



Project Summary

Developer name: Nyron Sookram

Date prepared: 18-10-2022

Contact number: 621-1513

Project name: Construction of Well (for agricultural purposes)

Company name: NMS Organics

Project location: 447 Silverhill Soesdyke Linden Highway

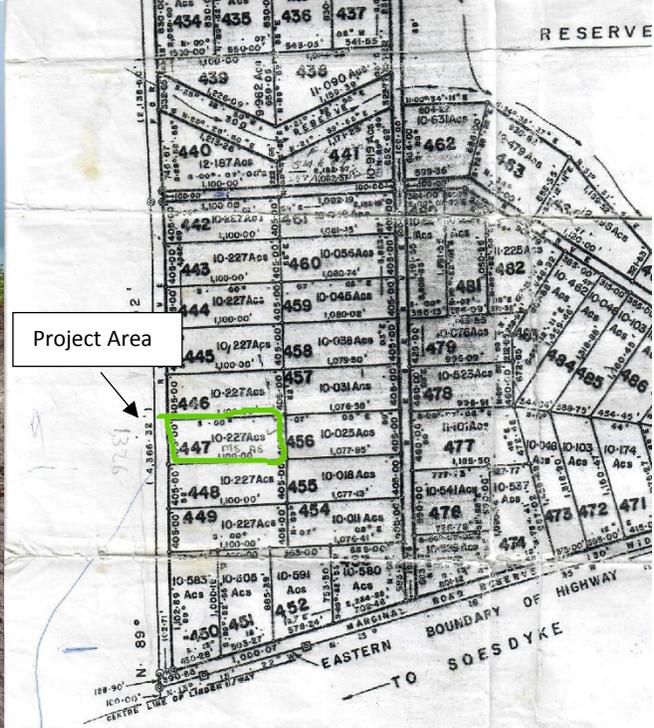
Project Overview

NMS Organics is an organic farm that uses only natural and sustainable farming methods which includes bio-pesticides and natural fertilizers integrated with renewable technologies, to improve consumers health and well-being, while saving the environment. The five (5) pillars in achieving the vision are: shade-house technology, soil amendment, biotechnology, sustainable agronomic practices and renewable energy.

Purpose and Site Description

This project entails the drilling of well on Lease Land measuring approximately ten (10) acres. The well will be established on the righter side, within the first 200 ft from the front of the land. The soil type is sandy, and the topography generally flat. The purpose of well is for agricultural irrigation. The well will act as a source of water for poultry rearing. The well will be constructed by the Guyana Water Incorporated (GWI), who will construct the well according to their specification and procedure. The dimension of the land is 405 ft in width, and 1,100 ft in length. Currently the entire land is cleared, with a few trees that was left intentionally. There is a creek located approximately 3,000 ft away from the land, on the eastern side.

Project Site



Project site cleared for well construction

Activities associated with project development and production

Activities	Number of employees	Duration
Land clearing	2	3 weeks
Construction of poultry pens	6	2 months
Installation of poultry housing systems	6	3 weeks
Procurement of chicks	3	1 week
Feed and medication of poultry birds	3	1 week
Marketing and sales of poultry birds	2	1 week

Source of utility services

- Water supply will be sourced from the well
- Energy/electricity will be sourced from generators

Capital Investment

\$5 million GYD

Investment in 1,100 broiler birds, with a projected production rate of 4lbs per bird over a period of 8 weeks.

Waste Management

The main type of waste produced by poultry enterprises is poultry litter – waste from deep litter systems. Poultry manure contains: nitrogen, zinc, phosphorus, copper, potassium, boron, calcium, iron, sulfur, manganese, and magnesium.

Method of Waste Disposal/Treatment

Drying

- Oldest, cheapest and feasible method
- Dried under sunlight and depends on lengths of time, climate and humidity.
- Drying the manure with heat results in loss of energy and nitrogen.
- Thin bed drying prevents the breeding of flies, reduces obnoxious odours and maintains the nutrient value of the manure particles.
- The faster the manure is dried, the higher is the nitrogen value.

Heaping

- Deep stacking of poultry waste produces considerable heat and had been shown to destroy coliforms.
- The maximum temperature was reportedly attained in 4-8 days.

Composting

- Can be stored for long time
- Aerobic bacterial action occurs

- The top foot is composed of fresh manure; the bottom foot is in an anaerobic condition and the central portion is undergoing composting.
- The essential requirement in managing the deep pit is that the fresh, wet material be adequately aerated to remove the moisture.
- To further the composting process and to prevent odours the pit must be watertight so that seepage water cannot enter.
- Little or no odours arising from the pits and manure removal may be delayed for years.

Poultry manure as organic fertilizer

- Poultry manure applications increase the moisture holding capacity of the soil
- Improve lateral water movement, improves irrigation efficiency and decreases drought
- Improve soil retention and uptake of plant nutrients.
- Increase the number and diversity of soil microorganisms.

Submitted by



Nyron Sookram

Project Developer

GUYANA

COUNTY OF DEMERARA

AUTHORISATION

I, **MOHAN SOOKRAM** of F and E Vlissingen Road, Georgetown, owner of land situated at Lot 447 Silver Hill Soesdyke Linden Highway, Guyana without the building and erections thereon, do hereby give consent and authorization to **NYRON SOOKRAM** of F and E Vlissingen Road, Georgetown, Guyana to construct a well and farm on the land that is situated at Lot 447 Silver Hill Soesdyke Linden Highway, Guyana.

We, therefore have no hesitation in granting permission to the said **NYRON SOOKRAM** construct a well and farm on the said property at the aforementioned address.

m sookram
MOHAN SOOKRAM

WITNESSES:-

1. J. Luytal

2. [Signature]

Sworn at Georgetown, Guyana

This 14TH day of September, 2022