances, Dredging at Borrow area and pumping the material at reclamation, is on account of the Sub-contractor at his own cost and time. DCI will assist in forwarding required documents/ letters on the request of Sub-contractor.

2.3 DCI's Personnel

DCI shall be responsible for ensuring that DCI's Personnel and DCI's other sub-contractors on the Site:

- (a) Co-operate with the Sub-contractor's efforts under Sub-Clause 4.6 [Co-operation], and
- (b) take actions similar to those, which the Sub-contractor is required to take under sub paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause [Protection of the Environment].

2.4 DCI's Claims

If DCI considers itself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, DCI or the Engineer or DCI shall give notice and particulars to the Sub-contractor. However, notice is not required for payments due under Sub-Clause 4.19.

The notice shall be given as soon as practicable after DCI became aware of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which DCI considers himself to be entitled in connection with the Contract. The Engineer shall then proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or determine (i) the amount (if any) which DCI is entitled to be paid by the Sub-contractor, and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub Clause 10.0.

This amount may be included as a deduction in the Contract Price and Payment. DCI shall only be entitled to set off against or make any deduction from an amount certified in a Payment to the sub-contractor, or to otherwise claim against the sub-contractor, in accordance with this Sub-Clause.

3.0 DCI's ENGINEER

3.1 Engineer's Duties and Authority

DCI shall appoint a representative who shall carry out the duties assigned to him in the Contract. The Engineer - DCI's staff, shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The Engineer shall have no authority to amend the Contract

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. DCI's representative shall obtain prior approval of DCI for giving any instructions to the Sub-contractor or taking any action on aspects, which are beyond the scope of the contract.

However, whenever the Engineer exercises a specified authority for which DCI/IDCO's approval is required, then(for the purposes of the Contract) DCI/IDCO shall be deemed to have given approval.

Except as otherwise stated in these Conditions:

- (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for DCI;
- (b) the Engineer has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract; and
- (c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test or similar act by the Engineer (including absence of disapproval) shall not relieve the Sub-contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.

3.2 Delegation by the Engineer

The Engineer may from time to time assign duties and delegate authority to its representatives, and may also revoke such assignment or delegation. These representatives may include a resident engineer, and/or Independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. Any reference in this Contract to DCI's representatives shall be construed solely as references to persons expressly authorized in writing by DCI, and no such person shall have any independent authority to bind DCI, except to the extent specifically provided in such written authorization. However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.4 [Determinations].

Each DCI's representative, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Sub-contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:

- (a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Engineer to reject the work, Plant or Materials;
- (b) if the Sub-contractor questions any determination or instruction of an DCI's representative at site, the Sub-contractor may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.

3.3 Instructions of the Engineer

The Engineer may issue to the Sub-contractor (at any time) instructions and additional or modified Drawings, which maybe necessary for the execution of the works and the remedying of any defects, all in accordance with the Contract. The Sub-contractor shall only take instructions from the Engineer, or from DCI's representative to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 12 [Variations and Adjustments] shall apply.

The Sub-contractor shall comply with the instructions given by the Engineer or delegated representative of DCI, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated representative of DCI:

- (a) gives an oral instruction,
- (b) receives a written confirmation of the instruction, from (or on behalf of) the Sub-contractor, within two working days after giving the instruction, and does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation, then the confirmation shall constitute the written instruction of the Engineer or delegated representative of DCI (as the case may be)

3.4 Determinations

Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.4 to agree or determine any matter, the Engineer shall consult with each Party in an endeavor to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances

The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 19 [Claims, Disputes and Arbitration]

3.5 Management Meetings

The Engineer or the Sub-contractor's Representative may require the other to attend a management meeting in order to review the arrangements for future work. The Engineer shall record the business of management meetings and supply copies of the record to those attending the meeting.

4.0 THE SUB-CONTRACTOR

4.1 Sub-contractor's General Obligations

The Sub-contractor shall design (to the extent specified in the contract), execute and complete the Works in accordance with the Contract and with the Engineer's instructions, and shall remedy any defects in the Works.

The Sub-contractor shall provide the Plant and Sub-contractor's Documents specified in the contract, and all Sub-contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.

The Sub-contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Sub-contractor (i) shall be responsible for all Sub-contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the design or specification of the Permanent Works.

The Sub-contractor shall, whenever required by the Engineer, submit details of the arrangements and methods, which the Sub-contractor proposes to adopt for the execution of the works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.

If the Contract specifies that the Sub-contractor shall design any part of the Permanent Works, then

- (a) the Sub-contractor shall submit to the Engineer the Sub-contractor's Documents for this part in accordance with the procedures specified in the Contract;
- (b) these Sub-contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Engineer to add to the Drawings for co-ordination of each Party's designs;
- (c) the Sub-contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and
- (d) prior to the commencement of the Tests on Completion, the Sub-contractor shall submit to
- (e) the Engineer the "as-built" documents and operation and maintenance manuals in accordance with the Specification and in sufficient detail for DCI to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 9.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Engineer.

4.2 Performance Security

The Sub-contractor shall obtain (at his cost) and submit a Performance Security of 10% of the accepted contract value for proper performance, in the amount, currencies and mode stated in the bidding document.

The Sub-contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to DCI.

The Performance Security shall be issued by an entity and from within a country (or other, jurisdiction) approved by DCI, and shall be in the form annexed to the Particular Conditions or in another form approved by DCI.

The Sub-contractor shall ensure that the Performance Security is valid and enforceable until the Sub-contractor has executed and completed the works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Sub-contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Sub-contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

DCI shall make a claim under the Performance Security, DCI under the Contract in the event of:

- (a) failure by the Sub-contractor to extend the validity of the Performance Security as described in the preceding paragraph, in which event DCI may claim the full amount of the Performance Security,
- (b) failure by the Sub-contractor to pay DCI an amount due, under Clause 19 [Claims, Disputes and Arbitration], within 30 days after this agreement or determination,
- (c) failure by the Sub-contractor to remedy a default within 30 days after receiving DCI's notice requiring the default to be remedied, or
- (d) circumstances, which entitle DCI to termination under Sub-Clause 14.2 [Termination by DCI], irrespective of whether notice of termination has been given.

DCI shall return the Performance Security to the Sub-contractor after 60 days after completion of defect liability period and after making the final payment. DCI shall not be liable to pay interest on Performance Security, under any circumstances, what-so-ever.

4.3 Sub-contractor's Representatives

The Sub-contractor shall appoint the Sub-contractor's Representative and shall give him all authority necessary to act on the Sub-contractor's behalf under the Contract.

Unless the Sub-contractor's Representative is named in the Contract, the Sub-contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Sub-contractor proposes to appoint as Sub-contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Sub-

contractor's Representative, the Sub-contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Sub-contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Sub-contractor's Representative or appoint a replacement.

The whole time of the Sub-contractor's Representative shall be given to directing the performance of the Contract. If the Sub-contractor's Representative is to be temporary absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Engineer's prior consent, and the Engineer shall be notified accordingly.

The Sub-contractor's Representative shall, on behalf of the Sub-contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].

The Sub-contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Engineer has received prior notice signed by the Sub-contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

The Sub-contractor's Representative and all these persons shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].

The Sub-contractor's Representative and all their persons shall also be fluent in English and/or Hindi, if Sub-contractor's Representative, or these persons, is not fluent in the above languages, the Sub-contractor shall make a competent interpreter available during all working hours.

4.4 Sub-contractors

The Sub-contractor shall not sublet the whole of the Works

The Sub-contractor shall be responsible for the acts or defaults of any Sub-contractor, his agents or employees, as if they were the acts or defaults of the Sub-contractor. However, unless otherwise stated,

- (a) the Sub-contractor shall not be required to obtain consent for the purchase of materials which are in accordance with the standards specified in the contract.
- (b) the prior consent of DCI / Engineer shall be obtained to engage other proposed Subcontractors. In case sublet is approved by Engineer then;
 - (i) the Sub-contractor shall give DCI / Engineer not less than 28 days' notice of the intended date of the commencement of each sublet work, and of the commencement of such work on the Site; and
 - (ii) each sublet shall include provisions, which would entitle DCI to require the sublet to be assigned to the Sub-contractor under Clause 4.0 (if or when applicable) or in the event of termination under Sub-Clause 14.2 [Termination by DCI].

4.5 Co-Operation

The Sub-contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

- (a) DCI's /IDCO's Personnel,
- (b) any other sub-contractors employed by DCI, and
- (c) the personnel of any legally constituted public authorities,

who may be employed in the execution on or near the Site of any work not included in the Contract

Any such instruction shall constitute a Variation if and to the extent that it causes the Sub-contractor to incur Unforeseeable Cost. Services for these personnel and other sub-contractors may include the use of Temporary Works or access arrangements, excluding the Sub-contractor's equipment, which are the responsibility of the Sub-contractor.

If, under the Contract, DCI is required to give to the Sub-contractor possession of any foundation, structure, plant or means of access in accordance with Sub-contractor's Documents, the Sub-contractor shall submit such documents to the Engineer in the time and manner stated in the Specification.

4.6 Setting Out

The Sub-contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract or notified by the Engineer. The Sub-contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

4.7 Safety Procedures

The Sub-contractor shall

- (a) comply with all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site,
- (c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 9 [DCI's Taking Over Works and sections], and
- (e) provide any Temporary Works (including roadways, footways, guards and fences), which may be necessary, because of the execution of the Works, for the use and protection of the public and of DCI's and occupiers of adjacent land.
- (f) Shall have HSE plan in place and shall submit HSE plan to the Engineer prior to commencement of work for approval and implementation. HSE monthly return shall be submitted

4.7.1 Price Reduction on Safety violations

Sub-contractor shall be responsible for ensuring adherence of all safety requirements by sub-contractors under their scope of work. In addition to price reduction and deductions as provided for in the Agreement, DCI shall be entitled to deduct from any payment due to the

Sub-contractor, for violations of safety provisions by the Sub-contractor or other Sub-contractors under his direct supervision, as per details given below:

Violation of applicable safety, health and environment related norm, resulting in:

1. Violation of applicable Safety, Health and Environment related norm- a penalty of Rs.5000/per occasion
2. Violation as above resulting in

Any physical injury, a penalty of 0.5% of the Total payment due to the Sub-contractor (maximum of Rs. 2,00,000/-) per injury in addition to Rs. 5000/per occasion as in item 1.

Fatal accident, a price reduction of 1% of the Total payment due to the Sub-contractor (maximum of Rs. 10,00,000/-) per injury in addition to Rs. 5000/per occasion as in item 1.

4.8 Quality Assurance

The Sub-contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Engineer shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Engineer for information before each design and execution stage is commenced.

When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Sub-contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Sub-contractor of any of his duties, obligations or responsibilities under the Contract.

4.9 Site Data

DCI shall have made available to the Sub-contractor for his information, prior to the Base Date, all relevant data in DCI's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. However, bidder is at liberty to inspect the site for any information required, as per CI 5 of ITB.

DCI shall similarly make available to the Sub-contractor all such data, which come into DCI's possession after the Base Date. The Sub-contractor shall be responsible for interpreting all such data.

To the extent which was practicable (taking account of cost and time), the Sub-contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or the Tender or Works. To the same extent, the Sub-

contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- (a) the form and nature of the Site, including sub-surface conditions, the hydrological and climatic conditions,
- (b) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
- (c) the Laws, procedures and labour practices of the Republic of India, and
- (d) the Sub-contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services

4.10 Sufficiency of the Accepted Contract Amount

The Sub-contractor shall be deemed to:

- (a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and
- (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data].

Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Sub-contractor's obligations under the Contract (including those under Provisional Sums; If any) and all things necessary for the proper execution and completion of the works and the remedying of any defects

4.11 Unforeseeable Physical Conditions

In this Sub-Clauses, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Sub-contractor encounters at the Site when executing the works, including sub-surface and hydrological conditions but excluding climatic conditions.

If the Sub-contractor encounters adverse physical conditions, which he considers to have been Unforeseeable, the Sub-contractor shall give notice to the Engineer within 24 Hrs.

This notice shall describe the physical conditions, so that they can be inspected by the Engineer, and shall set out the reasons why the Sub-contractor considers them to be Unforeseeable. The Sub-contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions, which the Engineer may give. If an instruction constitutes a Variation, Clause 12 [Variations and Adjustments] shall apply.

If and to the extent that the Sub-contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Sub-contractor shall be entitled subject to Sub-Clause 19.1 [Sub-contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving such notice and inspecting and/or investigating these physical conditions, the Engineer shall proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in subparagraphs (a) and (b) above related to this extent.

4.12 Rights of Way and Facilities

The Sub-contractor shall bear all costs and charges for special and/or temporary rights of-way which he may require, including those for access to the Site. The Sub-contractor shall also obtain, at his risk and cost, any additional facilities outside the Site, which he may require for the purposes of the Works.

4.13 Avoidance of Interference

The Sub-contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of DCI or of others.

The Sub-contractor shall indemnify and hold DCI/Client/ Prime Client harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.14 Access Route

The Sub-contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site. The Sub-contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Sub-contractor's traffic or by the Sub-contractor's Personnel.

These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

- (a) the Sub-contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
- (b) the Sub-contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- (c) DCI shall not be responsible for any claims which may arise from the use or otherwise of any access route,
- (d) DCI does not guarantee the suitability or availability of particular access routes, and
- (e) Costs due to non-suitability or non-availability, for those required by the Sub-

contractor, of access routes shall be borne by the Sub-contractor.

4.15 Transport of Goods

Unless otherwise stated in the Particular Conditions

- a. the sub-contractor shall give DCI not less than 07 day's notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- b. the Sub-contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- c. the Sub-contractor shall indemnify and hold DCI harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of goods, and shall negotiate and shall negotiate and pay all claims arising from their transport.

4.16 Sub-contractor's Equipment

The Sub-contractor shall be responsible for all Sub-contractor's equipment. When brought on to the Site, Sub-contractor's equipment shall be deemed to be exclusively intended for the execution of the Works and shall be retained at the site till the completion of the work. The Sub-contractor shall not remove from the Site any major items of Sub-contractor's equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Sub-contractor's Personnel off Site.

4.17 Environmental Monitoring

Environmental Management Plan (EMP) shall be drawn, as per the MoEF&CC guidelines, by the successful bidder in such a way that all reasonable precautions shall be undertaken so that the dredging operations does not result in any adverse impact on the water quality and marine productivity in the vicinity and submit the same for the prior approval of the Engineer-in charge. The Environmental Management Plan shall deal with impacts resulting from the dredging and offshore dumping which concerns sea water pollution and impacts resulting from the drainage of onshore reclamation. The Environmental Management Plan shall reflect the standards for environmental protection specified by the Ministry of Environment and Forest while issuing environmental clearance for the project. Copy of EC shall be handed over to the successful bidder.

It is the responsibility of the sub-contractor to comply with all rules and regulations in connection with the dredging contract in general, complying with EC & CRZ norms. The bidder shall consider all the environmental protection cost along with applicable norms in the relevant quantities of BoQ.

The Environmental Management Plan will also reflect measures to be taken by the successful bidder to mitigate and protect the environment against impacts resulting from the dredging and reclamation and offshore dumping operations.

The general form of the Environmental Protection Plan shall include and not be limited to

- ❖ Objective
- ❖ Work Plan
- ❖ Implementation Schedule
- ❖ Manpower requirement
- ❖ Monitoring Procedure

Note:

The entire dredged spoil under this contract shall be disposed of, into the designated Reclamation ground as per DRG 2A & 2B through Pipelines and also return water / backwash through pipeline only in to the designated dumping ground in to the sea, so as to avoid movement of the disposed sediments and causing any impact on the shoreline. DCI/Engineer reserves the right to relocate the above return water discharge location to any other location **within close proximity**. The tentative location is shown in CRZ Map.

All dredgers and other floating crafts of the sub-contractor shall follow MARPOL regulations.

In addition to various stipulation of this contract documents with regard to dredging, the Sub-contractor shall comply with the specific conditions, other standard conditions and general clauses applicable for dredging as stipulated by MoEF&CC, Environmental and CRZ Clearances and prepare the EMP and strictly adhere the same during dredging operations

4.18 Protection of the Environment

The Sub-contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations

The Sub-contractor shall ensure that emissions, surface discharges and effluent from the Sub-contractor's activities shall not exceed the values indicated in the Specification, and shall not exceed the values prescribed by applicable Laws.

Dredging works shall be undertaken such a way as to ensure that these operations do not deteriorate the surface water quality. Adequate anti-pollution measures should be taken so that environmental quality is maintained.

Samples of water and sediment to be collected at dredging and reclamation areas and also at various points including off shore discharge areas where pipeline backwash is discharging , as per EMP to comply EC approvals and as per direction of the Engineer/ DCI as per site requirements and will have to be tested by a laboratory approved by Central/State Pollution Control Boards and test results will have to be submitted to DCI /ENGINEER for records. The tested sample result should be compared with primary water quality standards framed

by Central water pollution Control Board (SW IV waters) and also back ground concentration values for other parameters.

Base Samples shall be collected one week prior to commencement of works.

The parameters to be monitored are:

a) For water quality-

Physical properties- pH, EC, colour, odour, salinity, temperature, turbidity and total suspended solids.

Chemical properties- DO, BOD, COD, Oil & Grease, nutrients, sulphates, and chlorides.

Heavy metals: Fe, Zn, Mg, Cd, Cr, Hg

Marine biology: Phytoplankton & Zooplankton

b) For sediment quality-

Physical properties- pH, organic matter, nutrients, oil & grease

Heavy metals: Fe, Mn, Cd, Ni, Cr, Hg, Zn and Pb

Benthic Communities: Macro & Micro Benthic Flora and Fauna.

The Sub-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 DCI.

Under no circumstances shall inflammable material and untreated Sewage be allowed to spill to the Dredging area or proposed harbor area.

The bidders shall ascertain from the public domain including the websites of the concerned departments and understand the probable period of the fish breeding season. The bidder shall also understand that the dredging shall not be allowed to be carried out during the fish-breeding season. The bidder shall plan their activities taking into account the above restrictions imposed by the concerned authorities. Any claim in this regard including idling, mob or demob, on account of the above imposition by the respective state government, shall not be entertained for reasons whatsoever.

Any services rendered by DCI/ Port during the execution of contract will be chargeable as per DCI's/ Port's scale of rates.

4.19 Site Facilities

4.19.1 Facilities Supplied by the Sub-contractor

The Sub-contractor shall supply all services, amenities, temporary structures including security fencing and storage compounds, machinery, buildings and Dredging and Reclamation equipment including compacting equipment etc , necessary for the proper

execution of the Works at Site at his cost except for the items specified below, which will be provided by DCI.

4.19.2 Facilities Supplied by DCI/IDCO

DCI/IDCO will make available to the Sub-contractor the following services which will be charged at the rates given below;

- (a) **Supply of land** for Sub-contractor's establishment and lay down areas may be made available as per the availability at the place where the land can be spared as per DCI's Schedule of Rates.
- (b) **Maintenance:** For the purpose of bunkering, repairs, maintenance, etc. the Sub-contractor shall make his own arrangements. However, when the sub-contractor requires an independent berth for the purpose, berth hire charges as applicable in the Scale of Rates will be charged to the sub-contractor, he may approach Paradip port at his own time and cost. In this regard necessary assistance in form required letters will be provided as per requirement. The sub-contractor shall pay the Port dues and vessel related charges including pilotage and departure after completion and all other dues shall be borne by the sub-contractor.
- (c) **Electric Power:** The Sub-contractor shall make its own arrangements for all electrical supply for lighting, marking, etc. and for power supply for all its floating plant and craft and shall bear all costs for the same.
- (d) **Accommodation:** Sub-contractor will not be permitted to establish its labour camp and residential accommodation for its staff on DCI's land unless given specifically for the purpose. Necessary accommodation shall be provided as per availability and on payment of necessary charges prevailing from time to time.

4.20 Progress Reports

Unless otherwise stated, monthly progress reports shall be prepared by the Sub-contractor and submitted to the Engineer in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Sub-contractor has completed all work, which is known to be outstanding at the completion date, stated in the Taking-Over Certificate for the Works.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design (if any), Sub-contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each

- Subcontractor,
- (b) the detail's described in Sub-Clause 5.10 [Records of Sub-contractor's Personnel and Equipment];
 - (c) copies of quality assurance documents, test results and certificates of Materials;
 - (d) list of notices given under Sub-Clause 2.4 [DCI 'sClaims] and notices given under Sub-Clause 19.1 [Sub-contractor's Claims];
 - (e) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
 - (f) Comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Sub-contract, and the measures being (or to be) adopted to overcome delays.

4.21 Security of the Site

Unless otherwise stated:

the Sub-contractor shall be responsible for keeping unauthorized persons off the Site/ Dredgers and the other floating crafts, and authorized persons shall be limited to the Sub-contractor's Personnel and DCI's Personnel; and to any other personnel notified to the Sub-contractor, by DCI or the Engineer, as authorized personnel of DCI's other sub-contractors on the Site/Dredgers an' other floating crafts.

4.22 Sub-contractor's Operations on Site

The Sub-contractor shall confine his operations to the Site, and to any additional areas, which may be obtained by the Sub-contractor and agreed by the Engineer as working areas. The Sub-contractor shall take all necessary precautions to keep Sub-contractor's Equipment and Sub-contractor's Personnel within the site and these additional areas, and to keep them off adjacent areas.

During the execution of the Works, the Sub-contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Sub-contractor's Equipment or surplus materials. The Sub-contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works, which are no longer, required.

Upon the issue of a Taking-Over Certificate, the Sub-contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Sub-contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Sub-contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Sub-contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Sub-contractor to fulfill obligations under the Contract.

4.23 Fossils

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and

authority of DCI. The Sub-contractor shall take reasonable precautions to prevent Sub-contractor's Personnel or other persons from removing or damaging any of these findings.

The Sub-contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Sub-contractor suffers delay and/or incurs cost from complying with the instructions, the Sub-contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 19.1 [Sub-contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price

After receiving this further notice, the Engineer shall proceed in accordance with Sub Clause 3.4 [Determinations] to agree or determine these matters.

5.0 STAFF AND LABOUR

5.1 Engagement of Staff and Labour

Except as otherwise stated in the Specification, the Sub-contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport

5.2 Rates of Wages and Conditions of Labour

The Sub-contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no Established rates or conditions are applicable, the Sub-contractor shall pay rates of wages and Observe conditions, which are not lower than the general level of wages, and conditions Observed locally by DCI's whose trade or industry is similar to that of the Sub-contractor.

5.3 Persons in the Service of DCI

The Sub-contractor shall not recruit, or attempt to recruit, staff and labour from amongst DCI's Personnel.

5.4 Labour Laws

The Sub-contractor shall comply with all the relevant Labour Laws applicable to the Sub-contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Sub-contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

5.5 Working Hours

Dredging and Reclamation works shall be carried out round the clock.

5.6 Facilities for Staff and Labour

Except as otherwise stated in the Specification, the Sub-contractor shall provide and maintain all necessary accommodation and welfare facilities for the Sub-contractor's Personnel. The Sub-contractor shall also provide facilities for DCI's Personnel as stated in the Specification.

The Sub-contractor shall not permit any of the Sub-contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

5.7 Health and Safety

The Sub-contractor shall at all times take all reasonable precautions to maintain the health and safety of the Sub-contractor's Personnel. In collaboration with local health authorities, the Sub-contractor shall ensure that medical staff, firstaid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Sub-contractor's and DCI's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Sub-contractor shall appoint a Health, Safety and Environment (HSE) officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Sub-contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Sub-contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Sub-contractor shall maintain records and make Reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.

5.8 Sub-contractor's Superintendence

- (i) Throughout the execution of the Works, and as long thereafter as is necessary to fulfill the Sub-contractor's obligations, the Sub-contractor shall provide all Necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

A reasonable proportion of the Sub-contractor's Superintending staff shall have a working knowledge of English or the Sub-contractor shall have a sufficient number of competent interpreters available during all working hours.

(ii) **Foreign Staff and Labour:**

The Sub-contractor may import any personnel who are necessary for the execution of the works. The Sub-contractor must ensure that these personnel are provided with the required residence visas and work permits. The Sub-contractor shall be responsible for the return to the place where they were recruited or to their domicile of imported Sub-contractor's personnel. In the event of the death in the Country of any of these personnel or members of their families, the Sub-contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

(iii) **Measures against Insect and Pest Nuisances:**

The Sub-contractor shall at all times take necessary precautions to protect all staff and all labour employed on the site from insect and pest nuisance, and to reduce their danger to health. The Sub-contractor shall provide suitable prophylactics for the Sub-contractor's personnel and shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

(iv). **Alcoholic Liquor or Drugs:**

The Sub-contractor shall not, otherwise than in accordance with the Laws of the Republic of India, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs or permit or allow importation, sale, gift, barter, or disposal by Sub-contractor's Personnel.

(v). **Arms and Ammunition:**

The Sub-contractor shall not give, barter or otherwise dispose of to any person any arms or ammunition of any kind, or allow Sub-contractor's Personnel to do so.

(vi) **Festivals and Religious Customs:**

The Sub-contractor shall respect the Country's recognized festivals, days of rest and religious or other customs.

5.9 Sub-contractor's personnel

The Sub-contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Engineer may require the Sub-contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Sub-contractor's Representative if applicable, who:

- (a) persists in any misconduct or lack of care,
- (b) carries out duties incompetently or negligently,
- (c) fails to conform with any provisions of the Contract, or
- (d) persists in any conduct, which is prejudicial to safety, health, or the protection of the environment.

If appropriate, the Sub-contractor shall then appoint (or cause to be appointed) a suitable replacement person.

5.10 Records of Sub-contractor's Personnel and Equipment

The Sub-contractor shall submit, to the Engineer, details showing the number of each class of Sub-contractor's Personnel and of each type of Sub-contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Sub-contractor has completed all work, which is known to be outstanding at the completion date, stated In the Taking-Over Certificate for the Works.

5.11 Disorderly Conduct

The Sub-contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Sub-contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

6.0 PLANT, MATERIALS AND WORKMANSHIP

6.1 Manner of Execution

The Sub-contractor shall carry out the manufacture of Plant, the production and manufacture of Materials, and all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognized good practice, and
- (c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

6.2 Employership of Plant and Materials

Each item of Plant and Materials shall, to the extent consistent with the Laws of the Republic of India, become the property of DCI at whichever is the earlier of the following times, free from liens and other encumbrances

- (a) when it is delivered to the Site,
- (b) when the Sub-contractor is entitled to payment of the value of the Plant and Materials under the contract.

6.3 Royalties

No royalty shall be paid/ charged to the sub-contractor for disposal of dredged material at the dumping ground.

7.0 COMMENCEMENT, DELAYS AND SUSPENSION

7.1 Commencement of Work

The work shall be commenced by Sub-contractor upon issue of the work order / LOA in line with Section VI – Time Schedule. Unless otherwise stated, the Commencement date shall be in line with Section VI – Time Schedule..

7.2 Time of Completion, Compensation for Delay to Sub-contractors Negligence

The Sub-contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including

- (a) achieving the passing of the Tests on Completion, and
- (b) completing all work, which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking over under Sub-Clause 9.0 [Taking Over of the Works and Sections].
- (c) Time period for completion of dredging and reclamation work shall be 11 months from the date of issue of letter of acceptance (LOA)/Work Order**

7.2.1 Liquidated Damages (LD) - In the event of the sub-contractor failing to complete the work in all respects within the time specified or within the extended time that may be allowed by DCI / Engineer as per the terms of the contract, hereof the sub-contractor shall payor allow DCI/ Engineer **to recover a sum equal to 0.5% per week or part thereof the total value of contract subject to maximum of 10% of the contract value as liquidated damages.** The Parties expressly agree and acknowledge that the above amounts represent a genuine and reasonable pre-estimate of the loss and damage likely to be suffered by DCI on account of, inter alia, disruption to project planning, regulatory and policy implications, adverse commercial and operational consequences, the precise monetary quantification of which is difficult or impracticable at the time of entering into this Contract. The Parties further agree that the said liquidated damages are not in the nature of a penalty, and that DCI shall be entitled to recover the same without the requirement of proving actual loss or damage.

7.3 Programme

The Sub-contractor shall submit a detailed time programme to DCI immediately after receiving the notice under Sub clause 7.1 for proceeding the work. The Sub-contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Sub-contractor's obligations Each programme shall include:

- (a) the order in which the Sub-contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Sub-contractor's Documents, etc.,
- (b) the sequence and timing of dredging and reclamation areas.
- (c) a supporting report which includes:
 - (i) a general description of the methods which the Sub-contractor intends to adopt; and of the major stages or milestones, in the execution of the Works, and
 - (ii) details showing the Sub-contractor's reasonable estimate of the number of each class of Sub-contractor's Personnel and of each type of Sub-contractor's Equipment required on the Site for each major stage.

Unless the Engineer, within 14 days after receiving a programme, gives notice to the Sub-contractor stating the extent to which it does not comply with the Contract, the Sub-contractor shall proceed in accordance with the programme, subject to his other obligations under- the Contract. DCI's Personnel shall be entitled to rely upon the programme when planning their activities.

The Sub-contractor shall promptly give notice to the Engineer of specific probable future events or circumstances, which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Engineer may require the Sub-contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 12.2 [Variation Procedure].

If, at any time, the Engineer gives notice to the Sub-contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Sub-contractor's stated intentions, the Sub-contractor shall submit a revised programme to the Engineer in accordance with this Sub-Clause

7.4 Extension of time for completion

The Sub-contractor shall be entitled subject to Sub-Clause 19.1 (Sub-contractor's claims) to an extension of the Time for Completion if and to the extent that completion for the purposes of sub clause 9.1 (Taking over of the Works) is or will be delayed by any of the following causes:

- (a) a Variation Procedure or other substantial change in the quantity of an item of work included in the Contract as per sub clause 12.2 (Variation procedure),
- (b) a cause of delay giving an entitlement to extension of time under a Sub- Clause of these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
- (e) Any delay, impediment or prevention caused by or attributable to DCI, DCI's Personnel, or DCI's other sub-contractors on the Site.

If the Sub-contractor considers himself to be entitled to an extension of the Time for Completion, the Sub-contractor shall give notice to the Engineer in accordance with sub clause 19.1 (Sub-contractor's claims). When determining each extension of time under the sub clause, the Engineer shall review previous determinations and may increase, but shall not decrease, the total extension of time. Further, extension of contract period shall be decided by DCI as per tender condition.

7.5 Rate of Progress

If, at any time, actual progress is too slow to complete within the Time for Completion, other than as a result of a cause listed in Sub-Clause 7.4 [Extension of Time for Completion], then the Engineer may instruct the Sub-contractor to submit, under Sub-Clause 7.3 [Programme], a revised programme and supporting report describing the revised methods which the Sub-contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

Unless the Engineer notifies otherwise, the Sub-contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Sub-contractor's Personnel and/or Goods, at the risk and cost of the Sub-contractor. If these revised methods cause DCI to incur additional costs, the Sub-contractor shall pay these costs to DCI based on the determination of the engineer.

7.6 Sub-contractor's Responsibility

Notwithstanding the payment of liquidated damages if any under clause-7.0, this shall not relieve the contractor from his obligation to complete the work or from any other obligations / liabilities under this contract.

7.7 Suspension of Work

The Engineer may at any time instruct the Sub-contractor to suspend progress of part or all of the Works. During such suspension, the Sub-contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage

The Engineer may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Sub-contractor.

The Sub-contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Sub-contractor's faulty design, workmanship or materials, or of the Sub-contractor's failure to protect, store or secure in accordance with the Sub-Clause.

7.8 Prolonged Suspension

If the suspension under Sub-Clause 7.7 [Suspension of Work] has continued for more than 28 days, the Sub-contractor may request the Engineer's permission to proceed. If the Engineer does not give permission within 7 days after being requested to do so, the Sub-contractor may, by giving notice to the Engineer, treat the suspension as an omission under Clause 12 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Sub-contractor may give notice of termination under Sub-Clause 15.1 [Termination by Sub-contractor]

8.0 TESTS ON COMPLETION

8.1 Sub-contractor's Obligations

The Sub-contractor shall carry out all tests as per MoEF&CC guidelines and other statutory guidelines as per EMP and as per mitigating measures during course of execution or on Completion in accordance with this Clause and Sub Clause 3.1.4 [Testing], after providing the documents in accordance with sub-paragraph (d) of Sub-Clause 4.1 [Sub-contractor's General Obligations], on the dredged material, testing/ analyzing the quality of water by adopting environmental safeguards, minimizing detrimental inputs enhancing the beneficial aspects of the project and for effective management of the environmental resources affected

by the project at his cost. No additional changes on any such account shall be payable by DCI.

The Sub-contractor shall give to DCI not less than 21 days' notice of the date after which the Sub-contractor will be ready to carry out each of the Tests on completion. Unless otherwise agreed, Tests on completion shall be carried out within 14 days after this date, on such day or days as the Engineer shall instruct.

In considering the results of the Tests on Completion, the Engineer shall make allowances for the effect of any use of the Works by DCI on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Sub-contractor shall submit a certified report of the results of these Tests to the Engineer.

8.2 Delayed Tests

If the Tests on Completion are being unduly delayed by the Sub-contractor, the Engineer may by notice require the Sub-contractor to carry out the Tests within 21 days after receiving the notice. The Sub-contractor shall carry out the Tests on such day or days within that period as the Sub-contractor may fix and of which he shall give notice to the Engineer.

If the Sub-contractor fails to carry out the Tests on Completion within the period of 21 days, DCI's Personnel may proceed with the Tests at the risk and cost of the Sub-contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of DCI /Engineer and the results of the Tests shall be accepted as accurate

8.3 Retesting

If the Works, or a Section, fail to pass the Tests on Completion, Tests on Completion on any related work, to be repeated under the same terms and conditions

8.4 Failure to Pass Tests on Completion

If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub Clause 8.3 [Retesting], the Engineer shall be entitled to:

- (a) order further repetition of Tests on Completion under Sub-Clause 8.3;
- (b) if the failure deprives DCI of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event DCI shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 10.3 [Failure to Remedy Defects]; or
- (c) issue a Taking-Over Certificate, if DCI so requests.

In the event of sub-paragraph (c), the Sub-contractor shall proceed in accordance with all other obligations under the Contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to DCI as a result of this failure. Unless the relevant reduction for this failure is stated (or its method of calculation is defined) in the Contract, DCI may require the reduction to be (I) agreed by both Parties (in full satisfaction

of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub- Clause 3.4 [Determinations]

9 TAKING OVER OF WORKS AND SECTIONS

9.1 Taking over of the Works

Except as stated in Sub-Clause 8.4 [Failure to Pass Tests on Completion], the Works shall be taken over by DCI when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 7.2 [Time for Completion] and except as allowed in sub- paragraph (a), below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

The Sub-contractor may apply by notice to the Engineer for a Taking-Over Certificate not earlier- than 7 days before the Works will, in the Sub-contractors opinion, be complete and ready for taking over.

The Engineer shall, within 28 days after receiving the Sub-contractor's application:

- (a) issue the Taking-Over Certificate to the Sub-contractor, stating the date on which the Works or Section were completed in full accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or
- (b) reject the application, giving reasons and specifying the work required to be done by the Sub-contractor to enable the Taking-Over Certificate to be issued. The Sub-contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Engineer fails either to issue the Taking-Over Certificate or to reject the Sub-contractor's application within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking Over Certificate shall be deemed to have been issued on the last day of that period.

9.2 Taking Over of a Parts of the Works

The Engineer may, at the sole discretion of DCI, issue a Taking-Over Certificate for any part of the Permanent Works.

DCI/IDCO shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Engineer has issued a Taking-Over Certificate for this part. However, if DCI/IDCO does use any part of the Works before the Taking-Over Certificate is issued:

- (a) the part which is used shall be deemed to have been taken over as from the date on which it is used,
- (b) the Sub-contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to DCI/IDCO, and

(c) if requested by the Sub-contractor, the Engineer shall issue a Taking-Over Certificate for this part.

After the Engineer has issued a Taking-Over Certificate for a part of the Works, the Sub-contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Sub-contractor shall carry out these Tests on Completion as soon as practicable before the expiry' date of the relevant Defects Notification Period.

If the Sub-contractor incurs Cost as a result of DCI/IDCO taking over and/or using a part of the 'Works, other than such use as is specified in the Contract or agreed by the Sub-contractor, the Sub-contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 19.1 [Sub-contractor's Claims] to payment of any such Cost plus reasonable profit, which shall be included in the Contract Price. After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or determine this Cost and profit.

In case part/portions of work can be commissioned and port/client operates the portion for commercial purposes, the rates of Liquidated Damage will be restricted to uncompleted / undelivered value of work beyond the stipulated date of completion. The defects notification period for the portions taken over in sections shall be as indicated in the appendix to tender.

9.3 Interference with tests on completion

If the Sub-contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which DCI/ Engineer is responsible, DCI/ Engineer shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.

The Engineer shall then issue a Taking-Over Certificate accordingly, and the Sub-contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Engineer shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

If the Sub-contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Sub-contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 19.1 [Sub-contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or determine these matters.

9.4 Surfaces Requiring Reinstatement

Except as otherwise stated in a Taking-Over Certificate, a certificate for the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement

10.0 DEFECTS LIABILITY

10.1 Completion of Outstanding Work and Remedying Defects

In order that the works in Contract documents and each Section, shall be in the condition required by the Contract by the expiry date of the relevant Defects Notification Period given in the appendix to tender or as soon as practicable thereafter, the Sub-contractor shall

- (a) Defect liability is applicable for Reclamation works till issue of taking over certificate for the project as per clause 9 GCC
- (b) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and
- (c) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) DCI on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

If a defect appears or damage occurs, the Sub-contractor shall be notified accordingly, by (or on behalf of) DCI.

10.2 Cost of Remedying Defects

All work referred to in sub-paragraph (b) of Sub-Clause 10.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Sub-contractor, if and to the extent that the work is attributable to

- (a) any design for which the Sub-contractor is responsible,
- (b) Plant, Materials or workmanship not being in accordance with the Contract, or
- (c) Failure by the Sub-contractor to comply with any other obligation.

If and to the extent that such work is attributable to any other cause, the Sub-contractor shall be notified promptly by (or on behalf of) DCI, and Sub-Clause 12.2 [Variation Procedure] shall apply

10.3 Failure to remedy Defects

If the Sub-contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) DCI, on or by which the defect or damage is to be remedied. The Sub-contractor shall be given reasonable notice of this date.

If the Sub-contractor fails to remedy the defect or damage by this notified date and this Remedial work was to be executed at the cost of the Sub-contractor under Sub Clause 10.2 [Cost of Remedying Defects], DCI may (at his option):

- (a) carry out the work himself or by others, in a reasonable manner and at the Sub-contractor's cost, but the Sub-contractor shall have no responsibility for this work; and the Sub-

contractor shall pay to DCI the costs reasonably incurred by DCI in remedying the defect or damage.

- (b) Require the Engineer to agree or determine a reasonable reduction in the contract price in accordance with sub clause 3.4 (Determinations) or
- (a) If the defect or damage deprives DCI of substantially the whole benefit of the works or any major part of the works, terminate the contract as a whole, or in respect of such major part, which cannot be put to the intended use. Without prejudice to any other rights, under the contract or otherwise, DCI shall then be entitled to recover all sums paid for the works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the site and returning plant and Materials to the sub-contractor.

10.4 Removal of defective work

If the defect or damage cannot be remediated expeditiously on the site and DCI gives consent, the sub-contractor may remove from the site for the purposes of repair such items of plant as are defective or damaged: this consent may require the sub-contractor to increase the amount of the performance security by the full replacement cost of these items or to provide other appropriate security.

10.5 Further tests

If the work of remedying of any defects or damage may affect the performance of the works, the engineer may require the repetition of any of the tests described in the contract. The requirement shall be made by notice within 15 days after the defect or damage is remedied.

These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the party liable under sub- clause 10.2 (cost of remedying defects), for the cost of the remedial work.

10.6 Right of access

Until the performance certificate has been issued, the sub-contractor shall have such right of access to the works as is reasonably required in order to comply with clause, except as may be inconsistent with DCI reasonable security restrictions.

10.7 Performance Certificate

Performance of the Sub-contractor's obligations shall not be considered to have been completed until the Engineer has issued the Performance Certificate to the Sub-contractor, stating the date on which the Sub-contractor completed his obligations under the Contract.

Only the Performance Certificate shall be deemed to constitute acceptance of the Works. A Performance Certificate will be issued to the sub-contractor after successful completion of the work including defect liability period and after rectification of works.

10.8 Unfulfilled Obligations

After the Performance Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation, which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

10.9 Clearance of Site

Upon receiving the Performance Certificate, the Sub-contractor shall remove any remaining Sub-contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.

If all these items have not been removed within 28 days after receipt of copy of the Performance Certificate, DCI may sell or otherwise dispose of any remaining items. DCI shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

11.0 MEASUREMENT AND EVALUATION (Also REFER Technical specifications)

11.1 Works to be measured

The Works shall be measured, and valued for payment, in accordance with this Clause. Whenever the Engineer/ DCI requires any part of the Works to be measured, reasonable notice shall be given to the Sub-contractor's Representative, who shall

- (a) promptly either attend or send another qualified representative to assist the Engineer/ DCI in making the measurement, and
- (b) supply any particulars requested by the Engineer/ DCI.

If the Sub-contractor fails to attend or send a representative, the measurement made by (or on behalf of) the Engineer/ DCI shall be accepted as accurate.

The Sub-contractor shall, as and when requested, attend to examine and agree the records with the Engineer/ DCI, and shall sign the same when agreed. If the Sub-contractor does not attend, the records shall be accepted as accurate.

If the Sub-contractor examines and disagrees the records, and/or does not sign them as agreed, then the Sub-contractor shall give notice to the Engineer/ DCI of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Engineer/ DCI shall review the records and either confirm or vary them. If the Sub-contractor does not so give notice to the Engineer/ DCI within 14 days after being requested to examine the records, they shall be accepted as accurate.

11.2 Method of Measurement

Except as otherwise stated in the Contract and notwithstanding local practice

- (a) measurement shall be made of the net actual quantity of each item of the Permanent Works, and

- (b) the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules/terms and conditions.

11.3 Evaluation

Except as otherwise stated in the Contract, Engineer shall proceed in accordance with sub clause 3.4 (Determinations) to agree or determine the contract price by evaluating each item of work, applying the measurement agreed or determined in accordance with the above sub clauses 11.1 and 11.2 and the appropriate rate or price for ten item.

For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contract or, if there is no such item, specified for similar work. However, a new rate or price shall be appropriate for an item of work if:

- (a)
 - (i) The measured quantity of the item is changed by more than 20% from the quantity of this item in the bill of quantities or other schedule.
 - (ii). This change in quantity multiplied by such specified rate for this item exceeds 10% of the accepted contract amount.
 - (iii). This change in quantity directly changes the cost per unit quantity of this item by more than 10% , and
 - (iv). This item is not specified in the contract as a “fixed rate item”;
- (b)
 - (i) The work is instructed under clause 12 (variations and adjustments) no rate or price is specified in the contract for this item, and
 - (ii). No specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the contract

Each new rate or price shall be derived from any relevant rates or prices in the contract, with reasonable adjustments to take account of the matters described in sub-paragraph (a) and/or (b), as applicable. If no Rates or prices are relevant for the derivation of a new rate or price, it shall be derived from the reasonable cost of executing the work, together with reasonable profit, taking account of any other relevant matters.

Until such time as an appropriate rate or price is agreed or determined, the engineer shall determine a provisional rate or price for the purposes of monthly payment.

11.4 Omissions

Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

- (a) the Sub-contractor will incur (or has incurred) cost which, if the work had not been

omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;

- (b) the omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
- (c) This cost is not deemed to be included in the evaluation of any substituted work;

then the Sub-contractor shall give notice to DCI accordingly, with supporting particulars. Upon receiving this notice, DCI shall proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or to determine this cost, which shall be included in the Contract Price.

12.0 VARIATIONS AND ADJUSTMENTS

12.1 Right to Vary

DCI shall make any variation of the form, quality or quantity of the works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the sub-contractor to do and the sub-contractor shall do any of the following

- (a) Increase or decrease the quantity up to +/- **20%**.
- (b) Omit any such work (partially or fully).
- (c) Change the character or quality or kind of any such work.
- (d) Change the levels, lines, position and dimension of any part of the work.
- (e) Execute additional work of any kind necessary for the completion of the work.
- (f) Change any specified sequence or timing of dredging of any part of the works.
- (g) The quantity in BOQ is for estimation only. However, actual quantity will be obtained at the Reclamation area between pre joint survey and post joint survey after achieving the required finished reclaimed level and also required compacting parameters as per Terms and conditions

No such variation shall in any way vitiate or invalidate the contract, but the effect, if any, of all such variations shall be valued in accordance with clause-12.2, provided that where the issue of an instruction to vary the works is necessitated by some default of or breach of contract by the sub-contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the sub-contractor.

The sub-contractor shall not make any variation without an instruction of the Engineer. Provided that no instruction shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an instruction given under this clause but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities

12.2 Valuation Procedure

All variations referred to in clause 12.1 shall be valued in the following manner:

- (a) at the rates and prices set out in the contract if, in the opinion of DCI, the same shall be applicable.
- (b) If the contract does not contain any rates or prices applicable to the varied work, the rates and prices in the contract shall be used as the basis for valuation so far as may be reasonable failing which after due consultation by DCI with the sub-contractor, suitable rates or prices shall be agreed upon between DCI and the sub-contractor.
- (c) In the event of disagreement, DCI shall fix such rates or prices as are, in his opinion, appropriate and shall notify the sub-contractor accordingly.

Until such time as rates or prices are agreed or fixed, DCI shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with contract and payment.

12.3 Price adjustment

The fuel escalation charges shall be paid to the sub-contractor for the main fuel based on the following formula.

If the price of **main fuel** by the dredger required for execution of the work increases, the sub-contractor shall be compensated for such increase as per provisions detailed below and the amount of the Contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices shall be available only for the work done during stipulated period of the contract including such period for which the contract validly is extended. Such compensation for escalation in prices.

The contract price will be subjected to adjustment on account of variation of price of diesel according to the formula below: -

$$V = 0.85 \times Q \times R \times (P - P_0) / P_0$$

V = Variation in price on account of main fuel during the month under consideration.

P₀ = Actual price of main fuel fixed by the IOCL/HPCL/BPCL in the concerned area / Port, as on the 7 days prior to the date of opening of technical bids.

P = Average price of main fuel fixed by the IOCL/HPCL/BPCL in the concerned area / Port, for the month under consideration.

Q = Fuel element factor has been predetermined as 0.25

R = Value of the work during the month under consideration as per relevant item of Bill of Quantities excluding mobilization and de-mobilizations fees (For the purpose of calculating Work Done (R) in the above formula, the value of work done (of a (TSHD / CSD) will be proportional to the quantity dredged (reported as per Daily Dredging Reports - DDRs) by each individual dredger).

Illustration for arriving "R" value for the month under consideration, say November:

- ❖ Total dredgers deployed - 01 no. TSHD & 01 no. CSD
- ❖ Total reported quantity dredged in November by TSHD – 3 lakh cum
- ❖ Total reported quantity dredged in November by CSD – 5 lakh cum
- ❖ Total value of work done in November (R) as per the Total quantity reclaimed = Rs. 56 Crores, excl. GST

❖ While calculating the Fuel Price Variation charges of TSHD & CSD individually,

- “R” corresponding to TSHD = $R_1 = \frac{3 \text{ lakh cum}}{(3+5 \text{ lakh cum})} \times \text{Rs.56 Crores} = \text{Rs.21 Crores}$
- “R” corresponding to CSD = $R_2 = \frac{5 \text{ lakh cum}}{(3+5 \text{ lakh cum})} \times \text{Rs.56 Crores} = \text{Rs.35 Crores}$

While, $R = R_1 + R_2$

If no. of dredgers are more, then $R = R_1 + R_2 + R_3 + \dots + R_n$ and R_n will be the corresponding reported quantity dredged as per DDRs, as above.

Similarly, if the price of main fuel by the dredger required for execution of the work decreases; de-escalation shall be applied for such decrease as per provisions detailed above and the amount of the Contract shall accordingly be adjusted through deduction. Thus, the benefit of reduction in fuel price, if any, shall be passed to DCI.

The fuel escalation / de-escalation bills will be paid/ recovered on monthly basis as per claim preferred by the sub-contractor. The claim for the month will be submitted latest by 20th day of subsequent month failing which applicable interest will be charged in the case of de-escalation.

Base Rate of Fuel and Adjustment for subsequent Price Variation:

- (i) Whenever there is variation in the price of main fuel, the Sub-contractor shall forthwith in writing and in any event not later than 7 days from the date of such variation inform the Engineer about such variation to enable the Engineer to verify the same.
- (ii) The variation in prices of main fuel to be considered for payment as aforesaid shall be the price charged by M/s. IOCL/HPCL/BPCL from time to time at their local delivery point at Paradip.
- (iii) Compensation for price variation in main fuel shall be worked out and paid/adjusted as the case maybe, subject to the condition that Sub-contractor shall be entitled to such variation in prices only during the Contract Period or any extension thereof, if any
- (iv) No escalation other than the price adjustment provided under cl. i to iii above shall be payable by DCI for reasons whatsoever, and the quoted rate is deemed to cover these aspects also. Beyond the contract period and during extended completion period, the price adjustment payment shall be made at the frozen price index prevailing on the original schedule date of completion of work.

12.4 Payment Applicable Currencies

All the payments under this contract shall be made in Indian Rupees only.

12.5 Provisional Sums

Each Provisional Sum shall only be used, in whole or in part, in accordance with the Engineer's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Sub-contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Engineer shall have instructed. For each Provisional Sum, the Engineer may instruct

- (a) work to be executed (including Plant, Materials or services to be supplied) by the Sub-contractor and valued under Sub-Clause 12.2 [Variation Procedure]; and/or
- (b) Plant, Materials or services to be purchased by the Sub-contractor, and for which there shall be included in the Contract Price:
 - (i) the actual amounts paid (or due to be paid) by the Sub-contractor, and
 - (ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in the Appendix to Tender shall be applied.

The Sub-contractor shall; when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

12.6 Adjustments Changes in Legislation

The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Republic of India (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Sub-contractor in the performance of obligations under the Contract.

If the Sub-contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Sub-contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 19.1 [Sub-contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub Clause 3.4 [Determinations] to agree or determine these matters.

13. CONTRACT PRICE AND PAYMENTS

13.1 The Contract Price

- (a) the Contract Price shall be agreed and be subject to adjustments in accordance with the Contract;
- (b) the Sub-contractor shall pay all taxes, duties and fees required to be paid by him under the Contract,

- (c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:
 - (i) of the Works which the Sub-contractor is required to execute, or
 - (ii) for the purposes of Clause 11 [Measurement and Evaluation]

13.2 Advance Payment

NO advance payment shall be paid by DCI for mobilization of equipment or for any reason what so ever

13.3 Submission of monthly invoice

The Sub-contractor shall submit an Invoice in four copies to the Engineer/DCI after the end of each month, in a form approved by DCI, showing in detail the amounts to which the Sub-contractor considers himself to be entitled, together with supporting documents which shall include the report on the progress during this month in accordance with Sub-Clause 4.20 [Progress Reports]

The Invoice shall include the following items, as applicable, which shall be expressed in the currency in which the Contract Price is payable, in the sequence listed:

- (a) The contract value of the works executed and the sub-contractor's documents produced up to the end of the month (including variations but excluding items described in sub-paragraphs (b) to (f) below);
- (b) Any amounts to be added and deducted for changes in legislation and charges in cost, in accordance with sub-clause 12.6 (adjustments for changes in legislation) and clause 24 (special conditions of contract);
- (c) Any amount to be deducted for retention, calculated by applying the percentage of retention stated in the appendix to tender to the total of the above amounts;
- (d) Any amounts to be deducted towards repayments of advances in accordance with sub-clause 13.2;
- (e) The other additions or deductions which may have become due under the contract or otherwise, including those under clause 19 (claims, disputes and arbitration); and
- (f) The deduction of amounts certified in all previous invoices.

13.4 Schedule of Payments

- (a) the installments quoted in this schedule of payments shall be on the quoted/ and accepted contract value(s) for the purposes of sub-paragraph (a) of Sub-Clause 13.3 [submission of monthly invoice)
- (b) if these installments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than that on which this schedule of payments was based, then the Engineer/DCI may proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or determine revised installments, which shall take account of the extent to which progress is less than that on which the installments were previously based.

13.5 Certification of Monthly Payments

No amount will be certified or paid until DCI has received and approved the Performance Security. Thereafter, the Engineer shall, within 15 days after receiving the monthly invoice and

supporting documents from the sub-contractor, certify and forward the same to the IOCL through IDCO for payment, which shall state the amount, which the Engineer fairly determines to be due, with supporting particulars.

Monthly bills for reclamation work shall be certified and paid only upon verification that the compacted layer(s) at the reclamation site have achieved a minimum compaction pressure of 7 Kg/cm² for all filled-up layers, up to the finished ground level of +5.601 m, within each control grid/section under consideration for the bill, in accordance with Cl. 3.6.6.2 & 3.6.6.3 of Technical Specifications. No payment shall be released for any portion of work where the specified compaction parameters have not been met and duly certified by the Engineer-in-Charge.

However, Payment shall not be withheld for any other reason, although:

- (a) if anything supplied or work done by the Sub-contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
- (b) if the Sub-contractor was or is falling to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.

The Engineer may, in any payment invoice(s), make any correction or modification that should properly be made to any previous Payment invoice. A Payment invoice shall not be deemed to indicate the Engineer's acceptance, approval, consent or satisfaction.

13.6 Payment Methodology

- i. Bills shall be raised on monthly basis and the same shall be certified by DCI after scrutinizing all relevant documents for complying in raising the invoice by the Sub-contractor.
- ii. The basis of payment will be on actual quantities pumped & compacted at the reclamation area and as measured jointly by the Sub-contractor, DCI or his representative/IDCO and as verified by the measurements as per BOQ and as per terms and conditions of contract.
- iii. Payment will be released by IOCL to the Escrow account, wherein DCI, "Sub-Contractor", IDCO and IOCL shall be members.
- iv. Within 15 days from the date of receipt of monthly invoice from the sub-contractor along with all relevant documents and after its compliance as per terms and conditions, DCI will examine and certify and submit the tax invoice to IOCL through IDCO.
- v. Within 30 days from the date of receipt of certified invoice from DCI, IOCL will review, certify and release the payment to Escrow Account directly to DCI and the "Sub-Contractor".
- vi. Monthly bill payment will be made after effecting applicable statutory deductions only.
- vii. Payment of the amount shall be in Indian Rupees only.

13.7 Draft Final Invoice

The sub-contractor shall submit three copies of a draft final Invoice with supporting documents showing in detail at (a) and (b) as below in a form approved by the Engineer:

- (a) the value of all work done in accordance with the Contract, and
- (b) any further sums which the Sub-contractor considers to be due to him under the Contract or otherwise.

If the Engineer disagrees with or cannot verify any part of the final draft invoice, the Sub-contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft final invoice as may be agreed between them. Then The Sub-contractor shall prepare and submit to the Engineer the final invoice for payment as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

However if, following discussions between the Engineer and the Sub-contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Engineer shall deliver to the Sub-contractor for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 19.2 [Amicable Settlement], the Sub-contractor shall then prepare and submit to DCI (with a copy to the Engineer) a Final Statement.

- (a) DCI shall not be liable to pay interest on amounts payable or due to the Sub-contractor, under any circumstances, what so- ever.
- (b) DCI shall have the right to recover any undue payment or excess payment made to the Sub-contractor from any subsequent invoices or from the Performance Security or Retention Money or as debt through the process of Law.

13.8 Discharge

When submitting the Final Statement, the Sub-contractor shall submit a written discharge, which confirms that the total of the Final invoice Statement represents full and final settlement of all moneys due to the Sub-contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Sub-contractor has received the Performance Security and the outstanding balance of this total, in which event the discharge shall be effective on such date.

13.9 Final Payment after taking over of the Reclaimed site by the Client/ Prime Client

After receiving the Final invoice and written discharge in accordance with Sub-Clause 13.9 [draft final invoice and Sub-Clause 13.8 [Discharge], after taking over of the reclaimed site by DCI/ IDCO, the Engineer shall issue, to the sub-contractor, the Final payment, within 60 days from the date of receipt of tax invoice from the sub-contractor, which shall state

- (a) the amount which is finally due, and
- (b) after giving credit to DCI for all amounts previously paid by DCI and for all sums to which DCI is entitled, the balance (if any) due from DCI to the Sub-contractor or from the Sub-contractor to DCI, as the case- may be

If the Sub-contractor has not applied for a Draft Final Payment in accordance with Sub-Clause 13.7 [draft final invoice] and Sub-Clause 13.8 [Discharge], the Engineer shall request the Sub-contractor to do so. If the Sub-contractor fails to submit an application within a period of 28 days, the Engineer shall issue the Final Payment for such amount as he fairly determines to be due.

13.10 Retention Money

Retention money shall be deducted from each running bill @ 5% subject to a maximum accumulation of 5% of contract price.

Retention Money shall be refunded within 30 days from the date of payment of final bill.

However, if any work remains to be executed under Clause 10 [Defects Liability], the Engineer shall be entitled to withhold retention money until it has been executed/rectified.

13.11 Cessation of DCI's Liability

DCI shall not be liable to the Sub-contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Sub-contractor shall have included an amount expressly for it

- (a) in the Final Statement and also
- (b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described

However, this Sub-Clause shall not limit DCI's liability under his indemnification obligations, or DCI's liability in any case of fraud, deliberate default or reckless misconduct by DCI.

13.12 Currencies of Payment

The Contract Price shall be paid in the currency or currencies named in the Appendix to Tender

- (i) payments and deductions under Sub-Clause 12.5 [Provisional Sums] shall be made in the above currencies and
- (ii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 13.3 shall be made in the above currencies;
 - (a) payment of the damages specified in the Appendix to Tender shall be made in the above currencies;
 - (b) other payments to DCI by the Sub-contractor shall be made in the currency in which the sum was expended by DCI, or in such currency as may be agreed by both Parties;
 - (c) if any amount payable by the Sub-contractor to DCI in a particular currency

exceeds the sum payable by DCI. To the Sub-contractor in that currency, DCI may recover the balance of this amount from the sums otherwise payable to the Sub-contractor and

- (d) for the provisions in (b) above, if no rates of exchange are stated in the Appendix to Tender, they shall be those prevailing on the Base Date and determined by the central bank of the Country.

14.0 TERMINATION BY DCI

14.1 Notice to Correct

If the Sub-contractor fails to carry out any obligation under the Contract, the Engineer may by notice require the Sub-contractor to make good the failure and to remedy it within a specified reasonable time

14.2 Termination by DCI

DCI shall be entitled to terminate the Contract if the Sub-contractor

- (a) fails to comply with [Performance Security] or with a notice under Sub-Clause 14.1 [Notice to Correct],
- (b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
- (c) without reasonable excuse fails:
 - (i) to proceed with the Works in accordance with Clause 7 [Commencement, Delays and Suspension], or
 - (ii) to comply with a notice issued under clause 10 within 14 days after receiving it
- (d) subcontracts the whole of the works or assigns the contract without the required agreement
- (e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order- made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or
- (f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:
 - (i) for doing or forbearing to do any action in relation to the Contract, or
 - (ii) for showing or forbearing to show favour or disfavor to any person in relation to the Contract,

or if any of the Sub-contractor's Personnel, agents or his subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However lawful inducements and rewards to Sub-contractor's Personnel shall not entitle termination.

In any of these events or circumstances, DCI may, upon giving 14 days' notice to the Sub-contractor, terminate the Contract and expel the Sub-contractor from the Site. However, in the case of sub-paragraph (e) or (f), DCI may by notice terminate the Contract immediately.

DCI's election to terminate the Contract shall not prejudice any other rights of DCI, under the Contract or otherwise.

The Sub-contractor shall then leave the Site and deliver any required Goods, all Sub-contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Sub-contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, DCI may complete the Works and/or arrange for any other entities to do so. DCI and these entities may then use any Goods, Sub-contractor's Documents and other design documents made on behalf of the Sub-contractor.

DCI shall then give notice that the Sub-contractor's Equipment and Temporary Works will be released to the Sub-contractor at or near the Site. The Sub-contractor shall promptly arrange their removal, at the risk and cost of the Sub-contractor. However, if by this time the Sub-contractor has failed to make a payment due to DCI, these items may be sold by DCI in order to recover this payment. Any balance of the proceeds shall then be paid to the Sub-contractor

14.3 Valuation at Date of Termination

As soon as practicable after a notice of termination under Sub- Clause 14.2 [Termination by DCI] has taken effect, the Engineer shall proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or determine the value of the Works, Goods and Sub-contractor's Documents, and any other sums due to the Sub-contractor for work executed in accordance with the Contract

14.4 Payment after Termination

After a notice of termination under Sub-Clause 14.2 [Termination by DCI] has taken effect, DCI may

- (a) proceed in accordance with Sub-Clause 2.4 [DCI's Claims],
- (b) withhold further payments to the Sub-contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by DCI, have been established, and/or
- (c) recover from the Sub-contractor any losses and damages incurred by DCI and any extra costs of completing the Works, after allowing for any sum due to the Sub-contractor under Sub-Clause 14.3 [Valuation at Date of Termination]. After recovering any such losses, damages and extra costs, DCI shall pay any balance, if available to the Sub-contractor.

14.5 DCI's Entitlement to Termination

DCI shall be entitled to terminate the Contract, at any time for DCI's Convenience, by giving notice of such termination to the Sub-contractor. The termination shall take effect 14 days after the later of the dates on which the Sub-contractor receives this notice or DCI returns the Performance Security. DCI shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another sub-contractor.

After this termination, the Sub-contractor shall proceed in accordance with Sub clause 15.3 (Cessation of Work and Removal of Sub-contractor's Equipment) and shall be paid in accordance with Sub-Clause 18.6 [Optional Termination, Payment and Release].

15.0 SUSPENSION AND TERMINATION BY THE SUB-CONTRACTOR

15.1 Termination by Sub-contractor

The Sub-contractor shall be entitled to terminate the work after prolonged suspension, affects the whole of the Works, the Sub-contractor may, upon giving 14 days' notice to DCI, terminate the Contract.

15.2 Cessation of Work and Removal of Sub-contractor's Equipment

After a notice of termination under Sub-Clause 14.5 [DCI's Entitlement to Termination], Sub-Clause 15.2 [Termination by Sub-contractor] or Sub-Clause 18.6 [Optional Termination, Payment and Release] has taken effect, the Sub-contractor shall promptly

- (a) cease all further work, except for such work as may have been instructed by the Engineer for the protection of life or property or for the safety of the Works,
- (b) hand over Sub-contractor's Documents, Plant, Materials and other work, for which the Sub-contractor has received payment, and
- (c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

15.3 Payment on Termination

After a notice of termination under Sub-Clause 15.1 [Termination by Sub-contractor] has taken effect, the Engineer shall

- (a) return the Performance Security to the Sub-contractor,
- (b) pay the Sub-contractor in accordance with Sub-Clause 18.6 [Optional Termination, Payment and Release]

16. RISK AND RESPONSIBILITY

16.1 Indemnities

The Sub-contractor shall indemnify and hold harmless DCI/IDCO, DCI /IDCO Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of

- (a) bodily injury, sickness, disease or death, of any person whomsoever arising out of or in the course of or by reason of the Sub-contractor's design (if any), the execution and

completion of the Works and the remedying of any defects, unless attributable to any negligence, willful act or breach of the Contract by DCI, DCI's Personnel, or any of their respective agents, and

- (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:
 - (i) arises out of or in the course of or by reason of the Sub-contractor's design (if any), the execution and completion of the Works and the remedying of any defects, and
 - (ii) is attributable to any negligence, willful act or breach of the Contract by the Sub-contractor, the Sub-contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

16.2 Sub-contractors care of the works

The Sub-contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Clause 9.0 [Taking Over of the Works and Sections]) for the works, when responsibility for the care of the Works shall pass to DCI. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to DCI

After responsibility has accordingly passed to DCI, the Sub-contractor shall take responsibility for the care of any work, which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed

If any loss or damage happens to the Works, Goods or Sub-contractor's Documents during the period when the Sub-contractor is responsible for their care, from any cause not listed in Sub-Clause 16.3 [DCI's Risks], the Sub-contractor shall rectify the loss or damage at the Sub-contractor's risk and cost, so that the Works, Goods and Sub-contractor's Documents conform with the Contract.

The Sub-contractor shall be liable for any loss or damage caused by any actions performed by the Sub-contractor after a Taking-Over Certificate has been issued. The Sub-contractor shall also be liable for any loss or damage, which occurs after a Taking-Over Certificate, has been issued and which arose from a previous event for which the Sub-contractor was liable.

16.3 DCI's Risk

The risks referred to in Sub-Clause 16.4 below are

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country,
- (c) riot, commotion or disorder within the Country by persons other than the Sub-

- contractor's Personnel and other employees of the Sub-contractor and his / other Subcontractors,
- (d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, within the Country, except as may be attributable to the Sub-contractor's use of such munitions, explosives, radiation or radio-activity,
 - (e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
 - (f)
 - (g) any operation of the forces of nature which is Unforeseeable or against, which an experienced sub-contractor could not reasonably have been expected to have taken adequate preventative precautions.

16.4 Consequences of DCI's Risks

If and to the extent that any of the risks listed in Sub-Clause 16.3 above results in loss or damage to the Works, Goods or Sub-contractor's Documents, the Sub-contractor shall promptly give notice to the Engineer and shall rectify this loss or damage to the extent required by the Engineer

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.4 [Extension of Time for Completion], and
- (b) Payment of any such Cost, which shall be included in the Contract Price.

16.5 Intellectual and Industrial Property Rights

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement

Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

DCI shall Indemnify and hold the Sub-contractor harmless against and from any claim alleging an infringement which is or was:

- (a) an unavoidable result of the Sub-contractor's compliance with the Contract, or
- (b) a result of any Works being used by DCI:
 - (i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
 - (ii) in conjunction with anything not supplied by the Sub-contractor, unless such use was disclosed to the Sub-contractor prior to the Base Date or is stated in the contract.

The Sub-contractor shall indemnify and hold DCI harmless against and from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Sub-contractor is responsible.

If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration, which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission, which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, Litigation or arbitration upon being requested to do so by such other Party.

16.6 Limitation of Liability

Notwithstanding anything to the contrary contained elsewhere and irrespective of whether the basis of claim be at law or in equity and whether or not based upon contract, tort, negligence, strict liability or otherwise;

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than under Sub-Clause 15.3 [Payment on Termination] and Sub-Clause 16.1 [Indemnities]

The total liability of the Sub-contractor to DCI, under or in connection with the Contract other than under Sub-Clause 4.19 [Site facilities], Sub-Clause 16.1 [Indemnities] shall not exceed Accepted Contract Amount.

Each party to this Contract, acting on behalf of itself and its affiliates and representing that it has the right to do so, waives the subrogation rights of its Business Interruption/ Extra Expense Insurers in favour of the other party, affiliates and their respective agents and employees.

This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

17. INSURANCE

17.1 General Requirements for Insurances

The Sub-contractor shall be responsible for effecting and maintaining the insurance specified in the relevant Sub- Clause

Each insurance shall be effected with insurers and in terms approved by DCI. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The Sub-contractor shall, within the respective periods stated in the Appendix to Tender (calculated from the Commencement Date), submit to DCI:

- (a) evidence that the insurances described in this Clause have been effected, and
- (b) copies of the policies for the insurances described in Sub-Clause 17.2 [Insurance for Works and Sub-contractor's Equipment] and Sub-Clause 17.3 [Insurance against Injury Persons and Damage to Property].

When each premium is paid, the Sub-contractor shall submit evidence of payment to DCI.

The Sub-contractor shall comply with the conditions stipulated in each of the insurance policies. The Sub-contractor shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

The Sub-contractor shall not make any material alteration to the terms of any insurance without the prior approval of the Employer. If the Sub-contractor makes (or attempts to make) any alteration, the same shall be informed to DCI in advance.

If the Sub-contractor fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, DCI may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The Sub-contractor shall pay the amount of these premiums to DCI, and the Contract Price shall be adjusted accordingly.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Sub-contractor, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurer shall be borne by the Sub-contractor. In accordance with these obligations; liabilities or responsibilities. However, if the Sub-contractor fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and DCI neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the Sub-contractor. Payments shall be subject to Sub-Clause 2.4 [DCI's Claims] or Sub-Clause 19.1 [Sub-contractor's Claims], as applicable.

17.2 Insurance for works and Sub-contractor's equipment

The Sub-contractor shall insure the Works, Plant, Materials and Sub-contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 17.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works

The Sub-contractor shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Sub-contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Sub-contractor in the course of any other operations (including those under Clause 10 [Defects Liability]).

The Sub-contractor shall insure their Equipment for not less than the full replacement value, including delivery to Site. For each item of Sub-contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Sub-contractor's Equipment. The assurance

- (a) shall cover all loss and damage from any cause not listed in Sub-Clause 16.3 [DCI's Risks],
- (b) shall also cover loss or damage to a part of the Works which is attributable to the use or occupation by DCI of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h) of Sub Clause 16.3 [DCI's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Appendix to Tender (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
- (c) may however exclude loss of, damage to, and reinstatement of:
 - (i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
 - (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,
 - (iii) a part of the Works which has been taken over by DCI, except to the extent that the Sub-contractor is liable for the loss or damage, and
 - (iv) goods while they are not in the Country,
If, more than one year after the Base Date; the cover described in sub-paragraph (b) above ceases to be available at commercially reasonable terms, the Sub-contractor shall give notice to DCI, with supporting particulars. DCI shall then (i) be entitled subject to Sub-Clause 2.4 [DCI's Claims] to payment of an amount equivalent to such commercially reasonable terms as the Sub-contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 17.1 [General Requirements for Insurances].

17.3 Insurance against Injury to Persons and Damage to Property

The Sub-contractor shall insure against each Party liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 17.2 [Insurance for Works and Sub-contractor's Equipment]) or to any person (except persons insured under Sub-Clause 17.4 [Insurance for Sub-contractor's Personnel]),

which may arise out of the Sub-contractor's performance of the Contract and Occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Appendix to Tender, with no limit on the number of occurrences. If an amount is not stated in the Appendix to Tender, this Sub-Clause shall not apply.

Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Sub-contractor as insuring Party,
- (b) shall be extended to cover liability for all loss and damage to DCI's property (except things Insured under Sub-Clause (17.2) arising out of the contractor's performance of the Contract, and
- (c) may however exclude liability to the extent that it arises from:
 - (i) DCI's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,
 - (ii) damage which is an unavoidable result of the Sub-contractor's obligations to execute the Works and remedy any defects, and
 - (iii) a cause listed in Sub-Clause 16.3 [DCI's Risks], except to the extent that cover is available at commercially reasonable terms

17.4. Insurance for Sub-contractor's Personnel

The Sub-contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Sub-contractor or any other of the Sub-contractor's Personnel

DCI and the Engineer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of DCI or of DCI's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For his Sub-contractor's employees, the insurance may be effected by his Sub-contractor, but the Sub-Contractor shall be responsible for compliance with this Clause.

17.5 Insurance for Floating Craft

Notwithstanding what is stated in the above clauses, all the floating crafts including dredgers deployed in the operation should be insured under Marine Hull Policy and covered for various Port risks including pollution and wreck removal by a P & I club, which is a member of an International Group of P & I Club

18. FORCE MAJEURE

18.1 Definition of ForceMajeure

In this Clause, "Force Majeure" means an exceptional event or circumstance

- (a) which is beyond a Party's control,
- (b) which such Party could not reasonably have provided against before entering into the Contract,
- (c) which, having arisen, such Party could not reasonably have avoided or overcome, and
- (d) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war,
- (iii) riot, commotion, disorder, strike or lockout by persons other than the Sub-contractor's Personnel and other employees of the Sub-contractors,
- (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Sub-contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) natural catastrophes such as earthquake, tsunami, hurricane, typhoon or volcanic activity

18.2 Notice of Force Majeure

If a Party is or will be prevented from performing any of its obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, (or should have become aware), of the relevant event or circumstance constituting Force Majeure.

The Party shall, having given notice, be excused performance of such obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either- Party to make payments to the other Party under the Contract

18.3 Duty to Minimize Delay

Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure.

A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure

18.4 Consequences of Force Majeure

If the Sub-contractor is prevented from performing any of his obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 18.2 [Notice of Force Majeure], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Sub-contractor shall be entitled subject to Sub-Clause 19.1[Sub-contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 7.4 [Extension of Time for Completion], and
- (b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (v) of Sub-Clause 18.1 [Definition of Force Majeure], occurs in the Country, payment of any such Cost.

After receiving this notice, the Engineer shall proceed in accordance with Sub Clause 3.4 [Determinations] to agree or determine these matters

18.5 Force Majeure Affecting Subcontractor

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Sub-contractor's non-performance or entitle him to relief under this Clause

18.6 Optional Termination Payment and Release

If the execution of substantially all the Works in progress is prevented for a continuous period of 30 days by reason of Force Majeure of which notice has been given under Sub-Clause 18.2 [Notice of Force Majeure], or for multiple periods which total more than 60 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 14 days after the notice is given, and the Sub-contractor shall proceed.

Upon such termination, the Engineer shall determine the value of the work done and issue a Payment which shall include:

- (a) the amounts payable for any work carried out for which a price is stated in the Contract;
- (b) Cost of Plant and Materials ordered for the Works which have been delivered to the Sub-contractor, or of which the Sub-contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) DCI when paid for by DCI, and the Sub-contractor shall place the same at DCI's disposal;
- (c) any other Cost or liability which in the circumstances was reasonably incurred by the Sub-contractor in the expectation of completing the Works;

the Cost of removal of Contractor's Equipment from the Site as stated in the contract

18.7 Release from Performance Under the Law

Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfill its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:

- (a) the Parties shall be discharged from further performance, without prejudice to the any rights, remedies, liabilities, or entitlements of either Party accrued prior to the date of discharge, and
- (b) the sum payable by DCI to the Sub-contractor shall be the same as would have been payable under Sub- Clause 18.6 [Optional Termination, Payment and Release] if the Contract had been terminated under Sub-Clause 18.7.

19.0 DISPUTE RESOLUTION

19.1 If any dispute or difference arises between DCI and Sub-contractor in connection with contract or as to the rights and liabilities of the parties hereto, immediately after receipt of notice of dispute by either party, parties shall first endeavour to resolve the dispute through negotiations through their authorized representatives.

19.2 Instead of direct negotiations or if direct negotiations fail, DCI and Sub-contractor may try to settle dispute through mediation before the panel of Independent External Monitors mentioned in the Integrity Pact in a time bound manner. However, not more than five meetings shall be held for a particular dispute resolution. The fees/expenses on dispute resolution shall be equally shared by both the parties. The seat and venue of Mediation shall, preferably, be Visakhapatnam and the language shall be English. The cost of mediation including Mediator's fees, logistics, boarding and lodging, travel, clerical charges and other expenditure, if any, will be shared by both the parties, equally.

19.3 If the matter is not resolved through Negotiation or Mediation within the time specified above, and if the value of the dispute is less than 10% of Contract Value it can be referred by any of the parties for settlement through Arbitration as per Arbitration and Conciliation Act, 1996, as amended from time to time. If the value of the dispute is 10% of Contract Value and above, the same shall be referred to adjudication by the Competent Court of Law.

19.4 The courts at Cuttack shall have exclusive jurisdiction on all the matters with reference to this Agreement.

19.5 ARBITRATION CLAUSE

19.5.1 If the matter cannot be settled through Negotiation or Mediation, the same shall be referred to the arbitration by a sole Arbitrator appointed through mutual agreement between the parties and the award of the sole Arbitrator shall be final and binding upon the parties hereto, subject to the provisions of the Arbitration and Conciliation Act 1996.

19.5.2 The arbitrator shall give a reasoned Award and it shall be in accordance with the provisions of the Arbitration and Conciliation Act 1996 or any statutory modifications or re-enactment thereof. The Arbitrator is precluded from awarding any interest for the pre-reference period or pendent lite period. The language of the Arbitration proceedings shall be English. The seat and venue of the Arbitration shall be Visakhapatnam.

19.5.3 Irrespective of the outcome of the Arbitration proceedings, the cost towards fees of the Arbitrator(s), his/their stay and transportation arrangements, venue and logistics arrangements will be equally shared by both the parties. The legal cost like advocates fees for pleadings, arguments, examination of witnesses, etc will be borne by the parties for their respective advocates/legal firms. Both parties shall enter into an agreement to this effect on the 1st Sitting of the Arbitration Proceedings after invocation of Arbitration.

20.0 PROPERTY IN EXCAVATED MATERIALS

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found during excavation / dredging shall be placed under the care and authority of DCI.

21. DRAWINGS AND DESIGNS

- a) General details of the works are shown on the drawings accompanying this tender document. The Engineer will supply to the sub-contractor from time to time during the progress of the works such further working drawings as will be necessary in his opinion for the proper and adequate execution and maintenance of the works in accordance with the Engineer's designs and/or any modification thereof as decided by the Engineer and the Sub-contractor shall carry out the work in accordance with the said working drawings. Two sets of such working drawings will be issued. If more sets are required by the Sub-contractor, he will have to make his own arrangement at his cost.
- (b) In the event of the Sub-contractor proposing any alteration/modification to the Engineer's design, detail, method of construction, he shall at his own expenses prepare and submit for approval of the Engineer copies in duplicate (in the first instance) of detailed working drawings which may be required for such alteration/modification and at the same time call the attention of the Engineer to any alternative detail or modification of the Contract drawings which the Sub-contractor may wish to make at least 30 days prior to the commencement of the work or part of the work to which such drawings relate. The sub-contractor shall at the same time, if so required by the Engineer, furnish calculation sheets in duplicate relating to the strength and anticipated deflections in respect of such altered/modified works. The Engineer will, after any such alteration which he may approve, record on the copies as amended his approval and will return one copy of the drawings and calculation sheets to the sub-contractor, who shall carry out the work in accordance therewith. The Sub-contractor shall forward to the Engineer three additional copies of the working drawings and calculation sheets as approved, in addition to these working drawings and calculation sheets as approved. In addition to these working drawings are also to be submitted (the same procedure as in the case of the Sub-contractor) in respect of any work proposed to be executed by sub-contractors. The approval of the Engineer of all or any of the calculation sheets, drawings shall not relieve the Sub-contractor- of responsibility in connection with the execution of the altered/modified or his sub-contractors works.
- (c) The complete sets of tracing on linen or tracing film of all drawings showing every and all works 'As Made' under the contract shall be made by the Sub-contractor at his own expense

and delivered to the Engineer within one month of the completion of the various sections of the work or at such times as directed by the Engineer. All departure alteration, / modifications from the Contract Drawings and supplementary working drawings issued by the Engineer also shall be incorporated in the "As Made" drawings. The drawings shall be fully dimensioned, of an approved size and with the standard litho black or as approved by the Engineer.

22. FILLING IN HOLES AND TRENCHES

Sub-contractor immediately upon completion of any work under the contract shall at his own expenses fill up all holes or trenches which have been made or dug, level or remove mounds of earth that may have been made and clear away all rubbish occasioned in the execution of the works or temporary works. The sub-contractor shall bear and pay all costs, charges, damages and expenses which may be incurred or sustained on account or in consequence of any accident which may happen by reason of holes and trenches connected with the work being left unfenced or materials being left or placed in improper situations.

23. CONTRACT SUPERSEDES PREVIOUS DOCUMENTS

The Sub-contractor shall have no right to any increase in the rates in the Bill of Quantities nor any other right whatsoever by reason of any representative explanation or statement or alleged representative explanation or statement made or by reason of any information promise or guarantee given or alleged to have been given to him by any person (whether in the employment of DCI or not) before the date of the contract embodies the whole arrangements between the parties with reference to the contract hereby constituted and all previous, correspondence/ negotiation/ representations/ explanations/ statements/ promises or guarantee whether oral or written shall be excluded.

24. BRIBES AND COMMISSION

Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Sub-contractor or his or their behalf to any officer, servant, representative or agent of the Engineer or to any person on his behalf in relation to the obtaining or to be execution of this or any other contract with DCI shall in addition to any criminal liability which he may incur subject the sub-contractor to the cancellation of this and all other contracts with DCI and also to the payment of any loss or damage resulting from any such cancellation, and the DCI shall be entitled to deduct the amounts so payable from any money otherwise due to the sub-contractor under this or any other contract. Any question or disputes as to the commission of any offence under the present clause shall be settled by the Engineer in such a manner and on such evidence or information as he shall think fit and consider sufficient and his decision shall be final and conclusive.

25. SCHEDULE OF RATES

25.1 Preamble

- a) The Schedule of Rates shall be read with all other sections of this Bidding Document.
- b) The Sub-contractor is deemed to have studied the drawings, specifications and details of works to be done within the Time Schedule and should have acquainted himself with the conditions prevailing at site.
- c) The quantity shown against the various items are only approximate and may vary to any extent individually as detailed in General Conditions of Contract. No claim shall be entertained during the currency of this Contract towards any items due to the above including where the Sub-contractor has quoted low/ high rates.
- d) DCI reserves the right to interpolate or extrapolate the rates for any new item of work not covered in Schedule of Rates from the similar items already available in Schedule of Rates. All the works shall be measured upon completion and paid for at the rate quoted and accepted in the "Schedule of Rates". In case any activity though specifically not covered in Schedule of Rates descriptions but the same is covered under scope of work/ scope of supply/ specification/ drawings etc. no extra claim on this account shall be entertained, since Schedule of Rates is to be read in conjunction with all other documents forming part of the Contract.
- e) All items of work mentioned in the Schedule of Rates shall be carried out as per the specifications, drawings and instructions of DCI and the rates are deemed to be inclusive of material, consumable, labour, supervision, tools & tackles and detailing of construction/fabrication drawings wherever required as called for in the detail specification and conditions of the Contract.
- f) DCI reserves the right to cancel/ delete/curtail any item or group of work if necessary. Such a step shall not be construed as reason for changing the rates.

25.2 General Terms of Payment

Mobilization and demobilization charges of the equipment and also the cost incurred for personnel during journey to the site and till the time of its demobilization, including insurance of equipment and personnel, all complete shall be paid as per terms and conditions of the contract and as per rate entered in BOQ after completion of mobilization at site. Mobilization is deemed to be complete after procedure document is approved, all equipment, dredging plant, marine spread and personnel are mobilized at the site as per technical specifications and certification.

25.3 Idle Time

Idle time charges are not payable for idling of any dredger or other equipment including the men and machinery for reasons whatsoever under this contract and no such claims shall be entertained even at a later date.

25.4 Goods and Services Tax (GST)

The quoted rate of the tenderer shall be inclusive of all taxes and duties excluding applicable GST. The Sub-contractor may raise GST invoice as monthly running bills notwithstanding the payment from DCI. The Sub-contractor has to comply the GST remittance and filing as per statutory requirements. GST will be reimbursed separately on confirmation of credit in DCI's GST Portal. DCI shall deduct TDS from the claim bill as per the statutory provisions of prevailing laws.

(i) The sub-contractor shall quote the price exclusive of GST. The sub-contractor shall quote prevailing GST rate separately, which shall be reimbursed by DCI after ascertaining necessary compliance as per Goods & Service Tax Act, 2017.

(ii) All other duties, taxes, cess, applicable if any, shall be borne by the sub-contractor.

(iii) Applicable TDS under GST Act is required to be deducted or as admissible from payment /credit given to the sub-contractor.

(iv) The element of GST will not be considered for evaluation of financial purpose.

Also change if any in the Government Policy or Amendment in Tax structure the same will be applicable from time to time.

25.5 Income Tax

Income tax on the gross amount of the sub-contractor's bill shall be deducted from as per Section 194C of the Income Tax Act as applicable from time to time.

26. SECURITY CLEARANCE

Prequalification of bidders is subject to security clearance from Govt. The bids received from any tenderer may be summarily rejected on National Security consideration without any intimation thereof to the tenderer.

The bidders shall note that Ministry of Home Affairs (MHA) is one of the agencies for according national security clearance to the bidders participating in PPP / dredging projects in Major Ports in India. Recently, Ministry of Home Affairs has developed "e-Sahaj" (<https://esahaj.gov.in/notices>) portal for submission of security clearance proposals and is functional. Ministry of Shipping is included in e- Sahaj. This e-Sahaj portal is effective from 01/09/2018. In addition to the registration and submission of requisite information for security clearance through e-sahaj portal, bidders are instructed to submit the required details/ information(s) for obtaining security clearances from Govt. as per the Formats/ proforma attached at Appendix-A(1). Bidders are requested to upload the scanned copies of along with technical bid as well as provide 12 nos. of hard copies of complete set of documents duly signed and stamped for security clearance. DCI has adopted the above requirement as a prudent measure to meet any contingency arising due to constraints whatsoever in the operation of the e-sahaj portal, so that DCI can forward all the details of the bidders to the Government for obtaining their respective security clearance.

All forms meant for submitting security clearance from MHA have to be uploaded in e-sahaj portal. The process for submitting security clearance from MHA will be as follows:

(i) All bidders participating in the dredging project will have to register themselves in e-sahaj portal. The log-in id and password will be provided through email and SMS through Mobile No. (STD/ ISD/Local). Bidders then need to fill up the form, upload the document as instructed and then send to concerned port.

(ii) Bidder is requested to provide 12 copies of complete set of submitted documents for the security clearance.

(iii) Joint General Manager (CS), Dredging Corporation of India Limited, is the Nodal Officer for the e-sahaj portal. He will be assisted by an Associate Officer. The Nodal Officer / Associate Officer after verifying the application would forward the proposal to the Ministry of Shipping.

(iv) Ministry of Shipping on receipt of the proposal would verify the application and if complete in all respects, forward the same electronically to the MHA.

The bidders are to register on the e-sahaj portal, and the following are relevant details

1. This form is for online registration of organizations or individuals seeking for security clearance.
2. Registration of organizations/firms/ companies is to be done once, by the person authorized by the same.
3. Registration of an individual applying for security clearance, is to be done by himself on the portal.
4. Person doing the registration for himself or on behalf of any organization/firm/company will be authenticated through OTP and also a documentary ID proof needs to be attached.
5. Registration is a two-step process, after successful completion of the step one, an email verification link is sent to the user's email. On successful registration by the portal, a registration ID will generated by the system to be used as login Id and it will be sent to the registrant's email. The password will be sent on the registered mobile number.
6. After successful registration, user needs to logged in to the portal to fill and submit the applicable security clearance form.
7. User will be prompted to change the system generated password to his own password.

8. Letter of authorization is an authorization letter from the company official on the letterhead of the company, who have authorized the registrant to register on the portal on behalf of the company.

Following are the some of the details to be submitted:

- (a) User-Application Details
- (b) Company Details (as applicable)
- (c) Foreign Collaborator Details (as applicable)
- (d) Board of Director Details (as applicable)
- (e) Share Holder Details (as applicable)
- (f) Details of Criminal Cases (as applicable)
- (g) User - Application Preview (as applicable)

The bidders whose security clearances have been received from the Government only shall be considered for pre- qualified.

Also change if any in the Guidelines issued by the Ministry of Shipping on security clearance, same will be applicable from time to time.

Bidders whose security clearance has been granted by Ministry, the validity of period will be subject to following condition as per the guidelines issued by Ministry dated 12/02/2016:

(1) It is mandatory to inform the Administrative Ministry / Department regarding any changes in management, control or Ownership pattern of company /operators executing the project or change in shareholding pattern in excess of 10% in the company to the Ministry of Shipping within two weeks and any lapse can result in withdrawing the security clearance already granted.

(2) The operation in Pakistan, if any of such entity who has been granted security clearance by the Ministry of Shipping should be suitable firewalled from the contract/operations in India and no Pakistani national or a person of Pakistan origin should be engaged by the company for this project.

(3) If the entity is found indulging in acts inimical to India's national security, the license/tender/contract is liable to be terminated.

(4) The company should inform the administrative Ministry regarding criminal case(s), if any registered against the company, DCI, promoter or any of its directors after the issue of license/concession or permission or award of contract, as the case may be. The administrative Ministry in turn will inform the MHA of Such development.

(5) Approval for any change in equipment or vessel involving foreign origin and clearance for engagement of foreign personnel shall be obtained from all security agencies.

The tenderer has to submit details (**Annexure-XVIII Under Section VIII**) along with the tender for the purpose of obtaining security clearance from the Govt. of India.

27. INTEGRITY PACT

The Central Vigilance Commission (CVC) has been promoting integrity, transparency, equity and competitiveness in transactions by various organizations of the Government of India. Public procurement is an area of concern for the CVC, and many steps have been taken to put proper systems in place. In this context, Integrity Pact (IP), a tool conceptualized and promoted by Transparency International, an international NGO, aimed at preventing corruption in public contracting, has been found useful. It has been decided by Ministry of Shipping that all organizations under the Ministry will implement IP. IP should cover every tender / procurement above a specified threshold value. The threshold value of contracts / procurements / transactions incorporating IP would be such that it covers 90% by value of all contracts / procurements / transactions of the organization in the last 3 years. Presently the threshold is fixed as Rs. 100 lakhs. IP essentially envisages an agreement between prospective vendors / bidders, and Dredging Corporation of India Limited, committing the persons / officials of both sides not to resort to any corrupt practice in any aspect of the contract at any stage. Only those vendors / bidders, who commit themselves to IP with DCI, would be considered competent to participate in the bid process. Any violation would entail disqualification of the bidders and exclusion from future business dealings. IP, in respect of a particular contract should cover all phases of the contract, from the stage of Notice inviting Tender (NIT) / pre-bid stage, till the conclusion of the contract, i.e. final payment or the warranty / guarantee period. IP would be implemented through Independent External Monitor (IEM), are eminent persons appointed by the organization, with approval of CVC. The term of appointment for an IEM would be 3 years. Name of the IEM will be mentioned in NIT. The IEM would review independently and objectively assess, as to whether and to what extent parties have complied with their obligations under the IP. IEM would have access to all contract documents, whenever required. The bidders may raise disputes / complaints if any, with the IEM. The IEM would examine complaints received by them and give their recommendations / views to the Chairman of Port. Recommendations of IEM would be in the nature of advice and would not be legally binding.

Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization. Shri. Prahlad Kumar Sinha, IP&TAFS (Retd.) and Shri. Aditya Kumar Mittal, IRSE (Retd.) have been appointed IEMs by DCI Ltd. Draft condition to be incorporated in the Draft Tender papers 1) Then bidder has to execute Integrity pact agreement with Dredging Corporation Of India Limited (As per Appendix) Shri. Prahlad Kumar Sinha, IP&TAFS (Retd.) and Shri. Aditya Kumar Mittal, IRSE (Retd.) have been nominated as Independent External Monitors for Integrity Pact whose address is as under;

1. Shri. Prahlad Kumar Sinha, IP&TAFS (Retd.)
A-303 Sanskrit Vihar, 10th Avenue,
Gaur City 2, Greater Noida West,
Gautam Budh Nagar, U.P-201318
Mobile: +91-9432677066, 9717466666
Email- pekay66@gmail.com

2. Shri. Aditya Kumar Mittal, IRSE (Retd.)
Flat C-2/10 (3102), Vanashree CHS,
Plot 1&2, Sector 58A, Palm Beach Road,
Near Seawood Estates, Nerul (West),

Navi Mumbai – 400 706
Mobile: +91-9560527000,
Email- adityakumarmittal@gmail.com

- 2) The bidder has to sign and seal and upload the scanned copy of Integrity Pact form (as per agreement form enclosed) along with the technical proposal in Cover- I/Preliminary bid as a token of acceptance. Original hard copy of the same shall have to forwarded subsequently so as to reach DCI Head office within 7 days of opening of the tenders failing which tender shall be considered irrelevant.

APPENDIX TO TENDER

| Item | Sub-Clause | Data |
|--|--------------------------|---|
| DCI's Nodal Officer Name and Address | 1.1.13 | General Manager (OPS) I/c, DCI Ltd Dredge House, Visakhapatnam – 530 022, AP, (INDIA) Ph No. 0(+91-891- 2871-344/ 397 E-mail ID: hodops@dcil.co.in |
| Client's Name and Address | 1.1.56 | Industrial Development Corporation, (IDCO), Govt of Odisha, Bhubaneshwar |
| Sub-contractor's Name and Address | 1.1.14 | (To be indicated after award of work) |
| Engineer's Name and Address | 1.1.15 | (To be indicated after award of work) |
| Time for Completion of the Work | 7.2 | 11 Months from issue of LoA (Site shall be handed over to DCI by April 2027) |
| Defect liability period (a) Dredging Works (b) Reclamation and other works | 9.2 & 11.5 9.1 & 11.6 | (a) Not Applicable (b) Till Taking over of site |
| Defects Notification Period | 10.1 | 15 days |
| Electronic Transmission Systems | 1.3 | E-mail |
| Governing Law | 1.4 | Laws of the Republic of India |
| Ruling Language | 1.4 | English |
| Language for Communication | 1.4 | English |
| Time for Access to the site | 2.1 | Prior to bidding, time for access to site would be any working day between 1000hrs and 1700 hrs subject to fulfilling security requirements. The access to site to the successful bidder would be 24 hours a day and 7 days in a week. |
| Amount of Performance Security | 4.2 | 10% of the Accepted Contract amount in Rupees in the form of Bank Guarantee from any Nationalised/ scheduled Bank (except Co-operative Bank) from any branch in India, preferably from Visakhapatnam. DCI shall not be liable to pay any interest on Performance Security, under any circumstances, what-so-ever. |
| Normal Working Hours | 5.5 | 24 Hrs per day/seven days/week |
| Liquidated damages | 7.2.1 | 0.5% per week or part thereof subject to maximum of 10% of contract value of dredging. |
| Percentage of retention money | 13.7 | 5% of value of each payment |

| | | |
|------------------------------------|------|---|
| Limit of retention money | 13.7 | 5% of the Accepted Contract Amount. DCI shall not be liable interest on Retention Money, under any circumstances, what-so-ever. |
| Currency of Payment | 12.4 | Indian Rupees (INR) |
| Periods of submission of Insurance | | |
| a) evidence of insurance | 17.1 | 30 days |
| b) relevant policies | 17.1 | 30days |

Signature of Tender

SECTION IV
TECHNICAL SPECIFICATIONS (TS)

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SECTION - IV
TECHNICAL SPECIFICATIONS (TS)

1.0 PROJECT SITE INFORMATION

1.1 Location

The proposed site for the Industrial Estate to be established by Odisha Industrial Infrastructure Development Corporation (IDCO) is located in the village Pratappur, near Paradip, Orissa state. As the site is in a low-lying area it is proposed to raise the level by sand filling. Based on the studies carried out by DCI on Environmental Impact Assessment, Hydrographic and Geo-technical aspects, it is decided to dredge the sand from nearby Sea Area as highlighted in the Borrow Area **drawing at DWG 3 under Section IX** and reclaim the site of 685 Acres of Land Parcel out of 780 Acres of Plot for the Industrial Estate as per drawing at **DWG 2A& 2B under Section IX**.

1.2 Meteorological Data

Meteorological data such as records of wind, cyclonic storm, depressions, rainfall, temperature, relative humidity, visibility etc. are recorded regularly at the observatory at Paradip and at the regional meteorological center at Bhubaneshwar. A gist of available data is furnished below for guidance.

a) Wind data

Wind rose of Paradip shows that dominant wind blows from the SSW much of the time –about 22.08% of all hourly wind directions. Approximately 13.01% (max) of the time the wind blows from the SSW at speeds are more than 5m/sec. Further, at Paradip much of the time winds blow at speeds between 5 and 12.17 m/sec – which is 34.85% of the time. About 0.65% of the time winds were CALM i.e wind speeds less than 0.5m/sec. The average wind speed in Paradip is 4.4m /sec with maximum wind speed of around 12m/sec.

b) Temperature

The average temperature of Paradip is around 27°C although it varies from around 21°C during winter (January) to 30°C during Monsoon (June). The hottest month of the year is June with temperatures varying from 25.8°C to 33.3°C. the coolest month of the year is January, with temperatures varying from 17.8°C to 25.5°C

c) Humidity

The average Relative humidity of Paradip is around 80% although it varies from around 69% during winter (December) to 87% during the Monsoon (July). The most humid month of the year is July with humidity varying from 76.9% to 98.6%. The least humid month of the year is December, with humidity varying from 44.4% to 97%

The table below shows the minimum, maximum and average percentage Relative Humidity over the year in Paradip

Table 1: Percentage of Relative Humidity

| Month | Relative Humidity (%) | | |
|-----------|-----------------------|---------|---------|
| | Minimum | Maximum | Average |
| January | 49.8 | 94.1 | 72.3 |
| February | 56.1 | 96.9 | 80.9 |
| March | 56.5 | 96.1 | 82.3 |
| April | 65.4 | 94.0 | 81.9 |
| May | 69.6 | 93.5 | 82.6 |
| June | 62.4 | 94.1 | 82.4 |
| July | 76.9 | 98.6 | 86.9 |
| August | 68.4 | 95.8 | 85.2 |
| September | 74.2 | 96.3 | 85.0 |
| October | 49 | 98.6 | 78.2 |
| November | 49.9 | 94.3 | 74.6 |
| December | 44.4 | 97.0 | 69.0 |

d) Rainfall

Annual average rainfall at Paradip is around 1400 mm per annum, about 755% of which is received during the South-Western Monsoon season, i.e between June and September. October Contributed about 8% of the annual rainfall as presented in table below

Table 2: Average Monthly Distribution of Rainfall

| Month | Average Monthly Distribution of Rainfall | | |
|-----------|--|-----------------------|-----------------------|
| | Minimum Rainfall (mm) | Maximum Rainfall (mm) | Average Rainfall (mm) |
| January | 0.0 | 27.7 | 10.0 – 12.0 |
| February | 6.1 | 76.7 | 36.0 – 40.0 |
| March | 15.0 | 177.4 | 48.0 – 50.0 |
| April | 16.0 | 67.2 | 38.0 – 42.0 |
| May | 4.2 | 139.9 | 42.0 -44.0 |
| June | 81.6 | 451.6 | 235.0 – 245.0 |
| July | 135.3 | 577.6 | 268.0 – 276.0 |
| August | 235.8 | 362.4 | 308.0 – 316.0 |
| September | 15.3 | 331.4 | 245.0 – 255.0 |
| October | 15.3 | 41.1 | 116.0 – 120.0 |
| November | 0.0 | 134.2 | 12.0 – 14.0 |
| December | 0.0 | | 36.0 – 40.0 |

1.3 Oceanographic Data**a) Tidal Data**

In nature, the tides at Paradip occur twice a day and have a tidal range that is comparable to the Chart Datum (CD), as follows

| | |
|---------------------------------|----------|
| Highest High-Water level (HHWL) | + 3.50 m |
| Lowest Low Water Level (LLWL) | + 0.40 m |
| Mean High Water Springs (MHWS) | + 2.58 m |
| Mean Low Water Springs (MLWS) | + 0.71 m |
| Mean High Water Neaps (MHWN) | + 2.02 m |
| Mean Low Water Neaps (MLWN) | + 1.32 m |

The levels listed above are calculated using chart datum, which is approximately the same level as the Lowest Astronomical Tide.

b) Waves

Waves characteristics of the Paradip Coast, Odisha, India have been studied from the IMD data. Predominant directions of the waves (frequencies >10%) are SW, SSWS, N and NE with frequencies in decreasing order. A large number of waves possess wave heights of 0.9m and periods and 9 sec. On about 4% of days in a year, waves with heights ranging from 3.75m to 4.75m and periods >17 sec prevail which coincides with the time severe stormy weather (wind speeds > 62.5 km/hr) occurs in the Bay of Bengal. The frequency distribution of waves from different directions during a year has been found to be closely related to the frequency distribution of surface wind directions off Paradip Coast.

c) Cyclone

Paradip is a cyclone-prone area and is affected by Cyclone developing in the Bay of Bengal. During Cyclonic conditions, wind speed may exceed 260 kmph as recorded during 1999 Super Cyclone.

d) Use of site information

The site information in this section of the bid document has been provided to assist the bidder in preparing their Bids. DCI does not warrant the accuracy or the completeness of the information. Before using any of the information the bidder shall satisfy himself as to its suitability, accuracy and completeness.

2.0 SCOPE OF WORK

This section covers in detail the Scope of work, Codes and Standards, Technical specifications, Requirements on design, engineering, construction and documentation, Obligations, Responsibilities etc., required to be carried out by the Sub-contractor for the reclamation work covering the 685 Acres of the Industrial Estate at Paradip, Orissa of IDCO, by dredging and pipeline transfer, from the Borrow Areas identified and shown in Drawing shown at **DWG -1, DWG- 2A, DWG -2B and DWG -3 Under Section IX**

The works shall be carried out as per prescribed specifications, relevant Indian and International codes and standards, drawings and instructions of DCI for all related facilities and shall be as follows but not limited to the following:

- a. Mobilization and deployment of suitable type, capacity and number of cutter suction dredgers/TSHD's etc. Maximum of 03 nos. of dredgers (both CSD & TSHD) are allowed, at any given time of contract, in line with the CRZ approval for the project is sanctioned for laying 03 pipelines to reclamation area and 02 nos. return-water pipelines.
- b. Mobilization of suitable and required marine spread including pipelines, Booster station(s) (onshore/offshore), Diesel Generator (DG) Sets/Power Packs, Anchor handling vessels, tug boats for shifting purpose, boats and survey vessels with necessary equipment to carry out the operation as per the technical specifications.
- c. Installation of necessary pipelines (both on-shore & floating) and booster stations, along with required accessories, to transport the dredged material to the reclamation sites, which is located 10 km (Approx.) away and also necessary arrangements for the draining of the backwash water from reclamation site into sea at a designated location, in line with the CRZ approval for the project.
- d. Mobilization and operation of earth moving equipment such as dozers, trucks, excavator, compaction equipment, etc., as required for the reclamation works.
- e. Arranging and providing telecommunication facilities.
- f. Installation and maintenance of water level gauges/tide gauges at the different designated dredging areas.
- g. Mobilizing experienced/ qualified personnel and suitable equipment for carrying out topographic and hydrographic surveys as required.
- h. Maintaining of all survey, test and measurement records, photographic and video graphic records and logs of all operations.
- i. Carrying out necessary surveys, at the dredging site and at the reclamation sites to ascertain the ground levels before commencement of the job and also during execution for ascertaining the progress of Work till completion of the job & handing over of site to DCI.

- j. Collecting and documenting all data of any obstruction coming in the way of laying pipelines that convey the dredged material or for carrying the backwash water to sea/ creek before commencement of the job and clearing all obstruction under intimation and concurrence of DCI.
- k. Collecting and documenting all data to ascertain the quantum of work for site clearing, cutting & removal of trees, removal of other structures at site and relocating or reconstruction of grid pillars and permanent pillars under intimation and concurrence of DCI.
- l. Construction of temporary approach roads to the different areas of dredging, the route along the pipeline carrying dredged material to the reclamation sites, booster pump stations, all reclamation sites, disposal sites for backwash etc.
- m. Arranging and providing site offices (porta cabins), workshops, Inspectors' porta cabins etc. with all necessary infrastructure facilities of power, drinking water, medicare, drainage etc. for the personnel of both the Sub-contractor and DCI.
- n. Establishing and maintaining laboratories with all necessary facilities and equipment manned by engineers and technicians for the various testing requirements at site. Designing and Supplying of all pipelines and associated materials, laying and maintaining them during the period of dredging and reclamation. Clearing and stripping of the areas for reclamation including cutting of trees, removal of all other structures existing at site, stacking of trees at the areas demarcated by DCI and disposal of all other unserviceable material away from the sites to the areas approved by DCI.
- o. Indicative drawings are provided. The indicative requirement is to provide Random Rubble stone pitching and pointing with cement mortar on the outside Slope and lining with HDPE Sheet on the inside for preventing ingress of water and the internal bunds required within individual filling areas, the required diversion beyond the bund limits to prevent any detrimental effect on the bund due to any existing storm water channels, small creeks etc. coming at the outer/peripheral bund locations.
- p. However sub-contractor shall carry out the suitable design and by adopting suitable methodology, including supply of all materials for construction of peripheral bunds around the reclamation site including the slope protection to meet the site requirement. The same shall be obtained concurrence and approval of DCI before commencement as per terms and conditions.
- q. Designing and providing overflow weirs with proper filter media to carry out backwash water without carrying the finer materials out of the bund areas at reclamation site.
- r. Designing and providing online booster pumping stations of required capacity for conveying the dredged material at the specified rate inclusive of effective maintenance during the period of dredging and reclamation at the various areas.
- s. Carrying out the reclamation at the site with dredged material to the final specified levels as given in the drawings (Chart shown in Sl. No. 2 in Section IX) by spreading/ levelling and achieving the specified compaction requirements.

- t. Carrying out the Electric Piezocone penetration tests (ECPTu) and field compaction test, as specified to ascertain whether the compaction requirements are met with.
- u. Designing the backwash management and carrying the backwash water from the reclamation site and to dispose in sea.
- v. Construction of all temporary structures and viaducts at various places over the creeks and water bodies to carry the dredged material to the sites and also to discharge the backwash water from the reclamation areas to the disposal points.
- w. Pumping of the backwash water to the sea.
- x. All facilities required for providing Construction Power for the Pumping Stations/Booster stations, lighting, Porta Cabins, Offices etc. shall be in the Scope of the Sub-contractor.
- y. Removal of all temporary structures laid over the Creeks and other water bodies/ canals after completing the activities of reclamation under intimation and concurrence of DCI.
- z. Final clearing of site, removal of all construction materials, debris, etc., from the completed reclamation areas, dredging areas, on-shore & off-shore pipelines for dredged material and backwash water transportation, etc., under intimation and concurrence of DCI.
- aa. Providing adequate organizational set up with experienced senior personnel in the areas of technical, administration, finance/accounts and contracts management along with necessary supporting staff and logistics under intimation and concurrence of DCI.
- bb. Arranging and providing all the required fuel and spare parts for the vessels and equipment deployed by the sub-contractor and ensure operation of vessels deployed without breakdown.
- cc. Preparation of interim, final and as built drawings and reports.

The works shall be carried out as per the enclosed specifications, drawings and instructions of DCI for all related facilities but not limited to the above and shall also follow the guidelines furnished in the following reports which are attached with the Tender document.

1. Detailed Project Report by NTCPWC and Paradip Port Authority
2. Environmental Clearance of JSW-USL and Paradip Port Authority
3. Approved CRZ Map
4. Geotechnical Investigation Report for Dredging
5. Geotechnical Investigation Report for Reclamation

3.0 TECHNICAL SPECIFICATIONS

3.1 Dredging

3.1.1 General

The Technical specifications, the Drawings, the Schedule of Rates, Preamble to the Schedule of Rates and Appendices to the tender are to be read in conjunction with these specifications

and matters referred to, or shown or described in any of the former are not necessarily repeated in the latter.

Notwithstanding the subdivision of the specifications under different headings, every part of it shall be deemed supplementary to and complementary of every other part below:

3.1.2 Standards

The standards required for the various materials and workmanship are described with each material or activity below, but in any case, should not be less than BS 6349 Part 5 (2016), latest revision of US Army Corps of Engineers - Shore Protection Manual and applicable Indian Standards.

3.1.3 Safety Regulations

- i) In respect of all labour, directly or indirectly employed in the work for the performance of the sub-contractor's part of this agreement, the sub-contractor shall at his own expense arrange for all the safety provisions as per safety regulations of Paradip Port Authority, Indian Standard Institution, The Electricity act, the Mines act and such other acts as applicable.
- ii) The Sub-contractor shall erect and maintain barricades to protect unsuspecting persons from entering hazardous working areas and if likely to be a danger at night they shall be marked at night by red flashier lanterns.
- iii) When the work is done near any place where there is a risk of drowning, all necessary safety equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
- iv) The Sub-contractor will have to provide Fire Extinguishers/Fire Buckets and drums at worksite as recommended by DCI. He will have to ensure all precautionary measures and exercise utmost care in handling the inflammable gas cylinders/inflammable liquid/paints etc. as advised by DCI. Temporary combustible structures will not be built near or around the work-site.
- vi) The sub-contractor shall deploy the requisite number of experienced and qualified safety officers to ensure safe operations on site.

3.1.4 Testing

- a) All testing shall be carried out in accordance with Indian Standards/ BS 6349 etc. unless otherwise as specified.
- b) All instruments required for testing shall be calibrated at the regular intervals recommended for the particular types of instruments and also on the instruction of DCI's Representative should have reason to doubt the accuracy of any instrument.

- c) Test certificates of testing carried out away from the site, and the results of tests carried out on site are to be retained for the duration of the contract, and copies are to be provided for delivery to DCI on the completion of the works.

3.1.5 Qualified surveyors

The survey work required for the execution of the works is of two distinct types, namely a) topographic and b) hydrographic. The sub-contractor shall employ qualified and experienced surveyors of each type for the respective surveys.

3.1.6 Environmental Management Plan (Execution)

The Sub-contractor shall prepare an execution plan of the EMP and submit it for approval by DCI within 14 days of Kick-off Meeting. The execution of the Environmental Management Plan (EMP) shall meet the following requirements.

- i) Dredging and reclamation works shall be undertaken in such a way as to ensure these operations do not deteriorate the existing ecology of both the designated dredging/working areas, Reclamation Areas and the Areas where the pipelines are passing. The water quality, turbidity, organic matter, soil quality, underground water quality etc. must be maintained and should be measured at regular intervals to monitor water quality.
- ii) Spillage of any mineral oil products shall be prevented and immediately mitigated in the exceptional occurrence of spillage.
- iii) The Sub-contractor should take adequate anti-pollution measures while dredging and transportation of the material so that the environmental quality parameters are maintained
- iv) Adequate provision for infrastructure facilities such as water supply, fuel, sanitation, etc., should be ensured for labourers during the operations so as to avoid felling of trees and pollution of water and the surroundings.
- v) Spillage/Leakage of Slurry and Backwash Water lines shall be prevented and immediately mitigated in the event of occurrence of spillage/leakages of the pipelines.

The Sub-contractor shall implement the EMP measures in to-to at the commencement of the permanent works activities and shall make adequate provisions for infrastructure facilities such as water supply, fuel, sanitation, etc., for labourers during the operations and shall ensure that no trees are cut and the water and surroundings are not polluted by the labourers.

As the execution plan of the EMP is a management tool for the Sub-contractor's use, it shall present in details how these measures should be operated, the resources required and the schedule of implementation. This plan should contain separate sections dealing with the individual environmental aspects.

The General format of the EMP (Execution Phase) shall be:

1. Objective

2. Work plan
3. Implementation Schedule
4. Manpower requirements
5. Monitoring procedures.

The cost of preparing, implementing and monitoring the EMP execution phase shall be deemed to be included in the quoted Rates for the work. The Sub-contractor shall also prepare a contingency plan to cater for containing, controlling and reducing the effects of any disaster.

The Sub-contractor shall respect all restrictions and safety rules as applicable and as imposed by the authorities concerned.

3.1.7 Quality Assurance

The sub-contractor shall document and operate a Quality Assurance System complying with ISO 9000 Part I or an equivalent standard approved by DCI.

In addition, the Sub-contractor shall prepare a Quality Assurance Plan for the execution of the works. The plan shall be submitted within 14 days from Kick-off Meeting. The Quality Assurance Plan shall be reviewed, updated and resubmitted for approval as necessary throughout the Construction period. The Quality Plan shall specifically address:

- i) The procedures for maintaining the project quality requirements with respect to the use of subcontractors, vendors and suppliers;
- ii) The structure of all correspondence between the Sub-contractor and DCI;

The sub-contractor shall cooperate with DCI and provide all necessary access to works and records to enable DCI to assess the Sub-contractor's quality plan and associated procedures.

The Sub-contractor shall not commence any item of the permanent works until he has submitted to DCI a written statement of his proposed procedure for his own inspections of the item, recording such inspection and obtaining DCI's written approval thereof. Every such statement shall identify the individuals on the Sub-contractor's or Sub-contractor's staff who are responsible for inspecting the workmanship and/or testing the materials for the item in question, the place of **inspection**, the stages at which inspections and tests are **to be made and the** detailed aspects to be verified or measured in each **inspection**. Each inspection shall be recorded.

The record shall identify the inspector, the place, the date and time when the inspection was completed, the section of the works inspected or part of the materials, and its state of completion. Reference shall be made to the relevant drawings and the specific aspects or properties, which were checked or measured.

The record of inspections and tests shall be stored in an orderly fashion on the site by the Sub-contractor until the issue of the Take-Over Certificate for the whole of the Works, or such earlier time as DCI may instruct, and DCI shall have the right of access to them at all times.

After the issue of the Take-over Certificate for the whole of the Works or such earlier time as DCI may instruct, the Sub-contractor shall, as instructed by DCI either dispose off the records or deliver them as directed.

3.2 Temporary Works

3.2.1 General

As soon as practicable but in any case not later than 14 days after Kick-off meeting, the sub-contractor shall submit drawings, specifications and details of the location, the layout and the construction of the buildings, the construction of roads, the services, the equipment, the fittings, the furnishings and everything to be provided, installed and constructed under the provisions of this clause for the approval of the competent authorities and DCI (which approval shall not be unreasonably withheld) before materials are ordered or the works are put in hand. Not with standing any given approval, the sub-contractor remains responsible for setting all temporary buildings, constructional plant, materials and things and protect them from damage arising from any circumstances.

3.2.2 Offices, Workshops etc. for the Sub-contractor

It shall be the full responsibility of the sub-contractor, within his tender to establish, erect, construct, and equip all offices, workshops, stores, sheds, buoys, harboring, moorings, loading and unloading facilities and the like required by him or his principals, employees or agents complete with all machines and equipment and all service's access roads and the like required by him or his principals, employees or agents directly or indirectly for the construction or maintenance of the works, complying also with relevant laws and regulations. The Sub-contractor will provide exclusive place in his office for accommodating the Representatives of DCI, and Client for about 6 personnel. This space shall be of nature provided for his senior personnel and shall be furnished accordingly. The Sub-contractor will allow his infrastructure facility to be shared by the personnel placed in this office for DCI and Client.

However for site office/ petrol bunkers/stores etc, to be erected near the dredging site/working areas, sub-contractor shall take necessary permission from the concerned Authorities and also make necessary payments as required.

3.2.3 Laboratory and Porta Cabins for DCI/ENGINEER/ CLIENT

The Sub-contractor shall provide, within four (4) weeks from the Kick-off meeting erect and equip for the use of DCI/Engineer/Client and his representatives, employees and agents at or near the site in such a location and position as directed by DCI, separate from the offices and other buildings of the sub-contractor or his sub-contractors, accessible by motor vehicle from the adjacent public roads along temporary all weather access ways & with adequate parking space nearby the following buildings:

- i) A fully equipped laboratory, operated by the sub-contractor, for Quality Assurance work.
- ii) Adequate Nos. of Porta Cabins for Inspection purpose (to be moved from time to time), complete with all plumbing, water services, drains, electrical

installation, equipment, furnishing and the like completely finished and ready for occupation.

Prior to constructing the site office and the laboratory, the sub-contractor shall furnish drawings to obtain DCI's approval for his proposed construction and arrangement of the buildings. For the Porta Cabins the sub-contractor shall submit a proposal for approval by DCI.

3.2.3.1 Soil/Material Testing Laboratory

The Sub-contractor shall provide, erect, staff and maintain a Site laboratory with testing equipment as specified in sub-para (2) below throughout the contract period. The laboratory shall be located at the site.

The laboratory shall be of a construction and design suitable for the, climatic conditions prevailing, be provided with power and running water, "sinks, drains and all other facilities required to enable it to operate efficiently and shall be used exclusively for the purpose. The internal headroom shall be a minimum of 3 meters. The office room shall be air-conditioned.

The laboratory office for the use of DCI's representative shall be furnished with suitable facilities.

The Sub-contractor shall provide all the testing equipment and tools and carry out all field and laboratory tests on materials and workmanship as specified in the contract. Staffing of the laboratory shall be with engineers well experienced in materials testing and approved by DCI. The laboratory, equipment, samples, tests and records shall be open to inspection by DCI's representative at any time and shall be available for the use of DCI's representative to perform control tests on materials and workmanship related to the works.

The following testing facilities and equipment are amongst others required for the site laboratory:

Sieving of earth materials both by dry and wet method. Dry ovens

Accurate balances

Microscope

Equipment for turbidity measurements

Equipment for determination of specific gravity

Cameras (Still and Video)

Various types of measurement tapes

Equipment for Electric Piezo Cone Penetration Test (ECPTu)

The above equipment and tests are not exhaustive and it the sub-contractor's responsibility to comply as per site and tender requirement and as per directions of DCI as and when required.

3.2.3.2 Porta Cabins

The Porta Cabins shall be portable and shall have facilities of Power, Water, Sewerage, Drainage, Sanitary Provisions.

The Ownership of the Laboratory and the Porta Cabins including the testing equipment, (furniture and accessories considered as part of the Porta Cabin) shall rest with the Sub-contractor and shall be cleared from site as per the instructions of DCI after completion of the work by the Sub-contractor.

3.2.4 Water supply and power supply:

No power or water will be provided on site by DCI.

Where required by DCI at or near the site and in the buildings provided for the works and where required by the sub-contractor for his own purpose including but not limited to his labour colony, site offices, workshops, stores and his floating craft and equipment, the sub-contractor shall arrange for, providing, installing and constructing everything necessary to ensure adequately :

The supply of potable water.

The supply of non-potable water where required.

The supply of electricity and other sources of power and light.

The disposal of sewage.

The drainage system.

The sub-contractor shall provide, install, and construct adequate sanitary conveniences on the site.

The Cost for establishing and meeting all the Power and Water requirements shall be borne by the Sub-contractor and shall be deemed to be included in their quoted prices.

3.2.5 Construction of Roads

For the purpose of this contract all road tracks, "rights of way", sidewalks and the like, which are not part of the permanent works, but are needed by the sub-contractor for the purpose of executing the works, and by DCI for supervising the works under the contract, will be called construction roads.

The sub-contractor shall construct and maintain all construction roads required. The construction roads shall be of such a standard that they can be normally and safely used in all weather conditions.

Road embankments close to the sea shall be designed to have sufficient slope protection to withstand all expected sea conditions without damage to the road. All construction roads shall have adequate side drains and culverts to allow the monsoon rains to drain away without flooding.

3.2.6 Landing Stage/ Jetty

The Sub-contractor shall make available for use by DCI and his representatives and such other persons as DCI authorizes, a landing stage at an approved location easily accessible and suitable for use during the whole year with the boats as specified at his own cost.

3.2.7 Clearing of Land for Temporary Works.

All areas to be cleared in order to permit the construction of the Temporary works. For proceeding for construction of the Temporary works, steps shall be taken to provide a regular surface of sufficient density for all vehicles, plant and labour to be able to carry out on the surface their specified duties, without delay. All working areas are to be properly drained.

3.2.8 Water Level Gauges/Tide recorders

The sub-contractor shall at the commencement of the contract, place at the site at approved locations near the shore and maintain and keep running during the contract period self-registering mechanical tide recorder(s) and water level gauge boards inscribed in meters and centimeters related to Chart Datum. The sub-contractor shall keep daily records of the water levels throughout the contract period.

3.2.9 Telecommunication

The sub-contractor shall arrange to install and provide suitable adequate and sufficient means of telecommunication for the use of the principals, employees and agents of DCI and the sub-contractor on the site.

The site office space of DCI in the Sub-contractor's Office shall be provided with an exclusive Phone for communication by DCI and to their offices in India. The Sub-contractor shall arrange the wireless communication system along with the relevant statutory approvals.

In addition the sub-contractor shall provide a radio room at sub-contractors base office and adequate radio communication sets on the construction vessels, dredgers, survey and inspection boats, and shore controls points. Adequate numbers of walkie-talkie sets are to be provided for key personnel to be contacted on VHF channel.

3.2.10 Operation, Maintenance and Insurance

The sub-contractor shall operate and maintain in good condition all his plant and equipment. Sub-contractor's infrastructure set up will be maintained in a clean and tidy condition.

The buildings, services and the temporary structures constructed or installed by the sub-contractor shall be duly covered by adequate insurance by the sub-contractor notwithstanding any use of them by others for the entire period of the Contract and extensions (if any).

3.3 Assistance to DCI/Engineer

3.3.1 General

The sub-contractor shall render such assistance with facilities, labour, construction plant and materials as at any time as may be required by DCI's Representative directly or indirectly in connection with the works. Facilities shall include providing Motor boat and survey equipment for the use of DCI/Engineer as and when required, logistic support to DCI/ Engineer to visit site/ office/vessel, as and when required, as per requirement, during the contract period. The assistance to DCI's Representative includes, but not limited to, the items in the following clauses, at no extra cost.

3.3.2 Boats

The Sub-contractor shall make available, maintain and keep repaired and in good running conditions and keep running (and provide everything necessary therefore) at such a time and for such a period as required by DCI's Representative:

One (1) suitable seaworthy motorboat of minimum 250 HP to operate within Dredging Areas and in the adjoining offshore waters, with a skilled and efficient crew and a complete outfit for use of DCI and his principals, employees and agents and such other persons as the engineer authorizes in so far required directly or indirectly in connection with the works, as required and a marine radio.

The vessel shall be available on a 24-hour per day basis, and in the event of breakdown of the vessel, the sub-contractor shall provide alternative sea transport to DCI's Representative. All boats shall include lifesaving equipment as required by the Mercantile Marine **Department/statutory body and sub-contractor** shall obtain clearance from said department.

3.3.3 Surveying Equipment

a. Hydrographic Surveys

The sub-contractor shall provide surveying equipment, heave sensors etc. on the Survey boats including a DGPS and echo sounding system along with transducer connected to an onboard computer. The sub-contractor shall provide standard survey navigation software packages.

Required Field calibration of the onboard survey equipment's shall be carried out before and after each joint survey.

b. Topographic Surveys

The Sub-contractor shall provide all surveying equipment including Total Station, Dumpy Level, GPS etc. and other required equipment.

Required Field calibration of the survey equipment's shall be carried out before and after each joint survey.

No Surveys shall be undertaken by Drones.

3.3.4 Protective Items

The sub-contractor shall provide for the use of DCI's Representative and his principals, employees and agents and such other persons as DCI's Representative authorizes adequate protective items such as gumboots, waterproof top-coats, first-aid equipment, life-jackets, helmets and other safety equipment as required by DCI's Representative in connection with the Contract.

3.3.5 Photographs and Video Recordings

The Sub-contractor shall, before commencing and during the progress of the works, take photographs in Video and Still modes of such sites, buildings, erection, works, machinery, plant etc. as may be directed by DCI or his Representative. Copies of such photographs and videos providing a record of the progress of the works shall be given by the sub-contractor to DCI, with no restrictions by way of copyright or any other tie on DCI or DCI's use of such record. The photograph and Video recording shall be on **Fortnightly basis**.

There shall be no separate payment for these photographs and videos, and the sub-contractor should include the costs in his quoted prices.

3.3.6 Approval of Temporary Works

Before any temporary work commences, the sub-contractor shall submit sufficiently in advance to DCI's Representative for review, his proposals for all temporary works including drawings and calculations.

Notwithstanding the review by DCI or his Representative of any design submitted for any of the temporary works, the sub-contractor shall remain entirely responsible for such works in all aspects. DCI shall be at liberty to direct modifications to the temporary works in accordance with the conditions of contract. Unless otherwise specified, the sub-contractor shall carry out such modifications without any extra payment.

3.3.7 Confidentiality shall be maintained with respect to all photos and videos taken and all the above records/documents in connection with the project. Such materials shall not be used, whether directly or indirectly, for any purpose other than the intended contractual use, without the prior written approval of DCI.

3.4 Dredging and Reclamation Surveys

3.4.1 General

The sub-contractor shall perform all necessary survey works required to be executed by him as per the Technical Specifications. For this purpose, he shall furnish and employ all the personnel, services, equipment and supplies needed to perform the surveys and all the incidental work required for:

- # the setting out, including the marking of all points for the works to be constructed/dredged/reclaimed.
- # the recording of water levels.
- # the pre-dredging surveys and charts
- # the post dredging surveys and charts
- # the intermediate progress surveys and charts and additional surveys
- # the provision of the DGPS, Positioning Systems etc.
- # the mobilization and operation of the hydrographic survey vessel
- # the mobilization and operation of the topographic survey equipment
- # the topographic survey of the areas of reclamation prior to the filling
- # the monitoring of profiles of reclamation during filling.
- # the topographic survey of the areas of reclamation post the filling and compaction activities are completed.

Field measurements and elaborations of data shall be executed to a degree of accuracy in horizontal and vertical direction and processed to scales as per the specifications. The Sub-contractor shall allow DCI or his representative to be present during any surveys, elaboration's or any connected activities. He shall give adequate prior notice (not less than 48 hrs) of plans to work in this respect to enable DCI or his representative to plan for the activity and provide DCI or his representative with all assistance to fulfil his duties.

The surveys shall be carried out in accordance with schedules to be approved by DCI or his representative.

3.4.2 DCI's attendance

The setting out of the works under contract shall be executed by the sub-contractor, with DCI's representative in attendance.

3.4.3 Setting Out Prior To Commencement of the Work

Setting out of the works shall be done by the sub-contractor on such a date as to permit timely commencement of the work. The Sub-contractor shall furnish, install and maintain all markers, buoys, shore beacons and other items necessary to define the works and facilitate the inspection and measurement thereof. It shall be the responsibility of the sub-contractor to obtain all licenses, permits and permissions for the use of marine radios, walkie-talkies\radio positioning systems, for the placing of onshore, offshore and under water beacons and marker buoys, and for giving the proper statutory notices for all maritime operators. The costs of such licenses, permits and notices are to be borne by the sub-contractor and shall be deemed to be covered by the rates and prices quoted in the Tender.

i) Checking of setting out

The Sub-contractor shall provide sufficient equipment, duly calibrated in the field, labour and materials to DCI's representative to enable him to check the Sub-contractor's setting out, at any time the engineer's representative may direct.

ii) Spacing of survey lines for the surveying of the works under the contract, the sub-contractor shall measure longitudinal sections and cross sections at distances apart as specified or indicated by DCI.

iii) Field books, etc

All field books, calculations, maps, original records, survey tracks and as-run plots etc. of the survey activities mentioned above shall be kept on site available for the DCI's representatives study or checking for the duration of the contract.

iv) Survey charts

All survey charts to be produced by the Sub-contractor shall be reduced to Chart Datum/Indian Mean Sea Level (CD/IMSL) as applicable and the depths shall be plotted in meters and centimeters. Entire joint survey data including raw data shall be submitted to DCI for record and joint processing of the data will be done. The final output/charts are to be presented to DCI in Hard Copies (3 Nos. duly signed and stamped by Sub-contractor & DCI) & Electronic copies.

v) Scale of survey charts

Data generated by the surveys shall be elaborated in accordance with sound topographic and hydrographic practices and be presented at a scale of 1:2000 or as instructed by Engineer, on survey charts of the sites. All survey lines shall be shown on the charts with plot intervals in the lines not exceeding 30 m for Hydrographic Surveys and 15 m for Topographic Surveys.

Furthermore, the charts shall incorporate all reference points, buoys, beacons, markers, gauges and benchmarks, together with the location and nature of obstructions, structures and facilities. Particular items of interest shall also be indicated on the charts.

3.4.4 Surveys

a. Hydrographic Surveys

Hydrographic surveys shall be performed by using single beam/multi beam echo sounding equipment and an electronic positioning system, both with an accuracy, which ensures that the requirements of the contract are achieved. These surveys shall only be carried out if weather and sea conditions, condition of equipment and methods of execution and interpretation are, in the opinion of the Engineer, satisfactory for this purpose. The Engineer may resolve to check echo soundings by means of other methods to measure water depths, such as sounding poles or lead lines. Engineer may also order calibration checks of the equipment as and when considered necessary. The sub-contractor shall cooperate in this respect and supply any manpower, boats and equipment that may be reasonably required for this verification.

i) Calibration of sounding equipment

Calibration certificates to be submitted for all survey equipment before mobilization/installation.

Further, Echo sounding equipment, DGPS shall be checked and calibrated (field calibration for joint surveys before and after each survey) or as directed by Engineer, by means of a bar or plate suspended at known distances below the water surface.

Checking shall be performed at the actual location of the survey and the Engineer's representative may require additional checks during surveying. Adjustments to the recording/readings taken will be made accordingly. Records of bar checks shall be retained at the start of the echo sounder record. The echo sounder should maintain a repeatable accuracy of better than 10 cms.

ii) Digital recording and plotting

Interpretation of echo rolls, reduction of sounded depths for tidal heights obtained from tide gauges, corrections for squat and wave motions (to be made using appropriate observed data and/or compensating devices) and definition of bottom levels on the echograms are to be done to the satisfaction of the Engineer's Representative. Each fix on the echo roll shall be denoted of the track plot chart of the survey vessel, and there should be at least one fix for every 15 m of cross section and the interpreted data shall be plotted.

iii) Temporary Tide gauges

The sub-contractor shall install and maintain suitable temporary tide gauges at approved locations close to the various dredging areas. These gauges shall be placed at least 15 days before dredging **is foreseen to commence** and calibrated periodically or as instructed by Engineer.

iv) Reduction of sounding depths

The sub-contractor shall place special stress on the accurate reduction of sounding depths in relation to the prevailing tidal levels.

v) Provision of Differential Global Positioning System (DGPS)

The sub-contractor shall provide, install, operate and maintain an approved differential global positioning system (DGPS), which shall fully cover the site of the works, and be constantly in operation during the course of the dredging works.

The system shall consist of ship borne masters or receivers (one for each dredger and one for each survey launch), distance measuring units, the requisite number of shore stations, interfaces, track plotters, data storage facilities and sufficient spares to enable uninterrupted operation of the system, to the accuracy specified and on-board computer and suitable navigational software.

vi) Installation and testing

The system shall be installed, tested and set to work for continuous operation during all dredging and survey operations. The system shall be fully operational, calibration and baseline checks completed, before commencement of survey operations. Once operational the system shall remain in continuous operation until the Post-dredging survey is completed and the Post dredging survey drawings have been signed and have been accepted by DCI Engineer's representative.

The positioning system should have one hundred percent back-up standby equipment to cater for the failure of any individual components.

The positioning system shall all times maintain a repeatable accuracy, for any point within the work site of plus or minus 1.0 m.

vii) Preparation of survey charts

On completion of the pre-dredging survey the Sub-contractor shall prepare within 7 days, survey charts and cross sections showing the full results of the survey. On completion and agreement of the contents of the drawings and sub-contractor and DCI's representative shall both sign the drawings, which shall then acquire the status of "Pre-dredging survey" and form the basis for all further work to be undertaken in the course of the contract.

b. Topographic Surveys

Topographic surveys shall be performed by using Total Stations, Dumpy Levels etc. and an electronic positioning system, both with accuracy, which ensures that the requirements of the contract are achieved. These surveys shall only be carried out if weather conditions, condition of equipment and methods of execution and interpretation are, in the opinion of DCI Engineer, satisfactory for this purpose. DCI may also order calibration checks of the equipment as and when considered necessary. The Sub-contractor shall cooperate in this respect and supply any manpower and equipment that may be reasonably required for this verification.

i) Calibration of equipment

Calibration certificates to be submitted for all survey equipment before mobilization/installation.

Further, Total Stations, DGPS shall be checked and calibrated on field for joint surveys (before and after each survey) or as directed by Engineer.

Checking shall be performed at the actual location of the survey and DCI/Engineer's representative may require additional checks during surveying. Adjustments to the recording/readings taken will be made accordingly.

ii) Temporary Benchmarks

The Sub-contractor shall install and maintain suitable temporary Benchmarks at approved locations close to the site of Reclamation and routing of Pipelines, Booster Stations etc. These Benchmarks shall be constructed and placed at least 15 days before reclamation, laying of pipelines, construction of Booster stations etc. is foreseen to commence. The Temporary Benchmarks shall be constructed in such a manner that the same are not damaged during the execution period. It will be the responsibility of the Sub-contractor to maintain the Benchmarks till the handing over of the reclaimed Site.

iii) Provision of Differential Global Positioning System (DGPS)

The Sub-contractor shall provide, install, operate and maintain an approved differential global positioning system (DGPS), which shall fully cover the site of the works, and be constantly in operation during the course of the Reclamation works.

The system shall consist of masters or receivers, distance measuring units, the requisite number of shore stations, interfaces, track plotters, data storage facilities and sufficient spares to enable uninterrupted operation of the system, to the accuracy specified and on-board computer and suitable Topographic Survey software.

vi) Installation and testing

The system shall be installed, tested and set to work for continuous operation during all Reclamation and survey operations. The system shall be fully operational, calibration and baseline checks completed, before commencement of survey operations. Once operational the system shall remain in continuous operation until the “**Post-Reclamation survey**” is completed and the “**Post-Reclamation survey**” drawings have been signed and have been accepted by Engineer's representative.

The positioning system should have one hundred percent back-up standby equipment to cater for the failure of any individual components.

The positioning system shall at all times maintain a repeatable accuracy, for any point within the work site of plus or minus 1.0 m.

vii) Preparation of survey charts

Pre-reclamation Survey shall be carried out after Compaction of the existing natural ground of the Reclamation Area to 90% of the Laboratory Dry Density of the in – situ soil. In this regard, the Sub-contractor shall ensure the same by conducting the relevant Laboratory Test at intervals of 50 m x 50 m with intermediate plots, if necessary. On completion of the pre-reclamation survey the Sub-contractor shall prepare within 7 days, survey charts and cross sections showing the full results of the survey. On completion and agreement of the contents of the drawings, the Sub-contractor and Engineer's representative shall both sign the drawings, which shall

then acquire the status of "**Pre-reclamation survey**" and form the basis for all further measurement/work to be undertaken in the course of the contract.

3.4.5 Survey on Completion of Works

Upon the completion of the dredging and reclamation works in designated areas, the sub-contractor and the Engineer's representative shall jointly survey the area of the works.

Requirements with regard to the system, spacings, etc. for the post dredging and post-reclamation surveys shall be identical to those indicated for the pre-dredging and pre-reclamation surveys.

i) Survey charts

On completion of the survey the Sub-contractor shall prepare survey charts and cross-sections showing the full results of the survey. On completion and agreement on the contents of the drawings and if Engineer's representative has satisfied himself that the works have been executed according to the contract, the Sub-contractor and Engineer's representative shall sign the drawings, which shall then acquire the status of "**Post-dredging survey**" and "**Post-reclamation Survey**". However, the "**Post-dredging Survey**" shall only serve as backup reference for Engineer's use and shall have no bearing on the payment terms.

3.4.6 Progress /Intermediate Surveys in Dredging Areas

The Sub-contractor, with Engineer's representative in attendance, shall regularly and not less than once in 15 days or earlier as instructed by Engineer carry out surveys in order to monitor the progress of the works. Survey lines for these intermediate progress surveys shall be spaced 30 m x 30 m apart for dredged area with intermediate plots, if necessary.

3.4.7 Intermediate Surveys for Progress Measurement in Reclamation Area

The Sub- contractor in cooperation with Engineer's representative shall make such surveys and computations as are necessary to determine the quantities of work performed or placed during each period from which the progress of work can be measured and monitored through Intermediate Surveys

The Sub-contractor, with Engineer's representative in attendance, shall regularly and not less than once in 15 days or earlier as instructed by Engineer carry out Intermediate surveys in order to monitor the progress of the works. Survey lines for these intermediate progress surveys shall be spaced 15 m x 15 m apart for reclamation area with intermediate plots, if necessary.

On completion and agreement on the contents of the drawings and if DCI's/ Engineer's representative has satisfied himself that the works have been executed according to the contract, the Sub-contractor and the Engineer's representative shall sign the drawings, which shall then acquire the status of "**Intermediate reclamation Surveys**".

3.4.8 Additional Surveys

Additional surveys, upon request of DCI's/ Engineer's representative shall include regular surveying of disposal areas and areas (within or in the vicinity of the site) where shoaling is expected or where artificial obstructions are suspected.

3.4.9 Notice of any Irregularities

The Sub-contractor shall inform DCI's/ Engineer's representative forthwith of any breakdown, irregularities or otherwise, affecting the positioning of his vessels or other equipment. Delays incurred in the dredging operation due to malfunctioning of the equipment deployed shall not be reimbursed under the contract and will not entitle the sub-contractor to an extension of time for completion or for increase in payment.

3.4.10 Specification of Survey Vessel

The survey vessel shall have:

- # Sufficient size and stability to safely and properly carry out the survey work under the prevailing site and sea conditions.
- # Good maneuverability, even at low speeds of 1 to 2 knots
- # Ample space for instruments, recorders, etc.
- # Day accommodation for two men of the Engineer's staff, besides the normal crew and sub-contractor's own surveyors.
- # A helmsman experienced in survey work
- # Adequate radio communication between all persons concerned in the surveys
- # A suitable shallow draught vessel to assist in the surveys of slopes close to the surface
- # Clean power for the operation of the positioning system.

3.5 Dredging Works

3.5.1 General

The dredging works under this contract involve the following:

- i) Dredging of Fill Material, as specified in Clause **3.5.3**, from the designated dredging areas.
- ii) Pumping and Pipeline transportation of the dredged material to the designated areas for filling as per the requirements of reclamation.
- iii) Pumping and Pipeline transportation of the backwash water to the designated disposal areas.

3.5.2 Dredging of Fill Material from the designated Dredging Areas

The Dredging Areas as detailed in the Tender Documents have been identified as the Borrow site having a capacity to yield the Fill Material quantity of about 10 million cum (+/- 20 %) estimated to be required for the reclamation work of about 8.2 Mil. CuM after achieving the required degree of compaction.

3.5.3 Materials to be dredged: -

As much as possible, the Sub-contractor shall ensure that the material dredged from dredging areas should be clean sand as specified in Clause 3.6.5.2.

In case borrow areas are encountered with fine soil while dredging, the same may be considered for pumping the total dredged soil at the reclamation area. However, Sub-contractor shall ensure to achieve the required compaction parameters in reclamation area.

Hence, the yield estimates are indicative only and it is the sub-contractor's responsibility to interpret the data furnished and to assess the required yield at the reclamation site.

Sub-contractor shall ensure by continuously monitoring & testing that the required compaction parameters are maintained at reclamation area.

At least two representative samples per week shall be collected randomly as per directions of Engineer. In the case of the CSD, two representative samples shall be collected at the shore discharge/booster point nearest to the shoreline. The dredged material shall be analyzed for the soil classification tests in accordance to BS 1377:1975 / IS 1498 - latest & 2720 - latest.

3.5.4 Marking of dredging areas

The Sub-contractor shall provide and place in position and maintain adequate number of buoys to mark the dredging areas, limits and boundaries of blocks etc. The Sub-contractor shall at his own cost provide all assistance, boats, labour etc. which the Engineer or his representatives may require to enable him to carry out required checks. The Sub-contractor shall allow for all relaying or replacement of buoys and navigation lights arising from drifts or any other cause as is considered necessary by DCI Engineer. Such buoys shall be removed upon completion of the dredging works.

3.5.5 Dredging depths

Dredging depths are strictly limited to as per table given below

| Sl.no | Borrow Area | Permissible maximum Dredging Depth |
|-------|------------------------|------------------------------------|
| 1 | Sand Trap | 8 m CD |
| 2 | Sand Bar | 18.4 m CD |
| 3 | Harbour Basin | 18.4 m CD |
| 4 | Outer Approach Channel | 19.3 m CD |

3.5.6 Dredging plant : Clause 3.3 of NIT prevails in this regard.

a. CSD

Suitable Cutter-suction dredger(s) of suitable cutter power and suitable pumping capacity to complete the required dredging quantity within the stipulated time period including ancillary craft shall be mobilized at site. The cutter suction dredgers to be mobilized should have following minimum capacities:

Cutter drive power - suitable power

Pumping distance with or without boosters - approx. 10 kms

b. TSHD

Suitable Trailer Suction dredger (TSHD) of required capacity to complete the required dredging quantity within the stipulated time period including ancillary craft shall be mobilized at site.

These dredgers shall be capable of operating in all environmental conditions prevailing in the identified Borrow Areas. The TSHD's to be mobilized should have following minimum capacities:

Minimum Hopper Capacity of TSHD : 15,000 cum
Maximum pumping distance with or without Boosters – minimum 10 kms

3.5.7 Dredging tolerances

No tolerances are allowed in the designated dredging areas

3.5.8 Pipeline transport of dredged Material

Dredged material from the Dredging Areas shall be transported by using suitable pipeline system with necessary boosters to match/enhance the production of the dredging plants. Suggested tentative pipeline route is shown in the **Drawing at DWG 2B and DWG 4 and DWG 5 under Section IX** in the Bidding Document.

However, the responsibility of establishing the final routing of the Pipelines shall rest with the Sub-Contractor as per the site actual conditions and project requirements. The pipeline system shall comprise of floating section near the dredger and over the Creeks and water bodies (if any) and the rest of the pipeline shall be over the land.

The diameter of the pipeline, booster power shall be designed to achieve suitable transport velocity to prevent any blockages. Pipe-wall thickness must be adequate to resist the internal pressure. If during the work, wear reduces the pipe to an unacceptable thickness, the pipeline should be changed. If bolted flange connections are provided in the shore sections, these should be watertight and include a compressible gasket. Alternatively, they may be joined by welding. Necessary branching, valve arrangements, quick coupling systems to be provided for distribution, switching of flows and to avoid interruptions.

The floating pipeline sections shall have necessary strength and flexibility as required for the environmental conditions existing at the site.

At the discharge end, the pipeline shall be raised suitably above the ground level to ensure free outflow of the mixture and be fitted with diffusers for better distribution of the Fill Material in the immediate vicinity of the outlet and to prevent crater formation due to impact of the fill water mixture on the ground.

3.5.9 Environmental Safeguards during Dredging Operations

- i. Dredging shall not be carried out beyond the limits of the specified borrow areas as per charts / drawings enclosed.
- ii. While laying pipelines it shall be ensured no damage shall occur to the existing natural features, structures, banks of creeks, nallahs, shrimp culture ponds, edge of the sand dunes, forest environment, and also while deploying and assembly of the booster pumps. They should be removed once the dredging operations are completed without effecting natural conditions in original.
- iii. The environment of the creek, dredging areas, reclamation areas and pipeline areas/ approaches and any other working areas should not be polluted because of any oil spills, dredge spoils etc. during dredging operations and no damages to be caused to

the movement of heavy machinery associated with dredging and reclamation operations.

- iv. Sufficient advance notice should be given to the local fishing community about the dredging activities and they should be made aware the magnitude and scale of dredging and extent of time involved in the entire operation. This will enable them to search for alternatives for their activities and the movement of their vessels.
- v. No damage should be caused to the vegetation or any other natural environment on either side of the creek, dredging areas and the working areas during the mobilization and establishment of dredging equipment/ ancillary equipment and pipelines in the area.
- vi. At the reclamation site, care should be taken that no inundation occurs into the neighboring areas. Periodical checks and maintenance of the bunds during entire period of reclamation is highly essential.
- vii. The ecology of the coastal zone vegetation should be maintained during the period of back-wash management. Necessary artificial channels should be made for the escape of the back-wash and they should be aligned in such a way that no damage is caused to the coastal environment. Once the dredging operations are completed, normal conditions should be restored by closing the weirs, the escape channels etc. Any excess deposition of fine material should be removed by earth moving equipment. The beach morphology has to be maintained regularly during the period of dredging and back- wash management.
- viii. Any temporary installations made, with prior approval of Engineer/ DCI, on the sand bars, sand pits, in the creek, working areas and in the adjoining areas during the period of dredging operations should be removed by the sub-contractor.

3.5.10 Quality Control

Quality assurance plan (QAP) for ensuring the quality shall be submitted by the Sub-contractor along with the dredging and reclamation methodology. The Sub-contractor shall prepare and submit the same for Engineer's approval, not later than 14 days from the date of kick of meeting his detailed proposals for a quality control system for the various dredging and reclamation works. Engineer's written approval of the system shall be obtained prior to the commencement of site activities and shall not be altered by the Sub-contractor without the written permission of Engineer.

The quality control system shall include all the project activities but not limited to the following:

- # Sub-contractor's personnel responsible for quality control,
- # Method of monitoring and determining the type of material being dredged,
- # Method of monitoring the Peripheral Bunds and determining the type of material being used for its Construction,
- # Method of determining the pumping of dredged material through the pipeline systems

- # Method of determining the reclamation activities and monitoring the same layer wise.
- # Method of determining the compaction activities and monitoring for achieving the required compaction parameters, etc.

3.5.11 Method Statement

A detailed method statement including the details of proposed methodology, equipment, sequencing of works, etc., should be submitted by the Bidder along with his bid.

3.6 Detailed Specification for Reclamation

3.6.1 Site Clearance at Reclamation Areas

Before the start of the filling / reclamation activities at site, all bushes, trees, vegetation and all other temporary structures / permanent structures (except for Permanent Benchmarks, survey pillars etc.) shall be removed from site and shall be stacked nearby site as per the directions of the Engineer. It is the Sub-contractor's responsibility to visit the site before quoting and assess the quantum of work involved in removing such structures.

All balance unserviceable material shall be cleared from the site and disposed off by the sub-contractor without any liability to DCI as directed by Engineer.

In case any existing Grid pillar / permanent pillar at site are likely to get buried at site/during the reclamation, these shall be relocated with top of pillar placed at min. 500 mm above the proposed Finished Grade Level (FGL) and new R.L and center line coordinates shall be duly punched on the metal plate on top of the pillar.

Any area in the reclamation site having loose deposits/soft patches shall also be sufficiently improved or removed /consolidated to 90% of maximum laboratory dry density of the in-situ soil before the start of reclamation works to ensure no differential settlements may occur in future after completion of the reclamation works. All soft patches must be worked out to achieve the required Degree of compaction.

The Sub-contractor to carry out the above activity before the Pre-reclamation Survey is commenced to minimize the losses due to settlement after reclamation.

3.6.2 Preparation of Peripheral Bund

3.6.2.1 Reclamation

Reclamation at site shall be done by creating bunds at site to retain the dredged soil, necessary outflow / overflow weirs with proper filter medium so as to allow only the wash water to drain without passing of fines, upto the specified limits of fines, out of the bund area, the size and number of such outlet / weir along with design of filter media shall be the sub-contractor's responsibility. The outlets shall be planned in such a way so as to allow for quick drainage of the dredged soil and it shall be ensured that no fine materials, upto the specified limits of fines, are passed along with the back wash water.

The Typical cross-section of the Peripheral Bund is attached with the bid document at **DWG 6 Under Section IX is an indicative.**

However, the side slopes of bund shall be designed by the sub-contractor based on the soil parameters of the soil used for bund construction and also to take care of the dredged

material to be retained inside the bund. It is the Sub-contractor's responsibility to design the Peripheral Bund, procuring of material, construction & maintenance of the bund till taking over of reclamation site. Sub-contractor may procure the material suitable to the construction/maintenance of bund, within the terms & conditions of the contract, at no extra cost and is allowed to utilize the material in the reclamation area if found suitable, subject to approval of Engineer. Design of the peripheral bund has to be approved by DCI prior commencement of bund construction.

Stability Analysis shall be undertaken to investigate the integrity of the bund during the filling operations. This analysis shall include critical slip circle calculations, verification of the bearing capacity and horizontal equilibrium.

3.6.2.2 Procedure for filling in bunds

The area where bunds are to be placed must be cleared of all loose material and virgin soft soil must be exposed. Such exposed surface must be consolidated properly to obtain 90% of maximum laboratory dry density of the soil. All soft patches must be compacted to the required compaction parameters.

Care shall be taken that all fill material at reclamation site shall be spread in uniform layers . If any clods, lumps etc., the same shall be broken before compaction of the layers.

In general the soil shall be spread uniformly over the entire width of embankment. Successive layers of filling shall not be placed until the layer under construction has been thoroughly compacted to satisfy the requirements as specified above. Prior to rolling, the moisture content of material shall be brought to within plus or minus 2% of the optimum moisture content as described in IS: 2720 Part VIII.

After adjusting the moisture content as described above the layers shall be thoroughly compacted by means suitable compaction equipment (rollers or the likes) till 90% of maximum laboratory dry density or 80% of relative density, whichever is higher, is obtained as per IS:2720. Each layer shall be tested in field for density and accepted by DCI subjected to achieving the required density before laying the next layer. Soil for these bunds to be obtained from scalping of existing soil inside area of filling.

The sub-contractor shall remedy at his own expense any defects in the reclamation and slope protection resulting from his working methods. The sub-contractor shall make good any damage during construction to retain the dredged material till the completion of all works.

The sub-contractor shall monitor and maintain the bunds provided for reclamation from time to time to prevent any collapse / breach and shall repair the same immediately as per requirement without any hindrance to reclamation job.

The Sub-contractor to ensure meeting all the Environmental norms w.r.t. the Peripheral Bunds and retention of the Dredged Material.

3.6.2.3 Slope Protection

The Top and Inner side of the Peripheral Bund shall be lined with suitable impervious layers with appropriate Mechanical protection to ensure no ingress of water into the Bund, prevent erosion of the inner slopes along with slope stability and protection of the impervious layers from damage.

3.6.3 Reclamation

An open disposal method of hydraulic filling, such that the fill can achieve its own natural consolidated density, should be used and Sub-contractor shall ensure that no ponding of water takes place anywhere in the reclamation area. Boards or any other suitable implements may be used to assist in the distribution of the fill material, to prevent heap formation of very fine material at the discharge point. The final elevation of the landfill as shown in the drawings may be obtained by use of suitable Earth moving equipment. The sub-contractor shall ensure that in forming the final elevation of the deposited material, hollows are not left in the general reclamation area, which shall lead to subsequent ponding. While laying the fill material, care shall be taken to ensure that the small proportions of fine materials are not allowed to segregate and accumulate to form mud pockets in the reclamation area. No silt from the reclamation process shall be allowed to flow into the existing creek or on the shore of the sea. The reclamation works shall be planned and carried out in such an approved manner that the fine content of the dredged material shall be mixed thoroughly resulting in homogeneous fill, not containing any soft pockets or layers of fines in the main body of the fill. Suitable earth compacting equipment shall be deployed to continuously level the area, until the whole area has been raised with required degree of compaction as per tender requirement and a new pipe section can be coupled to the pipeline. The Sub-contractor shall submit the method of mixing for developing homogeneous fill along with the bid.

Any Internal Bunds required for carrying out the reclamation work in stages as per the Method Statement shall be in the scope of the Sub-contractor and all costs for the same shall be deemed to be included in the quoted rates.

Prior to commencement of reclamation, the sub-contractor shall submit the detailed Method statement, explaining in detail the following:

- (i) Construction sequence and techniques the sub-contractor intends to implement
- (ii) The equipment proposed to be used
- (iii) Quality Assurance Plan
- (iv) Test reports indicative of quality of all materials
- (v) Measures to be taken for environmental (siltation etc.,) protection
- (vi) Site security
- (vii) Safe working conditions
- (viii) any other requirements specified elsewhere in the document or in the EC, CRZ, DPR etc.

3.6.3.1 Fill Tolerances

The area to be reclaimed and the finished level are both indicated in the drawings. The vertical tolerance allowed shall be (-) 0.00 i.e. nil on the negative side and (+) 0.2 m. maximum. The Subcontractor shall note that any over filling done by the Sub-contractor above the specified heights shall be without any commercial implication to DCI / IDCO and no payment will be done for such extra fills.

In case the Sub-contractor fills anything beyond the vertical tolerance of (+) 0.2 m, the same shall be removed by the Sub-contractor at no extra cost to DCI/IDCO.

3.6.4 Site Drainage and Back wash water management

3.6.4.1 Drainage of surface water

The land for reclamation shall not affect the natural drainage of surface water of the surrounding land. All cost related to the control, regulation and diversion of surface water drainage, or the adoption of measures or methods to ensure continued surface Water drainage, are deemed to be included in the Sub-contractor's quoted prices.

This does not however, relieve the Sub-contractor of his obligation to ensure that drainage of the surface water does not cause problems of flooding or sedimentation in areas adjacent or further downstream of the reclamation sites.

3.6.4.2 Backwash

Drainage of dredge water from the reclamation sites shall be facilitated by suitable means such as dykes, placement of suitable adjustable weir overflows and return pipelines etc. Suitable measures shall be taken, to the satisfaction of the Engineer, to ensure the discharge of dredge water/Surface Water in the Reclamation Area into the sea at the designated disposal areas only. Designated location is shown in DWG 5. However, the location is tentative and will be finalized during execution of the project as per the site requirement.

The Sub-contractor shall be responsible for any cost related to damage, loss of property, or inconvenience to third parties caused by the spillage/leakage/seepage of dredge water in areas adjacent or further downstream of the reclamation sites. In addition, the Sub-contractor shall take suitable corrective action immediately to remedy the aforementioned problems at his own cost so that the nearby habitats shall not be disturbed or impacted.

In case the back wash water /dredged material has to pass over any Creek/water bodies through pipelines at the site the same shall be carried over these creeks/water bodies by construction of any temporary supporting structures etc. over these creeks/water bodies without affecting the marine environment. The cost of these temporary structures shall be borne by the Sub-contractor and nothing extra shall be paid by DCI for the same. These temporary structures shall be dismantled, and all material removed from site after completion of the work. Care shall be taken while construction of such temporary structures with the supported pipelines that the dredged material/ backwash water leakage into the creek/water bodies is strictly prevented by adopting necessary Environmental protective measures.

In case of any other obstructions on the way, it is the duty of Sub-contractor to visit the site before quoting and find in detail the obstruction coming in way of laying the line from dredger(s) to the area of filling and also the back wash route from site to the sea. Sub-contractor's scope shall include construction of any temporary structures, nets over creeks / drainage channels and also such temporary structures must be removed upon completion of work at no extra cost along with the restoration of the original environment with suitable protective measures.

For taking the pipeline & back wash line to & from reclamation area, Sub-contractor shall have to make necessary arrangement for cutting and remaking good the existing approach roads if any without hampering the traffic and with due permission from DCI and the local authorities as necessary. Sub-contractor shall also co-ordinate/liaison with the concerned authorities for obtaining these permissions.

3.6.4.3 Existing beach protection

The Sub-contractor shall take all necessary measures to ensure that the existing adjacent beaches, if any, are not contaminated or affected in any way by the reclamation works.

3.6.5 Controls on Fill Quality at the Reclamation Site

3.6.5.1 Objective

To develop the reclaimed site with desired compaction in the entire area, for

- i) Use of land for construction activities shortly after the reclamation is over, and
- ii) Engineering use of land to support lightly/medium loaded structures

3.6.5.2 Control Aspects

a. Quality of Fill Materials

Dredged material to be transported to the reclamation site and sub-contractor shall ensure the required degree of compaction shall be achieved, upto the required level of Reclamation, while Material segregation at reclamation areas is not the relevant criteria.

b. Condition of Fill Placement

The hydraulic fill of dredged material shall be placed in such a way that the proportion of fine material which they contain are, preferably, not allowed to segregate and accumulate to form mud pockets in the reclamation area. Effective drainage system shall be adopted to avoid formation of ponds.

c. Methods of Compaction

Compaction of the filled-up or reclamation area shall be achieved by adopting suitable compaction methodology with suitable compacting equipment to achieve the required degree of Compaction energy of 7kg /cm² and the same shall be ensured by conducting Field and lab test results.

3.6.5.3 Routine Tests/Sampling

For periodic control on quality of fill material, to the extent possible, placed at reclamation site, routine sampling/testing shall be carried out for which details are provided in relevant section of Cl. 3.6.6.

3.6.5.4 Control Tests at Reclamation Site

The reclaimed ground at each stage/lift of fill placement/ and monthly executed shall be achieved by adopting suitable compaction strategy and the same shall be ensured through suitable field compaction tests and insitu density measurements and shall be carried out at minimum 50m x 50m grid in addition to the laboratory tests by collecting

representative samples from the same grid as per tender requirement and tests shall be conducted and or as per the Engineer's directions as and when required. In this regard bidder has to submit the detailed strategy of compacting methodology for achieving required compaction energy as per cl 3.6.5.5.

ECPTu (Electric Piezocone Penetrometer test) shall be carried out after completion of the entire reclamation fill up to the required fill level, minimum one test per 50 m x 50 m grid and up to a depth of 1m below the maximum thickness of reclamation fill or refusal whichever occurs earlier and or as per directions of Engineer for meeting the site requirements. The details/requirements are provided in relevant section of Cl. 3.6.6.

3.6.5.5 Fill Quality Requirements

- a. Fill materials Quality: Clause 3.6.5.2 (a) will be prevailing over this clause.
- b. Fill Compaction Quality: The Compacted reclamation site is required to possess compaction pressure of **minimum 7 Kg/cm²** for the filled-up layers till the finished ground level of +5.601m.

3.6.6 Specification for Field and Laboratory Testing

3.6.6.1 Scope

The Sub-contractor scope shall include sampling and carry out field/ laboratory test as specified at Cl 3.6.6.2, Cl 3.6.6.3 and Cl 3.8 and or as directed by DCI Engineer as per site requirement.

However, 5% of the total samples shall be tested in a Third Party NABL accredited laboratory for the tests to be done as directed by DCI-Engineer. All costs for transportation of the samples and the testing in the Third-Party Labs shall be deemed to be included in the quoted price.

3.6.6.2 Control Section/Grid

For control purpose, the fill volume be subdivided in control sections to a maximum of 50 m x 50 m grid, to ensure for achieving the required compaction parameters and the same shall be ensured by conducting the following field and lab tests.

- a. Following Field Tests to be adopted for each control section
 - (i) Suitable In-situ tests to ensure compaction of Soil
 - (ii) Electric Cone Penetration tests (ECPTu)
 - (iii) Collection of Representative samples for testing in laboratory

- b. Following Laboratory Tests to be adopted for each control section
 - (i) Angularity
 - (ii) Minimum and maximum dry density
 - (iii) Sieve Analysis
 - (iv) Hydrometer Analysis
 - (v) Preparation of GSA curves
 - (vi) Shear Strength (Triaxial / Direct shear)
 - (vii) Relative density
 - (viii) Permeability

Once control section fails to reach the required standards/ compaction parameters as per tender requirement based on above tests, the entire section shall be deemed to have been failed. The Engineer shall determine the actual extent of each control section as per the requirement if any, and he shall have the right to determine the location of sampling, with the section. Failed section shall be replaced and / or recomputed and new tests performed, to ensure that the required standards have been reached, at no extra cost.

The Sub-contractor may propose smaller test sections, if he prefers, in order to have precise monitoring. All test results shall be submitted to the Engineer together with plans showing location and level of samples taken. Sub-contractor shall conduct the above tests on a reclaimed surface/layer/ to ensure periodically and also monthly for submission of invoice and shall be ensured.

The Field and lab tests mentioned are indicative and sub-contractor can adopt more suitable tests methods to achieve and ensure the compaction pressure as per tender requirement

3.6.6.3. Tests and Equipment Details

a) Grain Size Analysis:

Three samples from each control section shall be taken and sieve analysis is carried out in accordance with BIS:2720 Part 4. Each result shall fulfill the specified requirements of landfill as contained herein. However, this test result will not impact the payment, subject to achieving the required degree of compaction.

b) Electric Piezocone Penetrometer Test

These shall be carried out as per ASTM 5778 with 20 T capacity equipment to ensure for achieving the minimum compaction pressure of 7kg /cm² . The results shall be presented in the Tabulated form and also graphically in graphs showing cone resistance in Kg/ Cm², friction resistance in Kg/ Cm² and pore pressure, with depth in meters.

The precision must be verified in the field taking into account all possible disturbing influences. The calibration of load cells or proving rings and with total equipment shall be verified on the site at least once a month using an appropriate field control unit. DCI Engineer shall provide the sub-contractor with locations where tests shall be performed. In addition to the tests proposed DCI Engineer may require the sub-contractor to carry out further tests in vicinity of suspected unsuitable material in order to establish its extent.

c) Routine sampling on dredged materials at reclaimed site:

The sub-contractor shall collect 3 numbers of fill samples each day, one number at eight-hour intervals from the reclaiming area where the hydraulic filling operation is in progress. These samples shall be a true representative sample of material dredged and placed within the preceding 8 hours. Engineer shall advise the location from where these samples shall be taken.

The Engineer after examination may require the Sub-contractor to take further samples and may instruct him to carry out further tests on these samples.

The Engineer shall provide the Sub-contractor within 24 hours of sampling a schedule of laboratory tests to be carried out on routine sample. The sub-contractor shall perform these tests in the Field and NABL approved laboratory and shall submit the results to DCI within 48 hours.

3.7 Measurement of Reclamation Volumes :

3.7.1 Mode of Measurement: Measurement of Reclamation Volume for Running Account Bills and Final Bills shall be based on computation of volumes of each individual blocks/control sections/grids etc. based on “**Pre-Reclamation Survey**”, “**Intermediate Reclamation Surveys**” and “**Post-Reclamation Survey**”. Plan area represented by each block/control sections/grids etc. multiplied with the depth of fill obtained from the successive Reclamation Surveys would be taken as the volume of fill for individual block/control sections/grids.

Total volume of the area for measurement / payment of reclaimed volume and acceptance over shall be calculated by adding the individual block volumes.

Measurement of this volumetric quantity for payment purposes shall be taken up only when a minimum continuous area of 50 m x 50 m is completed in all respects, i.e. upon reaching the specified finished ground levels and satisfying the compaction requirements as per Cl. 3.6.5.5.

3.7.2 Pre-reclamation survey:

Prior to commencement of reclamation process and after Site clearance of reclamation area and after compaction of existing reclamation ground as per Clause No. 3.6.1 above, Pre-reclamation survey shall be carried out jointly in the presence of Sub-contractor & Engineer. On completion of the pre-reclamation survey, the Sub-contractor shall prepare within one week, the cross sections showing the full results of the survey. On completion and agreement of the contents of the drawings & results, the Sub-contractor and Engineer’s representatives shall both sign the drawings, which shall then acquire the status of "**Pre-reclamation survey**" and form the basis for all further measurement work to be undertaken in the course of the contract, including the final measurement.

3.7.3 Intermediate-reclamation survey:

On completion of the reclamation works for a particular stage/lift, including the compaction, to the desired levels, Intermediate-reclamation survey shall be conducted jointly in the presence of Sub-contractor & DCI. On completion of the Intermediate-reclamation survey, the Sub-contractor shall prepare within one week, the cross sections showing the full results of the survey. On completion and agreement of the contents of the drawings & results, the sub-contractor and DCI's representatives shall both sign the drawings, which shall then acquire the status of "**Intermediate-reclamation survey**" and form the basis for final establishment of levels and final payment.

3.7.4 Post-reclamation survey:

On completion of all the reclamation works, including the compaction, to the desired levels, Post-reclamation survey shall be conducted jointly in the presence of Sub-contractor & DCI/Engineer. On completion of the post-reclamation survey, the Sub-contractor shall prepare within one week, the cross sections showing the full results of the survey. On

completion and agreement of the contents of the drawings & results, the sub-contractor and DCI's representatives shall both sign the drawings, which shall then acquire the status of "Post-reclamation survey" and form the basis for final establishment of levels and final payment.

3.8 Reporting of Test Results / Data

3.8.1 General

The Sub-contractor shall submit the following to Engineer for his approval before commencing works:

- a) Method statement for sampling and carrying out
 - Electric Piezocone penetration test
 - MDD/Relative Density Test
 - Laboratory tests
- b) Manufacturer's specification for electric piezocone penetration testing (ECPTu) equipment, including data recording system.

3.8.2 Reporting of Test Results/ Data

Sub-contractor shall submit the following within 24 hours after completion of tests:

Test results/data for the following tests, in an agreed format for:

- a. Electric piezocone penetration test
 - Field/Laboratory density tests
 - Grain size analysis
- b. Drawings showing locations of various tests
- c. Progress Photographs, measurement photographs in consultation with DCI Engineer.

4.0 DOCUMENTS TO BE FURNISHED BY THE SUB-CONTRACTOR FOR APPROVAL BY DCI/ENGINEER

After Kick-off Meeting within 14 days

- (i) Detailed Execution Methodology including sequence of activities
- (ii) Detailed Environmental Management Plan
- (iii) Scheme for Quality Assurance
- (iv) Design calculations and Cross-section details of bunds at various locations.

5.0 DOCUMENTS TO BE FURNISHED BY THE SUB-CONTRACTOR FOR INFORMATION TO DCI/ENGINEER

- (i) Details of mobilization of Dredging plants, Marine spread, Ancillary equipment's and Pipelines
- (ii) Details of Pipeline transport including booster locations, shifting valves and branching lines

- (iii) Procedures for Sampling, laboratory testing, Survey procedures and details of Survey and Dredging softwares, like Hypack/ Hysweep etc
- (iv) Detail filling and compaction plan
- (v) Layout of dredging pipeline from sea to site
- (vi) Layout of back wash header from site to disposal point
- (vii) Detail drawings for viaducts crossing the creeks/ water bodies,
- (viii) Detail drawings for crossing of dredging line and backwash line
- (ix) Details of filter media at every zone.
- (x) Details of Site Management Plan

6.0 LIST OF DRAWIMNGS AND DOCUMENTS ATTACHED FOR GUIDANCE

6.1 List of Drawings / Charts Enclosed Under Section IX

6.2 List of Documents Enclosed under Section X

7.0 SUPPLEMENTARY INFORMATION (To be provided by Tenderers)

The Bidder shall provide supplementary information as per the attached pro- forma in respect of:

- 1 a Description of proposed bund construction methods and
b Construction schedule (Programme)
2. Major constructional plant and equipment and also compaction equipment
3. Strategy of Compaction methodology and achievement as per tender requirement
4. Proposed Organization for management of project and also line of reporting.
5. Proposed sub-contractors.
6. Check list for submission of documents with the bid.
7. Unwanted Material in the Dredging Areas and the strategy for removal.

SECTION – V
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| | | |

SECTION – V
SPECIAL CONDITIONS OF THE CONTRACT (SCC)

1.0 General

- 1.1 Special Conditions shall be read in conjunction with the General Conditions of Contract, specification, drawings and any other documents forming part of this contract wherever the context so requires.
- 1.1 Notwithstanding the Sub-division of the documents into the above separate sections and volume every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.
- 1.2 Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions, the provisions of the Special Conditions shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnancy of variations, prevail.
- 1.3 Where it is mentioned in the Specification that the sub-contractor shall perform certain work or provide certain facilities, it is understood that the sub-contractor shall do so at his own cost.
- 1.4 The materials and workmanship shall satisfy the relevant Indian standards, the specifications contained herein and codes referred to. Where the specifications stipulate requirement in addition to those contained in the Standard codes and specifications, these additional requirements shall also be satisfied.
- 1.5 Encountering of boulder and debris during the execution of dredging works does not entitle the sub-contractor to any claim under adverse physical conditions.

2. The Work

2.1 Scope of Work

The detailed scope of work is defined in the Technical Specifications.

The Sub-contractor shall provide all necessary materials, equipment, and labor for the execution of dredging and reclamation until completion. This includes, but is not limited to, the provision of all tools, machinery, software, and any other resources required to carry out the work effectively.

Before any equipment, tools, or software are used on the project, they must receive approval from the Engineer /DCI. This ensures that all resources meet the required standards and specifications for quality, safety, and performance. The Sub-Contractor is responsible for coordinating with DCI/Engineer to facilitate timely inspections and approvals, preventing any delays in the project timeline.

Additionally, the Sub-contractor must ensure that all materials and equipment are in good working condition and suitable for the intended tasks. Regular maintenance and inspections should be carried out to avoid any disruptions or hazards during the project. The scope of work includes not only the initial execution of the tasks but also the ongoing maintenance

required to uphold the standards specified until the project is deemed complete.

3. **Duties of DCI's Representative/ Engineer**

DCI's Representative is responsible to DCI and shall carry out such duties and exercise such authority as may be delegated by DCI and shall act as 'Engineer.'

4. **Nature of Work**

The works under the contract include dredging of sand, silt and clay from the areas to be dredged and disposing the dredged material into the designated locations ashore (land) with finished level of +5.601 m CD to be created through land reclamation process, including compaction of the dumped soil and as directed by the Engineer.

5. **Engineer's Authority to Delegate**

The Engineer may from time to time delegate to the Engineer's Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing. However,

- a. any failure of the Engineer's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or Plant and to give instructions for the rectification thereof;
- b. if the Sub-contractor questions any communication of the Engineer's Representative he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication.
- c. Deployment of Staff by the Engineer

The Engineer shall deploy any number of persons from his firm or appoint any number of persons in the carrying out duties. Such persons have the authority to carry out their duties, acceptance of materials, verifications of drawings, checking the surveys, quantities of dredging, checking the locations of disposals of dredged material, levels of reclamation area, plant or workmanship as being in accordance with the Contract, and any instructions given by any of them to the Sub-contractor for those purposes shall be deemed to have been given by the Engineer's Representative on behalf of the Engineer of DCI.

The authority delegated to the Engineer is described in GCC.

The Engineer may delegate duties and authorities to the Engineer's Representative in writing, and may revoke such delegation at any time. Further,

- (a) The Engineer retains the authority to disapprove any work, materials, or Plant regardless of the Engineer's Representative's previous approval.
- (b) If the Sub-contractor questions the Engineer's Representative's communication, the matter can be referred to the Engineer for confirmation, reversal, or variation.

The Engineer may deploy staff to perform duties such as accepting materials, verifying drawings, checking surveys, and inspecting dredging and reclamation areas. Instructions from these staff members to the Sub-contractor are considered as given by the Engineer's Representative on behalf of the Engineer. The specific authorities delegated to the Engineer are described in the General Conditions of Contract (GCC). Any reference in this Contract to DCI's personnel or representatives shall be construed **solely as references to persons expressly authorized in writing by DCI, and no such person shall have any independent**

authority to bind DCI, except to the extent specifically provided in such written authorization

6. The Site - General Site information.

The intending tenderers are expected to visit the site and satisfy themselves on the actual site conditions, meteorological and oceanographic data, soil/subsoil strata to be dredged and the areas identified for disposal of dredged material, before tendering. Information regarding surface and subsurface strata, climatological, oceanographic data given in the tender documents are only intended as a general guidance for the tenderer/sub-contractor and no warranty is given regarding the correctness of the same.

7. SURVEYS AND LEVELS TO BE AGREED

Before the commencement of any part of the works, the Sub-contractor and the Engineer shall jointly survey the site and take necessary levels. They will agree on all particulars that will serve as the basis for measuring the works. These particulars shall be meticulously recorded. Once both parties agree on the details, the corresponding drawings shall be signed by both the Engineer and the Sub-contractor.

A similar procedure shall be followed after the completion of the works, referred to as the post-survey. In this process, the Sub-contractor and the Engineer/DCI will again conduct a joint survey of the site to verify the works completed as per contract conditions and take the necessary levels. They will compare the post-survey measurements with the initial agreed-upon particulars to ensure the work has been carried out as specified. All findings and measurements from the post-survey shall be documented, and the respective drawings will be signed by both parties to confirm the accuracy and completeness of the work performed.

- d. Failing such surveys and agreements being prepared and/or signed by the sub-contractor, the survey of the Engineer shall be final and binding on the Sub-contractor.
- a. The sub-contractor shall be entirely responsible for the horizontal and vertical alignment, the levels and correctness of every part of the work and shall rectify any errors or imperfection therein. The sub-contractor, at his own cost, shall carry out such rectification.

8. SETTING OUT WORKS

- a. DCI shall furnish the relevant existing grid points with Bench Mark with reference to permanent bench marks. It shall be Sub-contractor's responsibility to set out the necessary central points on land and to set out alignment. The sub-contractor shall have in his employ efficient survey team for this purpose and the accuracy of such setting out works shall be sub-contractor's sole responsibility.
- b. Before beginning the work, the Sub-contractor shall work out the control points on ground which, are pre-requisite for carrying out hydrographic surveys, accurately, with suitable markers as approved by Engineer. All these points and markings shall be checked and approved by DCI's Representative before starting the work.
- c. The sub-contractor shall also provide necessary equipment, labour and other facilities for proper checking of triangulation / bench mark stations and inspection of the points

during the survey and operations at no cost to DCI.

- d. The sub-contractor shall give DCI/ Engineer not less than 24 hours' notice in writing of his intention the set out or give levels for any part of the works so that arrangements may be made for checking the work.
- e. Work shall be suspended for such times as necessary for checking lines and levels on any part of the works.
- f. The Sub-contractor shall at his own expense provide all assistance which DCI/ Engineer may require for checking the setting out.

9. ORDER OF WORKS

The order in which the works are to be carried out shall be to the approval of Engineer/ DCI and shall be such as to suit the detailed method of construction, adopted by the sub-contractor as well as the CPM schedule. The works shall be carried out in such a manner so as to enable the other sub-contractors to work concurrently so that the entire project may be brought into use immediately after the completion of works.

10. CO-ORDINATION AND INSPECTION OF WORKS

The Co-ordination and inspection of the day-to-day work under the contract shall be the responsibility of Engineer/ DCI. The written instructions regarding any particular work will be normally passed by Engineer/ DCI. A work order book will be maintained by the Sub-contractor for each sector which aforesaid written instructions will be entered. These will be signed by the Sub-contractor or his authorized representative by way of acknowledgment within 12 hours.

11. GENERAL CONDITIONS

The work shall be permitted on the site round the clock.

- a. The sub-contractor must arrange for the placement of workers in such a way that the delayed completion of the works of any part thereof for any reason whatsoever will not affect their proper employment. DCI will not entertain any claim for over time /idle time payment etc. whatsoever.
- b. The Sub-contractor shall submit to DCI / Engineer reports at regular intervals regarding the state and progress of work. The details and proforma of the report will mutually be agreed after the award of Contract.
- c. Working in Monsoon

The execution of the work entails working in the monsoon also. The Sub-contractor must maintain sufficient labour force as may be required for the work and plant and execute the construction and erection according to the prescribed schedule. No special rate will be considered for such work in monsoon.

12. SUB-CONTRACTOR WORKING AREA

The Sub-contractor shall be allowed suitable working area as per the scope of works and approved by DCI /Engineer.

13. TEMPORARY WORKS, OFFICE, JETTY, ETC.

- a. The Sub-contractor shall submit to DCI / Engineer for his approval, drawings and

proposals for any temporary works, storage yard, office, store, false work and temporary platforms, workshop, etc. which he intend to construct for the execution of the contract and no such work shall be constructed before obtaining the written approval of DCI/ Engineer.

- b. The Sub-contractor shall obtain permission for any temporary work and would ensure that during execution of works the statutory requirements of the concerned authorities such as DCI, Police, etc. would be complied with.
- c. Not less than one month before the date when the Sub-contractor intends to start erecting any part of the temporary works and staging required for carrying out the works, he shall furnish to Engineer, complete drawings of that part of the temporary works and staging. The Sub-contractor shall at the same time, if so, required by Engineer furnish calculations in respect of such temporary works. The Sub-contractor shall also furnish to Engineer, drawings showing the method proposed for the erection of the various parts of the work.
- d. The furnishing to Engineer of any design for any temporary works and staging shall not relieve the Sub-contractor of any liability or obligation under the contract in respect of such temporary works and staging. All temporary works shall remain the property of the Sub-contractor.

14. OPERATIONS OF DCI AND OTHERS

- a. The ordinary business and works of DCI and others as carried out on and in the vicinity of the site will be continued during, the execution of the Contract shall be conducted in such a way as to avoid interference with traffic of every kind by land and by water and with any other works in progress in vicinity.
- b. The Sub-contractor's attention is drawn to the fact that other sub-contractors employed by DCI may be working in the vicinity and due interfacing, cooperation and adjustment need to be made by the sub-contractor.

15. APPLICABILITY OF PORT RULES

- 15.1 The Sub-contractor shall observe the conservancy rules relating to the Port/ 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 DCI. Under no circumstances shall inflammable material be allowed to spill into the Harbour area as per the MARPOL regulations.
- 15.2 The Sub-contractor shall always observe and comply with the working rules and regulations of the Port in force or as issued from time to time.
- 15.3 Vessel related charges for the marine crafts engaged for executing the contract (from mobilization, commencement of dredging operation to completion and demobilization), Pilotage/ berth hire if any, etc., for carrying out the maintenance will be on Sub-contractor's account.
- 15.4 Regulation of Entry of Ships into Ports, Anchorages and Offshore facilities, Rules 2012 and further notifications should be followed as per DG Shipping.

16. Existing Services

- 16.1 Drains, pipes, cables, overhead-wires and similar services encountered in the course of the work shall be guarded from injury by the Sub-contractor at his own cost so that may continue in full and uninterrupted use to the satisfaction of the Engineer's/ DCI's thereof or otherwise occupy any part of the site in a manner likely to hinder the operation of such services
- 16.2 Should any damage be done by the Sub-contractor to any mains pipes, cables or lines (whether above or below ground). Whether or not & shown on the drawings, the Sub-contractor must make good or bear the cost of making good the same without delay to the satisfaction of Engineer/ DCI and of the Engineer's/ DCI's.
- 16.3 Existing roads and approach roads including culverts used for transporting of Excavated material and Stones should not be damaged or defaced with mud and muck of tyres. The tyres of the transport equipment should be cleaned prior to usage of road. Should any damage or defacing happen, the sub-contractor must make good or bear the cost of making good to the satisfaction of Engineer/DCI and any other authority.

17. ENTRY ON PRIVATE OR OTHER PROPERTY

The Sub-contractor shall not enter upon or commence any work in or upon, across or through any land, building or place being private property until authorized in writing by Engineer/ DCI or other competent authority to do so.

18.0 NOTICE OF OPERATIONS

No important operations shall be commenced nor shall be carried out without the consent of Engineer/DCI in writing.

19.0 SECURITY AND SAFETY

- 19.1 The Sub-contractor shall comply with all regulations imposed by the Customs, DCI, Port and Security Authorities in respect of the passage of Plant, Vehicles, materials and personnel through Customs and Port barriers.
- 19.2 The Sub-contractor shall take all possible precaution to prevent outbreaks of fire on the site and in all offices, stores, camps and other places and things connected therewith and especially with respect to the safe storage of petroleum products, explosives and all other dangerous or hazardous goods. He shall comply with all rules, regulations and orders of any Statutory Authority and of Port/ DCI at no extra cost to DCI.
- 19.3 The Sub-contractor shall obtain from DCI details of any restricted areas in or around the site and shall have the details prominently and clearly displayed for the information of his staff and work people notices defining any such restricted areas. Such notices shall be provided at his own expenses.
- 19.4 The Sub-contractor will be required to take entry passes to the restricted area of Port for all personnel, labourers and vehicle at no extra cost. No claim whatsoever on this account will be entertained.
- 19.5 Required entry passes to men, vehicles and equipment shall be obtained as per the prevailing norms and charges.

20.0 RETURNS AND DRAWINGS

All reports, statement, returns, diagrams, photographs or drawings, etc. which the sub-contractor is required to submit to DCI / Engineer shall unless otherwise directed, be furnished in four copies. Tentative list of reports is given below:

Daily activity & performance report

- i. Weekly activity & performance report
- ii.. Monthly report

The Engineer shall submit format for submission of report prior to commencing of works for approval.

21. POSSESSION PRIOR TO COMPLETION

DCI shall have the right to take possession of or use any completed or partially completed work or part of the work. Such possession or use shall not be deemed to be acceptance of any work completion in accordance with the contract agreement. If such, prior possession or use by DCI delays the progress of work, on equitable adjustment in the time of completion will be made and the contract agreement shall be deemed to be modified according.

22. COMPLETION DOCUMENTS

For the purpose of provision of Clause 13.0 of the General Conditions of contract, to treat that the work has been completed and issue a final payment, the following documents will be deemed to form the completion documents:

- 22.1 The Technical documents according to which the work was carried out.
- 22.2 The set of charts/ drawings showing therein the modifications and corrections made during the course of execution signed by Engineer/ DCI and sub-contractor.
- 22.3 Pre and final levels as set out for Reclamation work & other works if any.
- 22.4 Tests performed for various works to attain the required levels and compaction parameters.

23. DISPUTE IN MODE OF MEASUREMENT

In case of any dispute as to the mode of measurement not covered by the contract to be adopted for any item of work, mode or measurement as per relevant Standard Specification (BIS 1200 & ASTM D-5778-12 - Latest revision) shall be followed. However the Engineer's /DCI's decision is final in this regard.

24. INCOME TAX

Income tax on the gross amount bill shall be deducted from the Sub-contractor's bill as per Section 194C and other applicable clauses of the Indian Income Tax Act or as revised from time to time.

25. FACILITIES TO BE PROVIDED BY THE SUB-CONTRACTOR

Sub-contractor shall provide the following facilities for DCI personal attached to the project, Engineer and his representatives engaged by DCI for supervision/ monitoring of the works

- 25.1 Suitable accommodation for the representatives of DCI/Engineer posted for monitoring the operations on 24x7 basis required if any.
- 25.2 Complete set of Personal Protective equipment (PPE) for the Engineer and Engineer's

- representatives to be provided by the sub-contractor for site visits and the necessary PPE in case of any epidemic in the region.
- 25.3 Certified and approved crew boat on request for transportation of DCI / Engineer or Engineer's Representatives to and fro from the marine equipment / Dredger. The transport shall also be used by monitoring staff during shift change. All the persons travelling shall be provided with individual life vests. The boat used for this purpose can be the boat used by the Sub-contractor for his own staff, a separate crew boat need not be provided, however on request the boat should be made available within reasonable time.
- 25.4 Temporary site office with seating arrangement for five to six persons with tables/ chair/ cabinets / net connection / printer / copier. Same shall be the property of the Sub-contractor on completion of works.
- 25.5 One Personal Computer and accessories installed with Licensed survey and AutoCAD software similar to the one used during the Survey to be provided by the sub-contractor to the Engineer for his estimation and evaluation of quantities and monitoring of works. All the equipment along with the software shall be returned on completion of works.
- 25.6 One Laptop for DCI's representative and one for the ENGINEER with Licensed survey and AutoCAD software similar to the one used during the Survey by the sub-contractor to be provided.
- 25.7 Communication facilities (Mobiles and / or Walkie talkies) to be provided to establish communication between DCI/ ENGINEER with sub-contractor's reclamation site/office and marine craft at all times.

26. Environmental Monitoring

As per the guidelines, Environmental Management Plan shall be drawn by successful bidder in such a way that all reasonable precautions shall be undertaken so that the dredging and reclamation operations do not cause any adverse impact on the water quality and marine productivity in the vicinity. The Environmental Management Plan shall deal with impacts resulting from the dredging and shore dumping which concerns sea water pollution and impacts resulting from the drainage of onshore reclamation. The Environmental Management Plan shall reflect the standards for environmental protection specified by the Ministry of Environment and Forest while issuing environmental clearance for the project. Copy of EC is enclosed.

It is the responsibility of the sub-contractor to comply with all rules and regulations in connection with the dredging contract in general, complying with EC norms. The bidder shall consider all the environmental protection cost along with applicable norms in the relevant quantities of Bill of quantities.

The Environmental Management Plan will also reflect measures to be taken by the successful bidder to mitigate and protect the environment against impacts resulting from the dredging and shore dumping operations. The general form of the Environmental Protection Plan shall include and not be limited to Objective, Work Plan and

- The entire dredged spoil under this contract shall be pumped through the pipelines in the designated Reclamation land of 685 Acres to raise the finished level of **+ 5.601 M CD**. without waste of dredged material .
- All dredgers and other marine crafts of the sub-contractor shall follow MARPOL regulations.

- Adequate noise control measures to be followed by the sub-contractor so that the noise levels are within 45 db (A) at a distance of 100m from dredging operation.
- Dredging shall be carried out in the confined manner to reduce the impacts on marine environment including turbidity.
- In addition to various stipulation of this contract documents with regard to dredging, the Sub-contractor shall comply with the specific conditions, other standard conditions and general clauses applicable for dredging as stipulated by MoEF&CC, Environmental and CRZ Clearances , prepare the EMP, and strictly adhere the same during dredging operations.

27. HEALTH SAFETY AND ENVIRONMENT, RISK & HAZARD

- 27.1 HSE Plan in line with DCI's HSE policy and Sub-contractor's company policy shall be made and submitted within 28 days of commencing of works for the approval of the Engineer/ DCI. The policy shall be followed during the life cycle of the project. The policy may be updated as and when required.
- 27.2 Risk and Hazard identification and mitigation plan shall be made and submitted within 28 days of commencing of works for approval of the Engineer/ DCI. The plan may be updated as and when required.

28. CODES, STANDARDS AND SEPCIFICATIONS

The design shall comply with the latest editions and revisions of the codes, specifications, and standards listed below:

- (a) BS: 6349 – BS Code of Practice for Marine Structures- Part 5 – Code of Practice for Dredging and Land reclamation.
- (b) Construction and Survey Accuracies for the Execution of Dredging and Stone Dumping Works-March 2001 published by Rotterdam Public Works Engineering Dept. the Nederland's association of dredging, shore and protection sub-contractors and the International Association of Dredging Companies (IADC)
- (c) IS 2720 Part VIII and (d) IHO Manual - MANUAL ON HYDROGRAPHY.

29. SUBLETTING

Engaging of labour on piecework basis shall not be deemed to be sub-letting.

SECTION - VI
TIME SCHEDULE

| DESCRIPTION OF WORK | TIME OF COMPLETION |
|--|--|
| <p>Dredging and Reclamation works for development of 685 Acres of Land for Establishment of Industrial Estate near Paradip, Orissa, India.</p> | <p>The time period is about 11 months from date of issue of LOA</p> <p>The work of Dredging and reclamation shall be completed by April 2027 by deploying suitable number and capacity equipment and accessories at site enable to achieve the desired reclamation level.</p> <p>Kickoff meeting shall be conducted within 7 days of issue of LOA.</p> <p>However, the sub-contractor shall strictly adhere to the following intermediate milestones.</p> <ol style="list-style-type: none"> 1. Dredging and Reclamation of the 685 Acres of land at 780 Acres Plot including Top and Side Slope Protection Works as defined in Technical Specifications under section IV of bid document - within 05 (Five) months from date of issue of work order. 2. Arrangement of all the required pipelines at site and completion of laying as per the required specifications along with installation of required Booster pumps - both pumping and return water/backwash for job execution- within 05 (Five) months from date of issue of work order. 3. Arrangement of required number of Dredgers (CSD(s) & TSHD(s)) along with required ancillary craft(s) at site with requisite resources as per Agreed Execution Plan complying with the time schedule, complete installation and commencement of dredging – within 05 (Five) months from date of issue of work order. 4. Completion of Reclamation works in 685 Acres of land at 780 Acres Plot - within 11 (Eleven) months from date of issue of work order 5. Demobilization from site and Handing over of site by April 2027 – within 02 (Two) weeks after completion of sl. no. iv above. |

NOTES:

1. The overall Time of Completion shall be reckoned from the date of issue of LOA.
2. The time indicated above (overall as well as the Intermediate milestones) is for completing the works in all respects as per design, drawings, and specifications and shall also include the time required for testing and rectification etc., if any, and to complete the works as per TS under section IV and other relevant specifications mentioned in bid document.

(STAMP & SIGNATURE OF BIDDER)

SECTION-VII
PART A
PREAMBLE TO SCHEDULE OF RATES/ BILL OF QUANTITIES

1.0 GENERAL

The sub-contractor's attention is drawn to the conditions of contract, the specifications and the drawings all of which are to be read in conjunction with the Bill of Quantities hereinafter. Directions and descriptions of work and material given in the other parts of the contract Documents are not necessarily repeated in the Bill of Quantities.

The total cost of complying with all the provisions, conditions, obligations and liabilities etc. described in the contract and of carrying out the works as specified including, but not by way of limitation, all charges and the rates and prices inserted in the Bill of Quantities hereinafter unless expressly otherwise provided for in the contract. Consequently, the sub-contractor shall have no claim for further or extra payment in respect of any work or rates and prices set against each item are to be for full and / or described in the specification which can reasonably be inferred there from and are to cover the cost of provision of all labour, materials, tools, tackles, plan all as per conditions stipulated elsewhere. The rates shall also include all contingent costs and charges for proper completion of the work, whether mentioned or not, including all taxes such as Income Tax, Building & other Construction workers welfare cess and general at all the sub-contractor's obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works. The quantities given in the Bill of Quantities are estimated. The basis of payment shall be the actual quantities of work ordered and carried out as measured jointly by the sub-contractor and by the Engineer valued at the rates and prices specified in the Bill of Quantities, where acceptable and otherwise as per the terms of the contract. The quantities of work and materials stated in the Bill of Quantities shall not be considered as limiting of extending the amount of work to be done.

The sub-contractor is deemed to be familiar with all site conditions at the Dredging and reclamation Site, weather, all site investigation records, available means of access and the locality of any existing services and working restrictions due to testing site features or other sub-contractor's works in order to execute the works. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. The sub-contractor is deemed to have referred to the relevant sections of the contract documentation and prices incorporated against each item in the Bill of Quantities. The method of measurement is described in the following preambles and / or is demonstrated in the measured items included in the Bill of Quantities

Unless separate items are measured, rates and prices must include for all testing in accordance with the specification.

The following abbreviations have been used:

- PS -Provisional Sum
- LS -Lump Sum
- M /m -metre
- M2/ m2 -square metre
- M3/ m3 -cubic metre
- T/t /Te/ te/MT -ton
- wk -week
- No. -Number
- Rs./ INR -Indian Rupee

2.0 METHOD OF MEASUREMENT & MODE OF MEASUREMENT

2.1. General

Unless stated or billed otherwise, quantities shall be measured in accordance with IS: 1200 and are net as they are finished shall include whatever allowance is considered by the sub-contractor to be necessary for waste, working area, construction slopes, batters etc.

2.2 Units Rates prevail

In case of any arithmetical errors in the Bill of Quantities, the quoted unit rates shall prevail. Arithmetical errors will be corrected by DCI in the manner set out in the Instructions to Tenderers.

The required area shall be worked out correct up to sq.mtr. and quantity shall be worked out up to 2 places of decimals of cubic meters of all items. The length & width shall be worked out correct upto 2 places of decimals of running meter for all the measurements. However levels shall be recorded in three decimals.

3.0 PAYMENT

3.1 General

Payment to the sub-contractor shall be made on the recorded measurements at reclamation area measured jointly and the sub-contractor will have to submit bills in the prescribed form once in a month and payment will be made ordinarily once in a month.

3.2 The tenderers are advised that all payments related to this subject work would be made through ECS (Electronic Clearing Service). The tenderer would be required to provide particulars of their bank account along with their bid.

The payment will be made through ECS only.

The tenderers to submit

1. Name of the Bank, Branch and full postal Address
2. Account Number
3. MICR Number
4. Type of Account
5. IFSC code number
6. Copy of PAN Card
7. TIN Number
8. Income tax PAN
9. GST

3.3 The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Sub-contractor and verified by the Engineer-in charge and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.

3.4 The rates and prices bid in the priced Bill of Quantities except insofar as it is otherwise, provided under the Contract, include all constructional plant, labour, supervision, materials, all temporary works and false works, erection, maintenance, establishment and overhead charges, profit, foreign taxation and levies, taxes (other than GST) general

risks, liabilities and obligations set out or implied in the Contract and including remedy of any defects during the Defects Liability Period.

- 3.5 The rates and prices shall be quoted in Indian Rupees (INR) only.
- 3.6 The rate or price rounded off to the nearest Indian Rupee shall be entered against each item in the Bill of Quantities both in figures and words, whether quantities are stated or not. The cost of items against which the Sub-contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of quantities.
- 3.7 The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of work.
- 3.8 General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
- 3.9 The method of measurement of completed work for payment shall be in accordance with the requirements as stated in the individual sections of the contract conditions

4.0 The Financial Offer will include the Following:

- 4.1 The bidder(s) are deemed to have been taken into consideration all the tender conditions including various stipulations of MoEF &CC and cost of its compliance, while quoting the rates in the BOQ. In addition the rates entered in the BOQ is deemed to cover the following additional aspect;
 - 4.1.1 Mobilizing of all equipment's including arranging all tools, equipment and machineries required for carrying out the work specified in the schedule within the targeted date and as per description of the works stipulated in the tender.
 - 4.1.2 Collection and analysis of data in the field, if so required by the Bidder.
 - 4.1.3 Maintenance of all equipment's for the work during the entire period of the contract.
 - 4.1.4. Accommodation at site or anywhere else nearby for the Bidder and his workmen.
 - 4.1.5 Periodical hydrographic survey of the area, including providing latest sounding equipment, preparations of charts, submission of bills of quantities as and when required and as desired by the EIC.
 - 4.1.6 Periodical conducting the tests for ensuring the milestones, and as per requirement to ensure the compaction of reclamation ground and shall fulfil the contractual requirements and for payment.
 - 4.1.7. It is the responsibility of the sub-contractor to comply with all rules and regulations in connection with the dredging contract including EC norms. The bidder is advised to take into account the environmental protection cost, to the extent

applicable, while furnishing the rates in the BOQ. No additional claims in this regard shall be entertained even at a later date.

- 4.1.8. Demobilization, dismantling, retrieving, carrying away from sites all tools, equipment, machineries, temporary anchorage (if any), debris if any and accommodation etc. after completion of the work.
- 4.1.9 Suitable equipment's along with other required ancillaries should be arranged by the sub-contractor. The sub-contractors will carry out the necessary repairs, maintenance to the equipment brought by them at site at his own risk and cost. DCI will not pay any charges for such repairs, replacement of parts, machineries, labors etc.
- 4.1.10 Dredging shall not be carried out during the fish breeding season as notified by the State Authorities/ Port.
- 4.1.11. Dredging and pumping shall be carried out in such a manner to minimize the spreading of silt plume as per minimum threshold value as per standards during dredging operation which causes turbidity. Turbidity should be monitored during the dredging operation as per Environmental regulations and mitigation measures which shall be submitted by the sub-contractor before commencement and the same shall be submitted as methodology during bid submission.
- 4.1.12. Dredging and reclamation shall be carried out in the confined manner to reduce the impacts on marine environment.
- 4.1.13. The dredging and reclamation schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
- 4.1.14 While carrying out dredging and reclamation, an independent monitoring shall be carried out through a Government Agency/Institute, by DCI at their discretion and cost, to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed

4.2 Other Conditions

- 4.2.1 The Schedule of Rates shall be read in conjunction with the Instructions to Bidders, General and Special Conditions of Contract, Technical Specifications, and Drawings.
- 4.2.2 The quantities given in the Schedule of Rates are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Sub-contractor and verified by the Engineer/ DCI and valued at the rates and prices tendered in the priced Schedule of Rates, where applicable, and otherwise at such rates and prices as DCI may fix within the terms of the Contract.
- 4.2.3 The rate quoted shall be valid for variation in dredging quantity upto + (Plus) or – (Minus) 20%. If the actual quantities are beyond the variation, the rates shall be negotiated as per GCC Clause 3.4 [Determination].

- 4.2.4 The rates and prices tendered in the priced Schedule of Rates shall, except in so far as it is otherwise provided under the Contract, include all construction plant, labour, supervision, materials, erection, fuel, lube oil, manpower, watch keeping, repair cost, spares cost, idle time charges, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 4.2.5 No other charges, other than those specified in the Schedule of Rates shall be payable.
- 4.2.6 The rates and prices shall be quoted in Indian Rupees only.
- 4.2.7 Rates shall be entered against each item in the Schedule of Rates. The cost of Items against which the Sub-contractor has failed to enter a rate shall be deemed to be covered by other rates entered in the Schedule of Rates.
- 4.2.8 The whole cost of complying with the provision of contract shall be included in the items provided in the priced schedule of Rates, and where no items are provided, the cost shall be deemed to be distributed among the rates entered for the related items of the work.
- 4.2.9 General directions and descriptions of work and materials are not necessarily repeated or summarized in the Schedule of Rates. References to the relevant sections of the contract documentation shall be made before entering rates or prices against each item in the Schedule of Rates.

SECTION VII
PART II-PRICE BID

SCHEDULE OF RATES /BILL OF QUANTITIES

NAME OF WORK : Dredging & Reclamation work for establishment of an Industrial Estate at Paradip, Odisha, India.

| Item No. | Description | Unit | Qty | Indian Rupees | |
|----------|---|---------|------------|---------------|-----|
| | | | | Rate. | Amt |
| | | | cum | | |
| 1. | Construction of the Peripheral Bund for the entire reclamation area of 685 Acres including the Top and Side Slope Protection Works as per the specifications, design and requirements as per Drawings/ Charts and documents mentioned under Section IX & X for execution of the Dredging and Reclamation Works and as defined elsewhere in these Tender Documents etc. all complete as per the directions of DCI. | M | 10,000 | | |
| 2. | Completion of laying of all the pipelines as per the required specifications- both pumping and return water/ backwash | Lumpsum | 1 | | |
| 3 | Completion of installation of all Booster pumps as per the required specifications | Lumpsum | 1 | | |
| 4 | Arrival of TSHD at site along with requisite crew members and commencement of dredging | Lumpsum | 1 | | |
| 5 | Arrival of CSD at site along with requisite crew members and commencement of dredging | Lumpsum | 1 | | |
| 6 | Demobilisation of the dredgers, dredger spreads, earth moving equipment from the work site and from dredging & reclamation location including transportation of equipment and making the area clear of any construction materials, pipelines, temporary structures etc. | Lumpsum | 1 | | |
| 7 | Carrying out Reclamation works at the 685 acres of acquired land (only after completion of the entire Peripheral Bund) by Surveys including Construction of Permanent Benchmarks, dredging of the material at the designated/identified Borrow Areas including making access channels (if any) to the Borrow Areas, dredging of material at the Borrow Areas, pumping the same through pipeline to the Reclamation Area, clearing and stripping at reclamation site prior to the pumping of material, making of internal bunds at reclamation sites as required, filling and levelling with dredge material, compacting, testing, rectification works (if any), | CuM | 82,00,000 | | |

| | | | | | |
|---|---|--|--|--|--|
| | etc., complete so as to attain the required compaction parameters and the levels as per the approved drawings and as per the details laid down in the technical specifications, and under Drawings/ Charts and documents mentioned under IX & X, carrying backwash water back to the final disposal point at Sea by pumping, including construction of all necessary approaches, intermediate booster pumping stations, site offices, laboratories, equipment for backwash water pumping etc., taking all steps to protect the environment conditions, supply of manpower, materials, fuels and consumables etc., all complete as per the attached scope of work, specifications, Tender Documents, instructions of the DCI/ Enginner, meeting the requirements of Environmental Clearance, Forest Clearance, CRZ Clearance, Detailed Project Report, Statutory Approvals etc. to complete the Dredging and Reclamation Works in all respects | | | | |
| 8 | Total Amount (In Rupees)(Excl GST) | | | | |
| 9 | Total Amount (In Rupees)(Incl GST) | | | | |

Note:

- a. Rate for mobilization of dredger, dredger spread & other equipment as per item No. 1 shall not be more than 7.5 % of the total quoted price.
- b. Rate for demobilization as per item No. 4 shall not be more than 2.5 % of the total quoted price.
- c. The rates of the above items are deemed to include all the facilities, except GST. Nothing extra shall be paid on any account.
- d. The peripheral bund construction Payment shall be made on completion of per Running Metre of the Peripheral Bund and after the same has been certified by the Engineer , after attaining of all compaction requirements based on the tests listed out in the Technical specifications under section IV.
- e. Quantity mentioned in BOQ is indicative only. Payment will be based on actual reclamation quantity measured and certified. “Quantity” mentioned in the tender is referred to as “Reclamation quantity”.
- f. Monthly Quantity calculations for payment purposes shall be done on the basis of the difference in the levels between “Pre-reclamation survey” and “Intermediate (Monthly) Reclamation Surveys”.

(Signature of Bidder)

SECTION - VIII

FORMS / ANNEXURES

1. Letter of Authority for Submission of bid . (**Annexure I**)
2. The Bidder shall complete and submit with its Techno-Commercial bid the **Bid Form / Form of Bid** (**Annexure-II**)
3. The Proforma for Bank Guarantee towards Earnest Money Deposit (EMD) duly filled in should be submitted along with the Techno-Commercial Bid. (**Annexure-III**)
4. The form of Contract Agreement, when it is finalized at the time of contract award, should incorporate any corrections or modifications to the accepted bid resulting from price corrections, acceptable deviations etc. (**Annexure-IV**)
5. The Performance Security in form of BG should not be completed by the bidders at the time of their bid preparation. Only the successful Bidder will be required to provide performance security in accordance with one of the forms indicated herein or in another form acceptable to DCI. (**Annexure-V**)
6. The Pre-Qualification Requirements form should specify, for example, requirement for a minimum level of experience in providing services in a similar type of activity for which the Invitation for Bids is issued. (**Annexure-VI**)
7. The Details of the Dredgers/crafts proposed for deployment duly filled in should be submitted along with the Techno-Commercial Bid. (**Annexure-VII**)
8. Declaration of relatives (**Annexure-VIII**)
9. Proforma for Illegal Gratification (**Annexure IX**)
10. Declaration with regard to litigation (**Annexure-X**)
11. Vendor code registration (**Annexure-XI**)
12. Integrity pact (**Annexure-XII**)
13. Details of the GST (**Annexure-XIII**)
14. E Payment form (**Annexure-XIV**)
15. Exceptions and Deviations (**Annexure XV**)
16. Letter of Acceptance (**Annexure XVI**)
17. Format of Declaration (**Annexure XVII**)
18. Security clearance (Annexure XVIII)
19. Undertaking (Annexure XIX)
20. Weekly Progress Report , Annexure XX

LETTER OF AUTHORITY FOR SUBMISSION OF BID

(To be executed on Rs.100/- non-judicial Stamp Paper)

Date

To

The GM(Ops) I/c

Dredging Corporation Of India

Visakhapatnam - 530035

Dear Sir,

We..... do hereby confirm that Shri ----- (Name, designation and Address) is/ are authorised to represent us to bid, negotiate and conclude the agreement on our behalf with you against tender no and his specimen signature is appended here to.

We confirm that we shall be bound by all and whatsoever our said signatory shall commit.

We understand that the communication made with him by DCI shall be deemed to have been done with us in respect of this Tender.

Yours faithfully,

Signature:

Name & Designation: For & on behalf of:

Bid Form/ Form of Bid

to be executed on Bidder's letter head)

[The Tenderer shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted The Form shall be submitted in both the Techno- Commercial and Price Covers separately.]

Date: _____

To:

GM(Ops) I/c
The Dredging Corporation of India Limited,
Dredge House, HB Colony Main Road,
Seethammadhara, Visakhapatnam – 530 022.

Dear Sir,

We, the undersigned, declare that;

- i. Having examined the bidding documents including Addenda/Corrigenda Nos. **[insert number and issuing date of each addenda/corrigenda]**, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver [description of services] in conformity with the said bidding documents for the sum or such other sums as may be ascertained in accordance with the Schedule of Prices submitted separately as a Price Bid and made part of this Bid.
- ii. We undertake, if our Bid is accepted, to provide the services in accordance with the schedule specified in the Schedule of Requirements.
- iii. If our bid is accepted, we undertake to provide a Performance Security in the form, in the amounts, and within the times specified in the Bidding Documents.
- iv. We agree to abide by this Bid and bid conditions for the Bid Validity Period specified in the document and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- v. Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award/ letter of acceptance, shall constitute a binding Contract between us.
- vi. We understand that you are not bound to accept the lowest or any bid you may receive.
- vii. We certify/confirm that we comply with the eligibility requirements as specified in the bidding documents.

Dated this _____ day of _____ 2026.

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

BANK GUARANTEE TOWARDS EARNEST MONEY DEPOSIT (EMD)

[The Bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated. To be executed on Rs.100/- non-judicial Stamp Paper][Bank's Name, and Address of Issuing Branch or Office]

Bank Guarantee No.

Date

To
The GM(Ops) I/c
Dredging Corporation of India,
Corporate office, HB Colony Main Road,
Seethammadhara,
Visakhapatnam – 530 022.

We have been informed that [name of the Tenderer] (hereinafter called "the Tenderer") has submitted to you its Tender dated (hereinafter called "the Tender") for execution of (name of work).....(hereinafter called "the Tender") in favour of DREDGING CORPORATION OF INDIA LIMITED, Corporate office, H.B.Colony Main Road, Seethammadhara, Visakhapatnam – 530 022 hereinafter called the "CORPORATION/ DCI".

KNOW ALL MEN by these presents that we, (Bankers full address) (Hereinafter called "the Bank") is bound unto the Corporation for the sum of Rs...../- (Rupeesonly) for which payment will and truly to be made to the said Corporation, the Bank binds itself, its successors and assigns by these presents:

THE CONDITIONS of this obligation are:

- a. If a Bidder withdraws his Bid during the "Period of Bid validity" and/or
- b. If a Bidder has indulged in corrupt/ fraudulent /collusive/ coercive practice and/or
- c. If the Bidder modifies Bid during the period of bid validity (after Due Date and Time for Bid Submission) and/or
- d. Violates any other condition, mentioned elsewhere in the Bid Document, which may lead to forfeiture of EMD and/or.
- e. In the case of a successful Bidder, if the Bidder fails:
 - (iii) to acknowledge receipt of the "Work order" or "Letter of Acceptance [LOA]" and/or,
 - (iv) to furnish "**Performance Security**" /execute the Agreement

we undertake to pay to the Corporation up-to the above amount upon receipt of his first written demand, without the Corporation having to substantiate his demand, provided that in his demand the Corporation will note that the amount claimed by him is due to him owing to the occurrence of one or both of the conditions, specifying the occurred condition or conditions.

Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs...../- (Rupeesonly) and will remain in force upto sixty (60) days beyond the validity

of the bid, and any demand in respect thereof must reach the Bank not later than the date of expiry of this guarantee failing which all the rights of the Corporation under the guarantee shall be forfeited and the Bank shall be deemed to be relieved or discharged from all liabilities hereunder.

Dated.....day of2026

For

(Indicate Name of the Bank)

FORM OF CONTRACT AGREEMENT

(To be executed on Rs.100/- non-judicial Stamp Paper)

This agreement made this _____ day of _____ BETWEEN the _____, a body corporate under _____ having its registered office at _____ (Hereinafter called “DCI”, “which expression shall unless excluded by or repugnant to the context, be deemed to include their successors in office) of the One Part AND _____

(name and address of the SUB-CONTRACTOR if any individual and of all partners if a Partnership with all their addresses) (Hereinafter called the “SUB-CONTRACTOR” which expression shall unless excluded by or repugnant to the context, be deemed to include his/their heirs, executors, administrators, representatives and assigns or successors in office) of the Other Part.

WHEREAS the “DCI” is desirous of _____

_____ and the Sub-contractor has offered to

AND WHEREAS the SUB-CONTRACTOR has deposited a sum of Rs. _____ as Performance Security in the form of _____ for the due fulfillment of all the Conditions of the Contract:

NOW THIS AGREEMENT WITNESSETH as follows:

1. That in this agreement words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract (Tender ref No. DCI/HO/OPS/IDCO-Dredging & Reclamation, PDP/2026, dtd 01-04-2026) hereinafter referred to.

2. That the following documents shall be deemed to form and be read and construed as part of this agreement viz:

- The Contract Agreement
- The Letter of Acceptance/Work order
- The Tender submitted by the Sub-contractor
- Instructions to Tenderer
- General Conditions of Contract
- Technical Specification for the Works
- Special conditions of contract
- Drawings /charts
- List of Documents
- Price Bid
- Integrity Pact

- pre-bid queries and replies
- Correspondence exchanged before the issue of letter of acceptance by which the Conditions of Contract are amended, varied or modified in any way by mutual consent (to be enumerated).

3. That the Sub-contractor hereby covenants with DCI to complete the Contract in conformity, with the provisions of the Contract in all respects.

4. That DCI hereby covenants to pay the Sub-contractor in consideration of such completion of the Contract, the AN “Contract Price” of Rs. _____ (Rupees _____) at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereunto have set their hands and seals the day and year first above written.

Signed and sealed by:
SUB-CONTRACTOR

| | | |
|-------------|---|--------------|
| Signature | : | Signature: |
| Name | : | Name : |
| Designation | : | Designation: |
| Seal | : | Seal : |

In the presence of

Witness

| | |
|-----------------|-----------------|
| Signature | Signature |
| Name & Address: | Name & Address: |

FORM OF BANK GUARANTEE
(in lieu of Performance Security)

[The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instructions indicated]

Bank Guarantee No.

Date

To
GM(Ops) I/c
Dredging Corporation of India Limited
.....
.....

In consideration of Dredging Corporation of India Limited, a Company incorporated under the Companies Act, 1956 and having its Corporate office, H.B. Colony Main road, Seethammadhara, Visakhapatnam – 530 022 India (herein after called the “DCI”) having agreed to exempt M/s having its Registered Office at(herein after called the said “Sub-contractor”) from the demand under the terms and conditions of an Agreement / Contract / Work Order datedmade between DCI and Sub-contractor for(herein after called the said “Agreement”), of Performance Security for the due fulfillment by the said Sub-contractor of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs/-(Rupeesonly), we(indicate the name of the Bank).(Hereinafter referred to as “the Bank”)at the request of M/s..... (Sub-contractor) do hereby undertake to pay to DCI an amount not exceeding Rs...../- against any loss or damage caused to or suffered or would be caused to or suffered by DCI by reason of any breach by the said Sub-contractor of any of the terms and conditions contained in the said Agreement.

2. We,
(Indicate the name of Bank)

do hereby undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from DCI without reference to the Sub-contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(say)only).

3. We undertake to pay to DCI any money so demanded notwithstanding any dispute or disputes raised by the Sub-contractor in any suit or proceeding pending before any Court or Tribunal relating thereto, our

liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Sub-contractor shall have no claim against us for making such payment.

4. Wefurther
(Indicate name of the Bank)

agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of DCI under or by virtue of the said Agreement have been fully paid by the said Sub-contractor and its claims satisfied or discharged or till DCI certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Sub-contractor and accordingly discharge this guarantee. Unless a demand or claim in writing under this guarantee has been received by us on or before, we shall be discharged from all liability under this guarantee thereafter.

5. We, further agree
(Indicate name of the Bank)

that DCI shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Sub-contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by DCI against the said Sub-contractor and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Sub-contractor or for any forbearance, act or omission on the part of DCI or any indulgence by DCI to the said Sub-contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Sub-contractor.

7. We, lastly undertake not to
(Indicate name of the Bank)

revoke this guarantee during its currency except with the previous consent of DCI in writing.

8. This guarantee will remain in force until All claims under this guarantee must be made in writing and dispatched to us by Registered Post, Hand Delivery or by Courier against acknowledgement or through email. Notwithstanding what is stated above, our liability under this guarantee will be limited to(..... Only).

Dated theday of2026.

PRE- Qualification Requirements

(The information to be filled in by the Bidder in the following pages will be used for purposes of Pre-Qualification as provided for in the Instructions to Tenderers.)

For Individual bidders and JV firms

A) Financial Qualification:

The bidder should furnish

- i) Audited balance sheet for the last three years as required under Clause 3.5 of NIT

B) Technical Qualification:

The documentary evidence of bidder's **technical competence should** include a Certificate from Employers for having successfully completed works of similar nature. The certificate should include the following information:

- i. Brief description of the work completed
- ii. List of equipment deployed
- iii. Contract amount
- iv. Time limit for completion
- v. Whether the work has been completed within the time
- vi. Whether any liquidated damages have been levied.
- vii. Constitution or legal status of Bidder
- viii. Place of registration:
- ix. Principal place of business
- x. (Power of attorney of signatory of Bid (Attach)
- xi. List of key personnel with their details
- xii. Litigation history

Duly authorized to sign this Authorization on behalf of: [insert complete name of Tenderer]

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

Dredger (s) proposed for Deployment

| | | | |
|---|---|---|--|
| 1 | a) Name of the TSHD/ CSD b) Production per hour c) RPM of vessel d) Cutter power e) Pipelines (s)/ Boosters / power packs etc | : | |
| | | | |
| 2 | Name of the Owner | : | |
| | | | |
| 3 | Builder's name and Address | : | |
| | | | |
| 4 | Year of built | : | |
| | | | |
| 5 | Main dimensions | | |
| 6 | Particulars of registry and year of registry. | : | |
| | | | |
| 7 | Place where the craft is presently available | : | |
| | | | |
| 8 | Pumping capacity (distance, in kms) | : | |
| 9 | Any other information | | |
| | | | |

NOTE: (1) If the Tenderer is not the Owner, hire agreement/willingness of the Owner of the Dredgers/crafts should be submitted on stamp paper duly notarized along with Tender.

Duly authorized to sign this Authorization on behalf of: [insert complete name ofTenderer]

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

Declaration of Relatives

Date:

To
The GM(Ops) I/c ,
Dredging Corporation of India Limited,
Corporate office, H.B. Colony Main Road,
Seethammadhara, VISAKHAPATNAM– 530022

Sir,

Sub: “Dredging & Reclamation work for development of land for Industrial Activities at Paradip” –reg.

A. With reference to your Tender ref No. DCI/HO/OPS/IDCO-Dredging & Reclamation, PDP/2026, dtd 01-04-2026 and as per Clause No.18.3 of Instructions to Bidders of Contract, we hereby certify that, we are not related to any Officer of Dredging Corporation of India Ltd., or any Officer of the rank of the Asst. Secretary or above in the Ministry of Shipping, Government of India and also certify that we do not have any relatives employed in the Dredging Corporation of India Ltd.

‘or’

B. We hereby certified that my relative(s) working as Officer in Dredging Corporation of India Ltd., or any Officer of the rank of the Asst. Secretary or above in the Ministry of Shipping, Government of India are given below:

- 1.....
- 2.....
- 3.....
- 4.....

Thanking you,

Yours faithfully,

*Strike out ‘A’ or ‘B’, whichever is not applicable.

PROFORMA FOR ILLEGAL GRATIFICATION

Date

To

The GM(Ops) I/c
Dredging Corporation of India Limited,
Corporate office, H.B. Colony Main Road,
Seethammadhara, VISAKHAPATNAM– 530022

Dear Sir,

Sub: Dredging and reclamation work for establishment of an Industrial estate at Paradip, Odisha, India”.–
Reg.

With reference to your Tender ref No. DCI/HO/OPS/IDCO-Dredging & Reclamation, PDP/2026 , dtd. 01-04-2026 and as per Clause No. 18.3, we hereby undertake that, we have not made any payment or illegal gratification to any person/authority connected with the bid process so as to influence the bid process and we have not committed any offence under the Prevention of Corruption Act in connection with the bid.

and,

As per Cl. No. 18.3 of ITB, we hereby certified that we have not made any payments and have nothing to disclose regarding any payments made or proposed to be made to any intermediaries (agents etc.) in connection with the bid.

Thanking you,

Yours faithfully,

Signature of the Tenderer with seal

PROFORMA –Declaration with regard to Litigation

Date:

To
The GM(Ops) I/c,
Dredging Corporation of India Limited,
Corporate office, H.B. Colony Main Road,
Seethammadhara, VISAKHAPATNAM– 530022

Sir,

Sub: “Dredging & Reclamation work for development of land for Industrial Activities at Paradip” –reg.

A. With reference to your Tender ref No. DCI/HO/OPS/IDCO-Dredging & Reclamation, PDP/2026, dtd. 01-04-2026 and as per Cl. No. 18.3 of ITB of Contract, we hereby certify that, we do not have any current litigation with any party/firms.

‘or’

B. We hereby certified that presently we are having litigation with the following party/firms:

- 1.....
- 2.....
- 3.....
- 4.....

Thanking you,
Yours faithfully,

Note - *Strike out ‘A’ or ‘B’ , whichever is not applicable.

VENDOR CODE CREATION FORM

| | | | |
|----|--|---|---|
| 1. | Vender Details | | |
| a) | Name of the Vendor | : | |
| b) | Address | : | |
| c) | Place of Registration | : | |
| d) | Principal place of business | : | |
| e) | Email ID | : | |
| f) | Contact No. | : | |
| 2. | <u>Taxation and Other Registration Details (Supporting copies need to be attached)</u> | | |
| a) | PAN No. | : | |
| b) | GSTIN | : | |
| c) | Type of Vendor | : | Registered / Unregistered / Composite Dealer (Tick whichever is applicable) |
| 3. | <u>Bank Details (Copy of cancelled cheque needs to be attached)</u> | | |
| a) | Bank Name, Branch & City | : | |
| b) | Bank Account Number | : | |
| c) | IFSC | : | |
| | | | |

**INTEGRITY PACT
INSTRUCTIONS FOR EXECUTION OF THIS INTEGRITY PACT**

As per ITB, GCC and SCC Clauses of the Bidding Documents, the accompanying 'Integrity Pact' is to be executed in two (02) originals.

Indian Bidder shall submit the Integrity Pact on a non-judicial stamp paper of Rs. 200/- duly signed by the person(s) signing the bid. Foreign Bidder may submit the Integrity Pact on its company's Letter Head, duly signed by the person(s) signing the bid.

The non-judicial stamp papers are to be purchased on the name of the Bidder or DCI and the date of purchase should not be earlier than six months of date of execution. The same is to be attached with this bound volume mentioning the following on the stamp paper:

"This stamp paper is an integral part of the Integrity Pact executed by us for ____ [Insert the name of the package] Package and Specification Number [Insert Specification Number: package]" [Sample is given overleaf]

In case of a foreign bidder, the Letter Head is to be attached with this bound volume mentioning the following on the Letter Head:

"The Integrity Pact executed by us for [Insert the name of the package] Package and Specification Number [Insert Specification Number of the package] is enclosed herewith" [Sample is given overleaf]

Bidders are required to clearly indicate the name of the package and its specification number on the stamp paper/covering letter and first page of the Integrity Pact.

All the pages of the integrity pact are to be signed by the Bidder. If the Bidder is a partnership or a consortium, the Integrity Pact shall be signed by all the partners or consortium members. Bidders are required to clearly indicate the name and designation of the signatory(ies) as well as the name and address of the witnesses.

The Bidder shall not change the contents of the Integrity Pact.

Bidder may note that Bidder's failure to submit the Integrity Pact duly signed along with the Bid shall lead to outright rejection of the Bid.

Note: The word DCI has been used in place of PIA short name. The same may be changed accordingly.

(These are instructions for execution and does not form part of the Integrity Pact)

(Rs. 200/- Non-judicial Stamp paper)

INTEGRITY PACT

Between

Dredging Corporation of India Limited (DCIL) hereinafter referred to as "The Principal",

And

(_____) hereinafter referred to as "The Bidder/Sub-contractor"

Preamble

The Principal intends to award, under laid-down organizational procedures, contract(s) for the tender No.....The principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relations with its Bidder(s)/Sub-contractor(s).

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

Section I - Commitments of the Principal:

The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

No employee of Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or other benefit which he/she is not legally entitled to.

The Principal will, during the tender process treat all Bidder(s) with equity and fairness. The principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

The Principal will exclude from the process all know prejudiced persons.

If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or it there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s) / Sub-contractor(s)

The Bidder(s)/Sub-contractor(s) 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 contract execution:

The Bidder(s)/Sub-contractor(s) will not, directly or through any other person or firm, offer promise or give to any of the Principal's employee involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage during the execution of the contract.

The Bidder(s)/Sub-contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or actions to restrict competitiveness or to introduce cartelization in the bidding process.

The Bidder(s)/Sub-contractor(s) will not commit any offence under the relevant IPC / PC Act; further the Bidder(s)/Sub-contractor(s) will not use improperly, for purpose of competition or personal gain, or passion 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.

The Bidder(s)/Sub-contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s)/Sub-contractor(s) of Indian Nationality shall furnish the name and address of Foreign Principals, if any. Further details as mentioned in the "Guidelines of Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Sub-contractor(s). Further, as mentioned in the Guidelines all the payments made to the India Agent / representative have to be in Indian Rupees only.

The Bidder(s)/Sub-contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

The Bidder(s)/Sub-contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3: Disqualification from tender process and exclusion from future contracts:

If the Bidder(s)/Sub-contractor(s), before award or during execution has committed a transgression through a violation of Section - 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Sub-contractor(s) from the tender process or take action as per the procedure.

Section 4:- Compensation for Damages.

If the Principal has disqualified the Bidder from the tender process prior to the award according to Section-3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit / Bid security.

If the Principal has terminated the contract according to Section-3, the Principal is entitled to terminate the contract according to Section-3, the Principal shall be entitled to demand and recover from the Sub-contractor Liquidated Damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5: Previous Transgression.

The Bidder shall declares that no previous transgressions occurred in the last three with any other company in any country confirming to the anti-corruption approach or with any Public Sector Undertakings / Enterprises in India that could justify his exclusion from the tender process.

If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process for action can be taken as per the procedure mentioned in “Guidelines on Banning of business dealings”.

Section 6: Equal treatment to all Bidders/ Subcontractors.

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

The Principal will enter into agreements with identical conditions as this one with all Bidders, and subcontractors.

The principal will disqualify from the tender process all bidders who does not sign this Pact or violate its provisions.

Section 7: Criminal charges against violation Bidder(s)/Sub-contractor(s).

If the Principal obtains knowledge of conduct of a Bidder or Subcontractor, or of an employee or a representative or an associate of a Bidder or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer (CVO).

Section 8: Independent External Monitor(s).

The Principal appoints competent and credible Independent External Monitors (IEMs) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Managing Director, DCIL.

The Bidder(s)/Sub-contractor(s) accepts that the Monitor has the right to access without restriction to all the project documents of the principal including that provided by the Sub-contractor. The Sub-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 his Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Subcontractor(s) with confidentiality.

The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and Sub-contractor. The parties Offer to the Monitor the option to parties in such meetings.

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 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.

The Monitor will submit a written report to the Managing Director, DCIL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit Proposals for correcting problematic situations.

The Monitor shall be entitle to compensation on the same terms as being extended to / provided to Independent Directors on DCIL Board.

If the Monitor has reported to the Managing Director, DCIL, a substantiated suspicion of an offence under relevant IPC / PC Act, and the Managing Director, DCIL has not, within the reasonable time taken visible action to proceed against such offence or report it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

The word 'Monitor' would include both singular and plural.

Section 9: Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Sub-contractor 08 Months after the last payment under the contract, and for all other Bidders 08 months after the contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged /determined by the Chairman of DCIL.

Section 10: Other provisions.

This agreement is subject to Indian Law. Place of performance and jurisdiction is Head Office, Visakhapatnam

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

If the Sub-contractor is a partnership firm or a consortium, this agreement must be signed by all partners or consortium members.

Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

Issues like warranty/Guarantee etc. shall be outside the purview of Monitors

In the event of any contradiction between the Integrity Pact and its Annexure, the clause in the Integrity Pact will prevail.

(For & On behalf of Principal)

(Office Seal)

Place: _____

Date: _____

(For & On behalf of Bidder/Sub-contractor)

(Office Seal)

Witness 1 :

(Name & Address)

Witness 2 :

(Name & Address)

DETAILS OF GST

The tendered shall furnish the following details along with a photocopy of the registered GSTIN No. while submitting bid

| Sl. No | GSTIN Details | Data to be filled up |
|---------------|--|---|
| 1. | Name of the Firm | |
| 2. | Type of vendor whether registered under GSTIN or not | Supplier of Goods/ Supplier of service / both (Tick relevant) |
| 3. | Whether registered under | Yes/No |
| 4. | Name & Address as registered in GSTIN | |
| 5. | GSTIN No. [copy should be enclosed] | |
| 6. | State of registration of GSTIN | |
| 7. | Status of GSTIN registered customer Whether SEZ/ EOU/DTA/ Govt/ Local Authority | |
| 8. | PAN No. [copy should enclose] | |
| 9. | Mobile No./Fax No. | |
| 10. | e-mail id | |
| 11. | Contact person | |
| 12. | Contact Landline No | |

Seal and signature of bidder

Place

Date

E-PAYMENTFORM

To
DCI

Sir,

We here by give particulars for payment of the Works bill /Advance etc.

| Sl. No | Particulars | |
|---------------|---|--|
| 1 | Name of the Sub-contractor | |
| 2 | Address of the Sub-contractor | |
| 3 | Name of the for which payment is made | |
| 4 | Agreement dated: Work order No. | |
| 5 | Name of the bank in which Sub-contractor operating account. | |
| 6 | Address of the Bank | |
| 7 | Branch Code No | |
| 8 | Type of Account (Whether SB A/c or Current A/c | |
| 9 | Account No : | |
| 10 | PAN No. | |
| 11 | GST Registration No. | |

Yours Sincerely

Signature of bidder)

EXCEPTIONS AND DEVIATIONS

Bidder may stipulate here exceptions and deviations to the bid conditions, if considered unavoidable.(Please check whether this can be allowed)

| Sr. No | Page No. of Bid Document | Clause No. of Bid Document | Subject Deviation |
|--------|--------------------------|----------------------------|-------------------|
| | | | |

Note : However, the Bidders to note that un acceptable deviations, if any, the bid shall be liable for rejection. Bidder is discouraged to deviate from Bid conditions, specifications, delivery schedules, commercial terms as per the tender document.

Duly authorized to sign this Authorization on behalf of: [insert complete name ofTenderer]

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

FORMAT FOR DECLARATION
(To be executed on bidder's letter head)

To _____
(Project Title)

Ref: _____

The undersigned, having studied the pre-qualification submission for the above mentioned project, hereby states:

- (a) The information furnished in our bid is true and accurate to the best of my knowledge.
- (b) That in case of being pre-qualified, we acknowledge that DCI may invite us to participate in due time for the submission of a tender on the basis of provisions made in the tender documents to follow.
- (c) When the call for tenders is issued, if the legal, technical or financial conditions, or the contractual capacity of the firm or joint venture changes, we commit ourselves to inform you and acknowledge your sole right to review the pre-qualification made.
- (d) We enclose all the required pre-qualification data format and all other documents and supplementary information required for the pre-qualification evaluation.
- (e) We also state that no changes have been made by us in the downloaded tender documents and also understand that in the event of any discrepancies observed, the printed tender document No.____is full and final for all legal/contractual obligations (delete if not required).

Date:

Place:

Name of the Applicant : _____

Represented by (Name & capacity) _____

DETAILS TO BE FURNISHED BY THE FIRMS

FOR THE PURPOSE OF OBTAINING SECURITY CLEARANCE FROM THE MINISTRY

Name of the Project: -----.”

Details of Companies / Bidders / Consortium Partner(s)

- i. Name of the Company / Consortium Members and their address, including Address of Indiansubsiary or branch / liaison office etc.
- ii. List of Promoters / Board of Directors of bidders / Consortium members with particulars like Name,Address – Permanent & Present, Nationality etc.,
- iii. Nature of the company, whether private or state-owned entity.
- iv. Shareholding details with particulars of entities / individuals having more than 5% stake with Ownership details to the last layer indicating the promoting individuals name
- v. Parental organization and sister concerns
- vi. Number of foreign national likely to be required for the execution of the project and their likelylocations / deployment.
- vii. Presence of the investing companies / Bidders / Consortium partners and shareholders in thecountries across the world, including collaborations with other foreign companies.

viii) (i) Proposed – For individuals (Board of Directors)

| S N o | Full names of Board of Directors / News editor | Date of Birth | Parent age | Complete Present & Permanent address | Nation ality | Passpor t Nos and issue date, if any | Contact address & telephone number, if any |
|-------------|--|------------------|---------------|--|-----------------|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

viii) ii) For Companies / firms (sheet 1 of 2).....contd

| Sl. No | Full name of companies and its foreign collaboration if any; including details of Board of Directors as in (i) above | Date of Registration | Present & Permanent address including address of Head office, Regional offices and Registered office | Link with other firm | Activities and other Business owned | Name of CEOs/Partners (with details) |
|----------|--|----------------------|--|----------------------|-------------------------------------|--------------------------------------|
| 1/1 1 | 2/11 | 3/11 | 4/11 | 5/11 | 6/11 | 7/11 |
| | | | | | | |

viii) ii) For Companies / firms (sheet 2 of 2)

| Shareholding pattern for applicant company and investing company | Details of the earlier approvals if any (Ref No.& Date) | Ultimate owner ship of share holding companies and the investing company along with detailed particulars of DCIs | Presence of investing companies and shareholders in countries across the world, including collaborations with other foreign companies |
|--|---|--|---|
| 8/11 | 9/11 | 10/11 | 11/11 |
| | | | |

PROJECT WORK DETAILS

- ix. Nature and Scope of the project work – and works required, project cost etc.
- x. Location and coverage area of the project site with info regarding sensitive / vital / defence installation in the vicinity (5 Kms radius area).
- xi. Model of project allocation – PPP, BOT, BOOT etc.
- xii. Duration of the project – completion, commissioning, lease period
- xiii. Machineries or heavy / sophisticated equipment needed for the project.
- xiv. Total Manpower projection for the execution of the project
- xv. Number of foreigners' likely / necessary to be involved for the project completion
- xvi. Earmarked place for stay of foreigners with details

UNDERTAKING

I am aware of the General Directions and conditions of contract and additional conditions including amendments issued from time to time by DCI. I will abide by them whenever works are entrusted to me and will sign them at the time of agreement without questioning. Also, I will not claim anything extra for the reason that they are not supplied along with tender papers.

WEEKLY PROGRESS REPORTWEEK UNDER REVIEW

FROM _____ TO _____

| | |
|-------|--|
| s1.no | Name of the work: |
| 2 | Work Order No. & Date. |
| 3 | Name of the Sub-contractor(s) |
| 4. | Scheduled period of completion (in weeks) |
| 5 | Number of weeks completed As on date. |
| 6 | Proportionate percentage ofProgress as on date A) Expected. B) Actual: |
| 7 | In case of delay during the Week under review reasons. |
| 8 | Cumulative delay as on date. |
| 9 | Steps taken to expedite. |
| 10 | Activities on Bar Chart affected(enclosed revised bar chart.) |

Encl: 1 Revised Bar Chart.

SIGNATURE

SUB-CONTRACTOR: NAME OF THE SUB-CONTRACTOR (S)(WITH STAMP)

SECTION IX

DRAWINGS

| Sl.no | Description of Drawing | Drawing No | Page No |
|--------------|--|-------------------|----------------|
| 1 | Over All Site Layout | DWG 1 | |
| 2 (i) | Reclamation Area | DWG 2A | |
| 2 (ii) | Reclamation Area showing Pipeline routes | DWG 2B | |
| 3 | Borrow Area(s) | DWG 3 | |
| 4 | Tentative Pipeline Route(s) – Pumping & Return Water | DWG 4 | |
| 5 | CRZ Maps _ Pipelines | DWG 5 | |
| 6 | Cross Sectional Details of Reclamation Peripheral Bund | DWG 6 | |

SECTION - X

LIST OF DOCUMENTS

| Sl.no. | Description | Document No | Page no |
|---------------|---|--------------------|----------------|
| 1 | Final Detailed Project Report (DPR) | DOC - 1 | |
| 2 | Geotechnical Investigation Report of Borrow Area | DOC - 2 | |
| 3 | Geotechnical Investigation Report of Reclamation area | DOC – 2A | |
| 4 | Sub Bottom Profiler Report Pertains to Borrow Area | DOC - 3 | |
| 5 | Marine EIA Report | DOC - 4 | |
| 6 | Topographical Survey Report | DOC - 5 | |