

وزارة الطاقة والمياه المديرية العامة للنفط منشآت النفط في طرايلس والزهراني

# إعلان رقم 8 / عمراً

الموضوع: دعوة للاشتراك في مناقصة لاجراء كشف ومعاينة خدمات المرافق النفطية في منشآت النفط في طرابلس.

تجري المديرية العامة للنفط - منشآت النفط في طرابلس مناقصة بطريقة الظرف المختوم لتلزيم الأشغال الخاصة لاجراء كشف ومعاينة الخدمات المرافق النفطية (خزانات - انابيب برية و بحرية) في منشآت النفط في طرابلس.

يمكنكم سحب دفتر الشروط الخاص بالمناقصة، والاطلاع عليه والاجراءات والنظم الادارية المتعلقة به وذلك عبر الحضور الى مكاتب المديرية العامة للنفط في فرن الشباك - بناية غاريوس - طابق ١١، مقابل دفعه مبلغا" وقدره مليون ليرة لبنانية.

ان آخر مهلة لتقديم العروض هي الساعة الثانية عشر ظهرا من نهار الثلاثاء الواقع في ٢٠٢/٦/١٤. وسوف تجري جلسة فض العروض المالية في مقر المديرية العامة للنفط في وقت يحدد لاحقا للشركات التي تتأهل إداريا وتقنيا.

بيروت في: ١٢ أبار ٢٠٢٢

وزير الطاقة والمياه

د اوليد فياض



# Lebanese Republic

Ministry of Energy and Water (MoEW)

Directorate General of Oil - Tripoli and Zahrani Oil Installations

# TRIPOLI TANK FARM INSPECTION OF EXISTING FACILITIES

**Volume 1: Conditions of Contract** 





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# 1. INFORMATION FOR TENDERERS



## 1. INFORMATION FOR TENDERERS

- 1.1 **TENDERS**
- 1.1.1 MINISTRY OF ENERGY AND WATER - DIRECTORATE GENERAL OF OIL (The Employer) wishes to receive bids for the "Tripoli Tank Farm -Inspection of Existing Facilities" project.
- 1.1.2 Tenders are invited for a lump-sum contract based on the Short Form of Contract published by the Federation Internationale des Ingenieurs - Conseils.
- 1.2 THE WORKS
- 1.2.1 The Tripoli tank farm project has three existing tanks which needs to be fully rehabilitated along with related piping, fire fighting system, and the supply pipelines from the berth up to the distribution manifold, including the manifold and supply line up to the tanks.

The Works consist of performing detailed technical inspection of existing site erected manifolds, pipelines, undersea product pipelines, including testing of flexible pipes and monobuoys for docking with the flange of the ship's stander, offshore manifold, main manifold, and draining system, on-shore tanks and other facilities of the TTF project. Detailed scope of work is included in Volume 2 -Employer's Requirements.

- 1.3 THE PARTIES
- 1.3.1 The Employer is:

MINISTRY OF ENERGY AND WATER - DIRECTORATE GENERAL OF OIL

MOEW - DGO

The Ministry of Energy and Water

Directorate General of Oil- Tripoli and Zahrani Oil Installations.

Lebanon, Beirut, Furn El Chebbak, Gharios Center, Eleven Floor

Info.ttf@dgo.gov.lb

(+961) 1 284782

- 1.3.2 The Employer's Representative shall be determined at a later stage.
- 1.4 TENDER DOCUMENTS
- 1.4.1 Documents issued to tenderers comprise:

Volume 1

Tender Conditions and Procedures, Conditions of

Contract and Tender Schedules.

Volume 2

Employer's Requirements.

Volume 3

Schedule of Prices





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2. TENDER CONDITIONS AND PROCEDURES



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#### 2. TENDER CONDITIONS AND PROCEDURES

#### 2:1 TENDER DOCUMENTS

## 2.1.1 DOCUMENTS COMPRISING THE TENDER:

The following documents comprise the Tender to be submitted by tenderers:

Volume 1 Tender Conditions and Procedures, Conditions of Contract

and Tender Schedules

Volume 2 The Employer's Requirements

Volume 3 Schedule of Prices

Addenda issued during the Tender period

and any other information required to be submitted in accordance with the Tender Conditions and the Specifications.

- 2.1.2 DETAILS TO BE CONFIDENTIAL: The tenderer shall treat the Tender Documents as private and confidential (except as may be necessary for the purpose of tendering) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere. The Tender Documents shall not be used for any purpose other than that for which they are intended.
- 2.1.3 EXAMINATION OF DOCUMENTS: The tenderer shall examine all documents for completeness and clarity. If any part is missing or indistinct he shall inform the Employer's Representative.
- 2.1.4 DISCREPANCIES: If the tenderer finds any ambiguities in the documents or discrepancies between documents or any other matters that are unclear, he shall inform the Employer's Representative, who will respond with an addendum.
- 2.1.5 CLARIFICATION: If the tenderer requires any clarification of the Tender Documents he shall notify the Employer's Representative in writing at the Employer's address indicated in the Invitation for Tenders (not later than 14 days before the deadline for submission of the tenders).

The Employer's Representative will respond to any request for clarification he receives earlier than fourteen (14) days prior to the date for submission of tenders.

The Employer's Representative's response (including a description of the enquiry but without identifying its source) will be sent to all tenderers.

Employer's Representative's response will be circulated via any of the below:

- In writing, or
- Fascimile, or

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- Published via MOEW-DGO official website
- 2.1.6 AMENDMENT: At any time prior to the original or extended date for submission of tenders, the Employer may, whether at his own initiative or in response to a clarification requested by a tenderer, modify the Tender Documents by the issue of addenda.
- 2.1.7 ADDENDA will be in writing and will be sent to all tenderers and will be binding upon them. Tenderers shall promptly acknowledge receipt thereof in writing to the Employer's Representative.
- 2.2 ELIGIBILITY AND QUALIFICATIONS OF TENDERERS AND BASIS OF TENDER
- 2.2.1 EVIDENCE OF QUALIFICATION: The tenderer shall provide evidence of his capability and adequacy of resources to carry out the Contract. To this effect, the tender shall include the following information:
  - a) Written power of attorney, signed, dated and notarized, authorizing the signatory of the tender to commit the tenderer.
  - b) Copies of original documents defining the constitution or legal status, place of registration and principal place of business of the tenderer's company, details of the experience and past performance of the Tenderer on works of a similar nature within the past five years, details of current work in hand and other contractual commitments.
- 2.2.2 BASIS OF TENDER: The tenderer shall complete the following schedules containing his further proposals in connection with the execution of the Works:
  - a) Similar Experience: Submit completed and on-going projects of similar nature executed in the last ten years (10) with brief description, value, date of start and date of completion. Provide Projects in progress with their value, the value of outstanding works, date of start and anticipated date of completion (Tender Schedule 3.3.1).
  - b) Qualifications and experience of key personnel proposed for administration and execution of the Contract, (Tender Schedule 3.3.2). A project organization chart shall also be submitted with this schedule.
  - c) Major items of Contractor's Equipment proposed for use in carrying out the Contract (Tender Schedule 3.3.3).
  - d) Preliminary programme of works and method statement explaining method and strategy to execute the required Works, with allocations of resources labour, material, equipment (Tender Schedule 3.3.4).

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- e) Financial Information: Submit the audited financial satements for the seven (7) years (Tender Schedule 3.3.5).
- f) HSE plans and policies (Tender Schedule 3.3.6) and Quality Assurance, Quality Control (Tender Schedule 3.3.7).
- 2.2.3 FINANCIAL DATA: The tenderer shall submit his proposed Price for the execution of the Works together with a detailed breakdown of Lump Sum Amounts and Unit Prices (Tender Schedule 3.3.8).
- 2.2.4 JOINT VENTURES: Not allowed.
- 2.2.5 ONE TENDER PER TENDERER: Each tenderer shall submit only one tender in the same tender process. No tenderer can participate in the same tender process as a Subcontractor while submitting a tender individually. A firm, if acting in the capacity of Subcontractor in any tender, may participate in more than one tender, but only in that capacity. A tenderer who submits or participates in more than one tender will cause all proposals in which the tenderer has participated to be disqualified.
- 2.2.6 CONFLICT OF INTEREST: A Tenderer shall not have a conflict of interest. Any Tenderer found to have a conflict of interest shall be disqualified. A Tenderer may be considered to have a conflict of interest for the purpose of this Tendering process if:
  - a) directly or indirectly controls, is controlled by or is under common control with another Tenderer; or
  - b) receives or has received any direct or indirect subsidy from another Tenderer; or
  - c) has the same legal representative as another Tenderer; or
  - d) has a relationship with another Tenderer, directly or through common third parties, that puts it in a position to influence the tendering process of another Tenderer, or influence the decisions of the Employer regarding this tendering process; or
  - e) has a close business or family relationship with a professional staff of the Employer who: (i) are directly or indirectly involved in the preparation of the Tender documents or specifications of the contract, and/or the Tender evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Employer throughout the Tender process and execution of the contract.







## 2.3 SITE VISITS

- 2.3.1 The tenderer is requested to visit, at the date mentioned in the invitation to Tender, and examine the Site of the Works and its surroundings and to obtain for himself and on his own responsibility all information that may be necessary for preparing the tender and entering into the Contract and, in all cases, shall be deemed to fully understand and be ready to undertake all liabilities and risks inherent in the Contract. The site visit is to be made by prior appointment with the Employer. Tenderers will be given permission to visit the Site entirely at their own risk. The Employer shall not be responsible for any loss, damage or injury, howsoever caused. The costs of visiting the Site shall be at the tenderer's own expense.
- 2.3.2 A tenderer who does not participate in the site visit will be dismissed from submitting the Tender. The Employer shall not be responsible for any loss, damage or injury arising from the site visit, howsoever caused.
- 2.3.3 The tenderer and any of his personnel or agents will be granted permission by the Employer to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the tenderer, his personnel and agents will release and indemnify the Employer and his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.
- 2.3.4 The tenderer shall be deemed to have understood the nature of the Works and the circumstances pertaining to the Project, as well as all local customs, the required types of labour and labour conditions, and all other conditions related to the tender or which affect his tender prices.

# 2.4 PREPARATION AND COMPLETION OF TENDER

- 2.4.1 COMPLETE TENDER: The tender must be for the whole of the Works, fully in accordance with the Tender Documents. A partial tender will not be considered.
- 2.4.2 COSTS: The tenderer shall bear all costs associated with the preparation and submission of his tender and the Employer will in no case be responsible for such costs, regardless of the conduct or outcome of the tendering process.
- 2.4.3 LANGUAGE: The tender and all correspondence and documents relating to the tender must be prepared and submitted in English. Supporting documents and printed literature furnished by the tenderer with the tender may be in other languages provided they are accompanied by an appropriate translation of the pertinent passages into English (for which accuracy the tenderer shall be responsible), and in which case, for purposes of interpretation of the tender, the English translation shall prevail.
- 2.4.4 COMPLETION OF TENDER DOCUMENTS: The Letter of Tender, Appendix, Tender Schedules, and any other document requiring completion shall be

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- completed. The originals of all Tender Documents, and any copies required to be submitted, shall be completed in indelible ink or type writing.
- 2.4.5 ALTERATIONS: The completed Tender Documents shall be without alterations, additions or erasures, except those made to accord with instructions issued to tenderers by the Employer or the Employer's Representative during the tender period. Any other alteration, addition or erasure will be disregarded in the evaluation of tenders and will be deemed to have no effect.
- 2.4.6 CORRECTION OF ERRORS: Any correction of errors made by the tenderer must be initialed by the person signing the tender.
- 2.4.7 SIGNING OF TENDER: The Letter of Tender shall be signed by a person authorised to bind the tenderer to the Contract. Proof of authorisation shall be provided in the form of a power of attorney which shall accompany the tender.
- 2.5 TENDER PRICE AND CURRENCY
- 2.5.1 FIXED LUMP SUM TENDER: Attention is drawn to the fact that this Tender is to be a Fixed Lump Sum for the execution and completion of the whole of the Works as shown, described, indicated or reasonably inferred from the Contract Documents; including all preparatory and enabling tasks, ancillary and associated works and installations necessarily required to satisfactorily execute, complete and deliver the Works as indicated.
- 2.5.2 CURRENCY OF TENDER: The tender and all rates and prices inserted in the Schedule of Prices shall be expressed in United States Dollars (USD).
- 2.5.3 FIXED PRICE: The rates and prices quoted by the tenderer shall be fixed for the duration of the Contract and shall not be subject to adjustment for changes in cost of labour, materials etc. on any account.
- 2.5.4 DUTIES, TAXES, ETC.: The rates and prices inserted in the Schedule of Prices (Tender Schedule 3.3.8) shall include for all import duties, taxes and other levies payable by law on materials, goods and services at a date 28 days prior to the date set for submission of tenders.
- 2.6 DEVIATIONS FROM TENDER DOCUMENTS
- 2.6.1 QUALIFICATION: The tender is to be strictly in accordance with the Conditions for Tender and the Tender Documents. Any qualification of a tender or alteration to the Tender Documents, will be deemed to be null and void unless sanctioned in writing by the Employer's Representative prior to submission of the tender.
- 2.6.2 ALTERNATIVES: Not Allowed.

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- 2.7 TENDER VALIDITY
- 2.7.1 PERIOD OF TENDER VALIDITY: The tender shall remain valid and open for acceptance for a period of 180 days from the latest date fixed for receiving tenders.
- 2.7.2 EXTENSION OF PERIOD OF TENDER VALIDITY: In exceptional circumstances, prior to expiry of the original tender validity period, the Employer may request the tenderer for a specified extension of the period of validity. A tenderer agreeing to the request will not be required or permitted to modify his tender.
- 2.8 SUBMISSION OF TENDER
- 2.8.1 DOCUMENT TO BE SUBMITTED: The Tenderer shall prepare one "ORIGINAL" and two COPIES of the Documents and CD (or USB memory stick or external disk) with soft copy, comprising the Tender clearly marked "ORIGINAL" and "COPY 1", and "COPY 2" as appropriate. In the event of any discrepancy between them, the original shall prevail. A tenderer is required after preparing his tender to make, by photocopying, such additional copies as are necessary to comply with these instructions. The Documents shall be signed, dated, priced and completed and returned as described in Tender Conditions and Procedures, together with all information listed in Section 2.1 Item 2.1.1.
- 2.8.2 DELIVERY OF TENDERS: Each set of the Tender Documents the "ORIGINAL" and "COPY" are to be delivered in two separate and sealed envelopes and shall be marked ENVELOPE NO. 1 and ENVELOPE NO. 2, as follows:
  - a) ENVELOPE 1 is the "Technical Part" including all data and designs of technical nature.
  - b) ENVELOPE 2 is the "Commercial Part" including:
    - i. The Priced Letter of Tender, together with any offered discount, signed and stamped by the authorized signatory of the Tenderer;
    - ii. Schedule of Prices
- 2.8.3 The package and inner envelopes shall:
  - a) be sealed in an outer package which shall be addressed to the Employer and delivered by hand at the following address::

MINISTRY OF ENERGY AND WATER – DIRECTOR GENERAL OF OIL  $\mbox{\sc MOEW}$  –  $\mbox{\sc DGO}$ 

The Ministry of Energy and Water Directorate General of Oil- Tripoli and Zahrani Oil Installations. Lebanon, Beirut, Furn El Chebbak, Gharios Center, Eleven Floor Info.ttf@dgo.gov.lb (+961) 1 284782

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and shall bear the following identification.

Tender Documents for:

TRIPOLI TANK FARM - INSPECTION OF EXISTING FACILITIES

## DO NOT OPEN WITHOUT AUTHORITY

The inner Envelopes Nos. 1 and No. 2 shall bear the name and address of the tenderer but the outer package shall not bear any marking which could identify the tenderer.

- 2.8.4 TIME LIMIT FOR SUBMISSION OF TENDERS: The tender must be received by the Employer at the address stated above on the date and time mentioned in the invitation to tender.
- 2.8.5 DEADLINE FOR SUBMISSION OF TENDERS: Tenders must be received by the Employer at the address specified above no later than (refer to Invitation to Tender). The Employer may, at his discretion, extend the deadline for submission of tenders by issuing an amendment in accordance with Sub-Clause 2.7.2 of these Instructions to Tenderers, in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline will thereafter be subject to the deadline as extended.
- 2.8.6 EXTENSION OF TIME LIMIT: The Employer may, at his discretion, extend the time limit for the submission of tenders by issuing an amendment, in which case all rights and obligations of the Employer and the tenderer previously subject to the original time limit shall thereafter be subject to the new time limit as extended.
- 2.8.7 LATE TENDERS: A tender received by the Employer after the prescribed time limit for submission of tenders will be returned unopened to the tenderer.
- 2.8.8 MODIFICATION AND WITHDRAWAL OF TENDER: no tender may be modified after the deadline for submission of tenders.
- 2.9 TENDER OPENING
- 2.9.1 TENDER OPENING: Tenders will be opened in Public in a two stage process. Following the outcome of the technical evaluation, the Commercial Envelopes of the technically-qualified tenderers will be opened. Commercial Envelopes of tenderers that have not passed the technical evaluation shall be returned un-opened or destroyed un-opened.
- 2.10 EXAMINATION OF TENDERS AND DETERMINATION OF RESPONSIVENESS
- 2.10.1 EXAMINATION OF TENDERS: Prior to the detailed evaluation of tenders, the Employer will determine whether each tender;
  - a) has been properly signed;

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- a) is substantially responsive to the requirements of the Tender Documents; and
- b) provides any clarification and/or substantiation that the Employer may require.
- 2.10.2 DETERMINATION OF RESPONSIVENESS: A substantially responsive tender is one which conforms to all the terms, conditions and requirements of the Tender Documents, without material deviation or reservation. A material deviation or reservation is one
  - a) which affects in any substantial way the scope, quality or performance of the Works;
  - b) which limits in any substantial way inconsistent with the Tender Documents, the Employer's rights or the tenderer's obligations under the Contract; or
  - c) which rectification would affect unfairly the competitive position of other tenderers presenting substantially responsive tenders.
- 2.10.3 TENDER NOT SUBSTANTIALLY RESPONSIVE: If a tender is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

## 2.11 EVALUATION OF TENDERS

- 2.11.1 NONDISCLOSURE OF INFORMATION: Information relating to the examination, clarification, evaluation and comparison of tenders and recommendations for the award of a contract shall not be disclosed to tenderers or any other persons not officially concerned with such process. Any effort by a tenderer to influence the Employer's processing of tenders or award decisions may result in the rejection of the tenderer's tender
- 2.11.2 CLARIFICATION OF TENDER: To assist in the examination, evaluation and comparison of tenders, the tenderer may be asked for clarification of his tender, including breakdown of unit rates. The request for clarification and the response shall be in writing and delivered by facsimile or email, but no change in the price or substance of the tender shall be sought, offered or permitted, except as required to confirm the correction of arithmetical errors discovered during the evaluation of tenders.
- 2.11.3 EVALUATION OF SUBSTANTIALLY RESPONSIVE TENDERS: The Employer will evaluate and compare only the tenders determined to be substantially responsive in accordance with Clause 2.10.2 of these Instructions to Tenderers.
- 2.11.4 EMPLOYER'S RIGHT TO ACCEPT ANY TENDER AND TO REJECT ANY OR ALL TENDERS: The Employer reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders, at any time prior to award of the Contract, without thereby incurring any liability to the affected tenderers or

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any obligation to inform any affected tenderer of the grounds for the Employer's action.

- 2.12 AWARD
- 2.12.1 AWARD: Subject to Clause 2.11 of these Instructions to Tenderers, the Employer will award the Contract to the tenderer who has been determined to be the lowest evaluated bid and is substantially responsive to the Tender Documents, provided further that the Tenderer is determined to be qualified to perform the Contract satisfactorily.
- 2.13 NOTIFICATION OF AWARD
- 2.13.1 NOTIFICATION OF AWARD: Prior to expiry of the period of tender validity, the Employer will notify the successful tenderer by sending the Letter of Acceptance. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") shall name the sum which the Employer will pay the Contractor in consideration of the Contractor's carrying out the engineering, construction, completion of, and remedying any defects in, the Works as prescribed by the Contract (hereinafter and in the Conditions of Contract called the "Contract Price").
- 2.13.2 The notification of award will constitute the formation of the Contract.
- 2.13.3 Upon the furnishing by the successful tenderer of a Performance Guarantee, the Employer will promptly notify the other tenderers that their tenders have been unsuccessful.
- 2.14 SIGNING OF CONTRACT
- 2.14.1 SIGNING OF THE CONTRACT AGREEMENT: at the same time as the notification of the award the Employer's Representative shall send the Contract Agreement to the successful tenderer for signature. Within 14 days of receipt of the Contract Agreement, the successful tenderer shall sign and return it to the Employer. The successful tenderer shall return the signed Contract Agreement together with the furnishing of the Performance Security.
- 2.15 PERFORMANCE SECURITY
- 2.15.1 PERFORMANCE SECURITY: Within 14 days of receipt of the notification of award from the Employer, the successful tenderer shall furnish to the Employer a Performance Security in the form of a bank guarantee in an amount of ten percent (10%) of the Contract Price. The Performance Security shall be in accordance with the form provided in the Tender Documents.

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2.15.2 The Performance Security shall be provided by the successful tenderer in the form of a bank guarantee and shall be issued by a bank located in Lebanon or a foreign bank which has been determined by the tenderer, supported by a Lebanese Bank, to be acceptable to the Employer.

# 2.16 UNSUCCESSFUL TENDERERS

2.16.1 UNSUCCESSFUL TENDERERS: Upon the successful tenderer's furnishing of a Performance Security, the Employer will notify the unsuccessful tenderers that their tenders have been unsuccessful.

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3. TENDER FORMS









#### 3. TENDER FORMS

# 3.1 LETTER OF TENDER FOR TRIPOLI TANK FARM - INSPECTION OF EXISTING FACILITIES

#### To: MOEW - DGO

The Ministry of Energy and Water
Directorate General of Oil- Tripoli and Zahrani Oil Installations.
Furn El Chebbak – Gharios Center
Eleventh Floor
Beirut - Lebanon

1.	We have examined the Tender and Contract Documents for the above-named
	Works, comprising the Information for Tenderers, Tender Conditions and
	Procedures, Conditions of Contract, Contract Guarantees, the Employer's
	Requirements, Schedules, the attached Appendix and Addenda NosWe
	have visited the Site, examined, understood and checked these documents and
	have ascertained that they contain no errors or defects. We accordingly offer to
	design, execute and complete the Works and remedy any defects therein in conformity with this Tender and the above-named documents for the lump sum of
	US Dollars
	(USD).

- 3. We acknowledge that the Appendix forms part of this Tender.
- 4. If this offer is accepted, we will provide the specified Performance Security within 14 days of receipt of the Letter of Acceptance, commence the Works as soon as is reasonably practicable after the Commencement Date, and complete the Works in accordance with above-named documents within the Time for Completion,
- 5. Unless and until a formal Contract Agreement is prepared and executed, this Letter of Tender, together with your the Letter of Acceptance thereof, shall constitute a binding contract between us.
- 6. We understand that you are not bound to accept the lowest or any tender you may receive.

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Dated this day ofof the year
Signature
In the capacity of
Authorised to sign tenders for and on behalf of
Address
Witness
Occupation
Address

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# 3.2 APPENDIX TO TENDER

Note: with the exception of the items for which the Employer's requirements have been inserted, the following must be completed, signed, and stamped before the Tender is submitted.

Sub- Clause	Item	Data
1.1.4	Employer's name and address	The Ministry of Energy and Water Directorate General of Oil- Tripoli and Zahrani Oil Installations. Furn El Chebbak Gharios Center Eleventh Floor Beirut – Lebanon (+961) 1 284782
1.1.5	Contractor's name and address	
3.1	Authorized Person	TBD
3.2	Employer Representative's name and address	TBD
1.1.9	Time for Completion of the Works	TBD
1.4	Governing Law	The Laws of the Republic of Lebanon
1.4	Ruling Language	Arabic
1.5	Language for communication	Arabic and English.
1.5	Electronic transmission systems	Facsimile or Email
2.1	Provision of Site	On Commencement Date
4.4	Amount of Performance Security	Ten percent (10%) of the Accepted Contract Amount, in the currencies and proportions in which the Contract Price is payable.
5.1	Contractor's Design	Not applicable.
7.4	Late Completion	Delay damages for the Works shall be 0.1 % per day, in the currencies and proportions in which the Contract Price is payable.
7.4	Maximum amount of delay damages	Ten percent (10%) of the Contract Price.
11.4	Percentage of Retention	10 %
11.4	Limit of Retention Money	10 % of Contract Price
11.7	Currency of Payment	United States Dollars (USD)
11.9	Total Advance Payment	Ten percent (10%) of the Accepted Contract Amount in the currencies and proportions in which the Contract Price is payable
11.9	Number of installments	1
11.9	Start repayment of advance payment	From the first Interim Payment Certificate
14.2	Evidence of Insurance to be	Before commencing works on site

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# Tripoli Tank Farm - Inspection of Existing Facilities

	submitted	
14.2	Copies of policies to be submitted	Not later than 35 days after Letter of Acceptance
14.2	Minimum Amount of Third Party Insurance	\$ 50,000 for any one occurrence, number of occurences unlimited.
15.3	Arbitration Rules	International Chamber of Commerce
15.3	Appointing authority	In accordance with the Rules of Arbitration of International Chamber of Commerce.
15.3	Seat & Venue of Arbitration	In accordance with the Rules of Arbitration of International Chamber of Commerce.

Initials of signatory of Tender	
Initials of signatory of Lender	

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## 3.3 TENDER SCHEDULES

The Tender Schedules form part of the Tender. They are intended as a guide to the tenderer, who may adapt them to suit his tender design. The Tenderer may provide the information required by the schedules on separate sheets in a similar format and having the same reference members. The submitted schedules must contain, as a minimum, the information stated, and they shall be accompanied by any required additional documents. The submitted schedules shall, subject to any amendments agreed between the Employer and the successful tenderer, become the Schedules as defined in the Conditions of Contract.

TENDER SCHEDULE	3.3.1	SIMILAR EXPERIENCE
TENDER SCHEDULE	3.3.2	KEY PERSONNEL
TENDER SCHEDULE	3.3.3	MAJOR ITEMS OF CONTRACTOR'S EQUIPMENT
TENDER SCHEDULE	3.3.4	PROGRAMME
TENDER SCHEDULE	3.3.5	FINANCIAL INFORMATION
TENDER SCHEDULE	3.3.6	HEALTH SAFETY ENVIRONMENTAL MANAGEMENT
TENDER SCHEDULE	3.3.7	QUALITY MANAGEMENT SYSTEM
TENDER SCHEDULE	3.3.8	SCHEDULE OF PRICES AND BREAKDOWN OF LUMP SUM
AMOUNTS AND UNIT	PRICE	ES

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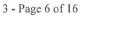
# 3.3.1 SIMILAR EXPERIENCE

Fill the below table with information relating to similar successfully completed projects carried out by the Tenderer. The completed projects should include similar components to the scope.

Contract No.	Project Description	Contract Value (USD.)	Contract Date	Contract Duration (days)	Contract End date	Supervising Consultant	Employer
			951				

The Tenderer shall deliver with his list supporting evidence (Owner's Certification) for his past experience.









# 3.3.2 KEY PERSONNEL

The Tenderer shall state below or on a separate sheets the key staff that he intends to deploy for the Contract and shall attach their CVs.

# Tenderer to fill the below table with the relevant data:

Key Personnel	Name	Present position in the company	Degree	Total Years of Experience	Years of Experience with the company	Relevant Experien ce/ Projects
Project Manager						
Others (add as needed)						

**Note:** The Contractor shall seek the Employer's consent to substitute any of the Key Personnel. Substitutes shall have minimun experience of those included in the Tender

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# 3.3.3 MAJOR ITEMS OF CONTRACTOR'S EQUIPMENT

The Tenderer shall list below or on separate sheets, the principal items of Contractor's Equipment and facilities that he proposes to bring on to the site for the Works.

Туре	Number	Age	Owned/Hired	Current Location
			<u> </u>	

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#### 3.3.4 PROGRAMME

# **PROGRAMME**

The Tenderer shall provide a preliminary programme for the Works to indicate his proposals for execution and completion of the Works within the Time for Completion. The programme shall be in bar chart form and shall show periods for Contractor's mobilization (if any), procurement of Plant, erection, testing and commissioning. The programme shall be a fully logic-linked critical-path network programme, with any open ends identified, indicating critical path activities.

It shall be accompanied by a preliminary method statement supporting the Programme submitted by the Tenderer including assumptions taken, productivity rates, key milestones, equipment details, etc.

## **METHOD STATEMENT**

The Tenderer shall provide a statement of his proposed methods for carrying out the design deliverables and execution of the work, indicating the principal plant to be used, work to be executed off-site and other relevant information. The methodology shall demonstrate a detailed understanding of the Work by detailing Tenderer's proposed methods of procurement and method of execution.

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# 3.3.5 FINANCIAL INFORMATION

Period (latest seven certified periods)	2020	2019	2018	2017	2016	2015	2014	Average
Current Assets								
Current Liabilities								
Total Assets								
Total Liability								
Net Profit								
Annual Turnover								
Value of running (ongoing) work in Lebanon								
Financial Indices	2020	2019	2018	2017	2016	2015	2014	Average
Current Ratio = Current Assets/ Current Liabilities								
Fixed Ratio = Total Assets/ Total Liabilities								
Profitability (%) = Net Profit / Total Assets								









## 3.3.6 HEALTH SAFETY ENVIRONMENTAL MANAGEMENT

# **HSE POLICY**

-	Do you have a written or printed HSE Policy Statement? (If YES, please attach a copy)	YES / NO		
-	Do you have a HSE Manual? (If YES, please attach a copy)	YES / NO		
-	Do you have written HSE Procedures/Instructions? (If YES, please attach a list of these)	YES / NO		
-	Do you establish an annual HSE Program? (If YES, please attach a copy of the summary)	YES / NO		
-	Do you have any HSE certificate, qualification or agreement? (If YES, please attach a copy)	YES/NO		
ā	Please provide the name and the title of the person in your company responsible for			

- overseeing HSE matters and the reporting of these to your board of directors?......
- How do you obtain information on the HSE records and program of your subcontractors? ......
- Did you receive any Improvement/Prohibition Notices from government bodies?
   YES / NO (If YES, please provide details)
- Did you obtain any HSE performance award?
   YES / NO (If YES, please attach copies)
- Do you have a written HSE Plan/Program for the projects you carry out?
  - YES / NO (If YES, please provide a copy of a recent one) (If NO, please describe briefly the HSE management system you foresee for the project)





# INCIDENT INVESTIGATION AND RECORDS

- Please fill the following table for the last three years:

Year	2018	2019	2020	Year to date
Worked manhours				
Fatalities (number of case)				
Lost Time Injuries (number of case)				
Restricted Work Cases (nb of case)				
Medical Treatments (number of case)				
First Aids (number of case)				
Near Misses (number of case)				
Environmental Damages (nb of case)				
LTIR (lost time injury rate) (1)				
TRIR (total recordable injury rate) (2)				
Severity rate (3)				

<sup>(1)</sup> LTIR: Number of cases (LTI +fatalities) x 200 000, divided by the number of worked man-hours (2) TRIR: Number of total recordable cases x 200 000, divided by the number of worked man-hours (3) Severity rate: Number of lost work days x 1.000, divided by the number of worked man-hours

 $Nota: recordable \ cases = LTI + RWC + Medical \ Treatment \ cases \ (MTC)$ 

How and	l by whom	were the	accidents	investigated?	
110 W and	i by whom	WCIC the	accidents	mvestigated.	***************************************

## **HSE TRAINING**

	Do you	train your	employees	ın	HSE	matters	!
--	--------	------------	-----------	----	-----	---------	---

YES / NO

- Do you supply HSE training for subcontractor personnel?

YES / NO

If YES to the above, does such training contain?

Employees/ Sub-contractors

Induction training

YES / NO

Management training

YES/NO

Task specific training

YES / NO

(If YES, please provide details)

Who undertakes this training?.....

# METHOD STATEMENTS AND RISK ASSESSMENTS

- Do you prepare method statement and risk assessment in respect of your undertaking for both on and off site?

YES / NO

(If YES, please provide a recent example)



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# OTHER RELEVANT INFORMATION

Is there any information we should have to assist us in assessing your ability to effectively manage HSE matters?

**DECLARATION: APPLICANT TO FILL FORM F-1** 







# FORM F-1

# DECLARATION

the statements included in section 3.3.6 of the HSE questionnaire are correct and we agree to notify about any significant changes affecting safety, health or the environment matters.  We understand that a client reserves the right to visit our premises, to assess out company and to verify the above statements, with a preliminary written notification.  SIGNED: SIGNED: SIGNED: HSE MANAGEMENT REPRESENTATIVE POSITION: POSITION: DATE: DATE: DATE:	We						
agree to notify about any significant changes affecting safety, health or the environment matters.  We understand that a client reserves the right to visit our premises, to assess out company and to verify the above statements, with a preliminary written notification.  SIGNED:  SIGNED:  SIGNED:  POSITION:  POSITION:  POSITION:	hereby certify that						
Company and to verify the above statements, with a preliminary written notification.  SIGNED: SIGNED: SIGNED: HSE MANAGEMENT REPRESENTATIVE  POSITION: POSITION: POSITION: POSITION: SIGNED: POSITION: POSITIO	agree to notify about any significant changes						
SENIOR MANAGEMENT REPRESENTATIVE  HSE MANAGEMENT REPRESENTATIVE  POSITION: POSITION:							
POSITION: POSITION:	SIGNED:	SIGNED:					
	SENIOR MANAGEMENT REPRESENTATIVE	HSE MANAGEMENT REPRESENTATIVE					
DATE:	POSITION:	POSITION:					
	DATE:	DATE:					









# 3.3.7 QUALITY MANAGEMENT SYSTEM

-	Do you have a Quality Management System implemented?	YES / NO
-	Are you certified ISO 9001:2015? If YES, please reply to the hereunder bullets and attach a copy:	YES / NO
	Certification authority:	
	Date of the first certification:	
	If NO:	
	Are your work processes compliant with ISO 9001:2015?	YES/NO
	Please attach, if it is available, the Quality Manual (or draft)	
	If you are awaiting certification, indicate forecast date and actions alrea	dy carried ou
	Do you have a list of pending and implemented corrective actions?	YES/NO
-	Is there an existing customer complaint record book?	YES / NO
-	Would it be available for auditing by third party?	YES / NO
-	Please list the number of staff within the QA/QC organization	
-	Do you have other Quality Related certificates than ISO 9001:2015?	YES / NO
_	Please attach the copy of certificates, if it is available.	







# 3.3.8 SCHEDULE OF PRICES AND BREAKDOWN OF LUMP SUM AMOUNTS AND UNIT PRICES

The Tenderer shall submit the Schedule of Prices.

The Tenderer shall append to its schedule a list of all Lump Sum amounts and unit prices inserted in the Bills of Quantities, giving a breakdown of its Fixed Lump Sum Tender. The breakdown shall include for each type of work description, estimated duration, and unit price.







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# 4. CONDITIONS OF CONTRACT





# 4. CONDITIONS OF CONTRACT

# 4.1 EXPLANATORY NOTES

- 4.1.1 GENERAL CONDITIONS: The General Conditions of Contract shall be the Short Form of Contract (First Edition 1999), published by the Fédération Internationale des Ingénieurs-Conseils (FIDIC), P.O. Box 86, CH 1000 Lausanne, 12-Chailly, Switzerland. The Contractor is deemed to have full knowledge of the General Conditions.
- 4.1.2 PARTICULAR CONDITIONS: The General Conditions are amended and supplemented by the Particular Conditions, which follow. In the event of any conflict between the General Conditions, and the Particular Conditions, the latter shall govern.
- 4.1.3 AMENDMENTS: The Particular Conditions amend the following Sub-Clauses of the General Conditions:

1.1, 4.4, 8.2, 11.3, 11.8, 13.2, 14.1.

4.1.4 ADDITIONS: The Particular Conditions contain the following additional Sub-Clauses:

3.3, 10.6, 11.1a, 11.9









#### 4.2 PARTICULAR CONDITIONS

#### 1. GENERAL PROVISIONS

## 1.1 DEFINITIONS

Add the following definitions:

- 1.1.20 'Letter of Tender' means the document titled 'Letter of Tender' completed and submitted by the Contractor, which includes his signed offer to the Employer for the Works.
- 1.1.21 'Letter of Acceptance' means the formal letter of acceptance by the Employer of the Contractor's Tender, which includes or annexes thereto all agreements made by the Parties subsequent to submission of the Letter of Tender.
- 1.1.22 'Appendix' means the Appendix to Tender as completed and agreed by the Parties, and which is deemed to be incorporated in the Contract Agreement.
- 1.1.23 'Contract Agreement' means the document, titled 'Contract Agreement' annexed to these Particular Conditions, signed by the Parties.

# 3. EMPLOYER'S REPRESENTATIVE

# 3.3 LIMITATIONS ON EMPLOYER'S REPRESENTATIVE'S RESPONSIBILITIES

Add new Sub-Clause 3.3 as follows:

- a) The Employer's Representative shall not be responsible for the Contractor's operational techniques and procedures nor for the safety and stability of Temporary Works and Contractor's Equipment nor for measures for the safety, health and welfare of any persons on the Site.
- b) Neither the Employer's Representative nor any member of the Employer's Representative staff shall be in any way personally liable to the Contractor for any acts or obligations under the Contract or answerable for any default or omission on the part of the Employer in the observance or performance of any obligations or acts under the Contract.

# 4. THE CONTRACTOR

# 4.4 PERFORMANCE SECURITY

Add the following at the end of Sub-Clause 4.4:

The Performance Security shall be a bank guarantee in the form annexed to these Particular Conditions.

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# 8. TAKING OVER

#### 8.2 TAKING OVER NOTICE

Add the following paragraph at the end of Sub-Clause 8.2:

Provided that in any case no Taking Over Notice shall be issued or shall be deemed to have been issued until the Contractor has provided to the Employer's Representative:

- a) The Final Documentation including As-Built drawings, inspection reports, calculation notes, BoQ, estimates for the Works and
- b) Any required warranties

## 10. VARIATION AND CLAIMS

# 10.6 CONTRACTOR'S NOTICE OF CLAIMS

Add the following new Sub-Clause 10.6:

If the Contractor intends to claim an extension of Time for Completion and/or additional costs under Sub-Clause 10.3, 10.4 and 10.5, he shall give written notice to the Employer not later than 7 days of the event or instruction and shall provide the itemised make-up in accordance with Sub-Clause 10.5. If the Contractor fails to give notice or provide the itemised make up in accordance with this Sub-Clause, the Employer shall be entitled to reject the Contractor's claim or to evaluate it according to his own records and observations of the event or instruction.

# 11. CONTRACT PRICE AND PAYMENT

Add the following new Sub-Clause 11.1.a

#### 11.1.a FIXED LUMP SUM:

Attention is drawn to the fact that this Tender is to be a Fixed Lump Sum for the execution and completion of the whole of the Works as shown, described, indicated or reasonably inferred from the Contract Documents; including all preparatory and enabling tasks, ancillary and associated works and installations necessarily required to satisfactorily execute, complete and deliver the Works.

#### 11.3 INTERIM PAYMENTS

Add ", less advance payment" after "less retention"

## 11.8 DELAYED PAYMENT

Delete Sub-Clause 11.8 and replace with the following:

CONDITIONS OF CONTRACT

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If the Employer fails to pay to the Contractor in due date in accordance with the Conditions of Contract, the Contractor shall be entitled to claim for proved and actual incurred losses, in accordance with Sub-Clauses 10.3, 10.4 of the General Conditions.

Add the following new sub-Clause 11.9:

# 11.9 ADVANCE PAYMENT

- (a) Upon receipt of confirmation from the Contractor that the following matters have been carried out by him the Employer shall pay the Contractor an Advance Payment as stated in the Appendix to Tender:
  - (i) submittal of Performance Security in accordance with Sub-Clause 4.4;
  - (ii) application for the Advance payment has been made;
  - (iii) provision of an approved bank guarantee for the advance payment in the full amount of the advance payment issued by a bank located in Lebanon or a foreign bank which has been determined by the tenderer, supported by a Lebanese Bank, to be acceptable to the Employer.

The Advance payment shall be repaid through the percentage deductions at the rate as stated in the Appendix to Tender from the certified Interim Payments until such time as the advance payment has been fully repaid; always provided that the advance payment shall be completely repaid prior to a time when 80 percent of the Contract Price has been certified for payment.

(b) The advance payment shall be used by the Contractor exclusively for mobilization expenditures, including the acquisition of Equipment, Plant and Materials in connection with the Works.

# 13. RISK AND RESPONSIBILITY

## 13.2 FORCE MAJEURE

Delete sub-paragraph (b) from the third paragraph.

## 14. INSURANCE

#### 14.1 EXTENT OF COVER

Delete the words starting with "The Contractor shall, prior..." and ending with "....names of the Parties" and replace with the following:

"Before commencing work on Site, the Contractor shall provide evidence to the Employer that the insurances required to be provided have been effected and, not later than 21 days after the date of the Letter of Acceptance, the Contractor shall provide copies of the

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policies to the Employer and shall notify the Employer's Representative accordingly. Thereafter the Contractor shall maintain insurances in the joint names of the Parties:"

Add the following paragraph at the end of Sub-Clause 14.1.

The amount of insurance cover to be effected by the Contractor under this Sub-Clause shall be:

- a) for loss or damage to the Works, Materials and Plant: the sum stated in the Contract Agreement plus 15%.
- b) for loss or damage to Contractor's Equipment: the full replacement amount of equipment delivered to Site.
- c) for loss, damage, death or injury to third parties: for a limit per occurance of not less than the amount stated in the Appendix to Tender, the numbers of occurances being unlimited.
- c) for death or injury to Contractor's personnel.

All deductibles shall be borne by the Contractor.







# 5. CONTRACT AGREEMENT





Ministry of Energy and Water Directorate General of Oil Tripoli and Zahrani Oil Installations  Contract Agreement  First Party (The Employer) The Ministry of Energy and Water Directorate General of Oil Tripoli and Zahrani Oil Installations Address: Furn El Chebbak - Gharios Center - Elovon Floor Beirut-Lebanon Represented by the Minister of Energy and Water  Second party (The Contractor) Company:	وزارة الطاقة والمياه النفط المديرية العامة النفط منشآت النفط في طرابلس والزهراني عقد اتفاق الفريق الأول: (صاحب العمل) و وزارة الطاقة والمياه المديرية العامة للنفط منشآت النفط في طرابلس والزهراني العنوان: منطقة فرن الشباك، غاريوس سنتر الطابق الحادي عشر، بيروت – لبنان ممثلة بشخص: معالي وزير الطاقة والمياه
	الفريق الثاني :(المقاول <u>)</u> 
Whereas the Employer desires that the Works known as TANK FARM PROJECT – INSPECTION OF EXISTING FACILITIES should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein,	لما كان الفريق الأول راغباً في اجراء كشف ومعاينة الخدمات الموجودة في منشآت النفط في طرابلس، ولما كان قد قبل بالعرض الذي تقدم به الفريق الثاني إنشاء الأشغال المذكورة وإنجازها وصيانتها وتسليمها،
The Employer and the Contractor agree as follows:	فقد تم الاتفاق بين الفريقين المتعاقدين على ما يلي:  1. يكون للكلمات والتعابير الواردة في هذه الاتفاقية نفس
In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to	<ol> <li>يحون الخلمات والتعابير الواردة في هذه الإلفاقية نفس المعاني المحددة لها في شروط العطاء، والمشار اليها فيما بعد</li> </ol>







2. The following documents shall be deemed to form and be read and construed as part of this Agreement:  a. The Letter of Acceptance dated  b. The Letter of Tender dated  c. The Addenda Nos  d. Volume 1: Tender Conditions and Procedures, Conditions of Contract and Tender Schedules  e. Volume 2: The Employer's Requirements.  f. Volume 3: Schedule of Prices	ي تعتبر الوثائق المدرجة فيما يلي جزءاً لا يتجزاً من هذه الاتفاقية وتعتبر قراءتها وفهمها في مجموعها وحدة متكاملة وهذه الوثائق هي :  a. قرار الاحالة (أو قرار التلزيم حيث يكون ذلك مطابقاً)  b. عرض المناقصة بتاريخ	
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein, in conformity with the provisions of the Contract.	8. إزاء قيام صاحب العمل بدفع الدفعات المستحقة للمقاول وفقا" لشروط العقد، يتعهد المقاول بموجب هذه الاتفاقية بتنفيذ واتمام الاشغال واصلاح أية عيوب فيها وفقا" لأحكام العقد.	
4. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price of LS	<ul> <li>4. يتعهد صاحب العمل، أن يدفع للمقاول ازاء قيامه بتنفيذ         واتمام الأشغال واصلاح أية عيوب قيمة العقد مبلغ مقطوع         دولار اميركي د.أ. في المواعيد والطريقة المبينة في         العقد.</li> </ul>	
5. This Contract is subject to the following:	<ol> <li>تخضع هذه الاتفاقية للشروط التالية:</li> </ol>	
<ol> <li>Priority of Contract Documents</li> <li>Contract Agreement.</li> <li>Addenda and circulars to Tender Documents</li> <li>Particular Conditions of Contract.</li> <li>General Conditions of Contract</li> <li>Employer's Requirements.</li> <li>Any other document forming part of the Contract.</li> </ol>	5.1. أولوية وثائق العقد: 1. عقد الاتفاق 2. الملاحق (ان وجدت) 3. شروط العقد الخاصة 4. شروط العقد العامة 5. متطلبات صاحب العمل 6. أي وثائق أخرى من وثائق العقد	

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#### 5.2. Contract Conditions

The General Conditions of Contract shall be the Short Form of Contract published by the Federation Internationale des Ingenieurs – Conseils (First Edition, 1999).

The Contractor is deemed to have full knowledge of the General Conditions.

The General Conditions are amended and supplemented by the Particular Conditions, which follow.

In the event of any conflict between the General Conditions, and the Particular Conditions, the latter shall govern.

# 5.3. Time for Completion

The Second Party hereby pledges to complete the Works, in a period of (that shall be determined at a later stage) from the date of Notice to Commence TC.

Any request for Extension of Time shall be

Any request for Extension of Time shall be treated in accordance with Sub-Clause 7.3 of the Conditions of Contract

# 5.4. Delay Damages for the Works

Delay damages shall be 0.1% of the Accepted Contract Amount per day, in the currencies and proportions in which the Contract Price is payable.

Maximum amount of liquidated damages shall be Ten percent (10%) of the Accepted Contract Amount.

# 5.5. Performance Bond

The Second Party remits to the First Party upon signature of this contract a performance bond amounting to 10% of the contract value as a guarantee for the execution of its obligations according to this contract.

This performance bond shall be submitted

This performance bond shall be submitted pursuant to Clause 4.4 of the Contract Conditions.

# 5.2. شروط العقد

تكون الشروط العامة للعقد شروط عقد Form of Contract published by the Federation Internationale des Ingenieurs – Conseils (First Edition, 1999)

كما يجب أن يلتزم المقاول بجميع البنود والشروط المحتواة في هذا العقد

يبين هذا العقد شروطاً خاصة كما هي معدلة في الوثيقة Section 4 اللازمة لهذا العقد

في حال تبيان أي تناقض بين الشروط العامة والخاصة، تتبع النصوص الواردة الشروط الخاصة

#### 5.5. مدة التنفيذ

يلتزم الفريق الثاني بتسليم الاعمال المطلوبة بمهلة (تتم تحديد ما لاحقا") من تاريخ أمر المباشرة.

لا يمكن تمديد مهلة التنفيذ الا لأسباب مبررة وفقا للبند 7.3 من شروط العقد.

# 5.4. تعويضات التأخير

تحدد تعويضات التأخير اليومية ب0.1% من قيمة العقد الأساسية ، باعتماد العملات والنسب المعتمدة في العقد، على أن لا تتعدى القيمة الاجمالية لل تعويضات نسبة 10% من القيمة الاجمالية للعقد.

# 5.5. ضمان الأداء (كفالة التنفيذ)

يقدم الفريق الثاني للفريق الاول عند التوقيع على هذا العقد ضمان الأداء بقيمة تساوي عشرة بالمئة من القيمة الاجمالية للعقد.

. ويكون هذا الصمان صالحاً وفقا لمتطلبات المادة 4.4 من شروط العقد.

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# 5.6. Taxes and duties

All taxes, royalties and duties imposed or levied on the contract in Lebanon shall be for the account of the Second Party, including the stamp fees:

- 0.4% (Four per Thousand) of the value of the contract excluding VAT, payable on the registration of the contract at the Lebanese Ministry of Finance within 5 working days following signature.
- 0.4% (Four per Thousand) to be deducted from any amount paid as per the Contract.

Excluding VAT, which is on First Party account.

N.B.: in case the second party is a non-Lebanese resident, it will be taxed as per article 41 and 42 of Lebanese Income Tax Law.

# 5.7. Confidentiality

Each of the parties herein agrees to keep confidential and not to disclose, directly or indirectly, any information regarding the other party's business, including without limitation, information with respect to operations, procedures, methods, accounting, technical data existing or potential customers, or any other information which the other party has designated as confidential.

The second party agrees that, its employees, agents and representatives shall not, either during the term of this Agreement or at any time, disclose any of the first party's proprietary, secret or confidential information of first party to any third party whatsoever without the express written consent of the first party.

# 5.8. Laws of the Republic of Lebanon:

This Agreement is executed pursuant to, and shall be construed under and governed exclusively by the laws of the Republic of Lebanon.

# 5.6. الضرانب والرسوم:

ان الأعباء والرسوم المالية والضريبة كافة المترتبة قانونا على توقيع وتنفيذ هذا العقد في لبنان تقع على عاتق الملتزم بالكامل بما فيها رسم الطابع المالي:

- 4 بالألف من قيمة العقد (دون الضريبة على القيمة المضافة)، تدفع عند تسجيل العقد في وزارة المالية في فترة لا تتعدى الخمسة أيام عمل من تاريخ امضاء العقد.
  - 4 بالألف تحسم من قيمة كل دفعة تسدد بموجب شروط هذا العقد.

باستثناء الضريبة على القيمة المضافة المتوجبة على الفريق الأول.

ملاحظة: في حال كان الملتزم شركة اجنبية، تخضع ايراداته في لبنان لضريبة الدخل وفقاً لأحكام المواد 41و42 من قانون ضريبة الدخل.

# 5.7. السرية

يتعهد الفريقان بالحفاظ على سرية و عدم الاافشاء، بطريقة مباشرة او غير مباشرة، اية معلومات متعلقة بالطرف الاخر، بما في ذلك على سبيل المثال لا المحصر، معلومات حول العمليات، الإجراءات والأساليب وطرق المحاسبة، والبيانات التقنية أو العملاء الحاليين أو المحتملين او اية معلومات أخرى مصنفة سرية من قبل الفريق الاخر.

يتعهد الفريق الثاني بما فيهم مستخدميه ووكلائه وممثلية، بعدم الإفصاح عن المعلومات السرية الواردة من الفريق الأول طوال فترة العقد او حتى بعد انقضاء هذه الفترة، الى أي طرف ثالث بدون موافقة خطية من الفريق الأول.

# 5.8. قوانين الجمهورية اللبنانية:

يطبق القانون اللبناني بكل ما يختص بتفسير او تنفيذ هذا العقد

CONTRACT AGREEMENT L21164-0100R-TD-CON-PMC-02 REV 1







6. Language:	6. اللغة:
For the administrative matters and in case of any misunderstanding related to the language of this contract, the formal language will be Arabic.	في الامور الادارية وفي حال وجود أي خلاف حول تفسير لغة العقد، يعتمد النص العربي كنص أساسي.
The Arabic language shall govern the Agreement and where applicable. English language shall only govern on the technical matters.	تعتمد اللغة العربية اللغة الحاكمة للعقد و حيثما يكون ذلك مطبقًا على أن تحكم اللغة الإنجليزية فقط في المسائل الفنية.
This contract is issued in two original copies, each party having received an original signed copy.	نظم هذا العقد على نسختين اصليتين واستلم كل فريق نسخة بعد التوقيع.
In Witness whereof the Parties hereto have caused this Agreement to be executed the day and year first before written in accordance with their respective laws.	وبناءً على ما تقدّم، فقد اتفق الطرفان على ابرام هذه الاتفاقية وتوقيعها في التاريخ المحدد أعلاه وذلك وفقًا لقوانين كل منهما.
Beirut:	بيروت في
First Party Minister of	الفريق الأول الفاني
Energy & Water	وزير الطاقة والمياه







# 6. CONTRACT GUARANTEES





#### 6. CONTRACT GUARANTEES

#### 6.1 PERFORMANCE SECURITY

(Specimen, to be completed on Bank headed paper)

# Brief description of Contract

The Tripoli tank farm project has three existing tanks which needs to be fully rehabilitated along with related piping, fire fighting system, and the supply pipelines from the berth up to the distribution manifold, including the manifold and supply line up to the tanks.

The Works consist of performing detailed technical inspection of existing site erected manifolds, pipelines, undersea product pipelines, including testing of flexible pipes and monobuoys for docking with the flange of the ship's stander, offshore manifold, main manifold, and draining system, on-shore tanks and other facilities of the TTF project. Detailed scope of work is included in Volume 2 – Employer's Requirements.

Name and address of Beneficiary

MINISTRY OF ENERGY AND WATER – DIRECTORATE GENERAL OF OIL

MOEW – DGO

The Ministry of Energy and Water

Directorate General of Oil- Tripoli and Zahrani Oil Installations.

Lebanon, Beirut, Furn El Chebbak, Gharios Center, Eleven Floor

Info.ttf@dgo.gov.lb
(+961) 1 284782

(whom the Contract defines as the Employer)

We have been informed that	(hereinafter called the "Principal") is
your Contractor under such Contract, which require	es him to obtain a performance security.

- a. that the Principal is in breach of his obligation(s) under the Contract, and
- b. the obligation of which the principal is in breach.

Following the receipt by us of an authenticated copy of the Taking-Over Certificate for the whole of the Works under Clause 8 of the Conditions of the Contract, such guaranteed amount shall be reduced by ...% and we shall promptly notify you that we have received such certificate and have reduced the guaranteed amount accordingly.

CONTRACT GUARANTEES
LD1164-0100R-TD-CON-PMC-02 REV 1

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We have been informed that the Beneficiary may required the Principal to extend this guarantee if the Performance Certificate under the Contract has not been issued by the date 28 days prior to such expiry date. We undertake to pay you in cash such guaranteed amount upon receipt by us, within such period of 28 days, of your demand in writing and your written statement that the Performance Cerificate has not been issued for reasons attributable to the Principal, and that this guarantee has not been extended.

This guarantee shall be governed by the laws of *(Employer's Country)* and shall be subject to the Uniform Rules for Demand Guarantees, published as number 458 by the International Chamber of Commerce, except as stated above.

_		
Date	Signature (s)	
Date	 Digitature (3)	



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#### 6.2 ADVANCE PAYMENT GUARANTEE

(Specimen, to be completed on Bank headed paper)

Brief description of Contract

The Tripoli tank farm project has three existing tanks which needs to be fully rehabilitated along with related piping, fire fighting system, and the supply pipelines from the berth up to the distribution manifold, including the manifold and supply line up to the tanks.

The Works consist of performing detailed technical inspection of existing site erected manifolds, pipelines, undersea product pipelines, including testing of flexible pipes and monobuoys for docking with the flange of the ship's stander, offshore manifold, main manifold, and draining system, on-shore tanks and other facilities of the TTF project. Detailed scope of work is included in Volume 2 – Employer's Requirements.

Name and address of Beneficiary

MINISTRY OF ENERGY AND WATER – DIRECTORATE GENERAL OF OIL

MOEW – DGO

The Ministry of Energy and Water

Directorate General of Oil- Tripoli and Zahrani Oil Installations.

Lebanon, Beirut, Furn El Chebbak, Gharios Center, Eleven Floor

Info.ttf@dgo.gov.lb

(+961) 1 284782

(whom the Contract defines as the Employer)

- a. that the Principal has failed to repay the advance payment in accordance with the Conditions of the Contract, and
- b. the amount which the Principal has failed to repay.

This guarantee shall become effective upon receipt of the first instalment of the advance payment by the Principal. Such guaranteed amount shall be reduced by the amounts of the advance payment repaid to you **in cash**, as evidenced by your notices issued under Sub-Clause 11.3 of the Conditions of the Contract. Following receipt (from the Principal) of a copy of each purported notice, we shall promptly notify you of the revised guaranteed amount accordingly.

Any demand for payment must contain your signature (s) which must be authenticated by your bankers or by a notary public. The authenticated demand and statement must be

CONTRACT GUARANTEES
L2N 64-0100R-TD-CON-PMC-02 REV 1

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received by us at this office on or before (the date 70 days after the expected expiry of the time for completion) ....... (the "expiry date"), when this guarantee shall expire and shall be returned to us.

We have been informed that the Beneficiary may required the Principal to extend this guarantee if the advance payment has not been repaid by the date 28 days prior to such expiry date. We undertake to pay you in cash such guaranteed amount upon receipt by us, within such period of 28 days, of your demand in writing and your written statement that the advance payment has not been repaid and that this guarantee has not been extended.

This guarantee shall be governed by the laws of (Employer's Country) and shall be subject to the Uniform Rules for Demand Guarantees, published as number 458 by the International Chamber of Commerce, except as stated above.

Date	Signature (s)	
Date	 Signature (S)	













# Lebanese Republic

Ministry of Energy and Water (MoEW)

Directorate General of Oil - Tripoli and Zahrani Oil Installations

# TRIPOLI TANK FARM INSPECTION OF EXISTING FACILITIES

Volume 2: Employer's Requirements





# Tripoli Tank Farm - Inspection of Existing Facilities

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# Tripoli Tank Farm - Inspection of Existing Facilities

# LIST OF FIGURES

Figure 1 Fuel farm Layout	10
Figure 2 Main product pipelines layout	10



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## 1. OBJECTIVE

This document describes the scope of work for the contractor to perform technical diagnostics/inspection for the existing supply pipelines from berths (in sea and on land) up to the storage tanks along with the manifolds in between including the following:

- a) site erected manifolds
- b) pipelines
- c) undersea product pipeline including testing of flexible pipes and monobuoys for docking with the flange of the ship's stander
- d) offshore manifold
- e) main manifold
- f) draining system
- g) other facilities of the TTF project

The goal of the inspection is to evaluate their current condition and to determine the future scope for rehabilitation.

The Contractor shall deliver a delineation report describing the existing conditions, proposed rectifications, quantification of the rectification works and cost estimate.

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# 2. INTRODUCTION

The Tripoli tank farm project covers the supply pipelines from the berth up to the distribution manifold, including the manifold and supply line up to the tanks. The inspection shall be performed in accordance with Lebanon General Regulatory Requirements of Liquid Oil Derivatives and applicable International Codes and Standards so that they can be properly and safely put into operation.

The existing facility was built in the early 1900s. Part of these pipelines and other facilities were put out of service after the Lebanese civil war (1980-1990). Some of these were re-entered into service recently to transport and store Fuel Oil and Diesel. Pipelines that are out of service, currently contain crude oil to preserve them from internal corrosion.

EMPLOYER'S REQUIREMENTS 12/164/0100R-10-CON-PMC-02 REV 1

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# 3. APPLICABLE CODES AND STANDARDS

Lebanese Decree No. 5509	Lebanon General Regulatory Requirements of Liquid Oil Derivatives and applicable International Codes and Standards	
API 2611	Terminal Piping Inspection— Inspection of In-Service Terminal Piping Systems	
API 570	Piping Inspection Code: In-service Inspection, Rating, Repair, and Alteration of Piping Systems – section 9: Inspection of Buried Piping	
API 574	Inspection Practices for Piping System Components – section 11.7: Inspection of Underground Piping	
API 1111	Design, Construction, Operation, and Maintenance of Offshore Hydrocarbon Pipelines – section 8: Inspection and Testing	
API-RP-17B	API Recommended Practice 17B Recommended Practice for Flexible Pipe	
ASME B31.4	Pipeline Transportation Systems for Liquids and Slurries	
NACE SP0502	Pipeline External Corrosion Direct Assessment Methodology	





## 4. SCOPE OF WORK

# 4.1. Project Components

- a) Underground Pipeline
  - 32" Gasoline 95
  - 32" Gasoline 98
  - 32" Diesel
  - 32" Fuel oil
- b) Undersea pipeline with berths
  - 32" Gasoline 95; with berth 2 and flexible pipe connection
  - 24" Gasoline 98; with berth 1 and flexible pipe connection
  - 24" Diesel; with berth 1 and flexible pipe connection
  - 32" Fuel oil; with berth 3 and flexible pipe connection
- c) Manifolds with valves and fittings

Main manifold on the sea coast (Manifold 1)
Main manifold close to terminal entrance (Manifold 2)

d) Drain System

Main line drain pump; sea line drain pump; associated valves fittings, flowmeters and instruments.

Sump tank with all accessories (instrumentation, valves, connections)

# 4.2. Inspection and Tests

a) Existing Underground and Undersea pipeline inspection:

Prior to the inspection of the pipelines, the contractor shall prepare the pipelines for inspection. All pipelines shall be thoroughly cleaned using PIG to ensure the effectiveness of the inspection tests. The underwater pipeline shall be visually inspected and cleaned from the outside and any visible defect of damage shall be reported.

Inspection shall be carried out on the underground/undersea piping to detect metal loss, crack features, deformations, and Cathodic protection effectiveness as elaborated below:



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Metal Loss	general corrosion levels, pitting, pinholes, axial groove, lamination, wall thinning, narrow axial external corrosion.
Crack Features	Hook/seam weld crack, Hydrogen induced crack, Circumferential crack, Fatigue crack, Shrinkage crack, Lack of fusion, Crack in dents, Stress corrosion cracking (SCC) shall be identified.
Deformation	Plain dent, Dents with metal loss, Small dents, ID expansions, Buckle/wrinkle, Bend, Bending strain Centerline mapping
Cathodic protection effectiveness	

In order to determine the above inspection tasks the contractor shall adopt the following tests to be carried using intelligent Pigs

Metal Loss	MFL (Magnetic Flux Leakage)
Crack Features	UT (Ultra Sonic Testing Inspection)
Deformation	GP(CCTV) and EC (eddy Current)
Cathodic protection effectiveness	Cathodic Protection current measurement

Following the success of the above tests the pipelines shall be pressure tested to 1.5 times the design pressure. Upon completion of the pressure test the pipe shall be emptied from the testing media, dried, sealed from both ends and filled with nitrogen for preservation.

Inspect the Existing Subsea pipelines with flexible pipe connections according to API-RP-17B and Provide reliable information about the condition of the inner surface of the pipe, wear-and-tear - in order to determine the real bearing capacity of pipelines.



b) Manifolds inspection according to API 570 and/or API 2611

Visually inspect the manifold including piping, fittings and valves for any defects and damages. Clean the manifold piping and inspect the internal part using CCTV.

Inspect the valves and ensure their suitability for operation.

Perform an MFL and UT gauging and scanning:

MFLD 1 onshore

MFLD 2 transition

c) Drain system (at shoreline near MFLD1) inspection according to API 570 and/or API 2611

Visually inspect the manifold including piping, fittings and valves for ant defects and damages. Clean the manifold piping and inspect the internal part using CCTV.

Inspect the valves and flow meters and ensure their suitability for operation.

Perform the following tests and report their outcome:

- o UT gauging and scanning
- o LRUT (long range ultrasonic testing)
- o MFL (Magnetic Flux Leakage)
- d) Berth system inspection including diving operations

Clean the berth system and visually inspect their stature and report and defects or damages.

- o Berth 1
- o Berth 2
- o Berth 3
- o Berth 4 and 5 for possible future expansions

EMPLOYER'S REQUIREMENTS

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# 5. DELIVERABLES

a) Method statement:

The report shows how the work will be done including procedures, equipment to be used, and the HSE measures to be applied, the report shall be submitted for approval prior to any site works.

- b) Inspection Test Plan
- c) Testing Report:

The report contains all the tests carried out in the survey, test results, and the recommendations based on the survey, the report shall be submitted for approval.

- d) Scope of rehabilitation definition
- e) Proposed timetable
- f) Delineation Report Issuance:

The contractor shall deliver a delineation report describing the existing conditions, proposed rectifications, quantification of the rectification works and cost estimate.

The report shall include records of performed examinations including examination results, remarks and recommendations for repair of intolerable defects and deviations, in case of the possibility of their rectification.







# 6. QUANTITIES

The below quantities are indicative.

Item	Unit	QTY
Underground Pipeline		
32" Gasoline 95	m	800
32" Gasoline 98	m	800
32" Diesel	m	800
32" Fuel oil	m	800
Undersea pipeline with berths		
32" Gasoline 95; with berth 2 and flexible pipe	m	2284
connection, 20 m deep		
24" Gasoline 98; with berth 1 and flexible pipe	m	2871
connection, 18.8 m deep		
24" Diesel; with berth 1 and flexible pipe connection,	m	2871
18.8 m deep		
32" Fuel oil; with berth 3 and flexible pipe connection.	m	2111
16 m deep		
Manifolds with valves and fittings		
Main manifold on the sea coast (Manifold 1)	Item	1
Main manifold close to terminal entrance (Manifold 2)	Item	1
Drain System		
Main line drain pump; sea line drain pump; associated	Item	1
valves fittings, flowmeters and instruments		
Sump tank with all accessories (instrumentation, valves,	Item	1
connections)		

EMPLOYER'S REQUIREMENTS L21164-0100K-TD-CON-PMC-02 LEV 1





# 7. APPENDIX A

# List of Drawings

DRAWING NO.	DRAWING TITLE	REV
3107A-02-DW-0053-01	Key Plan to Phase 1 and 2	01
3107A-02-DW-1332-01	General Plan Layout Sector 01	02
3107A-02-DW-1332-02	General Plan Layout Sector 02	02
3107A-02-DW-1332-06	General Plan Layout Sector 06	02
107A-02-DW-0058-01 Tie-in Location Plan		01
3107A-00-PP-05-01	Pipeline rehabilitation procedure	01

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# 8. APPENDIX B

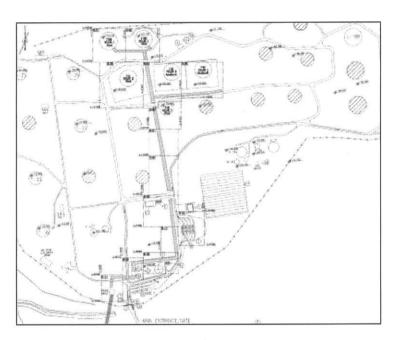


Figure 1 Fuel farm Layout

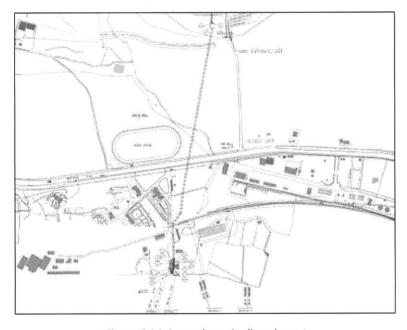


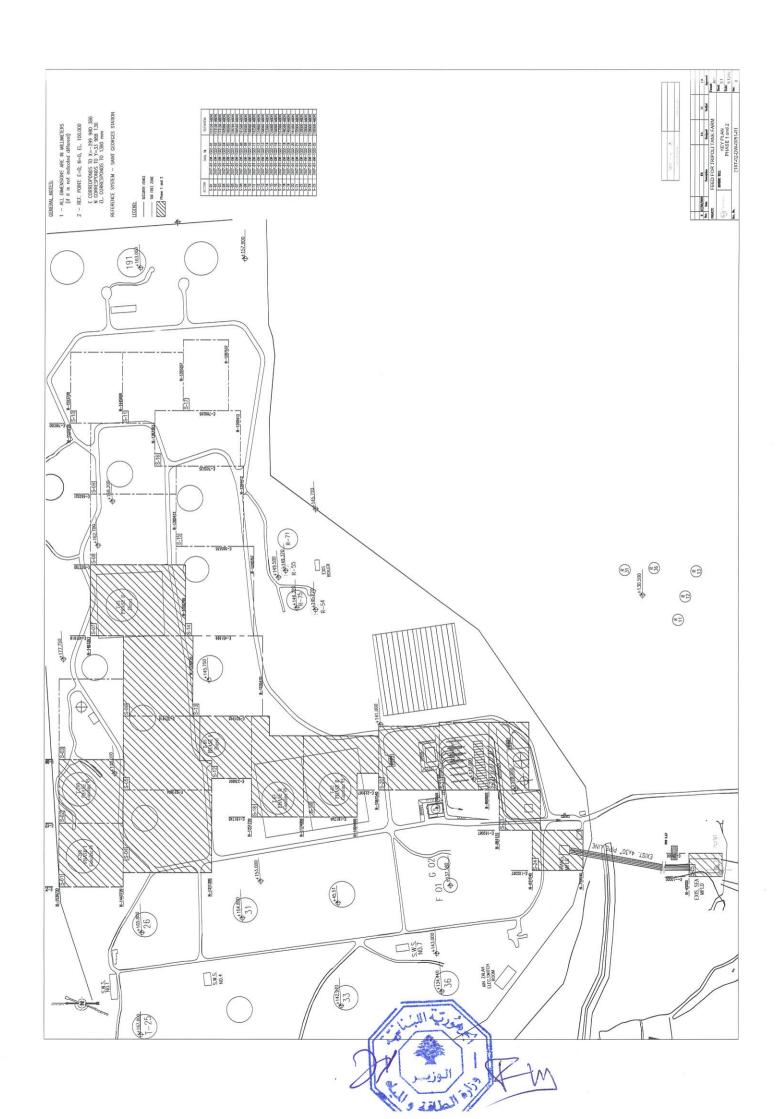
Figure 2 Main product pipelines layout

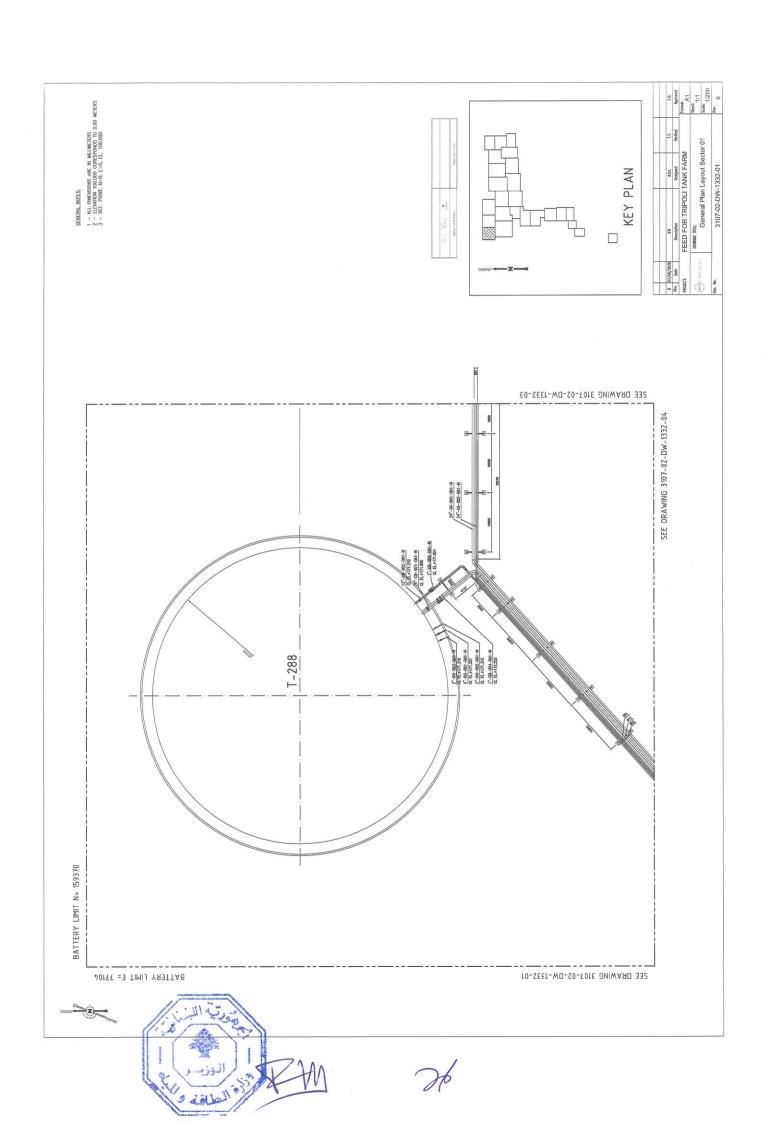


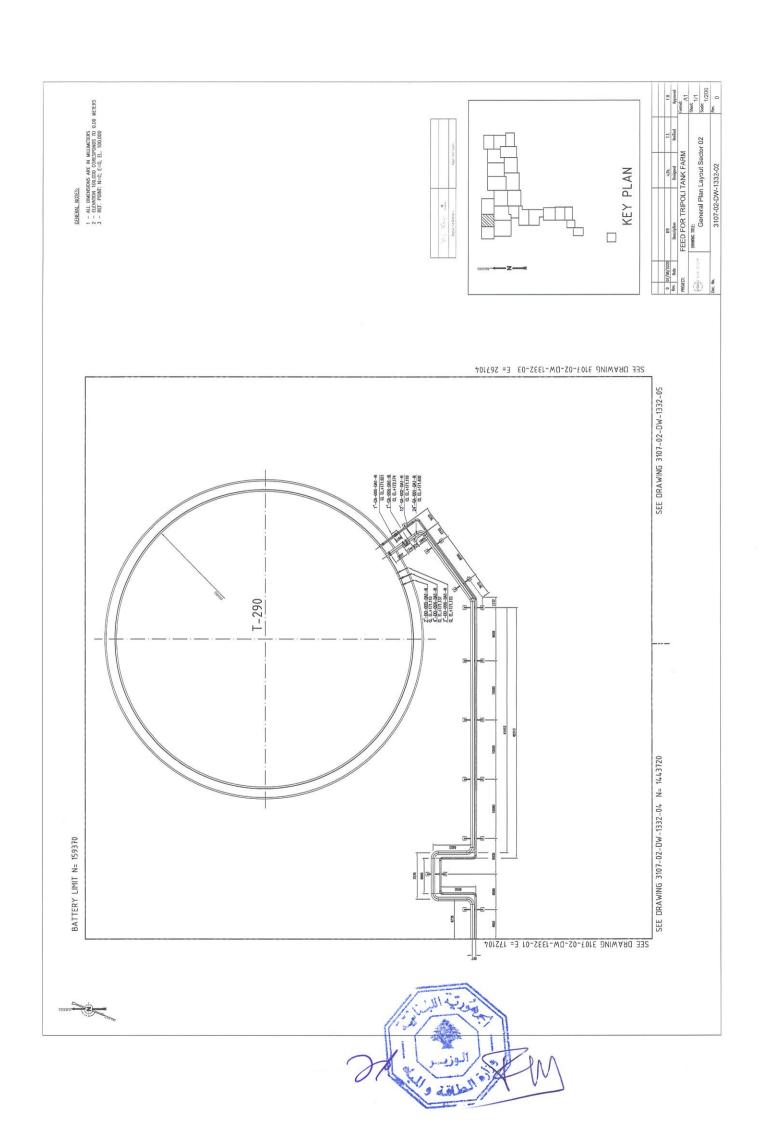
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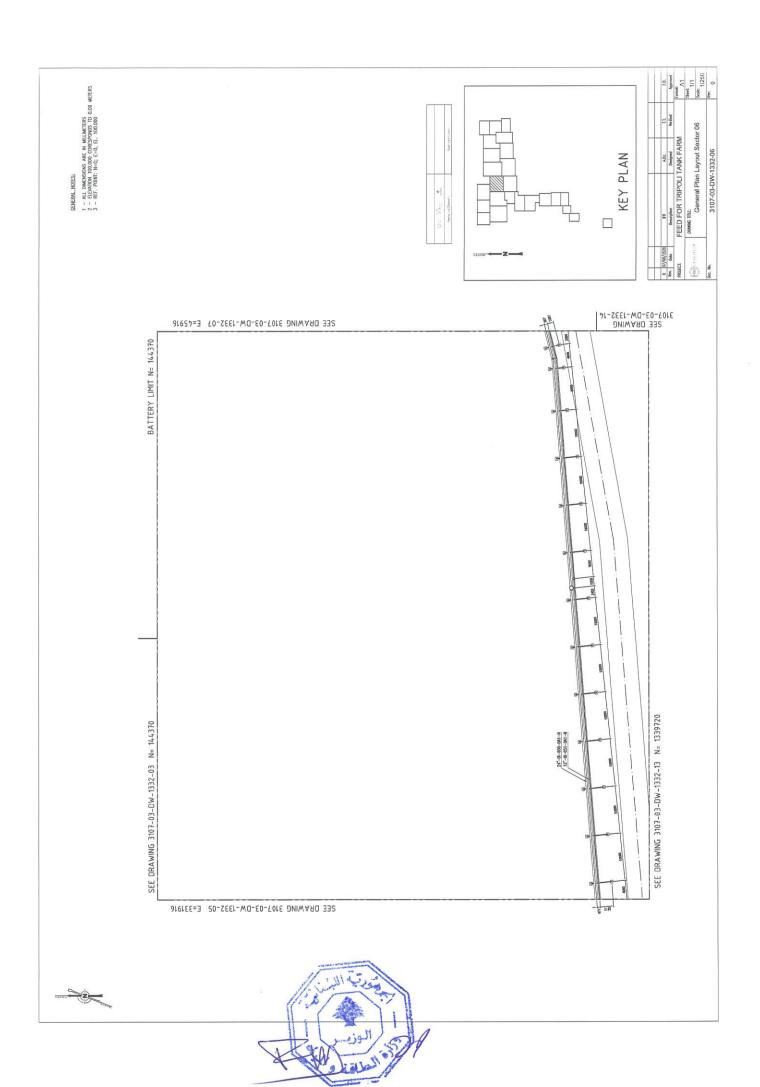


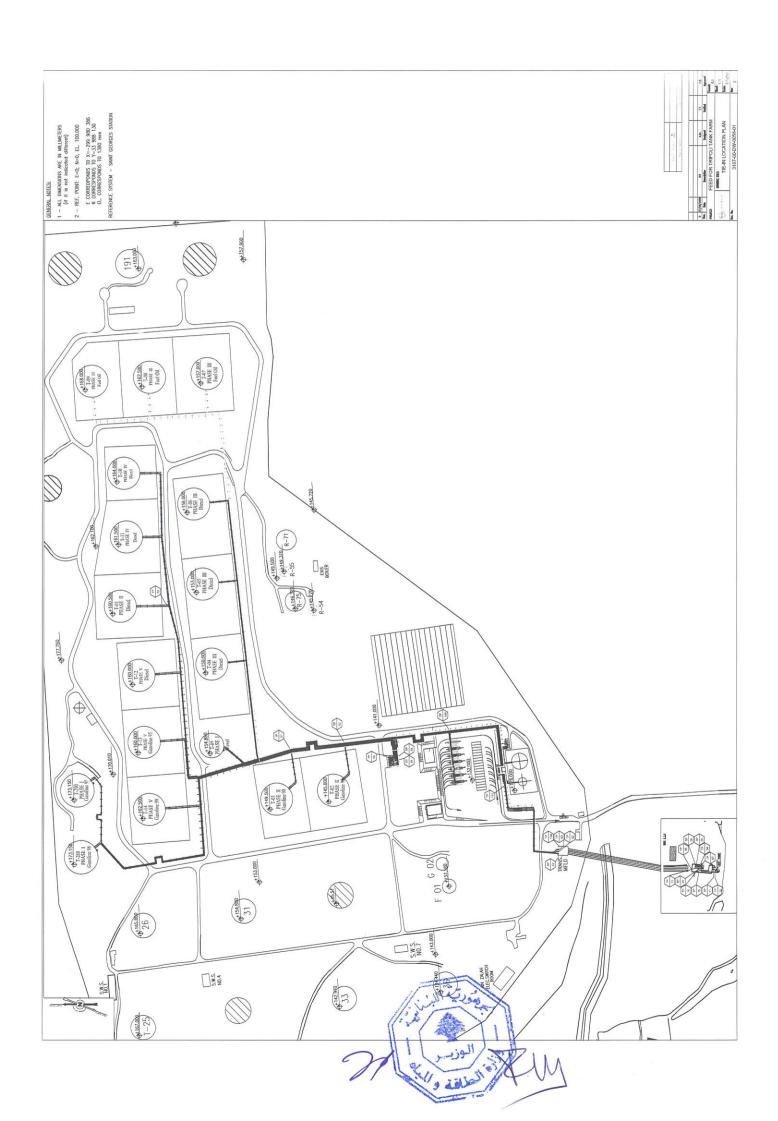














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# PIPELINE REHABILITATION PROCEDURE

Pages modified under this revision: All

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Rev	Date	Status	Approved Operator	Approved Owner	
			DOCUMENT REVISIONS		



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# 1 Introduction

#### 1.1 General

In January 2019 the Ministry of Energy and Water (MoE) - Lebanon Oil Installations (LOIL) granted the Operator (Client of this FEED) the rights to partly operate the Tripoli Tank Farm (TTF) - a crude and oil products storage terminal located approximately two and a half miles northeast of Tripoli. The terminal is one of the oldest in the world, dating back to the early 1900's, and was previously operated by the Iraq Petroleum Company. Currently Tripoli Oil Installations (TOIL) - a subdivision of LOIL — as an Owner of the terminal operates a small amount of tanks at TTF.

This document is part of the Front End Engineering Design (FEED) that frames the reconstruction and construction works for the infrastructure on the operated area as depicted in below picture.



The TTF Project has five phases, of which the first two must be implemented by the Operator – phases three to five are optional. The first two phases consist of:

- Three existing tanks to be rehabilitated and three new tanks to be constructed with an approximate combined capacity of one hundred and fifty thousand cubic meters (150000 m3) of fuel products (Diesel and Gasoline);
- New truck loading area;
- New piping, electrical, instrumentation, telecommunication networks;
- New pump station;
- Other facilities.

Also included in the scope is a 1 MW solar panel farm to cover the TTF Project power supply needs.

The operated area will be in a customs free zone/warehouse type concept to improve competitive trading features of the TTF Project outside the country.



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# 1.2 Objective

This procedure defines the minimum requirements for the rehabilitation of the existing pipeline, the undersea product pipelines, the main manifold located on the sea coast and the main manifold located near the TTF entrance, and the existing drain system located close the main manifold on the sea coast.

# 1.3 Reference documents

Document	Description
3107-00-PP-01	Project specification
3107-00-JSD-1300-01	Specification for Piping Design
3107-00-JSD-2300-01	Specification for Painting
3107-00-JSD-6300-01	Specification for Welding and NDT
3107-02-DW-0051-01	Key Plan-Phase 2
3107-05-DW-0051-01	Key Plan-Phase 5
3107-02-DW-1332-25	General Plan Layout Sector 25
3107-02-DW-1332-24	General Plan Layout Sector 24
3107-05-DW-0051-01	Overall plot plan – Phase 5
3107-02-PID-0021-06	Piping and instrument diagrams - Vessel area
3107-03-PID-0021-06	Piping and instrument diagrams - Vessel area

# 1.4 Definitions

Abbreviation	Description
FEED	Front End Engineering Design
MoE	Ministry of Energy and Water
TOIL	Tripoli Oil Installations
LOIL	THE MINISTRY OF ENERGY & WATER — Lebanon Oil Installations
ΠF	Tripoli Tank Farm
OWNER	The ministry of energy & water of the Lebanese republic – Lebanon Oil Installation - LOIL
OPERATOR / CLIENT	Levant Storage S.A.R.L





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VENDOR	Manufacture of equipment
CONTRACTOR	Most successful Bidder
EPICC	Engineering, Procurement, Intallation/Construction, Commissioning
SHALL	Indicates a mandatory requirement
SHOULD	Indicates a preferred recommendation

# 1.5 Applicable codes and standards

The work covered in this specification shall comply with all relevant governmental and local laws, regulations and standards.

The mandatory standard is Lebanon General Regulatory Requirements of Liquid Oil Derivatives Complexes, which precede all international standards

Standard	Description
Lebanese Decree No. 5509	General Regulatory Requirements of Liquid Oil Derivatives Complexes

# 1.6 Order of precedence

In the event of apparent technical conflict occurring in applying this Specification and reference documents, the following order of precedence shall apply:

- Lebanese Decree No. 5509; General Regulatory Requirements of Liquid Oil Derivatives Complexes
- International Codes and Standards
- This Project Specification
- •Discipline Technical Specification
- Data Sheet

Where a conflict exists the CONTRACTOR shall seek clarification from the Client.

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# 2 REHABILITATION / REVAMPING

#### 2.1 Scope

The main purpose of this Project procedure is to give the guideline for the rehabilitation of the existing pipeline, the associated manifold and drain system, the undersea pipeline with the berths and the flexible pipe connections.

Existing pipeline and associated manifolds, undersea pipeline, drain system shall be separated into following section:

# Manifold with valves and fittings

- Main manifold on the sea coast (Manifold 1)
- Main manifold close to terminal entrance (Manifold 2)

# **Pipeline**

- Gasoline 95; line number 32"-GA-035-DA1-N
- Gasoline 98; line number 32"-GB-031-DA1-N
- Diesel; line number 32"-DI-031-DA1-N
- Fuel oil; line number 32"-FO—020-DA1-ET

# **Drain System**

- Main line drain pump; sea line drain pump; associated valves fittings, flowmeters and instruments.
- Sump tank with all accessories (instrumentation, valves, connections)

# Undersea pipeline with berths

- Gasoline 95; line number 32"-GA-035-DA1-N with berth 2 and flexible pipe connection
- Gasoline 98; line number 24"-GB-031-DA1-N with berth 1 and flexible pipe connection
- Diesel; line number 24"-DI-031-DA1-N with berth 1 and flexible pipe connection
- Fuel oil; line number 32"-FO—020-DA1-ET with berth 3 and flexible pipe connection

#### 2.2 Method of works

Each rehabilitation / revamping works shall include following parts:

- Method of statement documents
- Preparation works
- Inspection and testing
- Report
- Rehabilitation works
- · Testing after rehabilitation works
- Final report





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As the works are completed final dossier will be created, and submitted to the client for approval. Method of statement shall be approved by the client.

# 2.3 Manifold with valves and fittings

Although the complete scope is divided, into individual segments, in order to follow the rehabilitation work easier, it is a part of one unique system.

In order to enable proper inspection the main pipeline, shall be separate from the two main manifolds

( sea coast and the one close to the entrance ). Further. It will be marked as Manifold 1 & Manifold 2.

The Separation, will be executed in a such way to enable application of the mobile pigging system for the purpose of cleaning and inspection of the 4 pipeline.

Before, any work proper safety measures shall be applied. That will be clearly indicated inside the Method of statement document.

#### Manifold 1

All civil works necessary to uncover all parts of Manifold 1 will be done. As revealing all components of Manifold 1, all key parts will dismantle. Some parts as valves, and instruments will be revamped in the workshop, while the manifold itself will be revamped on the field.

All standard revamping steps will be followed, as are: send blasting, 3 layer coating (primary and two final layers ), gasket replacement, etc...

Those steps will be fully described by the method of statement.

Battery limit for the Manifold 1, are:

- Connection to the undersea pipeline (South)
- Connection to the 4 main pipeline (North)
- Connection to the Power station (West)
- Connection to the drain system (East)

In addition to the rehabilitation works, the two new check valves shall be installed. During detail engineering, dedicated pit shall be foreseen for the check valves and the bypass, which are currently underground and not visible.

# Manifold 2

All standard revamping steps, will be followed, as are sand blasting 3 layer coating (2 primary and one final layers ), gasket replacement, etc...

Those steps will be fully described by the method of statement.

Some parts as valves, and instruments will be revamped in the workshop, while manifold itself will be revamped on the field.

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Separation of the 4 main pipelines from the Manifold 2, should be done in a such manner, to enable proper fittings of the new 4 pipelines. It should be created during Detail Engineering. Tie-in points for the new system connection, shall be considered during rehabilitation process of Manifold 2.

Walking platform around Manifold 2, with handrails shall be dismantled, sandblasted and coated with 3 layer and install again. If it is necessary, working platform can be rearranged to suit new service of Manifold 2. It shall be elaborated during Detail Engineering.

Some parts as valves, and instruments will be revamped in the workshop, while the manifold itself will be revamped on the field

#### 2.4 Pipeline

As it was mentioned above, following steps shall be applied:

- Method of statement documents
- Preparation works
- Inspection and testing
- Report
- Rehabilitation works
- Testing after rehabilitation works
- Final report

Preparation works, will mainly depend of the type of inspection and testing which shall be carried out. We propose Intelligent Pigging System (IPS)to be applied. The benefits of applying it are that full quality report shall be issued and accordingly scope of rehabilitation works will be defined.

In addition, the same IPS can be utilised for the undersea pipeline.

Civil works needed to apply IPS (lunching and receiving station, shall be part of Manifold 1 & 2 civil works.

Method of statement and final report shall be approved by client.

#### 2.5 Drain system

Drain system is located inside Pit, and consist of:

# Main line drain pump:

A two shaft screw pump with a pulsation dumper, a gear box, a belt driver system, a low speed coupling, a high speed coupling, a baseplate, an electric motor, a junction box, a cable try with cables.

The revamping process of the pump will include but will not limited to the following: a new gasket, a new bearing, a new driven belt, a new coupling, and if necessary a new sealing system, a new pulsation dumper. The pump shall be moved to a workshop for detailed dismantling and maintenance. All parts necessary to change shall be replaced with the original one, or with a suitable parts of the same quality.





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The Contractor shall consider replacement of the old pump with the new self priming centrifugal pump and auxiliary facilities. Decision shall be made with agreement and upon approval of Client.

#### Sea line drain pump

A gear pump with a discharge pulsation damper, a coupling, a baseplate, a electric motor, a gear box direct driven, a inlet filter, a junction box, a cable try with cables

The revamping process of the pump will include but will not limited to the following: a new gasket, a new bearing, a new driven belt, a new coupling, and if necessary a new sealing system, a new pulsation dumper. The pump shall be moved to a workshop for detailed dismantling and maintenance. All parts necessary to change shall be replaced with the original one, or with a suitable parts of the same quality.

The Contractor shall consider replacement of the old pump with the new pump and auxiliary facilities. Decision shall be made with agreement and upon approval of Client

#### Shelter cover of the Pit

As the shelter is near the sea, all of the beams are very rusted and mostly shall be replaced with the new one. The roof shall be completely new.

#### **Electrical & instrumentation**

All cables, junction boxes, lamps shall be replaced. Area is ex proof and all the items shall be suitable for that zone

Flow meters shall be replaced with the new one. All instruments shall be replaced with the new one, body will be stainless-steel suitable for the purpose.

Motor operated valves shall be tested after revamping, it will be decided during detail engineering should manual valves need to be installed instead of Motor operated valves.

# Sump tank

The sump tank is located near the Drain Pit. All necessary checking shall be carried out and if necessary rehabilitation work will be done. Installed instrument, a level gauge, a pressure gauge will be check and calibrated. All drain system area is Ex proof, so special precaution shall be implemented.

The Contractor shall consider replacement of the old Sump tank system with the new Sump tank and auxiliaries. Decision shall be made with agreement and upon approval of Client

# 2.6 Undersea pipeline with berths

Gasoline 95; line number 32"-GA-035-DA1-N with berth 2 and flexible pipe connection

Gasoline 98; line number 24"-GB-031-DA1-N with berth 1 and flexible pipe connection

Diesel; line number 24"-DI-031-DA1-N with berth 1 and flexible pipe connection





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Fuel oil; line number 32"-FO-020-DA1-ET with berth 3 and flexible pipe connection

As it was mentioned before, following steps shall be applied:

- Method of statement documents
- Preparation works
- Inspection and testing
- Report
- Rehabilitation works
- · Testing after rehabilitation works
- Final report

We propose Intelligent Pigging System (IPS) to be applied. Benefits of applying it, are that full quality report shall be issued and accordingly scope of rehabilitation works will be defined.

The civil works necessary to apply IPS will be carried out. Connection between onshore and offshore pipe should be marked and in that area mobile pigging should be installed.

During Detail Engineering it will be decided, which type of connection shall be implemented between onshore and offshore pipes (flange, check valve,)

Method of statement and final report shall be approved by client.

# Berth system 1, 2 & 3

Berth system consist of:

Berth 1. 2 &3

Anchoring of the berths with chain

Anchoring of the undersea pipelines

Flexible pipes

Proper inspection with divers shall be carried out, implementation of IPS will be checked and proper steps shall be foreseen.

# 3 FINAL CONCLUSION

This procedure gives only the basic guideline to the EPC contractor for the rehabilitation work of the above mentioned system.

The purpose of this procedure is to enable the definition of the scope of works which shall be further elaborated during Detail Engineering.



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The EPC contractor should be aware, that for all components, systems and subsystems, specific certification should be issued

Mandatory, for the existing system described here, (in addition to the fact, it should be as per engineering standards and fit to purpose) is that in any scenario this system should not be an obstacle of the service of the TTF. According to the parameters given inside the FEED documentation.





# Lebanese Republic

Ministry of Energy and Water (MoEW)

Directorate General of Oil - Tripoli and Zahrani Oil Installations

# TRIPOLI TANK FARM INSPECTION OF EXISTING FACILITIES

Volume 3: Schedule of Prices





	Grand Sur	mmary		
No.	Description	Unit		Total Price
1	General Requirements	LS	\$	
2	Inspection and Testing	LS	\$	
3	Pressure testing	LS	\$	
4	Deliverables	LS	\$	
	Total before Discount			
		Discount		
		Total after Discount	\$	

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No.	Description	Unit	Quantity	Unit Price	Total Price	
	The Contractor shall be deemed, prior to submitting his Tender, to have carefully studied, understood fully and taken account of all the provisions and requirements, expressed and implied, in Contract					
	Allow and price against the below items in these, for any and all direct, indirect and associated costs and expenses necessarily incurred in complying with and fulfilling the Contractor's obligations and responsibilities prescribed in and/or reasonably inferred from the Contract Documents including but not limited to Employer' requirements, General and Particular Conditions of Contract, and any other document forming part of the Contract.					
1	General Requirements	LS	1.00		\$	
2	Inspection and Testing				\$	
2.1	Existing Underground and Undersea pipeline inspection				\$	
а	32" underground pipeline	LS	4.00		\$	
b	24" undersea piline	LS	2.00		\$	
С	32" undersea pipeline	LS	2.00		\$	
2.2	Manifolds inspection according to API 570 and/or API 2611	LS	1.00		\$	
2.3	Drain system (at shoreline near MFLD1) inspection according to API 570 and/or API 2611	LS	1.00		\$	
2.4	Berth system inspection including diving operations	LS	1.00		\$	
3	Pressure testing in full compliance with Volume2- Employer's requirements	LS	1.00		\$	
4	Deliverables				\$	
4.1	Method statement	LS	1.00		\$	
4.2	Inspection Test Plan	LS	1.00		\$	
4.3	Testing Report	LS	1.00		\$	
4.4	Scope of rehabilitation definition	LS	1.00		\$	
4.5	Proposed timetable	LS	1.00		\$	
4.6	Delineation Report Issuance:	LS	1.00		\$	

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