CEYLON PETROLEUM STORAGE TERMINALS LIMITED

BIDDING DOCUMENT

FOR

RELOCATION OF TANK NO. 51 AND EXTENSION OF EXISTING CARGO PIPELINES OF FUEL OIL AT KOLONNAWA INSTALLATION

KPR /63A /2023

Employer:

Chairman,
Ceylon Petroleum Storage Terminals Limited,
Oil Installation, Kolonnawa.

Engineer:

Engineering Manager,
Engineering Function,
Ceylon Petroleum Storage Terminals Limited,
Oil Installation, Kolonnawa.

Issued to :……..

Issued by :…….

Date :…….

November - 2023

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Volume 2

VOLUME - 01

SECTION - 1

INSTRUCTIONS TO BIDDERS

Instructions to Bidders applicable to this contract are that given in Section-I of the Standard Bidding Document for Procurement of Works. ICTAD Publication No.ICTAD/SBD/01, Second Edition ,January 2007, published by Construction Industry Development Authority (CIDA), "Savsiripaya", 123, Wijerama Mawatha, Colombo 07.

This publication will not be issued with the Bidding Document and the Bidder is advised to purchase it from CIDA.

Instructions to Bidders shall be read in conjunction with the Bidding Data provided under section-5 of the Bidding Document (Volume 2)

Instructions to Bidders will not be a part of the contract and will case to have effect once the Contract is signed.

SECTION – 2

STANDARD FORMS (CONTRACT)

- ***Form of letter of acceptance***
- ***Form of agreement***
- ***Form of performance security***
- ***Form of advance payment security***
- ***Form of retention money guarantee***

FORM OF LETTER OF ACCEPTANCE

[LETTER HEADING PAPER OF THE PROCURING ENTITY]

---------- *[date]*

To: ----------
[name and address of the Contractor]

This is to notify you that your bid dated ---------- *[insert date]* for the construction and remedying defects of the ---------- *[name of the Contract and identification number]* for the Contract price of ----------[*name of currency]* ----------[*amount in figures and words]* as corrected in accordance with Instructions to Bidders and / or modified by a Memorandum of Understanding, is hereby accepted.

The adjudicator shall be ---------- ----------
---------- *[name and address of the Adjudicator, if agreed]* / shall be appointed by the Construction Industry Development Authority (CIDA).

You are hereby instructed to proceed with the execution of the said Works in accordance with the Contract documents.

The Start Date shall be: ---------- *(fill the date as per Conditions of Contract).*

The amount of Performance Security is *:* ---------- *(fill the date as per Conditions of Contract).*

The Performance Security shall be submitted on or before ---------- *(fill the date as per Conditions of Contract).*

Authorized Signature : ----------

Name and title of Signatory : ----------

Name of Agency : ----------

STANDARD FORM: AGREEMENT

This AGREEMENT, made the ……*[day]* day of ----------*[month]* 20-------- *[year]* between ----------*[name and address of Employer]* (hereinafter called "the Employer") of the one part, and ---------- *[name and address of Contractor]* (hereinafter called "the Contractor") of the other part.

WHEREAS the Employer desires that the Contractor execute ---------- *[name and identification number of Contract]* (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year aforementioned in accordance with laws of Sri Lanka.

…….	……..
Authorized signature of Contractor	Authorized signature of Employer
COMMON SEAL	COMMON SEAL

In the presence of:
Witnesses:

1. Name and NIC No. : ……
……
Signature : ……
Address : ……
……
2. Name and NIC No. : ……
……
Signature : ……
Address : ……
……

FORM OF PERFORMANCE SECURITY (UNCONDITIONAL)

……
(Issuing Agency's Name and Address of Issuing Branch or Office)

Beneficiary: **Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa**

Date: …….

PERFORMANCE GUARANTEE NO. : ……

We have been informed that ……
……..…… *(Name of Contractor)* (hereinafter called "the Contractor") has entered into Contract No. ……..….. (Reference No. of the Contract) dated ……. With you, for the ……... [*name of the contract and brief description of works*](hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we ……..……
…….. *(name of agency)* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ……. *(amount in figures)*
……..……
…….. *(amount in words)* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the ……. day of …… 20……. *(insert date, 28 days beyond the intended Completion Date)* and any demand for payment under it must be received by us at this office on or before that date.

……
Signature(s)

FORM OF ADVANCE PAYMENT SECURITY

……
……
(Name and Address of Agency, and Address of Issuing Branch or Office)

Beneficiary Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa

Date: …….

ADVANCE PAYMENT GUARANTEE NO. : ……..

We have been informed that ……
……. *(Name of Contractor)* (hereinafter called "the Contractor") has entered into Contract No. …….. (Reference No. of the Contract) dated ……
With you, for the …..…… [*name of contract & brief description*] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum……*(amount in figures)* ……..…… *(amount in words)* to be made against an advance payment guarantee.

At the request of the Contractor, we ……
…… *(name of issuing agency)* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of …….. *(amount in figures)* …… *(amount in words)* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation in repayment of the advance payment under the Contract.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor.

This guarantee shall expire on ……. …… *(insert date, 28 days beyond the expected expiration Date of the contract)*

Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

…….
Signature(s)

FORM OF RETENTION MONEY GUARANTEE

……..
(Issuing Agency's Name and Address of Issuing Branch or Office)

Beneficiary: Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa

Date: …….

RETENTION MONEY GUARANTEE NO.: ……

We have been informed that ……
…… *(Name of Contractor)* (hereinafter called "the Contractor") has entered into Contract No. …… (Reference No. of the Contract) dated ……. With you, for the ……[*name of the contract and brief description ofworks*](hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, when the works have being taken over and the first half of the Retention Money has been certified for payment, payment of the second half of the Retention Money may be madeagainst a Retention Money guarantee.

At the request of the Contractor, we ……..…
…….*(name of agency)* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of……*(amount in figures)*
……
…….. *(amount in words)* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is inbreach of its obligation under the Contract because the Contractor has not attended tothe defects in accordance with the Contract.

This guarantee shall expire, at the latest…….……. day of …… 20…….... *(insert 28 days after the end of the Defects Liability Period)* Consequently, any demand for payment under this guarantee must be received by us at this office on orbefore that date.

……
……Signature(s)

SECTION – 3

CONDITIONS OF CONTRACT

Condition of Contract that will be applicable for this Contract is that given in Section III of the Standard Bidding Document for Procurement of Works "ICTAD PUBLICATION NO. – ICTAD/SBD/01" Second Edition January 2007 published by Construction Industry Development Authority (CIDA), "Savsiripaya", 123, Wijerama Mawatha, Colombo 07.

This publication will not be issued with the Bidding Document and the Bidder is advised to purchase it from CIDA.

Conditions of Contract shall be read in conjunction with Contract data provided under Section-5 of the Bidding Document (Volume 2).

VOLUME - 02

INVITATION FOR BIDS

SECTION 04 : FORM OF BID AND QUALIFICATION INFORMATION

SECTION 05 : BIDDING DATA AND CONTRACT DATA

SECTION 06 : SPECIFICATIONS

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Invitation for Bids (IFB)

CEYLON PETROLEUM STORAGE TERMINALS LIMITED

RELOCATION OF THE TANK NO. 51 AND EXTENSION OF EXISTING CARGO PIPELINES OF FUEL OIL AT KOLONNAWA INSTALLATION

1. The Chairman, Department Procurement Committee, on behalf of the **Chairman, Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa** now invites sealed bids from eligible and qualified bidders for **Relocation of the Tank No. 51 and Extension of Existing Cargo Pipelines of Fuel Oil at Kolonnawa Installation** as described below.

   Relocation of Tank No. 51(Dia. 6m, Height 9 m, volume of 249 m^3); The work consists of Construction of new tank foundation, Cut, transport (Zone 09 to Zone 04), erection and painting of the existing tank, construction of proposed tank farm, access paths and bowser unloading bay with piping.

   Extension of Existing Cargo Pipelines of Fuel Oil; The work consists of Supply of carbon steel pipes, valves & fittings, laying of pipes, fabrication, welding, and testing.
   The Construction Period is 180 Days.

2. Bidding will be conducted through **National Competitive Bidding Procedure.**

3. To be eligible for contract award, the successful bidder shall not have been blacklisted and shall meet the following requirements.

   ICTAD (CIDA) registration is required as follows:

Specialty	Grade
Heavy Steel Fabrication	EM2 or above

4. Qualification requirements to qualify for contract award include

   i. Experience Required

   Experience as a contractor in construction of at least one new vertical steel petroleum storage tank of capacity not less than 300 m^3 conforms to API 650 or at least two repairs (similar nature and complexity) to tank/s of capacity not less than 300 m^3 including replacement of tank bottom/ shell replacement and entire painting conforms to API 653 with experience of carbon steel fuel pipe fabrications during last ten years (to comply with this requirement, works cited should be at least 70 percent complete).

   ii. Average of the annual volume of construction work performed in the last five years shall be at least Rs. 120,000,000.00 (**Rupees One Hundred Twenty Million**).

   If any bidder's annual volume of construction work performed in years 2020/2021, 2021/2022 and 2022/2023 is far below the average due the pandemic situation, recent previous years can be considered for evaluation upon request of the bidder.

iii. The minimum amount of liquid assets and /or credit facilities net of other contractual commitments and exclusive of any advance payments which may be made under the contract shall be not less than **Rs. 20,000,000.00 (Rupees Twenty Million).**

1. Interested parties may refer the bidding documents (only for viewing purpose) and obtain necessary information through the website www.cpstl.lk and inspect the bidding documents at the address given below from 0900hrs to1400 hrs of working days.

2. A complete set of Bidding Documents in English language may be purchased by interested bidders on the submission of a written application to The Manager (Procurement), Procurement Function, Ceylon Petroleum Storage Terminals Limited,1st floor, New Administration Building, Oil Installation, Kolonnawa from **19.03.2024** until **24.04.2024** from 0900 hrs to 1400 hrs of working days on production of receipt supporting payment of non-refundable Tender fee of Rs 11,000.00

3. Bids shall be submitted on the bidding document obtainable from Procurement Function and duly filled bidding documents may be sent by post/courier under registered cover or sealed cover to reach the Chairman, Department Procurement Committee (Lower Minor), C/o Manager Procurement, Ceylon Petroleum Storage Terminals Limited, Procurement Function, 01st Floor, New Building, Oil Installation, Kolonnawa, Wellampitiya or could be deposited in the tender box kept at the main entrance of CPSTL, on or before 1400 hrs. on **24.04.2024.**

4. Bids will be closed at 1400 hrs. on **24.04.2024** and will be opened immediately thereafter at the office of Manager Procurement, in the presence of the authorized only one representative of the bidder who chose to attend.

5. In case the bidders are unable to submit the original bids as above, they could submit the scanned copy of the duly filled bidding documents in PDF format via email to tenders@cpstl.lk to reach on or before 1400 hrs. on **24.04.2024**, subject to following conditions.

    a. Submission of the bid via email is at own discretion of the bidder.
    b. The title and the closing date of the tender shall be indicated as the subject of the email.
    c. Size of an email (with attachment) shall be limited to the maximum of 20 MB. In case the size of an attachment exceeds 20 MB, the bidder is requested to split the attachments and send as separate emails (i.e. 01 of 03, 02 of 03 etc.,).
    d. Do not CC/BCC to any other official/personal email IDs of CPSTL staff. Bids sent to any other email IDs is strictly not entertained.
    e. However, the original bid shall be sent to CPSTL prior to finalize the technical evaluation.

6. Bids shall be valid up to **25.07.2024** from the date of opening of bid.

7. All bids shall be accompanied by a Bid Security

   In the form of a cash deposit to the CPSTL Cashier for a minimum sum of LKR 250,000.00 (Sri Lanka Rupees Two Hundred and Fifty Thousand only).
   or
   In the form of bank draft/ bank guarantee of LKR 500,000.00 (Sri Lanka Rupees Five Hundred Thousand only).

   Bid Security shall be valid up to **22.08.2024.**

8. A pre-bid meeting will be held at 1000 hrs on **01.04.2024** at the office of Engineering Manager, CPSTL, Kolonnawa.

5. Any of the following party who wishes to submit a bid, shall register himself at the Department of Registrar of Companies www.drc.gov.lk (e-ROC) as per the Public Contracts Act, No. 03 of 1987 for every public contract value exceeding Sri Lankan Rupees **Five million** (**LKR 5,000,000**).

   i. An agent, sub-agent, representative or nominee must be registered **prior to the closing of the Bid/Tender**.
   ii. If the tender applicant and the tenderer is the same party, he must be registered prior to the **award of the tender**.

   Contact details of the Registrar: Department of Registrar of Companies, "Samagam Medura", No. 400, D R Wijewardena Mawatha, Colombo 10 / Tel.: +94-11-2689208 / +94-11-2689209 / Email: registrar@drc.gov.lk (Contact details may vary from actuals & CPSTL does not take any responsibility in this regard)

The address(es) referred to above is (are):

The Chairman,
Department Procurement Committee(Minor)
C/O Manager (Procurement),
Ceylon Petroleum Storage Terminals Limited
Procurement Function,
1st floor, New Administration Building,
Oil Installation, Kolonnawa.

SECTION – 4

- ***FORM OF BID***
- ***QUALIFICATION INFORMATION***

FORM OF BID

Name of Contract: **RELOCATION OF THE TANK NO. 51 AND EXTENSION OF EXISTING CARGO PIPELINES OF FUEL OIL AT KOLONNAWA INSTALLATION**

To:

The Chairman,
Ceylon Petroleum Storage Terminals Limited,

Gentleman,

1. Having examined the Standard Bidding Document – Procurement of Works (ICTAD/SBD/01 – Second Edition – January 2007), Specifications, Drawings and Bill of Quantities and addenda for the execution of the above – named Works, we/I the undersigned, offer to execute and complete such Works and remedy any defects therein in conformity with the aforesaid Conditions of Contract, Specification, Drawings, Bill of Quantities and addenda for the sum of Sri Lankan Rupees…… ……(LKR…… ……...) or such other sums as may be ascertained in accordance with the said Conditions.

2. We/I acknowledge that the schedule forms and the Bidding Document is part of our Bid.

3. We/I undertake, if our Bid is accepted, to commence the Works as stipulated in the Contract Data, and to complete the whole of the Works comprised in the contract within the time stated in the Contract Data.

4. We/I agree to abide by this bid for the period stated in the Sub-Clause 15 of Instructions to Bidders or any extended period and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. Unless and until a formal agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

6. We accept/ we do not accept the Adjudicator.

7. We/I understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this …… day of …….. 20…. in the capacity of …… ……... ……. duly authorized to sign tenders for and on behalf of ….. …… ……..…… …… ……

(IN BLOCK CAPITALS)

Signature :……

Name :……

Designation :……

Address :……

……

Witness :……

QUALIFICATION INFORMATION

(To be completed and submitted by the bidder, with the Bid)

ICTAD Registration		
Registration number	*(attach copies of relevant pages from the registration book)*	
Grade : EM2 or above	...……	
Specialty : Heavy Steel Fabrication	...……	
Expiry Date	...……	
Blacklisted Contractors		
Have you been declared as a defaulted contractor by NPA or any other Agency? (Yes/No)		
(If yes provide details)		
VAT Registration Number	...……	
Construction Program	*(attach as annex in the form of bar chart)*	
Legal status	*(attach relevant status copies, as annex)*	
Value of Construction works performed in last 5 years (average value shall be at least 120 million)	*(attach copies of Certificate of Completion etc. and other documents such as profit-loss and income expenditure statement)*	
Year 2018/2019	LKR ……..	
Year 2019/2020	LKR ……..	
Year 2020/2021	LKR ……..	
Year 2021/2022	LKR ……..	
Year 2022/2023	LKR ……..	
The minimum amount of liquid assets and/or credit facilities net of other contractual commitments and exclusive of any advance payments which may be made under the contract shall be not less than LKR 20,000,000.00	LKR ……..	
Value of similar works completed in last 10 years (indicate only the two largest projects)	1. Value…….. Year……..	
	2. Value…….. Year……..	
Major items of construction equipment proposed	1. Type ……. Capacity ……..	
	2. Type ……. Capacity ……..	
	3. Type ……. Capacity ……..	
	4. Type ……. Capacity ……..	
	5. Type ……. Capacity ……..	
Qualification and experience of key staff – Site & Head Office (Permanent, Contract basis & Consultants)	**Technical**	**Availability with the bidder**
	1. Site Engineer (Mech)	(Yes/No)
	2. Technical Officer (NDT Mech. or equivalent)	(Yes/No)
	3. Technical Officer (NDT Civil or equivalent)	(Yes/No)
	4. Welding Supervisor	(Yes/No)
	(attach copy of CVs as annex)	
Any deviation from the scope of work, specifications drawings, bill of quantities and addenda	(Yes/No) *(If yes provide the details as annex)*	

SECTION - 5

BIDDING DATA & CONTRACT DATA

G. Bidding Data

Instructions to Bidders
Clause Reference

(1.1) The Employer is

Name : The Chairman

Address: Ceylon Petroleum Storage Terminals Limited,
Oil Installation,
Kolonnawa

The work consists of

Relocation of Tank No. 51(Dia. 6m, Height 9 m, volume of 249 m^3); The work consists of Construction of new tank foundation, Cut, transport (Zone 09 to Zone 04), erection and painting of the existing tank, construction of proposed tank farm, access paths and bowser unloading bay with piping.

Extension of Existing Cargo Pipelines of Fuel Oil; The work consists of Supply of carbon steel pipes, valves & fittings, laying of pipes, fabrication, welding, and testing.

(1.2) Intended Completion Date is **180 Calendar Days** from the Start Date.

(1.3) The office for collection of bid forms is

Procurement Manager,
Procurement Function,
Ceylon Petroleum Storage Terminals Limited,
Oil Installation, Kolonnawa.

The non-refundable fee is Rupees **11,000.00**

The Bid forms will be issued from **19.03.2024** up to **24.04.2024**. during normal working hours (from 0900 hrs to 1400hrs)

(2.1) The source of funds is **CPSTL**

(4.2) The registration required

Specialty	Grade
Heavy Steel Fabrication	EM2 or above

(4.3) Any Deviation from the scope of work, specifications, drawings, bill of quantities and addenda in the bidding document shall be clearly mentioned in the Bid. Otherwise, the Employer shall proceed with evaluation assuming that the Bidder is adhering to all requirements in the Bidding Document.
The following information shall be provided in Section 4:

* ICTAD Registration;
Registration number

Grade

Specialty

Expiry Date

(Copy of the updated Contractors Record Book to be attached)

* VAT Registration number
* Construction Programme
* Legal Status (Sole proprietor, Partnership, Company etc.)
* Total monetary value of construction work performed for each of the last five years.
* Experience in works of a similar nature for each of the last ten years.
* Major items of construction equipment proposed to carry out the Contract.
* Qualifications and experience of key site management and technical personnel proposed for the Contract;
* List of Country of origin and manufacture of materials supplied by contractor.
* Confirmation letter dated within a month prior to Bid Closing date from a commercial bank operating in Sri Lanka with the authority of a license issued by the Monitory Board (Central Bank of Sri Lanka) on ability to facilitate the credit facility as specified in the Clause 4.4 (iv) in the section 5 for the "Relocation of the Tank No. 51 and Extension of Existing Cargo Pipelines of Fuel Oil at Kolonnawa Installation"

(4.4)

i. Experience as a contractor in construction of at least one new vertical steel petroleum storage tank of capacity not less than 300 m^3 conforms to API 650 or at least two repairs (similar nature and complexity) to tank/s of capacity not less than 300 m^3 including replacement of tank bottom/ shell replacement and entire painting conforms to API 653 with experience of carbon steel fuel pipe fabrications during last ten years (to comply with this requirement, works cited should be at least 70 percent complete).

ii. Average of the annual volume of construction work performed in the last five years shall be at least **Rs. 120,000,000.00 (Rupees One Hundred Twenty Million).**

If any bidder's annual volume of construction work performed in years 2020/2021, 2021/2022 and 2022/2023 is far below the average due the pandemic situation, recent previous years can be considered for evaluation upon request of the bidder.

iii. Following technical and managerial staff:

One Site Engineer with BSc. (Eng.) with minimum five years' experience, one Technical Officer with NDT (mechanical) or equivalent with minimum 05 years' experience shall be assigned to the project full time basis, one Technical Officer with NDT (civil) or equivalent with minimum 05 years' experience shall be assigned to the project during the civil works and a welding supervisor with 06 years' experience shall be assigned when welding is attended. This is the minimum requirement and the successful bidder shall assign all other necessary staff to enable

compliance with all other contractual stipulations.

iv. The minimum amount of liquid assets and /or credit facilities net of other contractual commitments and exclusive of any advance payments which may be made under the contract shall be not less than **Rs. 20,000,000.00 (Rupees Twenty Million).**

(7.1) Site Visit

Prior to submitting a bid, bidders shall familiarize themselves and shall be deemed to have done so. The bidders shall inform Engineering Manager, Engineering Function, Oil Installation, CPSTL, Kolonnawa (Tel. +94-11-2572214, Fax No. 0094-11-2531328) at least 02 days in advance with their names, NIC Numbers/Passport Numbers so that the CPSTL will arrange required permits for the site visit.

The bidders are advised to limit the number of persons, for the visit, due to the security reasons, at the Kolonnawa Installation. Site visit will be permitted during 0830 – 1600 hrs except Sundays and mercantile holidays. The cost of such visits shall be borne by the bidder.

(9.1) Employer's address for the purpose of clarification is;

Name : The Manager (Procurement),
Address : Procurement Function
Ceylon Petroleum Storage Terminals Limited
Oil Installation
Kolonnawa

Telephone: 0112572156
Fax: 0112074299
Email : procure@cpstl.lk

(11.1) The language of the bidding document shall be English.

(13.3) VAT component shall not be included in the rates. The amount written in the Form of Bid shall be without VAT. However, VAT component shall be shown separately at the end of the BOQ.

(13.4) The Contract is subjected to price adjustment in accordance with Clause 47 of the Conditions of Contract.

(15.1) The Bid shall be valid up to **25.07.2024**

(16.1) Bid shall include a Bid Security using the form included in Section 9.

(16.2) Bid Security shall be:

- for In the form of a cash deposit to the CPSTL Cashier for a minimum sum of LKR 250,000.00 (Sri Lanka Rupees Two hundred Thousand Only).
- or
- In the form of bank draft/ bank guarantee of LKR 500,000.00 (Sri Lanka Rupees Five Hundred Thousand only).
- Bid Security shall be valid up to **22.08.2024.**

- Securities and Guarantees shall be on demand guarantees issued by a commercial bank operating in Sri Lanka with the authority of a license issued by the Monitory Board (Central Bank of Sri Lanka).

(17.0) Pre-Bid meeting shall be together with the site visit
- venue: office of Engineering Manager, CPSTL, Kolonnawa... /
date: 01.04.2024 .. / time: 1000 hrs

(19.2) a The Employer's address for the purpose of Bid submission is

The Chairman,
Department Procurement Committee,
Procurement Function.
Ceylon Petroleum Storage Terminals Limited,
Oil Installation,
Kolonnawa

(19.2) b Contract name: **Relocation of the Tank No. 51 and Extension of Existing Cargo Pipelines of Fuel Oil at Kolonnawa Installation**

Contract No : **KPR/63A /2023**

The deadline for submission of Bids shall be **1400_hrs on 25.04.2024**

(29.1) Not applicable

(34.0) The amount of Performance Security is 5% of the Initial Contract Price.

(36.0) The Adjudicator proposed by Employer shall be **the Institute for Construction Training and Development (ICTAD).**

Fees and types of reimbursable expenses to be paid to the Adjudicator shall be on a case to case basis and shall be shared equally by the Contractor and the Employer.

Contract Data

(Please note that the Clause nos. given hereunder are that of Conditions of Contract)

(1.1) The Employer is
Name : The Chairman,
Address: Ceylon Petroleum Storage Terminals Limited
Oil Installation,
Kolonnawa

Employers Representative
Name : Manager (Procurement),

Address: Ceylon Petroleum Storage Terminals Limited
Oil Installation
Kolonnawa

(1.1) The Engineer is
Name: Engineering Manager

Address: Engineering Function
Ceylon Petroleum Storage Terminals Limited
Oil Installation
Kolonnawa

The work consists of,

Relocation of Tank No. 51(Dia. 6m, Height 9 m, volume of 249 m^3); The work consists of Construction of new tank foundation, Cut, transport (Zone 09 to Zone 04), erection and painting of the existing tank, construction of proposed tank farm, access paths and bowser unloading bay with piping.

Extension of Existing Cargo Pipelines of Fuel Oil; The work consists of Supply of carbon steel pipes, valves & fittings, laying of pipes, fabrication, welding, and testing.

The Construction period is 180 calendar days

The Site is located at, Oil Installation, CPSTL, Kolonnawa

(1.1) The Start Date shall be 14 Days from the Letter of Acceptance.

(8.1) Schedule of other contractors**:** None

(9.1) Schedule of Key Personnel:

Minimum persons with qualifications and experience to be defined,

	Technical Designation	**Academic Qualification**	**Experience**
i.	Site Engineer (Mechanical)	BSc (Eng)	5 years
ii.	Technical Officer (Mechanical)	NDT or equivalent	5 Years
iii.	Technical Officer (Civil)	NDT or equivalent	5 Years
iii.	Welding Supervisor	AWS certification or equivalent	6 Years

13.1 The minimum insurance covers shall be

(a) The minimum cover for insurance of the Works and of plant and Materials is **110% of initial Contract Price**.

The maximum deductible for insurance of the Works and of Plant and Materials is **5% of initial contract price**

(b) Contractor's Responsibility.

(c) The minimum cover for insurance of other property (other than the Site) is Rs. **20,000,000.00.**

(d) The minimum cover for personal injury of death, for third party and employees of the Employer and other persons engaged by the Employer in the Works is **Rs. 1,000,000.00** per event.

13.2 (a) A copy of insurance policy for the workmen and other employees of the Contractor as per the Workmen Compensation Act shall be forwarded to CPSTL prior to commencement of the work.

(17.1) The Intended Completion Date for the whole of Works shall be **180 days** from the Date of Commencement of Works

(21.1) The Site Possession Date shall be **21 Days** from the Letter of Acceptance

(27.1) The Contractor shall submit a programme for the Works within **28 Days** of delivery of the Letter of Acceptance.

Working Hours

i. Normal working hours of CPSTL from Monday to Friday is from 0730 hrs. to 1630 hrs.

ii. In the work programme Saturday also can be considered as a working day and from Monday to Friday up to 1800 hrs also can be considered as a working hour by the contractor. But to

work on Saturday and up to 1800 hrs the contractor is required to obtain prior permission since the offices are normally closed on Saturdays.

iii. However, working on statutory holidays, Sundays and after 1800 hrs. on working days will not be permitted.

iv. Provided always that provision of above (iii) shall not be applicable in the cause of any work which it is customary to carry out, outside normal working hours by rotary or double shifts.

(27.3) The Programme will be updated **Monthly**

(27.4) The amount to be withheld for late submission of a Programme is Rupees (2% of the Initial Contract Price)

(35.1) The Defects Liability Period is **180** Days.

(39.2) Not Applicable

(46.1) All Payments shall be made in Sri Lanka Rupees. Other currencies are not allowed to quote.
Minimum amount of interim payment certificate shall be LKR 2 million.

(47.1) (a) The Contract Price is subjected to price adjustment

(b) Input Percentages

No.	CIDA No.	Name of Input	Percentage
1	L1	Skilled Labour	15.61%
2	L3	Unskilled Labour	20.81%
3	M3	Cement	3.30%
4	M7	20 mm metal	0.83%
5	M8	Sand	2.09%
6	M13	Reinforcement steel	5.88%
7	M14	Structural Steel	7.15%
8	P1	Small Equipment	22.87%
9	P2	Heavy Equipment	7.00%
10	P3	Fuel	1.78%
11	M30A	Bitumen 80/100 (Bulk Form)	1.28%
12	M48	ABC	1.39%
			90%

(c) Non-Adjustable Elements shall be 1.1, 1.2, 1.3, 1.4,1.5

(d) Disregard elements shall be 2.1, 6.1.1, 6.2.1, 6.3.1, 6.4.1, 6.5.1, 6.6.1, 6.7.1, 6.8.1, 6.9.1, 6.10.1, 6.11.1, 6.12.1, 6.13.3, 6.14.1, 6.15, 7.1.1, 7.2.1, 7.3.1, 7.4.1, 7.5.1, 7.6.1, 7.7.1, 7.8.1, 5.1.5, 5.1.6, 5.2, 5.3, 5.4, 5.5

(48.1) The retention from each payment shall be **10%** percent of the certified work done.

The limit of retention shall be **5%** percent of the Initial Contract Price.

(49.1) The liquidated damages for the whole of the Works shall be **0.15% of Initial Contract Price per Day**

(50.1) The maximum amount of liquidated damages for the whole of the Works shall be **10%** of the Initial Contract Price

(52.1) The Performance Security shall be **5 %** of the Initial Contract Price.

(58.1) Schedule of operating and maintenance manuals.

(60.1) The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is **25% of Initial Contract Price.**

63.7 The attendance fee payable to the Contractor on nominated sub-contract work shall not exceed 8%

Advance Payment

Advance Payment to the contractor in an amount equivalent to 20 % of the Initial Contract Price excluding provisional sums and contingencies, within 14 Days after furnishing of an unconditional guarantee in a form and by a bank or a company acceptable to the Employer and as per the Condition of Contract that will be applicable for this Contract is that given in Section III of the Standard Bidding Document for Procurement of Works "ICTAD PUBLICATION NO. – ICTAD/SBD/01" Second Edition January 2007 published by Construction Industry Development Authority (CIDA), "Savsiripaya", 123, Wijerama Mawatha, Colombo 07.

SECTION 6

❖ ***SPECIFICATIONS***

6.1 Scope of Supply by CPSTL

6.1.1 Outer Coated Carbon Steel pipes of dia. 12" shall be supplied by the CPSTL.

6.1.2 Construction Utilities

6.1.3.1 Electricity and drinking water that would be supplied to the contractor to undertake this work would be charged from the contractor as per meter estimate. The prospective contractor is required to indicate his requirements of power & water from the CPSTL in his offer for evaluation purposes.

6.1.3.3 The maximum available electrical power supply available to the contractor is 45kVA, 400V AC, 4 wire (TPN), 50Hz and will be subjected to following 05 conditions.

i. Electrical power supply will be provided by CPSTL on the request of the Contractor and charge according to the applicable tariff system, or the Contractor shall have to arrange his own power source.

ii. The Electrical Section of CPSTL will provide terminating point to feeding cables through a suitable circuit isolating and interrupting devices such as a circuit breaker or a switch fuse at convenient location, within 150 m from the tank shell. This switch gears will remain the property of CPSTL and contractor has no access to it.

iii. The maximum load that the CPSTL electrical section can feed will be 63A, 3 Phases.

iv. Power supply will be energized after inspection by the Electrical Engineer of CPSTL provided all requirements in clause 6.2.14 are satisfied.

v. CPSTL will reserve the right to disconnect the power supply to the contractor without prior notice, if any of the foresaid conditions are violated.

6.1.3.3 Water supply will be provided by CPSTL on the request of the contractor and charge according to the meter.

6.1.3.3 Water for tank hydro test will be provided by CPSTL on the request of the Contractor and the Contractor shall provide necessary pumping, piping, manifolds etc.

6.2 Contractor's Scope of Supply

Contractor shall supply construction equipment, materials, consumables, and other requisites complying to the specification as follows.

6.2.1 Supply of all construction equipment such as welding machines, metal cutting equipment, air compressors, cranes, soil compacting and cutting equipment, material transporting vehicles, rigging equipment, jacks, scaffolding materials, planks, corrugated metal sheets, materials for fire blankets, tools and other equipment where necessary.

6.2.2 Supply of all inspection equipment and materials such as X ray machines, pressure/ vacuum testing instruments, chemicals for non-destructive testing and gauges to perform necessary inspection and testing.

6.2.3 Supply of materials required for construction of RCC tank foundation, catch pit, bowser unloading bay, RCC pedestals and tank farm access stairway.

6.2.4 Supply of materials required for all pipe works (Product Pipes, Water Drencher, Pipe Modifications, Oily Water Discharge, etc.) such as carbon steel pipes, fittings, valves. Packing materials, studs & bolts, etc. CPSTL will be supplied only the 12" pipes.

6.2.5 Supply of all materials required for tank relocation.

6.2.6 Supply of gaskets, nuts & bolts for replacements and boxed up the tank as per the specification given in this document.

6.2.7 Supply of all consumables such as welding electrodes, gas for cutting, grinding discs, temporary erection material, dye penetrant, grit/sand for blast cleaning and all other consumables necessary for the proper execution of the job.

6.2.8 The paint and thinner required for painting of tank interior, exterior with all accessories, stairways and its handrails, water drencher system, pipes (Uncoated), all other steel structures with components, etc. shall be provided by the contractor.

6.2.9 Supply of materials for coating of pipes (where applicable) such as bitumen, etc.

6.2.10 All direct requirements of field equipment such as fuel, lubrication oil etc. the contractor intends to mobilize at site.

6.2.11 Supply of all other materials which are not specifically mentioned and requires to successfully complete the job. The Contractor shall refer all specifications, drawings along with the site measurements to identify the requirement.

6.2.12 Shall submit a bar chart for the total project clearly indicating the various phases of the contract, breakdown of manpower and equipment and organization chart allocated for this contract.

6.2.13 Quality assurance records shall be maintained by the contractor and these records shall be given to Engineer upon completion of each job.

6.2.14 Successful bidder should submit an insurance cover as per "Schedule" under Section -5 of this bidding document.

6.2.15 <u>Construction Utilities</u>

i. Contractor shall use his own feeder cables and temporary power distribution board sufficiently rated to power the equipment and machinery used at site, conforming to CEB regulations in consultation / supervision of Electrical Engineer of CPSTL

ii. Contractor's power distribution board should consist of adequate over current and earth leakage protective devices for safety of men and machinery.

iii. Contractor shall install the feeder cables from the metering point up to the temporary power distribution board as per the instruction & approval of the CPSTL Electrical Engineer.

iv. It is a responsibility of the contractor to maintain his switch gear and cable network in good condition, so as to provide, complete safety to men and machinery.

v. All portable electrical appliances used inside the tank shall be at low voltage, 110V, 1 Phase and should be fed through a centre earthed transformer.

vi. The whole electrical installation of the contractor should conform to IEE wiring regulations (16th Edition) published by the Institution of Electrical Engineers (I.E.E), London.

6.3 Contractor's Scope of Work and Specifications

The scope of work of the contractor is defined in general and shall include the following, but not limited to the same. The bidder shall also carry out all the related work that are not listed in this section but required for completion of the entire work as specified in this Bidding Document.

6.3.1 Tank erection work shall conform to API 653 and API 650.

6.3.2 All product piping work shall conform to API 1104, ASME B 31.3, ASME B 31.4 and other applicable standards.

6.3.3 All fire water piping shall conform to NFPA 30 and other applicable standards.

6.3.4 The Contractor shall adhere to all applicable fire and safety regulations within the CPSTL. It is Contractors sole responsibility to maintain records of all approvals and present whenever required.

6.3.5 The Bidder shall check the existing tank design, dimensions including physical properties, structural rigidity, workspace/ Access path availability for proposed relocation and erection of the tank to ensure the suitability of the proposed methods. Suitability of the methods to be informed to CPSTL in writing. All applicable safety rules and regulations within the CPSTL and the industry should be followed.

6.3.6 The tank would be handed over to the contractor in a clean and gas free state.

6.3.7 All drawings, welding procedures, method statements, time schedules, as built drawings and other related documents shall be prepared and submitted by the contractor. The Engineer will not be allowed to continue the works without availability of approved documents.

6.3.8 Welding Procedure and Welder Qualification

6.3.8.1 Qualification of Welding Procedure

Prepare welding procedure specification (WPS) for all category of welding that are intended to be carried out in tank relocation & piping works and perform tests documented by Procedure Qualification Records (PQR) to support the specifications as required by section ix of the ASME code and any additional provisions of API 650/API 1104 standards.

6.3.8.2 Qualification of Welders

Conduct tests for all welders assigned to manual and semi-automatic welding to demonstrate the welders' ability to make acceptable welds in accordance with section ix of ASME code and API 650/API 1104 standards.

Welders for pipelines fabrication should be 6 G certified.

6.3.9 Site Clearing

The construction site including tank farm areas and proposed piping routes shall be cleared by removing of vegetation, debris, excess soil, etc before the commencement of works, during the construction works & at the completion of works.

The Contractor supposed to access various locations of the CPSTL during the tank relocation and extension of the existing pipe facility of fuel oil. It should be ensured that maintaining of adequate site vicinity during the entire construction period. The debris/removable generated shall be transport to a location within the CPSTL and the Contractor shall handover the usable materials to the CPSTL stores as directed by the Engineer.

6.3.10 Construction of Temporary Access Road

The Contractor shall construct temporary access road/s by removal/ alteration of existing obstructions (if any) in the selected route. It is Contractors sole responsibility to make adequate and safe access to the site without interrupting to CPSTL operations or any damages to the existing properties. Required permissions for the propose access road/s shall be obtained from the Engineer. Any damages/ alterations to existing properties shall be rectified after completion of works.

6.3.11 Construction and maintenance of temporary site office with required storage facilities. The site office should be equipped with necessary furniture and other facilities. The disposal/ discharge of generated wastes should be attended as per the applicable rules and regulations.

6.3.12 Construction of Fire Barriers

Erection of temporary fire barriers and fire blankets in order to protect the surrounding piping, nearby tanks and pump houses in operation. This should be complied with the fire and safety regulations of the CPSTL.

A temporary fire barrier should be erected as instructed by the Engineer using corrugated metal sheets/ any alternative by ensuring the firm stand during the adverse weather conditions. It should be erected in such a way as to give positive fire isolation. In addition to that pipes, valves, accessories, etc located around the tank and the welding locations of the proposed piping should be covered by fire blankets.

The Contractor shall recognize the exact requirement of fire barriers as per the instructions of the Engineer. Location and type of fire barriers will be varied depending on the nature of the work and work surrounding. Probable alternatives during all phases of the scope shall be identified early to avoid unnecessary delays.

Erection of temporary dust barriers/curtain walls during the sand blasting and painting to protect the surrounding properties. The Contractor shall ensure the minimal escape of the dust and paint particles from the Construction site.

6.3.13 Temporary shifting and re fixing of the existing power cable clipped along the dike wall to enable required temporary access as per the Engineer Instructions.

6.3.14 Modifications to the existing 8” diameter fire water pipe along the dike wall.

6.3.15 Erection of Scaffolding

Scaffolding should be erected to the approval of the safety department of CPSTL as follows.

- Should be of steel pipes and couplings, toe plates, platforms etc.
- Thickness of 2" timber planks to be used for the platform and to be properly fastened at both ends.
- Ladders should be provided from the ground to the platform.
- After erecting the scaffolding, the Contractor should obtain a written approval from the safety department of CPSTL before commencement of the work.

6.3.16 Construction of Tank Foundation

6.3.16.1 Excavation

Excavation works shall be carried out after obtaining the Engineers approval to the method statement. Disposal of excavated soil and debris to be removed outside from the Installation by the Contractor.

6.3.16.2 Ground Improvement

The existing tank shall be placed on the ground after top 1.5m (minimum) in an area at least 1.2m wider than the base is replaced with well compacted ABC which should have an allowable bearing capacity of 175kN/m^2 and proved with the relevant test reports.

6.3.16.3 RCC Ring Beam

The ring beam and drain shall be constructed as per the approved drawing confirming to following requirements.

i. Concrete Mixes

Concrete mixes shall conform to Grade 25 of, SCA/4/I and SCA/4/II or equivalent.

ii. Steel Reinforcement

Steel reinforcement shall conform to BS 4449, SCA/4/I and SCA/4/II or equivalent.

iii. Form work

Form Work shall conform to SCA/4/I and SCA/4/II or equivalent.

Required provisions trough the foundation shall be maintained for earthing system, etc where necessary.

The Contractor shall attend dewatering when required.

6.3.17 Supply and Laying of 300 mm Sand Bedding

Lay 300 mm thick layer of sand using river sand on the compacted ABC layer as instructed by the Engineer. The layer to be graded to suit the slope of the bottom plates.

6.3.18 Laying of Sand Tar Mixture

Lay 100mm thick layer of sand tar mixture using river sand mixed with hot bitumen (80%-100% penetration grade) and percentage of bitumen used should

be 5% by weight of sand. The mix to be laid hot and compacted as instructed by the Engineer. The layer to be graded to suit the slope of the bottom pates.

6.3.19 Construction of RCC Catch pit as per the drawing no. 1871-2.

6.3.20 Construction of RCC Pedestals

The Contractor shall construct RCC pedestals as specified in the newly proposed pipelines.

6.3.21 Cut, Transport & Erection of the Tank

6.3.21.1 The existing tank is in the zone 09 of the Kolonnawa Installation. The Contractor shall check the tank dimensions (Including attachments and accessories such as spiral stairway, crown handrail, pipes of the water drencher system, supports, nozzles, etc.) and other physical parameters to finalize the tank relocation.

6.3.21.2 The Contractor shall obtain the existing tank dimensions and provide a comprehensive method statement which shall include shell stiffening procedure, tank cutting procedure, method of handling, proposed travelling path, erection of tank on the new RCC foundation, etc. to obtain the approval from the Engineer. The Contractor shall ensure the safety and maintaining of the existing tank dimensions during the relocation process. Any dimensional alterations/deviations shall be corrected up to the Engineers satisfaction.

The Contractor shall submit welding sequences to obtain the approval of the Engineer prior to commencing of any welding works. Welding of shell joints shall be carried out by using AWSE 7018 series electrode in such a way it will provide a near possible plane surface as per the given welding sequence.

The Contractor shall attend all applicable testing and inspection as per the API 653 & API 650.

6.3.22 The Contractor shall fabricate and install the 3" firewater supply for the existing water drencher system after attending existing repairs. The connection point of the new fire water pipe to the existing fire water ring shall be attended after obtaining the approval of the engineer. Pipes along the ground shall be laid on the pedestals and underground pipes shall be hot dipped galvanized and outer coated with bitumen.

6.3.23 Construction of bowser unloading bay with required excavation, soil improvement and concreating works as per the drawing no. 1871 -3.

The Contractor shall dispose all excavated soil and debris within/ outside the CPSTL premises as directed by the Engineer.

6.3.24 Construction of tank farm access stair way with all steel works and concrete bases as specified in the drawing no. 1871-5.

6.3.25 Procure, supply, installation, and testing of Earthing system as per API Standard 650 Twelfth Edition, March 2013. The contractor must provide details of the proposed system to obtain approval from the Engineer.

6.3.25.1 Locate the grounding electrodes of the previous earthing system around the perimeter of the tank if possible and test each electrode for grounding resistance. If the grounding resistance of a particular existing electrode is below 5 Ω, when measured individually, it can be used as an electrode for the new grounding system.

6.3.25.2 For plate electrode installation, excavate pit for a depth of 3m form the ground level, install the electrode with bonding material (Bentonite, etc.), backfill and compact the filling up to the ground level. Plate must be bonded with the copper tapes using exothermic welding and additional 2 sets of stainless-steel nuts and bolts.

6.3.25.3 Additional copper rods shall be installed spaced at two times the length of the rod to achieve the required resistance level.

6.3.25.4 Concreate inspection pits must be installed for each separate electrode. The pit shall be complete with a lid and the assembly shall be installed flush with ground level.

6.3.25.5 All connections between electrodes and the grounding points on the tank shall be carried out using 25 mm×3 mm high conductive copper tapes and all underground tape joints must be exothermic welded.

6.3.25.6 40mm PVC sleeves must be kept through the ring beam, pavement, and the drain to rout the conductor tapes from the tanks to the inspection pits.

6.3.25.7 Earthing system shall be tested jointly with a representative of the Engineer to ascertain the electrode resistance levels and a report shall be submitted to the Engineer upon completion.

6.3.26 Tank shall be marked as "TANK NO 51, CAPACITY 249 m^3" as per the drawing.

6.3.27 Tank Hydro Test as per the API 653/650.

6.3.28 Calibration of the tank and provide 03 hard copies and soft copy in the Excel Format of the Calibration Chart.

6.3.29 Box Up the Tank. The Contractor shall provide all materials required for tank box up.

6.3.30 <u>Extension of the Existing Cargo Pipeline Facility of Fuel Oil</u>

6.3.30.1 The Contractor shall go through the details provided in the document and drawing nos. 1871-4 & 1871-5 to recognize the scope of the pipe facility extension. It is Contractors sole responsibility to take all required site measurements to recognize the pipe elevations, existing barriers along the proposed pipe paths, provisions, and requirements of site access. The Contractor shall provide all required materials to complete the entire scope of the work except 12" pipes.

6.3.30.2 Details provided in the drawing are layouts of the proposed pipe extensions and The Contractor shall submit detailed drawings with actual elevations, welding details, provisions and etc to obtain the approval of the Engineer.

6.3.30.3 CPSTL will be supplied the outer coated 12" pipes and Contractor shall collect the pipes from the CPSTL main stores and transport them to the required locations. Existing damages of the outer coating shall be rectified up to the satisfaction of the Inspection Engineer.

6.3.30.4 The Contractor shall be strictly adhered to the CPSTL safety procedures during the piping extension and ensure the minimum disturbance to the CPSTL operations. All connections to the existing piping system shall be pre planned and execute under the supervision of an authorized CPSTL officer.

6.3.30.5 Construction of pipes of fuel oil unloading bay and oily water discharge system of the tank.

6.3.30.6 All pipe welding shall be tested as per the API 1104, ASME B 31.3, ASME B 31.4 and other applicable standards. The Contractor shall attend all rectifications based on the test results.

6.3.30.7 AWSE 7018 series electrodes shall use for root welding and approval to be obtained for the type of electrodes to be used for other weldings.

6.3.30.8 All pipes shall be hydro statistically tested as per the applicable standards. The Contractor shall submit method statement to obtain the approval from the Engineer.

6.3.30.9 All uncoated pipes lay along the ground level and underground shall be bitumen coated. All exposed pipes shall be blast cleaned and painted as specified.

6.3.30.10 Construction of pipe pedestals where required and damages of the existing pipe pedestals shall be repaired. Refer drawing no. 1871 -4 for pedestal details.

6.3.31 **Painting**

6.3.31.1 a) **Painting of Underside of the Bottom Plates**

The underside of the tank bottom shall be painted after grit/sand blast cleaning specified under clause 6.3.31.5. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.31.6.

Paint preparation & application shall comply with manufactures data sheet.

Description	Thickness	Coat
SIGMA COVER 280 (PDS 7417) or SIGMA COVER 522 (PDS 7420) or equivalent	75 microns DFT	Primer
SIGMA COVER 300 Brown (PDS 7422) or equivalent	150 microns DFT	Intermediate
SIGMA COVER 300 Black (PDS 7422) or equivalent	150 microns DFT	Finish
Required overall paint thickness	375 microns DFT	
Sigma solvent – Thinner 91-92 or equivalent or as specified in manufactures data sheet.		

b) Painting of Tank Interior

The entire bottom of the tank interior draws off pipes with supports, the bottom most shell course up to 1-meter height from the bottom to be painted after grit/sand blast cleaning specified under clause 6.3.31.5. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.31.6.

Paint preparation & application shall comply with manufactures data sheet.

Description	Thickness	Coat
SIGMA COVER 280 Yellow Green (PDS 7417) or equivalent	75 microns DFT	Primer

SIGMAGUARD 720 (EHB) GREEN or LIGHT GREY (PDS 7433) or equivalent	150 microns DFT	Intermediate
SIGMAGUARD 720 (EHB) GREEN or LIGHT GREY (PDS 7433) or equivalent	150 microns DFT	Finish
Required overall paint thickness	375 microns DFT	
Sigma solvent – Thinner 91-92 or equivalent or as specified in manufactures data sheet.		

6.3.31.2 **a) <u>Painting of Tank Exterior</u>**

The roof external surfaces with all attachments (Dip hatch, Roof manholes, PV's, etc.) and tank shell exterior shall be painted after grit/sand blast cleaning specified under clause 6.3.31.5 as per following painting system. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.31.6.

Paint preparation & application shall comply with manufactures data sheet.

Description	Thickness	Coat
SIGMA COVER 280 – Yellow Green (PDS -7417) or equivalent	60 microns DFT	Primer
SIGMACOVER 456 Grey 5163 Light (PDS 7466) or equivalent	75 microns DFT	Intermediate
SIGMA DUR White 7000 (PDS 6824) or equivalent	75 microns DFT	Finish
Required overall paint thickness	210 microns DFT	
Sigma solvent – Thinner 91-92 or equivalent or as specified in manufactures data sheet.		

Note:

1 m band on tank exterior of bottom most shell course shall be painted with additional 100 microns intermediate coat before finish coat to accomplish total overall thickness of 310 microns.

Tanks shall be marked with tank identification number and CPSTL logo as directed by the Engineer (Refer the Drawing No. 1839).

b) <u>Painting of the Water Drencher System</u>

Water drenching system shall be painted after grit/sand blast cleaning or hot dipped galvanized specified under the clause 6.3.31.5 as per following painting system. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.31.6.

Paint preparation & application shall comply with manufactures data sheet.

Description	Thickness	Coat
SIGMA COVER 280 – Yellow Green (PDS -7417) or equivalent	60 microns DFT	Primer
SIGMA COVER 456 GREY (PDS -7466) or	100 microns	Intermediate

equivalent	DFT	
SIGMA DUR 550 Red RAL 3000 or equivalent	50 microns DFT	Finish
Required overall paint thickness	210 microns DFT	
Sigma solvent – Thinner 21-06 or equivalent or as specified in manufactures data sheet.		

6.3.31.3 **Painting of Stairways, Tank Farm Access Structures & Other Steel Structures.**

The Stairway and its handrail, crown handrail and steel structures for tank farm access, etc. shall be painted according to their standard color codes (structure – black, handrail – yellow) as follows after grit/sand blast cleaning specified under clause 6.3.31.5. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.31.6. The paint is to be recommended to apply by brush or Airless Spray.

Description	**Thickness**	
SIGMA COVER 280 – Yellow Green (PDS -7417) or equivalent	60 microns DFT	Primer
SIGMA COVER 456 GREY (PDS -7466) or equivalent	100 microns DFT	Intermediate
SIGMA DUR 550 Black or SIGMA DUR 550 Yellow or equivalent	50 microns DFT	Finish
Required overall paint thickness	210 microns DFT	
Sigma solvent – Thinner 21-06 or equivalent or as specified in manufactures data sheet.		

6.3.31.4 **Painting of Pipes**

All product pipes of the extended fuel oil pipe facility and pipes attached to the tank no. 51 from unloading bay, etc shall be painted after grit/sand blast cleaning specified under clause 6.3.31.5 as per following painting system. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.31.6.

Paint preparation & application shall comply with manufactures data sheet.

Description	**Thickness**	**Coat**
SIGMA COVER 280 – Yellow Green (PDS -7417) or equivalent	60 microns DFT	Primer
SIGMA COVER 435Light GREY (PDS 7466) or equivalent	100 microns DFT	Intermediate
SIGMADUR 550 Gray (PDS 7537) or equivalent	50 microns DFT	Finish
Required overall paint thickness	210 microns DFT	
Sigma solvent – Thinner 21-06 or equivalent or as specified in manufactures data sheet.		

6.3.31.5 Surface Preparation

All the surfaces which are to be grit blast cleaned shall conform to Swedish Standard

SA 2½. All the surfaces which are to be power brush cleaned shall conform to Swedish Standard St 3.

6.3.31.6 Details of application and approval

6.3..31.6.1 All painting work shall be done as per the manufactures' "datasheet". The whole area specified above to be painted with primer, intermediate and finish paint. The primer paint, intermediate and finish coats are recommended to apply by Airless spray.

6.3..31.6.2 Required total DFT indicated in specifications to be applied and the first coat of Paint shall be applied as soon as possible after surface preparation is approved by Engineer. The preparation of paint before application is to be done as per the instructions stated by the paint manufacturer.

6.3..31.6.3 Time interval between two coatings shall comply with paint manufactures instructions.

6.3..31.6.4 The Engineer reserves the authority to accept or reject.

a. Prepared surface before painting depending on his observations.

b. Application of paint depending on the preparation of paint and the weather.

Painting carried out under doubtful weather condition is the responsibility of contractor. If any painting is found to be unacceptable the particular surfaces shall be made paint free and repainted at contractor's expense.

6.3..31.6.5 Hot Dip Galvanizing

All hot dip galvanizing work shall conform to ASTM A 123 or BS EN ISO 1461:2009. Average mean coating thickness of galvanizing is 85 microns for all pipes, fittings, studs, nuts, flanges, supports and gratings.

Touch up painting with Zn rich paint shall be attended on the galvanized surfaces wherever required after installation.

Certificate from the galvanizing company stating that all the specifications of the bidding document were met shall be submitted to CPSTL after completion of galvanizing work.

6.3.32 Calibration of the Tank

After successful completion of repair work and painting, the tank shall be calibrated. The calibration and tabulations should conform to API 2550, ASTM 1220. The tank calibration should be carried out using one of the following methods by a third-party company acceptable to CPSTL.

- MPMS Ch. 2.2B – Calibration of Upright Cylindrical Tanks using the Optical Reference Line Method (ORLM)
- MPMS Ch. 2.2C – Calibration of Upright Cylindrical Tanks using the Optical Triangulation Method (OTM)
- MPMS Ch. 2.2D – Calibration of Upright Cylindrical Tanks using the internal Electro Optical Distance Ranging Method (EODRM)

MPMS (Manual of Petroleum Measurement Standards)

The name and address of the 3rd party company should be given in the bid for evaluation purposes.

The contractor shall submit three sets of certified calibration tables and soft copy in the form of spread sheets to the Engineer on or before successful completion of the work.

6.3.33 Box up the Tank

After completion of all works specified the tank shall be boxed up and handed over for operational purposes. Materials for tank box up to be supplied by the Contractor.

6.3.34 Site Cleaning

6.3.34.1 Work sites, tank interior, tank exterior and tank farm areas shall be cleaned and maintained properly until it is handed over to CPSTL.

6.3.34.2 Tank inside, tank exterior and tank farm, pipe erected locations shall be cleaned (including wastes which were available in the site) after completion of the works and all removed material shall be dumped at a location inside the premises as directed by the engineer.

6.3.34.3 Existing excess materials such as blasting sand, construction debris, excavated soils, etc shall be removed from the site as directed by the Engineer.

6.3.34.4 Vegetation inside the entire tank farm shall be cut and dump at a location inside premises before handing over the tank.

6.3.35 Tank Details

Tank Capacity	: 249 m^3
Tank Diameter	: 6 m
Tank Height	: 8.965 m
Type of the Tank	: Fixed / Cone roof, welded, Steel, Vertical Storage Tank at Kolonnawa Installation, CPSTL
Status	: Without product
Product	: Slop Oil

6.3.36 Specifications of Materials

All materials supplied by the contractor should have proven quality and approval should be obtained from the Engineer prior to purchase. The Engineer reserves the right to accept or reject the materials.

6.3.36.1 Carbon Steel Line Pipes

i. Length 5.8m/ 12 m, seamless and Bevel Ends (BE)
ii. Material shall conform to API Standard 5L-Gr B or ASTM A 106 B.
iii. Dimensions shall conform to ANSI B 36.10 SCH 40
iv. Identification: - Heat/Batch number, SCH number, API or ASTM number, seamless and material description shall be marked on the pipes.
v. Both ends of pipe should have protective sleeves.

vi. Valid mill test certificate should be supplied with Heat/Batch numbers or any other reference number marked on pipes as well as in the certificates to check once the items are delivered to CPSTL Kolonnawa with reference to the items against the Mill Certificate.

6.3.36.2 Carbon Steel fittings (Elbows, Reducers, etc)

i. Bevel ends (BE)
ii. Material shall conform to ASTM A 234 Gr. WPB.
iii. Dimensions shall conform to ANSI B 16.9, SCH40
iv. Identification: - SCH number, ASTM number and material description shall be marked on the elbows and reducers.
v. Valid mill test certificate should be supplied with Identification number or any other reference number marked on elbow as well as in the certificates to check once the items are delivered to Ceylon Petroleum Storage Terminals Limited Kolonnawa with reference to the items against the Mill Certificate.

6.3.36.3 Carbon Steel Flanges

i. Class 150, Slip on, Raised Face (RF)
ii. Material shall conform to ASTM A 105 Normalized.
iii. Dimensions shall conform to ANSI B 16.5.
iv. Identification: - ASTM number, ANSI Number, Class and material description shall be marked on the flange.
v. Flange should be marked with the ASTM specification grade identification symbol and ASTM specification number.
vi. Valid mill test certificate should be supplied with identification numbers or any other reference number marked on flanges as well as in the Certificate to check once the items are delivered to CPSTL Kolonnawa with reference to the items against the Mill Certificate.

6.3.36.4 Cast Steel Gate Valves (Class 150)

i. Operational Conditions
   a. Maximum Working Pressure :- 150 psi
   b. Nominal Working Temperature :- 45 ^{0}C

ii. Use for petroleum refined products such as Gas Oil, Gasoline, Kerosene, Fuel Oil and Aviation Turbine.

iii. The valves should be of outside screw and york type with rising stem non rising hand wheel, bolted bonnet and with solid or flexible wedge type plain gate and should conform to followings.
   a. Designed as per API 6D & API 600.
   b. End flanges shall be raised face type and flange dimensions should conform to ANSI B 16.5.
   c. Face to face dimensions should conform to ANSI B 16.10.
   d. Valve inspection and testing as per API 598.

iv. Materials of valve
   a. Materials of component of the valve should conform to API 600.
      - Body and bonnet - ASTM A 216 Gr. WCB
      - Seat and Wedge facing - 13% Chromium Steel
      - Stud - ASTM A 193 Gr. B7
      - Stud Nut - ASTM A 194 Gr. 2H

b. Trim material should be specified and should conform to API 600 normal trim material (supplier should forward manufacturer's certificate conforming the same).

c. The materials of all parts of the valve to be specified according to ASTM standard.

v. Other Conditions

a. Method of packing should be indicated prior to purchase.

b. Valves should be shipped/transported with gate closed and flange closed with suitable material or end caps.

c. Exterior surface (un machined) should be painted with suitable paint to prevent corrosion and machined or threaded surface should be coated with easily removable rust preventive coating.

d. The method of testing should conform to API 598 and valid test certificate should be supplied with the items and the supplier should mention in the quotation or Pro-forma Invoice whether this can be supplied.

e. Period of guarantee and the conditions of guarantee should be mention in the quotation.

f. The supplier should forward the copy of certificate of Authority to use official monogram of API and the originals of internationally published catalogues/literature relevant to the valve.

g. The supplier should forward all details mentioned above for evaluation purposes. The offers of those who fail to submit requested details will not be

h. Considered for evaluation.

6.3.36.5 Gasket Materials

i. Maximum Working Pressure - 225 psi
ii. Nominal Working Temperature - 45^{o}
ii. Thickness - 3 mm
iii. To use as packing for flanges of pipelines and tank manholes for petroleum refined products such as Gasoline, Gas oil, Fuel Oil and Aviation Turbine.
iv. Gaskets should conform to BS 7531 or equivalent.
v. Each sheet of jointing shall be indelibly marked with the number of British Standard and manufacturer's identification mark

6.3.36.6 Screen of the Strainer

i. Material : 316 Stainless Steel
ii. Screen shall have 1/8" diameter holes with 40% open area.
iii. Screen Thickness shall be minimum 2.00 mm

6.3.36.7 Angle Irons

i. Material: ASTM A 36
ii. Size: As specified in the drawing and as existing in the tank
iii. Valid mill test certificate shall be supplied

6.3.36.8 Nuts and Bolts

i. Material of bolts to be conformed to ASTM A 193 Gr.B 07 or BS 1506-621 Gr.A and materials of nuts shall conformed to ASTM A 194 Gr. 2H.
ii. Threads should be in accordance with ANSI B 1.1 Class 2A for bolts and class 2B for nuts.
iii. Identification marks shall be available on items to conform above standards.

6.3.36.9 GI Pipes

Grade : Heavy Duty

Size : As existing in the tank

6.3.36.10 Flat Iron

Material: ASTM A 36

ii. Size: As existing in the tank

iii. Valid mill test certificate shall be supplied

6.3.36.11 C Channel

Material: ASTM A 36

ii. Size: 205x100x9 mm and as existing in the tank

iii. Valid mill test certificate shall be supplied

Materials which are not specifically mentioned shall be complied with applicable standards and relevant technical specifications shall be forwarded to the Engineer to obtain the prior approval.

Bidder should replace all materials found with manufacturing defects at free of charge within the performance bond validity period

SECTION - 7

BILL OF QUANTITIES

BILL OF QUANTITIES

CEYLON PETROLEUM STORAGE TERMINALS LIMITED

JOB: RELOCATION OF THE TANK NO. 51 AND EXTENSION OF EXITING CARGO PIPELINES OF FUEL OIL AT KOLONNAWA INSTALLATION

BOQ NO: E/09/2023

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
	Note: **Contractors are strictly advised to visit the site & follow the given details, sketch drawings, specifications before bidding & before commencing the works. If there are any discrepancies should be forwarded to the Engineering Manager of CPSTL Kolonnawa before commencement of such works. Scope of the work is not limited to the content in the BOQ items and the Contractor shall refer all specifications in section 6, drawings, standards, rules and regulations, etc along with the site measurements.** **Construction work to be carried out without damaging existing tanks, pipes, valves, drains and other CPSTL properties. If any damages occur, contractor should repair by own cost according to the Engineer's or his representative's instructions.**				
1	**PRELIMINARIES**				
1.1	Allow for construction of temporary site office and stores (approx. 20 m^2) for the contractor's personnel.	Item	Allow		
1.2	Allow lump sum for cleaning the site before commencement of work, after completion of work and keep site in clean and tidy during construction.	Item	Allow		
1.3	Allow for laying tarpaulin of 12 m height to cover the shell area while sand blasting and painting by using scaffolding frame works and removing after completion of the job.	m^2	340		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
1.4	Construction of temporary access road by using laying Aggregate base course (ABC). Rate to include for demolishing of existing boundary wall from ground level (approximately 10 m long) and rebuilt the boundary wall to match the existing. Rate shall include for necessary demolishing works, removing of debris, concrete work, reinforcement, formwork, brick work, plastering and painting work.	Item	1		
1.5	Existing power cable (16 mm^2 4 core) clipped to the wall to be temporary remove and laying underground with suitable protection (only for temporary road area - 10 m long) and re fixed on wall after completion of tank and piping work. Rate shall include for necessary excavation, cable laying with additional cable joining (additional cable supplied by CPSTL), sand filling (300x400 mm trench - 10 m long) etc.	Item	1		
	Total Amount Carried to Summary				
2	**EXCAVATION, SOIL IMPROVEMENT & ASPHALT CONCREATE OF TANK FOUNDATION**				
2.1	Allow Sum for necessary dewatering and dealing with water during construction. (If required)	Item	1		
2.2	Excavation for foundation base to a depth not exceeding 1.5m commencing from ground level in any material except rock requiring blasting part return fill in and ram and disposal of surplus soil away from site.	m^3	40		
2.3	Supplying, Furnishing, placing & compacting graded aggregate base (ABC) material in 150 mm layers as specified. (Compacted volume)	m^3	30		
2.4	Supply of River Sand, filling, laying and compacting in tank bottom foundation (Measurements will be carried on compacted volume as directed by Engineer)	m^3	10		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
2.5	**Asphalt Concrete** Supply, laying and compacting of 100 mm thick Asphalt premix with 5% Bitumen (80% - 100% penetration grades) & River sand	m^2	26		
	Total Amount Carried to Summary				
3	**CONCRETE WORK OF TANK FOUNDATION**				
	75 mm thick lean concrete in 1:3:6 with maximum 25 mm aggregate - Grade 15				
3.1	75 mm thick screed.	m^3	8		
	Grade 25 Concrete				
3.2	Ring beam	m^3	7		
	Form work				
3.3	Ring beam side walls	m^2	50		
	Reinforcement				
	High Yield Steel				
3.4	16 mm dia. Tor steel bars	kg	150		
3.5	10 mm dia. Tor steel bars	kg	400		
	Total Amount Carried to Summary				
4	**BOWSER UNLOADING BAY & TANK FARM IMPROVEMENTS**				
4.1	**Catch Pit** Construction of catch pit - type CP 1. Rate to include for necessary excavation, concrete work, form work, reinforcement work and provide necessary voids for piping etc. as per the drawing.	nr	1		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
4.2	**Bowser Unloading Bay** Construction of bowser unloading bay. Rate to include for provide necessary voids for piping etc. as per the drawing.				
4.2.1	Excavation	m^3	24		
4.2.2	Grade 15 screed	m^3	48		
4.2.3	Grade 25 concrete -base, wall and curb	m^3	8.2		
4.2.4	Form work- bay and pit	m^2	17.8		
4.2.5	Reinforcement - 10 mm tor steel	kg	850.00		
4.3	**RCC Pedestals** Construction of RCC pedestal as per the drawing.				
4.3.1	Excavation	m^3	4.05		
4.3.2	Grade 15 screed	m^3	9.00		
4.3.3	Grade 25 concrete -base, wall	m^3	3.60		
4.3.4	Form work	m^2	23.40		
4.3.5	Reinforcement	kg	377.09		
4.3.6	Supply and fixing 37.5 HD GI pipe with non-shrinkage grout.	m	15		
4.4	**Tank Farm Access Stairway** Construction of tank farm access stairway as per the drawing. (Painting measured separately)				
4.4.1	Excavation	m^3	0.30		
4.4.2	Grade 15 screed	m^3	0.60		
4.4.3	Grade 25 concrete -base, wall	m^3	0.30		
4.4.4	Form work	m^2	5.0		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
4.4.5	Supply and fixing of necessary structural steel (angle iron, GI pipes, MS plates, etc)	Item	1		
	Total Amount Carried to Summary				
5	**RELOCATION OF THE TANK**				
	Cut, transport (from Zone 09 to Zone 04) and erection of Tank No. 51 at Kolonnawa Installation. Rate shall include for checking existing roundness, plumbness etc. and keeping adequate roundness, plumbness after installation of the tank at new location.				
	Fixing of reinforcement for protecting roundness of the tanks				
5.1.1	Supply of "H" beams 150x150x10 mm (approximately 48 m)	Item	1		
5.1.2	Fabricating and Fixing of "H" iron beam sections as per the approved method statement to retain the existing tank dimensions.	Item	1		
	Cutting / Gouging of Tanks				
5.1.3	Cutting of tanks as directed and as specification	Item	1		
	Transporting of Tank from Zone 9 to Zone 4				
5.1.4	Transportation of tank by using Low bed vehicle - trailer and prime mover with operator and etc.	Item	1		
	Installation of the Tank.				
5.1.5	Installation of the tank as per the drawing, specifications etc.	Item	1		
5.1.6	Supply, fixing, maintaining & dismantling of internal scaffolding for fixing angle brazing to keep roundness and cutting of shell plate-Tank removing stage	Item	1		
5.1.7	Supply, fixing, maintain & dismantling of external scaffolding for cutting of shell plate-Tank removing stage	Item	1		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
5.2	Hydro test as per the specifications.	Item	1		
5.3	Calibration of the tank including supply of 3 copies of calibration reports and soft copy in the form of Excel spread sheet.	Item	1		
5.4	Installation & testing of the earthling system.	Item	1		
5.5	Radiography test for welding joints of cargo piping and tank.	Item	1		
	Total Amount Carried to Summary				
6	**EXTENSION OF THE EXISTING FUEL OIL PIPE FACILITY**				
6.1.1	Supply of 6" dia. Carbon steel pipe SCH 40 (approximately 96m) with 6" dia. 30 nos. flanges, 2 nos. 90 bends, 4 nos. 45 bends and necessary gasket and nut and bolts etc. as per specifications.	Item	1		
6.1.2	Fabrication and laying of 6" pipe SCH 40 with 30 nos. flanges, 2 nos. 90 bends, 4 nos. 45 bends and necessary gasket and nut and bolts as directed.	m	96		
6.2.1	Supply of 6" carbon steel gate valves with necessary bolt and nut and gaskets as directed.	nr	6		
6.2.2	Fixing of 6" gate valves with necessary bolt and nut and gaskets as directed.	nr	6		
6.3.1	Supply of 6" non return valve with necessary bolt and nut and gaskets as directed.	nr	1		
6.3.2	Fixing of 6" non return valve with necessary bolt and nut and gaskets as directed.	nr	1		
6.4.1	Supply of 6" filter with necessary bolt and nut and gaskets as directed.	nr	1		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
6.4.2	Fixing of 6" filter with necessary bolt and nut and gaskets as directed.	nr	1		
6.5.1	Supply of 12" x 6" eccentric reducer	nr	1		
6.5.2	Fixing of 12" x 6" eccentric reducer	nr	1		
6.6.1	Supply of 8" pipe SCH 40 with 12 nos. flanges, 2 nos. 90 bends and necessary gasket and nut and bolts as directed.	Item	1		
6.6.2	Fabrication and laying of 8" pipe SCH 40 with 12 nos. flanges, 2 nos. 90 bends and necessary gasket and nut and bolts as directed.	m	74		
6.7.1	Supply of 8" gate valves with necessary bolt and nut and gaskets as directed.	nr	3		
6.7.2	Fixing of 8" gate valves with necessary bolt and nut and gaskets as directed.	nr	3		
6.8.1	Supply of 10" pipe SCH 40 with 26 nos. flanges, 4 nos. 90 bends and 2 nos. 45 bends necessary gaskets and nut and bolts as directed.	Item	1		
6.8.2	Fabrication and laying of 10" pipe SCH 40 with 26 nos. flanges, 4 nos. 90 bends and 2 nos. 45 bends necessary gasket and nut and bolts as directed.	m	91		
6.9.1	Supply and fixing of 12" x 10" eccentric reducer	nr	1		
6.9.2	Fixing of 12" x 10" eccentric reducer	nr	1		
6.10.1	Supply and fixing of 10" gate valves with necessary bolt and nut and gaskets as directed.	nr	5		
6.10.2	Fixing of 10" gate valve with necessary bolt and nut and gaskets as directed.	nr	5		
6.11.1	Supply of 12" dia. 8 nos. flanges, 1 no 90 bends and necessary gasket and nut and bolts as directed (12" dia. SCH 40 c/s pipes supplied by CPSTL).	Item	1		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
6.11.2	Fabrication and laying of 12" pipe SCH 40 with 8 nos. flanges, 1 no 90 bends and necessary gasket and nut and bolts as directed.	m	114		
6.12.1	Supply of 12" gate valve with necessary bolt and nut and gaskets as directed.	nr	2		
6.12.2	Fixing of 12" gate valve with necessary bolt and nut and gaskets as directed.	nr	2		
6.13	Supply fabrication and laying of 8" pipe (SCH 40) (approximately 18 m) fire line near temporary access road with disconnecting 8" line and connected and rerouting as per drawing with 04 nos. flanges, 4 nos. 90 bends and necessary gasket and nut and bolts as directed. Rate shall include for re connected the fire line after completion of construction work of the tank.				
6.13.1	Excavation for fire pipe laying	m^3	18		
6.13.2	Back filling and compaction for fire pipe laying	m^3	18		
6.13.3	Supply of 8" pipe SCH 40 with 4 nos. flanges, 4 nos. 90 bends and necessary gasket and nut and bolts as directed.	Item	1		
6.13.4	Fabrication and laying of 8" pipe SCH 40 with 4 nos. flanges, 4 nos. 90 bends and necessary gasket and nut and bolts as directed.	m	18		
6.14.1	Supply of 3" pipe (SCH 40) sprinkler line from main fire line to tank bottom valve as per drawing with 08 nos. flanges, 4 nos. 90 bends and necessary gasket and nut and bolts as directed.	Item	1		
6.14.2	Fabrication and laying of 3" pipe (SCH 40) sprinkler line from main fire line to tank bottom valve as per drawing with 08 nos. flanges, 4 nos. 90 bends and necessary gasket and nut and bolts as directed. Rate to including for shifting fire monitor.	m	10		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
6.15	Hydrostatic test of all pipes as per applicable standards - (All necessary materials and equipment's to be supply by the contractor)	Item	1		
	Total Amount Carried to Summary				
7	**PAINTING OF THE TANK & PIPING.**				
7.1.1	Supply of Paints for painting of tank bottom plate interior, internal pipes, and 1 m height of bottom most shell (approximate area 60 m^2)	Item	1		
7.1.2	Grit/ Sand blast cleaning and Painting of tank bottom plate interior, internal pipes, and 1 m height of bottom most shell	m^2	60		
7.2.1	Supply of Paints for painting of the tank bottom plate under side (exterior) (approximate area 30 m^2)	Item	1		
7.2.2	Grit/ Sand blast cleaning and Painting of the tank bottom plate under side (exterior)	m^2	30		
7.3.1	Supply of Paints for painting of exterior of roof plates and roof accessories (exterior) (approximate area 31 m^2)	Item	1		
7.3.2	Grit/ Sand blasting and Painting of exterior of roof plates and roof accessories	m^2	31		
7.4.1	Supply of Paints for painting of shell exterior with accessories. (approximate area 180 m^2)	Item	1		
7.4.2	Grit/ Sand blast cleaning and Painting of shell exterior with accessories.	m^2	180		
7.5.1	Supply of Paints for painting of stairway with handrail, structure and crown handrail with attachments	Item	1		
7.5.2	Grit/ Sand blast cleaning and Painting of stairway with handrail, structure and crown handrail with attachments	m^2	36		

Item	Description	Unit	Qty	Rate	Amount
				Rs. Cts.	Rs. Cts.
7.6.1	Supply of Paints for tank farm access stairs, hydrant operating flat form with attachments.	Item	1		
7.6.2	Grit/ Sand blast cleaning and Painting of tank farm access stairs, hydrant operating flat form with attachments.	m^2	44		
7.7.1	Supply of paints for sprinkler line.	Item	1		
7.7.2	Grit/ Sand blast cleaning and Painting of water drencher system from the newly connected point.	m^2	10		
	Painting of Pipelines.				
7.8.1	Supply of Paints for tank farm pipelines.	Item	1		
7.8.2	Grit/ Sand blast cleaning and Painting of tank farm pipelines.	m^2	200		
	Total amount carried to summary				

SUMMARY OF BOQ No: E/09/2023

	DESCRIPTION	AMOUNT (Rs)
1	PRELIMINARIES	
2	EXCAVATION, FILLING WORK & ASPHALT WORK	
3	CONCRETE WORK OF TANK FOUNDATION	
4	BOWSER UNLOADING BAY & TANK FARM IMPROVEMENTS	
5	RELOCATION OF THE TANK	
6	EXTENSION OF THE EXISTING FUEL OIL PIPE FACILITY	
7	PAINTING OF THE TANK & PIPING.	
	SUB TOTAL AMOUNT I	
	Discount if any	
	SUB TOTAL AMOUNT II	
	SSCL (2.5%) (If Applicable)	
	SUB TOTAL AMOUNT III- WITH SSCL TAX [TOTAL CARRIED TO "FORM OF BID"]	
	VAT. (18%)	
	TOTAL AMOUNT WITH VAT	

VAT Registration No. : - ……

Total amount in words: - ……
…….. ……..……..……..……..……

Name of tenderer :- ……..…….....

Address:- ….……...……..……
……..……..

Contact No: ……

(If Tender is not registered for VAT he should furnish a letter obtained from the commissioner of Inland Revenue Department certifying that the Company has not been registered for VAT)

…….. ……
Signature of Tenderer Date

SECTION – 8

DRAWINGS

1. Details of Tank Marking (1839)
2. Layout Plan & Demolition Plan (Dwg. No. 1871-1)
3. General Arrangement & Detail (Dwg. No. 1871-2)
4. Bowser Unloading Bay Detail (Dwg. No. 1871-3)
5. Pipe Pedestal Detail (Dwg. No. 1871 - 4)
6. Tank Farm Access Stair Detail (Dwg. No. 1871-5)
7. Proposed Piping Layout Plan & Detail (Dwg. No. 1871-6)

SECTION – 9

STANDARD FORMS (BID)

FORM OF BID SECURITY

[this Guarantee form shall be filled in accordance with the instructions indicated in brackets]
---------- *[insert issuing agency's name, and address of issuing branch or office]*

Beneficiary: Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa

Date: ---------- *[insert (by issuing agency) date]*

BID GUARANTEE No.: ---------- *[insert (by issuing agency) number]*
We have been informed that ---------- *[insert (by issuing agency) name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its bid dated ----------*[insert (by issuing agency) date]* (hereinafter called "the Bid") for the ……. of *[insert name of Contract]* under Invitation for Bids No. ---------- *[insert IFB number]* ("the IFB").

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.
At the request of the Bidder, we ---------- *[insert name of issuing agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ---------- *[insert amount in figures]* ---------- *[insert amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

(a) has withdrawn its Bid during the period of bid validity specified; or

(b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or

(c) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of the successful bidder furnishing the performance security, otherwise it will remain in force up to ---------- *(insert date)*
Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

_____
[signature(s) of authorized representative(s)]

CHECK LIST FOR BIDDERS

Bidders are advised to fill the following table.

ITEM	ITB Clause	YES (tick)	REFERENCE
Form of Bid			
Addressed to the Employer?	18		
Completed?	18		
Signed?	18		
Bid Securing Declaration Form (if required)			
Properly filled and signed	16		
Bid Security (if required)			
Address to the Employer?	16		
Format as required?	16		
Issuing Agency as specified?	16		
Amount as requested?	16		
Validity 28 days beyond the validity of Bid?	16		
Qualification Information			
All relevant information completed?	4		
Signed?	4		
Addendum			
Contents of the addendum (if any) taken into account?	10		
Bid package			
All the documents given in ITB Clause 12 enclosed in the original and copy?	12		
ITB Clause 19 followed before sealing the Bid package?	19		