DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

MINISTRY OF ENERGY

CEYLON PETROLEUM STORAGE TERMINALS LIMITED

BIDDING DOCUMENT

FOR

REPAIRS TO TANK NO. 34
AT KOLONNAWA INSTALLATION

CONTRACT NO: KPR/22 /2024

Employer:

Ceylon Petroleum Storage Terminals Limited,
Oil Installation,
Kolonnawa,
Wellampitiya,
Sri Lanka.

Issued to: …….

Issued by: ……..…….

Date: ……

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Invitation for Bids (IFB)

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF POWER & ENERGY

CEYLON PETROLEUM STORAGE TERMINALS LIMITED

REPAIRS TO TANK NO. 34 AT KOLONNAWA INSTALLATION

CONTRACT NO: KPR/22/2024

INTERNATIONAL COMPETITIVE BIDDING

1. The Chairman, Ministry Procurement Committee (MPC) on behalf of the Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa, Wellampitiya, Sri Lanka now invites sealed bids from eligible and qualified bidders for "**Repairs to Tank No. 34 at Kolonnawa Installation"** as described below and estimated to a cost of LKR 199.42 million.
2. The work consist of procurement of required materials and repairs to Tank No. 34 including construction of a new RCC ring beam foundation after soil improvement, construction of proposed RCC catch pits, drains, replacement of the existing tank bottom, removal of 125 mm strip of bottom most shell course, fabrication and erection of new shell accessories, painting of the tank after application of leak proof paint along the reverted joints and calibration of the tank. **The construction period is 300 Days**.
3. Bidding will be conducted through **International Competitive Bidding** Procedure.
4. To be eligible for contract award, the successful bidder shall not have been blacklisted and shall meet the following requirements.

   4.1 For domestic Bidders, **CIDA registration is required as follows;**

Specialty	**Grade**	**Party**
Heavy Steel Fabrication	EM1	Bidder or Partner in Charge of Joint Venture (JV)

   4.2 For foreign bidders, **CIDA registration is not required at the Bid submission**, but additional experience as per ITB of bidding document.

   In case of foreign bidder is selected for contract award, particular bidder shall obtain **temporary registration as a foreign contractor under Construction Industry Development Act No. 33 of 2014 and other required registrations under the laws of Sri Lanka.**

5. Qualification requirements to qualify for contract award include

   5.1 Average annual volume of construction work performed in last five years shall be at least **LKR 360 million or equivalent amount in foreign currency.**

   5.2 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, until the project is taken over by the CPSTL, shall be not less than **LKR 60 million or equivalent amount in foreign currency.**

   Bidder/Partner in Charge of JV should have experience as a prime contractor in the construction of a nature and complexity similar to the Works Construction of new 5,000 m^3 or higher capacity steel, vertical, above ground storage tank as per API Standard 650 or two major repairs to 10,000 m^3 or higher capacity petroleum storage

tanks including replacement of entire bottom conforms to API 653 with construction/rectification of RCC foundation. (to comply with this requirement, works cited should be at least 70% complete in the case of ongoing projects).

At least one new tank or two tank repair projects for domestic bidder/ domestic partner of JV/ domestic JV while two new tanks or four tank repair projects for foreign bidder/foreign partner of JV during last ten years.

6. 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 Lanka Rupees **Five Million (LKR 5,000,000).**

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

7. Interested bidders may obtain further information from the Manager Procurement of the Ceylon Petroleum Storage Terminals Limited, (Tele Phone+94 112572156, 2572155 and Tele Fax: +94 11 2074299 and Email: procure@cpstl.lk) and inspect the bidding documents free of charge during any working days from 0900 hrs to 1400 hrs. at the address given below. However, the bidders can inspect the bidding document (excluding drawings) from CPSTL website; www.cpstl.lk .

8. A complete set of Bidding Documents in English language may be purchased by interested bidders on the submission of a written application to the address below from **18.03.2024** until **29.04.2024** from 0900 hrs. to 1400 hrs. on any working day upon cash payment of a non-refundable fee of LKR 35,000.00 or remittance of USD 120.20 directly to the CPSTL bank account, details given below. All bank charges (foreign & local) shall be borne by bidder and proof of remittance (copy of TT) is required along with a written on or before **22.04. 2024** to issue the bidding document by courier service. No liability will be borne by CPSTL on loss or late delivery. Bidding Document (excluding drawings) available in the web is only for viewing purpose and Bids shall be submitted using Hard Copy of the Bidding Document purchased from CPSTL.

Account Holder	:	Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa, Wellampitiya, Sri Lanka.
Account No	**:**	**004-1-001-9-0208672**
Swift	:	PSBKLKLX
Bank Branch	:	People's Bank, Corporate Banking Division, No. 91, All Ceylon Hindu Congress (ACHC) Building, Sir Chittampalam A. Gardiner Mawatha. Colombo 02, Sri Lanka.

9. Bids shall be delivered in duplicate to the address given below on or before **1400 hrs.** Local time (+ 5.30 GMT) **30.04.2024**. Late bids will be rejected. Bids will be opened soon after closing in the presence of the bidders' representatives who choose to attend.

10. 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 **30.04.2024**, subject to following

conditions.

i. Submission of the bid via email is at own discretion of the bidder.

ii. The title and the closing date of the tender shall be indicated as the subject of the email.

iii. 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.,).

iv. 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.

v. However, the original bids will be obtained only for the filing purpose, not for verification against the e-bid

11. Bids shall be valid up to **30.07.2024**

12. All bids shall be accompanied by a Bid Security. Such security shall be,

    A refundable cash deposit or bank draft of LKR 1,000,000.00 (Sri Lanka Rupees One Million only) or USD 3,100.00 (US Dollars Three Thousand One Hundred Only).

    Or

    In the form of bank guarantee of LKR 2,000,000.00 (Sri Lanka Rupees Two Million only) or USD 6,200.00 (US Dollars Six Thousand Two Hundred Only).

    Bid Security shall be valid up to **27.08.2024**

13. A pre-bid meeting will be held at 1400 hrs. Sri Lanka local time (GMT+5.30) hrs on **Monday 01st April 2024** at the office of Deputy General Manager (E& SS), Oil Installation, Kolonnawa. Sri Lanka.

    In case, the bidders are unable to participate the pre bid meeting, they can participate via video conferencing method. Interested parties who wish to participate in the Pre bid meeting shall send their request to email procure@cpstl.lk at or before 1400 hrs. Sri Lanka local time (GMT+5.30) on **Thursday 28th March 2024**.

    The address referred to above is

    The Chairman, Ministry Procurement Committee,
    C/o Manager Procurement,
    Ceylon Petroleum Storage Terminals Limited,
    Procurement Function, New Building,
    Oil Installation, Kolonnawa, Wellampitiya,
    Sri Lanka.
    Postal Code : 10600
    Telephone :+94 11 2572156, +94 11 2572155 Facimile :+94112074299
    E-mail : procure@cpstl.lk

SECTION 1

INSTRUCTIONS TO BIDDERS

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 - Major Contracts. CIDA Publication No. CIDA /SBD/02, Second Edition, January 2007, published by the 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-2 of the Bidding Document.

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

SECTION – 2

BIDDING DATA

This section shall be read in conjunction with Section I – Instructions to Bidders, and is intended to provide specific information in relation to corresponding clauses in Section I. Whenever there is a discrepancy, the provisions in Section 2 – Bidding Data shall supersede these provided in the Section I - Instructions to Bidders.

BIDDING DATA

Instructions to Bidders Clause Reference

1.1 Employer's Name and Address:

Ceylon Petroleum Storage Terminals Limited,
Oil Installation,
Kolonnawa,
Wellampitiya,
Sri Lanka.

1.1 Scope of Works

Repairs to Tank No. 34 at Kolonnawa Installation

The work consist of procurement of required materials and repairs to Tank No. 34 including construction of a new RCC ring beam foundation after soil improvement, construction of proposed RCC catch pits, drains, replacement of the existing tank bottom, removal of 125 mm strip of bottom most shell course, fabrication and erection of new shell accessories, painting of the tank after application of leak proof paint along the reverted joints and calibration of the tank.

1.2 Time for Completion

The Time for Completion for the whole of works shall be **calendar 300 Days.**

2.1 Source of funds

The source of funds is Ceylon Petroleum Storage Terminals Limited.

4.1 Qualification Information

The following information shall be provided in Section 9 - Schedules:

- CIDA registration (for domestic bidders only)
  - Registration number
  - Grade
  - Specialty
  - Expiry date
- Copy of Business Registration of the Company/ies (if a foreign company, Business registration issued by the relevant country)
- A copy of VAT registration (if applicable)
- Form PCA 03 (if applicable)
- Construction program
- Legal status (Sole proprietor, Partnership, Company etc.)
- Authentication for signatory in the form of Power of Attorney (Specifically for this Bid)
- Total monetary value of construction work performed for each of the last five years
- Experience in works of a similar nature and size for each of the last ten years
- Construction equipment
- Staffing
- Work plan, method statements for Construction of RCC Ring Beam

and Tank Bottom Replacement, QA/QC procedures and HSE policy. (In the work plan duration of the delivery of Carbon Steel Plates shall be maximum 150 days from the date of award).

- Details of the suppliers and manufactures (Steel Plates, Paints, Valves, etc)

4.1 (c) Not applicable

4.2 To qualify for the award of the Contract, bidder shall meet the following minimum qualifying criteria specified under 4.2 (a), 4.2 (b), 4.2 (c), 4.2 (d), 4.2 (e) and 4.2 (f) of "Bidding Data". **Any bidder who does not submit required details in the requested manner will be liable for rejection of his bid without requesting any clarification.**

4.2(a) CIDA registration required

(i) For domestic Bidders :- CIDA registration is required as follows;

Specialty	**Grade**	**Party**
Heavy Steel Fabrication	EM1	Bidder or Partner in Charge of Joint Venture (JV)

(ii) For foreign bidders, CIDA registration is not required at the Bid submission, but additional experience is required as per 4.2 (c).

In case of a foreign bidder is selected for contract award, particular bidder **shall obtain temporary registration as a foreign contractor under Construction Industry Development Act No. 33 of 2014 and other required registrations under the laws of Sri Lanka**.

4.2(b) **Average annual volume of construction work performed in last 5 years**

Average annual volume of construction work performed in last five years shall be at least **LKR 360 million or equivalent amount in foreign currency.** Details shall be entered in Schedule 2 of Section 9; "Schedules". Documentary evidence such as copies of audited financial statement/accounts **certified by an Attorney at Law** for the last five (05) years (2018/2019, 2019/2020, 2020/2021, 2021/2022 and 2022/2023 shall be submitted.

If any bidder's annual volume of construction work performed in year 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.

4.2(c) **Experience**

Bidder/Partner in Charge of JV should have experience as a prime contractor in the construction of a nature and complexity similar to the Works Construction of new 5,000 m^3 or higher capacity steel, vertical, above ground storage tank as per API Standard 650 or two major repairs to 10,000 m^3 or higher capacity petroleum storage tanks including replacement of entire bottom conforms to API 653 with construction/rectification of RCC foundation. (to comply with this requirement, works cited should be at least 70% complete in the case of ongoing projects).

At least one new tank or two tank repair projects for domestic bidder/ domestic partner of JV/ domestic JV while two new tanks or four tank repair projects for foreign bidder/foreign partner of JV during last ten years.

Details shall be entered in Schedule 4 of Section 9; "Schedules". Documentary proof (Copy of Purchase Order, performance certificate, completion certificate, agreement etc.) for successful completion of the work relating to experience shall be submitted with the offer. Documentary proof shall be certified by the Embassy/ Consular General Office or Foreign Ministry of the relevant country in which the project has been carried out.

The bidders shall have very clear documentary evidence in English Language as proof of above experience.

4.2(d) Essential equipment

Proposals for the timely acquisition (own, lease, hire, etc.) of the following minimum required essential equipment shall be entered in Schedule 5 of Section 9 "Schedules".

Bar bending machine, Plate Compactors, Scaffoldings, Excavator/JCB, Surveying Equipment, concrete breakers, compressors, Crane (50 ton /etc), Hydraulic jacks, welding generators, Sand/Grit blasting equipment etc.

4.2(e) Managerial and Engineering staff

Following minimum staff shall be available and deployed to the Contract. Details shall be entered in Schedule 6 of Section 9; "Schedules". The bidder shall produce documentary proof for availability of following staff and their detailed Bio-Data.

(i) Managerial:

a. One Project Manager, a Chartered Engineer with minimum 5 years' experience.

(ii) Engineering:

a. A Civil Engineer with B.Sc. (Eng) or equivalent with more than 4 years' experience in similar nature works should be assigned to the project full time basis at site during the foundation construction.

b. A Mechanical Engineer with B.Sc. (Eng) or equivalent with more than 4 years' experience and who is conversant with API Standard 653, API Standard 650 and other relevant standards and codes with experience of similar tank repair works should be assigned to the project full time basis.

c. A Welding Inspector with AWS Certification (Level II or above) or equivalent with more than 6 years' experience in similar tank fabrication works should be assigned to the project full time basis at site during tank repair.

This is the minimum requirement and the successful bidder shall assign all other necessary staff to enable compliance with all other contractual stipulations.

4.2(f) Liquid assets and /or credit facilities required

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, until the project is taken over by the CPSTL, shall be not less than **LKR 60 million or equivalent amount in foreign currency.**

4.2(g) Construction/Repair Method Statement

Contractor should submit proper construction method statement with bid.

5.2 One of the partners shall have the qualification requirement for 4.2 (a) and (c). The qualification for each of the partners of a joint venture shall be added together to determine the bidder's compliance with the minimum qualifying criteria of Sub-Clause 4.2 (b) and (f); however, for a joint venture to qualify, each of its partners must meet at least 25 percent of minimum criteria 4.2 (b), (c) and (f); and the partner in charge must satisfy at least 40 percent of those minimum criteria. Failure to comply with this requirement will result in rejection of the joint venture's Bid. Subcontractor's experience and resources will not be taken into account in determining the bidder's compliance with the qualifying criteria.

8 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, Wellampitiya (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. 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.

10.1 Clarification of Bidding Documents

Employer's address for clarification in bidding document is as below.

The Chairman, Ministry Procurement Committee,
C/o Manager Procurement,
Ceylon Petroleum Storage Terminals Limited,
Procurement Function, New Building,
Oil Installation, Kolonnawa, Wellampitiya,
Sri Lanka.
Postal Code : 10600

Telephone :+94 11 2572156, +94 11 2572155
Facimile :+94112074299
E-mail : procure@cpstl.lk

13 Documents comprising the Bid

The Bid submitted by the bidder shall comprise the following:

(A) Enclosed in the envelope marked as "ORIGINAL";

(a) Duly filled and signed Form of Bid (in the format indicated in section 7);
(b) Bid Security (in the format indicated in section 11);
(c) Power of attorney for the signatory to the Bid (Specifically for this Bid);
(d) Original of Form PCA 03 (if applicable)
(e) Section 2 - Bidding Data
(f) Section 4 - Contract Data
(g) Section 6 - Specifications;
(h) Section 8 - Priced Bill of Quantities;
(i) Section 9 - Duly filled Schedules;

(j) Section 10 - Drawing; and
(k) Detailed "Construction/Repair Procedure" of the tank including related procurement, construction, repairs, testing, commissioning and documentation such as catalogues, literature, write-ups to supplement with adequate information. Manufacture/supplier, country of origin, country of manufacture of plates, paints, pipes, fittings, flanges, valves, nozzles, other equipment shall be clearly mentioned.

(B) Enclosed in the envelope marked as "COPY"

(a) Duly filled and signed Form of Bid (in the format indicated in section 7);
(b) Section 8 - Priced Bill of Quantities;
(c) Section 9 - Duly filled Schedules;
(d) Detailed "Construction/Repair Procedure" of the tank including related procurement, construction, repairs, testing, commissioning and documentation such as catalogues, literature, write-ups to supplement with adequate information. Manufacture/supplier, country of origin, country of manufacture of plates, paints, pipes, fittings, flanges, valves, nozzles, other equipment shall be clearly mentioned.

14.3 VAT component shall not be included in the rates.

If bidder is registered for VAT, the bidder shall indicate the amount of VAT claimed separately at the end of the Bill of Quantities, in addition to the net value of the bid, along with VAT registration number. The amount written on the Form of bid shall be without VAT.

14.4 Adjustments for change in cost

The Contract **is subjected** to price adjustment.

15.1 Currency of Bid

In order to minimize the risk of fluctuation in foreign currency exchange rate, the bidders are allowed to bid partially in USD. Hence, the Bid shall be quoted either in Sri Lankan Rupees (LKR) or in Mixed Currencies (LKR + USD).

In case of mixed currencies, USD component shall be limited to 25% of the total Bid Price and the bidders are allowed to bid in USD only for importation of material, accessories, equipment & machinery and payment of remuneration for expatriates (foreign) etc.

If any bid has been quoted without considering foreign currency component limitation of 25%, such bidder will be requested to adjust his foreign currency component as per the limitation without changing the total bid price. If the bidder does not agree for such adjustment, his bid will be rejected.

For evaluation and comparison of Bids under Sub-Clause 30.2, rates and prices quoted in USD by the bidders will be converted to Sri Lanka Rupees using "Indicative Exchange Rate" published by Central Bank of Sri Lanka, on the date 28 Days prior to date of closing of Bids.

16.1 Period of Bid validity:

The Bid shall be valid up to **30.07.2024.**

17.1 The amount of Bid Security

A refundable cash deposit or bank draft of LKR 1,000,000.00 (Sri Lanka Rupees One Million only) or USD 3,100.00 (US Dollars Three Thousand One Hundred Only).

Or

In the form of bank guarantee of LKR 2,000,000.00 (Sri Lanka Rupees Two Million only) or USD 6,200.00 (US Dollars Six Thousand Two Hundred Only).

17.2 Validity of Bid Security

The Bid Security shall be valid up to **27.08.2024** as per attached specified format.

Securities and Guarantees shall be irrevocable and unconditionally en-cashable upon the first written request from the Procuring Entity.

The bid securities issued by the following agencies are acceptable;

- a commercial bank operating in Sri Lanka approved by Central Bank of Sri Lanka,
- a bank based in another country but the guarantee "backed and confirmed" by a bank in Sri Lanka with a valid licence issued by the monetary board of Sri Lanka.

19.1 Pre-Bid meeting

A pre-bid meeting will be held at 1400 hrs. Sri Lanka local time (GMT+5.30) hrs on **Monday 01st April 2024** at the office of Deputy General Manager (E& SS), Oil Installation, Kolonnawa. Sri Lanka.

In case, the bidders are unable to participate the pre bid meeting, they can participate via video conferencing method. Interested parties who wish to participate in the Pre bid meeting shall send their request to email procure@cpstl.lk at or before 1400 hrs. Sri Lanka local time (GMT+5.30) on **Thursday 28th March 2024**.

All costs incurred in attending to this pre bid meeting and site visit will have to be borne by the Bidder.

21.2 (a) Employer's Address for Bid submission

Employer's address for the purpose of bid submission is the Office of the

The Chairman, Ministry Procurement Committee,
C/o Manager Procurement,
Ceylon Petroleum Storage Terminals Limited,
Procurement Function, New Building,
Oil Installation, Kolonnawa, Wellampitiya,
Sri Lanka.
Postal Code : 10600

21.2 (b) Identification number of Contract

Identification Numbers of the Contract: **KPR/22/2024**

22.1 Deadline for submission of Bids

Deadline for submission of Bids: **1400 hrs. Local time (+ 5.30 GMT) 30.04.2024.**

25.1 Bid opening

Venue: **Office of Manager Procurement,**
Ceylon Petroleum Storage Terminals Limited,
Procurement Function, New Building,
Oil Installation, Kolonnawa,

Wellampitiya,
Sri Lanka.

Time: **1400 hrs. Local time (+ 5.30 GMT)**

Date: **30.04.2024**

31.1 **Preference for Domestic Bidders**

Preference for domestic bidders is applicable as per Government Procurement Guideline Clause No. 7.9.5 and Public Finance Circular No 442.

Domestic Contractors are eligible for a 15% margin of preference in the comparison of their Bids with those of bidders who do not qualify for the preference. To eligible for domestic preference the bidders & joint ventures shall meet the following criteria:

(a) For an **individual/sole proprietorship** the bidder shall be a Sri Lankan;

(b) For **partnerships** more than fifty percent (50%) of the members of the partnership, shall be Sri Lankans;

(c) For an **individual firm** –

(i) such firms shall be registered in Sri Lanka;

(ii) should have more than fifty percent (50%) ownership by Sri Lankans; and

(iii) should not sub contract more than ten percent (10%) of the contract price, excluding provisional sums to foreign contractors.

(d) The application of the margin of preference for a **joint venture of domestic firms:**

(i) Would be limited only to joint ventures of individual firms who meet the criteria stipulated in (c) (i) & (ii) above;

(ii) The joint venture should be registered in Sri Lanka; and

(iii) Should not sub contract more than ten percent (10%) of the contract price, excluding provisional sums to foreign contractors.

Domestic Bidders shall submit the documentary proof for above requirements under Schedule -1 “General Information” in order to consider for domestic preference.

The following procedure will be used to apply the margin of preference:

Responsive bids will be classified into the following groups:

(i) Group A : Bids offered by domestic bidders ; and

(ii) Group B : all other Bids

For the purpose of evaluation and comparison of Bids only, an amount equal to 15% of the evaluated bid prices determined in accordance with Sub- Clause 30.2 will be added to all Bids classified in Group B.

32 **Award of Contract**

After evaluation of Bids in accordance with the procedure described under Clause 28, 29, 30 and 31, the Employer will inform to all the bidders in writing the selection of the successful bidder and the intention of contract award to such bidder. The unsuccessful bidders if they so wish, within one week of such notice may make representation to the Secretary to the Line Ministry at the address given below. Such representation shall be self-contained to enable the Secretary to arrive at a conclusion and a cash deposit to amount given below shall be made. The Employer may request the bidder who had made representation to submit further evidence during the investigation of such representation. The cash deposit will be forfeited unless the Employer has changed the original contract award decision in favour of the bidder who has made such representation.

Address: The Secretary,
Ministry of Power and Energy,
No. 80,
Sir Ernest de Silva Mawatha,
Colombo 07.

Cash Deposit: Si Lanken Rupees 25,000/=

35.1 **Amount of Performance Security**

Performance Security acceptable to the Employer given in the Form for Performance Security given in the bidding document shall be a Guarantee obtained from;

- a commercial bank operating in Sri Lanka approved by Central Bank of Sri Lanka,
- a bank based in another country but the guarantee "backed and confirmed" by a bank in Sri Lanka bank in Sri Lanka with a valid licence issued by the monetary board of Sri Lanka. (Local bank and the bank based in another country shall jointly bear the responsibility in case of encashment of the security)

The amount of Performance Security is **5%** of the Initial Contract Price, in the currencies and proportions in which the Contract Price is payable.

The Performance Security shall be valid until 28 days beyond the expected completion date of Defects Liability Period.

37 **Adjudicator**

The Adjudicator proposed by the Employer is an Adjudicator selected from the pool of Adjudicators of Construction Industry Development Authority **(CIDA).**

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

SECTION – 3
CONDITIONS OF CONTRACT

Conditions of Contract shall be read in conjunction with the Section 4 – Contract Data, which shall take precedence over the Conditions of Contract.

CONDITIONS OF CONTRACT

Conditions of Contract that will be applicable for this Contract is that given in section- 3 of the Standard Bidding Document for Procurement of Works- Major Contracts, CIDA Publication No. CIDA/SBD/02, Second Edition, January 2007, Addendum 01 issued in October 2009, published by the Construction Industry Development Authority (CIDA) "Savsiripaya" 123, Wijerama Mawatha, Colombo 7.

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

Conditions of Contract shall be read in conjunction with the Section 4 – Contract Data, which shall take precedence over the Conditions of Contract.

SECTION – 4

CONTRACT DATA

This section shall be read in conjunction with Section 3 – Condition of Contract, and is intended to provide specific information in relation to corresponding clauses in Section 3. Whenever there is a discrepancy, the provisions in Section 4 – Contact Data shall supersede these provided in the Section 3 - Condition of Contract.

CONTRACT DATA

Conditions of Contract Clause Number/s			
1.1.2.2 & 1.3	**Employer's Name and Address**	**Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa, Wellampitiya, Sri Lanka.**	
1.3	**Contractor's Name & Address:**	Name: Address:	…… …… …… ……
1.1.2.4 & 1.3	**Engineer's name & Address**	Name: Address:	Engineering Manager Ceylon Petroleum Storage Terminals Limited, Engineering Function, Oil Installation, Kolonnawa, Wellampitiya, Sri Lanka.
1.1.3.3	**Time for Completion of the Works**	Time for completion of the whole works shall be **Three Hundred (300) calendar Days**	
1.1.3.7	**Defects Notification Period**	Defects Notification Period is **One Hundred Eighty (180) Days**	
2.1	**Right of access to the Site**	14 days after Letter of Acceptance	
4.2.1	**Amount of Performance Security**	The amount of Performance Security is **5%** of the Initial Contract Price, in the currencies and proportions in which the Contract Price is payable. Performance Security acceptable to the Employer given in the Form for Performance Security given in the bidding document shall be a Guarantee obtained from; • a commercial bank operating in Sri Lanka approved by Central Bank of Sri Lanka, • a bank based in another country but the guarantee "backed and confirmed" by a bank in Sri Lanka Lanka with a valid licence issued by the monetary board of Sri Lanka. (Local bank and the bank based in another country shall jointly bear the responsibility in case of encashment of the security)	

The Performance Security shall be valid until 28 days beyond the expected completion date of Defects Liability Period.

4.8 **Safety Procedure**

Special Safety Conditions

i. Fire barriers to be erected and Fire blanket are to be laid before starting hot work at site wherever required. Requirement of fire barriers should be obtained from the fire and safety department and approval to be obtained after erection.

ii. The work/workers should conform to the Fire & Safety rules and regulations of CPSTL and they should wear safety belts when working at high elevations.

iii. Before work of any nature is commenced in any area it is necessary to obtain excavation permits, safety certificates and if the work involves sparks or flames a hot work permit from the Fire & Safety Section of the CPSTL, Kolonnawa depending on nature of work. All precautions stipulated in these documents must be adhered by the contractor and his employees. If the work cannot be completed in the period for which these documents are valid, the work shall be discontinued until the documents have been renewed.

iv. The CPSTL Kolonnawa Installation is security-restricted area and all contractor's personnel shall abide by the security regulations prevailing and those which might be enforced as and when necessary due to changed circumstances.

v. All contractor's personnel and their vehicles will be required to obtain gate passes before entering in to the CPSTL Kolonnawa Installation. Safety clearances to be obtained before entering to the tank farm.

vi. All contractor's personnel should possess valid police clearance certificate (Police Report) to obtain gate passes.

vii. The contractor shall, except if and so far as the contract provides otherwise, indemnify the CPSTL against all losses and claims in respect of injuries or damage to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution of the works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation or damages for or with respect to:

   a. the permanent use or occupation of land by the works or any part thereof;

   b. the right of the CPSTL to execute the works or any part thereof on, over, under, in or through any land;

   c. injuries or damage to persons or property resulting from any act or neglect of the CPSTL, his agent, servants or other Contractors, not being employed

by the Contractor, or for or in respect of any claims proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the Contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors for the damage or injury.

6.4 **Working Hours**

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

ii. In the work programme, contractor can consider Saturday and period from 1630 hrs to 1800 hrs on weekdays as a working period, for which the contractor is required to obtain prior permission since the offices are normally closed on Saturdays and after hours.

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

Provided always that provision of above (iii) shall not be applicable in case of any work which is customary to carry out, outside normal working hours.

8.7 **Liquidated damages for the Works** **0.2%** of the Initial Contract Price per day

8.7 **Maximum amount of liquidated damages** **10%** of the Initial Contract Price

12.2 (b) **Method of Measurement** Sri Lanka Standard 573: 1999 UDC 69(08374)

13.4(b) **Percentage for Adjustment of Provisional Sums** Not applicable

13.7 **Weightings of Inputs**

No.	CIDA No.	Name of Input	Percentage
1	L1	Skilled Labour	10.24
2	L3	Unskilled Labour	7.16
3	M39	Ready mixed Concrete	4.77
4	M8	Sand	21.20
5	M13	Reinforcement Steel	14.63
6	M21	Formwork Timber	0.58
7	P1	Small Equipment	14.07
8	P2	Heavy Equipment	5.06
9	P3	Fuel	6.50
10	M30	Bitumen 80/100 (Bulk Form)	5.80%
			90.00

		Nonadjustable elements shall be A1, A2, A3, A4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18 & C19 Disregarded elements shall be C30, C38, C40, C41, C42
14.2	**Total Advance Payment**	20 % of the Initial Contract Price excluding Provisional Sums & Contingencies. The advance payment securities issued by the following agencies are acceptable; • a commercial bank operating in Sri Lanka approved by Central Bank of Sri Lanka, • a bank based in another country but the guarantee "backed and confirmed" by a bank in Sri Lanka with a valid licence issued by the monetary board of Sri Lanka. (Local bank and the bank based in another country shall jointly bear the responsibility in case of encashment of the security)
14.2	**Number and timing of instalment for Advance Payment**	20% of Initial Contract Price, will be paid in two equal instalments. **Stage I-** The first ten percent (10%) of Initial Contract Price will be paid within 14 days from receipt of both Performance Security and Advance Payment Guarantee as required under clause 4.2 and 14.2 respectively. **Stage II-** Balance ten percent (10%) of Initial Contract Price will be paid after successfully mobilization at the site after receipt of mobilization Advance Payment Guarantee. For calculate the Initial Contract Price, the foreign currency component will be converted to Sri Lanka Rupees using "Average of the Selling & Buying Exchange Rates" published by Central Bank of Sri Lanka, on the date of the invoice of performance security
14.3(c)	**Percentage of Retention**	**10%** of certified value of works
14.3(c)	**Limit of Retention**	**5**% of the Initial Contract Price
14.4	**Plant & Material Intended for the works**	Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3 (Application for Interim Payment Certificate), an amount equivalent to 80% of the invoiced value of Plant and Materials which have been delivered to the Site for incorporation in the Permanent Works.

14.5	**Minimum amount of interim payment certificates**	LKR amount of 10 million or USD 3,100.
14.6	**Payment**	To be eligible for foreign currency payment, bidders are required to submit valid justification to that effect such as Import of materials, accessories, plant, equipment and machinery and payment of remuneration for expatriates(foreign) etc., would for instance be deemed to be valid justifications. All payments to local bidders will be made only in LKR. The payments will be made by converting the USD component into LKR using the "Average of the Buying & Selling Exchange rate" published by Central Bank of Sri Lanka (CBSL) at the date of CUSDEC (Customs Declaration) form for imported materials and the invoice date for Foreign Services obtained.
14.8	**Alternative method for Payment of Retention**	Not applicable
18.1 (a)	**Insurance for Works**	For an amount not less than 115% of Initial Contract Price.
18.1 (b)	**Insurance for Contractor's Equipment**	Contractor's responsibility
18.2	**Third Party Insurance (including Employer's Property)**	Insurance cover to the amount of LKR 100 Million for the entire period of construction work. The contractor shall take special measures to safeguard the adjacent storage tanks and allied facilities at the site.
18.3	**Insurance for Contractor's Personnel**	A copy of insurance policy for the workmen of the contractor as per the Workmen Compensation Act shall be forwarded to CPSTL prior to commencement of the work.

SECTION 5

STANDARD FORMS (CONTRACT)

- **FORM OF LETTER OF ACCEPTANCE**
- **FORM OF AGREEMENT**
- **FORM OF PERFORMANCE SECURITY**
- **FORM OF ADVANCE PAYMENT SECURITY**

Notes on Standard Forms (Contract):

Bidders should not complete the Form of Agreement at the time of preparing of bids. The successful Bidder will be required to sign the Form of Agreement, after the award of contract. Any corrections or modifications to the accepted bid resulting from arithmetic corrections, acceptable deviations, or quantity variations in accordance with the requirements of the bidding documents should be incorporated into the Agreement.

The Form of Performance Security, Form of Advance Payment Security and Form of Retention Money Guarantee should not be completed by the Bidders at the time of preparation of bids. The successful Bidder will be required to provide these securities in compliance with the requirements herein or as acceptable to the Employer.

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.

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

The Commencement date shall be: ……..……*(fill the date as per Clause 8.1 of Conditions of Contract).*

The amount of Performance Security is:…… *(fill the amount as per Clause 4.2 of Conditions of Contract).*

The Performance Security shall be submitted on or before ……...*(fill the date as per Clause 4.2 of Conditions of Contract).*

Authorized Signature : ……

Name and title of Signatory : …….

FORM OF AGREEMENT

This Agreement made the …….*[day]* of …… *[month]* 20…..*[year],* between **Chairman, Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa, Wellampitiya***[name and address of Employer]* (hereinafter called and referred to as "the Employer"), of the one part, and ……. …….. *[name and address of Contractor*] (hereinafter called and referred to as "the Contractor"), of the other part:

Whereas the Employer desires that the Contractor execute …… *[name and identification no of Contract](hereinafter called and referred to as "the Works")* and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and remedying of any defects therein.

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract.

2. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, 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 execute and complete the Works and remedy any defects therein, 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 hereto have caused this Agreement to be executed the day and year aforementioned in accordance with laws of Sri Lanka.

……..	……..
Authorised signature of Contractor	**Authorised signature of Employer**
COMMON SEAL	COMMON SEAL

In the presence of
Witnesses :

Name and NIC No. ……
Signature ……

Address ……

……

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, Wellampitiya,**

Date:……..

PERFORMANCE GUARANTEE No:…….

We have been informed that …… ……
…….*[Name of Contractor]*(Hereinafter called "The Contractor") has entered into Contract No. ……..…. *[Reference number of the contract]* dated ……. with you, for the ……..(*insert "Construction")* of …… *(Name of Contract and brief description)* (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 letter than the ……..day of 20……[insert date,28 days beyond the time of completion] 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 Issued branch or Office]*

Beneficiary Ceylon Petroleum Storage Terminals Limited, Oil Installation,
Kolonnawa, Wellampitiya,
Date: ……

ADVANCE PAYMENT GUARANTEE No:……

We have been informed that …… *[Name of Contractor]* (hereinafter called " The Contractor") has entered into Contract No. …… *[reference number of the contract]* dated ……. with you , for the …… Construction of …… …… (Name of Contract and 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] is 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 the date, 28 days beyond the Time of Completion)

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

_____
[Signature(s)]

SECTION – 6

SPECIFICATIONS

Specifications

6.1 Scope of Works

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 document, but required for completion of the entire work as specified in this Bidding Document.

6.1.1 The Contractor shall check the proposed tank repairing works and structural rigidity for suitability of the proposed methods for the Work. Such suitability to be informed to CPSTL in writing before commencement of the work as the contractor is responsible for the total work to be done.

6.1.2 The Contractor shall carryout the project planning considering that all works shall be attended while operations are going on and with minimum impact to the operation in the Kolonnawa Installation.

6.1.3 The Contractor shall submit project time schedule, manpower schedule, equipment schedule and cash flow schedule (including S-curves using MS Project).

6.1.4 The Contractor shall obtain all relevant physical measurements (Plumbness, Radii Measurements, Roundness, etc.) of the existing tank as per the recommendations made in the API 653/650. Any deviations from the allowable limits of dimensional tolerances should be informed in writing with proposed correction methodologies to obtain the approval of the Engineer.

6.1.5 The Contractor shall prepare temporary access road as directed by the Engineer.

6.1.6 The Contractor shall erect temporary fire barriers and fire blankets as required for a petroleum terminal in order to protect the surrounding piping, other tanks, pump houses and gantries in service. The approval for the temporary fire barriers and fire blankets shall be obtained from the Fire & Safety Department of the CPSTL prior to commence any hot works.

6.1.7 The Contractor shall carryout the procurement of all materials, equipment, machinery, tools, consumables, etc., necessary for replacement of the tank bottom, nozzles, shell insertions, tank attachments, earthing system, soil improvements, construction of new RCC ring beam, construction of proposed oily and storm water discharge systems, all required product piping modifications including fittings, valves, paints for the tank and etc. Loading, handling and transportation of all materials from supply point / store at work site / Contractor's store as per the requirement of the project.

The Contractor shall obtain written approval for all materials from the Engineer before placement of orders.

6.1.8 The Contractor shall submit all shop drawings, engineering calculations, and method statements as requested by the Engineer.

6.1.9 The Contractor shall remove all unused structural components, debris, unused/replaceable pipe segments attached to the tank and in the tank farm as directed by the Engineer.

6.1.10 The Contractor shall fabricate, install, and testing of proposed product pipes modification with all accessories including pipe supports, pipe crossing structures, pressure relief system etc.

6.1.11 The Contractor shall remove the existing RCC tank foundation, apron, drains etc. and disposal of debris in a location within/outside the CPSTL premises as instruct by the Engineer.

6.1.12 The Contractor shall check the soil condition around the tank and submit a detailed method statement for excavation works of the new tank foundation. The method statement should include all relevant calculations and testing procedures.

The Contractor shall commence demolition of the existing tank foundation, excavation & construction of new RCC foundation after obtaining the approval to the method statement. It is Contractors sole responsibility to complete the construction of tank foundation in a safe manner. Any failure or damage to the nearby properties should be corrected/rectified by the Contractor at his own cost.

6.1.13 The Contractor shall obtain the approval for the tank jacking up procedure by submitting a method statement with calculations from the Engineer.

6.1.14 The Contractor shall cut & remove the existing tank bottom with underneath asphalt layer (Sand Tar Mixture) and 125mm strip of the bottom most shell course.

6.1.15 The Contractor shall remove minimum of 100mm thick sand layer in the exiting sand filling of the tank bottom and fill with 600mm thick new river sand layer including the removed thickness. The Contractor shall ensure that removal of all sand which is mixed with oil. The removal thickness can be greater than the 100 mm in such locations. The written approval for the sand removal shall be obtained from the Engineer prior to re filling.

Sand mixed with oil shall be disposed in safe manner while adhering to applicable local/environmental rules and regulation.

6.1.16 The Contractor shall lay 100mm thick sand tar mixture.

6.1.17 The Contractor shall fabricate the new tank bottom including the center sump, draw off pipes and, shell insertions, shell nozzles (3 Nos) with all attachments as per API Standard 653 and API Standard 650.

6.1.18 The Contractor shall replace the earthing system as per the API 650.

6.1.19 The Contractor shall construct RCC drains, catch pits, drainage pipes in the tank farm including replacement of the existing drain.

6.1.20 The Contractor shall modify the landing (Apron Level) of the existing stairway.

6.1.21 The Contractor shall repair and modify existing water drencher system.

6.1.22 The Contractor shall fabricate, install, testing and commissioning of two vertical level gauges.

6.1.23 The Contractor shall attend all minor repairs in the roof accessories, shell manholes, etc as specified.

6.1.24 Grit/Sand blast cleaning and painting of the tank, pipes, all accessories and steel structures as specified.

6.1.25 Third party inspection of steel plates shall be carried out by a reputed third-party inspector approved by CPSTL, witnessed by two CPSTL engineers and submission of inspection report to CPSTL to obtain the approval before the shipment. The Contractor shall deliver the carbon steel plates to the site within 150 days from the date of Award of the Contract.

6.1.26 Third party inspection of pipes, fittings and valves shall be carried out as specified and submission of inspection reports to CPSTL to obtain the Engineers approvals before the shipment/purchase.

6.1.27 The Contractor shall carry out the tank hydro test. Water will be provided by the CPSTL as per the applicable tariff rates if required.

6.1.28 The Contractor shall carry out the calibration of the tank by a reputed calibration company acceptable to CPSTL and submit calibration charts in hard and soft copies.

6.1.29 The Contractor shall submit 2 years Warranty from the date of commissioning, in the name of CPSTL for valves and level gauges.

6.1.30 The Contractor shall box up the tank and hand over to CPSTL.

6.1.31 The Contractor shall attend the site cleaning which includes removal of excess pipe supports, temporary site offices and etc.

6.1.32 The Contractor shall improve the tank compound including site leveling, earth filling and etc up to the Engineers Satisfaction.

6.1.33 The Contractor shall prepare detailed drawings of the proposed repairs and constructions.

Layout and General Assembly drawing of the tank and tank bottom are annexed. The Contractor shall obtain prior approval for all drawings and documents from CPSTL before commencement of the Work.

6.1.34 The Contractor shall provide quality assurance plan to obtain prior approval from the Engineer. The Contractor shall maintain Quality Assurance records and these records shall be given to Engineer upon completion of each job.

6.1.35 The Contractor shall submit soft copies and hard copies of As-Built drawings, all catalogues, manuals, reports and required documents in English language as directed by the Engineer. Drawings to be submitted in ACAD (dwg) format too.

6.2 Scope of Supply by CPSTL

Construction Utilities

6.2.1 Electricity and drinking water can be supplied to the contractor to undertake this work. The prospective contractor is required to indicate his requirements of electrical power and water from the CPSTL in his offer for evaluation purposes.

6.2.2 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 follows are satisfied.

    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 the 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 center 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.

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.

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

6.2.4 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.

6.3 Site Conditions

6.3.1 The Bidder is responsible for its own investigations to establish sufficient and accurate information for all works of the existing steel storage tank. The Bidder shall visit the proposed site and shall ascertain the nature and location thereof and all conditions which may affect repairs and construction works of the existing steel storage tank.

6.3.2 The Bidder shall make its own assessment of any and all of the information provided in this bidding document and collect own information. CPSTL is not responsible for the accuracy or completeness of any such information.

6.4 General Specifications

6.4.1 Permits, Licenses and Consents

It is the sole responsibility of the Contractor to identify, to obtain, to complete, and maintain any permits and any other consent, licenses and approvals that are required for repairs and constructions of the existing tank. CPSTL will co-ordinate with the Contractor in identifying, applying, and processing such permits, consents, licenses and approvals.

6.4.2 Packing and Transportation of Materials

All parts of the tank repair and equipment shall be well packed and protected against loss or damage during the transport by sea and over land and whilst in storage under adverse climatic conditions. All packing shall be performed in such a way that overturning of the packages will not damage the equipment. Dimensions of packages, crates, etc., shall be suitable for road transportation. Instruction for handling shall be clearly marked on all parts, packages and crates.

All parts, packages and crates shall be adequately marked in order to enable identification. Each item contained in a package shall be clearly identified on the packing list by its description, part number and assembly drawing reference, and each item shall be marked or labelled to correspond with the packing list.

The Contractor shall be entirely responsible for all packing, any loss or damage and shall be replenished/ fixed by the Contractor and, except where otherwise provided, at the Contractor's own expense.

Any transhipment of materials and equipment through countries shall be the Contractor's responsibility. Any cost(s) associated with transhipment of materials and equipment shall be deemed to be included in the Bid Price.

Identification and preparation of access to the site and transportation of equipment and materials shall be the responsibility of the Contractor. Any costs associated with identification and preparation of access to the site shall be deemed to be included in the offered Price.

6.4.3 Material Properties

i. Materials selected by the Bidder shall be proven adequate and sufficient for the completion of the repair work.
ii. The Contractor shall carefully consider all corrosion and erosion possibilities subject to the environment of the Site and nearby facilities.

6.4.4 Codes and Standards

The Bidder shall ensure that the engineering works, reviewing of designs, construction, testing, etc. relevant to repairs to the tank are according to Government and Local Authority Requirements, International Codes, Latest revisions of the following codes.

Document Title	Document Number
BS Structural use of concrete	BS 8110: Part 1 : 1985
BS Structural use of Steel work	BS 5950 – 1: 2000
Code of Practice for Foundation	BS 8004
Code of Practice for Earth retaining structures	BS 8002
Inspection Documents for Metallic Products	EN 10204
Standard for Welding Pipelines and Related Facilities	API 1104
Process Piping (Pressure piping)	ASME B 31.3
Pipeline Transportation Systems for Liquid Hydrocarbon and Other Liquids	ASME B31.4
Specification for Line Pipe	API 5L
Specifications for Pipeline Valves	API 6D
Valve inspection & Testing	API 598
ANSI – Pipe Flanges and Flanged Fittings	ANSI B 16.5
Large Diameter Steel Flanges	ASME B16.47
Welded Steel Tanks for Oil Storage	API STD 650 Twelfth Edition, March 2013. (including all Addenda and Errata)
Tank Inspection, Repair, Alteration and Reconstruction Welded Steel Tanks for Oil Storage	API 653
Manual of Petroleum Measurement Standards	API-MPMS
Automatic level gauges for measuring the level of liquid in stationary storage tanks	OIML R 85-1 & 2
Design, Construction, Operation, Maintenance and Inspection of Terminal and Tank Facilities	API Standard 2610, Third Edition, September 2018
Boiler and Pressure Vessel Code (Welding and Brazing Qualification)	ASME Sec IX

Document Title	Document Number
Recommended Practice Classification of Locations For Electrical Installations At Petroleum Facilities Classified As Class 1, Division 1 And Division 2	API RP 500
Applicable codes and Standards published by National Fire Protection Association (NFPA)	NFPA 11, NFPA 15, NFPA 20, NFPA 30
Specifications for Electrical & Mechanical Works - [2nd Edition (Revised) – August 2000]	SCA/8
Specifications for Fire Detection, Protection & Suppression Systems	SCA/9

It is implied that the eligible Bidders are fully acquainted with the above Documents and therefore, those will not be issued to the Bidders with this Bidding Document. However, Bidders may purchase the same if necessary, from CIDA, Savsiripaya", 123, Wijerama Mawatha, Colombo 7, Sri Lanka or other relevant organisations.

6.5 Technical Specifications

6.5.1 Site Clearing

The construction site including tank farm area shall be cleared by removing of vegetation, debris, excess soil, steel components, pedestals etc. before the commencement, during the work & at the completion of works. The debris 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.

6.5.2 Construction of Temporary Access Road

The Contractor shall construct temporary access road 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. Required permissions for the propose access road/s shall be obtained from the Engineer. Any damages/ alterations to existing properties shall be rectified at the end of the repairing works.

6.5.3 Construction and maintenance of temporary site office with required storage facilities. The site office should be equipped with necessary furniture and other facilities such as wash/bathing, sanitary, etc. The disposal/ discharge of generated wastes should be attended as per the applicable rules and regulations.

6.5.4 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 by ensuring the firmly 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 tank farm

should be covered by fire blankets.

Erection of temporary dust barriers/extraction systems/curtain walls during the sand blasting and painting in order to protect the surrounding properties. The tank is located near to one of the boundaries of the CPSTL and residential dwellings are located beyond. Hence, escape of dust particles and paints to the nearby properties should be eliminated/controlled.

6.5.5 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.

6.5.6 The Contractor shall obtain a physical measurement report of the tank and check the existing tank dimensions are within the specified limits in the API 653/650. Any deviations found should be informed to the CPSTL in writing with proposed corrective methodologies. The Contractor shall ensure that physical dimensions of the repaired tank is within the specified limits of dimensional tolerances at the end of the repairing work.

6.5.7 New Constructions, Repairs and Modifications

6.5.7.1 The Contractor shall dismantle all pipe connections (Product Pipes, Fire Water, etc) to the tank including the earthing system, etc after obtaining the approval of the Engineer. Dismantled materials, valves, equipment, etc shall be handed over to the CPSTL.

6.5.7.2 The Contractor shall examine the soil condition around the tank area and propose a suitable shoring arrangement for the required excavations to construct the new RCC tank foundation. It is Contractors sole responsibility to plan and execute the excavation works without effecting to the existing tank and the nearby properties.

6.5.7.3 The Contractor shall review the proposed design of the new RCC tank foundation and recommended soil improvement. The sufficiency of the design and the soil improvement shall be analyzed and inform to the Engineer in writing. The analysis shall be carried out based on the proper Engineering approach aligns with applicable codes and standards. The report of the design review shall be authorized by a Charted Structural Engineer and forwarded to prior approval of the Engineer.

The Contractor shall submit a comprehensive method statement for the construction of ring beam foundation and soil improvement.

6.5.7.4 The Contractor shall remove the existing tank foundation including the apron and the outer drainage. All debris should be disposed to a location outside the CPSTL premises as instructed by the Engineer.

6.5.7.5 Construction of New Tank Foundation (Ring Beam & Drain)

6.5.7.5.1 Excavation

Excavation works shall be carried out after obtaining the Engineers approval to the method statement. Disposal of excavated soil to a location within/outside the CPSTL.

6.5.7.5.2 Ground Improvement

The existing tank shall be placed on the ground after top 1.5m (minimum) in an area at least 1.5m wider than the base is replaced with well compacted ABC which should have an allowable bearing capacity of 175kN/m^2(Refer Drawing No. 1839 – 5).

6.5.7.5.3 RCC Ring Beam and Drain

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 30 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.

6.5.7.6 Cut, remove and stack the exiting bottom plates. Bottom plates shall be cut along the reverted joints to manageable sizes and hand over to the CPSTL.

6.5.7.7 Removal of the asphalt layer underneath the existing bottom including 100 mm thick sand layer. The Contractor shall ensure the removal of entire sand which was mixed with the oil. The disposal of the oily mixed sand/soil shall be carried out as per the applicable environmental rules and regulations.

6.5.7.8 Supply and Laying of Sand Bedding

Level the sand bed underneath bottom plates in such a way to install the new bottom plates. Sand bed to be consolidated as per the instruction given by the Engineer. Lay minimum of 700 mm sand layer (including the removed sand layer of 100 mm thickness or higher) of river sand with standard compaction on the existing sand filling. The layer to be graded to suit the slope of the bottom plates. Sand bed to be consolidated as per the instruction given by the Engineer.

Parameters of the river sand must be complied with the specifications. Test reports of the sand samples must be submitted to obtain prior approval of the Engineer.

6.5.7.9 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 plates.

6.5.7.10 Tank Apron

Apron should be provided with reinforced concrete slabs to suitable slope as per detail drawings and joints to be filled with sand tar mix. Compacted sand to be used to obtain the required slope underneath the slabs.

6.5.7.11 Demolish and Re Construction of the Existing Drain in the Tank Farm

The existing damaged drain in the tank farm should be demolish and new RCC drainage to be constructed as per the specified dimensions. The Contractor shall dispose Debris and excavated soil outside the premises as per the Engineers Instructions. Drain should be adequately slopped and ensure the flow of content as per the applicable standards.

6.5.7.12 Construction of RCC Drains in the Tank Farm

Excavation, disposal of excavated soil and construction of the drains. Adequate slope of the drain to be maintained towards the direction of flow.

Layouts of the drains are specified in the Drawing No. 1839-4. The Contractor shall obtain the site measurements and confirm the adequacy of the slopes to ensure the proper discharge of water.

6.5.7.13 Construction of RCC Catch Pits and Laying of Oily Water Discharge System Piping

Construction of RCC Catch pits with all piping, valves (2 no's of 4" gate valves) and accessories. Pipes should be hot dipped galvanized and coated (Bitumen) as per the directions of the Engineer. Proposed layout of the oily water discharge system is shown in the Drawing No. 1839-4.

6.5.8 Improvements to the Existing Tank Farm

The existing tank farm of the tank no. 34 shall be cleaned by removal of all construction debris, abandoned pipes, steel structural components, concrete pedestals & etc. Tank farm shall be improved with removal of all unnecessary vegetations and maintaining of slopes towards the drainages. The Contractor shall remove/ fill & compact of soil as directed by the Engineer. The gravel soil required for the tank farm improvement shall be supplied by the Contractor.

6.5.9 Construction of Foot path

Supply and construction of foot paths as per the specifications provided in the Drawing No. 1839 -4.

6.5.3 Repairs of the Tank

6.5.3.1 Repairing of the tank shall be done as per the details provided in the bidding document, API Standard 653 and 650.

6.5.3.2 The tank would be handed over to the contractor in a gas free state.

6.5.3.3 Welding Procedure and Welder Qualification

6.5.3.3.1 Qualification of Welding Procedure

Prepare welding procedure specification (WPS) for all category of welding that are intended to be carried out in tank repair work and perform test 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 standards.

6.5.3.3.2 Qualification of Welders

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

6.5.3.4 The Contractor shall fabricate and install required jacking up brackets to the shell plates of the tank. Contractor shall ensure the jacking up of the tank shell without distorting the shell plates/ reverted joints. Any distortions encountered in the shell plates/reverted joints shall be rectified by the Contractor at his own cost. Method statement with relevant calculations for tank jacking procedure shall submit 02 weeks prior to the commencement to obtain the approval from the Engineer.

6.5.7.4 Cut, remove, and stack the 125 mm strip of the bottom most shell course including required shell openings for the nozzles (2 No's of 12" Product inlet & outlet, 02 No's of 4" drain outlets). The Contractor shall refer the specified dimensions of the shell openings and work shall be carried out without any distortions to the existing shell/ reverted joints.

6.5.7.5 The Contractor must handover all removed steel materials and components to the main stores of CPSTL.

6.5.7.6 Procure, supply, fabricate, erection, welding and testing of bottom plates, annular plates and datum plate as per the bottom plate layout submitted by the contractor and approved by the Engineer. Laying of new bottom plates as per bottom plate layout on premix asphalt layer. Weld the joints of new bottom plates as per the welding sequence submitted by the contractor and approved by the Engineer. Welding of plate joints shall be carried out using AWSE 7018 series electrode in such a way it will provide a near possible plane surface as per the given welding sequence, the welding sequence adopted should result in least distortion.

The third-party inspection charges and all expenses for 02 CPSTL engineers including visa chargers, return air tickets, accommodation, internal transport and food will be arranged and borne by the Contractor.

6.5.7.7 Supply, fabricate, erect, welding and testing of the 02 no's of 4" tank internal draw off pipes.

6.5.7.8 Procure, supply, fabricate, erect, welding and testing of 04 no's of shell nozzles as per the shell plate layout submitted by the Contractor and approved by the Engineer. Weld the joints of new shell plate segments as per the welding sequence submitted by the Contractor and approved by the Engineer. Welding of plate joints shall be carried out by using AWSE 7018 series electrode in such a way it provides a near possible plane surface as per the given welding sequence. The welding sequence adopted should result in least distortion. Low hydrogen electrode shall be used for manual metal arc welds in shell to bottom joints.

6.5.7.9 Procure, supply, fabricate, install and testing of the required product pipe modifications with all accessories and pipe supports. Final connections to the existing product piping should be carried out as directed by the Engineer.

6.5.7.10 Procure, supply, install and testing of 04 No's of 12" dia. gate valves as per specifications.

6.5.7.11 Supply, fabricate, install and testing of pressure relief system for cargo and delivery pipes.

6.5.7.12 Supply, fabricate and install of proposed steel platforms and required pipeline cross overs in the tank farm.

6.5.7.13 The existing water drencher system shall be modified to suit to the elevational changes of the tank. The existing piping arrangement should be repaired by replacing of the corroded flanges, studs, bolts, pipe supports, & water drencher head. All materials required for the repairing works shall be supplied by the Contractor. The entire piping of the water drencher (including the pipes along the tank farm) shall be cleaned and painted after hot dipped galvanizing as per the specifications.

6.5.7.14 Supply and repair of existing 02 no's of roof manholes, 02 no's of PV valves and the dip hatch. Existing roof accessories shall be repaired by replacement of the corroded plates, flanges, nuts, bolts, etc. All repairs shall be attended at the satisfaction of the Engineer.

6.5.7.15 Supply, fabricate, erect and fixing of toe guard for the existing crown handrail. Dimensions of the toe guard is 75mm× 6 mm flat irons.

6.5.7.16 Supply, fabricate and fixing of steel mesh near the dip hatch area. Steel mesh length and width should be match with the operational requirements.

6.5.7.17 Supply and replace the corroded nuts, bolts & washers of the all shell attachments. Packing materials of the existing tank accessories shall be replaced.

6.5.7.18 Procure, supply, installation and testing of side mounted sour service Mechanical Level Gauges (two no's) with grease sealed pulley system with aspects of easiness to read indicator and sign board.

6.5.7.19 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.

i. 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.

ii. 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.

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

iv. 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.

v. 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.

vi. 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.

vii. 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.

6.5.8 Painting of the Tank

6.5.8.1 The Contractor shall Grit/Sand blast clean and paint bottom underside, tank bottom and 1m height of bottom most shell course interior, all reverted joints (350mm wide strips), 1m height of top most shell course, tank exterior, stairways, hand rails, pipes (Product & etc) and all steel structures/platforms.

i. Painting of Underside of Bottom Plates

The undersides of the bottom plates are to be painted after Grit/ Sand blast cleaning specified under Clause vii). Approval for painting to be obtained as described in Clause viii).

Description	Thickness	Coat
SIGMA COVER 280 (PDS 7417) Yellow Green or equivalent	50 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	350 microns DFT	
Sigma solvent – Thinner 91-92 or equivalent or as specified in manufactures data sheet.		

ii. Painting of Tank interior

The entire bottom of the tank interior, the bottom most shell course up to 1-meter height from the bottom, 1 m height of the top most shell to be painted as follows after Grit/ Sand blast cleaning specified under clause vii). Application of paint and obtaining of approval for painting shall be carried out as described in clause viii).

Description	Thickness	Coat
SIGMA COVER 280 Yellow Green (PDS 7417) or equivalent	50 microns DFT	Primer
SIGMA GUARD 720 (EHB) GREEN OR LIGHT GREY (PDS 7433) or equivalent	150 microns DFT	Intermediate
SIGMA GUARD 720 (EHB) GREEN OR LIGHT GREY (PDS 7433) or equivalent	150 microns DFT	Finish
Required overall paint thickness	350 microns DFT	
Sigma solvent – Thinner 91-92 or equivalent or as specified in manufactures data sheet.		

iii. Painting of Tank Exterior

The shell exterior surface and roof external surfaces with all attachments shall be painted as follows after Grit/ Sand blast cleaning specified under clause vii). Application of paint and obtaining of approval for painting shall be carried out as described in clause viii).

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
SIGMADUR 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:

Projected portion of annular plate and 100mm high band of bottom most shell plate exterior shall be painted with additional 100 microns intermediate coat before finish coat to accomplish total overall thickness of 310 microns.

300 mm height of the bottom most shell plate, vertical strip along the dip hatch area and area around the dip hatch shall be painted in black colour finish coating.

Tank shall be marked with tank identification number and CPSTL logo as directed by the Engineer.

iv. Painting of Stairways, handrails, all attachments, and steel structures/ platforms.

The Stairways and its supportive structures, handrails and crown handrail with all attachments including stanchions and steel structures/ platforms shall be painted according to their standard colour codes as follows after Grit/ Sand blast cleaning specified under clause vii). Application of paint and obtaining of approval for painting shall be carried out as described in clause viii).

Description	Thickness	Coat
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
SIGMADUR 188Yellow/ Black/ Grey/ Red (PDS 6824)/ SIGMADUR White 7000 (PDS 6824) 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.		

The Contractor shall grit/ sand blast cleaned and painted of all existing steel components in the tank farm as directed by the Engineer.

v. Piping systems of water drencher system, product piping (modified sections and exposed pipes in the tank farm of Tk. 34), drain piping (Above ground / Exposed) and tank internal piping system of draw off sump shall be painted as follows after hot dip galvanizing specified under clause ix). Application of paint and obtaining of approval for painting shall be carried out as described in clause viii).

Description	Thickness	Coat
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
SIGMADUR 188 Yellow, Red, Gray, Green (PDS 6824) 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.		

vi. All horizontal and vertical reverted joints shall be painted (350 mm width) after cleaning as per the paint manufacturer specifications. The cleaning of the required width along the reverted joints shall be attended as per the paint manufacturers recommendations (Grit/ Sand blast cleaning or etc). The contractor shall submit a method statement along with the manufacturers consent for leak proof painting to obtain the approval of the Engineer. Application of paint and obtaining of approval for painting shall be carried out as described in clause viii).

Description	Thickness	Coat
SIGMA COVER 280 – Yellow Green (PDS -7417) or equivalent	50 microns DFT	Primer
SIGMA GUARD CSF 650 Green/Off White or equivalent	150 microns DFT	Intermediate
SIGMA GUARD CSF 650 Green/Off White or equivalent	150 microns DFT	Intermediate
SIGMA GUARD CSF 650 Green/Off White or equivalent	200 microns DFT	Finish
Required overall paint thickness	550 microns DFT	
No Thinner should be added for CSF 650 and other coatings are as specified in manufactures data sheet.		

Note – The proposed painting system shall be validated from the paint manufacturer and optimum thickness should be used.

vii. Surface Preparation

All the surfaces which are to be painted to be blast cleaned to conform to Swedish Standard SA 2 ½ by grit/sand blasting.

Industrial vacuum cleaning to be carried out for tank bottom prior to application of painting.

viii. Details of application and approval

a. 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 is recommended to apply by Air Spray or Airless spray. The intermediate and finish coats are recommended to apply by Airless spray.

b. Stripe coating 3 times on welding joins & sharp edges before each paint code and other required are to be stripped coated as required.

c. Required overall paint thickness should not be less than 350 microns DFT for tank interior/bottom underside and 210 microns DFT for tank exterior/stairway/handrails while first coat, intermediate coat and final coat thickness to be not less than what is specified.

d. Approval for painting should be obtained from the Inspection Engineer of CPSTL or his representative as follows.

- Prior to application of first primer coat after satisfactory cleaning of surfaces.
- Prior to application of first intermediate coat after applying the required thickness of primer.
- Prior to application of first finish coat after applying the required thickness of intermediate coat.
- 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 instruction stated by the paint manufacturer.
- Contractor shall arrange pin hole test to the tank bottom with witness of Inspection officer.
- Time interval between two coatings shall comply with paint manufactures instructions
- The Engineer reserves the authority to accept or reject.
- Prepared surface before painting depending on his observations.
- 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.

ix. 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.

6.5.9 Testing

6.5.9.1 The Contractor shall carry out required testing and inspection of the tank as per the API 653, API Standard 650 Twelfth Edition, March 2013 and all the other applicable standards of mechanical, electrical & civil. Required testing and inspection shall be supervised and certified by the Engineer/his nominee and Inspection Unit of CPSTL as appropriate.

6.5.9.2 Hydro Test

The Contractor shall carry out hydro test for the tank. Testing procedure to be agreed by the Contractor and CPSTL. Water will be supplied by the CPSTL if requested. Required manifold and piping connections to be erected by the Contractor. Required piping and pumping facilities to be supplied by the Contractor.

6.5.9.3 Calibration

After successful completion of hydro testing, the tank calibration is to be attended. The calibration and tabulations shall conform to API 2550, ASTM 1220. The tank calibration is to be carried out using one of the following methods by a third-party company acceptable to CPSTL.

i. MPMS Ch. 2.2B – Calibration of Upright Cylindrical Tanks using the Optical Reference Line Method (ORLM)
ii. MPMS Ch. 2.2C – Calibration of Upright Cylindrical Tanks using the Optical Triangulation Method (OTM)
iii. MPMS Ch. 2.2D - Calibration of Upright Cylindrical Tanks using the Internal Electro Optical Distance Ranging Method (EODRM)
iv. MPMS (Manual of Petroleum Measurement Standards)

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

Calibration of the tanks and submission of calibration charts and soft copies in the form of spread sheets.

The Contractor shall submit three sets of certified calibration tables to the Engineer on or before successful completion of the work.

6.5.9.4 <u>Box up the Tank</u>

After completion of all works, the tank shall be boxed up and handed over for operational purposes. The Contractor shall supply all materials required for box up the tank.

6.5.9.5 <u>Tank Details</u>

Tank Capacity : 11,217 m^3
Tank Diameter : 35.41 m
Tank Height : 12.19 m

Type of the Tank : Fixed/Cone welded roof, reverted shell & bottom,
Steel, Vertical Storage Tank at Kolonnawa Installation, CPSTL
Status : Without product
Product : Fuel Oil

6.5.10 Materials shall be as per following Specifications

6.5.10.1 List of recommended manufactures – Mechanical works

No.	Item	Country of Origin and Country of Manufacture
1.	Plates Pipes, fittings, flanges, nut & bolts, gaskets	European, UK, Japan, South Africa or USA
2.	Valves Level gauges	European, Japan or USA

Note:

The reference made here to certain manufacturers' products, this has been done for the sole purpose of defining and establishing standards of quality and performance and not with the intention of restricting the procurement of materials or fittings to a particular manufacturer.

6.5.10.2 Carbon Steel Plates

i. Material shall conform to ASTM A 283 Gr. C for all other plates.

ii. Identification:-Heat/Batch number and material description shall be marked on the plates

iii. Valid mill test certificate with the heat/batch numbers shall be provided in accordance with EN 10204 3.2 with the plates. The heat /batch numbers marked on plates should tally with that of the certificate for final acceptance at Ceylon Petroleum Storage Terminals Limited (CPSTL) Kolonnawa.

iv. Tolerance in size, if any, should be mentioned with relevant standards for the purpose of evaluation.

6.5.10.3 Carbon Steel Pipes

i. Single Random Length (SRL), 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 40/80

Note – Pipes for all shell nozzles and all pipes of nominal diameter less than 2" should be SCH 80 (Refer the provided pipe modifications drawing).

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.

Mill Certificate should be supplied in accordance with EN 10204 3.1 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

6.5.10.4 Carbon Steel fittings (Elbows, Reducers)

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. Mill Certificate should be supplied in accordance with EN 10204 3.1 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.

6.5.10.5 Carbon Steel Flanges

i. Class 150, Slip on, Raised Face (RF)

ii. Material shall conform to ASTM A 105 Normalised.

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. Mill Certificate should be supplied in accordance with EN 10204 3.1 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.

6.5.10.6 Studs and Nuts

i. Material of studs 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 or BS 1506-162.

ii. Threads should be in accordance with ANSI B 1.1 or BS 1580 Class 2A for studs and class 2B for nuts.

iii. Identification marks shall be available on items to conform above standards.

6.5.10.7 Gasket Materials

i. Maximum Working Pressure :- 225 psi

ii. Nominal Working Temperature :- 45^{o} C

iii. Thickness :- 3 mm

iv. To use as packing for flanges of pipe lines and tank manholes for petroleum refined products such as Gasoline, Gas oil, Fuel Oil and Aviation Turbine.

v. Gaskets should conform to BS 7531 or equivalent.

vi. Each sheet of jointing shall be indelibly marked with the number of British Standard and manufacturer's identification mark.

6.5.10.8 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 in the quotation or Pro-forma Invoice.

   b. Valves should be shipped 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 easy 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.

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

6.5.10.10 Literature should be supplied in English language along with the bid for the manufacturing process of the materials.

6.6 Technical Documents and Information

6.6.1 Documentation to be submitted after Award of Contract

The following describes the minimum scope of information, documents, drawings, etc. to be submitted by the Contractor to the Employer after award of the contract (during the site construction). The Employer reserves the right to request from the Contractor such additional information, drawings, documents, etc. as may be reasonably required for proper understanding and definition of the project.

The Contractor shall provide softcopies and two (2) hard copies of all drawings and documentation to be submitted by him.

Monthly progress reports shall be provided by no later than ten (10) days after the last day of each month.

Any revision of the project implementation schedule shall not be delivered later than fourteen (14) days after such revision.

6.6.1.1 Documentation to be submitted prior to new Constructions/ Repairs

All documents and permits required for new constructions/ repairs shall be submitted prior to initiate site works.

6.6.1.2 Documentation to be submitted during Constructions/ Repairs

The following documents shall be submitted during the site works:

i. The Contractor shall submit drawings, diagrams, graphs, curves, calculations, schedules for information, reviews or approvals as described in the Contract to the Engineer. The quality of all documents submitted shall conform to acceptable international practice.
ii. The Contractor shall provide the calibration certificates of all calibrated equipment to the CPSTL.
iii. Monthly progress brief reports - by no later than one (1) week after the last day of each month including S-curves showing the work progress. The minimum information shall be:
    a. Engineering activities
    b. Component and material purchase and receipt status
    c. Construction activities
    d. HSE
    e. Incidents
    f. Accidents
    g. Personal on site
    h. Number of staff
    i. Number of local staff
    j. 4-week look ahead schedule
    k. Recommendations for improvement
    l. Project graphs
    m. Layout drawings which shall show the work status
    n. S-curves which shall show on a monthly base the status of the works (planned and actual as well as cumulated) for the project.

6.6.1.3 Final Documentation

The Contractor shall deliver to the CPSTL the final documentation, both in digital and hard copies (2x). The final documentation shall comprise at least the following:

i. All As-built drawings
ii. Site safety procedures
iii. HSE procedure and plan
iv. Key list and site access contacts
v. Components data sheets
vi. Installation and O&M manuals from component manufacturers
vii. Mechanical completion documents including but not limited to:
    a. Data sheets and manuals of all components and equipment
    b. Calibration protocols
viii. Warranties of component suppliers
    a. Valves
    b. Galvanization
    c. Painting

SECTION -07

FORM OF BID

FORM OF BID

Name of Contract**:** **Repairs to Tank No. 34 at Kolonnawa Installation**

To: **Ceylon Petroleum Storage Terminals Limited,**
Oil Installation, Kolonnawa, Wellampitiya.

Gentlemen:

1. Having examined the Standard Bidding Document - Procurement of Works – Major Contracts [ICTAD/SBD/02 - Second Edition, January 2007], Specifications, Drawings and Bills of Quantities and Addenda for the execution of the above-named Works, we the undersigned, offer to execute and complete such Works and remedy any defect therein in conformity with the aforesaid Conditions of Contract, Specifications, Drawings, Bills of Quantities and addenda Nos.……. for the sum of LKR

   ……..……..……..…

   ……..…… [in words]

   (LKR……. [in figures]

   and

   sum of USD ……..……..……..

   ……..……..……... [in words] USD…… [in figures] or such other sums as may be ascertained in accordance with the said Conditions.

2. We acknowledge that the Contract Data forms part of our Bid.

3. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Contract Data.

4. We agree to abide by this Bid until the date specified in ITB Clause 16, **30.07.2024** and it shall remain binding upon us and may be accepted at any time before that date.

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 understand that you are not bound to accept the lowest or any bid you may receive.

7. We certify/confirm that we comply with the requirements as per ITB Clause 3and 4 of the bidding documents.

   Dated this …… day of……..……20……..

   Signature ……... in the capacity of ……..…...……...……...

   duly authorized to sign bids for and on behalf of ..……..…..……
   ……..……..……..……..……..……..……..…..…… *[in block capitals or typed]*

   Name : .....

   Designation: ….....

   Address: ……..……..…….

   Witness: ……...……..

SECTION- 8

BILL OF QUANTITIES

PREAMBLE TO THE BILL OF QUANTITIES

It is the Bidder's responsibility to see that the prices include for complying with all the requirements of the other documents whether specifically referred to in Bill of Quantities.

The Bidder is advised to visit the site of the proposed work and it is the responsibility of the Bidder to ascertain the conditions governing access to the site, the extent of working space store area etc.

1. This Bill of Quantities contains pages numbered from 55 to 69. Bidders are requested to see that no page is missing, no duplicate and that all TRADES are carried to SUMMARY at the end of the Bill of Quantities.

2. The Conditions of Contract, the Specifications and the Drawings are to be read in conjunction with the Bill of Quantities.

3. The cost of complying with all conditions, obligations and liabilities described in the Conditions of Contract, Specifications and the Bill of Quantities including all overhead charges and profit in carrying out the work as shown on the Drawings shall be deemed to be spread over and included in the prices of sums stated by the Bidder in the Bill of Quantities unless separately measured.

4. If the Bidder fails to price any items in the Bill of Quantities then the cost of the work under such items shall be held to be spread over and included in the prices given against other items of work.

5. The quantities set out in the Bill of Quantities are provisional and cover the approximate scope of the work anticipated to be performed by the Contractor. The actual quantities used for final measurement purposes will be determined by the Engineer by measurement of the work completed by the Contractor.

6. Where trade names, brands and or Catalogue Numbers are referred to, sole preference to any material or equipment is not intended. Any other material or equipment may be used, provided that the characteristics of type, quality, appearance, finish, method of construction and / or performance is superior to the specified.

7. Whenever the method of measurement is not clear from the documents available, the principles as given in the Sri Lanka Standard 573: 1999 UDC 69(08374) shall be applicable.

8. Selected Bidder shall comply with the arrangement of work and be ready to work part by part as required by the Authorities of the Employer if applicable.

9. The unit and lump sum prices of the Bill of Quantities (referred to as the Contract Rates) shall, except in so far as is otherwise provided for under the Contract, be deemed to cover all obligations set out in the Contract, and all matters or things necessary for the proper completion and maintenance of the Works, and shall be fixed and binding upon the Contractor.

10. Unit prices when applied to the quantity of work performed under the Contract shall, and other sums specifically determined under the provisions of the Contract, constitute full remuneration to the Contractor under the Contract.

11. Each item shall be priced by the Bidder in Sri Lanka Rupees or USD.

12. Rates for items in this Bill of Quantities shall be inclusive for hauling, transporting, loading, unloading, spreading, heaping, supporting, scaffolding, welding, and for laps, unless otherwise specifically stated.

13. Unless otherwise specifically stated in Bill of Quantities or herein, the following shall be deemed to be included with all items:-
    i. Labour and all costs in connection therewith.
    ii. Materials, goods and all costs in connection therewith.
    iii. Tools, plants, equipment, machinery and all costs in connection therewith.
    iv. Waste of materials.
    v. Protecting and clearing.
    vi. Square cutting.
    vii. Establishment charges, overhead charges and profit.
    viii. All setting out works.
    ix. For providing of method statements, calculations, proposals by Contractor, shop drawings and as built drawings.
    x. The rate for each item shall also include for all the following.
        a. Complying with regulations of the Municipal Council and/or any other relevant authority under which particular item of work is to be executed unless otherwise included in the preliminaries.
        b. Plant and equipment unless and otherwise included in preliminaries.
        c. In addition to above, the rate for item of work in substructure shall include for the works at depth extending below ground water table where applicable including excavation under water, removal and disposal of mud, stand and preparation of place to a condition suitable for proper execution of the work.

14. If Bidders are anticipating to give any discount, it shall be marked separately in the space allocated in the summary of Bill of Quantities. Provisional Sums shall not be considered when calculating discount.

15. All materials, equipment supplied shall be new, unused without any defects.

16. All materials used in the Works shall be of the best quality of their respective kinds as specified and shall be obtained from sources and suppliers approved by the Engineer and shall comply strictly with the tests prescribed or, Where tests are not laid down in this Specification, with the requirements of the latest issue of the relevant British Standards or other Standards approved by the Engineer.

17. Metric units are used throughout the Bill of Quantities for measurement purposes unless otherwise indicated. Abbreviations used in the Contract are as follows:-

L.S.	-	Lump Sum
P.S.	-	Provisional Sum
m	-	Metre
m^2	-	Square metre
m^3	-	Cubic metre
kg	-	kilograms
nr	-	Numbers
LKR	-	Sri Lankan Rupees
USD	-	US Dollars

BILL OF QUANTITIES
CEYLON PETROLEUM STORAGE TERMINALS LIMITED
JOB: REPAIRS TO TANK NO. 34 AT KOLONNAWA INSTALLATION.
BOQ No: E/ 18 / 2023

Note: Items which has both the LKR Component and a Foreign Currency (USD) Component, shall be rated separately in the provided columns. For the items which has only a single currency component shall be rated in respective columns.

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
	Contractors are strictly advised to visit the site & follow the given details, sketch drawings, specifications before commencing the works. Any discrepancy should be forwarded to the Engineer before commencement of such works.						
A	**PRELIMINARIES**						
A1	Mobilization & Demobilization	Item	1				
A2	Temporary fire barriers, fire blankets, screens, and coverings	Item	1				
A3	Supply, fixing, maintain & dismantling of Internal & external scaffolding.	Item	1				
A4	Site cleaning, removal of debris, oil mixed soil and surplus in tank farm as directed by the Engineer.	Item	1				
	Total amount carried to summary						
B	**CIVIL WORKS** The Contractor is requested to visit the site and to acquaint himself regarding the work spaces, conditions of adjoining properties						

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
	,access, actual extent of the work to be done, existing services, methods of disconnecting and termination of services, method of transportation of material, equipment to be used etc. prior to pricing of this section. The contractor shall dispose excavated material away from the premises. The excavation shall be carried out on an approved method with approved tools and equipment acceptable to the Engineer with prior approval. The contractor's rates shall include for all precautions to minimize the noise, dust and vibrations etc. to the approval of the Engineer. The contractor shall submit all relevant information stated in this document and the information based for his pricing of this section. Dewatering if required only.						
	Construction of Ring Beam & Outer Drain						
B1	Removal of the existing tank foundation and excavations for the new RCC ring beam foundation (Refer the Drawing No. 1839-5)	m^3	300				
B2	Supply & fix temporary earth work supports (open planks or etc) minimum depth up to minimum of 2.0 m from the ground level (Shoring)	m^2	350				
B3	Supply, levelling & compacting of ABC (Aggregate Base Course up to 98%) as specified.	m^3	100				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
	Compacted layer thickness shall be as per the approved construction drawing. The Contractor shall submit a shop drawing to obtain the approval of the Engineer after analyse soil conditions at the site. Suitable compacting equipment shall be used to achieve the compaction. (Compaction of ABC mixture shall be complied with relevant SCA/5 specification. Compacted ABC layers shall be tested for compaction prescribed by SCA/5 specification)						
B4	Supply & pour mass concreate of grade C 15 into the area directly under the new RCC ring beam foundation & drain (Screed concrete of 75 mm thickness).	m^3	8.1				
B5	Supply & pour mass concreate of grade C 30 (ready mixed) to cast new RCC to ring beam foundation with drain.	m^3	114				
B6	Supply & fix fair faced timber/ suitable material for formwork for the ring beam. (Rate to be including for all necessary boards, supports, erecting, framing, cutting angles, cleaning wetting and treatment before placing concrete and removals)	m^2	520				
B7	Supply, cut, form and erect of tor steel bar reinforcement for RCC ring beam.	kg	19,600				
B8	Supply, fill & compaction of river sand for ring wall and under the tank bottom (Sand layer shall be sloped to the centre of the tank bottom as per specified angle).	m^3	1,100				
B9	Supply & lay 100mm thick layer of sand tar mixture (river sand and 80 - 100 hot bitumen mixture) over the compacted sand filling.	m^2	1,050				
B10	Excavation, lay, backfilling and connecting of proposed 8" dia. oily water discharge pipe as per the drawing 1839 -4. The pipe shall be hot dipped galvanized and coated with the bitumen.	m	6				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
B 11	RCC concrete pad with modifications to the existing ground level landing of the stairway as per the proposed tank elevational changes.	Item	1				
	<u>Construction of RCC Valve Pits and Apron</u>						
B12	Excavate and removal of soil for valve pit, commencement depth shall not exceed 1.5 m from the ground level.	m^3	2				
B13	Supply & pour 50 mm thick layer of grade C 15 mass concrete (Screed for the RCC valve pit base)	m^3	0.2				
B14	Supply & pour grade C 25 Concrete for the valve pit base & walls.	m^3	10				
B15	Supply & fix fair faced timber/ suitable material for formwork for the valve pits. (Rate to be including for all necessary boards, supports, erecting, framing, cutting angles, cleaning wetting and treatment before placing concrete and removals)	m^2	15				
B16	Supply, cut, form and erect of tor steel bar reinforcement for RCC valve pits.	kg	230				
	<u>Construction of Drains in the Tank Farm</u>						
B17	Demolish & removal of the existing damaged drain in the tank farm area.	Item	1				
B18	Excavate and removal of soil along the proposed paths of the storm water drains, commencement depth shall not exceed 1 m from the ground level.	m^3	35				
B19	Supply & pour 50 mm thick layer of grade C 15 mass concrete (Screed for the RCC drain base)	m^3	2				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
B20	Supply & pour grade C 25 Concrete for the RCC drain base & walls.	m^3	17				
B21	Supply & fix fair faced timber/ suitable material for formwork for the drains. (Rate to be including for all necessary boards, supports, erecting, framing, cutting angles, cleaning wetting and treatment before placing concrete and removals)	m^2	254				
B21	Supply, cut, form and erect of tor steel bar reinforcement for RCC drain.	kg	1,230				
B22	Power Tool Cleaning and painting of the existing interceptor coverings.	Item	1				
	Other Civil Works						
B 23	Supply (75mm thick precast concrete paving slab) & Construction of foot paths. Foot paths should be constructed a as per the Drawing No. 1839 – 4. Rate shall include for excavation, supply & laying quarry dust, placing precast slab and edge concrete cube etc.	m^2	120				
B 25	Supply and Levelling and compacting of imported soil to the tank farm for improve the properly surface water discharge as per Engineer instruction.	m^3	25				
	Total amount carried to summary						
C	**MECHANICAL WORKS** The contractor shall obtain approval from CPSTL for all materials and equipment prior to commence any work.	Note					

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
	The tank repair shall be carried out according to the API STD 653 & API STD 650 Twelfth Edition, March 2013 and Specifications. **The contractor's rates shall include for:** Supplying of all materials and costs of preparation, fabrication, erection, laying in position, forming, welding & painting etc. Transportation of all the materials to the final location at the CPSTL premises, Kolonnawa. Third party inspection where applicable. Inspection and testing shall be according to the API 653 & API 650.	Note Note Note Note Note					
C1	**<u>Removal Works</u>** Dismantle & removal of existing cargo and delivery pipe segments	Item	1				
C2	Cut & removal of 03 No's of shell manholes, 03 No's of nozzles with attached shell area as specified.	Item	1				
C3	Cut & removal of the tank bottom with internal drainpipes, sump & etc including the existing asphalt layer.	Item	1				
C4	Cut & removal of 125 mm of bottom most shell strip including jacking up the tank.	Item	1				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
C5	**Supply of Materials** Supply of 8m long 12" dia. Carbon Steel pipes, pipe fittings and other required materials for cargo and delivery pipe modifications.	Item	1				
C6	Supply of 4 no's of 12" diameter Gate Valves as per specifications.	Item	1				
C7	Supply of valves, pipes, fittings and etc for the pressure relief system as per the Drawing No. 1839 - 2	Item	1				
C8	Supply of carbon steel plates and other required materials for removal of 03 No's of shell manholes and 03 No's of nozzles with attached shell plates (approximate weight 5.7 tons).	Item	1				
C9	Supply of carbon steel plates and other required materials for replacement of the tank bottom plates, sump and annular plates (approximate weight 82 tons shall be supplied within 150 Days from the Date of the Award).	Item	1				
C10	Supply of pipes, pipe fittings, valves (2 Nos of 4" Gate Valves), & etc for oily water discharge system.	Item	1				
C11	Supply of pipes, pipe fittings, valves, & etc for oily water discharge system (from catch pit to existing drain).	Item	1				
C12	Supply of materials for repairs to be attended in the existing water drencher system, 02 No' of roof manholes, 02 no's of PV Valves, and the existing dip hatch.	Item	1				
C13	Supply of materials for replacement of the earthing system	Item	1				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
C14	Supply of nuts, bolts and washers for the corroded nuts and bolts of the exiting shell attachments (Excluding the 03 no's of shell manholes to be replaced)	Item	1				
C15	Supply of materials for the fabrication of the toe guard in the crown handrail. and GI mesh required in the dip hatch area.	Item	1				
C16	Supply of materials for the GI mesh required in the dip hatch area as per specifications.	Item	1				
C17	Supply of materials for the fabrication and installation of the pipe crossing structures.	Item	1				
C18	Supply of two no's of mechanical level gauges.	Item	1				
C19	Supply of painting materials for painting of underside of tank bottom, top side of tank bottom including shell interior, top side of roof plates including all accessories, shell exterior with all attachments, spiral stairway with its handrail, pipe crossing structures, existing interceptor coverings, leak prevention coatings, water drencher system, product pipes and pipes of the oily water discharge system after hot dipped galvanizing, tank marking, black coloured strip along the shell within the dip hatch area (Includes the roof area around the dip hatch and bottom most shell strip).	Item	1				
C20	**<u>Fabrications, Erections, Repairs & Testing</u>** Fabrication, installation & testing of cargo and delivery pipe modifications including valves & construction of pipe supports.	Item	1				
C21	Fabrication, installation & testing of pressure relief system	Item	1				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
C22	Fabrication, installation & testing of 03 No's of shell nozzles with attached shell plate insertions.	Item	1				
C23	Fabrication, erection, welding and testing of bottom plates, annular plates with centre sump, and tank internal drains.	Item	1				
C24	Repairs, modifications, and testing of the existing water drencher system	Item	1				
C25	Repairs & modifications of the existing 02 no's of roof manholes, 02 no's of PV valves and the dip hatch.	Item	1				
C26	Fabrication and installation of toe guard for the existing crown handrail.	Item	1				
C27	Fabrication and installation of the steel mesh near the dip hatch area.	Item	1				
C28	Fabrication and Installation of pipe crossing structures with concrete supports/ pedestals.						
C29	Installation, testing & commissioning of 02 no's of level gauges	Item	1				
C30	Installation & testing of the earthling system.	Item	1				
C31	**Painting of the Tank** Grit/Sand blast cleaning and painting of underside of bottom plates.	m^2	1,002				
C32	Grit/ Sand blast cleaning and painting of entire bottom of the tank and shell interior as specified.	m^2	1,226				
C33	Grit/ Sand blast cleaning and painting of the roof external surfaces with all accessories (Manholes, PV Valves, Dip Hatch, Pipe Supports, etc).	m^2	1,212				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE USD	AMOUNT USD
C34	Grit/Sand blast cleaning and painting of the shell exterior with all attachments (Remaining shell openings, pipe supports, etc).	m^2	1,378				
C35	Grit/Sand blast cleaning and painting of stairway and its supportive structure, handrail, crown handrail, pipe crossing structures with all attachments.	Item	1				
C36	Grit/ Sand blast cleaning and painting of the water drencher system, product pipes and pipes of the oily water discharge system after hot dipped galvanizing.	Item	1				
C37	Application of leak prevention paints for reverted joints as per specifications.	Item	1				
C38	Painting Tank identification number, CPSTL logo and other details	Item	1				
C39	Black coloured paintings around the dip hatch, tank shell and bottom most shell strip as specified.	Item	1				
C40	Box up the Tank	Item	1				
	Testing and Calibration						
C41	Tank Hydro test	Item	1				
C42	Tank calibration & Physical Measurement Report	Item	1				
	Total amount carried to summary						

SUMMARY OF BOQ				
ITEM	**DESCRIPTION**		**LKR AMOUNT**	**FOREIGN CURRENCY AMOUNT (USD)**
A	PRELIMINARIES			
B	CIVIL WORK			
C	MECHANICAL WORKS			
	Sub Total I	(a)		
	Less discount if any	(b)		
	Sub Total II	(c)= (a) +(b)		
	SSCL Tax (if applicable)	(d) = (c) *(…...) %		
	Total sum carried to Form of Bid	(e) = (c) + (d)		
	VAT 18%	(f) = (e)*18%		
	Total sum with VAT	(g) = (e) + (f)		

VAT Amount (if applicable) :- ……

VAT registration no **(**if applicable) :-…… ……..……..……..….

Name of Bidder :-……...

Address :-……..……..……...

……..……..…

Contact No: ----------

Emai l:----------

……

Date

……..….

Signature & Common Seal
of the Bidder

Witness :……..

Name :……..

Address :……..

N.I.C. No:…….

Witness :……..

Name :……..……..

Address :……..

N.I.C. No:…….

SECTION – 9

SCHEDULES

SCHEDULES

Schedule 1 – General Information

(i) If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.

(ii) For joint ventures, each joint venture partner shall furnish information separately.

ITB Clause reference	Description	Information (to be filled by the bidder)	Remarks
	ICTAD Registration		Provide certified copies and label as attachment to clause 3.1
	Registration Number		
	Grade		
	Specialty		
	Expiry Date		
	Written Power of attorney of the signatory to the Bid	Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to clause 4.1(a)	
	If a Joint Venture, names and addresses of Joint Venture Partner	1. …….. 2. …….. 3. ……..	Provide a draft copy of the Joint Venture Agreement or alternatively the memorandum of understanding
	If a Joint Venture, Name of Lead Partner		
	For joint ventures, each joint venture partner shall furnish Legal Status separately		
	(Lead Partner)		Provide certified copies and label as attachment to clause 4.1(a)
	Legal Status		
	Place of registration		
	Principal place of business		
	Written Power of attorney of the signatory to the Bid	Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to clause 4.1(a)	

Schedule 1– General Information continued …….

	If a Joint Venture, names and addresses of Joint Venture Partner	1. …….. 2. …….. 3. ……..	Provide a draft copy of the Joint Venture Agreement or alternatively the memorandum of understanding
	If a Joint Venture, Name of Lead Partner		
	For joint ventures, each joint venture partner shall furnish Legal Status separately		
	(Partner 2)		Provide certified copies and label as attachment to clause 4.1(a)
	Legal Status		
	Place of registration		
	Principal place of business		
	Written Power of attorney of the signatory to the Bid	Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to clause 4.1(a)	
	VAT Registration Number		
	Name (Partner 3)		Provide certified copies and label as attachment to clause 4.1(a)
	Legal Status		
	Place of registration		
	Principal place of business		
	Written Power of attorney of the signatory to the Bid	Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to clause 4.1(a)	
	VAT Registration Number		

Schedule 2 – Annual Turn-over Information

(i) If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.

(ii) For joint ventures, each joint venture partner shall furnish information separately.

Year	Turn-over	Remarks
2018 / 2019		Attach audited reports and label as attachment to clause 4.2
2019 / 2020		
2020 / 2021		
2021 / 2022		
2022 / 2023		
Average		

Schedule 3 – Adequacy of Working Capital

If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.

Source of credit line	Amount	Remarks
		Provide documentary evidence and label as attachment to clause 4.2

Schedule 4 – Construction Experience in last ten years

(i) If pre-qualification is done the bidders are required to include information Subsequent to that submitted with the pre-qualification application.

(ii) For joint ventures, each joint venture partner shall furnish information separately.

Year	Employer	Description of Works	Amount	Contractor's Responsibility (%)

- Provide documentary evidence and label as attachment to Clause 4.2

Schedule 5 – Major Items of Construction Equipment Proposed

Type	Capacity

Schedule 6 – Construction Management Staff (Contract Managers/Technical Staff)

A. Key Personnel / Professionals

	Name	Position	Task
Managerial	1.		
	2.		
	3.		
Technical	1.		
	2.		
	3.		

B. Support Staff

	Name	Position	Task
	1.		
	2.		
	3.		
	4.		
	5.		

Schedule 7 - Time Schedule for Key Staff

Name	Position	Activities	Months (in the form of a Bar Chart)											Number of Months
			1	2	3	4	5	6	7	8	9	10		

Full Time:----------

Part Time:----------

Schedule 8 - Work Program										
	(1st, 2nd,etc. months from the start date.)									
Construction Activity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th

SCHEDULE FOR DAY WORKS

SCHEDULE A- LABOUR

Any labour engaged on Day work shall be paid at the rates given below. Contractor's profit and overheads should not be included in the rates.

No.	Category	Gross Daily Wages LKR
1	Skilled labour	
2	Semi-skilled labour	
3	Unskilled labour	
4	Welder	

SCHEDULE B-MATERIAL

The Bidder shall give in this schedule the basic price of the following material

No.	Category	Unit	Gross Rate LKR
1	Carbon Steel Plate	Ton	
2	Sulphur resistant cement	50 kg bag	
3	Sand	m^3	
4	Reinforcement steel	kg	

SCHEDULE C – PLANT

Any Plant engaged on Day works shall be paid at the rates given below. The rates are for wet hire. These rates shall include for all inputs for running of the plant, transport to site, operators, attendants, insurance and other overheads associated with such plant.

No.	Description of Plant	Hourly Rate LKR
1	Farm Tractor with Trailer	
2	Backhoe Loader	
3	Excavator (1 m^3)	
4	Lorry/Tipper (5 t) with driver	
5	DC Welding Plant	
6	50 Ton Crane	
7	Grit/Sand blasting equipment	

Schedule 9–Details of Suppliers & Manufactures					
No	**Item**	**Manufacture**	**Supplier**	**Country of Origin**	**Country of manufacturer**
1.	Plates				
2.	Pipes				
3.	Fittings				
4.	Flanges				
5.	Nut & bolts				
6.	Gaskets				
7.	Valves				
8.	Level gauges				
9.	Paints				
10.	Any Other				

SECTION – 10

DRAWINGS

LIST OF DRAWINGS

NO.	DRAWING TITLE	DRG. NO.
01	Details of Marking	1839
02	Bottom Plate Arrangement	1839-1
03	Shell Accessories & Sump Details	1839-2
04	Platform & Piping Details	1839-3
05	Layout Plan of Drain System and Foot Path	1839-4
06	Foundation Details	1839-5
07	General Arrangement	1839-6

SECTION – 11

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, Wellampitiya,.

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

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?**	20		
Completed?	20		
Signed?	20		
Bid Security			
Address to the **Employer?**	17		
Format as required?	17		
Issuing Agency as specified?	17		
Amount as requested?	17		
Validity **28 days beyond** the validity of Bid?	17		
Qualification Information			
All relevant information completed?	4		
Signed?	4		
Addendum			
Contents of the addendum (if any) taken in to account?	11		
Bid package			
All the documents given in ITB Clause 13 enclosed in the original and copy?	13		
ITB Clause 21 followed before sealing the Bid package?	21		