COMPANIES Scope of Products UTILITIES and Services

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PART 1: OVERVIEW

1.1 <u>Description</u>

Project Name: Poeleele – Replacement Pump

Location: Hawaii

Date: 01/23/2020

1.2 Project Overview

This is a complete, packaged replacement pump intended to serve the Poeleele system for the purpose of pumping irrigation water to the existing gravity pipe system.

1.3 Design Overview

For this project, Romtec Utilities is proposing to supply a complete packaged replacement pump for the Poeleele project. Romtec Utilities based this preliminary scope of supply on data and design criteria received between 01/02/2020 and 01/08/2020 provided by McBryde Resources, Inc.

Romtec Utilities has designed the Poeleele replacement pump to match as closely as possible the given design criteria and standards. However, the following items are important variances or questions regarding the design.

• Existing Force Main - Romtec Utilities strongly recommends that any existing force main be thoroughly cleaned before being attached to any Romtec Utilities supplied equipment. This cleaning will ensure that the inside diameter of the force main is as close as possible to the manufacturer specification, which ensures that Romtec Utilities can be given the most accurate design criteria. The method of cleaning, such as progressive poly pigging, is up to the customer or owner. Romtec Utilities is not responsible for system performance issues related to inaccurate design criteria such as an inaccurate inside diameter for an existing force main.

1.4 Overview of Scope

- A. Romtec Utilities has reviewed the provided data and design criteria to ensure that the replacement pump meets the stated requirements for the project.
- B. Romtec Utilities will supply the replacement pump as described below and in the attached manufacturer data sheets.
- C. Romtec Utilities will provide the Operation & Maintenance manual for the pump.
- D. Romtec Utilities does not perform any construction at the project site.

PART 2: PRODUCT AND SERVICES

The following is a general summary of the components and services Romtec Utilities is proposing to supply:

2.1 Delivery Services

A. McBryde Resource will be coordinating delivery of the pump from Wilsonville, OR.

2.2 Pump Package

The following are the associated pump items Romtec Utilities will be supplying and integrating:

- A. Romtec Utilities will supply one (1) Goulds VIS-BATM 18BHC 450HP 4-stage submersible vertical turbine pump.
- B. The pump cable will include a customer-specified pigtail for connection to the customer's existing pump cable. Specifics of required pigtail connection to be provided by customer.
- C. The pump will ship in sections that will require assembly and installation onsite by the installing contractor.
- D. See attached manufacturer data sheets for more details.

ITEM	QUANTITY
MOTOR: 450HP, 3PH, 60HZ, 2300V, 1800RPM 16" 'M' OIL-FILL	1
ADAPTER PKG: SUN STAR TYPE 'M' ADAPTION PKG <u>Note</u> : Motor is 16 weeks to ship.	1
PUMP: 18BHC-4 STG-SUB- 14" X 16" SPECIAL ADAPTOR TO MOTOR 3200GPM@477' TDH @11.8125" IMP <u>Note</u> : Pump cannot be delivered until motor is completed.	1
COLUMN: 14" X 10FT T&C NPT THREADED COLUMN .375' WALL	1
COLUMN: 14" X 20FT T&C NPT THREADED COLUMN .375' WALL	20

2.3 <u>Warranty</u>

A. The pump and its associated components shall be warrantied according to the manufacturer's standard warranty. The warranty period will begin upon installation of the pump, or 18 months from delivery of the pump or the date the pump was ready to deliver, whichever is earlier.