

INVITATION TO BID

Bid No. 12-2021
Date: 31st May 2021

Summary

IASL is the National Airline of the Republic of Maldives and is wholly owned by the Government of Maldives. In addition to Air Transport Services, IASL offers various other aviation related services such as Air Cargo, Airport Management, Aircraft Engineering, and Ground Handling Services.

IASL is looking to develop a new Fuel Plant at N. Maafaru International Airport. IASL hereby invites local and foreign companies with financial capability and experience in manufacturing and supplying of a Pumping Filtration Module for Aviation Fuel (JET A-1) as per the details give in Annexure -1.

Island Aviation Services invites sealed bids valid for 90days from the date of opening the bids from Maldivian / International companies, for procuring requirement as per Annexure -1. All bidders are advised to study the Bid Document carefully.

Tentative Project Timeline

Task Name	Start (M/D/Y)	Finish (M/D/Y)
RFB Confirmation	5/26/21	5/27/21
Announcement	5/31/21	6/4/21
Queries Clarification	5/31/21	6/17/21
Proposal Submission	5/31/21	6/23/21
Proposal Evaluation	6/23/21	6/27/21
Selection	6/27/21	6/29/21
Agreement Confirmation	6/29/21	7/3/21
Agreement Signage	7/3/21	7/4/21
Payment Settlement	7/5/21	7/6/21
Manufacturing	7/6/21	8/3/21
Shipping	8/3/21	10/4/21
Clearance	10/5/21	10/18/21
Inspection	10/19/21	10/20/21
Acceptance	10/21/21	10/21/21
Transportation to NMF	10/22/21	10/25/21
Tank Installation	10/26/21	11/3/21
Completion of the Project	11/3/21	11/3/21

Note: Above project timeline is subject to change but IASL recommends all bidders to put their best effort to be consistent with above timeline.

Information for Bidders

Services/Goods Required:

Design, Materials, Fabrication, Assembly, Testing, Inspection, Painting, Documentation, packing of a Pumping Filtration Module for Aviation Fuel (JET A-1) as per the details give in Appendix A.

No of Pumping Skid Required: 1 Unit.

Warranty Period: Minimum 1year.

Guideline for BID Registration:

Bidders are required to provide expression of interest by mailing the filled EOI Form to IASL procurement mail as per below mailing format:

To: procurement.admin@iasl.aero

Cc to: mohamed.ziyau@iasl.aero

Subject: EOI for IASL NMF Jet A-1 Fuel Pump Skid BID No:12-2021

Last date for EOI (Expression of interest) is 4th June 2021 on or before 14:00hrs local time in Maldives (GMT + 0500hrs).

BIDs will be accepted only from the bidders who express their interest as per above instructions and participate in the below proposal submission video conference.

Clarifications for queries will be open till 17th June 2021 on or before 14:00hrs local time in Maldives (GMT + 0500hrs). Queries must be mailed to below email addresses:

To: procurement.admin@iasl.aero

Cc to: mohamed.ziyau@iasl.aero / m.ali@iasl.aero / binarchdesign@gmail.com

BID Submission via Video Conference:

All the parties that meet the eligible criteria must submit their Bids not later than 23rd June 2021. Bid submission time window will be open from 17:10 – 17:30hrs local time in Maldives (GMT + 0500hrs).

Proposal submission will be conducted through a video conference meeting held in IASL Head Office at 17:00hrs local time in Maldives (GMT + 0500hrs).

A link for joining the video conference meeting will be sent to each Bidders email address prior to one-hour of video conference commencement.

For uploading proposals, a 20-minute submission time window will be given for all bidders starting from 17:10 – 17:30hrs local time in Maldives (GMT + 0500hrs).

The latest time for joining the BID submission video conference will be till 17:10hrs local time in Maldives (GMT + 0500hrs). late Bidders will not be allowed to join proposal submission video conference.

Eligible bidders

The Bidders must submit relevant documents as per below details.

- a. Bidder must be a Business Entity providing such goods and services as attachment.
- b. If the bidder is a Maldivian Firm, they must have its own operational office at Maldives and registered with Maldives Inland Revenue Authority (MIRA) and submit below documents:
 - a. Company Registration Certificate
 - b. GST Registration Certificate
 - c. Audited Financials (2019 – 2020)
- c. Foreign bidder must submit a valid Tax Compliance Certificate of their origin country along with audited financials of (2019 -2020).
- d. The Application must be submitted in English language. All required information must be provided, responding clearly and concisely to all the points set out. Any application which does not fully and comprehensively address this Request for Proposal may be rejected.

The Application document should comprise of the following:

1. Cover Letter: The cover letter for the proposal must be signed by an authorized person who has the authority to bind the Proposal to a Contract;
2. Company Profile: If vendor is a firm, Profile of the Firm including the firm's shareholding structure and valid registration details;
3. Project Cost and Payment Terms: The Project Cost and Payment Terms and arrangements quoted in Maldivian Rufiyaa (MVR) or in United States Dollar (USD) inclusive of all freight, insurance, and taxes.
4. Proposal must remain valid for a period of 90 days after the date of Proposal Submission.
5. A detail cost breakdown of the Jet A-1 Fuel Pump Skid.
6. Proposed price must be quoted in all-inclusive CIF Sea Freight basis.

7. Implementation Plan: From Order confirmation to Manufacturing and Delivery Plan.
8. Information About Party's Technical and Financial Capacity and Relevant Experience:
 - 8.1. Provide last 2 years' financial statements (audited) to indicate financial strength of the company to execute a project of this nature;
 - 8.2. List of past experience in similar projects with letters of completion. If past experiences are not accompanied with an official letter of completion by the client, marks will not be awarded to that section; and
9. Related Party Disclosure (Form A):
 - 9.1. The form serves to justify that the bidder has or does not have any relationship in terms of employment or close family relationship. Close family relationship here refers to spouse, including former spouse relatives, which comprise: siblings; cousins; uncles and aunts; nephews and nieces; lineal ancestors (presumably, it means parents, grandparents and other ancestors of direct lineage) lineal descendants (children, grandchildren and other direct descendants).

Island Aviation holds the right to reject a Proposal in the following circumstances:

1. If less than two bids have been submitted, the IASL has the right to continue or reject the evaluation or request for a resubmission.
2. If any of the documents mentioned above in the documents required is missing from the BID, the IASL has the right to reject the BID or request for a resubmission

Applications shall be evaluated in accordance with the Party's demonstrated capacity and experience and expertise. The awarding criteria's and weightage will be annexed to this document.

Parties shall bear all costs associated with the preparation and submission of the Application and Island Aviation will not in any case be responsible and liable for the costs incurred.

All information given in writing to or verbally shared with the Party's in connection with this Request for Proposal is to be treated as strictly confidential. The Party's shall not share or invoke such information to any third party without the prior written approval of IASL. This obligation shall continue after the procurement process has been completed whether or not the Party is successful.

All materials submitted in Response to the Request for Proposal shall become the property of IASL. Proposals and supporting materials will not be returned to the Party.

- e. All information provided will be subjected to verification by IASL. Submission of incomplete or unsigned forms may result in rejection of the bid as non-responsive.
- f. IASL will only accept one bid document from every bidder.
- g. To assist in the evaluation and comparison of bids, IASL may, at its discretion, request any bidder for clarification of its bid. This will be clarified in writing, but no change in substance or price of the bid will be sought.
- h. IASL will evaluate and compare only those bids determined to be responsive in accordance with requirements specified in the bidding document.
- i. IASL will award the contract in writing to the bidder who scores the highest marks in compliance with the criteria decided by the Bid Evaluation Committee.
- j. Upon furnishing by the successful bidder, IASL will promptly notify the other bidders through telephone or email that their bids have been unsuccessful.

Evaluation Criteria:

- k. IASL intends to apply the following criteria for the selection of bids. The Bid will be evaluated by the Bid Evaluation Committee of IASL. Points will be given to proposals according to the evaluation criteria below.

Price Offered	50 %
Strength/Reliability	10 %
Relevant Past Experience	10 %
Delivery	30 %

NOTE:

1. Letters from clients stating the successful execution of similar tasks or evidence of Refuellers supplied by the bidder is required to attain marks for the “Past Experience” category.
2. Marks will be awarded under criteria for Strength/Reliability considering the **submitted audited financials** for the latest two years.

COMPANY INFORMATION FOR (EOI)	
Business Name	
Correspondence Address	
Registered Address	
Date of Incorporation	
Name of Representative	
Designation of Representative	
Contact No.	
Email Address	

RELATED PARTY DISCLOSURE (FORM A)

Island Aviation Services Limited
M. Dar Al-Eiman Building,
Majeedhee Magu,
Male' 20345,
Republic of Maldives

[Date]

Dear Sir/ Madam,

Project: RFB to

Subject: Related Party Disclosure

With the exception of the below specified, I hereby declare that, we, the party is in no way, shape or form related to Island Aviation; created either through an employer-employee agency relationship between employees or directors of Island Aviation or by way of ownership of Island Aviation.

Name of the Related Party	Designation of the Related Party	Relationship

Yours sincerely,

[Name of signatory]

[Title]

Annexure -1

PUMPING MODULE

1. Scope

The specification covers the requirements for the detailed design, materials, fabrication, assembly, testing, inspection painting, documentation, packing of a Pumping and Filtration module for aviation fuel (JET A-1). The unit shall comply with requirements of the relevant EI, JIG, BS, DIN Specification or any other standard that are relevant at detailed design stage.

2. Product Data

Unless stated otherwise all equipment is to suitable for use with aviation turbine Fuel (Jet A-1).

Product: Jet A-1

Density: 775-840 kg/m³

Viscosity: 2.1 cSt @ 15°C

Design Temperature: 0-60°C

Operating Temperature: 32°C

3. Performance Data

Performance Capacity: 1800LPM

Pumping: Self-priming Centrifugal Pump

02 Nos Pump Rated @ 900LPM

Filtration: Filter Water Separator

02 Nos Filter Water Separator Rated @ 1200LPM

Sampling Pump - PD Pump

Sampling Pump: 30LPM

Meter - PD flow meter – Electronic display

Meter Accuracy: ± 0.1%

Working Pressure: 6bar

Design Pressure: 12bar

4. Operation Concept

Pumping skid Shall be able to undertake refueller bottom loading operation with dual hoses, Tank to Tank Transfer operation, Fast Flush System and Closed-Circuit Sampling System and Data Capturing

4.1 - Refueller Loading

Pumping System to be operated for Refueller Loading, Bottom Loading Operation concept follows for loading of Fuel to Aircraft Refueller to be undertaken using single pump or dual pump; Refueller loading maximum Flow rate 1800LPM; Refueller loading shall be preset metering & controlled by Electric Deadman Operation.

Pump switching ON/OFF by manual control panel mounted on the Pump Skid.

Loading operation to be done using fixed 2 x DN65 Hoses – 5m each.

Refueller Loading Shall be via online pump control system (SCADA)

- Electronic Meter with Preset Values
- Flow meter to be integrated with Electronic Deadman control & solenoid valve
- Bonding Reel
- Connection to Refueller - STD Bottom Loading Adaptor
- Hoses - Elaflex
- Hose connection / fittings – Elaflex
- Aircraft Refuelling Nozzle

Refer P&ID

4.2 - InterTank Transfer

Product Transfer / Inter tank Transfer shall be able to be undertaken using the Pumping Skid and Filtrations.

Intertank Transfer operation using Deadman and Meter.

Refer P&ID

4.3 - Sampling System

Fast Flushing system & Closed-Circuit Sampling to be incorporated in the Pumping Skid.

Fast Flushing via gravity of product and via sampling pump.

All essential sampling point to be connected to Closed Circuit Sampler.

Refer P&ID

5. **Applicable Codes and Standards**

- 5.1 Energy Institute, Model of Safe Practice, Part 15 “Area Classification for Installations Handling Flammable Fluids”.
- 5.2 BS 7671 AM3 (2015) –Wiring Regulations
- 5.3 BS EN 60079-14: 2014 – Electrical Installations Design, Selection and Erection
- 5.4 JIG1 – Aviation Fuel Quality Control & Operating Standards for Into-Plane Fuelling Services – Issue 12
- 5.5 JIG2 – Aviation Fuel Quality Control & Operating Standards for Airport Depots & Hydrants – Issue 12
- 5.6 EI1530 - Quality assurance requirements for the manufacture, storage and distribution of aviation fuel to airports
- 5.7 EI 1529 - Aviation fuelling hose and hose assemblies.
- 5.8 API/IP SPEC 1581 - Specifications and qualification procedures for aviation jet fuel filter/separator.
- 5.9 API STD 610 Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries
- 5.10 API STD 526 - Flanged Steel Pressure-relief Valves

- 5.11 API STD 600 Steel Gate Valves
- 5.12 API STD 598 - Valve Inspection and Testing
- 5.13 ASTM A312 TP316L Welded Pipe, 316L Stainless Steel Seamless Pipe
- 5.14 EN50014 – EN50018 <<d>> and IEC 79 - Electrical apparatus for potentially explosive atmospheres

6. Construction

All components defined shall be fully assembled and mounted on Skid Base; all necessary valves shall be located in an easy operable manner.

Skid Base

Fully welded carbon steel construction made of carbon steel profiles of hot dip galvanized, reinforcements and floor plate, complete with spill collection basin. Drain points fitted with plugs are provided at the base to facilitate the spill tray emptying whenever necessary. The skid base to be included:

- Fork lift pocket on the longitudinal side
- Foundation plates
- Grounding connection

Roof

The roof is made of polyurethane sandwich panels 40 mm thick with external cladding to protect the system from sun radiation and rain. It is supported by no. 04 posts located at the corner. To be included:

- Lighting installation consisting of 1 x 36 W Excd fluorescent lamp, including Excd switch.
- Lifting points at the corners.

Piping

All the piping system in sch. 10 SS pipe, fully welded and pressure tested. In addition, 10% off the welding seams are radiographic inspected. The pipes diameters will be in accordance to the specific flow rate in order to have a fluid velocity $\leq 3,0$

Valves

Ball vales used in the system shall be stainless steel and other equipment shall be internally lined with epoxy coating.

All manual sampling / drain point shall have 300mm clearance.

7. Pump & Motor

- 7.1 Each pump unit shall comprise of a centrifugal pump with electric drive motor and flexible coupling all mounted on a common rigid base plate.
- 7.2 Pump Capacity - 54 m³/hr
- 7.3 Pumps shall be finished painted, in double coat of epoxy, finish color - WHITE.
- 7.4 The pump head shall rise continually from the duty point to shut-off. The preferred head rise to shut off is at least 110% of the rated differential head.
- 7.5 The mean velocity at the discharge nozzle should not exceed 3.0 ms⁻¹, and shall not exceed 5.0 ms⁻¹.

- 7.6 Electric motors shall be manufactured in accordance with EN50014 – EN50018 <<d>> and IEC 79.
- 7.7 Electric motors drivers shall be suitable for installation in a hazardous area as specified on the motor data sheets.
- 7.8 Motors must be suitable for a maximum of 6 starts per hour.
- 7.9 For each pump, works testing shall consist of: -
 - Unwitnessed Hydrostatic Test;
 - Unwitnessed Performance Test
 - Unwitnessed NPSH Test;
 - Shop Inspection
- 7.10 All mechanical and electrical equipment within the pump Supplier's scope of supply shall comply with the European (ATEX) directive 97/9/EC.

8. Filter Water Separator

- 8.1 This site specification details the requirement for aviation jet fuel Filter/Water Separator vessels in pressure service.
Any deviations from this specification including any modifications necessary for particular applications shall be submitted to the purchaser for written approval.
- 8.2 API 1581 Design and Construction of Aviation Fuel Filter Vessels 5th Edition.
- 8.3 Max Flow Rate – 1200 LPM
- 8.4 Filter/Water Separator vessels shall be carbon steel.
- 8.5 In addition to API/IP 1581 Non-asbestos fibre (NAF) bolted flange gaskets shall meet the requirements of this specification.
- 8.6 Slow Fill Connection -1"
- 8.7 Millipore Connection – GTP/ Equivalent
A ½" ANSI flanged connection shall be provided on the inlet & outlet elbow to allow Millipore samples
- 8.8 Earthing Boss
The vessel shall have an earthing (grounding) boss.
- 8.9 Differential Pressure
Filter/Water Separators shall be supplied with a differential pressure gauge, mounted at a suitable location (location of the gauge to be easily readable).
- 8.10 Air Eliminator
An air eliminator suitable for the rated flow should be provided as standard and supplied c/w a sight glass.
- 8.11 Pressure Relief Valve
All Filter/Water Separators shall be supplied with a pressure relief valve complying with the requirements of ASME VIII.
- 8.12 Bulletin 1581 or of data demonstrating qualification by (SIMI) similarity in accordance with API 1582.

9. Fast Flush & Closed-Circuit Sampling System

- 9.1 Stainless Steel Fast Flush sampling tank with a capacity to hold 500Lts
- 9.2 Tank shall be cone down bottom type.
- 9.3 Typical layout of sampling Tank provided in JIG-2.
- 9.4 Sampling system shall include product gravitating sampling and sampling under sampling pump pressure.
- 9.5 Sampling tank shall be emptied using the sampling pump and product returned to the storage tank via inlet pipeline. (RF Flange connection to be left on the skid for Tapping point for site connection)
- 9.6 Closed Circuit Sampling system with a closed-circuit sample Jar 20ltrs fitted with CWD fittings and other accessories.
- 9.7 All the sampling inlet lines to Closed Circuit Sampler shall be SS tubes piping of DN10, without using any elbows.
- 9.8 Necessary connection shall be left for samples drawn from other points.

10. Sampling Pump system

- 10.1 Pump unit shall comprise of a positive displacement pump with electric drive motor and flexible spacer coupling all mounted on a common rigid base
- 10.2 Pump Capacity – 50LPM
- 10.3 The Supplier shall be responsible for the design, integration, testing, delivery and proper functioning of each pump unit within the scope of supply.

11. Thermal Relief

- 11.1 Stainless Steel Thermal Pressure relief system to be established.
- 11.2 Thermal Pressure relief system to be connected to Sampling tank separate nozzle.
- 11.3 Description
 - Pattern: Angle pattern relief valve
 - Connection Type: Flanged ANSI B16.5 Class 150 R.F.
 - Back Pressure 6.2bar(g)
 - Temperature -10°C TO +80°C
 - Specific Gravity 0.78
 - Viscosity 10 cSt to 200 cSt

12. Flow Meter

- 12.1 Electronic PD flow meter – Electronic display
- 12.2 Meter Accuracy: $\pm 0.1\%$
- 12.3 ATEX, PED and MID
- 12.4 Meter proving shall be carried out in accordance with HM 20 and the EI Petroleum Measurement Manual, the API Manual of Petroleum Measurement Standards or equivalent industry standard.
- 12.5 Flow meter to be integrated with Deadman control solenoid valve.
- 12.6 Truck Loading operation to be undertaken using Deadman control system.
- 12.7 Meter shall have necessary communication protocols to configure fuel delivery process and delivery tickets, transections history, cloud management.

13. Electrical System

The electrical system to be divided into two separate panels; Exd enclosure is located at the skid front, where all the main controls are fitted. A second unit housing the deadman control device is segregated at the skid side, in a specific compartment considered safe area (the recession to be positioned over 800 mm from the skid floor and far away from potential hazardous points).

Main Control Panel

- Explosion proof enclosure IP 65, complete of
- Main switch
- Circuit breakers, overload cut-out devices
- Auxiliary circuit 24 V
- Pumps delta/star starter
- Pumps start/stop button
- Pilot lights for skid main components
- Emergency push button with Connection additional ESD at other 2 locations.
- Auxiliary Single-Phase Power socket ex rated shall be provided on the skid for possible power requirement on any maintenance.

Deadman Control system

- Electronic intermittent Timer controlled Deadman System
- Wired Deadman with Suzy cable
- Rate of flow deadman control valve mounted on the delivery line.

14. Automation Solutions

The pumping system shall be integrated into mini-SCADA able to perform the following function and data from the Office Control Station.

- Refueller Filling Transection
- Report of Activities
- Emergency Stop Device Functions
- Control Station (PC + other hardware's)

The automation solution shall be supplied with all necessary hardware and software with licenses for 2years required for functionality and monitoring of the pumping system.

15. Spare Parts

- 15.1 2 sets of Filter Water Separator Elements to be supplied uninstalled along with the Pumping Module.

16. Label and Marking and Documentation

- 16.1 Flow Chart, Operation Instruction including valves labeling are provided on engraved aluminium plates.
- 16.2 The unit to be supplied complete with product marking in accordance with EI 1542, including standard signs such as JET A-1, Flammable, Hazard, No Smoking and Environmental Protection.
- 16.3 As-built drawings
- 16.4 Pipework pressure test and welding test certificate
- 16.5 Manufacturer instruction manual for installation, operation and maintenance in English language
- 16.6 Components list – OEM manuals
- 16.7 Data sheet and performance curve
- 16.8 Conformity certificates

17. Approvals

- 17.1 All materials used shall be pre-approved by the Client / Consultant Engineer before the construction.

18. Warranty

- 18.1 Workmanship and components installed and delivered materials shall carry 12 months Warranty.

19. Testing

Factory Testing of the Pumping Skid at factory stand and able to undertake the following test minimum in the presence of the Client / Consultant Engineer.

- Flow Rate Individual and Full Skid
- Performance Testing
- Sampling
- Millipore Test
- ESD
- Deadman Control System
- Electrical System
- Mechanical System
- Automation and Monitoring System

20. Delivery

General

The Manufacturer shall arrange CIF delivery to the Maldives.

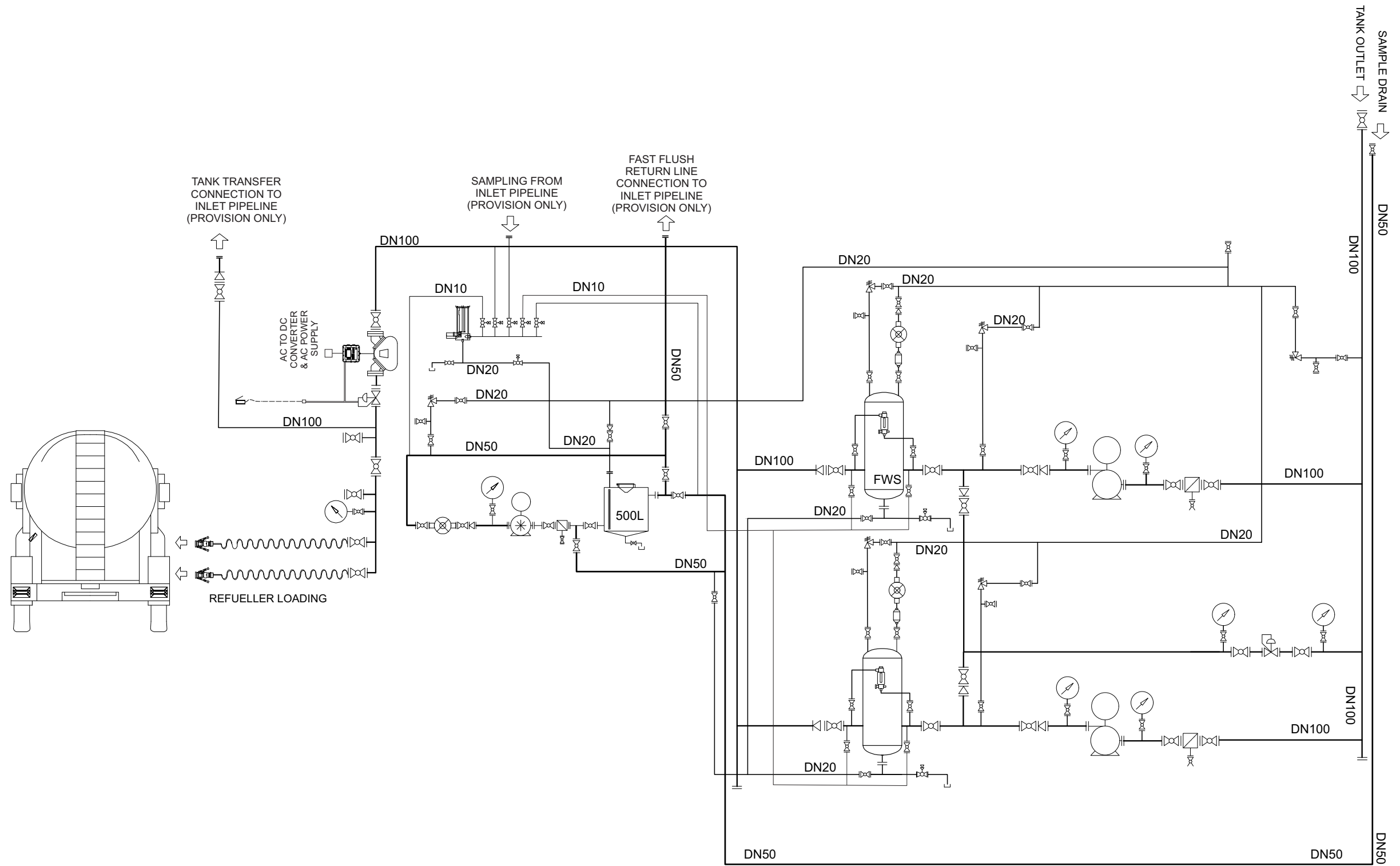
Packing

Necessary packing for seaborne cargoes to be applied.

Suitable material and anti-corrosion agents to be applied for protection of the Skid and Its components from the exposure for salinity for shipping.

LEGEND

	CENTRIFUGAL PUMP
	PD PUMP
	GATE VALVE
	BALL VALVE
	FLOW CONTROL VALVE
	NON RETURN VALVE
	THERMAL RELIEF VALVE
	AIRCRAFT REFUELING ADAPTOR
	AIRCRAFT DRY DISCONNECT
	AIRCRAFT REFUELING HOSE
	CLOSED CIRCUIT SAMPLER-20L
	FILTER WATER SEPARATOR
	FAST FLUSH TANK -500L
	METER DIGITAL DISPLAY
	SPRING LOADED VALVE
	SIGHT GLASS
	PRESSURE GAUGE
	LINE STRAINER
	DEADMAN CONTROL SYSTEM



P & ID - PUMP SKID

REVISION:

PROJECT : PROPOSED	DRW TITLE : P&ID PUMP SKID	DESIGNED : -	SCALE:AS MENTIONED	DATE: APR 2021
CLIENT : -	OWNER : -	ARCH. CHECKER : -	DIMENSION: MM	PAGE No. /
MALDIVES	CONTACT : -	DESIGN ENG : -	CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE BEFORE STARTING ANY WORK OR SHOP DRAWINGS, FIGURED DIMENSIONS TO TAKE PRECEDENCE OVER SCALE READINGS	PR NO. : -
		CHECKED ENG : Niyaz		
		DRAWN : Samyr		

Bid Documentation Check List

- Cover Letter
- Company Profile
- Payment Terms
- Related Party Disclosure
- Audited Financials
- Company Registration Certificate
- MIRA Registration Certificate (For Local Companies Only)
- Tax Compliance Certificate
- List of past experience in similar projects with letters/certificates of completion.
- Implementation Plan / Delivery Schedule