

Center for Industrial Consultancy and sponsored Research(IC&SR)
IIT MADRAS
INVITATION FOR BID

For and on behalf of IC&SR,IIT Madras, Sealed tender are invited under for the following work being executed by IIT Madras:-

1	Description	Conducting soil investigation for the Development /Upgradation of Fish Landing Centers in the State of Odisha
2	Tender Reference No	OE/2020/RSUN/SOILINVESTIGATION
3	Earnest money Deposit	75000/-
4	Last date for submission of Bid:	01.12.2020 at 3 PM.
5	Date & place of openings of tender	01/12/2020 @ 4 PM Rm.306,Third floor, Department of Ocean Engineering, IIT Madras,Chennai-600036,Tamilnadu 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	One cover system (Technical-cum-Financial bid)
8	Clarification to be obtained from:	Prof. R. Sundaravadivelu Project Coordinator Department of Ocean Engineering IIT Madras,Chennai-600036 Tamilnadu Phone no:044-2257 5618/5819/4810 Email: rsun@smail.iitm.ac.in
9	Cost for Tender Specification	Nil
10	Tender Authority Inviting	Prof. R. Sundaravadivelu Project Coordinator Department of Ocean Engineering IIT Madras,Chennai-600036 Tamilnadu

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SECTION-I
INSTRUCTION TO BIDDERS

1.1 General:

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

“Conducting soil investigation for the Development /Upgradation of Fish Landing Centers in the State of Odisha”

1.2 Scope of work:

The scope of the study shall include:

(Detailed scope of work as mentioned under Section-III)

1.2.1 **Tender reference No** : OE/2020/RSUN/SOILINVESTIGATION

1.2.2 **Cost of Tender Specification** : Waived

1.3 EARNEST MONEY DEPOSIT(EMD) :

The EMD in the form of account payee DD for 75,000/- in favor of The Registrar – IIT Madras, payable at Chennai should be enclosed in the Technical-cum-Financial bid cover. Any offer not accompanied with the EMD shall be rejected summarily as non-responsive.

The EMD of the unsuccessful bidders shall be returned within 30 days of the end of the bid validity period. The same shall be forfeited, if the tenderers withdraw their offer after the opening during the bid validity period. The Institute shall not be liable for payment of any interest on EMD. EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) and Startups as recognised by Department of Industrial Policy & Promotion (DIPP)

1.4 Schedules for Receipt and Opening of Bid:

- a. Last date and time for receipt of bids : 01.12.2020 @ 3 PM
- b. Date and time for opening of bids : 01.12.2020 @ 4 PM

1.5 Submission of Tender:

Tender should be furnished in sealed cover, super-scribed as

“Conducting soil investigation for the Development /Upgradation of Fish Landing Centers in the State of Odisha”.

The offer should be addressed to:

Prof. R. Sundaravadivelu
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 **Room. no 306, 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 **Room.306, Third 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

Prof.R.Sundaravadivelu

Project Coordinator

Department of Ocean Engineering

IIT Madras, Chennai - 600 036, Tamil Nadu

1.8 Unsolicited offers: “This notice is being published for information only and is not an open invitation to quote in this limited tender. Participation in this tender is by invitation only and is limited to the selected registered suppliers. Unsolicited offers are liable to be ignored. However, suppliers who desire to participate in such tenders in future may apply for registration as per procedure.” The Website for Registration of vendors is <http://web.iitm.ac.in/supplier/> and the mail address for queries is “workflow@rt.iitm.ac.in”.

SECTION – II
COMMERCIAL TERMS AND TECHNICAL CONDITIONS

2.1 GENERAL

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

2.2 LOCATION

The project site is Balasore, Bhadrak, Kendrapara, Jagatsinghpur & Ganjam.

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 PRICE

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

2.5 VALIDITY OF TENDER

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:-

Payment will be made as per the following methods

Sl.No	Description	% Total Consultancy charges
1	Submission of mobilization Report with photographs	20%
2	Submission of Draft Report on completion of soil investigation	40%
3	Submission of Final Report including test results	40%

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: 7 weeks from the date of award of work. Submission of Final Report: After Two (2) Weeks from the date of draft report submission.

2.8 Qualifying Criteria:

One similar nature of work executed in the last financial year at least to the value of Rs. 6.00 Lakhs.

Or

Two similar nature of work executed in the last financial year at least to the value of Rs. 4.00 Lakhs.

Or

Three similar nature of work executed in the last financial year at least to the value of Rs. 3.00 Lakhs

2.9 FORCEMAJEURE

2.9.1 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.

2.9.2 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.

2.9.3 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.

2.10 TAXES

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.

2.11 JURISDICTION FOR LEGALPROCEEDINGS

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 valueRs.100/- agreeing to the above condition as per schedule furnished in Annexure-II.

2.12 ARBITRATION

Arbitration is not applicable to this contract.

2.13 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.

2.14 DEVIATIONS INTENDER

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.

2.15 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 there of.
- 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.

2.16 EVALUATION AND COMPARISON OF TENDEROFFERS

- 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 tax, etc.,

- In case of discrepancy between the prices quoted in words and in figures, the lower of the two shall be considered.

Acknowledgement: - It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

SIGNATURE OF TENDERER
ALONG WITH SEAL OF THE
COMPANY WITH DATE

SECTION – III

TECHNICAL SPECIFICATION.

3.1 SCOPE OF SERVICE

The following Investigation will be carried out along the coastal districts of Balasore, Bhadrak, Kendrapara, Jagatsinghpur & Ganjam.

1. Detailed Soil Investigation.

Detailed soil investigation Specification

- i) Soil investigation for 8 number of bore holes shall be carried out for a depth of (-) 20 M @ 1.0 M interval of SPT Value and also including jungle clearance at suitable location.
- ii) Conducting field tests and collecting disturbed and undisturbed soil samples and rocks core samples from the exploratory boreholes
- iii) Conducting laboratory test on soil samples to enable classification of soil for obtaining engineering properties of soils and rock samples to assess the compressive strength of rocks.

Boring and In Situ Sampling

Boring minimum of 150mm nominal diameter boreholes through all types of soil including rock using shell and auger or other approved equipment below the existing ground level up to (-) 20.00m (8 Nos.). The boring shall include conducting standard penetration test (SPT) at a regular depth interval of 1m, collection of split spoon samples or disturbed soil samples.

Laboratory Test for proposed and fill up soil (As per IS code)

- a) To carry out test for Waterberg limits – Liquid limit & Plastic Limit.
- b) To carry out test for Natural moisture content in the Laboratory.
- c) wet and dry density at the laboratory.
- d) To carry out test specific gravity, void ratio.
- e) To carry out sieve analysis (grain size distribution (wet sieve analysis)).
- f) Hydrometer Analysis
- g) Test on rock samples for density, porosity, water absorption and specific gravity.
- h) Point load test on rock sample
- i) Crushing strength on rock sample

- j) Unconfined compression test on selected undisturbed samples in the laboratory.
- k) Free Swell index.
- l) Height of Water Table.
- m) Soil (Sulphate, Chlorides, PH, Carbonate and Organic matter content).
- n) Water (Sulphate, Chlorides, PH, Carbonate and Organic matter content).
- o) Dynamic cone penetration

Note:

Tender inviting authority has the right to change and cancel the location, prior to mobilization.

3.2 SCHEDULE OF FEES -I

3.2.1 SPECIFICATIONNO:

Name of the Work: **“Conducting soil investigation for the Development / Upgradation of Fish Landing Centers in the State of Odisha”.**

Sl. No	Description	% Total Consultancy charges
1	Submission of mobilization Report with photographs	20%
2	Submission of Draft Report on completion of soil investigation	40%
3	Submission of Final Report including test results	40%

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

Conducting soil investigation for the Development /Upgradation of Fish Landing Centers in the State of Odisha

Specification & Scope of Work

- i) Mobilization& Demobilization all necessary equipment and personnel at site and including removing and taking away the equipment and clearing the site including all materials, labor, tools, fuel, etc., complete.
- ii) Setting out Boring Equipment's and Drilling for the below mentioned
 - a) 8 Nos, of deep bore hole up to (-) 20.00m.**
Including shifting of plants from one points to another.
- iii) Conducting field tests and collecting disturbed and undisturbed soil samples and rocks core samples from the exploratory boreholes
- iv) Conducting laboratory test on soil samples to enable classification of soil for obtaining engineering properties of soils and rock samples to assess the compressive strength of rocks.

Detailed soil investigation Specification

- i) Soil investigation for 8 number of bore holes shall be carried out for a depth up to (-) 20 m.
- ii) Conducting field tests and collecting disturbed and undisturbed soil samples and rocks core samples from the exploratory boreholes
- iii) Conducting laboratory test on soil samples to enable classification of soil for obtaining engineering properties of soils and rock samples to assess the compressive strength of rocks.

Boring and In Situ Sampling

Boring minimum of 150mm nominal diameter boreholes through all types of soil including rock using shell and auger or other approved equipment below the existing ground level up to (-) 20.00m (8 Nos.). The boring shall including conducting standard penetration test (SPT) at a regular depth interval of 1m, collection of split spoon samples or disturbed soil samples.

Laboratory Test for proposed and fill up soil (As per IS code)

- a) To carry out test for Waterberg limits – Liquid limit & Plastic Limit.
- b) To carry out test for Natural moisture content in the Laboratory.
- c) Wet and dry density at the laboratory.
- d) To carry out test specific gravity, void ratio.
- e) To carry out sieve analysis (grain size distribution (wet sieve analysis)).
- f) Hydrometer Analysis
- g) Test on rock samples for density, porosity, water absorption and specific gravity.
- h) Point load test on rock sample
- i) Crushing strength on rock sample
- j) Free Swell index.
- k) Height of Water Table.
- l) Soil (Sulphate, Chlorides, PH, Carbonate and Organic matter content).
- m) Water (Sulphate, Chlorides, PH, Carbonate and Organic matter content).
- n) Dynamic cone penetration

Conducting relevant laboratory test results and submitting detailed report containing the field and laboratory test results all as per relevant specifications and as directed.

S.No	Description	Qty	Unit	Rate	Amount
1	Mobilization & Demobilization all necessary equipment and personnel at site and including removing and taking away the equipment and clearing the site including all materials, labor, tools, fuel, etc., complete.	1			
2	Boring minimum of 150mm nominal diameter boreholes through all types of soil including rock using shell and auger or other approved equipment.				
a	Deep Bore Hole – 8 Nos.				
i	0m to 10m	80	Mtr		
ii	10m to 20m	80	Mtr		
3.	Carry out the standard penetration test as per 2131 (latest revision) in boreholes as specified including supply of all tools, plant labor.	160	Nos		

4.	Collect water samples from bore holes as per specification transport the same laboratory.	8	Nos		
5.	Core drilling and collection of rock core samples from different depth and determination of CR Rod and rock classification with NX 110 at any depth (as per actual) for 1m length.	8	Nos		
6.	Laboratory Test (As per latest IS Code)				
a	Atterberg Limit – Liquid Limit & Plastic Limit	160	Nos		
b	Natural Moisture content	160	Nos		
c	Wet and dry density	160	Nos		
d	Specific gravity, void ratio	160	Nos		
e	Proctor density and modified proctor density	160	Nos		
f	CBR (residual index), SPT/CPT, etc.	160	Nos		
7	Particle size	160			
a	Sieve analysis	160	Nos		
b	Hydrometer analysis	24	Nos		
c	Free swell index	24	Nos		
8	Triaxial shear test				
a	Unconsolidated undrained on undisturbed samples	160	Nos		
b	Consolidated drained on sandy samples	160	Nos		
9	Consolidated undrained with pore pressure measurements	160	Nos		
10	Consolidation tests on undisturbed samples	160	Nos		
11	Unconfined compression test on selected undisturbed samples in the Laboratory	160	Nos		
12	Direct Shear Test	160	Nos		
13	Test on rock samples for density, porosity, Waterabsorption, specific gravity(As per Actual)	160			
14	Point load test on rock sample (As per actual)	160	Nos		
15	Crushing strength on rock sample(As per actual)	160	Nos		
16	Uniaxial compressive strength	160	Nos		
17	Chemical analysis	160	Nos		
18	Soil (Sulphates, Chlordies, PH, Carbonate and organic matter content)	8	Nos		
19	Water(Sulphates,Chlordies,PH,Carbonate and organic matter content)	8	Nos		
20	Submit Investigation Report, Field logs and recommendation of a qualified foundation expert in 2(two) copies.				
	Grant Total				

SCHEDULE OF TENDER

(A) Tender for the work:

CONDUCTION SOIL INVESTIGATION FOR THE DEVELOPMENT/UPGRATION FISH LANDING CENTES IN THE STATE OF ODISHA

Notice Inviting Tender will be available for download through online from 16.00 hrs on 16.11.2020 through web site of IIT Madras / IC&SR & CPP Portal (E-publishing).

<i>Time schedule for floating the tender document for Soil investigation at at Development/Upgration of 20 nos FLC in the state of odisha</i>		
(i)	Floating of tender.	16.11.2020
(ii)	Closing time for submission of bid.	01.12.2020 at 3 PM.
(iii)	Opening of Bid.	01.12.2020 at 4 PM.
(iv)	Bid Evaluation and submission of comments based on submitted bids.	03.12.2020
(v)	Technical and financial Qualification of Bidders.	05.12.2020
(vi)	Award of work.	09.12.2020.

Contractor's Mile stone for Soil investigation

Contractor's Mile Stone for Soil Investigation		
i)	Mobilization of all equipment's by contractor shall be completed by	0-15 Days
ii)	Soil investigation shall be concluded on or before	16-45 Days
iii)	Draft Report Shall be Submitted on or before	45-55 Days
iv)	Final soil investigation shall be submitted on or before	55-60 Days