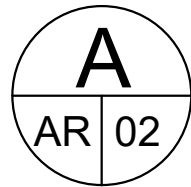
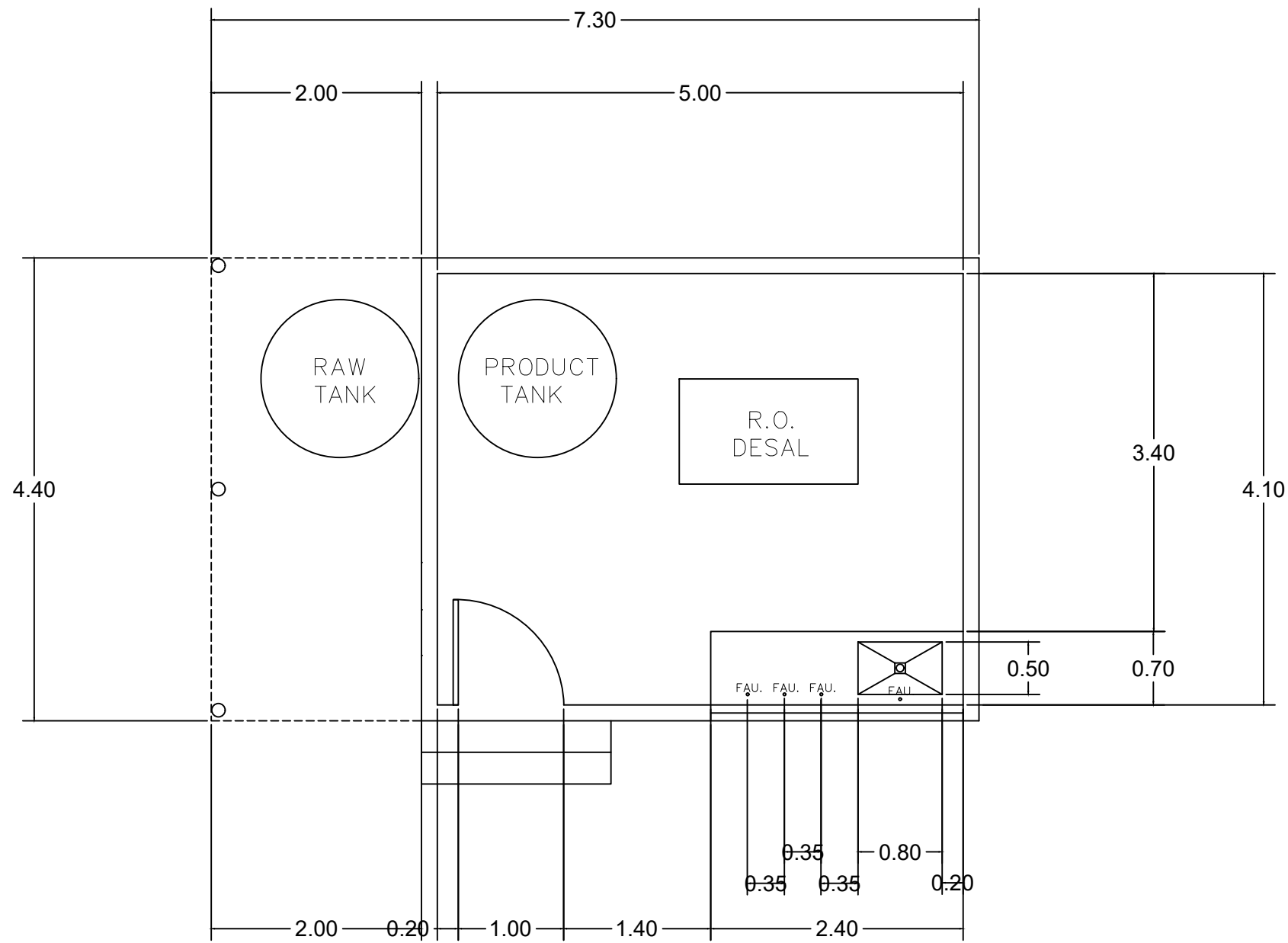




Proposed Water Desalination Production Area

13.527000889651479, 122.11859343115655



## EQUIPMENT PLAN LAY-OUT

SCALE: 1:30



**UNIQUE INTERNATIONAL EXPORT CO.**  
ADDRESS: NO. 1 CORDILLERA ST., MANDALUYONG CITY  
TEL. NO. (02)-531-4257 / (02)-532-2709 / (02)-508-3050

PROJECT TITLE:

**DESALINATION**

PROJECT LOCATION:

MONGPONG ISLAND

DRAWN BY:

Ar. DANILO B. AMOR JR.

ARCHITECT, UNIQUE CORP.

NOTED BY:

MICHAEL CHUA LIWANAG

MANAGER, UNIQUE CORP.

OWNER:

DOST MINDORO

SHEET CONTENT:

AS SHOWN

APPROVED BY:

SHEET NO.:

**A**  
**1**



**(3) Project Duration (number of months):** 12 months

(4) Project Start Date: 2025      (5) Project End Date: 2026

[illegible]

**DOST Form 5**  
**B – EXPECTED OUTPUTS**

(1) Program Title: GRANT-IN-AID

**(2) Project Title: Improving Access to Safe Drinking Water through Water Desalination in Barangay Maniwaya, Sta. Marinduque**

(3) **Project Duration (number of months):** 12 months

(4) Project Start Date: 2025      (5) Project End Date: 2026

(9) EXPECTED OUTPUTS (6Ps)	Y1 Objectively Verifiable Indicators (OVIs)					Y2 Objectively Verifiable Indicators (OVIs)					Y3 Objectively Verifiable Indicators (OVIs)				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Publications				1	1										
Patents/IP					None										
Products				1	1										
People Services				1	1										
Places and Partnerships	1				1										
Policy				1	1										
(10) POTENTIAL IMPACTS (2Is)															
Social Impact	Access to clean water will reduce waterborne diseases and improve the health of residents. The project will also empower the community by providing training and involving them in managing the facility. This will improve the quality of life by saving time and money spent on fetching water from distant sources.														
Economic Impact	The project will create jobs for residents and boost the local economy by reducing the cost of water for households. It will also lower water expenses for families, allowing them to save money for other needs. In the long run, the desalination facility can become self-sustaining, benefiting the community financially.														

**DOST Form 5**  
**C – RISK MANAGEMENT PLAN**

**(1) Program Title: GRANT-IN-AID**

**(2) Project Title: Improving Access to Safe Drinking Water through Water Desalination in Barangay Maniwaya, Sta. Marinduque**

**(3) Project Duration (number of months):** 12 months

**(4) Project Start Date:** 2025

**(5) Project End Date:** 2026

OBJECTIVES	(11) RISKS AND ASSUMPTIONS	(12) RISK MANAGEMENT PLAN (use separate sheet if necessary)
1. Establish a water desalination facility in Barangay Maniwaya capable of producing 2 cubic meters of clean and potable water daily by 2025.	<b>R-</b> High initial cost of purchasing, installing, and commissioning the desalination facility may exceed budget projections. <b>A-</b> Secured adequate funding to cover capital and operational expenses.	Provide flexibility in the budget to manage unexpected expenses without compromising the project's scope.
2. Provide affordable and safe drinking water to 100% of Barangay Maniwaya's population, reducing reliance on costly mainland-sourced water within the first year of operation.	<b>R</b> - maintaining consistent and safe water quality, especially during peak demand. <b>A-</b> desalination technology will be reliable, producing consistent, high-quality potable water without significant issues.	Ensure the desalination system is protected from poor water quality, especially during environmental changes
3. Generate two employment opportunities for residents by hiring and training facility operators to ensure efficient and sustainable operations.	<b>R-</b> lack of local residents with the required skills or willingness to work as facility operators. <b>A-</b> sufficient number of qualified or trainable local residents interested in the facility operator roles.	Attract skilled workers and retain them by offering more than just base pay, including benefits like job security, growth opportunities, and job satisfaction.
4. Reduce the financial and logistical burden on residents by decreasing household water expenses by at least 50% within the project's first year.	<b>R-</b> The sustainable water supply system may face operational challenges, such as equipment breakdowns or insufficient water availability, which could hinder its ability to reduce household water expenses as planned. <b>A-</b> The target households will actively adopt and utilize the sustainable water supply system, ensuring the expected cost savings and reduction in logistical burdens.	Implement regular maintenance, establish backup water sources, and allocate emergency funds to ensure uninterrupted system operation and achieve the 50% cost reduction goal.