



Work Order no: 05 of EE(P&D) of 2025-26

No: IENG/EE(P&D)/WQ4&5/Pt-I/758
Dt: 16-09-2025

To
Prof. S. Nallayarasu,
Department of Ocean Engineering,
Indian Institute of Technology Madras,
Chennai - 600 036.

Sir,

Sub: Consultancy Services for preparation of Detailed Feasibility, DPR and Detailed Design for Strengthening of existing WQ-4 & WQ-5 berths in the Northern Arm of Inner Harbour to cater to 14.00 m draft vessels for a dredge depth (-) 16.00 m - Reg.

Ref: 1) VPA Lr.no: IENG/EE(P&D)/WQ4&5/Pt.I/622, Dt: 30-07-2025.
2) IIT Letter dated 01-08-2025.
3) VPA Lr.no: IENG/EE(P&D)/WQ4&5/Pt.I/664, Dt: 07-08-2025.
4) IIT Letter dated 08-08-2025.

With reference to the correspondence cited, your offer for an amount of Rs.90,00,000/- (Rupees Ninety lakhs only) plus applicable GST for availing consultancy services of IIT Madras for the subject work is accepted subject to the following terms & conditions:

1.0 Scope of Work for Consultancy:

Part A: Preparation of Detailed Feasibility Study Report.

- Visit site for the reconnaissance survey.
- Study the existing structures Berth structural arrangement and prepare feasibility considering available channel width and backup area.
- Preliminary design for dredging the Berth pocket to (-)16m with various alternative schemes including relieving platform, back anchorage, platform construction on existing caissons etc.
- Carry out mooring analysis for 14m vessels to derive bollard requirements in prevailing wind conditions and wave/current at the harbour.
- Preliminary design of proposed arrangements and ranking based on constraints such as channel width, backup area etc.
- Block Cost estimate for project cost with breakup of each component.

Part B: Preparation of Detailed Project Report (DPR).

- Bathymetry survey of the area including topographic survey of the backup area
- Geotechnical Borehole investigations as required.
- Berthing and mooring analysis include design including design of fender system and selection mooring hooks.
- Detailed design of proposed wharf structure strengthening, relieving platform or other selected option for berthing 14m draft vessels and (-)16m dredge depth.

- e) Detailed estimate of bill of quantities and estimation of project cost with breakup of each component.
- f) Prepare Detailed Project Report including financial analysis and IRR calculations.
- g) Assisting the Authority in obtaining statutory clearance as required.

2.0 Consultancy Fee:

The total consultancy fee for the various scopes of work as defined in section 1 is summarized in Table 1 below.

Table 1 Schedule of fee for engineering

No	Description	Fee (Rs Lakhs)	Schedule
Part A	Feasibility Report	36.0	4 weeks
Part B	Detailed Project Report	54.0	16 weeks
	Total excluding GST	90.0	
	Total including GST	106.2	

3.0 Payment Terms:

The following payment schedule is proposed and summarised in Table 2.

Table 2 Payment schedule

No	Description	Advance	Milestone
Part A	Feasibility Report	50%	Upon submission of report - 40%
Part B	Detailed Project Report	50%	Upon submission of report - 40%

Note: A final 10% shall be paid upon approval of the report.
 Payment shall be made to "The Registrar, IIT Madras".
 Income Tax shall not be deducted as IIT Madras is exempt from income tax.
 Payment shall be made within 30 days of issuance of invoice.

4.0 Travel

The travel required for the project duration is included in the lump sum fee including local accommodation.

5.0 Schedule

The schedule for the feasibility report and detailed project report is 16 weeks.

It is requested to contact the Chief Engineer, VPA for further particulars and start the work. The letters under reference and this work order shall form part of the contract entered by you with the Port Authority. You have to enter into an agreement on non-judicial stamp paper worth of Rs100/- (Rupees one Hundred only) immediately.

Thanking you Sir,

Yours faithfully,


CHIEF ENGINEER

Copy to: FA&CAO for information please.



Work Order no: 06 of EE(P&D) of 2025-26

No: IENG/EE(P&D)/OSTT/Pt-I/ 159
Dt: 10-09-2025

To

Prof. S. Nallayarasu,
Department of Ocean Engineering,
Indian Institute of Technology Madras,
Chennai - 600 036.

Sir,

Sub: Consultancy services for Feasibility Study for Expansion & Extension of OSTT Jetty for handling higher draft vessels more than 18m including simulation studies - Reg.

Ref: 1) VPA Lr.no: IENG/EE(P&D)/OSTT/Pt.I/609, Dt: 28-07-2025.
2) IIT Letter dated 30-07-2025.
3) VPA Lr.no: IENG/EE(P&D)/SL Canal/Pt.I/647, Dt: 06-08-2025.
4) IIT Letter dated 07-08-2025.

With reference to the correspondence cited, your offer for an amount of Rs.45,00,000/- (Rupees Forty Five lakhs only) plus applicable GST for availing consultancy services of IIT Madras for the subject work is accepted subject to the following terms & conditions:

1.0 Scope of Work for Consultancy:

- Collection of data from VPA for vessel sizes and the details of existing jetty structure details.
- Prepare layout showing augmentation of jetty arrangement for berthing VLCC and VLGC vessels including Turning Circle.
- Carry out Mathematical Simulation for determining wave tranquility at the berth based on prevailing wave conditions at the entrance during monsoon and non-monsoon periods.
- Carry out hydrodynamic flow simulation to determine the current at the Entrance to the jetty and its direction affecting the maneuvering of VLCC.
- Carry out mooring analysis for VLCC and VLGC to derive mooring hook requirements in prevailing wind conditions and wave/current at the Harbour.
- Check the stability of existing gravity structures if the berth pocket is dredged to more than 18m to cater for larger draft vessels (more than 18m) and mitigate the situation by shifting the berthing line forward.

- g) Verify the stability of South and East Breakwater at the mouth due to dredging of the channel and turning circle for VLCC and VLGC.
- h) Verify the effect on Outer Harbour Turning Circle and nearby structures if any.
- i) Preliminary design of additional berthing and mooring structures including addition of front platform in front of unloading platforms.
- j) Prepare feasibility report including Block Cost Estimate.

2.0 Consultancy Fee:

The total consultancy fee for the various scopes of work as defined in section 1 is Summarized Rs 45 Lakhs + GST.

- 50% advance payment upon issue of work order.
- 50% balance to be paid upon submission of report.
- Payment shall be made to "The Registrar, IIT Madras"
- Income Tax shall not be deducted as IIT Madras is exempt from income tax.
- Payment shall be made within 30 days of issuance of invoice.

3.0 Travel

The travel required for the project duration is included in the lump sum fee including local accommodation.

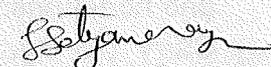
4.0 Schedule

The schedule for the feasibility report and detailed project report is 12 weeks.

It is requested to contact the Chief Engineer, VPA for further particulars and start the work. The letters under reference and this work order shall form part of the contract entered by you with the Port Authority. You have to enter into an agreement on non-judicial stamp paper worth of Rs100/-(Rupees one Hundred only) immediately.

Thanking you Sir,

Yours faithfully,


Y **CHIEF ENGINEER**

Copy to: FA&CAO for information please



Work Order no:07 of EE(P&D) of 2025-26

No: IENG/EE(P&D)/SL Canal/Pt-I/ 760
Dt: 10-09-2025

To
Prof. S. Nallayarasu,
Department of Ocean Engineering,
Indian Institute of Technology Madras,
Chennai - 600 036.

Sir,

Sub: Consultancy Services for De-siltation and Strengthening Banks on opposite side of SL Canal Jetty - Reg.

Ref: 1) VPA Lr.no: IENG/EE(P&D)/SL Canal/Pt.I/602, Dt: 25-07-2025.
2) IIT Letter dated 01-08-2025.
3) VPA Lr.no: IENG/EE(P&D)/SL Canal/Pt.I/663, Dt: 07-08-2025.
4) IIT Letter dated 08-08-2025.

With reference to the correspondence cited, your offer for an amount of Rs.63,00,000/- (Rupees Sixty Three lakhs only) plus applicable GST for availing consultancy services of IIT Madras for the subject work is accepted subject to the following terms & conditions:

1.0 Scope of Work for Consultancy:

Part A: Preparation of Detailed Feasibility Study Report.

- Visit site for the reconnaissance survey for feasibility of creating a silt trap and strengthening of canal bank.
- Study the existing structures and canal discharge for locating the silt trap including the proposed 5MLD sewage treatment plant in the port area.
- Study the siltation pattern and determine the best possible silt trap or silt diversion scheme
- Estimate the silt trap size
- Preliminary design for construction and silt removal procedure.
- Assessment of the south canal opposite bank strengthening requirement.
- Preliminary design of proposed canal bank strengthening.
- Block Cost estimate for project cost with breakup of each component.

Part B: Preparation of Detailed Project Report (DPR).

- Bathymetry survey of the area including topographic survey.
- Geotechnical Borehole investigations as required.
- The condition assessment of existing canal bank structures and study the requirement of strengthening.
- Detailed design of canal bank strengthening structures including any new /modification of existing structures for proper retaining of the earth.
- Detailed analysis to determine the silt trap including measures to avoid siltation in berth EQ-1A berth.

- f) Detailed design of canal bank strengthening including any new structures required to retain the earth.
- g) Detailed estimate of bill of quantities and estimation of project cost with breakup of each component.
- h) Assisting the Authority in obtaining statutory clearance as required.

2.0 Consultancy Fee:

The total consultancy fee for the various scopes of work as defined in section 1 is summarized in Table 1 below.

Table 1 Schedule of fee for engineering

No	Description	Fee (Rs Lakhs)	Schedule
Part A	Feasibility Report	27.00	4 weeks
Part B	Detailed Project Report	36.00	12 weeks
	Total excluding GST	63.00	
	Total including GST	74.34	

3.0 Payment Terms:

The following payment schedule is proposed and summarised in Table 2.

Table 2 Payment schedule

No	Description	Advance	Milestone
Part A	Feasibility Report	50%	Upon submission of report - 40%
Part B	Detailed Project Report	50%	Upon submission of report - 40%

Note: A final 10% shall be paid upon approval of the report.
 Payment shall be made to "The Registrar, IIT Madras".
 Income Tax shall not be deducted as IIT Madras is exempt from income tax.
 Payment shall be made within 30 days of issuance of invoice.

4.0 Travel

The travel required for the project duration is included in the lump sum fee including local accommodation.

5.0 Schedule

The schedule for the feasibility report and detailed project report is 16 weeks.

It is requested to contact the Chief Engineer, VPA for further particulars and start the work. The letters under reference and this work order shall form part of the contract entered by you with the Port Authority. You have to enter into an agreement on non-judicial stamp paper worth of Rs100/- (Rupees one Hundred only) immediately.

Thanking you Sir,

Yours faithfully,


CHIEF ENGINEER

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