

**Centre for Industrial Consultancy and Sponsored Research (IC & SR)**  
**IIT Madras**  
**INVITATION FOR BID**

For and on behalf of IC & SR, IIT Madras, sealed tenders are invited in Duplicate under Single Part Tender System for the following work being executed by IIT Madras:-

1)	Description:	EIA Study for Provn of Sea / Retailing Cum Security Wall at Eastern Coastal Perimeter at STN Carnicobar. (Detailed scope of work as mentioned under Section-III of this specification).
2)	Specification No.	<b>OE/STN-CARNICOBAR/2017/3</b>
3)	Earnest Money Deposit:	Waived
4)	Last date for Submission of Bid:	<b>16.00 Hrs. IST on 04.12.2017</b>
5)	Date & Place of Opening of Tender (Techno commercial bid):	<b>16.01 Hrs. IST on 04.12.2017</b> <b>Rm.005, Ground Floor, Department of Ocean Engineering, IIT Madras, Chennai 600036</b>  If the due date happens to be a holiday, the tender will be received & opened on the next working day.
6)	Validity of offer:	60 days from the date of opening.
7)	Method of submission of tender:	Single cover system
8)	Number of tender offer copies to be furnished:	In Duplicate.
9)	Clarification to be obtained from:	Prof. K. Murali The Project Coordinator Department of Ocean Engineering IIT Madras, CHENNAI - 600 036 TAMIL NADU Phone no.: 044- 2257 4816



		Email.: murali@iitm.ac.in dr.murali.iitm@gmail.com
10)	Cost of Tender specification	Nil
11)	Tender Inviting Authority:	<b>THE Dean,</b> <b>IC &amp; SR IIT, Madras, Chennai – 600 036</b>  Telephone No: (91) (44) 2257 8061 Fax No: (91) (44) 2257 0545



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**SECTION -I**  
**INSTRUCTION TO BIDDERS**

**1.1 General:**

Separate sealed competitive bid under "Single cover system" is invited in Duplicate for the following works.

**1.2 Scope of work:**

The scope of the study shall include:

➤ Environmental impact assessment (EIA) Study for Provn of Sea / Retailing Cum Security Wall at Eastern Coastal Perimeter at STN Carnicobar.  
(Detailed scope of work as mentioned under Section-III of this specification).

**1.2.1 Specification No:** OE/STN- Carnicobar/2017/3.

**1.2.2 Cost of Tender Specification:** Waived

**1.3 EARNEST MONEY DEPOSIT (EMD):** Waived

**1.4 Schedules for Receipt and Opening of Bid:**

- |    |  |                                |
|----|--|--------------------------------|
| a) | Last date and time for receipt of bids | : 16.00 Hrs. IST on 04.12.2017 |
| b) | Date and time for opening of bids      | : 16.01 Hrs. IST on 04.12.2017 |

**1.5 Submission of Tender:**

Tender should be furnished in sealed cover, super-scribed as "EIA Study for Provn of Sea / Retailing Cum Security Wall at Eastern Coastal Perimeter at STN Carnicobar".

The offer should be addressed to:

Prof. K. Murali  
The Project Coordinator  
Department of Ocean Engineering  
IIT Madras, CHENNAI - 600 036, TAMIL NADU

and if handed over in person, the same shall be handed over to **Rm.005, Department of Ocean Engineering, IIT Madras** on or before the due date and time specified above.

**1.5.1** The Bidders have the option of sending the bid by Registered post, Courier or submitting the bid in person, so as to ensure that the bids are received in the specified



office of the Purchaser, by the date and time indicated in the Sl.No.1.5 above. Bids submitted by Telex/ Fax/ Telegram/e-mail etc. will not be accepted.

#### **1.6 Opening of Tender**

The tenders will be opened at **Rm.005, Ground Floor, Department of Ocean Engineering, IIT Madras** on the due date and time prescribed in the presence of such of those tenderers who may desire to be present. If the due date for tender opening happens to be a holiday, the tenders will be opened on the next working day.

The individuals attending the opening of tenders should be duly authorized by the participating firms in the tender.

If the tenderer has any doubt about the meaning of any portion of this specification, he may address the Tender Inviting authority which should reach at least one week before opening of this tender. Any clarification received after this date will not be entertained.

#### **1.7 Tender Inviting Authority**

THE Dean,  
IC & SR IIT, Madras, Chennai – 600 036  
Telephone No : (91) (44) 2257 8061  
Fax No : (91) (44) 2257 0545



## SECTION – II

### COMMERCIAL AND TECHNICAL CONDITIONS

#### 2.1 GENERAL

The scope of services shall be as detailed in Section - III of this specification.

#### 2.2 LOCATION

The site is located in the Car Nicobar falls in between Little Andaman and Nancowry.



**Location at the IAF water front for Shore Protection work**

#### 2.3 COMPLETENESS OF TENDER

The tender should be complete in all aspects. The tenderer shall furnish all relevant details called for in the specification with supporting documents wherever required for considerations by IC & SR. The tenders not containing the complete details as requested in the specification are liable for rejection.

#### 2.4 PRICES

Tenderers shall quote FIRM Price only. Shall quote price separately for each item in the respective schedule as prescribed in the specification.

  
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## 2.5 VALIDITY OF TENDERS

Tenders should be valid for acceptance for a period of at least **Sixty (60) days** from the date of tender opening. In case any bidder quotes a lower validity period than that called for, his offer shall be liable for rejection. In exceptional circumstances, the purchaser may solicit the bidder's consent to an extension of the period of the validity. The request and response thereto shall be made in writing (including fax or telex).

## 2.6 PAYMENT TERMS:-

The consultant shall be paid lump sum fee / charges for providing the consultancy services as per the schedule below at the specified percentages:

Sl. No.	Description	% Total Consultancy charges
1	a) Advance payment	25%
	b) On submission of Draft report	50%
	c) On submission of Final Reports	25%

**2.6.1** Payment will be made by Cheque / Bank transfer on any one of the commercial banks or their branches in India as may be decided by IC & SR from time to time. If the contractor requests for DD payment, Exchange Commission for issue of bank draft will be to the account of the consultant.

**2.6.2** Offers agreeing to the above terms of payment will be preferred. IC & SR may reject the offers with other terms of payment.

## 2.7 Schedule of Submission of Report:

Submission of Draft report: 1 Month from the date of award of work

Submission of Final Report: After one week from the date of draft report submission.

## 2.8 FORCE MAJEURE

**2.8.1** Neither the Contractor nor the Purchaser shall be considered in default in performance of its obligations hereunder if such performance is prevented or delayed for any causes beyond the reasonable control of the party affected, such as war,



hostilities , revolution, riot, civil commotion, epidemic, major fires, explosions, floods, earthquakes or because of any law, order, proclamatory regulations or ordinance of Government or because of any act of God, provided notice in writing of such cause with necessary evidence that the obligation under the Contract is thereby affected or prevented or delayed, is given within 14 days from the happening of the event and in any case it is not possible to serve the notice within 14 days period, then within the shortest possible period without delay. In case the force majeure conditions prolong beyond a continuous period of 6 months, the Purchaser shall be entitled to decide the further course of action including revisions in the terms of Contract, if any.

**2.8.2** As soon as the cause of Force Majeure has been removed, the party whose ability to perform its obligation has been affected shall notify the other party the actual delay occurred on account of such activities.

**2.8.3** Although the time for completion of work shall be suitably extended (not exceeding the period during which the work was stopped on account of Force Majeure clause), such extension shall not result in any financial claim by the Contractor against the Purchaser or any account of such a delay for any other reason whatsoever.

## **2.9 GST & INCOME TAX**

The price quoted shall be firm and shall be inclusive of all statutory levies and taxes including GST. Necessary income tax will be deducted at source on each bill as per the regulations in force. If the Institution is exempted from payment of income tax, the documentary evidence for the same has to be furnished.

## **2.10 JURISDICTION FOR LEGAL PROCEEDINGS**

No suit or any proceedings in regard to any matter arising in any respect under this contract shall be instituted in a Court Save in the City Civil Court of Chennai or the Courts of Small Causes at Chennai. It is agreed that no other courts shall have jurisdiction to entertain any suit or proceedings even though part of the cause of action might arise within their jurisdiction. In case any part of cause of action arises within the jurisdiction of any of the courts in Tamil Nadu and not in the courts in the Chennai City, it is agreed to between the parties that such suits or proceedings shall be instituted in a court within Tamil Nadu and no other court outside Tamil Nadu shall have jurisdiction, even though any part of the cause of action might arise within the jurisdiction of such courts.



The bidders shall furnish an undertaking in a non-judicial stamp paper of value Rs.80/- agreeing to the above condition as per schedule furnished in Annexure-II.

#### **2.11 ARBITRATION**

Arbitration is not applicable to this contract.

#### **2.12 SPECIAL CONDITIONS**

The tenderers should clearly indicate their acceptance or otherwise to the following terms and conditions.

- Specific acceptance of Board's terms of payment.
- Board's terms of Liquidated damages for delay in completion of work.
- Validity of tender.

If no indication is given by the tenderer in his offer, it is presumed that the tenderer is agreeable to the terms and conditions of IC & SR mentioned in the specification.

All information in the bid shall be in ENGLISH only. All corrections, over typing etc. in the tender should be attested.

Tenderers are advised to post sufficiently early so as to ensure that the tenders reach this office in time. Tenders though posted in time but delayed in transit by post will not be considered, if received after the due date and time.

#### **2.13 DEVIATIONS IN TENDER**

Offers which conform to the specification without any deviation will be preferred. If the tenderer wants to deviate from any of the terms and conditions, the same shall be mentioned clearly.

#### **2.14 IC & SR BOARD RESERVES THE RIGHT**

- Not to accept the lowest or any tender.
- To reject any or all the tenders without assigning any reasons thereof.
- To relax or waive any of the conditions stipulated in the tender specification as deemed necessary in the best interest of the project for good and sufficient reasons.
- To revise the quantum of works/completion period of work of any or all the items covered by this enquiry during the pendency of contract and to terminate the contract in between the agreed stipulated period.



## 2.15 EVALUATION AND COMPARISON OF TENDER OFFERS

- The evaluation of the Tender will be done as per IIT Madras guidelines IC & SR.
- The evaluation shall include contract value of works with applicable sales/service tax, etc.,
- In case of discrepancy between the prices quoted in words and in figures, the lower of the two shall be considered.

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## SECTION – III

### TECHNICAL SPECIFICATION

#### 1. SCOPE OF SERVICE

##### **3.1. SCOPE OF WORK**

The scope of the study shall include "EIA Study for the Provn of Sea / Retailing Cum Security Wall at Eastern Coastal Perimeter at STN Carnicobar".

##### **3.1.1 PROPOSED SCOPE OF WORK FOR EIA STUDY**

The components of the EIA study include:

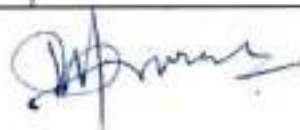
- Determination of baseline data using primary data generation and secondary data available from various government published reports on air, meteorology, water, soil, flora & fauna, socio-economics, infrastructure, sensitive areas (forests, archaeological, historical etc).
- Detailed description of all elements of the project activities during the pre-construction, construction and operational phases. The elements analyzed include the infrastructures of the project including drainage features, roads, waste collection, disposal and management and utility requirements.
- Identification of the sources of pollution and assessing the impacts on the environment due to proposed project if any.
- Preparation of EIA and EMP documents with recommendations on preventive and mitigative measures for limiting the impact on environment to the desired level during various stages of project. Development of a suitable post study-monitoring program to comply with various environmental regulations and
- Risk Assessment (RA) and Disaster Management Plan (DMP) describing the probable risks and preventive & precautionary measures to be followed in the event of emergency situations such as accidents, fire etc.

##### **3.1.2 BASELINE ENVIRONMENTAL DATA GENERATION**

<b>Sl.No</b>	<b>Attributes</b>	<b>Scope of work</b>
1	Ambient Air Quality	<b>3-4 Locations - 2 days/week for 4 weeks in a month for Non-rainy Season as per Revised NAAQ Norms &amp; Parameters.</b> Design of ambient air quality sampling network with regard to topography, population, sensitive



		locations, emission sources, background concentrations and possible impact zones, through application of screening.
2	Meteorological data	Already available
3	Water Quality	<b>5-8 Locations</b> – Once during study period Parameters as per IS-10500, IS:2296 and EPA Act as applicable etc will be carried out for surface water, including Marine Waters, and ground water in the study area.
4	Noise Levels	<b>3-5 Locations once during the study period on hourly basis</b> for 24 hrs in a Season for Leq, Ld and Ln.
5	Land use	Land use as per the district census handbooks as well as with the help of satellite imagery will be presented in 10-km radius study area. <b>Once in the study period.</b>  Areas under various crops, crop nutrient requirements and nutrient status of soils.
6	Geology and Hydro-geological aspects	Already available
7	Socio-Economic and Health aspects	Socio-economic and health aspects will be covered for the Study Area based on the Census documents and NIC database for the past two decades. <b>Once in the study period.</b>
8	Ecological studies (Terrestrial and Aquatic)	Flora and fauna will be studied in 10-km radius study area, <b>once during the study period.</b> These studies will be based on primary as well as secondary sources. The survey also includes assessment of the species diversity, density, abundance etc. in the study area and formulation of ecological indexes, assessment of likely changes on flora and fauna due to the project related activities, suggestions for conservation and protection of flora and fauna in the study area and suggestions for development of new conservation areas locally.



### **3.1.3 Legislation and Regulatory Considerations:**

Government policies, legislation and regulations relevant to the proposal will be identified. Local plans and policies will also be evaluated. Project characteristics will be analyzed to ensure compliance with these policies, legislation and regulations. Appropriate recommendations will be provided to ensure regulatory compliance. The legislation relevant to the project will be summarized and presented in the EIA Report.

### **3.1.4 Environmental Impact Assessment**

The guidelines suggested and international practices prescribed by World Bank and Asian Development Bank will be reviewed to determine the adverse impacts and critical areas. There are various qualitative as well as quantitative methods of conducting EIA studies, each having its own merits and demerits. We intend to use the best logical tool to assess the impact of the project.

A qualitative and quantitative assessment of pollution aspects of proposed project (air and dust, wastewater, noise pollution, wastewater discharges etc.) will also be done to identify the adequacy of the proposed control measures as well as the likely impact on existing critical areas. The short term and long-term impacts, particularly on sensitive targets such as endangered species, plants and historically important monuments, will be identified and mitigation measures to reduce adverse impacts will be suggested.

#### **Air Impacts:**

Emission Inventory will be carried in an area of 10-km around the project site.

- Combined impacts due to the existing and the proposed activities will be estimated.

#### **Water Environment**

- Estimation of water balance for the proposed plant.
- Characterization/collection of data on waste water streams;
- Assessment of the nature of effluents likely to be discharged and its impact;
- Assessment of feasibility of water recycles, and reuse for green belt development and irrigation;
- Recommendations on water conservation measures.



### **Land Environment**

- Collection of data on soil and sediment characteristics and soil types;
- Quantification of solid wastes likely to be generated during operation and suggestions on proper collection, treatment and disposal methods;
- Delineation of environmentally compatible options for value added utilization of solid wastes;
- Strengthening of green belt keeping in view the selected plant species and attenuation factors for noise and air pollutants.

### **Biological Environment**

Collection of the existing and available information on flora and fauna in the study area including rare and endangered species;

- Assessment of the species diversity, density, abundance etc. in the study area;
- Assessment of likely changes on flora and fauna due to the projects and related activities;
- Delineation of conservation measures for the protection of flora and fauna in the study area.

### **Noise Impacts:**

Sources of noise and its impact on the environment would be clearly brought out. The noise level at varying distances for multi-sources will be predicted using suitable model. A comparison of measured noise (Leq) at monitoring locations to that of predicted noise levels (Leq) would be made and mitigatory measures required, if any, will be recommended to conform to regulatory ambient air noise standards.

We propose to estimate increase in noise levels over the baseline conditions in different zones like industrial, residential and sensitive areas like hospitals, wild life habitation etc. The potential noise level exposure will be determined and evaluated for acceptable limits of exposure.

### **Socio-economic and Health Environment**

- Study of parameters to assess/characterize the quality of life in the study area;
- Assessment of changes from the baseline in the socio-economic parameters due to proposed plant operations;



- Assessment of economic benefits to community.

#### Aesthetic/Cultural

- Identification of all historical/archaeological sites/monuments in the study area.

#### Traffic Study

- Field study at important points on the approach roads to assess the existing total daily traffic, peak hour traffic and traffic composition;

Assessment of the change in traffic composition and volumes.

#### **3.1.5 Environment Management Plan**

For each potential negative impact identified, recommendations will be presented for avoidance, minimization or mitigation of impacts along with costs associated with potential mitigation.

An EIA/EMP, based on three months baseline study, will be prepared for the project. The EMP will address the following:

- Identify and summarize all anticipated significant adverse environmental impacts;
- Identify and summarize all mitigation measures, including the type of impact to which it relates and the conditions under which it is required;
- Define a set of policies and objectives for environmental performance and continual enhancement of performance;
- Green belt development plan
- Recommend monitoring and reporting procedures including the parameters to be monitored, methods to be used, sampling locations, frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions
- Recommend capacity development and training requirements for implementation of EMP
- Recommend an organizational structure for effective implementation of the EMP and
- Draw up an implementation and cost schedule for EMP.

An environmental monitoring and management plan will be developed for the





sensitive elements of the environment that may require monitoring during construction and implementation of the proposed project. Recommendations will be made on the institutional arrangements that will be necessary to ensure effective monitoring and management.

A detailed management and monitoring program will be developed to reduce the effects of potential negative environmental impacts.

### **3.1.6 Risk Assessment and Disaster Management Plan**

Preparation of the Risk Assessment Report will be followed by Disaster Management Plan (DMP) and Emergency Preparedness Plan (EPP) based on the quantitative Risk Assessment of the proposed activity and associated infrastructure for the project.

The study includes identification of process hazards, preliminary of hazardous sections of the plant and that of storage with recourse to fire and explosion index for these units, analysis of major inventories in process and storage and identification of major hazardous locations of the plant with recourse to Go I rules, 1989.

### **3.1.7 Occupational Health and Safety**

Review the safety management and occupational health surveillance system in the proposed facility and recommend for further appropriate measures.



**2. SCHEDULE OF FEES - I**

**SPECIFICATION NO. OE/STN-CAR NICOBAR/2017/3**

**Name of the Work:**

"EIA Study for the Provn of Sea / Retailing Cum Security Wall at Eastern Coastal Perimeter at STN Carnicobar".

Sl. No.	Description	% Total Consultancy charges
1	a. Advance payment	25%
	b. On submission of Draft report	50%
	c. On submission of Final Reports	25%

SIGNATURE :  
NAME :  
DESIGNATION :  
DATE :  
PLACE :  
SEAL :



**3. ANNEXURE-I**

**UNDERTAKING TOWARDS JURISDICTION FOR  
LEGAL PROCEEDINGS**

**(NON JUDICIAL STAMP PAPER VALUE NOT LESS THAN RS.80/-)**

This undertaking executed at ..... on this ..... (Date) ..... (Month)  
Two thousand and ..... by M/s ..... Registered under  
Companies Act, 1956 having its registered office at .....  
hereinafter called the contractor (which expression shall where the context so admits  
mean and include its successors in office and assigns).

WHEREAS a contract for the supply of .....has been awarded in favour of  
the contractor under the Purchase order No.....dated.....

AND WHEREAS in accordance with the terms of the above Purchase order, the  
contractor has to furnish un undertaking to the effect that no suit or any proceedings  
in regard to any matter arising in any respect under this contract shall be instituted in  
any matter in any respect under this contract shall be instituted in any court other  
than in the High court, Madras of District court at ..... or Sub-court at  
.....or at the District Munsiff court at ..... as the case may be.

IN CONSIDERATION of the Board having agreed to accept the undertaking the contractor hereby undertakes that no suit or any proceedings in regard to any matter arising in respect of this contract shall be instituted in any court, save in the High court, Madras or District court at.....or sub court at ..... or at the District Munsiff court at .....as the case may be it is agreed that no other court shall have jurisdiction to entertain any suit or proceedings, even though, part of the cause of action might arise within their jurisdiction. In case any part of the cause of action might arise within the jurisdiction of any other Courts in Tamil Nadu and rest within the jurisdiction of Courts outside the State of Tamil Nadu, then it is agreed to between the parties that such suits on proceedings shall be instituted in a court within the State of Tamil Nadu and no other Court outside the State of Tamil Nadu shall have jurisdiction.

IN WITNESS WHEREOF Thiru.....of M/s ..... hereby put his hand and seal for due observance of the undertaking in the presence of the following witnesses.

COMPANY SEAL		SIGNATURE	:
DESIGNATION	:		
COMPANY	:		
DATE	:		

WITNESSES:

- 1)
- 2)

