

MURITARO QUARRY PROJECT

EXPLORATION SUMMARY

REPORT AND MINE PLAN



MURITARO, DEMERARA RIVER

Effective Date: July 5th, 2024

Report Date: July 8th, 2024

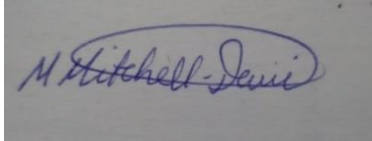
Prepared for

Muritaro Amerindian Village Council, and New Thriving Restaurant & Hua Yin Inc., Georgetown, Guyana

Report Prepared by

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0.0 SIGNATURE PAGE

A handwritten signature in blue ink, reading "Melicia Mitchell-David", is enclosed within a blue oval. The signature is written in a cursive style.

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July 8, 2024

Contents

0.0 SIGNATURE PAGE	2
1.0 SUMMARY	5
1.1 ACCESSIBILITY, PROPERTY DESCRIPTION, CLIMATE AND INFRASTRUCTURE	7
1.2 OWNERSHIP	13
1.3 GEOLOGIC SETTING; REGIONAL AND LOCAL GEOLOGY	13
1.4 ADJACENT PROPERTIES	19
1.5 PREVIOUS WORK	20
1.6 EXPLORATION	20
1.7 RESOURCE ESTIMATION	26
1.8 Mining Methods	29
1.801 Mining Design	30
1.81 Production Objective	32
1.82 Products	32
1.83 Mine and Process Methodology	33
1.84 DRILLING AND BLASTING TECHNIQUES	40
1.85 GROUND AND SURFACE WATER MANAGEMENT	41
1.86 REVENUE AND COST ESTIMATES	42
1.87 PROJECTED INCOME STATEMENT	44
1.88 MACHINERY REQUIREMENTS;	44
1.89 BUILDING AND INFRASTRUCTURE	46
1.810 PERSONNEL QUARRY	47
1.811 FUEL POWER AND LUBRICANT	49
1.9 ENVIRONMENTAL CONSIDERATIONS	50
1.10 Existing Land Use Pattern	56
1.10.1 Alternative Land Use	56
1.10 MARKET STUDIES AND CONTRACTS	56
1.11 INTERPRETATION AND CONCLUSIONS	57
1.12 RECOMMENDATIONS	58
2.0 STATEMENT OF QUALIFICATIONS	59
APPENDIX I Definition of Inferred mineral resource	60

APPENDIX II: Closure Plan	61
1.0 Introduction.....	61
1.1 Project Components Requiring Closure.	61
1.2 Closure Plan – Ecological and Environmental Goals.	61
1.3 Closure Plan: Reclamation Concepts.	63
1.4 Closure Plan: Specific Reclamation Areas and Tasks	64
APPENDIX III: Main equipment and technical	69
Figure 1: Access Map “MVCNTR” Muritaro Quarry Project.....	11
Figure 2: Road Access Map “MVCNTR” Muritaro Quarry Project	12
Figure 3: Regional Geology and Deposits, Guyana	15
Figure 4: Regionally Geology map for Muritaro area, “MVCNTR” Quarry Project	16
Figure 5: Local Geology Map for “MVCNTR” Muritaro Quarry Project based on Field Mapping.....	18
Figure 6: Property Status Map for Regional Area, “MVCNTR” Muritaro Quarry Project	19
Figure 7: Traverse Map with Outcrop data, “MVCNTR” Muritaro Quarry field exercise	24
Figure 8: Drainage map for “MVCNTR” Muritaro Quarry Project based on Field Traverse and DEM (elevation) regional data.....	25
Figure 9: Map showing Estimated Quarriable resource for the Mining Pit and Outcrops for “MVCNTR” Muritaro Quarry Project	28
Table 1: Inferred Quarriable Resource for “MVCNTR” Muritaro Quarry Project.....	26
Table 2: Proposed Production by Year for “MVCNTR” Muritaro Quarry	32
Table 3: Proposed Equipment for Quarry mining at “MVCNTR” Muritaro Quarry	35
Table 4: Calculation of ANFO total Explosive pounds for 6’x7’ drill pattern	41
Table 5: Projected Profit and Loss expenditure for Muritaro Quarry	43

1.0 SUMMARY

The Muritaro Village Council and New Thriving Restaurant & Hua Yin Inc (refer to as “MVCNTR”) Muritaro Quarry Project is a stone aggregate project located at Muritaro, Demerara in the Potaro Mining district, county of Demerara, Guyana, approximately 29.1 air kilometers SSW of the Mining town of Linden, Guyana, S.A. Current access to the Permit is mainly by road, namely from Georgetown to the project area located inland of the right bank of the Demerara River via the Linden-Kwakwani Road. Total travel time is ~3.5 hours. The “MVCNTR” Muritaro Quarry Project comprised of one permit and the area under tenure totals 1,200 acres.

The quarry project will be done in partnership with **Muritaro Village Council and New Thriving Restaurant & Hua Yin Inc**, who will provide funding, equipment and technical expertise.

Locally within the “MVCNTR” Muritaro Quarry Project area based on field mapping and outcrop data, the general geology is the younger granites which are then intruded by gabbroic sill and young basic dykes which are all overlain by saprolite and recent sediments (Bleackley 1957¹). Mapping has identified a small gabbroic? sill, ~50m wide intruding at surface.

Exploration work comprising of mapping and prospecting exercise along creeks and ridge, where several outcrops of the younger granite and gabbro were mapped. A total of 8 outcrops were mapped of which 4 were the younger granites, 2 were of the gabbro-norite sill, and 2 samples of the gneiss. Drainage, road access along with target area for drilling were compiled and identified during the field exercise. Observations within the creeks and ridges showed that the overburden (saprolite) varied in thickness from 0.1-2 m.

Based on the interpreted data, it is inferred that the “MVCNTR” Muritaro Quarry Project currently has an Inferred quarriable resource of **2.3 million tons of aggregates** with propose Pit A, ~ 1.37 million tons with ~61k tons from the outcrops mapped within the permit area, with an estimated cost of **~USD\$3,642,952 (GY\$765,020,000)** to bring the quarry into operation with a production

¹ Bleackley D, 1957; Geomorphology, Observations and Geological history of the Coastal plain of British Guiana

rate of **~300,000 tons per year**. No drilling is recommended since the overburden is very thin, ranging from 0.1 to 2m with many outcrops on the surface.

The production of Stone aggregates from the “MVCNTR” Muritaro Quarry project will be mainly for the local Guyana Market and will be sold locally within the construction industry, targeting the building of the Linden/Kwakwani, Bartica and Regions 5 & 4 roads and housing.

Particulars	Details		
		Northing(N)	636600N to 638300N
Geographical Location		Easting (E)	348000E to 353400E
Total Mine Lease area	1,200 acres		
Current status of the quarry	No existing logging and mining activities		
Local name of the project area	<i>Muritaro, Demerara</i>		
Project Site Toposheet No.	37NW		
Production	None		
Geological Resource	~2.3 million Tons		
Mineable Resources Pit A	~1.37 million Tons		
Startup Mine Pit Resource	~1,370K tons of Granite		
Life of Mine (Pit A)	~5 years		
Estimated project cost	USD\$3,642,952		
Production target	~300,000 tons per year		
Manpower	34 personnel		
Highest and lowest elevation	200ft (Highest) and 100ft ASL (Lowest)		
Land use	Mining		
Nearest habitation	Muritaro Village, ~0.6km N		
Nearest Town	Linden, ~29.1km N		
Width of access road to the site	~6m wide road		
Nearest Airstrip	Linden, ~29.1km N		
Power supply	Thermal generators		
Water and its Source	Water will be sourced from the Demerara River		
Nearest streams/ rivers/ water bodies	Demerara River		

Nearest Hospital / dispensary	Linden Hospital, 29.1km, N
Police Station	Linden, ~29.1km N
Mobile Towers	Linden, ~29.1km N
Ecological sensitive zone	None within the Mining area
Defense installations	None within the Mining area
Archeological Features	None within the Mining area

1.1 ACCESSIBILITY, PROPERTY DESCRIPTION, CLIMATE AND INFRASTRUCTURE

The “MVCNTR” Muritaro Quarry Project is located at Muritaro, Demerara in the Potaro Mining district, county of Demerara, Guyana, approximately 117 air kilometers SSW of the capital city of Georgetown, Guyana, S.A. (Figure 1). Current access to the Permit is mainly by road, namely from Georgetown to the project area via the Linden-Kwakwani Road up to 35km, then branch road to the concession. Total travel time is ~3.5 hours. (Figure 2).

Georgetown is the capital city of Guyana and is located at the mouth of the Demerara River where it discharges into the Caribbean Sea. The nearest commercial center to the “MVCNTR” Muritaro Quarry Project is Linden (Figure 2) where resupplies, basic and heavy equipment, parts along with fuel can be sourced. Equipment can be transported via “low-bed” or “TM” trucks from Georgetown to the Permit via linden.

Georgetown is a modern urban center with good road and air connections to the rest of the Caribbean and the United States. There are regular scheduled flights to New York, Trinidad, Toronto and other major cities several times daily.

The Permit is covered by virgin tropical rainforest except for areas of logging activities where trees were felled for use within the local market. The general topography is low relief (200ft – 100ft) with large rainforest trees. The Yarowakabra and Haiawakilli creeks headwaters are within the Permit.

Climate and Length of Operating Season

There is only sparse temperature, precipitation, and humidity data available from the meteorological station at Kwakwani and Linden. The average temperature on site is estimated to be 26°C, with minimum and maximum recorded temperatures of 18°C and 36°C, respectively. Humidity is relatively high with values ranging between 64% and 100% and an average value of 82%. Monthly average rainfall values have been estimated from the data seen from the Linden station. The precipitation records gave an average annual precipitation of 2,400 mm. A wet season occurs in December to February and a second wet period in May to July of each year.

At the project area, temperatures range from the about 23-25°C at night to 28-32°C during the day. The area is very humid with relative humidity rarely less than 70%.

Annual precipitation is in the order of 2,000 mm². Although rain falls throughout the year, about 50 percent of the annual total arrives in the summer rainy season that in the regional area extends from April-May to the end of June. There is a second rainy season from November through January. Rain generally falls in heavy afternoon showers or thunderstorms. Overcast days are rare; most days include four to eight hours of sunshine from morning through early afternoon.

Although exploration drilling can be carried out on a year-round basis, the dry season from July to November is the most advantageous time to carry out exploratory surveys such as mapping/sampling, drilling and geophysical surveys.

Infrastructure Availability and Sources

Proximity to Population Center

The Muritaro Amerindian village is located on the left and right banks of the Demerara ~0.6km NNE of the permit. The closest town Linden is ~29.1 km away to the north. Georgetown is ~117 km away by road.

² Guyana Hydrometeorological Service

Power

There is no nearby electricity grid. Permanent power is currently generated within the general area by thermal power generators.

Water

Water for mining is readily available throughout the year from the Demerara River if needed, catchment ponds and from rainfall run-off.

Mining Personnel

Laborers with a variety of experience in heavy equipment operation are available in Georgetown, Linden and the local community.

Formal Boundary Description

A Tract of state land located in the Potaro Mining District No. 2 as shown on Terra Surveys Topographic 1:50,000 Map 37NW, within the following boundaries;

Commencing from **Point 1**, located at geographical coordinates of longitude **58°22'22"W** and latitude **5°45'16"N**, thence at true bearing of **72°**, for a distance of approximately **799 yards**, to **Point 2**, located at geographical coordinates of longitude **58°21'59"W** and latitude **5°45'23"N**, thence at true bearing of **79°**, for a distance of approximately **1 mile 855 yards**, to **Point 3**, located at geographical coordinates of longitude **58°20'43"W** and latitude **5°45'38"N**, thence at true bearing of **51°**, for a distance of approximately **1 mile 530 yards**, to **Point 4**, located at geographical coordinates of longitude **58°19'50"W** and latitude **5°46'20"N**, thence at true bearing of **164°**, for a distance of approximately **1 mile 913 yards**, to **Point 5**, located at geographical coordinates of longitude **58°19'28"W** and latitude **5°45'4"N**, thence at true bearing of **252°**, for a distance of approximately **1691 yards**, to **Point 6**, located at geographical coordinates of longitude **58°20'16"W** and latitude **5°44'49"N**, thence at true bearing of **11°**, for a distance of approximately **886 yards**, to **Point 7**, located at geographical coordinates of longitude **58°20'11"W** and latitude **5°45'15"N**, thence at true bearing of **88°**, for a distance of approximately **773 yards**, to **Point 8**, located at geographical coordinates of longitude **58°20'34"W** and latitude **5°45'15"N**, thence at true bearing of **57°**, for a distance of approximately **577 yards**, to **Point 9**, located at geographical coordinates of longitude **58°20'49"W** and latitude **5°45'25"N**, thence at true bearing of **250°**, for a distance of

approximately **1 mile 601 yards**, to **Point 10**, located at geographical coordinates of longitude **58°21'55"W** and latitude **5°45'1"N**, thence at true bearing of **83°**, for a distance of approximately **624 yards**, to **Point 11**, located at geographical coordinates of longitude **58°22'13"W** and latitude **5°45'3"N**, thence at true bearing of **48°**, for a distance of approximately **242 yards**, to **Point 12**, located at geographical coordinates of longitude **58°22'19"W** and latitude **5°45'8"N**, thence at true bearing of **23°**, for a distance of approximately **283 yards**, to the point of commencement at **Point 1**, thus enclosing an area of approximately **1,200 acres**, save and except all lands lawfully held or occupied.



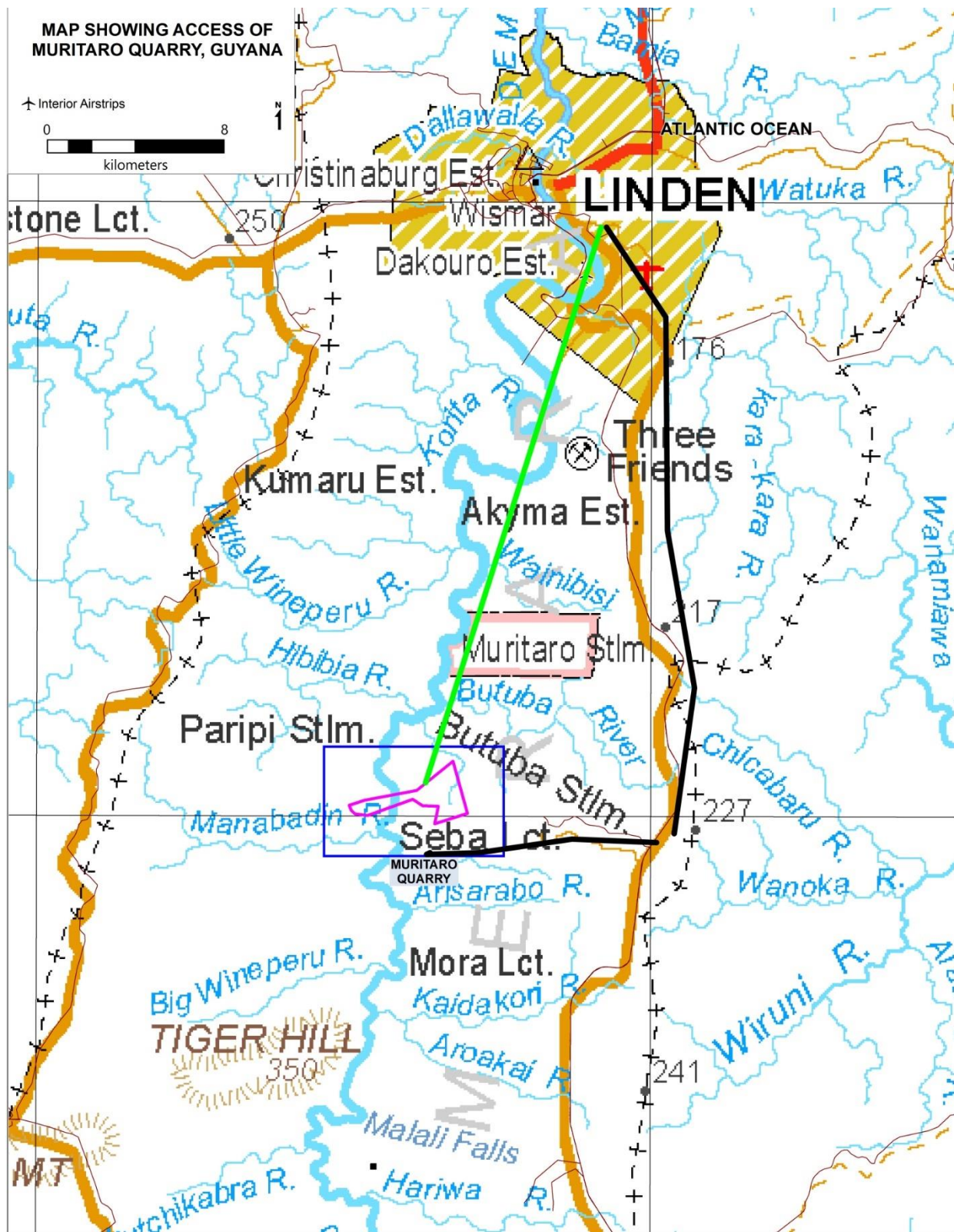


Figure 2: Road Access Map from Linden, “MVCNTR” Muritaro Quarry Project

1.2 OWNERSHIP

The “MVCNTR” Muritaro Quarry Project is a proposed quarry license located within the Muritaro Titled land covering sections on the right bank of the Demerara River and the area under tenure totals 1200 acres. This permit covers the headwaters of the Yarowakabra and Haiawakilli creeks with the Demerara River along the western boundary. In Guyana, all mineral rights are vested in the state. Mineral policy is administered by the Ministry of Natural Resources and the Environment and the Commissioner of the Guyana Geology and Mines Commission (GGMC). The GGMC was created by legislative act in 1978 and later in the year amended to the current “Mining Act 1989”. The permit is currently being applied for.

1.3 GEOLOGIC SETTING; REGIONAL AND LOCAL GEOLOGY

The “MVCNTR” Muritaro Quarry Project is located within the Guyana Shield in northern South America as shown in Figure 3. The shield covers easternmost Colombia, southeastern Venezuela, Guyana, Suriname, French Guiana, and northeastern Brazil. The Guyana portion of the shield is subdivided geologically into a Northern and a Southern geologic province at a latitude of approximately 4.5 degrees north. The Northern Province is composed of a basement suite of rocks ranging in age from Archean to early Proterozoic, roughly between 2.12 and 1.9 billion years of age³. These rocks appear to have been deposited in marine troughs that were filled with offshore sedimentary and volcanic deposits. Subsequent to their deposition, the troughs were compressed and metamorphosed into greenstone belts with associated mineralizing events, resulting in an auriferous terrain throughout most of northern South America in all rocks of this geologic age.

The Guiana Shield is a Paleo-Proterozoic granite-greenstone terrane forming the northern part of the Amazon craton. Subdivisions of the Amazon craton are based upon age determinations,

³ **Gibbs, A.K. and Barron, C.N., 1993:** The Geology of the Guiana Shield: New York, Oxford University Press, Oxford Monographs on Geology and Geophysics 22, 246 p

lithologies, structural and geophysical trends. It is one of the largest cratonic areas in the world covering an area of about 4.3×10^5 km.

The metavolcanics, metabasic and metasedimentary greenstone belts forming the Guiana shield are in the Pastora-Amapa Province (2.2 Ga to 1.95 Ga) and subdivided into the Barama-Mazaruni Supergroup metasedimentary / greenstone terrane intercalated with Archean-Proterozoic gneisses. These rocks are intruded by Trans-Amazonian granites and mafic to ultramafic intrusions which the Bartica assemblage is part of⁴(Figure 3).

⁴ Voicu G., Bardoux M, Jébrak M. and Crépeau R., (1999): "Structural, Mineralogical, and Geochemical Studies of the Paleoproterozoic Omai Gold Deposit, Guyana", Econ. Geol. V94, 1277-1304.

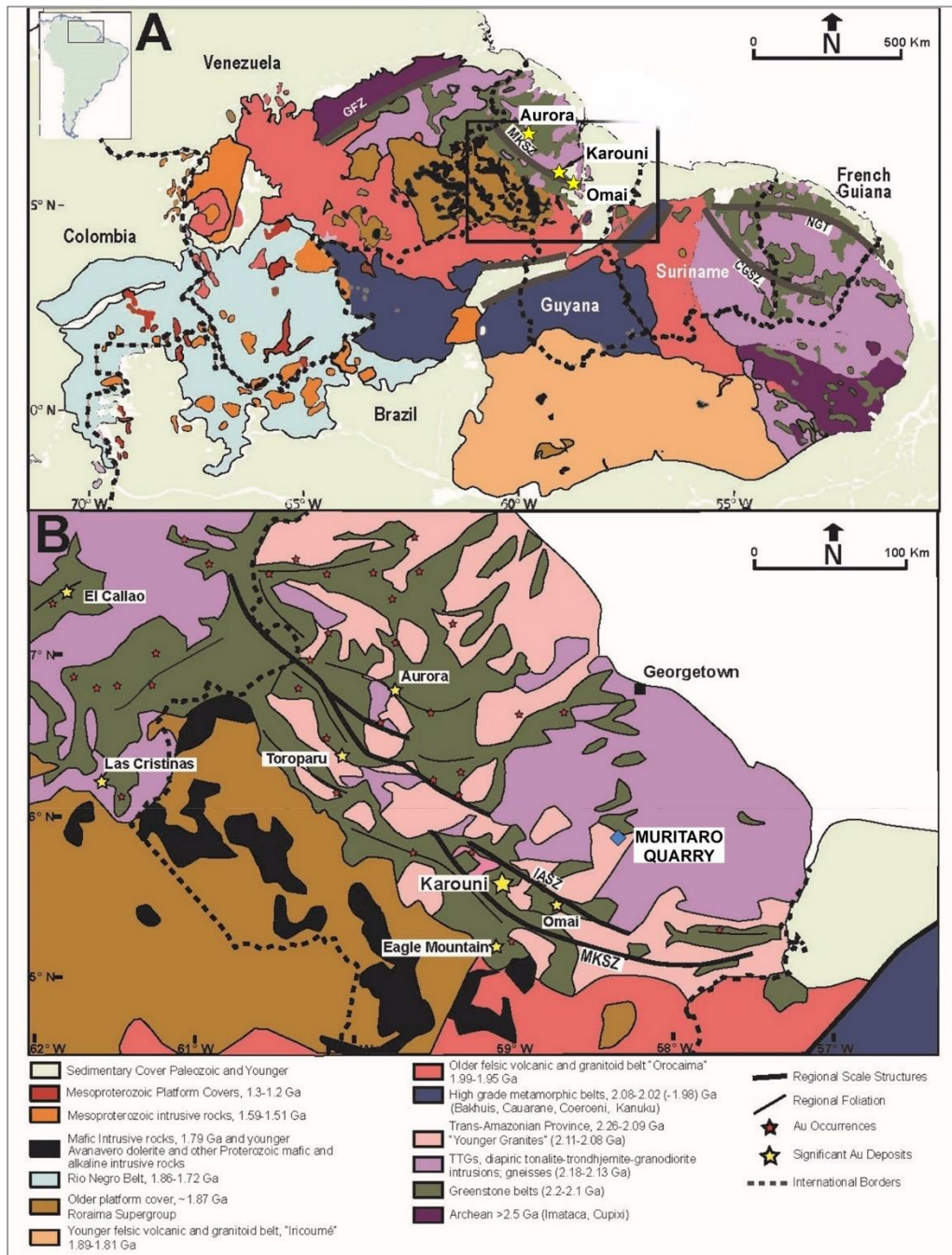


Figure 3: Regional Geology and Deposits, Guyana⁵

⁵ A) Geology of the Guiana Shield (taken and modified from Tedeschi et al., 2018). B) Geology of northern Guyana highlighting major Mineral deposits, showing Muritaro Quarry location. Modified from the geologic maps of Guyana (Walrond, 1987), Suriname (Bosma et al., 1978), and Venezuela (Hackley et al., 2005). D. Abbreviations: CGSZ = Central Guiana shear zone, GFZ = Guri fault zone, IASZ = Issano-Appapari shear zone, MKSZ = Makapa-Kuribrong shear zone, NGT = Northern Guiana trough, TTG = tonalite-trondhjemite-granodiorite.

The regional geological map is a compilation of work by different authors spanning a significant period of time. Rock type descriptions are necessarily general and used to identify large-scale differences between meta-sedimentary, meta-basic and meta-volcanic horizons within greenstone belts. These observations are limited by poor exposure due to intense tropical weathering obscuring primary mineralogy and mineral fabrics⁶.

The rocks within the proposed area consist essentially of the younger granites with the granites more readily identifiable on a regional scale (Figure 4). Mapping to date has identified the granites and a potential gabbroic sill ~50m outcropping on surface (inferred from Outcrop data) (Figure 5).

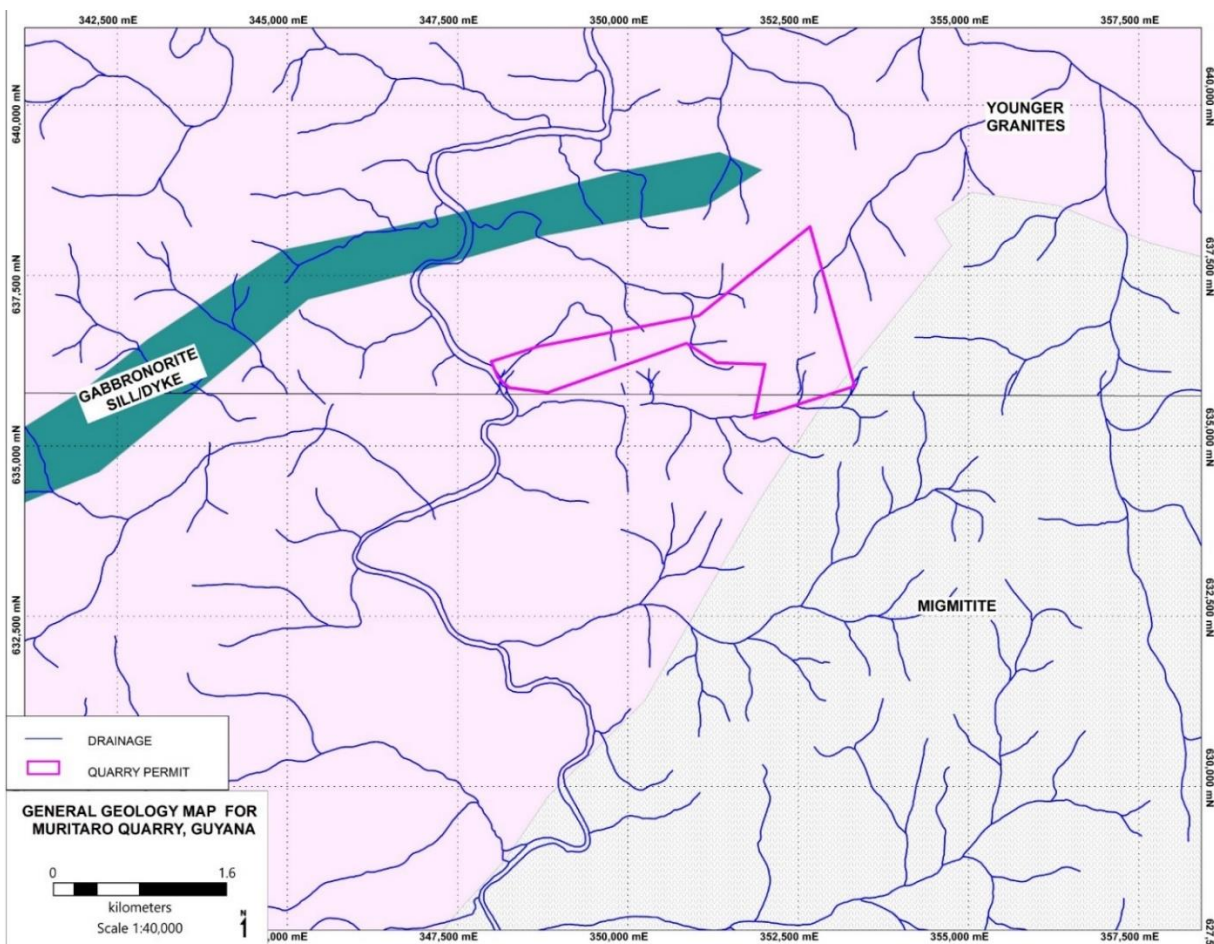


Figure 4: Regionally Geology map for Muritaro area, "MVCNTR" Quarry Project

⁶ Annual Report 1969, Geological Survey of British Guyana.

Three dominant structural fabrics are recognized in Guyana, a system of significant east-west, northwest-southeast and northeast-southwest structures. The regional magnetic survey data is sufficient to interpret structural features at the property scale with NE/ENE-SW, N-NNE and NW-SE lineaments noted within the general area. These structures, mainly the NE trending are used in interpreting the small basic dykes which are noted to follow this trend.

Locally within the “MVCNTR” Muritaro Quarry Project area based on field mapping and outcrop data, the general geology is the metamorphosed gneiss, which are intruded by younger granites, then by a small gabbro-norite sill which are all overlain by thin layer of saprolite and sand (Figure 5).

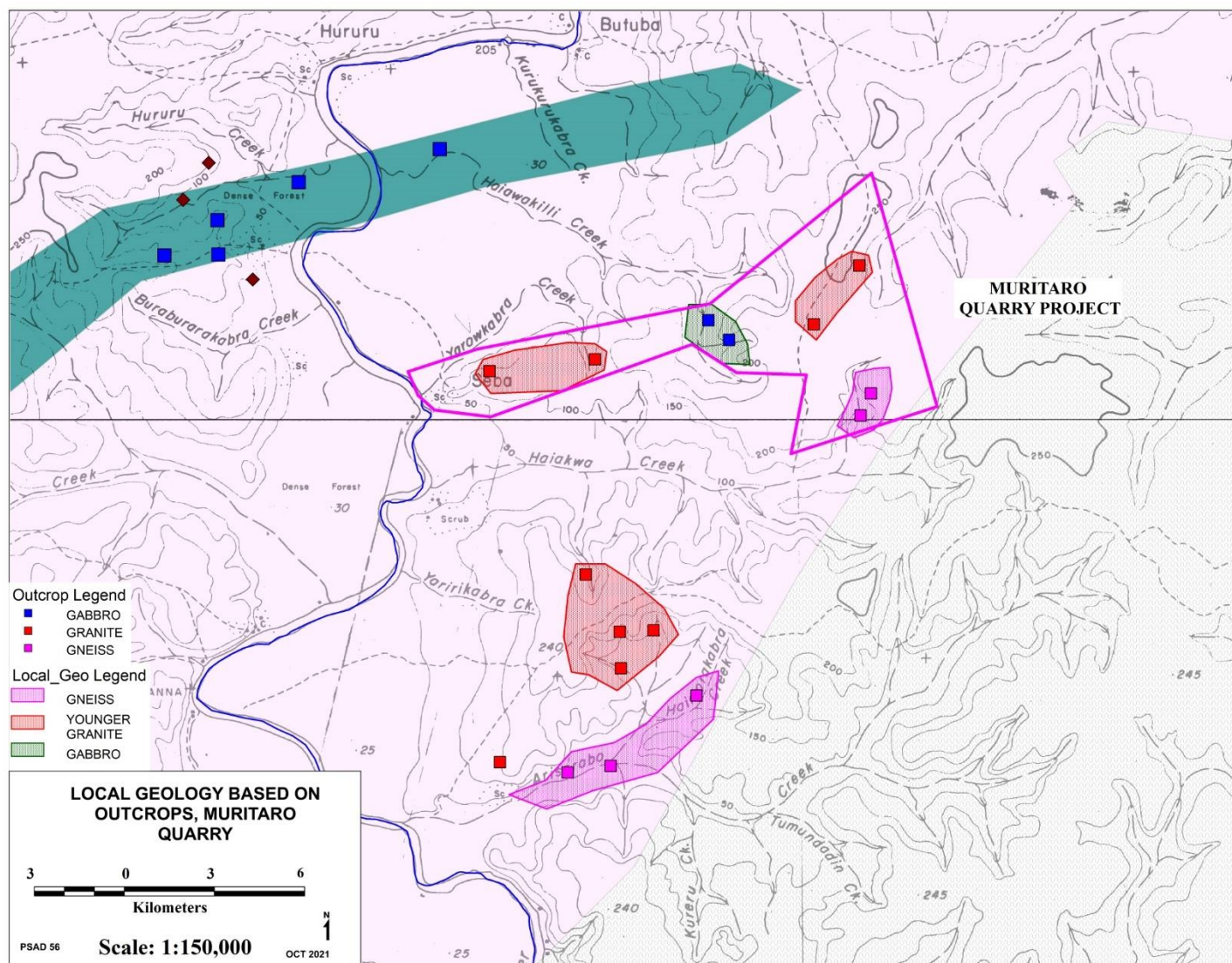


Figure 5: Local Geology Map for “MVCNTR” Muritaro Quarry Project based on Field Mapping

1.4 ADJACENT PROPERTIES

There is only one Quarry Permit located South of the Muritaro Proposed Quarry Project (Figure 6) which is owned by Malali. The nearest active quarry license is the Sherima Quarry which is currently operational and is ~48km NW of the Permit. GGMC has granted several medium scale Permits for gold and base metals within the immediate area.

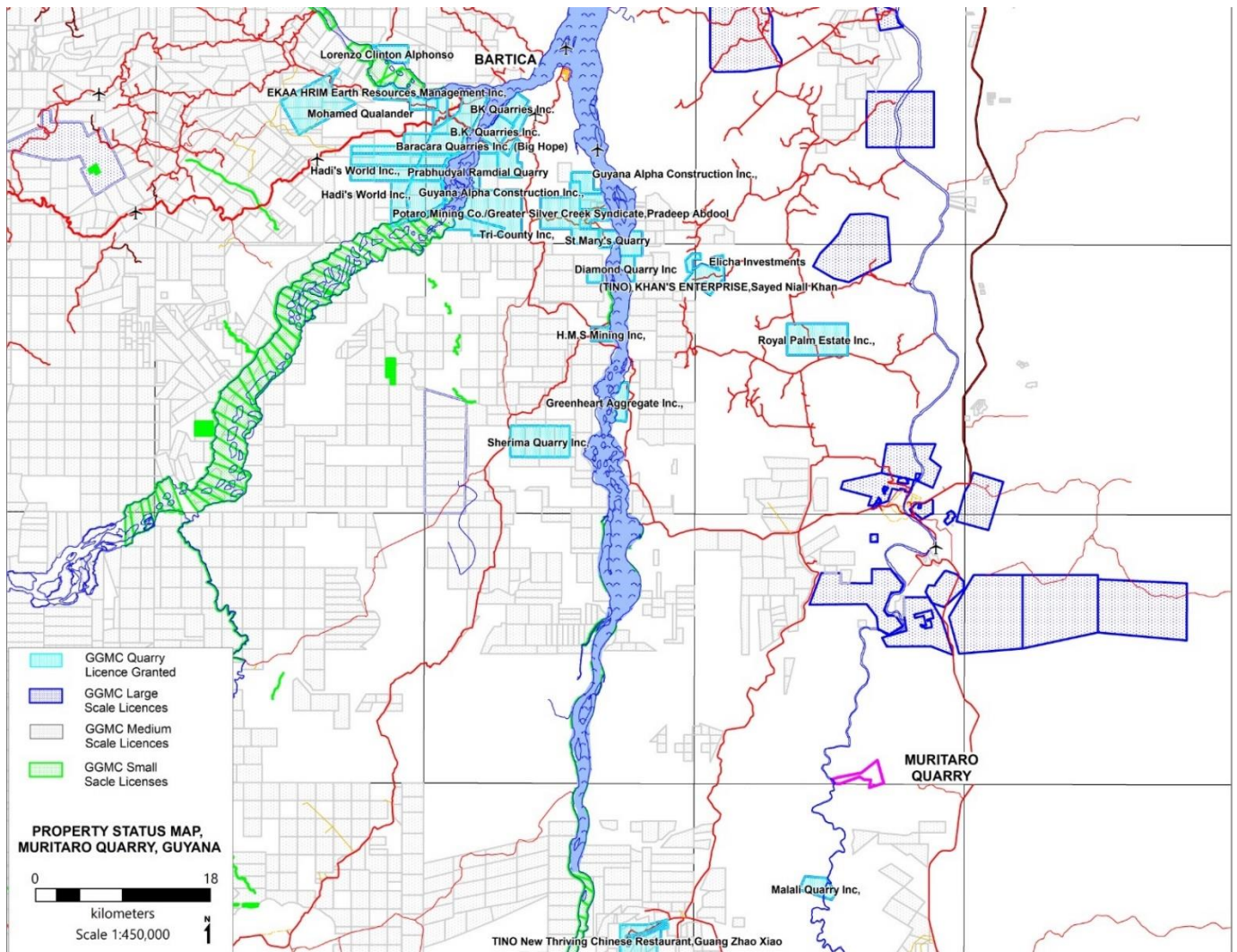


Figure 6: Property Status Map for Regional Area, "MVCNTR" Muritaro Quarry Project

1.5 PREVIOUS WORK

There are currently no mining or logging activities (evidence of past logging activities were noted during the field exercise which was done by the village community) recorded within the “MVCNTR” Muritaro Quarry Project. The first written report of the area is “The Geology of the Goldfields of British Guiana by Harrison, Sir J.B. (1908)”, which describes granite outcrops located along the Demerara River (Great falls) as potential quarriable material for the colony.

In 1963, P. Allen⁷ compiled a Geologic map for the area, which showed outcrops of Granite along the Demerara River, namely at Great falls. CN Barron in 1966⁸, compiled the Granites of Northern Guyana which showed a number of these intrusives within the regional area along with old gold workings. In 1965⁹, the UN in partnership with Terraquest, flew Airborne magnetics for the regional area covering the Permit. In 2004¹⁰, GGMC carried out geochemistry sampling within the area as part of its Arisaru project where the granites and Gabbroic sills and dykes were mapped along the Demerara River.

1.6 EXPLORATION

In June 24, a one-day visit was done to the proposed quarry area. A team of 3 personnel comprising of 2 field technicians with a Geologist, carried out a field mapping and prospecting exercise within the proposed Quarry Permit where several outcrops were mapped with the aim to identify the Granite and gabbro. The team walk along the ridge and check the creeks where possible from the river where several outcrops of granite and gabbro were noted. The overall goals of the exercise (first phase reconnaissance) were as follows;

- To collect data in the field regarding rock types,
- To make observations of outcrops along the traverse path,
- To collect rock samples where possible,

⁷ Allen, P. 1963, Granites of Northern Guyana, Guiana Geological Survey (BGS)

⁸ Barron CN, 1966, Map of Northern Guyana showing Granites and old gold workings, BGS

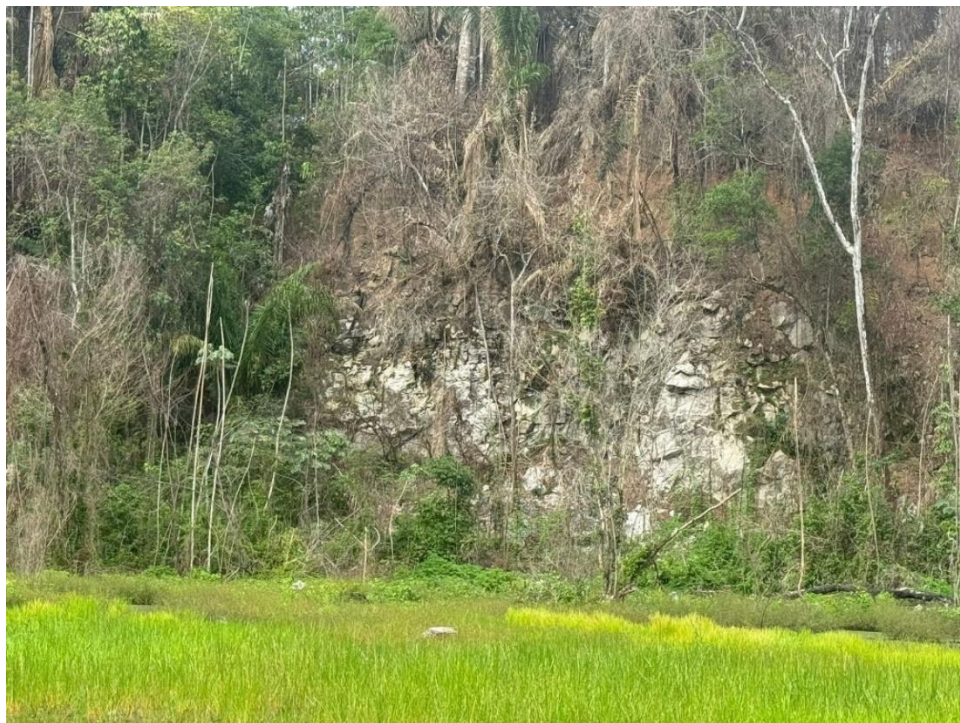
⁹ UN and Terraquest, 1965, Aeromagnetic survey, Northern Guyana, BGS

¹⁰ Serge et al, 2004, Arisaru Regional Geochemistry Project, GGMC

- Identify overburden thickness where possible,
- Ascertain access route for area,
- Identify target area(s) for drilling based on Outcrops/sub-crops seen, if possible,
- Identify area(s) for proposed pit for mining startup.
- Identify potential wharf area.

A traverse was carried out by the team, mapping and prospecting any notable features and outcrops along the ridge with ravines and creeks checked. From the traverse done, a total of 8 outcrops were mapped of which 4 were of the younger granite, 2 gabbro-norite, and 2 samples of the gneiss (Figure 7 & Pictures below). Drainage and road access were also mapped (Figure 8).

Based on the observations from the creeks and ridge, it is estimated that the thickness of saprolite (weathered bedrock) overburden varies from 0.1 to 2m (As such, it is the Author's opinion that there is no need for MVCNTR to drill the permit). The field mapping identified an ~50m size potential gabbro-norite sill based on field interpretation.





Younger Granites Outcrops



Gabbro Outcrop



Proposed Wharf Area

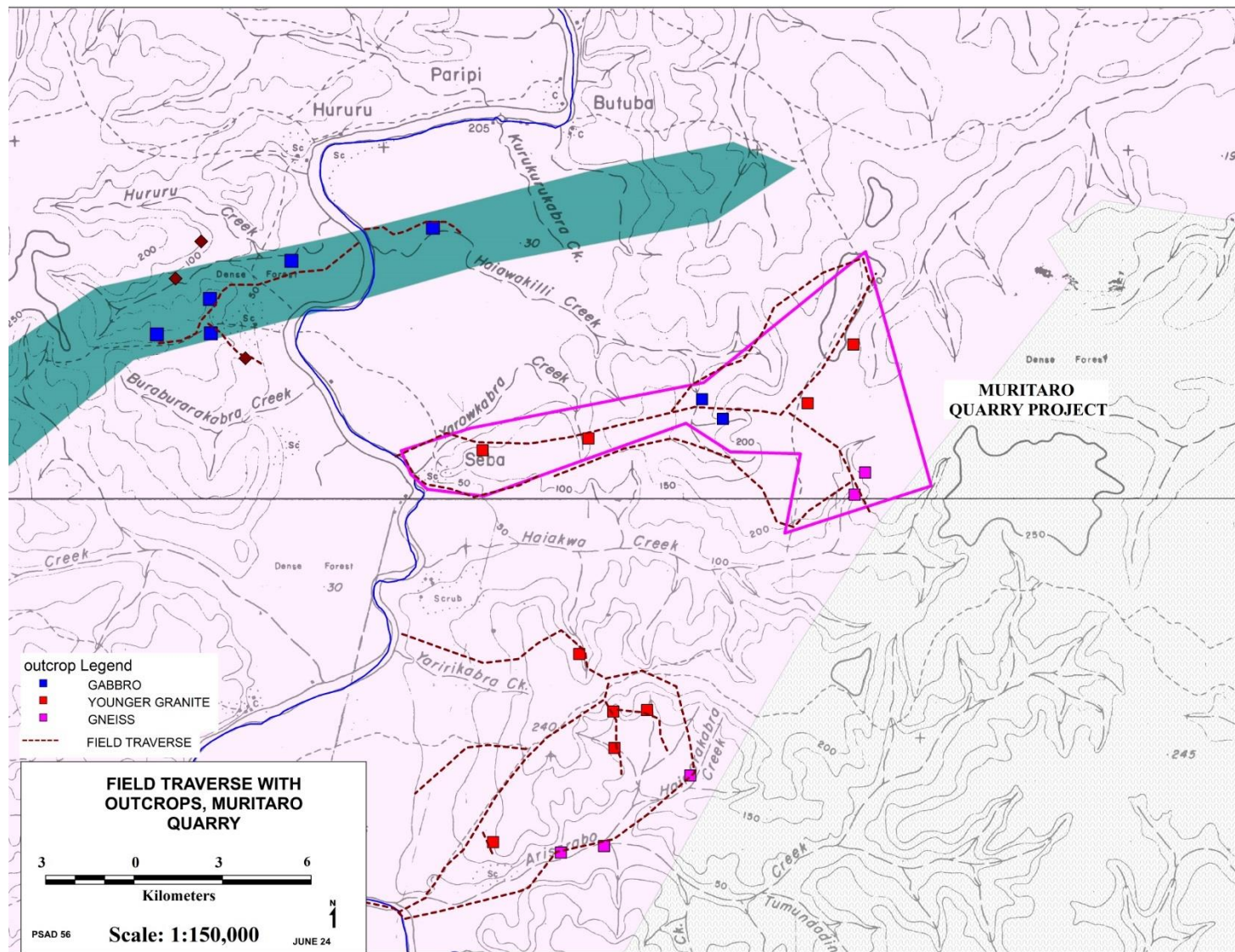


Figure 7: Traverse Map with Outcrop data, “MVCNTR” Muritaro Quarry field exercise

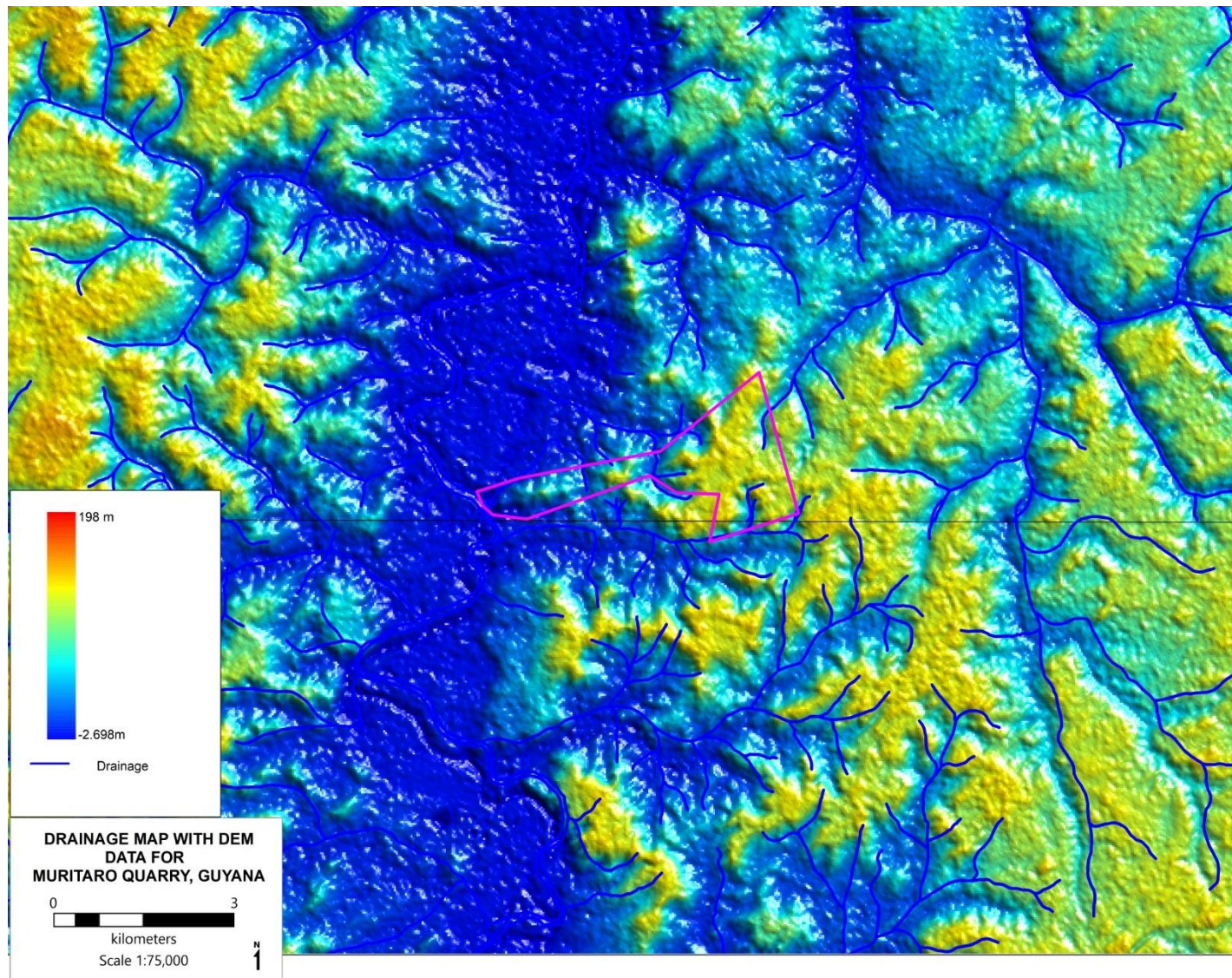


Figure 8: Drainage map for “MVCNTR” Muritaro Quarry Project based on Field Traverse and DEM (elevation) regional data

1.7 RESOURCE ESTIMATION

Based on the mapping from the field exercise carried out within the proposed Permit from which outcrop data was acquired, the author was able to derive an estimated Inferred Quarriable resource of the proposed pit area for the granite and gabbro. The author also inferred a quarriable resource based on the size distribution for the outcrops within the permit. In interpreting the local geology, which was significant for the resource estimation, the author combined data from the DEM (elevation)/Topography along with magnetics, interpreted structures, and regional geology (Figure 9).

Based on the interpreted data, it is inferred that the “MVCNTR” Muritaro Quarry Project currently has a quarriable inferred resource of ~2.3 million tonnes with ~1.3 million tons of granite within the proposed startup Pit A, with a measured resource of 145K tons for the outcrops found within the permit. Table 1 below shows the breakdown of this inferred quarriable resource calculation for the permit.

Table 1: Inferred Quarriable Resource for “MVCNTR” Muritaro Quarry Project

Area	Classification	Rock Type	Volume (m3)	Specific Gravity	Mass (t)
Muritaro	Inferred aggregates Pit A	Granite	526,000	2.5	1,315,000
	Measured aggregates Outcrops Pit A	Granite	24,500	2.5	61,250
	Inferred aggregates Pit B	Gabbro	320,000	2.6	832,000
	Measured aggregates Outcrops Pit B	Gabbro	32,250	2.6	83,850
	Total Aggregates	Gabbro	902,750	2.55	2,302,013

Note:

- The Specific gravity used was taken from SEBA Quarry for Gabbro and Younger Granites
- A depth of 5m for the Units was used in the resource calculation.
- The area for each pit was generated using Datamine’s Mapinfo software

- **Based on definition of “Inferred Resource”, the author used the criteria of JORC and 43NI-101 (see Appendix I) in using this terminology for the Quarriable resource for the “MVCNTR” Muritaro Quarry Project**

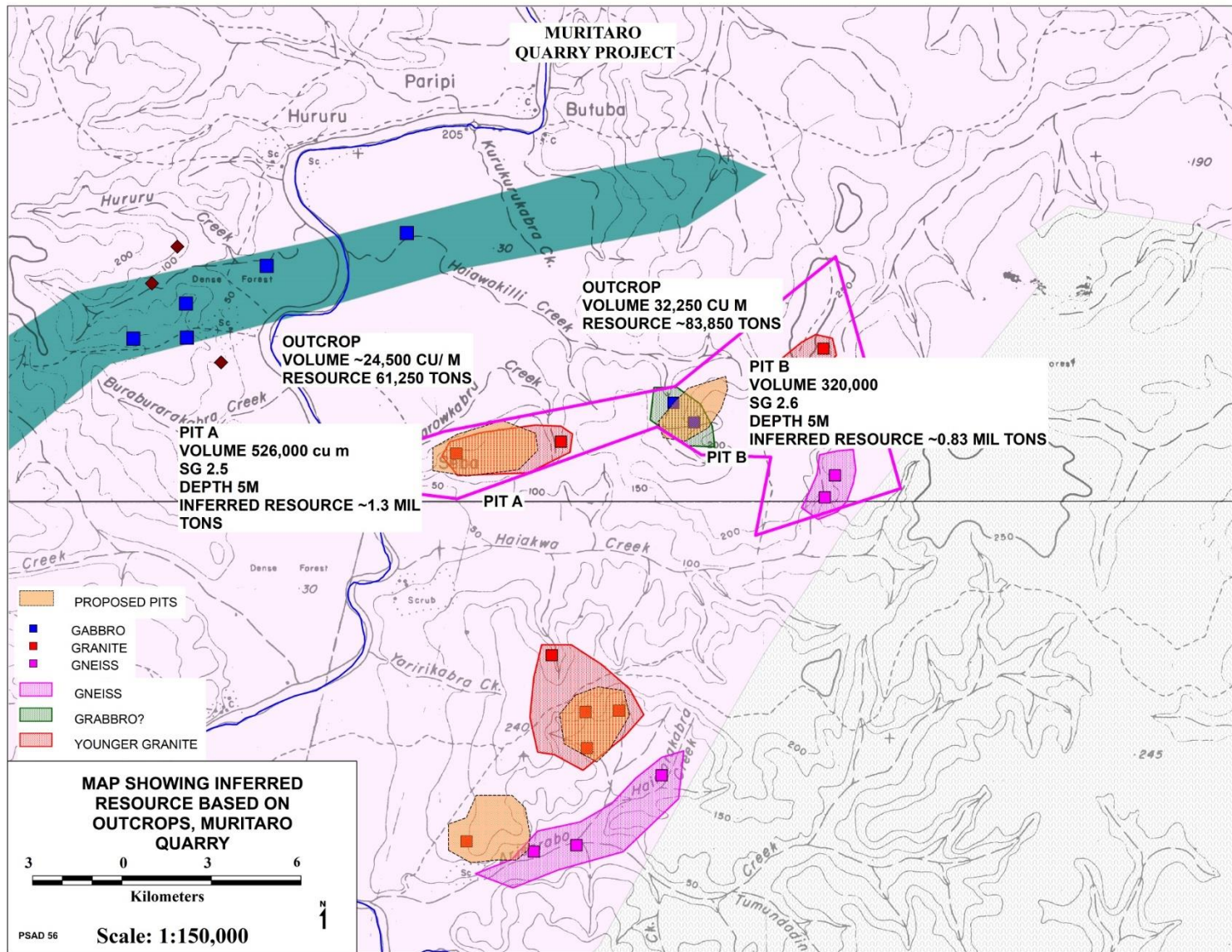


Figure 9: Map showing Estimated Quarriable resource for the Mining Pit and Outcrops for “MVCNTR” Muritaro Quarry Project

1.8 Mining Methods

Quarry mining operations planned for the “MVCNTR” Muritaro Quarry project will be open pit with benching and blasting, with the planned mining pit hosting an estimated resource of **1.3 million tons of granite**. Given that additional work is needed to convert this resource into a reserve, the mining plan below details a proposed mining operation of 1.3 million tons over 5 years at an average of 300,000 tons of stone aggregates produced per year with an investment cost of **~USD\$3,642,952 (GY\$765,020,000)** and an estimated operating cost of **~USD\$19/ton¹¹**.

The mining method selected for the Project is conventional truck and shovel for both overburden stripping and mining. The shallow pit depth, relatively high production levels and initial soft ground conditions favor a fleet of backhoe oriented hydraulic excavators and small rigid frame mining haul trucks.

Vegetation and topsoil will be cleared by dozers ahead of the mining operation. Suitable organic material will be stockpiled for future reclamation use. Overburden and clays will be stripped with excavators to expose the bedrock below.

The quarriable materials, namely aggregates and rip-raps (when produced) will be transported to the stockpile site located at the bank of the Demerara River for barging to local markets (see Mine Plan). To properly manage water infiltration into the pit, a sump will be established at the lowest point on the pit floor. Water collected in this sump will be pumped to a collection point (groundwater pond) at surface (Conceptual mine plan below).

The production target for the Project is ~300,000 tons yearly. To meet this demand, the mining operation at Muritaro Quarry is required to produce an average of 1,000 tons of material per working day (26 days working month projected).

Mining operations for the Project will be six days per week, operating 8 hours per day.

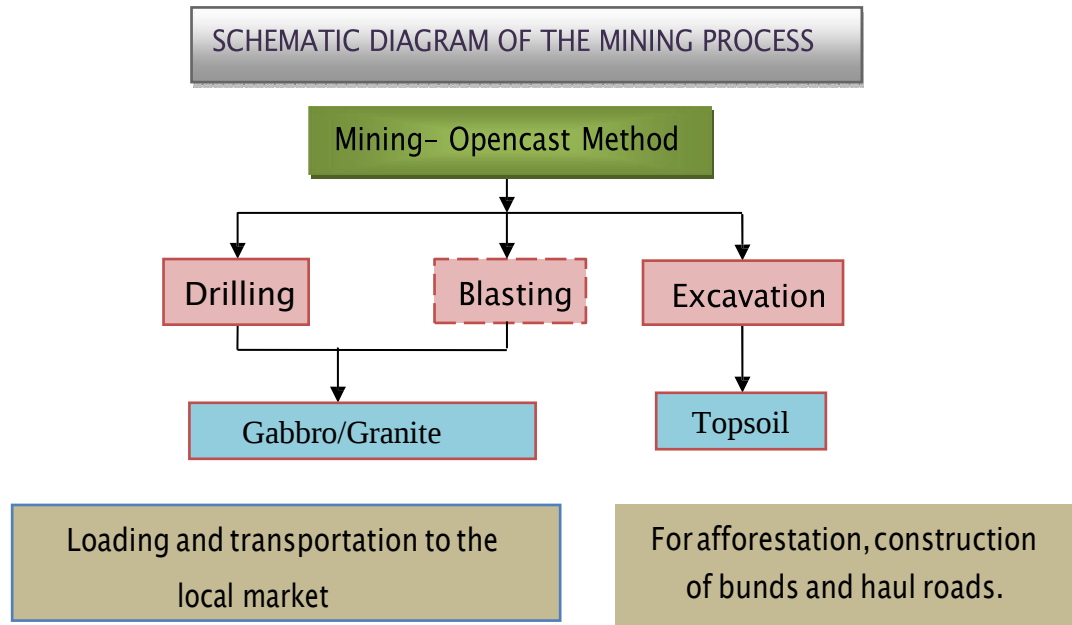
The haul truck selected for the Project is the Sinotruk Howo A7. This rigid frame mining truck will be robust enough to manage the ground conditions expected and be able to satisfy the hauling to the plant. The nominal payload of the Howo A7 is 35 tons.

A fleet of four (4) trucks is required during pre-production with the number increased to five (5)

¹¹ Cost per ton estimated from mining operations at St. Mary's and Teperu quarries

by the third year.

The loading machine selected for the Project is the Volvo hydraulic excavator. To mine the tonnages presented in the mine plan, three (3) excavators are required during pre-production, and mining. A fleet of one (1) D7 dozer, one (1) XCMG wheel loader, one (1) XCMG crane and service trucks complete the mining fleet.



1.801 Mining Design

The economic pit limits derived from the pit optimization will be used as a guideline for the detailed pit design. The pit design process includes smoothing the pit wall, adding ramps to access the pit bottom, and ensuring that the pit can be mined using the initially selected equipment. The following sections provide the parameters that will be used for the detailed pit design.

Geotechnical Pit Slope Parameters

Overall pit configuration will reflect local geological conditions of rock orientation and stability. The pit will closely follow an East-north easterly orientation, and the approximate 55° dip of contact will affect high-wall and bench construction. Construction of 30 foot high-walls with 70° faces and 20 feet benches would produce a 1:1 (45°) overall slope. If high-walls were 25 feet high with 70° faces and 25-foot benches, the overall slope would be about 1.34:1 (horizontal to vertical; -36° slope).

Exact high-wall to bench ratios will depend on site specific conditions at the site. Maximum height of high-walls would probably be around 30-35 feet. Where steep high-walls are developed, they will be designed and maintained in compliance with regulations.

Pit wall slopes and bench widths are dependent on the types of rock involved and the size of equipment working the mine faces. High-walls developed in coherent rock being worked by large excavators can be higher and steeper than high-walls in loose material being worked by small equipment.

Haul Road Design

The ramps and haul roads will be designed with an operating width of 9m. For double lane traffic, industry practice indicates the road width to be a minimum of 3 times the width of the largest truck. The overall width of the Howo A7 haul truck is 2.8 m. A maximum ramp grade of 8% will be used for slopes during loaded haulage and a minimum of 6% for empty trucks returning to pit. Ramps will be added as the need arises to access the stone aggregates. These ramps will be constructed from waste material.

Dump Design

Waste material will be hauled to an out-of-pit waste dump until sufficient pit floor space is developed to allow for in-pit backfilling if needed. The parameters are highlighted below will be used as a guide for the dump design:

Overall Slope ~18.4° (3H:1V);

Maximum Dump Height 50 m;

Setback from Pit Crest 40 m;

Setback from Major Creeks 100 m.

To ensure the safety of the operation, all mining activity will remain at a minimum distance of 50 m from the in-pit waste dump and 500m from the explosive bonds.

Material Properties

The table below defines the material properties that were used for the conceptual mine design

and mine planning purposes.

Estimated Material Properties for Muritaro

	In-Situ Dry Density (t/m ³)	Moisture Content (%)	Swell Factor (%)
Overburden	1.40 ¹	20.0 ¹	12

1. Taken from Soil data, Bonasika (Note: No soil and rock testing was carried out for Muritaro).

1.81 Production Objective

The production objective for the “MVCNTR” Muritaro Quarry is to produce mainly aggregates for the local Guyana market. The estimated mine life based on the proposed exploitable resource for the proposed Pit is 5 years (**Note that this resource will be upgraded significantly as mining exposes the bedrock and will expand the lifetime of the mine**). Over the 5-year period, 99% of the quarrying material will be aggregates with 1% rip-rap. Initial production will focus on ¾”, ½”, Gabions, 1st Grade and Sifting for local construction and road building industry. It is expected that the Quarrying Operation will commence 2nd Quarter, 2025 with an initial mine life of ~5 years with an average yearly production of ~300,000 tons aggregates. The table below gives a proposed breakdown.

Table 2: Proposed Production by Year for “MVCNTR” Muritaro Quarry

Product (1,000 tons)	Years					TOTAL
	2025	2026	2027	2028	2029	
Rip-Rap	0	10	10	10	10	40
Aggregates	200	290	290	290	290	1360
TOTAL	200	300	300	300	300	1400

1.82 Products

The proposed quarry will produce the following products with the main focus of aggregates for road building within years 1-3:

STONE AGGREGATES	Product market
¾”	ROAD CONSTRUCTION

1/2"	CONSTRUCTION
5/8"	CONSTRUCTION
3/8"	CONSTRUCTION
1 1/2" MINUS	CONSTRUCTION
SIFTING	CONSTRUCTION
GABIONS	ROAD CONSTRUCTION
1ST GRADE	ROAD CONSTRUCTION

1.83 Mine and Process Methodology

As mining is done on undisturbed areas, vegetation will be removed according to EPA regulations, and overburden along with topsoil will be stockpiled for reclamation efforts. Once a desirable surface is exposed, the bedrock will be excavated via ripping with appropriate tracked equipment and blasting. The first cut will be carried out within the Proposed Pit (see Mine Plan) with the overburden cleared and stockpile within the "Overburden Stockpile Dump" area located ~300m South of the Pit. The equipment used (Table 3) will be;

- Volvo EC5 Excavators
- Caterpillar D6R Bulldozer
- XCMG Wheel loader
- Sinotruk Howo A7 Articulated truck 35 Ton

In general, a series of high-walls and benches trending chiefly East-northeasterly will be created. Areas too hard to be ripped by tracked excavators will be drilled and blasted. Blasting will be done using ANFO (ammonium nitrates and fuel oil) explosives which can be purchased locally, and the blast pattern proposed will be a standard 6 x 7 matrix. Note that blasting pattern can change depending on mining conditions. All blasting and related activities will be supervised by locally experienced blasting and mining engineers. A jack hammer will be used to break oversize boulders in the pit and at the crusher grizzly.

Overall pit configuration will reflect local geological conditions of rock orientation and stability. The pit will closely follow a north-easterly orientation, and the approximate 55° dip of contact will affect high-wall and bench construction. Construction of 30 foot high-walls with 70° faces and 20 foot benches would produce a 1:1 (45°) overall slope. If high-walls were 25 feet high with 70° faces and

25-foot benches, the overall slope would be about 1.34:1 (horizontal to vertical; -36° slope). Exact high-wall to bench ratios will depend on site specific conditions. Maximum height of high-walls would probably be around 30-35 feet. Where steep high-walls are developed, they will be designed and maintained in compliance with regulations.

Pit wall slopes and bench widths are dependent on the types of rock involved and the size of equipment working the mine faces. High-walls developed in coherent rock being worked by large excavators can be higher and steeper than high-walls in loose material being worked by small equipment.

Once the desired material is broken loose in the open pit, it will be transported by front end loaders and dump trucks to a primary crusher and loading facility located within the northeastern part of the permit. Stockpiles will be established to store run-of-mine and crushed material such that crushing and loading capacities will not be exceeded. The Crushing Plant is rated at 75 tons/operating hour. This size specification for the crusher is as follows:

Siftings:

3/8" Minus, 1/2" Minus, 3/4" Minus, 1" Minus (all Aggregates)

Rip-rap

Boulders

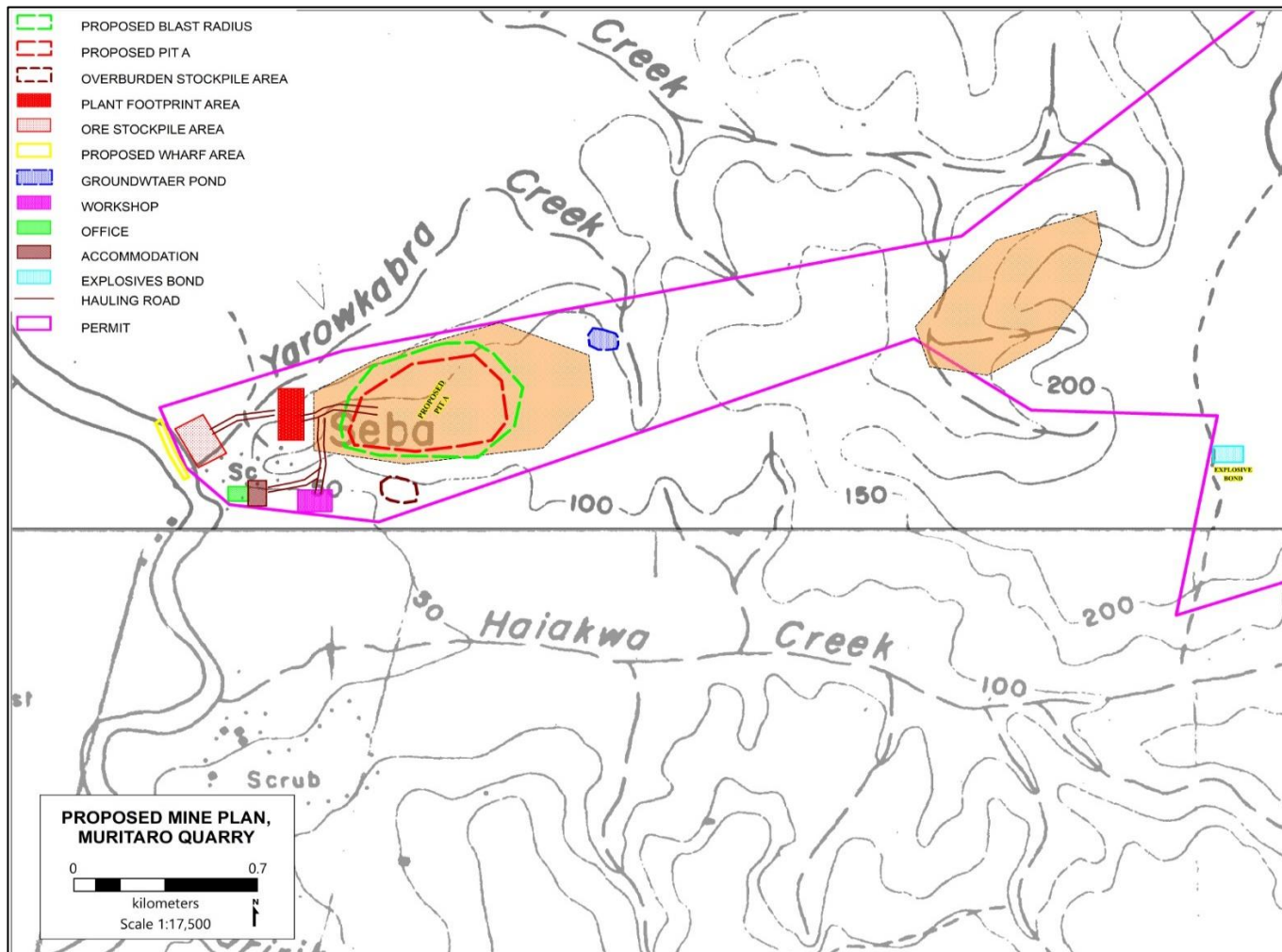
Crushing will be accomplished only during daylight hours (8 hours per day). Materials (rip-rap and aggregates) will stockpile and shipped via trucks to the targeted market mainly road and housing construction. Some materials will be used for cement manufacturing and local construction industry and stockpile at Linden. The quarry will be operated 8 hours a day (plant operation). It is estimated that ~300,000 tons of quarriable products will be transported per annum for the local road construction and infrastructure projects.

Water will be routinely sprayed from a water tanker onto roadways and active stockpiles, and water spray bars will be installed on crushing equipment. Roads and process areas within the facility will be periodically graded and berm to allow for safe travel and to control surface drainage. Some Vegetation will be used to provide dust guards between mine site, crushing area and accommodation areas.

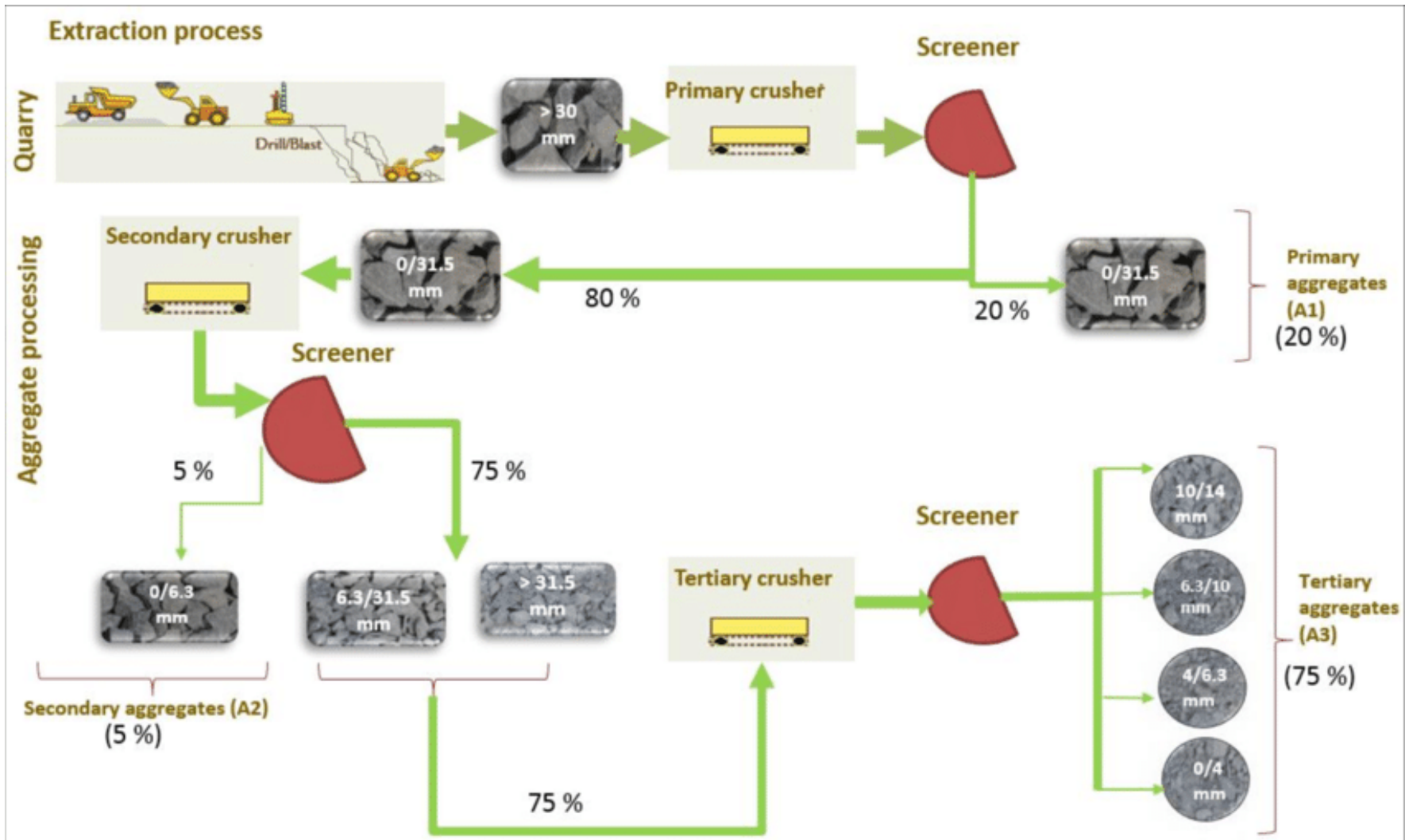
The following equipment are proposed to be used in the mining and processing of quarrying material at the “MVCNTR” Muritaro Quarry;

Table 3: Proposed Equipment for Quarry mining at “MVCNTR” Muritaro Quarry

Equipment			# Units
Vibrating feeder	International	ZWS1865	1
Jaw crusher	International	CJ160	1
Cone crusher	International	RC65-450	1
Cone crusher	International	RC65-150E	4
Vibrating screen	International	2YA3060	10
Vibrating screen	International	2Y2A3083	2
Hopper feeder	International	GZB1420	6
Sand washer	International	2LX1300	2
Linear vibrating screen	International	ZJS2460	2
Support Equipment			# Units
Track Dozer	Caterpillar	D6R	1
Haul Truck	Sinotruk	Howo A7 35 tons	4
Utility Excavator	Volvo	EC500ELHBC4	2
Utility Excavator	Volvo	EC500ELHBC4	1
Wheel Loader	XCMG	LW500FN	1
Drill	Atlas Copco	ECM 590	1
Crane	XCMG	QY50KD	1
Generator	Caterpillar	DE1250GC	4
Water Truck	Sinotruk	Howo ZZ1	1
Light Tower	International	10.5 hp	2
Compressor	International	375 CFM	1
Service Equipment			# Units
Fuel / Lube Truck	TM	4-wheeler	1
Self-propel Barges	Used	1000 ton	4
Pick-up Truck	Toyota	Landcruiser, double cab	2



CONCEPTUAL MINING PLAN FOR "MVCNTR" MURITARO QUARRY

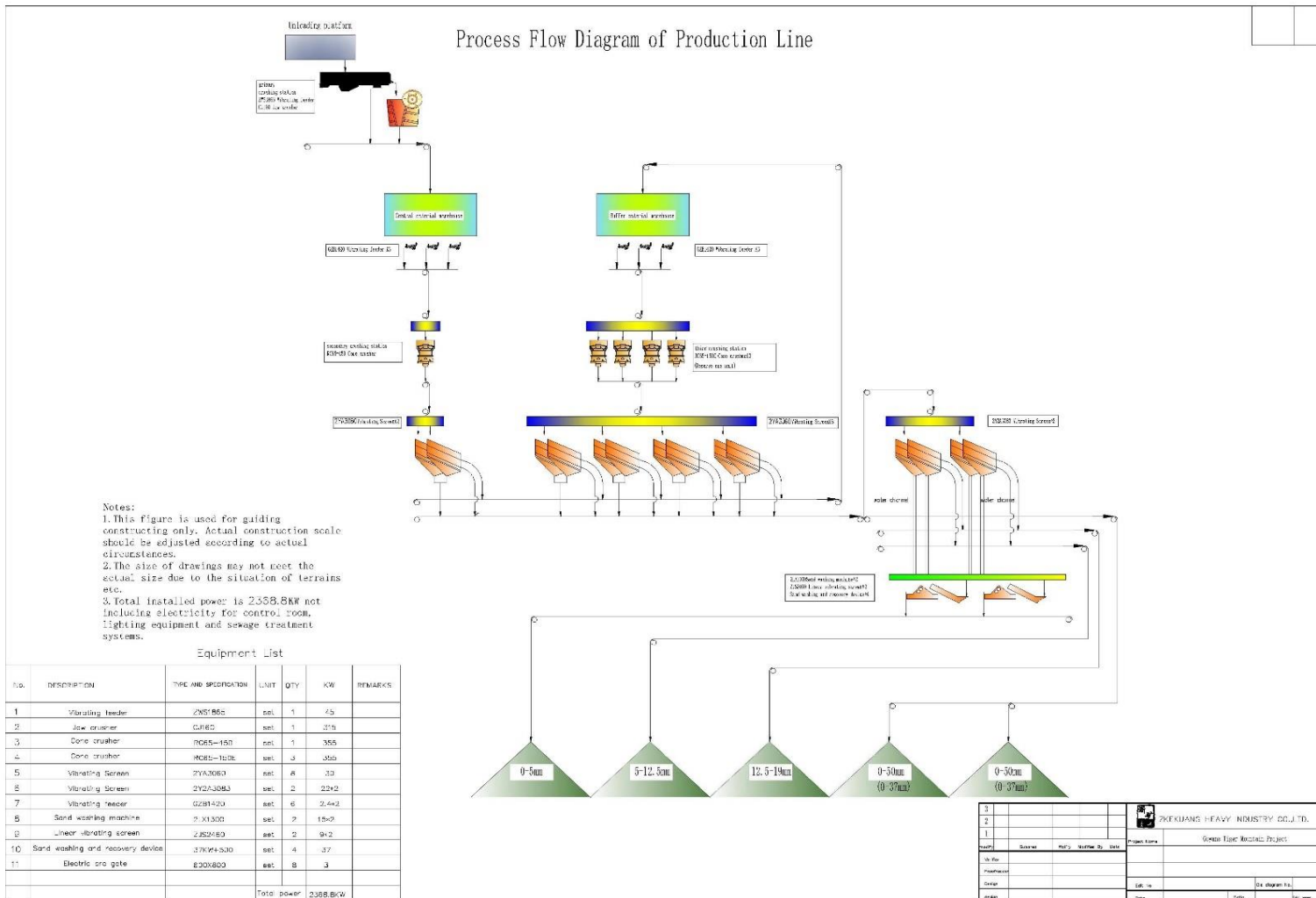


CONCEPTUAL MINING PROCESS

CONCEPTUAL PLANT FOR “MVCNTR” MURITARO QUARRY



CONCEPTUAL PROCESS FLOW DIAGRAM



1.84 DRILLING AND BLASTING TECHNIQUES

Drilling and blasting will be carried out to fracture the rock to enable mechanical excavation. Holes will be drilled behind the working face and filled with an explosive (ANFO explosive). When detonated, the rock is broken into manageable fragments and transported for further crushing and processing. Multiple blast holes will be drilled with the help of 32 mm drill rods, Jack Hammer and Air Compressor. The plan at “MVCNTR” Muritaro Quarry is to have inhouse blasting services, with a blasting engineer to supervise all blasting activities. Below is the proposed blasting plan for the “MVCNTR” Muritaro Quarry.

At the “MVCNTR” Muritaro Quarry, blasting of the quarriable material will be done twice a month and the type of blasting proposed is Fragmentation Blasting. The target is to blast ~25,000 tons of material per month of which 92%-94% should be fragmentation.

Based on the mining advance, the Quarry foreman would first indicate to the Blast foreman the area selected for blasting. The area is then cleared and cleaned using an Excavator and Dump truck. The drilling pattern is then marked out which is checked by the Blasting and Drilling foremen. At the Quarry, a 6ft x 7ft (burden x spacing) pattern is proposed since locally this has shown to improve the percentage of fragments produced from blasting.

The pattern is then drilled. For each pattern, there are ~150 holes which will be drilled to a depth of 30ft. While the drilling is ongoing, the Sargent of the onsite Police Outpost is informed of the imminent blast and for preparations to be made for usage of explosives since they will be responsible for the securing of the explosives at site. Once the pattern has been drilled, it is then checked by the Blast foreman to make sure there are no blockages and that the required depth of the hole is met.

The number of explosives for the blast pattern is then calculated (Table 4) and the explosives then transported from the Explosive magazine bond to the blasting pattern with the assistance of the Police. The explosives to be used is the ANFO (ammonium nitrate/fuel oil) which is a bulk industrial explosive. For the 6’x7’ blasting pattern at the quarry, a total of 24,750lbs ANFO of explosive is used (Table 4). The powder factor used is 0.56 kg/ cubic meter.

Once the holes are loaded, it is covered with stemming (Rocklock) to complete charging. The HTD (millisecond connector) is then connected to the designated shot pattern. The detonator cord is then connected to the HTD then the blasting wire is connected to the battery to set off the blasting of the pattern in sequence. For the blasting, there is a 42 second delay between each blast row when detonated. The blast force is targeted mainly towards the “Free Face” (area into the mine) of the mine and the blasting footprint is ~100 ft in this direction. Due to the potential of “flyrock” (rock that is ejected from the blast site in a controlled explosion in mining operations) from the blast, the surrounding area will be evacuate during the blasting exercise. Before the detonation is initiated, a warning consisting of a Siren which is mounted on the crushing plant, is sounded to warn of the impending blast. This siren is only turned off when the Blast foreman has given the greenlight that the blast was a success. Also, all entrances to the blast site are secured by the Guyana Police force unit prior to the blasting.

Once the blasting is completed, after 1 hour, the area is checked by the blasting foreman to confirm that there have been no misfires. Once the area has been cleared, it is handed over to the quarry foreman for mining. The material is then checked where the amount of Oversize (boulders >36”), fragments (<30”) and boulders (18”-36”) are noted. The oversized is then broken up by the Jackhammer but in cases where this cannot be done, these oversizes are usually blasted back during the next blasting session.

Table 4: Calculation of ANFO total Explosive pounds for 6’x7’ drill pattern

“MVCNTR” MURITARO QUARRY	
ANFO EXPLOSIVE	
DEPTH OF HOLE	30 FT
LBS PER HOLE	165
TOTAL LBS OF EXPLOSIVE	24,750

1.85 GROUND AND SURFACE WATER MANAGEMENT

Ground water occurs at a shallow depth (~2m) at the proposed “MVCNTR” Muritaro Quarry based on the mapping exercise done with the headwaters of the Yarowkabra and Haiawakilli creeks within the quarrying concession and the Demerara River to the west. If significant ground water

accumulates in an active pit, it may be pumped for use in processing and dust control. Ground water level and quality measurements will be recorded periodically during mine operations and within the proposed pit if ground water is encountered there. The Dozer and excavator will have to be utilized to establish both top level and quarry floor level drainage. Dykes and drains will be established on top of the quarry face and drains will be drilled and blasted around the quarry face and drains will be drilled and culvert to the Yarowkabra Creek, a pump and sump may be necessary to facilitate the initial drainage of the quarry floor. Priority will be given to the maintenance of these drainage systems for a clean/ dewatered quarry. The mine water pond is proposed approximately 80m * 50m for the quarrying operation ~500m ENE of the proposed quarry pit.

In the Environmental Management Plan (EMP), additional details are set out on parameters to be tested for surface runoff and ground water seepage.

1.86 REVENUE AND COST ESTIMATES

The estimated operating cost for the proposed mine is ~USD\$19¹²/ton. The initial startup cost of the project has been estimated as follows;

ITEM - QUARRY	COST (GY\$)
Plant, Machinery and Equipment	\$503,580,000.00
Mine development expenses	\$150,000,000.00
Building and civil works	\$61,440,000.00
TOTAL	\$715,020,000.00
NET INITIAL WORKING CAPITAL	\$50,000,000.00
PROJECT COST	\$765,020,000.00

REVENUE

The base price for all categories of products to be exported from the Muritaro Quarry is projected at GY\$11,500 per ton for aggregates and GY\$10,400 per ton for Rip-Rap¹³. These products will be sold within country mainly within Demerara and Berbice (Regions 4, 5 and 10).

¹² This is estimated from the costs of production from Teperu and St. Mary's Quarries

¹³ These are the current market prices for aggregates and rip-rap within the local market

Average selling price per ton of aggregates = **\$11,500**

Revenue = **\$11,500 x 200,000 tons = \$2,288,000,000**

Profit / Loss: Revenue – Total Expenditure (Year 1)

\$2,288,000,000 - \$1,375,650,000¹⁴ = \$912,350,000 (Profit / Surplus)

OPERATING

Operating requirements have been derived from the projected Quarry project expenditures upon startup and allowances made for increased prices on some items (Table 5).

Table 5: Projected Profit and Loss expenditure for Muritaro Quarry

		Year 1 (\$ million)
Revenue	Gross Sales	2,288.00
<i>less</i>	Royalty	274.56
Operating Costs	Net Sales Revenue	2,013.44
	Mining Costs	686.28
	Processing Costs	95.76
	G&A costs	15.96
Net Cash Operating Margin	Total cash operating costs	798.00
		1,215.44
Capital Expenditure	Initial/expansion capital	50.00
	Sustaining & Closure	10.00
Depreciation		15.00
Net cash flow before tax		1,140.44
Taxation payable (20%)		228.09
Net cash flow after tax		912.35

¹⁴ Calculated from expected Admin costs, depreciation, taxes and operating costs

1.87 PROJECTED INCOME STATEMENT

		Year 1 (\$ million)	NPV @ 8% (\$ million)	LOM (YR 1-5) (\$ million)
Revenue	Gross Sales	\$ 2,288.00	\$ 2,013.44	\$ 11,440.00
<i>less</i>	Royalty	\$ 274.56	\$ 241.61	\$ 1,372.80
Operating Costs	Net Sales Revenue	\$ 2,013.44	\$ 1,771.83	\$ 10,067.20
	Mining Costs	\$ 686.28	\$ 603.93	\$ 3,431.40
	Processing Costs	\$ 95.76	\$ 84.27	\$ 478.80
	G&A costs	\$ 15.96	\$ 13.73	\$ 79.80
Net Cash Operating Margin	Total cash operating costs	\$ 798.00	\$ 701.92	\$ 3,990.00
		\$ 1,215.44	\$ 1,069.91	\$ 6,077.20
	Capital Expenditure	\$ 50.00	\$ 44.00	\$ 200.00
	Sustaining & Closure	\$ 10.00	\$ 8.80	\$ 50.00
Depreciation		\$ 15.00	\$ 13.20	\$ 150.00
Net cash flow before tax		\$ 1,140.44	\$ 1,003.91	\$ 5,677.20
Taxation payable (20%)		\$ 228.09	\$ 200.72	\$ 1,135.44
Net cash flow after tax		\$ 912.35	\$ 803.19	\$ 4,541.76

Rip-Rap	\$10400 per tonne
Aggregates	\$11,440 per tonne

1.88 MACHINERY REQUIREMENTS;

A balance mix of imported and locally available machinery has been selected to maintain optimum level of productivity and efficiency.

No.	Machinery Details for Model Quarry	Quantity	Total Cost GUY\$	Unit Duty
1	CJ160 Jaw Crusher with Capacity of 450 tons Complete	1	\$75,000,000.00	Plant
2	RC65-450 Cone Crusher with Capacity of 450 tons Complete	1	\$65,000,000.00	Plant
3	Spare parts for Crushing and screen plant		\$15,000,000.00	Plant
4	Jump Conveyors	6	\$12,000,000.00	Plant
5	Atlas Copo ECM 590 drill with one Jack hammer and parts	2	\$15,500,000.00	Blasting prep
6	Manual jackhammer	2	\$950,000.00	Blasting Prep
7	Compressor with air hose and air tank	1	\$1,200,000.00	Blasting and other work
8	Excavator Volvo EC500ELHBC4	1	\$46,000,000.00	Quarrying raw material
9	Excavator Volvo EC500ELHBC4	2	\$96,000,000.00	Quarrying raw material
10	Wheel Loader XCMG	1	\$25,000,000.00	Loading raw material
11	Crane XCMG	1	\$35,000,000.00	Operations
12	Bulldozer D6 Caterpillar	1	\$20,000,000.00	Stripping of topsoil/overburden

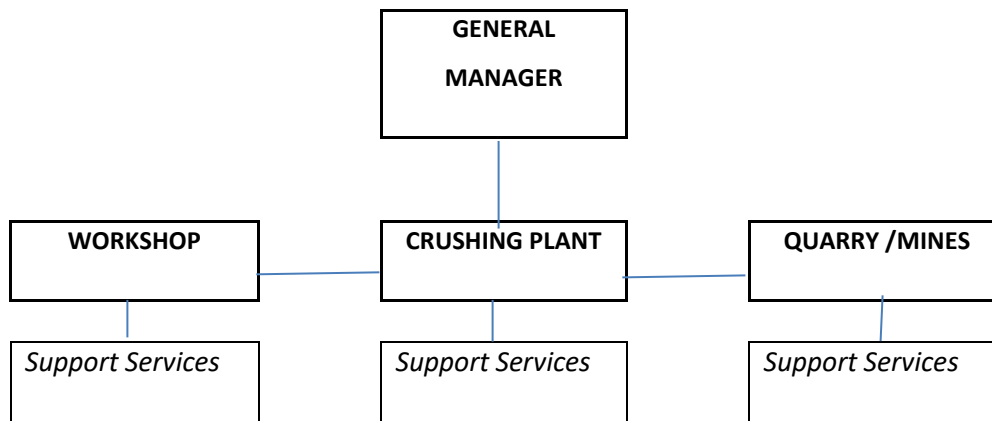
13	Sinotruk Howo A7 Haul Trucks	4	\$44,000,000.00	Cart raw material
14	Light Tower	1	\$300,000.00	Operations
15	Sinotruk Water Cart 3000 liters	1	\$4,500,000.00	Allaying dust
16	Fuel Truck TM	1	\$8,500,000.00	Operations
17	Toyota Double Cab Pickup	2	\$16,000,000.00	Operations
18	Welding Plant electric	1	\$755,000.00	Operations
19	Oxygen Cylinder	1	\$30,000.00	Operations
20	Water Pump 5.5 HP (3'x3')	1	\$225,000.00	Operations
21	Diesel Tank	1	\$520,000.00	Operations
22	Gas Welding Plant with Complete kit	1	\$1,500,000.00	Operations
23	Water Pump 20HP(petrol)	1	\$3,200,000.00	Operations
24	Generator CAT DE1250GC	4	\$17,400,000.00	Operations
	TOTAL		\$503,580,000.00	

1.89 BUILDING AND INFRASTRUCTURE

Detail of Building and Civil Works		
Description	Covered Area sq ft	Cost GUY\$
Offices/Prefabricated Containers	2500	\$8,000,000.00
Workshop/Bond	4000	\$12,800,000.00
Residential Setup /Prefabricated Containers	4,200	\$13,440,000.00
Haul Road	8500	\$27,200,000.00
Total	19,200	\$61,440,000.00

1.810 PERSONNEL QUARRY

The operation is expected to be manned by a team of skilled, experienced, and motivated individuals. This team will be led by a General Manager.



The quarry is expected to have in its employment thirty-four (34) persons with the following designations:

MURITARO Quarry Mine			
DESIGNATION	TYPE	NUMBER	SALARIES ANNUAL
Manager	Skilled	1	\$ 4,800,000.00
Certified Blaster	Skilled	1	\$ 4,200,000.00
Utility Operator	Skilled	3	\$ 12,600,000.00
Truck Driver	Skilled	5	\$ 15,000,000.00
Driller	Skilled	2	\$ 7,200,000.00

Drill Helper	Semi-skilled	2	\$ 5,280,000.00
Excavator Operator	Skilled	2	\$ 7,680,000.00
CRUSHING PLANT			
Production Engineer	Skilled	1	\$ 3,360,000.00
Crushing Plant Operator	Skilled	1	\$ 2,880,000.00
MECHANICAL WORKSHOP/ POWERHOUSE			
Welder	Skilled	1	\$ 2,640,000.00
Serviceman	Semi-skilled	2	\$ 2,880,000.00
Security	Unskilled	1	\$ 1,440,000.00
Electrician	Skilled	1	\$ 2,400,000.00
Supervisor	Skilled	1	\$ 2,640,000.00
Driver	Semi-skilled	1	\$ 1,800,000.00
SUPPORT SERVICES			
Security	Unskilled	1	\$ 1,440,000.00
Domestic	Unskilled	1	\$ 1,200,000.00
Labourer	Unskilled	2	\$ 2,640,000.00
Cook	Semi-Skilled	2	\$ 3,360,000.00
Medic/Safety Officer	Skilled	1	\$ 2,880,000.00
ADMINISTRATION			
Office Clerk	Unskilled	1	\$ 1,560,000.00
Stores Clerk	Unskilled	1	\$ 1,560,000.00

1.811 FUEL POWER AND LUBRICANT

Item	Liters/Kgs Consumption per annum	Price per Liter/Kg
Diesel	208,175	215
Lubricant oil	11,355	700
Hydraulic oil	9,463	1,400
Grease	1500	610

		Years				
		1	2	3	4	5
Capacity Utilization	100%	50%	60%	70%	80%	90%
Diesel	44,757,625	22,378,813	26,854,575	31,330,338	35,806,100	40,281,863
Lubricant oil	7,948,500	3,974,250	4,769,100	5,563,950	6,358,800	7,153,650
Hydraulic oil	13,247,500	6,623,750	7,948,500	9,273,250	10,598,000	11,922,750
Grease	915,000	457,500	549,000	640,500	732,000	823,500

33,434,312.50	40,121,175.00	46,808,037.50	53,494,900.00	60,181,762.50
33,434,312.50	44,133,292.50	56,169,645.00	69,543,370.00	84,254,467.50

Taken on capacity utilization and increased @ 10% per annum

1.9 ENVIRONMENTAL CONSIDERATIONS

Guyana is richly endowed with mineral resources such as gold, diamond, bauxite etc. However, in order to uncover these resources, one must disrupt the forest cover, which can adversely affect the natural environment. Economic activities such as mining will inevitably have an impact, but these can be minimized with use of appropriate mitigation strategies to reduce the impact on the forest and biodiversity. As such for the quarry mining operation, we are adhering to the following:

1. Minimize the clearance of the natural forest via drilling to identify the exact extent of the mining target areas that are within the viability criteria of the Mine.
2. Adopt progressive reclamation and replacement of topsoil cover to enhance natural revegetation.
3. Ensure efficient waste disposal and garbage.
4. Ensure all fires lit at camp sites are properly put out when not in use to safeguard against forest fires.

Muritaro Village Council and New Thriving Restaurant desires to conduct the Muritaro quarry operations in an environmentally responsible manner and will address all pertinent issues to insure proper stewardship of public lands and preservation of wildlife. A separate environmental assessment will be completed to further address the following and other issues of environmental concern. Details of the environmental mitigation measures to be employed at the quarry will be provided in the Environmental Management Plan (EMP). The EMP will address potential impacts of the design, construction, operation and closure phases of the quarry.

Air Quality: Dust and diesel emissions are the main elements of air quality concern at the quarry. To limit dust formation during mining and transport of materials at the site, water will be periodically sprayed on roadways, process areas and accessible working faces. Dust suppressants will also be used as required. Appropriate speed limits will be enforced within the quarry and access road to limit fugitive dust, and spray bars will be installed at several points on crushing equipment to limit dust generation. Combustion emissions will result from the use of

diesel and gasoline fueled equipment. Due to the small nature of the operation and the small number of heavy equipment to be used very minor changes in air quality resulting from equipment emissions is anticipated. Fueled equipment will be maintained according to the manufacturer's manual and kept in good working order.

Storm Water Runoff: Surface water from disturbed surfaces of industrial sites can cause pollution down gradient from areas of disturbance. The most likely form of down-gradient pollution is siltation caused as fine materials washed away from active mine operations are deposited in areas where such deposition is harmful to plants and wildlife. Because much storm water runoff is or will be captured by internal drainages associated with quarries, large amounts of storm water will not flow from the area of mining operations. Untreated discharge can result in increased turbidity in the receiving water bodies. Dewatering of the quarry of accumulated water resulting from surface runoff or ground water infiltration will require pumping excess water to the Demerara River and may potentially impact surface water turbidity. Surface run-off will be directed to a settling pond. Excess water from the settling pond will be discharged to the Demerara River through site drains to prevent overfilling and overtopping. Discharge from the settling pond under these circumstances will be monitored to ensure the compliance with water quality standards established by the EPA. Design details and the location of settlement pond will be determined following geotechnical investigations as well as topographic, hydrological and structural surveys at the project site.

Ground Water: Because "MVCNTR" will use only clean water and processes inert materials in their operations, it will not release pollutants into the ground-water table. Major fuel storage would be secured properly. Fuel, lubricants, coolant, waste oil, waste chemicals and hazardous materials will be stored in suitable clearly marked containers or surface tanks within impervious clay and or concrete bund walls to contain spillage. The storage areas will be completely covered to prevent any entry of rain and located away from operating areas, waterways and drainage lines and areas prone to flooding. The fuel and hazardous materials storage areas will be constructed with a containment capacity of 110% of the largest container stored. Discharges

from the fuel storage and workshop areas will be directed to an oil/water separator before discharge to the environment.

Fire Safety and General Safety: Approved fire extinguishers will be located on all pieces of mobile equipment and in process control rooms. Heavy equipment and water will be available on site to assist in firefighting. Satellite telephone and internet service will be readily available at the Muritaro quarry for emergency and other communications. “MVCNTR” International employees will be trained in proper emergency response, incident reporting and general health and safety. An Emergency Response Plan will be prepared as a component plan of the Environmental Management Plan (EMP) for the project. The emergency response plan will outline the measures to respond to possible emergencies such as the unintended release of hazardous materials, fire and accidents at the project site. “MVCNTR” International will identify and have trained an emergency response team and nominate an emergency response coordinator. The coordinator will have the authority to commit resources necessary to respond to emergencies. The Company will also ensure that all employees are trained in emergency response scenarios.

“MVCNTR” will establish and maintain an emergency response outfit, which will be located at a strategic location within the Mine Site and equipped with communication equipment as well as equipment to respond to potential emergencies. The outfit will have the following equipment readily available at their disposal for emergency response:

- Designated evacuation vehicle; Pickup. Transport vehicles will be provided with emergency communication equipment.
- Earth Moving Equipment.
- Pumps.
- Earthen gravel; sand, clay.
- Booms and absorbents.

In the event of an emergency, an emergency alarm will be raised to alert all persons likely to be affected and to summon the emergency coordinator and crew. All personnel within the affected area will be evacuated to an established emergency assembly point. Emergency assembly areas will be clearly identified and communicated to all employees and visitors of the mine site.

In the event of a spill, the spill response and clean up procedures will be initiated. If there is a release of fuel oil or other hazardous material all persons living downstream and downwind of the release will be notified. Spills will be contained by deploying relevant equipment such as booms in water and earthen material on land. In the event of a fire, water and/or other fire suppressants shall be used. In the event of an accident, a first aider will render first aid care. The emergency response coordinator will make contact with the Linden Public Hospital and inform them of the estimated time of arrival of the injured person. Details of the injuries sustained, and the state of the injured will also be communicated. The coordinator will complete an accident report to be provided to the hospital on arrival of the injured.

Emergency contact numbers/radio frequencies/satellite phone numbers/etc., for identified medical personnel, hospital, and police will be clearly posted at the mine and camp. An accident report will be prepared describing the cause and nature of the accident, and the remedial actions taken to prevent the reoccurrence of the accident. This report will be forward to the relevant regulatory agencies on request.

For effective implementation of the EMP and for a safe and healthy work environment, training will be provided to all workers. A site induction will be conducted for all new workers. This policy will ensure that employees become familiar with potential hazards and safety precautionary measures in a quarry environment. The training program will be coordinated and implemented by the safety officer of the company.

Hazardous Materials: Diesel fuel and lubricants will be the major hazardous materials present at the quarry site. Care will be taken so that equipment lubricants, fuels and other industrial liquids do not drip or flow onto natural surfaces. Waste oil, other related fluids, filters, oily rags, etc., will be collected and disposed of properly. Large metal refuse containers will be positioned at the site for collection of hazardous waste materials.

Hazardous Waste: No hazardous waste will be produced at the proposed Muritaro quarry. Any waste rock products will consist chiefly of hornblende.

Mine Safety: The proposed Muritaro quarry will be inspected periodically and will operate under applicable EPA, GGMC and Guyana safety and health regulations. All employees will receive initial training before commencing work and annual refresher safety training.

Impacts from blasting will be mitigated by:

- Ensuring prescribed procedures for blasting are followed, which include (1) assessing the type of rock formation; (2) determining the depth of drill holes and (3) determining the Frequency of Blasting and Type of Explosives used.
- Careful design of the blast sequence and ensuring detonation is designed using appropriate delay intervals for charge ignition to avoid detonation of large unconfined charges and to reduce air-blast and vibration effects. The use of electronic detonators will also be employed to reduce vibrations. The number of explosives used in the blast will be carefully administered to reduce fly rock.
- Ensuring that blast safe zones are established during blasting.
- Strict procedures for transport, storage and handling of explosive and blasting will be implemented in accordance with Mining regulations and the GGMC Code of Practice for Quarrying.
- A Certified Blaster will be recruited to supervise the blasting exercise, as required by law.
- Blasting will be done according to the Blasting Plan approved by the GGMC.

Blasting: Blasting will periodically be required at the Muritaro quarry. All blasting will be conducted by qualified individuals in compliance with Guyana Laws. A model blasting plan for the project is presented in the section Drilling and Blasting techniques. The closest village (Muritaro) lies approximately 0.6km N of the project area. Blasting will occur only during workdays during daylight working hours such as to minimize impact to surrounding area. Noise limiting methodologies will also be used to lessen noise impact.

Vibration and Noise: In addition to blasting, other mine operations including mechanical excavation, crushing and processing can produce significant noise and vibration. Best available

practices of noise and vibration reduction will be utilized at the quarry and noise monitoring will be conducted during initial mining operations. The project's operations will be associated with noise and vibration generating activities – excavation with machinery, drilling and blasting of rock, transport of boulders within the site and loading of barges are the critical noise generating activities. Excessive noise can affect workers and give rise to hearing loss, sleep disturbance and can also affect wildlife within the project area.

Noise will be mitigated by installing sound suppression equipment on vehicles, e.g., mufflers and ensuring vehicles are maintained according to the manufacturer's manual and are kept in good working order. Operators will be equipped with PPEs such as earplugs or earmuffs. Generators will be installed with sound proofing or at a safe distance away and downwind from the living quarters. Blasting will be implemented in accordance with Mining regulations and the GGMC Code of Practice for Quarrying. Careful design of the blast sequence and the use of electronic detonators will be employed to reduce vibrations. Quarry operations will comply with the decibel limits outlined in the GNBS Noise Emission Standard.

General Housekeeping: Operational litter will be collected in appropriate containers and removed as required from the site. No waste will be buried on site. A septic system on the land will be utilized

Waste and Ablution Facilities: Project activities is expected to produce both liquid and solid waste which, if not properly stored and or disposed can lead to pollution of receiving water bodies or accumulate on site creating an unhygienic and un-aesthetic environment. Improper management of domestic waste and sewage can pollute land and water resources in the area, resulting in health impacts on site.

Waste generated will be collected, segregated, stored, and transported to an on-site landfill constructed in accordance with the EPA Guidelines for establishing landfills. Domestic wastewater will be directed to a soak-away filter treatment system prior to discharge to the Demerara River. Discharges to the river will be in accordance with the EPA domestic wastewater discharge limits. All sewage will be directed to septic tanks with filter bed treatment installed.

1.10 Existing Land Use Pattern

There is currently no existing active quarry license close to the proposed quarry license. There is river access for small barges (750 to 1000 tons) using the Demerara River all year round if the material is stockpile at the Demerara River. Road access from the site is also readily available to take the product (stone aggregates) to market (Kwakwani /Linden Road). The local markets targeted are roads and housing construction industry. Infrastructure development in the country is expected to rise significantly in 2024 based on the current government 10 years infrastructure plan. The current mining venture is expected to deforest about 600 acres which will be mined over the proposed 5- year period. The consequent loss of primary vegetation is not expected to have significant long- term environmental impact in so far as the organic topsoil will be stripped, stockpiled and proposed to be reused in a systematic reclamation effort. This will enhance natural reforestation which is known to occur in many tropical forests.

1.10.1 Alternative Land Use

There are limited competitive viable alternative uses of lands in and around the project site. While agriculture is a plausible possibility, farm to market transportation cost can increase the cost for the produce, making it uncompetitive in Georgetown. The demand for agricultural produce within Muritaro community is not significant and is driven by village consumption. Given its significant contribution to Guyana's GDP, mining is considered the most viable land use activity for these areas.

1.10 MARKET STUDIES AND CONTRACTS

Summary of Information

The information contained in this report has been obtained from independent vendors and/or estimated from first principles based on the author experience in Guyana.

Market Studies

Stone Aggregates is the main product to be produced by the “MVCNTR” Muritaro Quarry. Final products will initially consist of 1st Grade, Gabions, $\frac{3}{4}$ ”, $\frac{1}{2}$ ” and Siftings and additional sizes added as the market dictates.

1st Grade will be produced mainly for road construction and will target the building of the Linden/Kwakwani road and construction projects at Linden. It is expected that ~20% of the production will be 1st Grade.

Gabions will be produced also for road construction mainly for revetment, embankments, canals and dams. It is expected that ~10% of the production will be Gabions

$\frac{3}{4}$ ” will be produced for road construction mainly as a base for roads targeting the Linden/Kwakwani, and Regions 10, 5 & 4 roads. It is expected that 60% of the production will be $\frac{3}{4}$ ”.

$\frac{1}{2}$ ” and Siftings will be produced for concrete and building construction and will target the local housing market. It is expected that ~10% of the production will be $\frac{1}{2}$ ” and Siftings.

All stone aggregates produced will be sold locally within the Guyana Market.

1.11 INTERPRETATION AND CONCLUSIONS

Geology and Resources

The field mapping and prospecting exercise carried out within the “MVCNTR” Muritaro Quarry Project were able to identify the potential for the granites. Outcrops of granite and gabbro were readily identified in the field which are quarried regionally and found within the permit. Observations within the creeks showed that the saprolite varied in thickness from 0.1 to 2m.

A resource estimation using the data collected from the field exercise, identified an Inferred quarriable resource of **2.3 million tons aggregates** with the proposed Pit A, ~1.3 million tons of granite with ~145k tons from the outcrops mapped within the permit.

Mining

Within the quarry licence, one mining pit has been identified as phase 1 operation initially for mining at ~300k tons per year for ~5 years at an estimated startup cost of USD\$3.4 million. Mining will be done as an open pit operation with blasting and extraction of the stone aggregates.

Project Implementation

The Project implementation is expected to start in 2nd Quarter, 2025. No drilling is needed since the bedrock is covered by a thin saprolite layer (0.1 to 2m).

Market

The produced stone aggregates will be sold mainly within the local Guyana market targeting the Linden/Kwakwani, and Regions 10, 5 & 4 roads corridor along with the housing industry.

1.12 RECOMMENDATIONS

It is recommended that a trenching program be carried out to confirm the locally interpreted geology along with the overburden thickness for the Saprolite, upon granting of the quarry license. The Production drill can be used to carry out quick shallow drilling to identify depth to bedrock for mining purposes given the shallow occurrences of the basement rock.

2.0 STATEMENT OF QUALIFICATIONS

The principal author of this report is Melicia Mitchell-David who holds an MBA in Project Management and BSc in Applied and Exploration Geology. The author is also an Exploration Geologist with over 7 years' experience in prospecting and exploration of precious minerals, base metals, stone aggregates, REEs and currently works as a consultant for several local and foreign exploration companies in Guyana. She has contributed to the feasibility, resource evaluation and mine planning for Gran Colombia Toroparu Deposit, and Elisha Investments Seba - Moraballi Quarry.

She has previously worked within the regional area visiting the Teperu, St. Mary, Moraballi, Macoura and Monkey Jump Quarries.

APPENDIX I Definition of Inferred mineral resource

Definition of Inferred Mineral Resource

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability". (Clause 20 of 2004 JORC Code)

Inferred Mineral Resource

That part of a Mineral Resource that can only be estimated with a low-level of confidence. Reasons for low confidence may include: Inadequate geological knowledge, Limited sampling data and Data of uncertain or poor quality. Uncertain geological and/or grade continuity "Low" in this context means usually not sufficient to allow the application of technical and economic parameters to be used for detailed planning. Therefore, Inferred Resources may not be converted directly to Ore Reserves (CIM NI43-101 code)

APPENDIX II: Closure Plan

1.0 Introduction.

The sole precedent for closure of a mine site operation in Guyana is the closure of Omai Gold Mines (OGML, 2007). This closure plan partly draws from this closure plan since there are some similarities namely the proposed quarrying pit(s) and is conceptual in nature and done in accordance with the Environmental Management Code of Practice to ensure that the site is returned as closely as possible to its pre-utilization state.

1.1 Project Components Requiring Closure.

The “MVCNTR” Quarry Mine will include the following components:

- Open pit mine.
- Building Infrastructure Namely Admin, Storage bond, maintenance, and housing accommodations.
- Mobile processing equipment
- Overburden Stockpiles
- Access Road

1.2 Closure Plan – Ecological and Environmental Goals. The overall intent of the closure plan is to achieve project objectives for restoring the site and aquatic environment to a high ecological value. The facilities will be progressively closed over the duration of the mine site operations. Progressive closure will be undertaken in a manner to not pose challenges to the day-to-day operations of the site. Final closure of the mine site will be undertaken after it has been determined that viable stone aggregates material no longer exist at Muritaro Quarry.

The conceptual closure is intended to ensure the “return to nature” of the mine site. At the conclusion of the closure process, no buildings or supporting infrastructure would remain at the project location. The area will be fully replaced by a sustainable and productive ecological system. Spoil piles, stockpiles, borrow areas etc. would be vegetated with general grass as well as emerging forest (primarily early stages in rainforest succession are expected to dominate the period immediately following closure). The site will be monitored for success of the Closure Plan. A few routes will be left for access to points of interest for the monitoring

program. These routes will be closed after successful reclamation.

The objectives of the closure plan are to:

- Prevent, reduce or mitigate the adverse environmental effects associated with the Project;
- Provide for the reclamation of all affected sites and landscapes to a stable and safe condition;
- Provide for the return of all affected ecosystems to healthy and sustainable functioning;
- Reduce the need for long-term monitoring and maintenance and instituting progressive reclamation;
- Provide for long-term monitoring and maintenance of the sites affected by the Project as required;
- Provide for mine closure using the most current available proven technologies in a manner consistent with sustainable development.

Closure will result in the establishment of conditions that support public safety through physical stability (Physical Stability); it will encourage productive end land use by promotion of revegetation and promote conditions for biological stability (Biological Stability); and will ensure that mechanisms are in place to protect water resources and the receiving environment, thereby providing chemical stability (Chemical Stability). Performance standards related to physical, biological and chemical stability would function as measures of accomplishment of the closure objectives. The Project performance standards are as follows:

- Physical Stability – Preservation of protective safety measures (in a state in which the measures can be effective) throughout the post-closure monitoring period, once there has been no external human influence.
- Biological Stability – Effective revegetation and restoration evidenced by vegetative proliferation on 70% of the site areas intended for revegetation by the end of the post-closure monitoring period.

- Chemical Stability – Water quality similar or improved when compared with historic data at the end of the post-closure monitoring period, once there has been no human or related influence.

The closure activities incorporate strategies to protect surface water and groundwater; prevent erosion and control discharge from reclaimed mining facilities; and protect wildlife, as outlined below.

The storm-water management practices will provide systems that minimize environmental damage by:

- Maximizing retention time within the system by use of detention ponds
- Minimizing increases in surface runoff flow and volume
- Channeling and diverting runoff
- Use of bench terraces

Soil conservation techniques to be employed to ensure closure success include

- Modifying the soil slope
- Maintaining and establishing natural vegetative cover
- Securing favorable soil conditions to facilitate vegetative growth

Wildlife conservation techniques will include:

- Providing food resources through establishment of vegetation
- Providing habitats for wildlife through encouragement of vegetative proliferation, as well as creation of aquatic habitats
- Providing surface water and soils of good quality for wildlife consumption and use.

1.3 Closure Plan: Reclamation Concepts.

The Reclamation of the Quarry Mine site will be coordinated by the Guyana Geology and Mines Commission. The basic reclamation concept of the Closure Plan is the “return to nature” of the mine site. At the conclusion of the closure process, no buildings or supporting infrastructure or facilities would remain at the site. The areas will be fully replaced by a sustainable environment comprised of productive and diverse lake and pond ecosystems. Spoil piles, stockpiles, borrow areas etc. would be vegetated with general sustainable grass as well as emerging forest (primarily early stages in rainforest succession are expected to dominate the period immediately following

closure).

Certain facilities will be progressively closed over the duration of the mine site operations. Progressive closure will reduce the costs of reclamation since closure will be integrated with the production operations. In addition, progressive closure will result in the development of expertise on the most appropriate reclamation methods. Progressive closure will be undertaken, however without posing impediments to day-to-day operations of the site.

Final closure of the mine site will be undertaken once treatment of site waters is no longer required, and the operator has made a determination that no further mining of the Quarry is warranted.

Final closure of the facility will occur in two stages and will be coordinated with the Guyana Geology & Mines Commission. The first stage will entail removal of all fuel, chemicals, waste hydrocarbon products, and any potentially hazardous materials from the site.

During the second stage of the final closure, all equipment, machinery, and storage tanks will be removed for reuse or recycle. Where such uses are not practical, any remaining such materials will be disposed of at a suitable long-term waste disposal area on-site. All structures will be removed and/or be demolished. Structures that are suitable for reuse or recycling will be salvaged. Structures not suitable for use will be disposed of at the waste area. The water management ponds will be closed, and all disturbed areas will be reclaimed, with the exception of roads needed for monitoring access or as may be requested by GGMC.

After the major closure activities are complete, a monitoring program will be implemented if required which could include the site water quality monitoring.

The site will be monitored for success of the revegetation component of the closure plan. A few routes will be left open for access to points of interest for the monitoring program. These routes will be closed after successful reclamation unless GGMC may otherwise direct.

1.4 Closure Plan: Specific Reclamation Areas and Tasks

The reclamation work will focus on the following aspects of the overall closure plan.

1.4.1 Water Management Strategy

Final closure designs will be developed for the project and reevaluated at final closure to include

such surface water controls as are necessary to prevent erosion of the facilities that remain at closure. Future geochemistry studies will predict the quality of discharges at closure and recommend management strategies if any discharges are problematic.

It is anticipated that the established quarry pit(s) will be provided with a spillway to enable discharge to surface water features around the pit(s). The discharge spillway will be sloped and will be covered with geotextile and rock waste to minimize the possibility of erosion. All power and water line will be disconnected and will be removed from the site.

It is also anticipated that the water management ponds will be breached to reduce the pond to one-half of its designed height and a spillway will link the pond to nearby surface water features. The spillway will be covered with geotextile and rip rap to minimize the possibility of erosion.

1.4.2 Mining Pits

At closure, most of the pit walls will be reduced to a safe slope. Where feasible, upper portions of pit walls will be ripped from above and pushed into the pit. Where necessary, stockpiled overburden and processing water will also be placed against the high wall. Any loose high wall or fill material will be compacted to a safe, stable slope significantly less than the angle of repose for unconsolidated materials. Final pit slopes are anticipated to be 2.5:1 or less for most areas. Where high walls cannot be collapsed from above, those portions of the high wall remaining above backfill will be scaled from within the partially refilled pit or otherwise made safe and stable.

Barriers will be constructed around the perimeter of the pit for safety. A perimeter berm and fence will be placed around the open pit, and the earthen berm will be revegetated. The berm will be to prevent vehicles from entering the pit except at a designated, locked access point. The fence will be used to prevent unauthorized access. It is assumed that any future pit lake will not require water quality management activities; however additional assessment will be required to predict future pit lake conditions and the need for post-closure treatment or management.

1.4.3 Overburden (Spoil pile) Storage Areas

A containment berm will be constructed around the perimeter of each spoil pile to control

erosion and the migration of solids. The spoil pile will be graded to blend with the natural topography. Soil will then be applied over the spoil piles and vegetated islands will be planted and observed. If the Islands indicate that the soils are fertile to develop a diverse community of plants, no additional action will be taken, and the vegetation will be allowed to naturally spread. If observations of the Island indicate very little development and spreading of vegetation, seedlings from a nursery plot at the site will be transplanted into the spoil pile.

1.4.4 Processing Plant and Facilities

All processing plant and related facilities will be dismantled or demolished. Concrete slabs and footings will be broken up to allow for infiltration or will be placed into open facilities such as ponds. Power and water lines will be disconnected and will be removed from the site. Useful major equipment and material will be salvaged and reused or sold to third parties. Foundations will be removed, and excavated areas will be filled with native topsoil to restore naturally sloping topography, where feasible. Facility sites will be graded to blend in with existing topography, and compacted areas will be ripped and the whole area will be covered with topsoil and revegetated. All topsoil areas will be regraded and revegetated. Covers will be installed using saprolite available at site.

Several roads will remain to provide access to the Property for closure and post-closure monitoring. Internal roads will be leveled and graded to facilitate vegetation growth and re-establish drainage. All exploration roads at the mine site will be reclaimed in a similar manner to haul and access roads. This will include all areas outside the active mining area.

1.4.5 Closure Monitoring

It is anticipated that surface water and groundwater quality will be monitored after closure for evidence of environmental impacts. Water samples will be collected annually to establish water quality trends. Physical inspections will be conducted to monitor the physical stability of remaining facilities and the condition of the closure covers and revegetation. It is anticipated that physical inspections will take place quarterly. Environmental monitoring is assumed to continue for five years, or until non-hazardous conditions are achieved for any discharge from the remaining facilities and the groundwater and surface water quality meets applicable regulatory

standards. Monitoring records will be maintained by the mine operator.

1.4.6 Reclamation and Closure Cost Estimate

An allowance of USD\$47,500 for the final cost of reclamation and closure of the Property has been included in the cash flow projection for the project.

1.4.7 Conclusions and Recommendations

Closed facilities will be inspected, and annual reports provided to evaluate the success of progressive reclamation. Reclamation monitoring will be coordinated with the EPA, GGMC and GFC. Reclamation sources will be evaluated both in terms of vegetation and erosion. Monitoring would be modified to address progressive reclamation as it proceeds. If it is determined that artificial seeding (re-vegetation) of reclaimed areas would be cost efficient, a seed mixture approved by EPA/GGMC will be applied. The seed mixture would likely attempt to duplicate the area's natural vegetation.

In summary, this conceptual closure plan will lead to the re-establishment of ecological processes that will allow for the development of healthy habitats on areas previously disturbed by mining activities.

See table below.

Project Component	Issues	Closure Action	Performance Goals
Quarry	Safety	Installation of fence to restrict unauthorized access.	Prevention of unwarranted accidents
		Posting of signs to indicate hazardous areas.	
	Open Cast Pit	Progressive reclamation	Reemergence of vegetation and habitats
		Surface Profiling, and effective drainage	
	Pit wall stability	Maintaining final pit wall slope below 55 degrees	Stable pit wall
	Visual impact	Configure disturbed areas to blend in with surrounding landscape.	Obscure physical alteration to site
		Replace Organic cover to enhance re-vegetation.	
	Loss of forest cover	Reclamation and surface water management to enhance the regeneration of natural forest and habitats.	Effective and continuous rejuvenation of natural conditions
	Water quality	Mitigating mobilization of soil via appropriate surface profiling	Mitigate erosion and suspended solids during periods of high precipitation.
	Dust Generation	Reclamation and organic cover replacement to accelerate re-vegetation	Suppress dust mobilization
	Overburden Dumps	Runoff and associated suspension of solids	Reclaiming open cast with 100% of overburden
			Mitigating mobilization of solids
Dump Sites	Solid waste	Backfilling of all dump sites as previously prescribed, profiling and placement of organic cover to enhance rapid forest regeneration.	Eliminating visual evidence of dump site
General Infrastructure		Demolition and removal of all buildings and plant infrastructure not negotiated for takeover by government or other alternative land use	Nil
		Post closure care and maintenance	

APPENDIX III: Main equipment and technical

① CJ160 Jaw crusher

Equipment Name	CJ 160 Jaw crusher
设备型号	CJ160
Quantity	1set
Use	Coarsely crusher
Capacity	When the discharge opening size is 150-250mm, the normal processing capacity of a single machine is 650-1340t/h
Feeding Size	Maximum feeding $\leq 1100\text{mm}$
Output Size	The maximum discharge particle size is less than 300mm, and the discharge port is adjustable
Packed feeding	To realize the lamination crushing, reduced energy consumption and large processing capacity.
Motor model	Power supply 50HZ,380V, level 6, power 315KW
Total equipment weight	81000KG
Lubrication	Fully automatic concentrated grease
Discharge port adjustment	Mechanical adjustment

Electrical control	Cabinet protection grade IP44 and above The crusher adopts soft start control cabinet
Performance description	The product complies with Q/ZKJ 010-2015" compound pendulum jaw crusher"

Product Structure Model:



② RC SERIES CONE CRUSHER

RC65-450 Cone crusher medium crushing technical parameters

Equipment Name	Rolling Bearing Single Cylinder Hydraulic Cone Crusher
Model	RC65-450
Use	1 Sets(production line corresponds to 4 fine crushing cone)
Quantity	Medium crush
Processing capacity	When the discharge opening size is 55-65mm, the normal processing capacity of a single machine is 900-1350t/h.
Feeding size	Less than 450mm
Output size	The maximum discharge particle size is less than 150mm, and the discharge port is adjustable.
Fill up feeding	Achieve laminate crushing, reduce energy consumption and increase processing capacity.
Motor model	Power supply 50hz, 380V, level 4, power 355KW, YONGFA Motor YJKZ400-4P
Total weight of machinery	48000KG
Hydraulic and lubrication	Including: oil tank, oil pump, motor, oil filter, cooler, electric heater, etc.
Functional requirements	1. The crusher has overload protection and over-iron protection during operation. 2. Functions such as automatic setting of the crusher discharge port and automatic compensation after liner

	wear.
Electrical control	1. The start and stop of the crusher host are controlled by a soft starter, PLC, and touch screen method. 2. The internal control of the crusher, including hydraulic pressure, lubrication, material level, discharge port, lining plate wear, etc., adopts PLC and touch screen to control the "automatic operation" of the crusher. It can monitor and record the hydraulic pressure, flow rate, oil temperature, discharge port size, host current, power, spindle displacement, etc. in real-time, and can automatically adjust the one click calibration of the discharge port and discharge port. 3. The protection level of the cabinet is IP44 or above. 4. The soft start and control cabinet of the crusher control room shall be provided by Party A
Performance Description	The product meets the enterprise standard for rolling bearing single cylinder hydraulic cone crusher (Q/ZKJ 002-2015)

Product Structure Model:





③ Technical parameters of RC65-150E cone crusher

Equipment Name	Rolling Bearing Single Cylinder Hydraulic Cone Crusher
Model	RC65-150E
Use	Fine crush
Quantity	4 Sets (production line corresponds to 1 medium crushing cone)
Processing Capacity	When the size of the discharge port is 22-35mm, the normal processing capacity of a single machine is 500-800t/h
Feeding Size	Less than 150mm

Output Size	The content of fine particles smaller than the discharge port shall not be less than 60%, and the discharge port can be adjusted
Fill Up Feeding	Realize laminated crushing, reduce energy consumption, and have large processing capacity.
Motor Model	Power supply 50Hz, 380V, level 4, power 355KW YJKZ400-4P Yongfa Motor
Total Weight of Equipment	48000KG
Hydraulic and Lubrication	Including: oil tank, oil pump, motor, oil filter, cooler, electric heater, etc
Functional Requirements	1. The crusher has overload protection and over iron protection during operation. 2. Automatic setting of crusher discharge port and automatic compensation after lining plate wear.
Electrical Control	1. The start and stop of the crusher host are controlled by a soft starter, PLC, and touch screen method. 2. The internal control of the crusher, including hydraulic pressure, lubrication, material level, discharge port, lining plate wear, etc., adopts PLC and touch screen to control the "automatic operation" of the crusher. It can monitor and record the hydraulic pressure, flow rate, oil temperature, discharge port size, host current, power, spindle displacement, etc. in real-time, and can automatically adjust the one click calibration of the discharge port and discharge port. 3. The protection level of the cabinet is IP44 or above. 4. The soft start and control cabinet of the crusher control room shall be provided by Party A
Performance Description	The product meets the enterprise standard for rolling bearing single cylinder hydraulic cone crusher (Q/ZKJ 002-2015)

Product Structure Model:



④ Technical parameters of 2YA3060 oil immersed vibrating s

Equipment Name	Oil Immersed Vibrating Screen
Model	2YA3060
Quantity	10
Use	Used for intermediate and fine crushing screening
Screen Mesh Area	18m ²
Screen Mesh layer	2
Mesh Size	Purchased by customer
Screen Type	Purchased by customer
Install Dip Angle	20°
Processing Capacity	250-800TPH
Amplitude	6-14mm
Vibration Frequency	748rpm
Lubrication Method	Thin oil lubrication
Motor Model	30, 380V, YEFF-30kw-6P
Total Weight of Equipment	12116KG
Driving Method	The belt pulley should be connected with a triangular belt between the driving motor and the screening machine to avoid direct transmission of vibration from the screening machine to the motor.

Performance Description	The product meets the enterprise standard for YA series circular vibrating screens (Q/ZKJ 008-2015).
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Product Structure Model:



① Technical parameters of 2Y2A3083 oil immersed vibrating screen

Equipment Name	Oil Immersed Vibrating Screen
Model	2Y2A3083
Quantity	2
Use	Used for intermediate and fine crushing screening
Screen Mesh Area	24.9m ²
Screen Mesh layer	2
Mesh Size	Purchased by customer
Screen Type	Purchased by customer
Install Dip Angle	20°
Processing Capacity	240-1160TPH
Amplitude	6-14mm
Vibration Frequency	748rpm
Lubrication Method	Thin oil lubrication
Motor Model	22*2, 380V, YEFF-22kw-6P
Total Weight of Equipment	18500KG
Driving Method	The belt pulley should be connected with a triangular belt between the driving motor and the screening machine to avoid direct transmission of vibration from the screening machine to the motor.

Performance Description	The product meets the enterprise standard for YA series circular vibrating screens (Q/ZKJ 008-2015).
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Product Structure Model:



② ZWS1865 Vibrating Feeder

Equipment Name	Vibrating Feeder
Model	ZWS1865
Quantity	1 Set
Use	Feed to jaw crusher
Groove Width	1800mm
Groove Length	6500mm
Processing Capacity	500-1200T/H
Maximum Feed Size Allowed	1000mm
Total Weight of Equipment	16000KG
Angle of Installation	12°
Installing Form	sitting type
Vibrational Frequency	983 times/min
Power	45KW,380V
Performance Specification	Products comply with Q/ZKJ 007-2015 "Vibration feeder enterprise Standard"

Single Fulcrum Static Load	$F_a 47000N$, $F_b 94000N$
Single Fulcrum Dynamic Load	$F_a \pm 35000N$, $F_b \pm 70000N$

Product Structure Model:



Construction machinery list

- ① Off-road truck : MT96L*4



- ② Volvo excavator : EC500ELHBC4*3



③ Loader : LW500FN*1



④ Crane : QY50KD*1

