FIJI ELECTRICITY AUTHORITY

TENDER SPECIFICATIONS

TENDER

TENDER NO: MR 72/2017

Design, Supply, Installation & Commissioning of Cooling System for Ruston 16RK270 at FEA's Labasa Power Station

Scope of Works

1.1 General

The main function of the engine cooling system is to remove the heat generated by normal function of the engine. The heat transfer mainly takes place in the engine block, the turbo charger and the charged air heat exchanger.

The cooling System of the engine is divided into 3 close loop cooling circuit; Lube Oil, Jack Water & Raw Water. Each system is fitted with its own circulation pump driven by the diesels engine.

The three are cooled by their respectively dedicated radiators. Details are in the P& ID drawing below.

1.2 Engine Details

Engine: Ruston 16RK270
Engine number(s): IH10424
RPM: 750r/min
I.S.O Standard Power 4050
Continuous Service Power 3590

1.3 Environmental Condition

Ambient temperature	45'C
Climate	Dry Tropical
Humidity	90%
ATM	10m above Sea Level

Figure 1 Layout of Labasa Power Station

KNS: 23/03/2017

FIJI ELECTRICITY AUHTORITY

Design, Supply, Installation & Commissioning of Cooling System for Ruston 16RK270 at FEA's Labasa Power Station

ITEM	ITEM DESCRIPTION	UNIT PRICE	TOTAL PRICE
		Currency: _____	
1	Design & Supply of Cooling Unit for Ruston 16RK270 accords to engine specification and local ambient temperature		
2	Removal of all existing radiators and associated pipes (Water and Oil) for G6 (Ruston 16RK270) generators. All removed pipes must be inspected, cleaned and pickled to the engine.		
3	Construct new or extend the existing concrete pads as indicated in new design with a minimum of 30MPa concrete.		
4	Installation and fixing of new Radiators (Charge Air, Jacket Water, Lube oil and Valve Cage)/ cooling system to the concrete base. Modify and install of all additional pipes as required.		
5	All pipes will need to be pickled and flushed properly. An appropriate filter based circulation for cleaning will be needed for the lube oil pipes.		
6	Supply all valves, fittings and flanges required		
7	Allow for painting of all pipes and fittings. Allow for proper attachment of pipes to the sides of the trench.		
8	Allow for all electrical re-connections for the motor panel and the radiator fans.		
9	Supply of minimum 2 copy of the installation, parts and O&M manuals		
10	Freight Cost Shipping terms: _____		
	TOTAL (VEP)		
	VAT 9%		
	TOTAL (VIP)		

Notes:

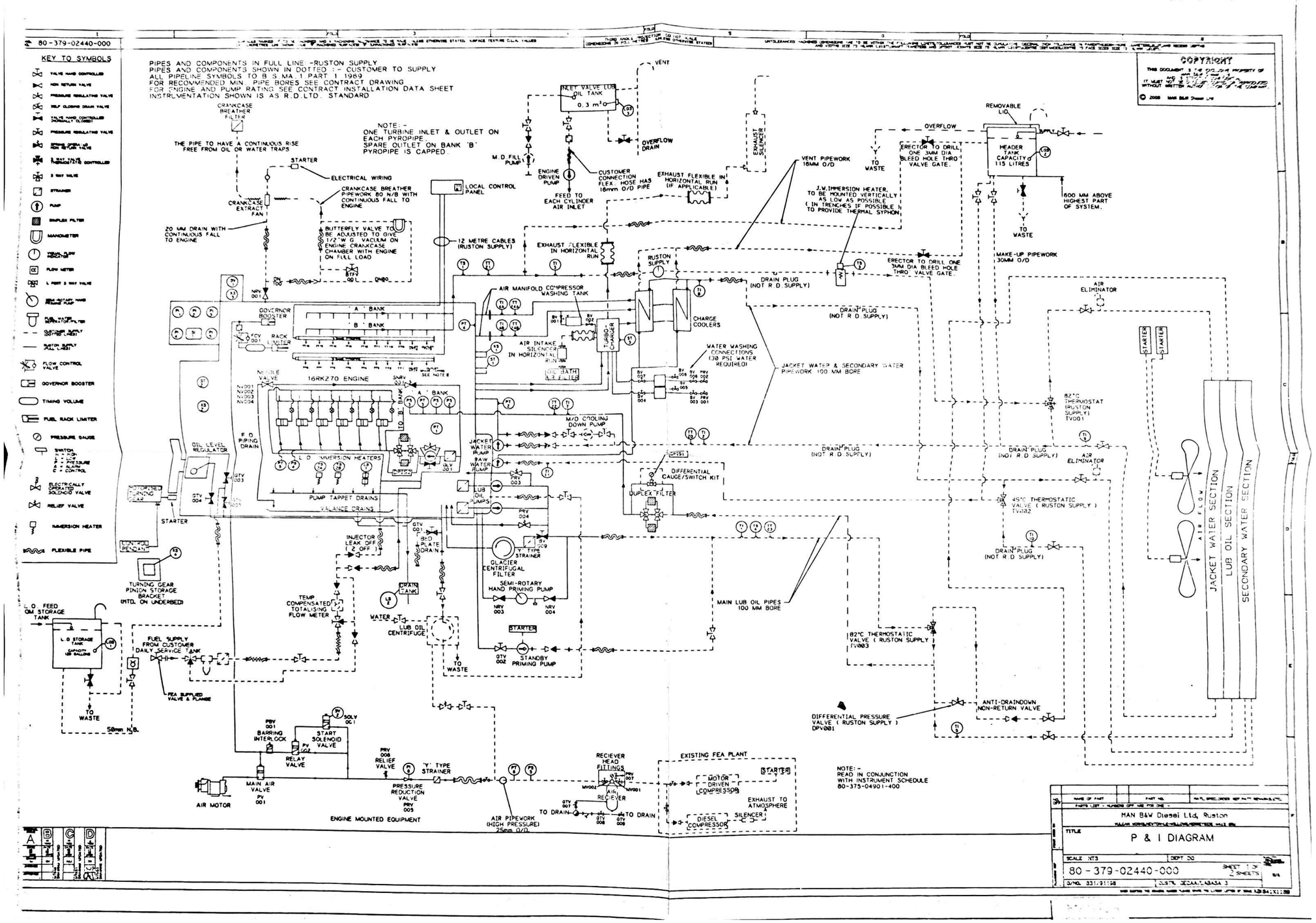
1. Ensure site HSE rules are followed at all times.
2. Contractor to verify all drawing measurements onsite
3. All Sub-contractors to be used for any part of the works are to be declared.
4. A detailed work plan to be provided with expected date for the works.
5. FEA financial terms are applicable for these works. Any advance payment will require a bank guarantee.

1.4 Current Cooling Unit Details

1.4.1 Ruston 16RK270 – Labasa G6 (Bronsweak Heat Transfer BV)

Figure 2 Photo of G6 Current Radiator Setup

1.4.2 Cooling System P& ID drawing



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Tender Submission - Instruction to bidders

It is mandatory for Bidders to upload a copy of their bid in the **TENDER LINK** Electronic Tender Box no later than **4:00pm, on Wednesday 19th April, 2017.**

To register your interest and tender a response, view 'Current Tenders' at:
https://www.tenderlink.com/fea

For further information contact The Secretary Tender Committee, by e-mail
TDelairewa@fea.com.fj

In additional, hard copies of the tender, one original and one copy must be deposited in the tender box located at the FEA Head Office, 2 Marlow Street, Suva, Fiji no later than **4:00pm, on Wednesday 19th April, 2017-** Addressed as

Tender – MR 72/2017 – Design, Supply, Installation and Commissioning of Cooling System for Ruston 16RK270 at FEA's Labasa Power Station

The Secretary Tender Committee
Fiji Electricity Authority
Head Office
Suva
Fiji

- **Hard copies of the Tender bid will also be accepted after the closing date and time provided a soft copy is uploaded in the e-Tender Box and it is dispatched before the closing date and time.**

Tenders received after **4:00pm** on the closing date of **Wednesday 19th April, 2017.**

- will not be considered.
- Lowest bid will not necessarily be accepted as successful bid.
- **It is the responsibility of the bidder to pay courier chargers and all other cost associated with the delivery of the hard copy of the Tender submission including any Duties/Taxes. Hard copies of the Tender submission via Post Box will not be considered.**