

Project summary

WILLIAM AGGREGATES & HARDWARE
SUPPLY

July 2025

CEDRIC WILLIAMS| TRACK 'N' SECTION B, LOT 12-14 FRIENDSHIP,
EAST BANK DEMERARA

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1.0 Background

William Aggregates and Hardware Supplies has applied to the Environmental Protection Agency (EPA) for an Environmental Permit to support the development and operation of a multi-purpose facility. The proposed components of the facility include a wharf for mooring hardware supply vessels, an administrative office, a storage bond/silo for cement and hardware supplies, a heavy-duty scale with an operation room, and a stockpile area for aggregates such as sand, stone, and loam. The existing wharf at the project site will be operationalized through the construction of supporting infrastructure on the adjoining property.

The facility will be situated at Lot 12–14 Friendship, East Bank Demerara, with GPS coordinates 6°40'05.4" N and 58°11'14.0" W (refer to the site map in Appendix 1). Upon completion, the site will accommodate the storage and sale of cement, hardware materials, and aggregates. The facility is designed to serve both local and international suppliers and customers. Access to the facility will be available via land through the East Bank Public Road and via the Demerara River, allowing for efficient transport and logistics support.

Operations are expected to run six days per week from 08:00 hours to 17:00 hours, with an anticipated operational lifespan of 75 to 99 years. The project site is located within a transport property area and has obtained all relevant regulatory approvals. These include a no-objection from the Central Housing and Planning Authority (CHPA), the Caledonia/Good Success Neighbourhood Democratic Council (NDC), and the Maritime Administration. Additionally, the business has a valid registration to support the intended commercial activities.

2.0 Project site

William Aggregates and Hardware Supplies operates on 2.0155 acres of transported land located in a predominantly commercial and industrial zone. The project site features an existing wharf measuring approximately 60 feet by 30 feet in width and 120 feet by 30 feet in length. This wharf will be fully operationalized with the construction of several key structures, including an administrative building (approximately 30 feet by 50 feet), a storage bond/silo for cement and hardware supplies, a heavy-duty scale with an operations room, and a designated stockpile area for aggregates such as sand, stone, and loam.

The site offers dual access, by land through the East Bank access road on the eastern boundary and by water via the Demerara River to the west. To the south of the facility, a concrete drain facilitates stormwater management. This drainage system will be modified to include sediment settling chambers/traps to treat wastewater. Smaller drainage systems will be strategically constructed to direct stormwater, wastewater, and cement slurry to the primary onsite drainage system, which subsequently drains into the Demerara River.

The surrounding area supports a mix of industrial and commercial activities, including a ready-mix concrete facility immediately south of the site. The project area is also bordered by a single residential house to the north, the East Bank access road to the east, and the Demerara River to the west.

3.0 Project Description and Design

- **Construction of Adjoining Building**

The building to be constructed on the land adjoining the existing wharf will serve as the central hub for the storage and sale of cement, hardware supplies, and aggregates. This structure will be built primarily from concrete with wood finishing, utilizing raw materials such as steel, cement, and aggregate. The construction team will comprise approximately

15–20 skilled workers. The building's design is tailored to support the operational requirements of the facility (refer to Site Plan in Appendix 2).

The construction will be executed in three phases:

1. Phase One – Construction of the foundation for administrative building with adjoining cement bond/silo, hardware store and operating room.
2. Phase Two – Erection of structural columns and blockwork. Paving of driveway and aggregate storage area. Construction of the drainage network and upgrade of primary drainage to include sediment chambers/traps.
3. Phase Three – Installation of the roof, construction of internal office spaces, and furnishing of the administrative areas. Setting up the control room, machinery, equipment, and conveyor system for the loading of aggregates onto marine vessels.

- **Fuel storage and management**

Approximately 500 gallons of diesel fuel will be stored on-site for the operation and maintenance of the machinery. Given its hazardous nature, the proposed storage and management protocols will include:

Storage

- The diesel will be stored in clearly labeled, sealed, and approved containers (metal or HDPE) designed for flammable liquids.
- It will be kept in a well-ventilated, secure, and shaded area, away from direct sunlight, ignition sources, and high-traffic areas within the facility
- The containers will be placed on an impermeable surface with a small secondary containment (110% of the largest container volume) to catch any spills in keeping with EPA guidelines.

Management

- A log will be maintained for fuel use and inspection.

- The facility will be equipped with spill kits, including absorbent pads.
- The relevant employees will be trained on safe handling, first aid, and emergency procedures.

- **Storage and Management of Waste Oil**

Waste oil is hazardous waste and therefore will be managed and stored as follows:

- Waste oil will be stored separately from the non-hazardous waste in labelled drums on an impermeable surface.
- It will be treated and disposed of following the specifications on the item and the EPA's Hazardous Waste Regulations 2000.
- There will be spill kits on-site equipped to clean up any accidental spills; the materials, including adsorbent pads, will be disposed of in an appropriate hazardous waste bin. Disposal will be conducted by an EPA-authorized company.
- Employees will wear protective gear when handling hazardous materials and waste.
- The company will maintain a hazardous waste log.

- **Operation of the facility**

Dislodging of aggregates

- The truck bed will be inspected to ensure it's clear of obstructions and the tailgate is functioning properly.
- Trucks will be parked on a level, stable surface to prevent tipping or rolling.
- Designated unloading areas with proper drainage and containment will be utilized.
- Hydraulic tipping will be used to allow gravity to assist in unloading safely.

- Vibrators or mechanical aids (e.g., bed shakers) to loosen stuck material will be used if necessary.
- The unloading area will be inspected for spillage and all residual materials cleaned.

- **Revetment work**

The existing wharf is currently structurally sound; however, it will be subject to ongoing monitoring throughout the implementation of the project. Revetment works will be carried out as necessary, based on the results of these assessments.

- **Safety Equipment**

In compliance with the Guyana Fire Service's guidelines, the facility will be equipped with fire safety systems, including extinguishers, fire buckets, and displayed safety signage.

- **Environmental Compliance**

Environmental management measures will be implemented to ensure regulatory compliance. These include the maintenance and cleaning of an interceptor drain, strategic placement of garbage receptacles per the Environmental Protection (Litter Enforcement) Regulations 2013, and the use of certified waste disposal services. The facility will maintain high standards of cleanliness, sanitation, and hygiene. Additionally, fire protection systems and a spill clean-up kit will be readily available for emergency use.

- **Security Measures**

The site will be secured with a comprehensive security system, including lighting, surveillance cameras, and alarm systems to prevent theft, vandalism, and unauthorized access. The premises will be fully fenced and illuminated, with 24-hour security personnel on-site.

- **Staffing and Training**

The facility will employ experienced personnel who will also undergo on-site training specific to their roles. All staff will be trained in environmental best practices, including emergency response procedures.

- **Inspections and Maintenance**

Routine inspections and maintenance will be conducted to ensure the safe and efficient operation of the facility. Regulatory bodies with jurisdiction over the operation will also carry out periodic monitoring and audits.

- **Additional Provisions**

The project site will include designated parking facilities to accommodate staff and visitors.

4.0 Sources of Utility

Utilities

- **Electricity**

Electricity for the facility will be supplied by Guyana Power and Light (GPL) to support operational needs.

- **Water Supply**

Potable water will be provided by Guyana Water Inc. (GWI). In addition, the facility will be equipped with water storage tanks to ensure a continuous supply. Water pipes will be strategically installed to distribute water throughout the site efficiently.

- **Communication**

Telephone and internet services will be facilitated by one of the local telecommunications providers to support administrative and operational communications.

Waste Management

The facility will generate the following categories of waste:

- **Construction and operational Waste**

Includes:

- Scrap steel and wood
- Cement bags and plastic packaging
- Wooden pallets
- Paint residues and construction materials

- **Solid Waste**

Generated from daily operations, including:

- Snack packaging and food waste
- Disposable cups, plates, food boxes, and wrappers
- Office waste (e.g., paper, used stationery)
- Washroom disposables (e.g., paper towels)

- **Sewage/Grey Water**

- Wastewater from toilets and sinks will be managed through appropriate sanitation systems.

- **Hazardous Waste**

- Cement packaging and residues
- Used oils and lubricants from heavy-duty machinery and equipment

5.0 non-technical explanation

Williams Aggregates and Hardware Supplies proposes the construction of a multi-functional facility comprising an administrative building, a cement and hardware storage

bond, a heavy-duty scale with an operating room, and a designated stockpile area for aggregates such as sand, stone, and loam. The development will be located on 2.0155 acres of land adjacent to the existing wharf.

The facility will support the storage and sale of cement, hardware items, and aggregates. It is designed to accommodate both local and international suppliers and customers, with accessibility by land and via the Demerara River. The adjoining wharf will enable the mooring of supply vessels, thereby supporting marine logistics.

Operations are expected to run daily from 08:00 to 17:00 hours and will primarily involve mechanical processes. Trained heavy-duty equipment operators and laborers will manage the day-to-day handling of materials.

The company is committed to complying with all relevant local standards and regulations, including the guidelines and procedures established by regulatory agencies such as the Environmental Protection Agency (EPA) and the Central Housing and Planning Authority (CH&PA).

The proposed site is situated within a predominantly commercial and industrial zone. Since the wharf infrastructure is already established, the project will not require extensive land clearing or excavation.

Approximately 15–20 workers will be engaged during the construction phase, and 20–25 employees will be employed during the facility’s operational phase.

6.0 Duration of the Project

The operation of the project is expected to be sustained for an extended time period, approximately 75-100 years.

7.0 Potential Environmental Impacts and Mitigation

Operation of the William Aggregates and Hardware Supplies

Potential impact	Activities	Mitigation Measures
Environmental and Social Impacts		
Soil Contamination	<ul style="list-style-type: none"> • Aggregate or cement spills, which can contaminate soil and nearby water bodies • Affect groundwater quality and marine ecosystems, particularly around the Wharf. 	<ul style="list-style-type: none"> • Store on a concrete surface • Implement sediment control • Ensure the land has good drainage
Oil spills	<ul style="list-style-type: none"> • Oil spills from leakage or accidents • Any spills in the marine environment could have long-lasting impacts on marine life, fisheries, and tourism. 	<ul style="list-style-type: none"> • Establish Standard Operating Procedure (SOP) for managing both marine vessels and land transportation. • Erect signage outlining spill clean-up procedures and safety signs. • Prominently display emergency contacts at all times. • Ensure appropriate clean-up equipment such as spill trays, dispersant spray system or sorbent pads etc. are available.

Air Emission

- Emissions from construction machinery, transportation of materials
- Dust and Particulate matter during construction and operation
- Dust from aggregates
- Emissions from heavy-duty machinery during operation
- Wet suppression methods, such as water spraying, will be applied regularly on exposed surfaces, storage piles, and during loading/unloading activities to control dust.
- Appropriate tools and machinery will be used for all operations, and regular maintenance will be conducted to ensure efficient, low-emission performance.
- Windbreaks/ barriers will be installed around storage areas.
- Stockpiles will be covered with tarps when not in use.
- Aggregates will be stored on a concrete base, and access

	<p>roads will be paved to reduce emissions.</p> <ul style="list-style-type: none"> • The storage areas will be contained with boundary walls to reduce material loss and spillage.
<p>Water pollution</p> <ul style="list-style-type: none"> • Runoff carrying cement, oil, or other contaminants • Accidents during loading and offloading 	<ul style="list-style-type: none"> • Store cement and other materials safely following specifications <p>Cement will be stored in enclosed bond/silo, reducing the risk of exposure to wind and water, and preventing contamination of runoff.</p> <ul style="list-style-type: none"> • Ensure an efficient mooring system for marine vessels • Erect safety signs • Employ trained personnel • Drainage network will be designed to allow for run off into primary drainage with sediment chambers/traps to

		<p>reduce turbidity and allow for settling before final discharge</p>
<p>Noise/vibration emissions</p>	<ul style="list-style-type: none"> • Construction activities often generate significant noise, which can disturb people and wildlife, particularly sensitive marine species such as fish. • Noise from vehicles, mooring vessels, and the use of heavy-duty equipment 	<ul style="list-style-type: none"> • Apply sound attenuation for noisy activities. • Adhere to GNBS guidelines for noise emission for this type of operation. • Provide PPEs to workers • Erect signage for safety and good environmental practices
<p>Habitat Disruption</p>	<ul style="list-style-type: none"> • The operation of the Wharf may lead to habitat disruption for marine species such as fish and shorebirds 	<ul style="list-style-type: none"> • Monitor and stagger the mooring of marine vessels as required • Implement systems to reduce accidents and spillage of cement or aggregates into the waterways

Improper Waste Management	<ul style="list-style-type: none"> • Improper disposal of construction and operational waste • Improper management of hazardous and non-hazardous waste • Littering 	<ul style="list-style-type: none"> • Adhere to the Environmental Protection (Litter Enforcement) Regulations 2013 • Adhere to the Environmental Protection Hazardous Waste Management Regulations 2000 for the management of hazardous waste • Install covered waste receptacles at strategic locations within the facility • Maintain good hygiene and sanitation practices • Utilize approved service providers for the collection and disposal of waste • Train employees in good waste management practices
Fire/explosion	<ul style="list-style-type: none"> • Smoking by patrons and employees. 	

- Improper storage of products
- Erection of no-smoking signage in specific areas and ensuring all employees and customers adhere to the rules regarding smoking.
- Acquire and strategically place the necessary firefighting equipment, such as sand buckets and fire extinguishers, throughout the facility with guidance from the Guyana Fire Service
- Ensure everyone entering the facility are aware of the Emergency procedures, such as muster points and emergency exits.
- Ensure electricity outlets are secure and working optimally.

		<ul style="list-style-type: none"> • Provide adequate signage and appropriate training for staff.
Hazardous waste (HW)	<ul style="list-style-type: none"> • Fuel and oily waste from accidental spills. • Storage containers • Use and disposal of cleaning chemicals. 	<ul style="list-style-type: none"> • Store hazardous waste (HW) separately from the non-hazardous waste. Dispose following specifications on the item. • Keep a HW cleanup kits on site. • Employees will wear protective gears when handling hazardous materials and waste.
Socioeconomic Impacts		
Health and Safety Risks:	<ul style="list-style-type: none"> • Risk of injury from heavy machinery or falling objects • Vehicular accidents 	<ul style="list-style-type: none"> • Enforce Personal Protective Equipment use (helmets, boots, masks, visibility vests) • Conduct safety briefings and training

Impact on Fishing	on	<ul style="list-style-type: none"> • Local fishing communities may suffer from restricted access to fishing grounds, pollution, and habitat destruction, which could lead to reduced fish stocks. 	<ul style="list-style-type: none"> • Notify nearby fisher folks of the project • Erect no-fishing signs near the project site
Traffic and Accessibility	and	<ul style="list-style-type: none"> • Increased traffic from material deliveries and equipment • Traffic from suppliers and customers 	<ul style="list-style-type: none"> • Stagger the frequency of vessel transfer and trucks accessing the facility • Schedule deliveries during off-peak hours • Use signage and traffic personnel • Adhere to guidelines, standards, and protocols set out by the regulatory authorities with oversight for this type of project.

8.0 Appendices

Appendix 1: Map of surrounding land use

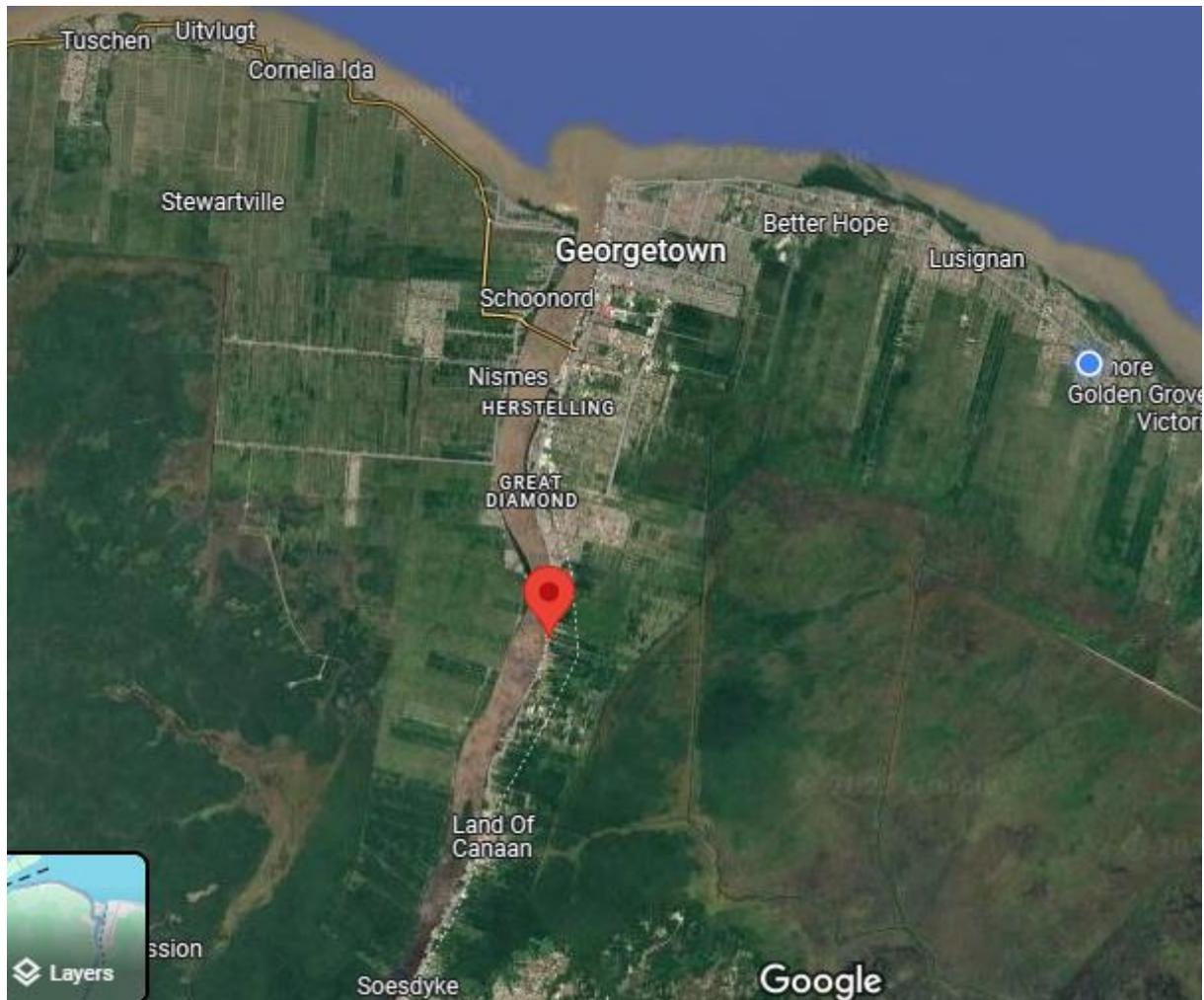


Image 1: site map

Appendix 2: Site Plan

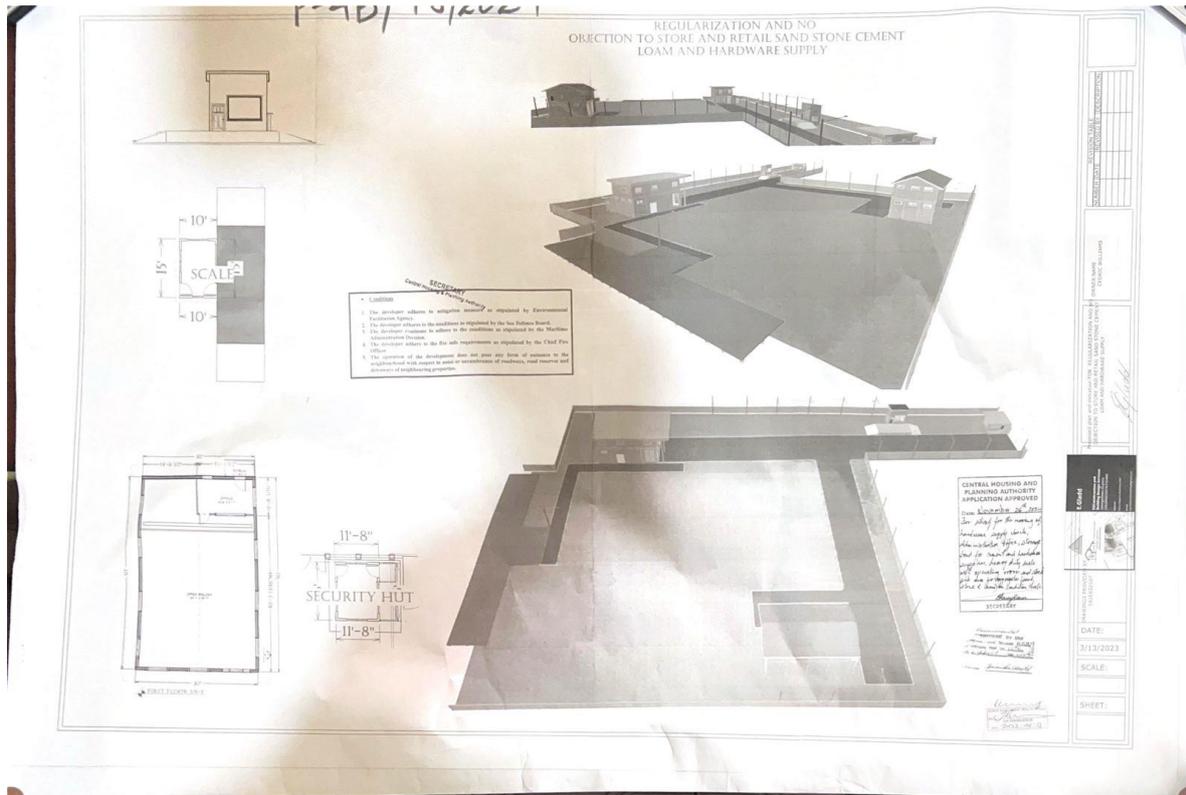


Image 2: Site Plan

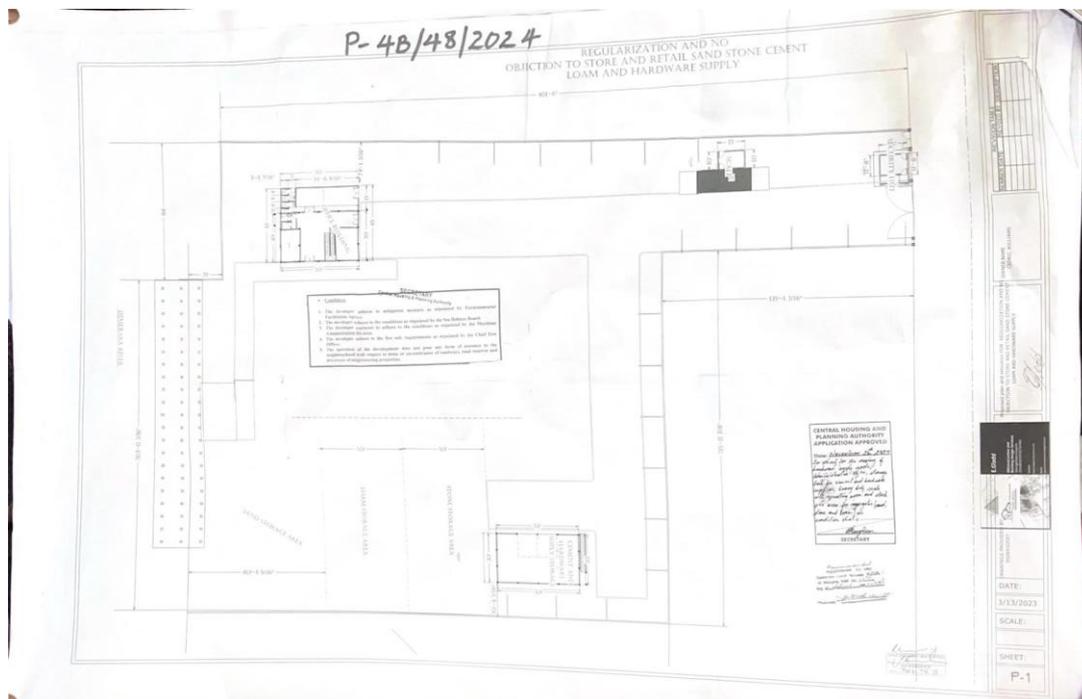


Image 3: Site Plan

