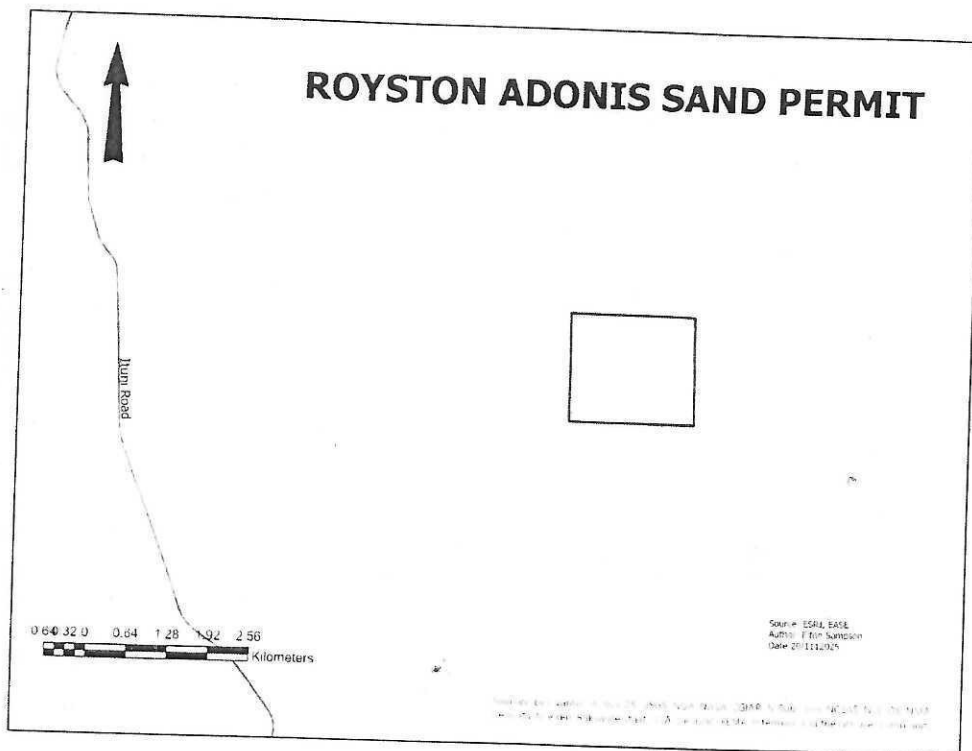


Mine Plan for the "Kara Kara River" Operation, Region 10, Guyana



Date: November 20, 2025

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Executive Summary

This document outlines a phased plan for the establishment and operation of a medium-scale sand mining project on a designated concession along the Kara Kara River, Region 10, Guyana. The plan focuses on the safe, efficient, and environmentally responsible extraction of high-quality construction-grade sand. The initial phase will target an estimated resource of 1.5 million cubic meters, with a planned operational life of 5-7 years, extensible based on further resource delineation. Key components include resource estimation, mining methodology, processing, environmental and social management, market analysis, and financial projections. The operation will comply with the laws of Guyana and international best practices.

1.0 Introduction & Project Overview

Project Name: **Kara Kara Sands Operation**

Location and Access: Concession area in the vicinity of the headwaters of the Kara Kara river, a right bank tributary to the Demerara River. It is situated approximately twenty kilometers southeast of Linden and bounded between latitudes 5.957731° and 5.872925° and longitudes -58.196623° and -58.179016° Region 10, Guyana. This area is approximately sixteen- and one-half kilometers east of the Demerara River and between seven to eight kilometers east of the Linden to Ituni Road. As a consequence of this, seven to eight kilometers of access road would have to be built before any production can be obtained from the property.

Mineral Target: Construction Sand (fine to coarse aggregate).

This project is aimed at mining high quality construction grade silica sand.

Land Status: The property with which this document is concerned is a legal Government concession; a Mining Permit properly applied for by Mr. Royston Adonis and duly granted by The Guyana Geology and Mines Commission.

Project Objectives:

1. To establish a reliable supply of high-quality sand for the growing Guyanese construction market.
2. To operate profitably while maintaining the highest standards of safety and environmental stewardship.
3. To create local employment and contribute positively to the regional economy.
4. To achieve full regulatory compliance with the Guyana Geology and Mines Commission (GGMC) and other relevant agencies.

2.0 Geology and Resource Estimation

Deposit Type: The deposit is alluvial sand deposit and entirely made up of soil derived from the Bartica Gneiss Complex. The Bartica Gneiss Complex is a foundational geological unit of Guyana, providing key resources in the form of durable construction stone, aggregate, sand, and, most importantly, acting as the original source for the region's extensive alluvial gold deposits.

The Bartica Gneiss Complex is a major geological formation in Guyana, forming part of the Guiana Shield. It is one of the oldest rock units in the country, with crystallization ages typically ranging from 2.0 to 2.2 billion years, placing it in the Paleoproterozoic Era. As the name suggests, it is primarily composed of gneiss—a

high-grade metamorphic rock characterized by its banded or foliated texture, formed under intense heat and pressure deep within the Earth's crust.

The complex is named after the town of Bartica, situated at the confluence of the Essequibo, Mazaruni, and Cuyuni Rivers, an area where these rocks are prominently exposed.

Compositions

The Bartica Gneiss Complex is not a single rock type but a suite of metamorphic rocks. Its primary compositions include:

- **Banded Gneiss:** The most common type, featuring alternating light and dark mineral bands. The light bands are typically composed of feldspar and quartz, while the dark bands are rich in biotite and hornblende.
- **Granodioritic Gneiss:** A gneiss with a composition similar to granodiorite (less quartz than granite).
- **Migmatite:** Representing the highest grade of metamorphism, these rocks show a mixture of metamorphic and igneous characteristics, indicating they began to partially melt.
- **Amphibolite:** A dark, heavy rock composed mainly of hornblende and plagioclase, often occurring as layers within the gneiss.
- **Minor Components:** Includes quartz-feldspar veins, pegmatites, and schists.

Possible Deposits

The complex is a significant source of valuable mineral and material deposits such as is mentioned below:

1. Quarriable Material:

- **Dimension Stone:** The attractive banding and durability of the gneiss make it an excellent material for building stones, countertops, tiles, and paving stones. When polished, it can be highly decorative.
- **Aggregate:** Crushed gneiss works very well as a high-quality aggregate for **construction**, road base, and concrete. Its hardness and angular fracture make it a stable material and better to use than most others available on the market.

2. Sand:

- Weathering and erosion of the quartz-rich gneiss produce **silica sand**. This sand is a vital resource for the construction industry (for mortar and concrete) and has potential for industrial uses.

3. Gold:

- The Bartica Gneiss Complex itself is not the primary source of gold, but it plays a crucial indirect role. It acts as the "basement" or source rock for many of Guyana's alluvial gold deposits.

- Over millions of years, gold-bearing quartz veins and other mineralized structures within the complex were weathered and eroded.
- The released gold particles were then transported by rivers and concentrated in alluvial placer deposits in the surrounding river valleys (e.g., Mazaruni, Cuyuni, Essequibo). Therefore, the complex is a fundamental part of the geological system that gave rise to Guyana's prolific gold fields.

Resource Estimation:

Method: Preliminary assessment was done using calculations from data derived from Digital Elevation Models along with observations from known sand pits in areas that

Results: Average sand thickness of 4 meters.

Total Concession Area: 800 acres or 3,237,485.14 m²

The Project will be conducted in four phases, and each phase will aim to mine two hundred acres or 809,371.285 m².

Estimated In-Situ Resource for the entire property, based on an average thickness of 5m is $3,237,485.14 \times 5 = 16,187,425.7$ cubic meters. This means that 4,046,856.425 cubic meters will be mined in each phase.

However, it should be noted that only between 75% to 85% is usually successfully mined, hence, we can expect 3,237,485.14 cubic meters to be mined during each phase (using 80% recovery).

3.0 Mining Method and Operation

Mining Method: This Mining Permit is proposed to be mined using the Open Cast or open pit method which would employ the use of an excavator and truck(s).

This method is not only cost-effective, but it also allows for selective mining, besides being suitable for the relatively shallow overburden and sand thickness.



Figure 1

Mining Sequence:

1. Clearing and Grubbing: Vegetation would be cleared using bulldozers. As this is done, timber will be stockpiled for potential sale or local use. In fact, the rights to sell timber would be obtained from The Guyana Forestry Commission.

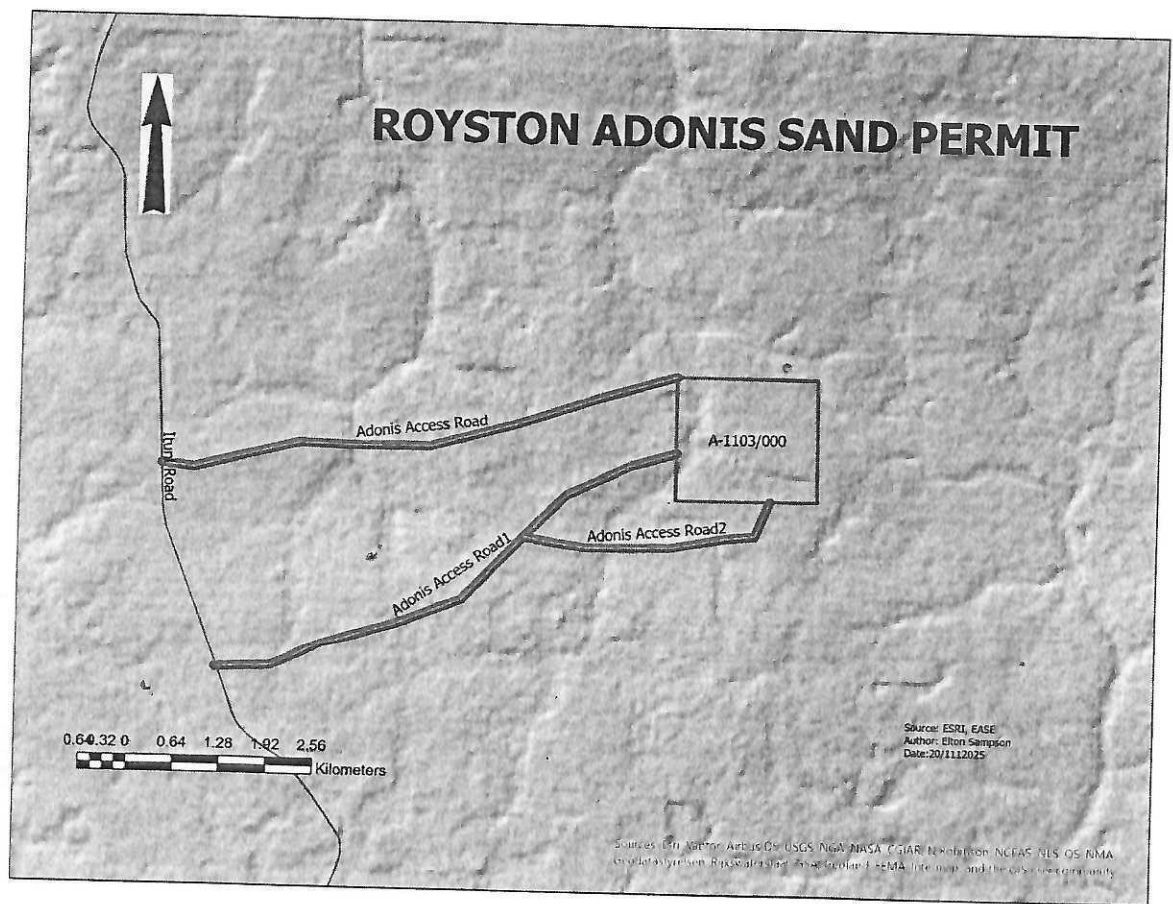


Figure 2

10.0 Implementation Timeline

Months 1-3: Permitting, Final Feasibility Study, Community Engagement.

Months 4-5: Site Mobilization, Clearing, Construction of Plant & Infrastructure.

Month 6: Commissioning of plant, start of production.

Months 7+: Full-scale production, ongoing marketing and sales.

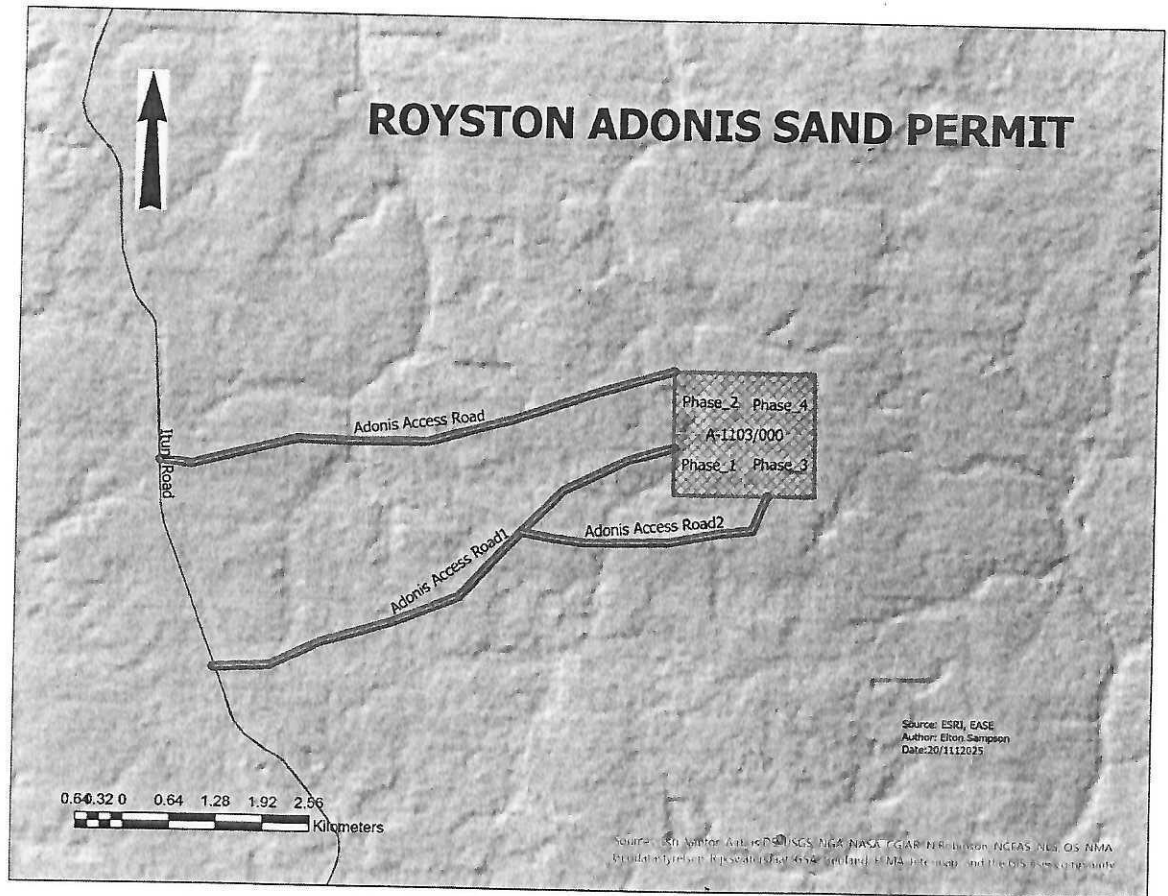


Figure 3

2. Overburden Removal: Removal of topsoil and clay overburden (0.5m - 1.5m) will be done using a bulldozer and a 20-ton excavator. Overburden will be stored in designated, contoured stockpiles for future rehabilitation.
3. Sand Extraction: A 20-ton hydraulic excavator will be utilized. The excavator will load directly into haul trucks, which in turn either truck the material to a processing plant, stockpile or directly to buyers. A processing plant becomes necessary whenever specific grade of material is needed or there are other specific conditions

4. Haulage: Transportation of the raw sand from the pit to the processing plant or stockpile will be done using several off-road, 30-ton dump trucks. There will be instances whereby the trucks will leave the pits and go directly to the buyers.

5. Pit Dewatering: Installation of perimeter drains and a sump pit with electric pumps to manage groundwater, will be done. This will be especially necessary during the rainy season.

Production Schedule:

Operating Schedule: The mine will be operated on a forty-hour per week model. More Specifically, Monday through Friday, eight hours per day.

Planned Production: It is expected that a total of eight hundred cubic meters (800 m³) of raw sand will be processed per day.

Annual Production (250 days) is planned at one hundred and twenty-five thousand cubic meters (200,000 m³).

Mine Life (Phase 1): $3,237,485.14 \text{ m}^3 / 200,000 \text{ m}^3/\text{year} = \sim 16 \text{ years}$.

4.0 Processing and Quality Control

Process Flow:

1. Feeding: The dump trucks tip raw sand into a feed hopper.
2. Scrubbing & Washing: The material from the hopper passes through a rotary scrubber/trommel screen to break down clays and remove organic matter. It is important to note that the intensity of this process may vary depending on the quality of the raw material.
3. Screening: Washed sand is passed over vibrating screens to separate it into different product sizes such as Fine Plastering Sand, Coarse Concrete Sand.
4. Cycloning (Optional): A hydro-cyclone may be used to remove silt and improve the fineness modules of the product.
5. Product Stockpiling: Clean, graded sand will be conveyed to designated stockpiles for drainage and loading.

Quality Control:

- ❖ Regular sieve analysis and testing for silt/clay content, organic impurities, and gradation will be conducted on the raw material being mined.

- ❖ Adherence to ASTM C33 or equivalent Guyanese National Bureau of Standards (GNBS) specifications for concrete aggregate will be a part of the culture of the Mine.

5.0 Environmental Management Plan (EMP)

Pre-Mining:

In order to be fully compliant with the laws of Guyana that relate to conducting Sand Mining, a full Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) as required by the Environmental Protection Agency will be prepared and submitted to the relevant authorities.

Currently, all necessary permits from the EPA and GGMC are being actively acquired.

During Mining:

Erosion & Sediment Control: Installation of silt fences, sediment ponds, and berms will be done so as not to have slurry running off into the Kara Kara River.

Dust Control: Regular watering of haul roads and stockpiles will be conducted during the active mining periods.

Noise Control: Maintain equipment and use mufflers; establish buffer zones.

Water Management: Monitor water quality in the river. Settling ponds will be used to recycle process water and ensure discharge water meets EPA standards.

Waste Management: Proper storage and disposal of waste oils and filters will be a priority of the Mine Manager and as such measures will be taken to have this done according to the guidelines provided by The EPA.

Rehabilitation & Closure:

Progressive Rehabilitation: As mining activities are conducted, the Company will backfill excavated areas with overburden and waste material, contour the land to a stable shape, and re-spread topsoil.

Re-vegetation: The company will be plant with native grass and tree species to prevent erosion and restore habitat. Two particular species being considered are the Acacia Plant and Fat Poke (a very resistant plant native to Region Ten).

Final Land Use: The rehabilitated land could be used for agriculture, forestry, or recreational purposes. Decisions will be taken at the given times based on the existing needs of the company.

6.0 Market Analysis and Sales Strategy

Target Market: The target market for derivatives and products of this mine include but is not limited to:

- ❖ The booming construction sector in Guyana, specifically:
- ❖ Ready-Mix Concrete plants.
- ❖ Large-scale infrastructure projects (housing, roads, commercial buildings).
- ❖ Block-making factories and individual contractors.

Competitive Advantage: It is intended that the following provides a competitive advantage for the mine.

- ❖ High-quality, consistently graded, and washed sand.
- ❖ Reliable supply chain and proximity to key markets via river and road transport.

Pricing Strategy: It is intended to employ a Competitive Pricing System based on market rates, with potential premiums for certified quality.

Logistics: Sales will be ex-pit (FOB). Customers will be responsible for transport, though the company may assist in arranging trucking.

7.0 Organizational Structure and Human Resources

Management: 1 Mine Manager, 1 Operations Supervisor will be employed to manage the day to day operations of the mine.

Operations: 2 Excavator Operators, 4 Truck Drivers, 2 Plant Operators will be employed to ensure smooth running of the operations of the mine.

Maintenance: 2 Mechanics/Maintenance Personnel will be employed so as to minimize down-time due to equipment failure or faulty equipment.

Administration: The Mine will have 1 Safety Officer/Environmental Officer, 1 Weighbridge Clerk/Accountant. This will provide adequate administration practices and consequently better productivity.

Total Workforce: ~15-18 employees.

Hiring Policy: Prioritize hiring from local communities. Personnel will be sourced from towns and villages within proximity to the mining property. Additionally, safety and operational training will be provided at no cost for the employees.

8.0 Capital and Operating Expenditure (CAPEX & OPEX)

Capital Expenditure (CAPEX - Estimated):

Land Acquisition/Lease: \$200,000.00

Mining Licenses & Permits: \$160,000.00

Equipment Purchase (Excavator, Bulldozer, Trucks, Processing Plant): GYD \$60 - \$80 Million (~USD \$300,000 - \$400,000)

Site Infrastructure (Office, Workshop, Weighbridge): GYD \$15 Million

Total Initial CAPEX: ~ GYD \$85 - \$100 Million

Operating Expenditure (OPEX - Per m³ Estimated):

Fuel & Lubricants: GYD \$1500

Labor: GYD \$700

Maintenance & Spares: GYD \$500

Royalties & Permits (to GGMC): GYD \$400

Administration & Overheads: GYD \$500

Total OPEX/m³: ~ GYD \$3,600

9.0 Financial Projections

Assumed Selling Price: GYD \$5,500 per cubic meter (ex-pit).

Contribution Margin: $\text{GYD } \$5,500 - \$3,600 = \text{GYD } \$1,900/\text{m}^3$.

Annual Revenue ($200,000 \text{ m}^3$): $200,000 \times \$5,500 = \text{GYD } \1.1 Billion .

Annual Gross Profit (Pre-Tax, pre-CAPEX): $200,000 \times 1,900 = \text{GYD } \380 Million .

Per month: \$31.6M

Payback Period: $(\text{CAPEX GYD } 100\text{M} / \text{monthly Gross Profit GYD } 31.6\text{M}) = \sim 3$ months (Note: This is a simplified calculation; a full financial model with depreciation, taxes, and financing costs is required).