

PROJECT SUMMARY

CONSTRUCTION AND OPERATION OF A WHARF AT JOP PROPERTY
INC/BAKER HUGES GUYANA SUPERCENTER IN LAND OF CANAAN

Project Type:	Construction of Wharf Facility
Project's Address:	'P' Land of Canaan, East Bank Demerara
Name of Developer (Executive Director):	Yodhia Persaud
Developer's Address:	9 Bel Air Gardens
Tel:	592 626 1503
email:	guygas1@gmail.com



**PROJECT
SUMMARY
CONSTRUCTION
OF A
WHARF FACILITY AT JOP PROPERT/
BAKER HUGHES GUYANA
SUPERCENTER IN LAND OF**

PROJECT SUMMARY

1.0 Introduction

JOP Property Holdings Inc. is a Guyanese company established on November 11th, 2004 under the Companies Act of Guyana (Section B), bearing company No. 5273. A copy of the certificate of incorporation can be seen in annex 1. The Company, under Executive Director, Mr. Yodhia Persaud (see annex 2 for a copy of ID), has been actively playing its part in supporting Guyana's offshore oil and gas activities by providing much needed onshore facilities, which have been rented to companies such as Baker Hughes. The Company's latest investment would have been the development of the Land of Canaan facility which is currently being rented to Baker Hughes for its Supercenter operation.

The new multimodal Supercenter at Land of Canaan has been built together with Baker Hughes' existing completion warehouse and liquid mud and completion fluids plant, providing full support to customers in Guyana and Suriname. It is located approximately 14 miles south of Guyana's Capital Georgetown, occupies roughly eight acres of land next to the Demerara river. Consisting of two buildings totaling almost 100,000 square feet, the Supercenter includes a workshop, warehouse, storage space, and maintenance facilities. The Supercenter represents a multimillion-dollar investment from Baker Hughes over 15 years and is expected to employ more than 100 Guyanese workers within the next few years.

Adding to this initial investment, JOP Property Holdings Inc. is now positioned to expand its facility at Land of Canaan via the construction of a wharf, which was a major factor in the initial choice of location for the facility, given the property's proximity to the Demerara River. This will facilitate river access that would allow the transition of products and supplies back and forth to the offshore operations, thus eliminating the need for road transportation and for a safer, cleaner and efficient operation since it will eliminate the risks associated with road transportation. In this regard, the company is preparing to construct the wharf facility along the water front boundary of its 12.560 acres Land of Canaan facility, east of the Demerara River. A copy of the survey plan can be observed in annex 3.

The wharf will sit directly in the Demerara River, approximately 63 Georgetown Datum (GD) from the high water mark along the western boundary of the property. The wharf will be 20 meters wide, with a 10 m wide ramp, by 240 meters long, covering a total area of 7,200 m².

All clearances have since been given for the development (including No objection from the NDC see annex 4), however it was advised that the company also seek approval from the Environmental Protection Agency (EPA), with regards to the necessary Environmental Authorisations/Permits, prior to the commencement of construction activities. The following therefore provides a synopsis of the proposed project for consideration. Attached also is an application for Environmental Authorisation.

1.1 Location of Project

The wharf will be constructed along the western river front boundary of the Baker Hughes Supercenter facility, located at Land of Canaan, East Bank Demerara. More specifically, according to the survey plan (Plan No. 77573) the location of the Baker Hughes Supercenter facility is described as Plot "YY", being portion of Tract "P" being part of lots "C" and "D" of the northern half of Plantation Land of Cannan, situated on the East Bank of Demerara. A copy of the survey plan is provided in appendix 3. A copy of the transport for the property is provided in annex 5.

Figure 1-1 provides a map showing the general location of the project area while figure 1-2 provides a drone image of the actual project area.

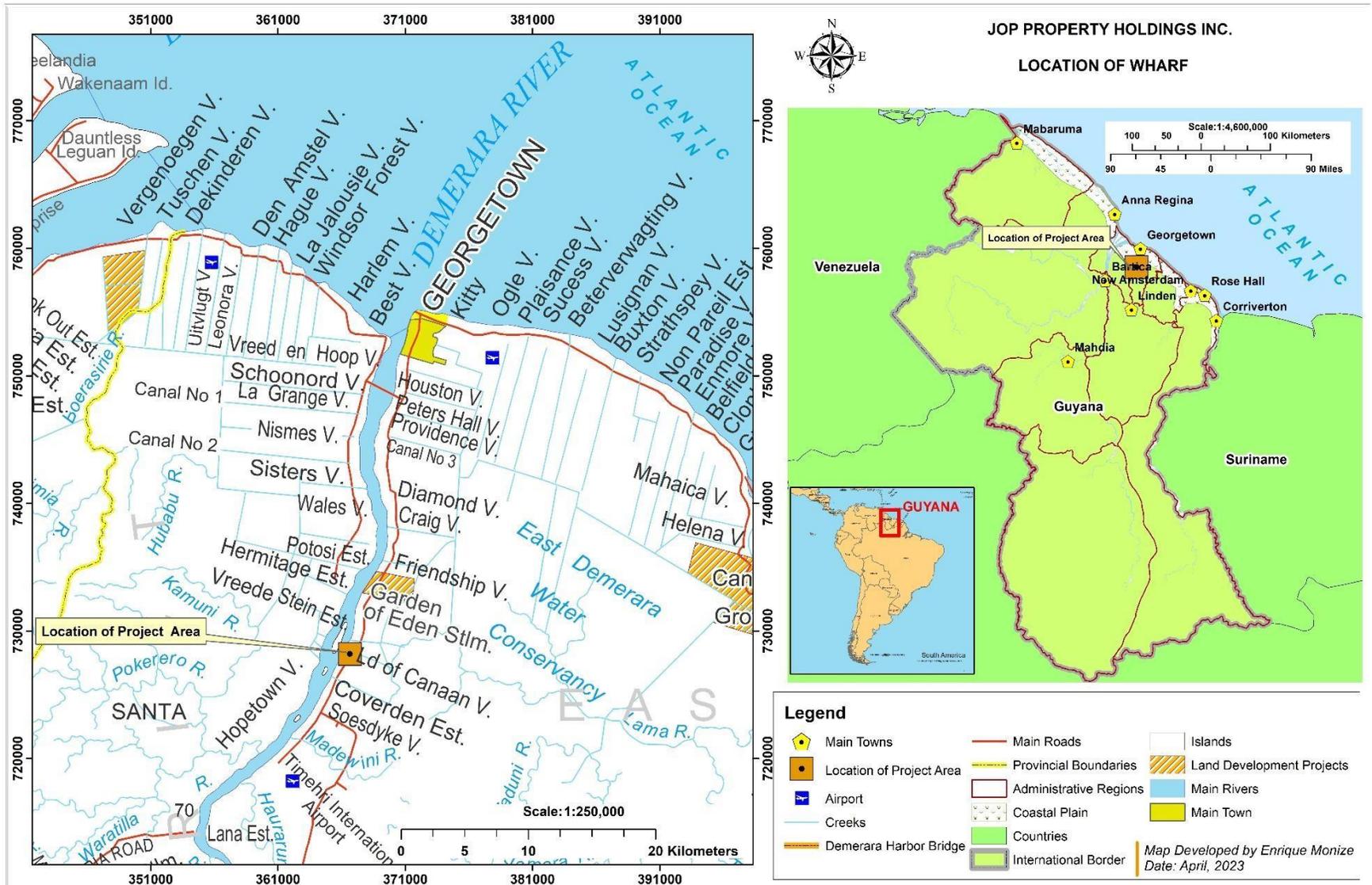
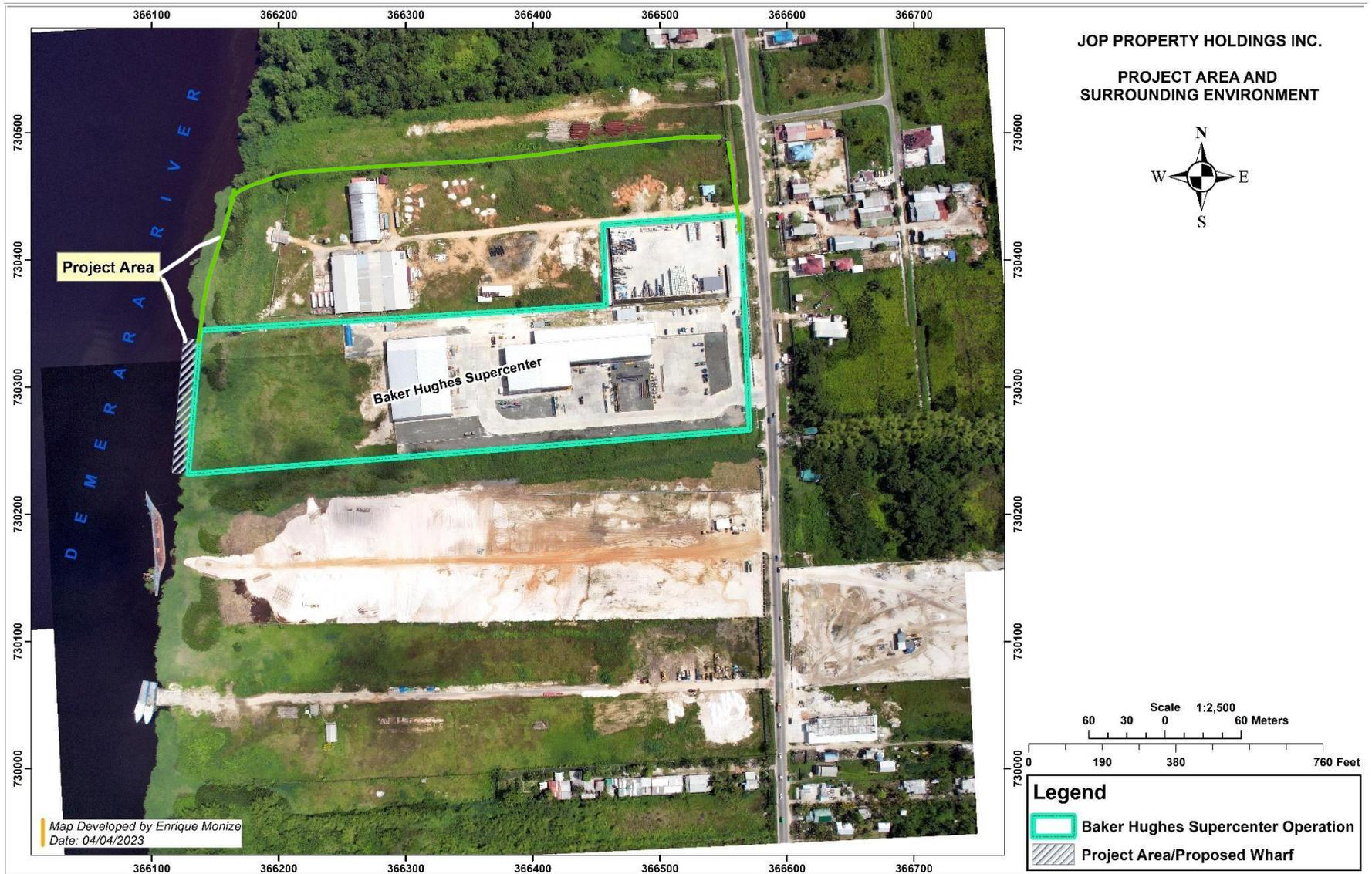


Figure 1-1: Location of Project Area.

Figure 1-2: Location of Project Area and Surround Environment



1.2 Description of the General Project Site and Land Uses

Land of Canaan is a community located on the right bank of the Demerara River, approximately 23 kilometres south of Georgetown. Land of Canaan is primarily accessible by road via the East Bank Demerara Public Road (Outridge, 2021). The proposed project site for the wharf falls along the western border of Tract 'P', Land of Canaan, East Bank Demerara. This property is currently being rented by Baher Hughes for its Guyana Supercenter facility.

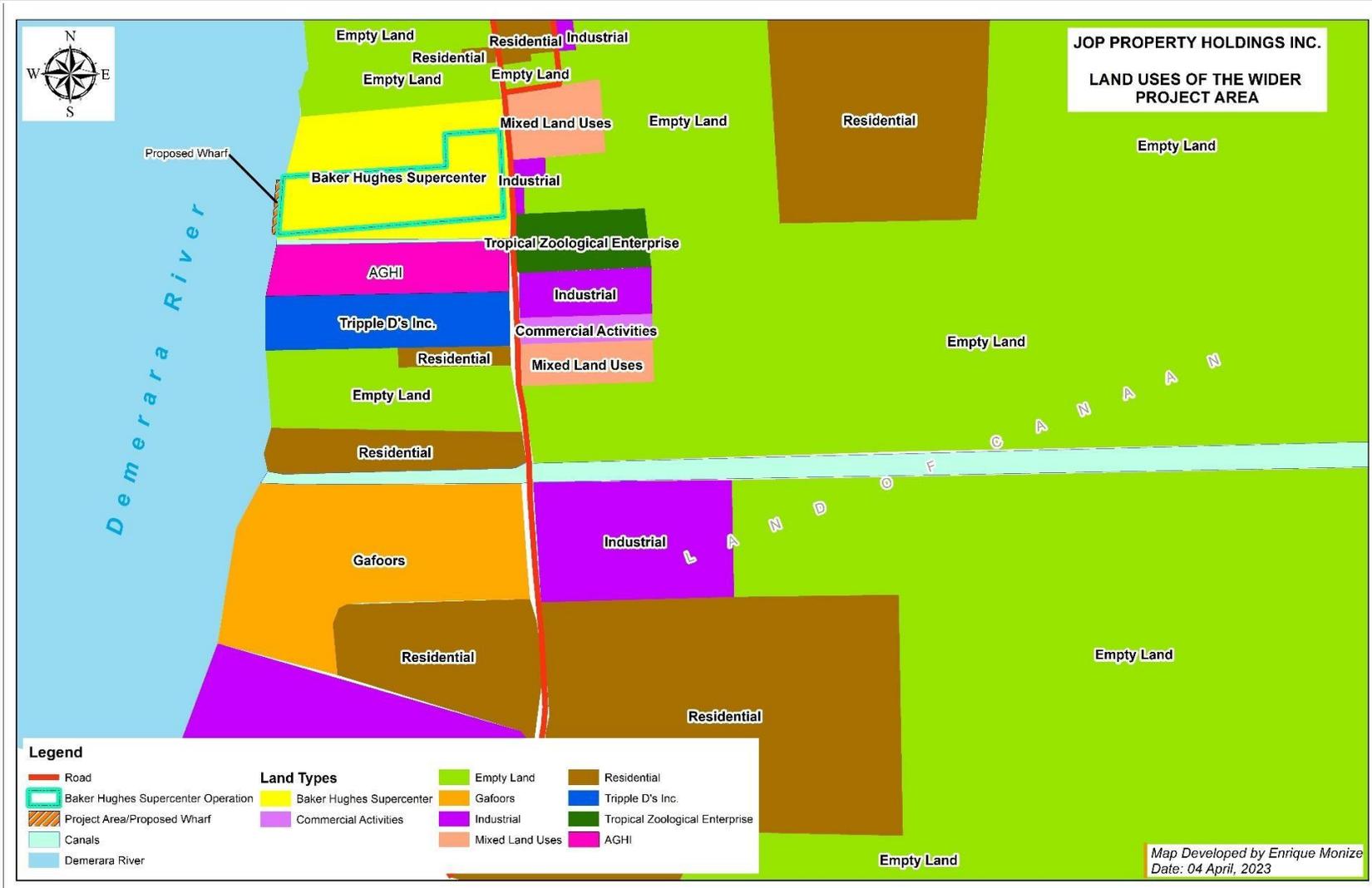
At present, Land of Canaan is one of the communities where there is significant industrial and commercial development (MoA 2015). In particular, there has been an increase in industrial and commercial activities within Land of Canaan due to the emerging oil and gas sector, and expanding building and infrastructure development sector. Principal amongst these activities are:

- Gafson's Industries Ltd (Gafsons Manufacturing Complex).
- Baker Hughes Supercenter
- GuyGas Inc.
- Gulf Engineering Services
- Demerara Bakery
- Two Brothers Service Station
- Falls Gas Station
- Canaan Fisheries
- Goodwill Enterprises Inc. - Battery Factory

There are also a number of forestry related operations including sawmills, wood processing operations and lumberyards such as Eco-Woods, A. Mazarally and Sons Lumberyard, and A. Family and Sons Lumberyard (MoA 2015). Therefore, the main economic activities in Land of Canaan are from small, medium and large-scale businesses, and to some extent agriculture including poultry and cash crop farming. As such, many persons residing within and around Land of Canaan are employed at the aforesaid companies.

The immediate project area is bounded by industrial developments (oil and gas sector related developments), namely Baker Hughes Supercenter, Avocat Guyana Holding Inc. and Tripple D's Equipment Rental Ltd, respectively. The project site is also bordered by the Demerara River to the west. The project site can be observed in Figure 1-2. Directly northeast of the public road (obliquely opposite the Baker Hughes Supercenter) is a flat concrete single family residential structure, and an elevated wooden structure (Security Office) at the entrance of a property leading to Hyde Park Zoo Sanctuary and Tropical Gardens Inc. Beyond the immediate project area, further south (and directly after Tripple D's Ltd. property) is Tropicano Zoological Enterprise, which comprises a strip of land accommodating small-scale residential and commercial building structures (wooden and or concrete). Similarly, beyond the immediate project area, further southeast (directly after Tripple D's Ltd. property and east of the EBD public road) are several single-family residential structures (elevated and flat structures made of concrete and or timber), several commercial businesses such as a convenience store, a dress shop and a bird cage making shop. Some homeowners themselves operate these businesses out of residential lots. A private residential housing scheme (West Amazon Community Housing Scheme) is currently being constructed in the Land of Canaan area about 1.3 km north of the project site. The land use of the wider and immediate project area is shown in Figure 1-3.

Figure 1-3: Land Uses Surrounding the Project Area



2.0 Project Description

2.1 Overview of Wharf Structure

The proposed wharf structure is to consist a reinforced concrete deck supported on prestressed precast concrete piles. The piles are to consist of cross-section dimensions 350mm x 350mm.

The wharf is assumed to not be subjected to any substantial lateral loads, with the berthing and mooring loads of vessels being absorbed by the fender piles located adjacent to the riverside edge of the wharf. These fenders are separate from the wharf structure, and should not contact the wharf at any time during wharf operations.

2.2 Wharf Deck Design Loads

2.2.1 Uniformly Distributed Loads (UDL)

The wharf deck will be designed to support a UDL of 50kPa over the entire deck surface.

2.2.2 Design Crane Loads

The design crane is considered to be a Hitachi Sumitomo SCX2500 250-ton hydraulic crawler crane, operating with a maximum boom length of 73m.

The maximum loading applied by this crane occurs during lifting operations, and as such several lifts were run utilizing the ground pressure simulator provided by the manufacturer in order to determine the maximum forces exerted on the wharf deck.

Table 2-1: Design Crane Properties

Design Crane	Track Length (m)	Shoe Width (m)	Self-Weight	Minimum Ground Pressure (kPa)
SCX2500	7.86	1.12	203t	115
Operational Loadings				
Design Crane	Lift Load	Lift Radius	Loaded Length of track	Max. Ground Pressure
SCX2500	250t	4.6m	7.86m	646kPa

2.3 Wharf Substructure Design

The substructure of the wharf design was based on two different investigations. An investigation in 2020 was focused inland of the wharf location, within the footprint of a structure to be constructed at this location. Figure 2-1 shows borehole locations relative to wharf.



Figure 2-1: Borehole locations relative to wharf (2020 Investigation)

The top elevation of these boreholes was not included in this investigation. Additionally, the depth of investigation was limited to 25m below the ground surface which limits the length of the foundation piling for the wharf structure.

The second investigation was conducted in 2022 within the footprint of the wharf, with boreholes extending to a depth of approximately 33m, and will form the primary basis for the design soil profile.

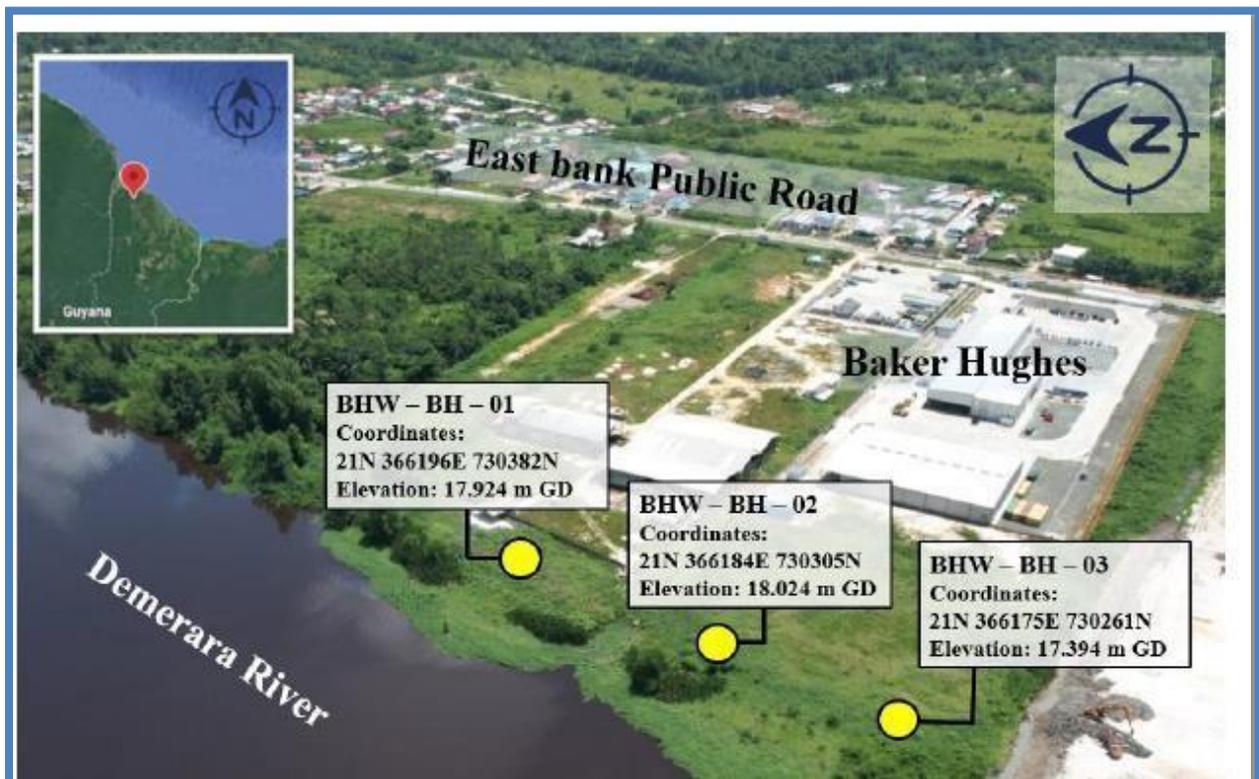


Figure 2-2: Borehole locations relative to wharf (2022 Investigation)

Both investigations utilized Shear Vane and Standard Penetration Tests as in situ testing methods, which allowed the datasets to be directly compared. It should be noted that the 2020 investigation included shear vane results for the upper soft clays with very low values, ranging from 3kPa to 9kPa, with identical results being presented for up to 9 consecutive tests in a single borehole.

These low values, alongside the repeated values with depth, are not considered a realistic dataset for this material. Extensive testing of this soft clay has occurred over the entirety of Coastal Guyana, and a typical soil profile exhibits significantly higher shear strength as well as a gradual increase in strength with depth.

As such, the data obtained in the 2022 investigation will be used as the primary basis for design considerations.

Based on these investigations, the wharf foundation piles are assumed to have a pile top elevation of 17.5mGD, which is consistent with the assumed wharf deck elevation of 18mGD to 18.5mGD. Additionally, these piles are considered to be located within the river channel, with the mudline considered to be at approximately 9mGD. This mudline elevation allows for considerable dredging to occur in the vicinity of the wharf while not compromising the wharf substructure.

2.4 Wharf Deck Structural Design – Crane Loading

The most critical loading for the wharf deck is expected to be the crane loads, and as such this load will be used in the initial design of the wharf deck.

The wharf deck will be designed as a flat slab supported on a 1.7m x 1.7m pile grid consisting of 350mm x 350mm concrete piles.

CSI SAFE software will be used for the analysis and design of the deck slab. The most critical location of the crane track will be at midway between two rows of piles, and such this is the loading condition analysed.

A clear distance of 2m is considered to be maintained from the position of the crane tracks and body during lifting operations. Within this area no substantial loads other than the crane itself is considered to be present.

Two crane orientations are considered;

- a) Crane Tracks Parallel to Channel
- b) Crane Tracks Perpendicular to channel

2.5 Wharf Design Summary

The wharf structure and design loads are summarized in Tables 2-2 and 2-3 below.

Table 2-2: Summary of Wharf Structure

Wharf Member	Description	Details
Foundation Piles	350mm x 350mm driven prestressed concrete piles	Pile length = 24m Pile grid = 1.7m x 1.7m
Deck Slab	600mm thick Reinforced Concrete Slab	Slab will include nominal shear connectors to foundation piles
	Bending Reinforcement	T25mm diameter bars at 150mm centres, both ways, top and bottom face
	Shear Reinforcement	T10mm diameter links at 300mm x 250mm centres

Table 2-3: Allowable Wharf Loads

Design Crane	Lift Load	Lift Radius	Remarks
SCX2500	250t	4.6m	2m clear distance required between the crane and wharf edge during lifting. 2m clear distance required between crane and any substantial wharf deck loads during lifting. No restrictions on crane orientation.
Allowable Uniformly Distributed Load on Wharf Deck = 5t/m ² (50kPa)			

2.6 Provisional Retaining Wall

A retaining structure may be required at the inland edge of the wharf in order to protect the river bank from erosion. This structure will be considered to be a cantilevered retaining wall consisting of Steel Sheet Piles.

Note that the design of this wall will be dependent on the onshore loading adjacent to the wall, as well as the difference in elevation between the upstream and downstream sides of the structure. This parameter will be confirmed for the structure, but a provisional design will be put forward utilizing assumed values as follows;

Retained Height = 3m

Upstream Loading =
10kPa

Note that this upstream loading is compatible with the movement of trucks and other wheeled vehicles nearby to the

In short, retaining wall will comprise 2m long sheet pile walls, with a retained height of 3m with nominal scour protection at base of wall. The maximum surcharge load on inland face of the wall = 10kPa over a distance of 6m. Surcharge Load on inland face of wall will maintain a clear distance of 2m at all times. A further 4m to be restricted to 10kPa loading or less.

The general layout plan of the wharf can be seen in annex 6.

2.7 Raw Materials

Raw materials will mainly include sand, concrete, stone, timber and concrete piles, prestressed concrete slabs, steel, etc.

2.8 Buildings

No permanent buildings will be constructed at the location during this time, however, there will be temporary work sheds and mobile offices established throughout the construction phase. These will be equipped with toilets attached to removable septic tanks which will be anchored into the ground.

2.9 Water Supply

Water will be supplied mainly by the Guyana Water Inc. (GWI) via the Baker Hughes Supercenter Facility.

2.10 Energy

The main source of power will come directly from the national grid, through the Guyana Power and Light Inc. (GPL). This will be supplemented during periods of power outages by a 10,000 running watts portable generator.

2.11 Project's Capital Investment

The capital investment for the project is expected to reach in excess of USD 25,000,000. Funds for the project will come directly from the Company's accounts and loans from commercial banks. Annual turnovers cannot be stated currently as the Company is yet to strike deals with interested investors/partners. The investment cost breakdown/estimate can be observed in the table2-4.

Table 2-4: Investment Cost Breakdown/Estimate

Investment Cost Breakdown (Estimate)		
Item	Description	Cost (USD)
	<u>PILING</u>	
1.1	Steel Sheet Pile Revetmentt	\$4,105,000
1.2	Concrete Piles	\$1,620,000
	<u>FENDER SYSTEM AND BOLLARDS</u>	
1.3	Fender System and Installation	\$350,000
	<u>SAND AND STONE COMPACTION</u>	
1.4	Crusher run, sand and stone fill materials	\$4,100,000
	<u>FABRICS</u>	
1.5	Geocell and geofabric installation	\$1,865,000
	<u>WASTE DISPOSAL</u>	
1.6	Waste disposal	\$656,000
	<u>DREDGING</u>	
1.7	Dredging	\$1,750,000
1.8	<u>PERIMETER FENCE</u>	\$350,000
1.9	<u>LAND DEVELOPMENT, ACCESS ROADS AND DRAINAGE</u>	\$2,000,000
1.10	<u>OFFICES AND BUILDINGS</u>	\$4,700,000
	<u>FEES</u>	
1.11	Insurances and Engineering Support	\$400,000
	Sub-total	\$21,896,000
	Add VAT (14%)	\$3,065,440
	TOTAL Inc. VAT	\$24,961,440

2.12 Possible Employment

The project is expected to provide direct employment to a minimum of about fifty (50) persons during the land preparation and construction phases. A larger number of persons is expected to be employed once the project commences operation phase, however this figure is not yet available.

3.0 Possible Environmental Impacts and Mitigation Measures

The table below provides a synopsis of impacts and mitigation measures that can be implemented to minimize negative impacts and also enhancement measures for those impacts which are positive.

3.1 Possible Impacts and Mitigation Measures

Impacts	Mitigation Measures
Increase noise levels	<ul style="list-style-type: none"> • Avoid night activities. • Ensure noisy equipment have adequate muffler device installed. • Noisy equipment, such as generator, will be enclosed using sound proofing materials, if necessary. • Protective equipment such as ear muffs or plugs will be provided to employees exposed to high noise levels.
Increase in particulate matter and Greenhouse Gas Emissions	<ul style="list-style-type: none"> • Sand stockpiles for construction will be soaked regularly during dry and windy conditions. • All workers will be provided with dust masks as part of their personal protective equipment (PPE). • Reduce load on generator by using energy efficient fixtures and equipment.
Increase pressure on solid waste system	<ul style="list-style-type: none"> • Removable septic systems will be for all temporary toilets. • Arrangements will be put in place for regular emptying of all septic systems by a private company. • Adequate receptacles will be put in place at strategic areas. • All construction waste and garbage will be collected by a private company for disposal at the Eccles Dumpsite.
Improved aesthetics and infrastructure	<ul style="list-style-type: none"> • Regular maintenance
Increased employment	<ul style="list-style-type: none"> • Provide both direct and indirect means of employment. • Regular training. • Nationwide advertisement of employment opportunities through popular mediums. • Work with the University of Guyana to create internship programs.
Increased opportunities for local businesses/suppliers	<ul style="list-style-type: none"> • Create linkages with service providers e.g. transportation. • Create direct linkages with local construction groups. • Create direct linkages with other such businesses for sharing of technologies.

3.2 Air Quality

- ❖ During Construction phase:
 - Dust emanating from grading of land for infrastructural works, mixing of concrete, sawing of timber and transporting or materials to site.
 - Smoke, soot (particulate matter), CO, CO₂, NO, SO₂ and volatile organic

compounds present in the exhaust fumes coming from heavy-duty construction equipment used at the site will affect

the quality of the air in the immediate surroundings. This can present potential risks for persons, particularly those with breathing challenges.

- If combustible construction wastes (cement bags, wood chips, form boards, etc.) are burnt on-site this can also release smoke which will present the same risks caused by bullet 2.
- On-site generator which will be used in event of blackouts, may release smoke, presenting same risks and impacts as discussed above.

❖ **Mitigation**

There is the possibility for dust pollution to occur as a result of construction activities. Dust pollution can be a significant health impact, particularly to employees since these impacts will be mostly localised. As such, there is the need to implement measures to prevent and minimize dust levels within the project area. Thus, the following measures will be implemented to reduce the impacts of dust:

- There is a variety of Personal Protective Equipment (PPE) available to combat dust nuisance. Workers will be equipped with the necessary PPE based on the type of work environment they are operating within. Personnel working within dusty environments will be required to use dust masks or respirators;
- During dry periods it will be necessary to soak the construction zone and routes where vehicles and equipment traverse in order to reduce dust pollution;
- Dry materials for land preparation will not be stockpiled for long periods, and will also be covered to prevent particles from becoming airborne;
- All vehicle loads transporting loose materials will be covered to minimize dust emissions; and
- Burning of waste onsite will be disallowed. This would reduce the amount of emissions into the atmosphere from burning;

3.3 Noise

- Heavy duty machinery and equipment will be utilized during the construction phase of the project, this can result in an increase in noise levels. Also, some construction activities are generally noisy. Although the project will result in increased levels of noise, the impacts will be localised and will not pose harm to any nearby community, since there is none within close proximity to the actual project site. It is also important to note that the project sits within an area that is quickly developing into shore base industrial activities and as such, will carry a higher noise level threshold to that of a residential community. Nevertheless, measures will be implemented to reduce noise levels to that recommended by the GNBS Guidelines for Noise Emission into the Environment specific to construction and industrial sites.

❖ **Mitigation**

As discussed above, the impact of noise from construction activities is not expected to be significant since there is minimal residence within close proximity, particularly downwind of the project. The need still exists to implement measures to prevent and minimize noise, especially as it relates to impacts to workers and other operations within the immediate surroundings. Compliance with the GNBS limits is therefore necessary to ensure the impacts on the environment and human health, particularly for workers, are reduced. The following measures will be implemented to reduce the impacts of noise:

- The provision and monitoring of use of Personal Protective Equipment (PPE) is critical. Workers will be equipped with the necessary PPE to mitigate noise

pollution. Hearing protection for employees exposed to high noise levels: ear muffs and earplugs for employees who operate heavy-duty machines/equipment will be provided;

- Control of noise levels at source will be done through installation of mufflers and silencers on exhaust system, particularly for generators;
- Noisy activities will not be conducted during the night or on Sundays and Holidays;

- Noisy equipment such as generators will be sited away from work sites and also be enclosed if needs be. This would reduce the amount of noise escaping into the environment and the impacts to workers;
- Warning signs will be erected in areas of high noise levels instructing employees to wear earmuffs or earplugs as required;
- Machinery and equipment will be serviced regularly with the necessary silencer installed wherever possible.

3.4 Soil

Impacts to soil will be unavoidable but would not cause any impact to the environment, but would rather enhance the area by the prevention of erosion. No mitigation measures will therefore be required.

3.5 Water Resources

- Discharge of waste-water from operations into the external drainage systems can pose risks to the environment.
- Dissolved nutrients in waste-water may cause eutrophication in these water bodies, which can lead to a proliferation of weeds, algal bloom and ultimately depletion of dissolved oxygen in the water and impeded drainage capacity.
- There will be less interception and percolation of rainfall water as a result of the structure and other concrete and bituminous surfaces and therefore increased surface run-off. This will lead to more surface water entering the drainage canals at a higher rate, requiring more rapid discharge capacity.
- The operational phase is likely to produce high levels of oil and grease which, if enters into the main drainage system can cause some amount of degradation.

❖ *Mitigation*

All waste-water will be collected via internal concrete drains. Oil and grease traps will be installed at each outlet point. Where necessary, soakaway systems will be built to drain both black and gray waters. Other measures to reduce the associated impacts on the water resources will include the following:

- No dumping of solid waste into drainage system. All waste will be managed in an acceptable manner.
- Ensuring that fuel is managed and stored in a recommended manner;
- Ensuring that waste oil, hydraulic fluid and other oil base substances are collected using drip trays and other spill prevention mechanisms so as to prevent spills which can lead to water contamination.
- Ensuring that all oil and grease base substances are stored in sealed containers of which are then kept in an enclosed environment with an impermeable base.

3.6 Fuel, Lubricants and Chemicals Management

Improper handling and management of fuel and lubricants can result in soil and water contamination. Fuel and lubricants are classified as hazardous materials and require special consideration in terms of transportation, storage and handling. In addition to contamination, the improper use, storage and handling of these substances can pose various threats to the workers on site as well as surrounding communities.

Due to the nature of the project, minimal amounts of fuel would be required per day, as such, these will be brought to site on a daily basis as needed. The project is not expected to require the use of lubricants and chemicals. Lubricants which are required for heavy duty machine and

equipment will be provided during servicing. Nevertheless, if these are to be stored on site, for any reason, it is important for them to be stored properly, as they can ignite and release dangerous fumes. All fuel, lubricants and chemicals (if used) will be clearly labelled and easily identified to reduce the chances of misuse. In addition, all workers handling these substances will be required to wear the necessary PPE to prevent any unwanted contact with these hazardous substances.

❖ **Mitigation**

Fuel, lubricants and chemicals can have serious impacts on the surrounding environment if special consideration is not given to the transportation, handling and storage of these substances. To reduce the risks on the environment and human health, preventative actions will be taken and/or mitigation measures implemented. The contractor and subcontractors will therefore be required to implement the following measures to prevent and or reduce the impacts of these hazardous substances on the environment, in particular, contamination soil and water from accidents and/or spills:

- Efforts will be made to transport fuel to the work area as needed. This would minimize the need to store large quantities of fuel onsite. Small quantities of fuel onsite will minimize the possibility of spillage and also minimize the impacts if spillage do occur;
- If required, the storage of fuel, lubricants and chemicals onsite will be done at a safe distance from drains, offices and work zone and will be placed higher than ground level to detect any leaks. Storage will be also be done within a bunded area with an impervious surface and a secondary containment with the capacity of 110% of the largest storage container. Such measure is important as the containment berm would prevent any spill from getting into the surrounding environment and the elevated storage would allow for easy and early detection of leaks on the storage container;
- Preventative measures such as adequate signage, fire extinguishers and/or sand buckets will be placed in and around the fuel storage area. The type of fuel stored in containers will be indicated and signage will include 'No Smoking' and Highly Flammable'. This would warn persons of the dangers of the substances as well as how they should handle these substances;

3.7 Waste Management

This project will generate a fair amount of construction waste. If such wastes are not managed properly, they can end up into the Demerara River. In addition, waste such as tyres can become breeding grounds for mosquitoes, consequently impacting the health of workers and residents if not disposed properly. The disposal of hazardous substances such as waste oil, hydraulic fluid etc. is also important as these can contaminate the work site and also affect workers health and safety.

❖ **Mitigation**

As mentioned above, proper waste handling and disposal is important during the project's construction phase. Several waste streams will exist, including domestic garbage which usually consists of a mix of bottles, bags, cans, boxes, plant residues, excess food and packaging material and paper. In addition, liquid waste will also be generated including sewage waste and waste water from sanitary facilities. Finally, hazardous waste may also be present in the project area; these include used batteries, tyres, waste oil, filters, oil containers and contaminated soils. Outlined below are various techniques that will be implemented to properly dispose waste associated with the project. These measures will be considered in the preparation of a Waste Management Plan which will be developed for the general construction of the facility:

- Liquid Waste
 - As noted, all liquid waste will be collected via PVC pipes and channelled to a series of soakaways so as to prevent direct discharge into the external drainage system or most importantly, the Demerara River.

- Solid Waste
 - All solid waste generate onsite will be disposed of at the Eccles approved landfill site by a waste disposal company.
 - The Company will ensure that the work area is kept tidy at all times, preventing waste from accumulating and polluting the surroundings;

- Excavated materials will be properly stored and covered where possible.
- Hazardous Waste
 - Waste oil generated from the equipment repairs or servicing will be collected and stored in sealed containers or drums in a designated area and disposed of in a safe and acceptable manner. In some cases, waste oil and other greasy substances would be given to chainsaw operators and farmers to be used on agriculture equipment.
 - Used tyres that are not needed, will be removed from the worksite and disposed of appropriately.

4.0 General Health and Safety Concerns

Like any other undertakings, the project is likely to have several health and safety concerns both during construction and during operation. Related activities can impact on the health and safety of workers and the general public. The operations will involve the use of several pieces of heavy duty equipment. Given this type of operation, health and safety is always a major concern. Workers would be exposed to situations which can result in serious accidents, some of which can be fatal. Risks can involve accidents from the use of heavy duty equipment, exposure to noisy equipment or general improper use of equipment, etc.

4.1 Health and Safety Measures

The following measures will be implemented as best as possible so as to ensure that the health and safety of workers and other personnel or land users are not compromised:

- The Company will comply with industrial and international best practices standards so as to ensure that health and safety issues are prevented.
- An Occupational Health and Safety Officer will be employed to oversee health and safety matters through the construction phase.
- Adequate safety gear and PPE relevant to the job will be provided to all workers.
- Required warning signs will be installed at the facility.
- Workers will be trained regarding their work, especially those working in hazardous conditions.
- Emergency response equipment/measures to respond to emergencies including fire, accidents, spills, etc., will be provided.
- An emergency boat will be provided on site at all times, in case persons accidentally fall into the river while working on the wharf.

5.0 Environmental Compliance

The developer intends to comply with all regulations and guidelines prescribed by the EPA as well as, those prescribed by other governmental entities, in all efforts to ensure that good environmental and industrial practices are maintained throughout the various phases of this operation.

Annex 1 – Copy of Certificate of Incorporation

FORM 2

5273
Company No.

COMPANIES ACT OF GUYANA
(Section B)

CERTIFICATE OF INCORPORATION

**JOP PROPERTY
HOLDINGS INC.**

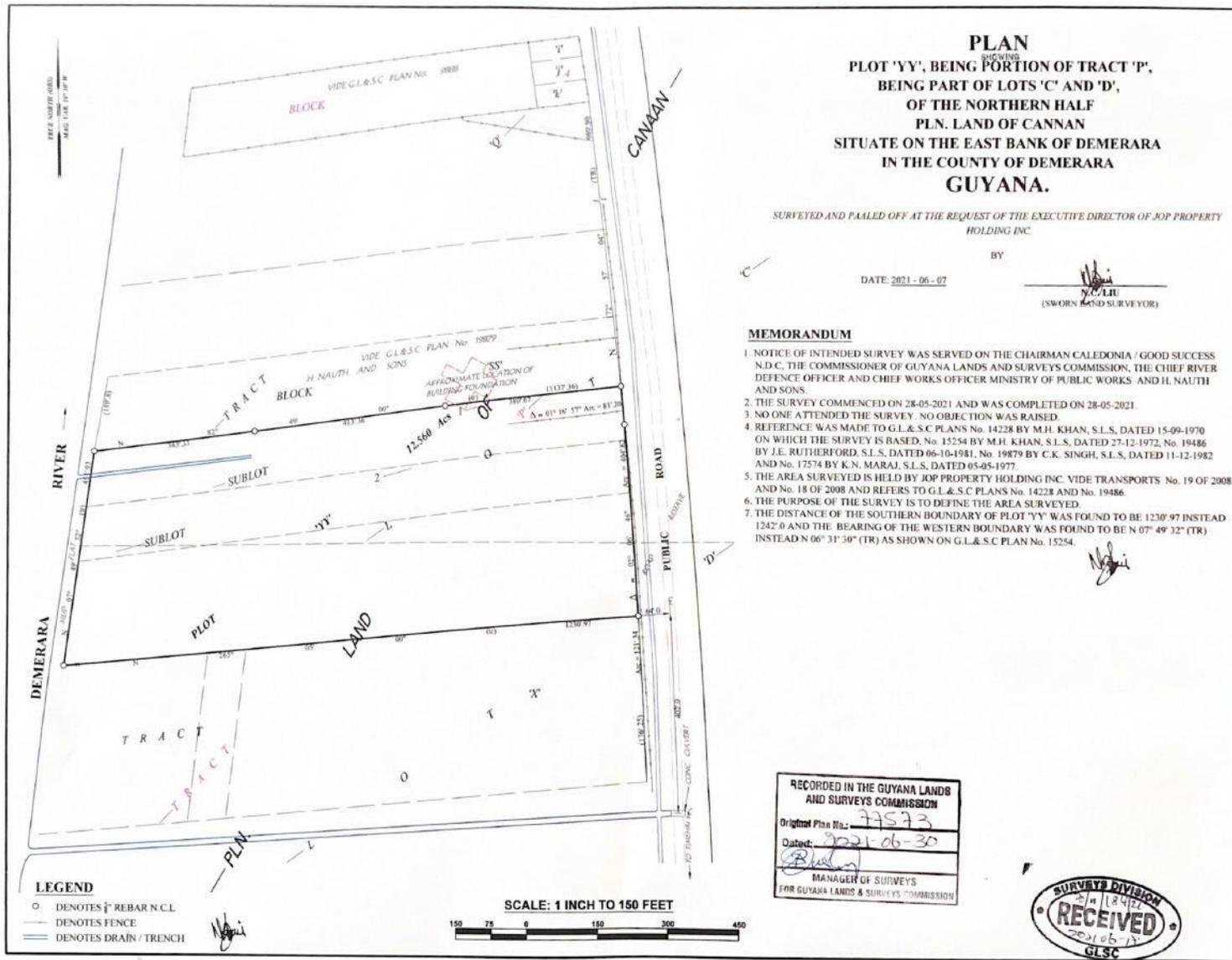
I hereby certify that the above-mentioned Company, the Articles of Incorporation of which are attached, was incorporated under the Companies Act of Guyana.



[Signature]
Registrar of Companies

11th November 2014
Date of Incorporation

Annex 3 – Copy of the Survey Plan



Appendix 4 – NDC No Objection Letter

Caledonia - Good Success Neighbourhood Democratic Council

Lot 401 School Street Craig, East Bank Demerara

Tel#: 592- 266- 2239

Email Address: cgndc@gmail.com



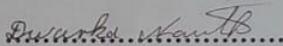
February 04, 2022

TO WHOM IT MAY CONCERN

This is to certify that the Caledonia/Good-Success Neighborhood Democratic Council has NO OBJECTION for JOP PROPERTY HOLDINGS INC. to construct and operate a Wharf Facility at Tract Lettered 'P' Land of Canaan, East Bank Demerara, in the Caledonia/Good-Success Neighborhood Democratic Council District for the mooring of ships and other related activities. This NO OBJECTION is hereby issued on conditions of the adherence to the rules and regulations of all the relevant agencies.

All for your information and guidance.

Yours Sincerely,



Dwarka Nauth

Chairman

Chairman Caledonia- Good
Success
NDC

Appendix 5 – Copy of Transport for Property

19/2008

Receipt No. 3H 855695

Fee \$ 700,000.00

Duty \$ 2,800,000.00

Transport.

29. 80. 07.
12.

Guyana,
County of DEMERARA

Before *Carolyn Paul* (a9) —

Registrar of Deeds of Guyana aforesaid

Be it known that on this day the 4th

day of *January* in the Year Two Thousand
and *eight* appeared

RANDULPH RAMBARRAN of 5 Nandy Park, Peters Hall, East bank
Demerara, Guyana.



which appearer declared by these presents to Cede, Transport, and in full
and free property to make over to and in favour of JOP PROPERTY HOLDINGS INC.,
a Company registered under the Companies Act of Guyana of 1991
and whose registered office is situate at 1 Croal Street,
Georgetown, Guyana, its representatives and assigns.

Tract lettered 'P', being part of lots lettered 'C' and 'D', in the northern half of Plantation Land of Canaan, in the Craig-Caledonia Village District, situate on the east bank of the Demerara river, in the County of Demerara, in the Republic of Guyana, save and except tract lettered 'X' containing an area of 10 (ten) acres being shown on a plan by M.H. Khan, Sworn Land Surveyor, dated the 27th December, 1972 and deposited in the Deeds Registry on the 21st February, 1973, transported to Derek Kore Devonish by Transport No. 715 dated 7th May, 1973, and also save and except 2 (two) sublots containing areas of 3.008 (three decimal nought nought eight) and 3.004 (three decimal nought nought four) acres respectively and being shown on a plan by J.E. Rutherford, Sworn Land Surveyor, dated the 6th October, 1981 and deposited in the Deeds Registry on the 31st December, 1982, the said Plantation being shown on a diagram by E.C.H. Klautky, Sworn Land Surveyor, dated the 30th July, 1910 and deposited in the Deeds Registry on the 15th July, 1916, the said lots lettered 'C' and 'D' being shown on a plan by Sugren A. Nehaul, Sworn Land Surveyor, dated the 5th November, 1957 and deposited in the Deeds Registry on the 27th November, 1957, the said tract lettered 'D' containing an area of 22.729 (two two decimal seven two nine) acres and being shown on a plan by M.H. Khan, Sworn Land Surveyor, dated the 15th September, 1970 and deposited in the Deeds Registry on the 12th January, 1973 and the said tract lettered 'X' containing an area of 10 (ten) acres and being shown on a plan by M.H. Khan, Sworn Land Surveyor, dated the 27th December, 1972 and deposited in the Deeds Registry on the 21st February, 1973, no building and erections thereon

SECONDLY:

sublots numbered 1 (one) and 2 (two) being parts of tract lettered 'P' being part of lots lettered 'C' and 'D', in the northern half of Plantation Land of Canaan, in the Craig-Caledonia Village District, situate on the east bank of the Demerara river, in the County of Demerara, in the Republic of Guyana, the said lots lettered 'C' and 'D' being shown on a plan by Sugren A. Nehaul, Sworn Land Surveyor, dated the 5th November, 1957 and deposited in the Deeds Registry on the 27th November, 1957, the said tract lettered 'P' containing an area of 22.729 (two two decimal seven two nine) acres and being shown on a plan by M.H. Khan, Sworn Land Surveyor, dated the 15th September, 1970 and deposited in the Deeds Registry on the 12th January, 1973, the said sublots containing areas of 3.008 (three decimal nought nought eight) and 3.004 (three decimal nought nought four) acres, respectively and being shown on a plan by J.E. Rutherford, Sworn Land Surveyor, dated the 6th October, 1981, and deposited in the Deeds Registry on the 31st December, 1982, no building and erections thereon

Being of the value of ONE HUNDRED AND FORTY MILLION
Dollars of the current money of Guyana aforesaid
transported on the 10th March, 1995 - No. 273
The appearer acknowledging to be fully paid and satisfied for the same.

And appeared at the same time *Natalia Rosand, Director/Santa*
to and on behalf of Top Property Holding Inc.



who declared to accept of the foregoing Transport and to be satisfied therewith.

In testimony whereof the parties have hereunto set their hands and *P*
I, the said Registrar of Deeds, together with the Transport Clerk,
have countersigned the same, the day and year first above written.
The seal of the Court being affixed hereto.

The original of which this is a true copy is duly signed.

Quod Attestor

[L.S.]

P

[Signature]
Asst Sworn Clerk and Notary Public.
2008/1/28

Annex 6: General Layout of the Wharf

