

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

**MINISTRY OF HIGHWAYS & ROAD DEVELOPMENT AND
PETROLEUM RESOURCES DEVELOPMENT**

CEYLON PETROLEUM STORAGE TERMINALS LIMITED

BIDDING DOCUMENT

INTERNATIONAL COMPETITIVE BIDDING (ICB)

FOR

**REPAIRS TO TANK NO. 46 AT KOLONNAWA
INSTALLATION**

CONTRACT NO: KPR/102/2017

Employer:

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

Issued to:

Issued by:

Date:

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DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Invitation for Bids (IFB)

MINISTRY OF HIGHWAYS & ROAD DEVELOPMENT AND PETROLEUM

RESOURCES DEVELOPMENT

CEYLON PETROLEUM STORAGE TERMINALS LIMITED

REPAIRS TO TANK NO. 46 AT KOLONNAWA INSTALLATION

CONTRACT NO : KPR/102/2017

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. 46 at Kolonnawa Installation**” as described below and estimated to cost LKR 140 million. The Construction period is 270 calendar days.

Above work consist of,

- i. Removing of existing roof plates with all attachments, roof structure, the 6th, 7th and 8th shell courses, water drenching line from nearest flange to tank.
 - ii. Supply of plates and other materials and installation of new shell courses, roof structure and roof with all attachments.
 - iii. Fabrication and installation of new inlet and outlet nozzles, floating suction.
 - iv. Blast cleaning and painting of tank interior and exterior with roof structure.
 - v. Fabrication and installation quick flush system including all valves, pump with motor and other accessories.
 - vi. Demolishing of existing concrete apron and brick drain and constructing the apron and drain.
 - vii. Third party inspection of plates, calibration of the tank and box up the tank.
2. Bidding will be conducted through **International Competitive Bidding** Procedure.
3. To be eligible for contract award, the successful bidder shall not have been blacklisted and shall meet the following requirements.
- (a) For domestic Bidders, **ICTAD (CIDA) registration is required as follows;**

Specialty	Grade
Heavy Steel Fabrication	EM1

- (b) For foreign bidders, **No ICTAD (CIDA) registration is required**, but more experience is required compared to domestic bidder as per Clause 4.3 for compensating above registration.
4. Qualification requirements to qualify for contract award include
- 4.1 Average annual volume of construction work performed in last five years shall be at least **LKR 280 million (Sri Lanka Rupees Two Hundred and Eighty Million) or equal amount in foreign currency.**
 - 4.2 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 47 million (Sri Lankan Rupees Forty Seven Million) or equivalent amount in foreign currency.**

4.3 Bidder should have experience as a contractor in the construction of a nature and complexity similar to the Works (5,000 m³ or higher capacity steel, vertical, above ground storage tank as per API Standard 650) or major repairs to such tanks including replacement of entire bottom/ roof plates with roof structure conforms to API 653. At least one project for domestic bidder/joint venture partner and two for foreign bidder/joint venture partner for new tank construction or at least two projects for domestic bidder/joint venture partner and four for foreign bidder/joint venture partner for major repairs to such tanks during last ten years.

for joint ventures between Domestic and Foreign partners;

(a) If the Domestic partner have ICTAD (CIDA) registration of **EM1 in Heavy Steel Fabrication speciality**, foreign bidder/joint venture partner should have experience as a contractor in at least one project for new tank construction or at least two projects for major repairs to such tanks required.

(b) If the Domestic partner doesn't have ICTAD (CIDA) registration of **EM1 in Heavy Steel Fabrication speciality**, foreign bidder/joint venture partner should have experience as a contractor in at least two project for new tank construction or at least four projects for major repairs to such tanks required.

5. Interested bidders may obtain further information from the Manager Procurement of the Ceylon Petroleum Storage Terminals Limited, (Tele Phone+94 112572156, 5750764 and Tele Fax: +94 11 2572155 and Email: procure@cpstl.lk) and inspect the bidding documents free of charge during any working days from 0900 hrs to 1500 hrs. at the address given below. However, the bidders can inspect the bidding document (excluding drawings) from CPSTL website; www.cpstl.lk .

6. 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 **24.05.2019** until **04.07.2019** from 0900 hrs. to 1430 hrs. on any working day upon cash payment of a non-refundable fee of LKR 26,000.00 or remittance of USD 150 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 request before 14 days to the Bid closing date 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 : PSBKLK LX

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.

7. Bids shall be delivered in duplicate to the address given below on or before **1430 hrs.** Local time (+ 5.30 GMT) **05.07.2019**. Late bids will be rejected. Bids will be opened soon after closing in the presence of the bidders' representatives who choose to attend.
8. Bids shall be valid up to **04.10.2019**.
9. All bids shall be accompanied by a Bid Security of LKR 1,400,000.00 (Sri Lankan Rupees One Million and Four Hundred Thousand only) or USD 7,800.00 (US Dollars Seven Thousand and Eight Hundred Only). Bid Security shall be valid up to **01.11.2019**.
10. A pre-bid meeting will be held at 0930 hrs on **11.06.2019** at the office of Engineering Function, Oil Installation, Kolonnawa.

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 5750764
Facimile : +94112572155
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. ICTAD Publication No. ICTAD/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 (Volume 2)

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 those 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. 46 at Kolonnawa Installation.”**

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.

- (i) Removing existing roof plates with all attachments, roof structure, 6th, 7th and 8th shell courses and water drenching line from nearest flange to tank.
- (ii) Supply plates and other materials and installation of new shell courses, roof structure and roof with all attachments
- (iii) Fabrication and installation of new inlet and outlet nozzles, floating suction,
- (iv) Blast cleaning and painting of tank interior and exterior with roof structure
- (v) Fabrication and installation of quick flush system including all valves, pump with motor and other accessories.
- (vi) Third party inspection of plates
- (vii) Calibration of the tank
- (viii) Box up the tank

1.2 Time for Completion

The Time for Completion for the whole of works shall be **270 Calendar Days.**

2.1 Source of funds

The source of funds is Ceylon Petroleum Storage Terminals Limited.

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

- ICTAD (CIDA) registration (for domestic bidders only)
- Registration number
- Grade
- Specialty
- Expiry date
- VAT registration number (if applicable)
- Attach construction program
- Attach legal status (Sole proprietor, Partnership, Company etc.)
- Attach authentication for signatory
- 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
- Attach Work plan and methods;
- Details of the suppliers and manufactures

4.1 (a) **Qualification Information**

Bidder is the party having experience in construction of 5,000 m³ or higher capacity steel, vertical, above ground storage tank as per API Standard 650 or major repairs to such tanks including replacement of entire bottom/ roof plates with roof structure conforms to API 653. In the case of joint venture, party having above experience is considered as the bidder, and the other party/ies are considered as joint venture partner/s.

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”.

4.2(a) ICTAD (CIDA) registration required

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

Specialty	Grade
Heavy Steel Fabrication	EM1

(ii) For foreign bidders:- **No ICTAD (CIDA) registration is required**, but more experience is required compared to domestic bidder as per Clause 4.2 (c) for compensating above registration.

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 280 million (Sri Lanka Rupees Two Hundred and Eighty 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 for the last five (05) years (2012/2013, 2013/2014, 2014/2015, 2015/2016 and 2016/2017) shall be submitted with the offer.

4.2 (c) **Experience**

Bidder should have experience as a contractor in the construction of a nature and complexity similar to the Works (5,000 m³ or higher capacity steel, vertical, above ground storage tank as per API Standard 650) or major repairs to such tanks including replacement of entire bottom/ roof plates with roof structure conforms to API 653. At least one project for domestic bidder/joint venture partner and two for foreign bidder/joint venture partner for new tank construction or at least two projects for domestic bidder/joint venture partner and four for foreign bidder/joint venture partner for major repairs to such tanks during last ten years. (to comply with this requirement, works cited should be at least 70 percent complete).

for joint ventures between Domestic and Foreign partners;

- (a) If the Domestic partner has ICTAD (CIDA) registration of **EM1 in Heavy Steel Fabrication speciality**, foreign bidder/joint venture partner should have experience as a contractor in at least one project for new tank construction or at least two projects for major repairs to such tanks required.
- (b) If the Domestic partner doesn't have ICTAD (CIDA) registration of **EM1 in Heavy Steel Fabrication speciality**, foreign bidder/joint venture partner should have experience as a contractor in at least two project for new tank construction or at least four projects for major repairs to such tanks required.

Details shall be entered in Schedule 4 of Section 9 "Schedules". Documentary proof (Copy of PO, performance certificate, completion certificate, agreement etc.) for successful completion of the work relating to experience and the availability of engineers and other staff involved in work relating to experience, shall be submitted with the offer.

The bidders shall have very clear documentary evidence as proof of having 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". Scaffoldings, Excavator/JCB, 25 ton Crane, 5 nos welding generators, grit blasting equipment etc.

4.2(e) Qualification and Experience of the Contract Managers/Engineering staff
Following 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 10 years experience.

(ii) Engineering:

- a. One Mechanical Engineer with B.Sc. (Eng) or equivalent with more than 4 years experience and who is conversant with API Standard 650 and other relevant standards and codes.
- b. One Mechanical Engineer with B.Sc. (Eng) or equivalent with more than 1 years experience in similar tank fabrication works should be assigned to the project full time basis on site during tank erection.

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 47 million (Sri Lanka Rupees Forty Seven Million) or equivalent amount in foreign currency.**

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 (Tel. +94-11-2572214, Fax No. 0094-11-2531328) at least 02 days in advance with their names, NIC Numbers/Passport Numbers so that the CPSTL will arrange required permits for the site visit.

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

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 5750764

Facimile : +94112572155

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 / Power vesting letter for the signatory to the Bid;
 - (d) Section 2 - Bidding Data
 - (e) Section 4 - Contract Data
 - (f) Section 6 - Specifications;
 - (g) Section 8 - Priced Bill of Quantities;
 - (h) Section 9 - Duly filled Schedules;
 - (i) Section 10 - Drawing; and
 - (j) Detailed "Construction Procedure" for related design, procurement, construction, testing, commissioning and documentation. Catalogues, literature, write-ups to be annexed to supplement the procedure with adequate information. Manufacture/supplier, country of origin, country of manufacture of plates, pipes, fittings, flanges, valves, nozzles, foam pourer, cables, dip hatch, and 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 Procedure" for related design, procurement, construction, testing, commissioning and documentation. Catalogues, literature, write-ups to be annexed to supplement the procedure with adequate information. Manufacture/supplier, country of origin, country of manufacture of plates, pipes, fittings, flanges, valves, nozzles, foam pourer, cables, dip hatch, and other equipment shall be clearly mentioned.

14.3 VAT component shall not be included in the rates. The amount written in the Form of Bid shall be without VAT.

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.

If any bidder is not registered for VAT, he shall indicate the net value of the bid. Under the category bidder shall obtain a letter from the Commissioner of Inland Revenue Department, certifying the Company has not been registered for VAT, shall be attached to the bid. Any bidder who does not comply with this requirement will be liable for rejection of his bid.:

14.4 Adjustments for change in cost

The Contract **is not subjected** to price adjustment.

15.1 Currency of Bid

The Bid shall be quoted in Sri Lankan Rupees (LKR) and/or Foreign Currency.

The Bidders shall be allowed to quote only in two Currencies.

For evaluation and comparison of Bids under Sub-Clause 30.2, rates and prices quoted in foreign currencies by the bidders will be converted to Sri Lanka Rupees using middle exchange rate published by Central Bank of Sri Lanka, on the date 28 Days prior to date of closing of Bids.

Price Schedule No.	Item No.	Currency

16.1 Period of Bid validity:

The Bid shall be valid up to **04.10.2019**

17.1 The amount of Bid Security

The Amount of Bid Security LKR 1,400,000.00 (Sri Lankan Rupees One Million and Four Hundred Thousand only) or USD 7,800.00 (US Dollars Seven Thousand and Eight Hundred Only).

17.2 Validity of Bid Security

The Bid Security shall be valid up to **01.11.2019** 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 “confirmed” by a bank in Sri Lanka approved by Central Bank of Sri Lanka

19.1 Pre-Bid meeting

A pre –bid meeting will be held at 0930 hrs. Local time on **11.06.2019** at the office Engineering Function, Ceylon Petroleum Storage Terminals Limited, Oil Installation, Kolonnawa. Subsequently, a site visit will be arranged.

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/102/2017

22.1 Deadline for submission of Bids

Deadline for submission of Bids: **05.07.2019**

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: 1430 hrs. Local time (+ 5.30 GMT)

Date: **05.07.2019**

31.1 Preference for Domestic Bidders

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 procedures 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 Highways & Road Development and
Petroleum Resources Development,
No. 80,
Sir Ernest de Silva Mawatha,
Colombo 07.

Cash Deposit: Rupees 50,000/=

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 “confirmed” by a bank in Sri Lanka approved by Central Bank of Sri Lanka,

The amount of Performance Security is **5 %** of the Initial Contract Prices.

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

37. Adjudicator

The Adjudicator proposed by Employer is **Institute for Construction Training and Development ICTAD / (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.50% by the Employer and 50% by the Contractor.

SECTION – 3
CONDITIONS OF CONTRACT

Conditions of Contract shall be read in conjunction with the Section 4 – Contract Data in Volume 2, 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, ICTAD Publication No. ICTAD/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: Engineering Manager

Address: 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 **270 Calendar Days.**

1.1.3.7 Defects Notification Period Defects Notification Period is **365 Calendar 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.
The Performance Security shall be valid until 28 days beyond the expected completion date of Defects Liability Period. The acceptable form is Unconditional Guarantee

Special Safety Conditions i. Fire barriers to be erected and Fire blanket are to be laid before starting hot work at site where ever required.

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 observed 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 Oil Installation, Kolonnawa 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 enter in to the Oil Installation, Kolonnawa. Those who possess valid police clearance are eligible to obtain gate passes. Safety clearances to be obtained before enter to the tank farm.
- vi. 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.

	Working Hours	<p>i. Normal working hours of CPSTL from Monday to Friday is from 0730 hrs. to 1645 hrs.</p> <p>ii. In the work programme Saturday also can be considered as a working day and from Monday to Friday up to 1800 hrs also can be considered as a working hours by the contractor. But to work on Saturday and up to 18. 00 hrs the contractor is required to obtain prior permission since the offices are normally closed on Saturdays.</p> <p>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 the cause of any work which it is customary to carry out, outside normal working hours by rotary or double shifts.</p>
8.7	Liquidated damages for the Works	0.1% 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	Adjustments for Changes in Cost	Not applicable
14.2	Total Advance Payment	<p>20 % of the Initial Contract Price excluding Provisional Sums & Contingencies.</p> <p>The advance payment securities issued by the following agencies are acceptable;</p> <ul style="list-style-type: none"> ▪ a commercial bank operating in Sri Lanka approved by Central Bank of Sri Lanka, ▪ a bank based in another country but the guarantee “confirmed” by a bank in Sri Lanka approved by Central Bank of Sri Lanka,
14.2	Number and timing of instalment for Advance Payment	<p>Stage 1-</p> <p>Two equal instalments. The first ten percent (10%) of advance payment will be paid within 14 days from receipt of both Performance</p>

and Advance Payment Guarantee as required under clause 4.2 and 14.2 respectively.

Stage II-

Balance ten percent (10%) will be paid after successfully mobilization at the site after receipt of mobilization Advance Payment Guarantee.

14.3(c)	Percentage of Retention	10% of certified value of works (Applicable for all interim payments except final interim payment)
14.3(c)	Limit of Retention	5% of the Initial Contract Price (Applicable only for Final interim payment)
14.4	Plant & Material Intended for the works	Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3 (<i>Application for Interim Payment Certificate</i>), 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 16 million
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 for Insurance (including Employer's Property)	Insurance cover to the amount of LKR 100 Million 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 and Managing Director, 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:.....[Name and Address of Employer]

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 later than theday 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:.....[Name and Address of Employer]

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 -06

SPECIFICATIONS

6.1 Scope of Supply by CPSTL

Flat iron required for toe plate of crown handrail shall be supplied by CPSTL.

6.1.1 Construction Utilities

6.1.1.1 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.

6.1.1.2 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 clause 6.2.11 are satisfied.
- v. CPSTL will reserve the right to disconnect the power supply to the contractor without prior notice, if any of the foresaid conditions are violated.

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

6.2 Contractor's Scope of Supply

Contractor shall supply construction equipment, materials, consumables and other requisites as follows;

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

6.2.2 Supply of all inspection equipment such as X-ray machines, vacuum testing instruments and gauges to perform necessary inspection and testing.

6.2.3 Supply of Carbon Steel plates as per the specification (Clause No 6.3.15.1) for replacement of the roof and shell courses.

6.2.4 Supply of materials for all replacement such as manholes, vents, dip hatch, roof structure, nozzles, water drenching line etc as per the specification given in this document.

6.2.4 Supply of gasket and nuts & bolts for all replacements and for boxed up the tank as per the specification given in this document.

6.2.5 Supply of all consumables such as welding electrodes, gas for cutting, grinding discs, temporary erection material, dye penetrant / X ray films / diesel for inspection, grit for blast cleaning and all other consumables necessary for the proper execution of the job.

6.2.6 The paint and thinner required for tank interior & exterior, roof structure, roof exterior with all accessories, stairway and its hand rail, and water sprinkle system shall be provided by the contractor.

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

- 6.2.8 Supply of sand, cement, reinforcement, butamine and all necessary material for proper execution of job.
- 6.2.9 Shall submit a bar chart for the total project clearly indicating the various phases of the contract, breakdown of manpower and equipment and organization chart allocated for this contract.
- 6.2.10 Quality assurance records shall be maintained by the contractor and these records shall be given to Engineer upon completion of each job.
- 6.2.11 The Contractor shall submit the performance bond and insurance covers as per Contract Data in Section – 4.
- 6.2.12 Construction Utilities
- 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.

6.3 Contractor's Scope of Work and Specifications

- 6.3.1 All repair work shall conform to API 653 and API 650.
- 6.3.2 Check the existing tank design and structural rigidity for suitability of the proposed method by the bidder for the tank roof plates replacement. Suitability of the method to be informed to CPSTL in writing.
- 6.3.3 The tank would be handed over to the contractor in a clean and gas free state.
- 6.3.4 All drawings, welding sequences, method statements, time schedules, as built drawings and other related documents shall be prepared and submitted by the contractor.
- 6.3.5 Welding Procedure and Welder Qualification
- 6.3.5.1 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 tests documented by Procedure Qualification Records (PQR) to support the specifications as required by section ix of the ASME code and any additional provisions of API 650 standards.
- 6.3.5.2 Qualification of Welders
Conduct tests for all welders assigned to manual and semi-automatic welding to demonstrate the welders' ability to make acceptable welds in accordance with section ix of ASME code and API 650 standards.

6.3.6 Repairs to Tank

- 6.3.6.1 Existing roof plates and roof structure should be removed including crown handrails, roof accessories and water drenching system.
- 6.3.6.2 All plates of the 8th, 7th and 6th Shell courses shall be removed with reinforcement ring as per the drawing No. 1615-2.
- 6.3.6.3 Supply 7 mm or 9/32 inch thick Carbon Steel plates as per specifications, fabrication and welding of new shell plates for shell course No. 06, 07 and 08 as per the drawing No. 1615-2.
- 6.3.6.4 Supply angle iron for roof structure as per the specifications, fabrication and welding according to drawing No. 1615-1.
- 6.3.6.5 Supply 6mm or ¼ inch thick Carbon Steel plates as per specifications, fabrication, laying and welding of new roof plates. Supply materials as per specifications, fabrication, installation and welding of roof accessories such as manholes, vents, dip hatch etc. The contractor on the approval of the Engineer shall commence lying of the new plates. The plates shall be joined by a suitable welding method using AWS E 7018 series electrode in such a way it will provide a near possible plane surface. AWS E 6013 can be used for joining of roof plates. Subject to approval of the Engineer, the welding sequence adopted should result in least distortion.
- 6.3.6.6 Supply angle iron for the deformed section of roof top angle as per the specifications, fabrication and welding.
- 6.3.6.7 Supply of foam top pourers as per the specifications and fixing to the tank.
- 6.3.6.8 Underside of new roof plates and roof structure shall be blast cleaned and painted as per the specifications given in 6.3.9.1 before installation.
- 6.3.6.9 Tank shell interior and tank bottom shall be blast cleaned and painted as per the specifications given in 6.3.9.1.
- 6.3.6.10 Tank shell exterior including roof and all roof accessories shall be blast cleaned and painted as per the specifications given in 6.3.9.2.
- 6.3.6.11 Supply of materials for crown handrail fabrication with toe plate and fixed to the tank. Painting of handrail shall be power brush cleaned.
- 6.3.6.12 Painting of spiral stairway shall be power brush cleaned and locally repaired.
- 6.3.6.13 Top landing structure shall be replaced.
- 6.3.6.14 Fire water cooling line shall be replaced from flange near tank apron as per the drawing No. 1615-6 and grit blast cleaned and painted as per the specification given in 6.3.9.3.
- 6.3.6.15 Supply of materials, bending pipes and fabrication of foam piping system as per drawing No. 1615-7.
- 6.3.6.16 Foam piping system shall be Grit blast cleaned and hot dip galvanized as per the specification given in 6.3.10.
- 6.3.6.17 Floating suction shall be fabricated and fixed. Flexible metal hose, pipes for floating suction and float drums shall be supplied by CPSTL.
- 6.3.6.18 Earthing system shall be designed as per API Standard 650 Twelfth Edition, March 2013 –Clause 5.8.11.3
- 6.3.6.19 Corroded portions of reinforcement ring of tank shell shall be replaced by supplying and fabrication of 205x100x9 mm C channel.
- 6.3.6.20 Demolish the existing concrete apron and brick drain and construct the apron and

drain as per the drawing 1615-10.

6.3.6.21 Tank shall be marked as “TANK NO 46, CAPACITY 12,000 m³” as per the drawing No. 1615-12.

6.3.6.22 Supply of materials, fabrication and installation of quick flush drain system including tank and pump shall be attended as per the Drawing No.1615-11. Whole unit shall be painted as per specification given in 6.3.9.1 and 6.3.9.2

6.3.6.23 Fix the 450x450x50 mm precast concrete slabs after laying 50 mm quarry dust layer as per the Drawing No. 1615-11.

6.3.6.24 Tank shall be calibrated.

6.3.6.25 Tank shall be boxed up.

6.3.7 Third party inspection of plates and other relevant materials

Third party inspection of plates (which are supplied by the contractor) shall be done by a reputed third party inspection company approved by CPSTL and Third Party Inspection reports shall be submitted to CPSTL for the approval.

6.3.8 Testing and Inspection

6.3.8.1 Tank roof welds shall be tested for leaks with vacuum tester (using contractor’s own equipment) in the presence of the representative of Inspection Engineer.

6.3.8.2 Tank shell welds shall be tested by Radiographic examination. The report of radiographic examination of welds shall be submitted to the Engineer together with any other relevant information that may be required.

6.3.8.3 All inspection and testing of the roof plate weldments and the roof accessories shall be arranged by the contractor as per the requirements of API 650 and API 653.

6.3.9 Painting

6.3.9.1 Painting underside of roof plates and roof structure, tank shell interior and tank bottom

The entire roof structure, tank shell interior and tank bottom shall be painted, under side of the roof plates and interior of quick flush tank shall be painted before plates are installed and touch-up paintings shall be done on welding joints as per following paint system after grit blast cleaning specified under clause 6.3.9.6. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.9.7.

Paint preparation & application shall comply with manufactures data sheet.

Description	Thickness	
SIGMA COVER 280 (PDS 7417) or SIGMA COVER 522 (PDS 7420)	50 microns DFT	Primer
SIGMAGUARD 720 (EHB) GREEN (PDS 7433)	150 microns DFT	Intermediate
SIGMAGUARD 720 (EHB) GREY LIGHT (PDS 7433)	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.		

6.3.9.2 Painting Tank Exterior

The roof external surfaces with all attachments, tank shell exterior and exterior of quick flush tank and system shall be painted after grit blast cleaning specified under clause 6.3.9.6 as per following painting system. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.9.7.

Paint preparation & application shall comply with manufactures data sheet.

Description	Thickness	
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.		

6.3.9.3 Painting of the water drenching system

Water drenching system shall be painted after grit blast cleaning specified under the clause 6.3.9.6 as per following painting system. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.9.7.

Paint preparation & application shall comply with manufactures data sheet.

Description	Thickness	
SIGMA COVER 280 – Yellow Green (PDS -7417) or equivalent	60 microns DFT	Primer
SIGMA COVER 435/SIGMA CAP MIO - Colour Green (PDS -7465) or equivalent	75 microns DFT	Intermediate
SIGMA DUR 188 Red (PDS 6824) or SIGMA COVER 456 Gray or equivalent	75 microns DFT	Finish
Required overall paint thickness	210 microns DFT	
Sigma solvent – Thinner 21-06 or equivalent or as specified in manufactures data sheet.		

6.3.9.4 Painting of Spiral Stairway

The Spiral Stairway and its hand rail and crown hand rail shall be painted according to their standard colour codes (structure – black, handrail – yellow) as follows after power brush cleaning specified under clause 6.3.9.6. Application of paint and obtaining of approval for painting shall be carried out as described in clause 6.3.9.7. The paint is recommended to apply by brush or Air Spray.

Description	Thickness	
SIGMA COVER 280 – Yellow Green (PDS -7417) or equivalent	60 microns DFT	Primer

SIGMA COVER 435/SIGMA CAP MIO - Colour Green (PDS -7465) or equivalent	75 microns DFT	Intermediate
SIGMA COVER 456- Black (PDS -7466)/ SIGMA COVER 456- Yellow (PDS -7466) or SIGMA DUR 188 Yellow (PDS 6824) or equivalent	75 microns DFT	Finish
Required overall paint thickness	210 microns DFT	
Sigma solvent – Thinner 21-06 or equivalent or as specified in manufactures data sheet.		

6.3.9.6 Surface Preparation

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

6.3.9.7 Details of application and approval

6.3.9.7.1 All painting work shall be done as per the manufactures’ “datasheet”. The whole area specified above to be painted with primer, intermediate and finish paint. The primer paint is recommended to apply by Air Spray or Airless spray.

The intermediate and finish coats are recommended to apply by Airless spray.

6.3.9.7.2 All welding seams, sharp edges and other required areas are to be stripped coated as required.

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

- a. Prior to application of first primer coat after satisfactory cleaning of surfaces.
- b. Prior to application of first intermediate coat after applying the required thickness of primer.
- c. Prior to application of first finish coat after applying the required thickness of intermediate coat.

6.3.9.7.4 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.

6.3.9.7.5 Time interval between two coatings shall comply with paint manufactures instructions

6.3.9.7.6 The Engineer reserves the authority to accept or reject.

- a. Prepared surface before painting depending on his observations.
- b. Application of paint depending on the preparation of paint and the weather.

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

6.3.10 All pipes of foam top pourer system including fittings and flanges shall be grit blast cleaned and hot dip galvanized. All galvanizing work shall confirm to ASTM A 123 or BS EN ISO 1461:2009. Average mean coating thickness of galvanizing is 85 microns for all pipes, fittings and flanges.

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

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

6.3.11 Erection of Scaffolding

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

- 6.3.11.1 Should be of steel pipes and couplings, toe plates, platforms etc.
- 6.3.11.2 Thickness of 2” timber planks to be used for the platform and to be properly fastened at both ends.
- 6.3.11.3 Ladders should be provided from the ground to the platform.
- 6.3.11.4 After erecting the scaffolding the contractor should obtain a written approval from the safety department of CPSTL before commencement of the work.
- 6.3.11.5 Approval for the screening for grit blasting to be obtained from Fire & Safety Department of CPSTL after erection of scaffolding and prior to the grit blasting.
- 6.3.11.6 A temporary screening for grid blasting shall be erected to cover each sides of the tank using scaffolding and suitable materials for the purpose. It should be in a height of at least 1 meter beyond the tank roof starting from the ground. It should be erected in such a way as to give positive fire isolation. Further pipe rack running by the tank and all valves should be covered by a fire blanket.

6.3.11 Erection of Temporary Fire Barrier and Fire Blanket

A temporary fire barrier shall be erected to cover near tanks as required using corrugated metal sheets. It should be in a height of at least 1 m beyond the tank roof top position. Starting level of fire barrier can be decided to the contractor depending on his design. However it shall be approved by CPSTL. It should be erected in such a way as to give positive fire isolation. Further pipe rack running by the tank and all valves should be covered by a fire blanket.

6.3.12 Calibration of the Tank

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

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

MPMS (Manual of Petroleum Measurement Standards)

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

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

6.3.13 Box up the Tank

After completion of all works specified the tank shall be boxed up and handed over for operational purposes.

6.3.14 Site cleaning

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

6.3.14.2 Tank inside, tank exterior and tank farm shall clean after completion of the works and all removed material shall be dumped at a location inside the premises as directed by the engineer.

6.3.14.3 Existing excess materials shall be removed from the site as directed by the Engineer.

6.3.15 Tank Details

Tank Capacity	:	11,859 m ³
Tank Diameter	:	34.15 m
Tank Height	:	14.86 m
Type of the Tank	:	Fixed/Cone roof, welded, Steel, Vertical Storage Tank at Kolonnawa Installation, CPSTL
Status	:	Without product
Product	:	Jet A1

6.3.16 Specifications of Materials

6.3.16.1 Carbon Steel Plates

A) For Roof

- i. Material shall conform to ASTM A 283 Gr. C (Equivalent is not accepted)
- ii. Thickness :- 6mm or ¼ inch
- iii. Size :- 1800mm x 6000mm or 72inchx240inch or Suitable Size
- iv. Identification:-

Heat/Batch number and material description shall be marked on the plates.

- v. Valid mill test certificate with the heat/batch numbers or any other reference number should be submitted with the plates. The heat /batch numbers or any other reference number marked on plates should tally with that of the certificate for final acceptance at Ceylon Petroleum Storage Terminals Limited (CPSTL) Kolonnawa.
- vi. Tolerance in size, if any, should be mentioned with relevant standards for the purpose of evaluation.

B) For Shell

- i. Material shall conform to ASTM A 283 Gr. C (Equivalent is not accepted)
- ii. Thickness :- 7 mm or 9/32 inch
- iii. Size :- 1830mm x 7650mm or 72inchx300inch or Suitable Size
- iv. Identification:-

Heat/Batch number and material description shall be marked on the plates.

- v. Valid mill test certificate with the heat/batch numbers or any other reference number should be submitted with the plates. The heat /batch numbers or any other reference number marked on plates should tally with that of the certificate for final acceptance at Ceylon Petroleum Storage Terminals Limited (CPSTL) Kolonnawa.
- vi. Tolerance in size, if any, should be mentioned with relevant standards for the purpose of evaluation.

6.3.16.2 Carbon Steel Line Pipes

- i. Length 5.8m, seamless and Bevel Ends (BE)
- ii. Material shall conform to API Standard 5L-Gr B or ASTM A 106 B. (Equivalent is not accepted)
- iii. Dimensions shall conform to ANSI B 36.10 SCH 40
- iv. Identification: - Heat/Batch number, SCH number, API or ASTM number, seamless and material description shall be marked on the pipes.
- v. Both ends of pipe should have protective sleeves.
- vi. Valid mill test certificate should be supplied with Heat/Batch numbers or any other reference number marked on pipes as well as in the certificates to check once the items are delivered to CPSTL Kolonnawa with reference to the items against the Mill Certificate.

6.3.16.3 Carbon Steel fittings (Elbows, Reducers)

- i. Bevel ends (BE)
- ii. Material shall conform to ASTM A 234 Gr. WPB. (Equivalent is not accepted)
- iii. Dimensions shall conform to ANSI B 16.9, SCH40
- iv. Identification:- SCH number, ASTM number and material description shall be marked on the elbows and reducers.
- v. Valid mill test certificate should be supplied with Identification number or any other reference number marked on elbow as well as in the certificates to check once the items are delivered to Ceylon Petroleum Storage Terminals Limited Kolonnawa with reference to the items against the Mill Certificate.

6.3.16.4 Carbon Steel Flanges

- i. Class 150, Slip on (50), Raised Face (RF)
- ii. Material shall conform to ASTM A 105 Normalised. (Equivalent is not accepted)
- iii. Dimensions shall conform to ANSI B 16.5.
- iv. Identification:- ASTM number, ANSI Number, Class and material description shall be marked on the flange.
- v. Flange should be marked with the ASTM specification grade identification symbol and ASTM specification number.
- vi. Valid mill test certificate should be supplied with identification numbers or any other reference number marked on flanges as well as in the Certificate to check once the items are delivered to CPSTL Kolonnawa with reference to the items against the Mill Certificate.

6.3.16.5 Gasket Materials

- i. Maximum Working Pressure - 225 psi
- ii. Nominal Working Temperature - 45°
- ii. Thickness - 3 mm
- iii. 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.
- iv. Gaskets should conform to BS 7531 or equivalent.
- v. Each sheet of jointing shall be indelibly marked with the number of British Standard and manufacturer's identification mark.

6.3.16.6 Angle Iron

- i. Material: ASTM A 36

- ii. Size: As specified in the drawing and as existing in the tank
- iii. Valid mill test certificate shall be supplied

6.3.16.7 Nuts and Bolts

- i. Material of bolts 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 bolts and class 2B for nuts.
- iii. Identification marks shall be available on items to conform above standards.

6.3.16.8 Foam Top Pourer

Foam Top Pourers should be designed specifically for the use fixed roof fuel storage tanks. The pourers shall comprise with two elements, a Foam Generator and a Foam Pourer.

- a. Foam Generator which produces expanded foam when supplied with foam solution.

Capacity (Foam solution flow)	- 1250 l/m at 5 bar
Inlet Connection	- 4" RF Flange ANSI Class 150
Outlet Connection	- 8" RF Flange ANSI Class 150
Material Body	- Carbon Steel
Internal Fitting	- Stainless – steel
Frangible Disc	- Glass

- b. Foam Pourer which delivers the foam gently into the fuel surface of the fixed roof fuel storage tank. Foam Pourer should be designed to fix through a standard ANSI class 150 hole cut in the tank shell. Connection of the pourer to the tank shall be 8" RF Flange ANSI Class 150.

Operating Pressure	- 3 bar to 10 bars
Foam Expansion	- Low expansion

- c. Finish - Yellow thermoplastic Powder Coated

Following details to be submitted with the offer.

- i. Make and model.
- ii. Country of origin and Country of manufacture.
- iii. Original Brochures and standard test certificates.
- iv. List of required spare parts for a period of 5 years.
- v. Surface preparation and coating thickness details.

6.3.16.9 GI Pipes

Grade : Heavy Duty

Size : As existing in the tank

6.3.16.10 C Channel

- i. Material: ASTM A 36
- ii. Size: 205x100x9 mm and as existing in the tank
- iv. Valid mill test certificate shall be supplied

6.3.16.11 Pump and Electric Motor

a. Pump

- i. Centrifugal pump with end suction comply to API 610
- ii. Capacity: 6.8 m³/h
- iii. Minimum Head: 36 m
- iv. Suction size: 2 or 1 ½ inch
- v. Delivery size: 1inch
- vi. Flange: Class 150, ANSI B 16.5
- vii. Operation and maintenance catalogue shall be submitted

Mechanical Data

Type	: Centrifugal
Direction of rotation (Facing driven end)	: pref. CCW
Pump seal	: Mechanical
Position of nozzles (Facing driven end)	: Yes

Accessories

Base plate	: Combined for pump & motor
Foundation bolts	: Yes
Coupling	: Flexible
Coupling guard	: Yes, Non-sparking
Pressure/Suction Gauges	: Yes

Pump Drive

Electric Motor (50 Hz)

Hydrostatic test and complete unit test shall be done and certificates shall be submitted to CPSTL for approval.

Hydrostatic Test

All pressure casing components shall be hydrostatically tested with liquid at a minimum of 1.5 times the maximum allowable working pressure.

Complete Unit Test

The pump and driver train (motor), complete with all auxiliaries that make up the unit, shall be tested together.

b. Electric Motor

All the test certificates and conformity certificates and Data for Electrical Motor, including following shall be submitted to CPSTL for approval.

- i. Certificates for Routine Test conducted as specified in the latest EN/IEC 60034-1 standard
- ii. Certificates for AC induction motors intended for use in potentially explosive atmosphere inconformity with latest ATEX directive 94/9/EC.
- iii. Certificates for AC induction motors for flame proof enclosures inconformity with latest EN/IEC 60079-0 0 (General Requirement) and EN/IEC 60079-1 (Flame Proof) standard.
- iv. Motor Dynamic Balancing Test Reports.
- v. ISO-9000 certificate of the motor manufacturer.
- vi. Calibration certificates of all the measuring instruments used for testing.

Data for Electrical Motor

Type	:	Squirrel Cage type AC, Three phase Induction Motor
Power Supply	:	400 V \pm 10%, 3 Phase, 50Hz \pm 3%
Starting Frequency	:	Normal
Area Classification	:	As per latest ATEX Directive 94/EC conformity. Motor Group: II (Surface Industry, above ground) Equipment Category : 2 (Zone 01) Surrounding Atmosphere: G (Gas)
		As per latest EN/IEC 60079-0 (General Requirement) and EN/IEC 60079-1 (Flame Proof) Standard Conformity Type of Protection: d (Flame Proof Motor and Terminal Box) Gas Group: IIB Temperature Class: T4
Enclosure	:	TEFC
Ingress Protection Class	:	IP65 (as per latest EN/IEC 60529 standard)
Insulation Class	:	F
Motor Efficiency	:	MEPS-2/IE-1
Direction of Rotating	:	Bi Directional (Pref. CCW)
Capacity	:	Vender to specify
No. of Poles	:	Vender to specify
Frame size	:	Vender to specify
Mounting	:	Vender to specify
Brand	:	Vender to specify
Model	:	Vender to specify
Motor rating and performance shall comply with EN/IEC 60034-1		

Service Condition

Ambient Temperature	:	Max 40C, Min 20C
Relative Humidity	:	40-90%
Altitude	:	Less than 2000 meters
Location	:	Outdoor, hazardous area
Duty Type	:	S3-Intermittent
Starting Method	:	Motor shall be suitable for direct on line (DOL) and Star-delta starting with full load (all six terminals should be available at the terminal plate for selecting the proper starting method to end user.)

Other Condition

Noise Level	:	Shall not exceed 85dB at 1 meter
Vibration	:	Within the limits specified in ISO 2372 or equivalent

Construction Requirement

Cooling Method	:	IC 411 (According to IEC 34-6)
Bearing	:	Ball/Roller bearing with grease lubrication
Earthing	:	Both internal and external earthing terminal shall be provided
Balancing	:	Motor shall be dynamically balance using a half key and test report shall be submitted along with the motor
Stator	:	Shall be made out of cast steel/iron
Cooling fan	:	Non-sparking Bronze alloy
Terminal Box	:	To mounted, 4 ways rotational by 90 steps, shall have a sufficient space to accommodate cables. Cable entry plate shall be mounted separately for easy disconnection of incoming cable.
Thermistors	:	PTC type thermistors (PTC 130°C) embedded in each phase of winding for sensing winding temperature. The extra terminals of thermistor shall be brought in the same terminal box.
Name plates	:	02 Nos. (Provide extra name plate)
Handling	:	Provide Eye Bolt for handling

Standards & Codes Applicable

The motors shall be manufactured and tested according to latest IEC standards, Motors shall have either ATEX certification conformity or IEC Ex certification of conformity to permit the use of motor in the hazardous area as specified in clause 3.2.0 Data for Electrical Motor. The motor name plates shall be marked accordingly.

- 6.3.16.12 Valves
 Valves shall be complied with API 6d standard
 Types and Size of the valves asper the Drawing no. 1615-11

SECTION -07

FORM OF BID

FORM OF BID

Name of Contract: **Repairs to Tank No. 46 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 Sri Lankan Rupees
.....
(LKR) 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, [insert Date]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 storage area etc.

1. This Bill of Quantities contains pages numbered from 62 to 71. 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 Foreign Currency.

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.46 AT KOLONNAWA INSTALLATION.****BOQ No: E/48/2017**

Note: Items which has both the LKR Component and a Foreign Currency 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. Sub totals of LKR Component and a Foreign Currency Component (Specify the Foreign currency in the space given in BOQ & Summary) should be carried forward to the summary and the Foreign Currency subtotal to be converted in to LKR in the summary (Foreign Currency shall be converted to LKR using middle exchange rate published by Central Bank of Sri Lanka, on the date 28 Days prior to date of closing of Bids). Then both components shall be added and the total to be carried to Form of Bid.

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE	AMOUNT
A	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. PRELIMINARIES						
A1	Mobilization and demobilization and site clearing.	Item	Allow				
A2	Construction of temporary access road.	Item	Allow				
A3	Erection of temporary fire barrier and fire blanket in order to protect the surrounding piping and other tanks in service.	Item	Allow				
	Total amount carried to summary						

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE	AMOUNT
B	MECHANICAL WORK						
B1	Removal of existing roof plates, roof accessories and water drencher system.	Item	Allow				
B2	Removal of existing roof structure.	Item	Allow				
B3	Removal of 6 th , 7 th and 8 th shell courses with reinforcement ring as per the drawing.	Item	Allow				
B4	Fabrication and installation of inlet and outlet nozzles as per the drawing.	Item	Allow				
B5	Supply materials, fabrication and installation of new shell plates and accessories as per the drawing No. 1615-2.	Item	Allow				
B6	Supply materials, fabrication and installation of roof top angle.	m	110				
B7	Supply materials, fabrication and installation of roof structure.	Item	Allow				
B8	Supply materials, fabrication and installation of new roof plates and roof accessories.	Item	Allow				
B9	Supply materials, fabrication and install of water drenching system.	Item	Allow				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE	AMOUNT
B10	Supply necessary materials, fabrication and installation of floating suction.	Item	Allow				
B11	Supply necessary materials, fabrication and installation of reinforcement ring of tank shell.	m	110				
B12	Replacement of the dip plate.	Item	Allow				
B13	Supply materials, fabricate and install foam piping system with hot dip galvanizing.	Item	Allow				
B14	Supply and installation of foam top pourer unit.	Item	Allow				
B15	Supply materials, fabricate and install top hand rail with toe plate.	Item	Allow				
B16	Grit blast cleaning and painting of underside of roof plates and roof structure.	Item	Allow				
B17	Grit blast cleaning and painting of tank bottom and shell interior.	Item	Allow				
B18	Grit blast cleaning and painting of top side of roof plates and other accessories and shell exterior.	Item	Allow				
B19	Grit blasting cleaning and painting of water drenching system.	Item	Allow				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE	AMOUNT
B20	Power brush cleaning, painting, and local repairs to spiral stairway and its handrail.	Item	Allow				
B21	Improvement to the earthing system to the tank.	Item	Allow				
B22	Supply of centrifugal pump with electric motor.	Item	Allow				
B23	Supply materials, fabrication and installation of quick flush tank and system including gate valves, check valves and self-closing valves as per the Drawing No.1615-11.	Item	Allow				
B24	Blast cleaning and, painting of quick flush tank and piping system.	Item	Allow				
B25	Calibration of the tank including supply of 3 calibration tables and soft copy in the form of spread sheets.	Item	Allow				
Total amount carried to summary							
CIVIL WORK							
C1	Demolishing of existing tank apron by 3” and the existing brick drain.	m ²	200				
C2	Excavation, fill and compacted 300 mm ABC layer as per the drawing No. 1615-10	m ²	200				

ITEM	DESCRIPTION	UNIT	QTY	LKR COMPONENT		FOREIGN CURRENCY COMPONENT	
				RATE LKR	AMOUNT LKR	RATE	AMOUNT
C3	Constructing of concrete apron with filling groove by asphalt as per the drawing No. 1615-10	m ²	200				
C4	Demolishing and constructing concrete drain as per the drawing No. 1615-10	m	130				
C5	Laying, spreading and compaction of quarry dust of average 50mm thick as per the drawing No. 1615-11. Rate to include for necessary excavation, back filling, levelling etc.	m ²	50				
C6	Supply and laying of 450 x450x 50 mm pre cast concrete slabs by using grade 20 concrete on the well compacted sub base and leaving 30 mm joints and edges filled with 1:3 cement, sand mixture as per the drawing No. 1615-11.	m ²	50				
Total amount carried to summary							

SUMMARY OF BOQ					
ITEM	DESCRIPTION			LKR AMOUNT	FOREIGN CURRENCY AMOUNT (.....)
A	PRELIMINARIES		= LKR		
B	MECHANICAL WORK		= LKR		
C	CIVIL WORK		= LKR		
	Sub Total I	(a)	= LKR		
	Less discount if any	(b)	= LKR		
	Sub Total II	(c)	= LKR		
	Sub Total III (only LKR Amount)	(d)	= LKR		
	Convert Foreign Currency subtotal of (c) to LKR	(e)	= LKR		
	Sub Total IV	(f) = (d)+ (e)	= LKR		
	NBT (2%)	(g) = 2% (f)	= LKR		
	Total sum carried to form of bid	(h) = (f)+ (g)	= LKR		
	VAT (15%)	(j) = 15% (h)	= LKR		
	TOTAL AMOUNT WITH VAT	(h)+ (j)	= LKR		

Total amount in words (LKR):-.....

.....

VAT Amount :-

VAT registration no :-.....

Name of Bidder :-.....

Address :-.....

.....

.....
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			
<p>(i) If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.</p> <p>(ii) For joint ventures, each joint venture partner shall furnish information separately.</p>			
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		
	NCASL Membership		Provide certified copies and label as attachment to clause 3.2
	Number		
	Expiry Date		
	Legal Status		Provide certified copies of Registration
	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
2012 / 2013		Attach audited reports and label as attachment to clause 4.2
2013 / 2014		
2014 / 2015		
2015 / 2016		
2016 / 2017		
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.		
Engineering	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	11	12	13	14	15	40		

Full Time:-----

Part Time:

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	Portland cement	50 kg bag	
2	Sand	m ³	
3	Course Aggregate	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	DC Welding Plant	
3	25 Ton Crain	
4	50 Ton Crain	

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.	Structural Steel (Angle Iron etc.)				
8.	Top Foam pourers				
9.	Angle iron/C Channel				
10.	GI Pipes				
11.	Valves				
12.	Pump and Electric Motor				
13.	Any Other				

SECTION – 10

DRAWINGS AND ANNEXURE

LIST OF DRAWINGS

NO.	DRAWING TITLE	DRG. NO.
01	Existing Roof Truss Detail	1615-1
02	Replacement of Roof & Shell Plates	1615-2
03	Detail of Roof Manhole	1615-3
04	Detail of Dip Hatch	1615-4
05	Roof vent	1615-5
06	Detail of water Drencher System	1615-6
07	Proposed Foam Piping System	1615-7
08	2 Nos of 12" Shell Nozzles	1615-8
09	Floating Suction Arm detail	1615-9
10	Tank Apron & Outer Drainage Detail	1615-10
11	Quick Flush System	1615-11
12	Detail of Marking	1615-12

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, Sri Lanka.

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		