



WEATHERFORD TRINIDAD LIMITED – GUYANA BRANCH



PROJECT SUMMARY

Reliability & Maintenance (R & M) Services for Oil & Gas Industry



SUBMITTED TO:

Environmental Protection Agency Guyana

Ganges Street, Sophia

DATE: 30th June 2021

SUBMITTED BY:

Michelle Mitchell

QHSSE Coordinator III

Cell: +1.868.331.0087

Email: michelle.mitchell@weatherford.com

Zahair Ali

QHSSE Coordinator

Cell: +1.868.371.0035

Email: zahair.ali@weatherford.com

Project Summary/Description

Weatherford Overview

Weatherford is the leading wellbore and production solutions company, providing integrated solutions across well stages and customer domains to the oil and gas industry. We integrate trusted technologies with innovative ideas to help finish wells earlier and produce more for longer. We have a substantial global network of people, service bases, manufacturing facilities, and technology and training centers in more than 100 countries. Our products and services span the lifecycle of a well, including drilling, evaluation, completion, production and intervention. The company's range of production-enabling technologies include evaluation services, directional drilling services, secure drilling SM services, cased hole completion systems, expandable technologies, intelligent completion technologies, production optimization systems and all major forms of artificial lift.

2. A description of the site which should include the area of influence (spatial and temporal boundaries), location, land requirements (area occupied), layout, identification of receiving water(s), the present land use of the project area and the areas contiguous to it and the location of any existing or proposed intake and discharge structures and the location of any discharge. This information should also be presented on maps.

Weatherford facility at land of Canaan will occupy a total area of 6690.88 square meters. This area was cleared and sand filled by the landowner before it was leased to Weatherford. The facility will include the following infrastructure:

- *A cast concrete floor for storage of material, this area will also have a wash bay, storage area for fuel and chemical.*
- *A Concrete building with metal roof will house the office and the workshop and occupy a total area of 3186 square meters.*
- *Perimeter fence around the compound and security booth at the entrance.*

Land use around the site (see attached Figure 1. A google image showing the land use)

- *Gulf Engineering Services (Guyana) Inc and DEM Bakery on the northern side*
- *Vegetation with trees on the eastern side.*
- *Vacant land and Gas station on the southern side.*

- *Vacant land follow by the East Bank Public Road on the western side, Gafoors Complex– is on the opposite side of the Public Road.*

Weatherford facility will share the same location as Gulf Engineering Services (Guyana) Inc which will be separated by a fence. The close water body to Weatherford facility is Cunha Canal which is approximately over 500 meters.

3. The project design including: - Activities associated with all development stages from construction to closure: operation and production processes and alternatives considered e.g. provide a guide for all stages of the project from raw material to the finished product. - Source of utility services such as water supply and treatment, energy/electricity and communication, facilities, etc. - Waste management details which should include types of waste and methods of waste disposal/treatment

Construction-

Energy will be provided by GPL and water from GWI. There will be hardwired telephone and internet connection during operations. All such services currently exist in the location to neighboring properties.

Waste is expected mainly Household Waste (paper, food etc.), Scrap Metal and Hazardous Waste (oily rags, oily gloves and oily coveralls).

Waste will be separated into the different categories (paper and cardboard, kitchen waste, plastic bottles, hazardous waste and scrap metal). Household waste will be stored in covered colour coded waste bins for weekly removal by waste services provider. Hazardous waste will be destroyed by one of Weatherford's and EPA approved service providers and scrap metal sold to Weatherford's approved & EPA Scrap Metal Vendor.

4. The project size, e.g. capital investment, number of employees projected for each stage of the project, rates of production, etc
The project involves an investment of over 2.3USD Million in investment to prepare the site for operations and will employ between 25 to 30 employees during operations: a combination of HSE staff, lifting equipment operators, laborer, security, and administrative staff with 70% of the staffs will be working Offshore.

5. A non-technical explanation of the project (a summary of what the project is about in layman language).

Weatherford Trinidad Limited - Guyana Branch will be providing Well Construction Services (Tubular Running Services, Fishing & Re-Entry & Well Bore Clean Out Services) & Completions Services (Liner Hangers, Sand Control Screens & Cementation Equipment) to Guyana Operations and will deploy Reliability & Maintenance (R & M) services for customers in the Oil & Gas Industry. The location at Land of Canaan will be used to store these tool and equipment until the they are transported offshore, conduct servicing and maintenance work, equipment testing and pressure testing and the general maintenance (washing, painting) of the tool and equipment.

6. The duration of the project (for each phase).

The construction phase (Local Utilization) is approximately 27 workers and the duration is approximately six (6) to eight (8) months. The expected lifetime of the project is greater than ten (10) years.

The operating phase (Local Workforce Utilization) is calculated based on a total constant head count of 27. Guyanese Staff will be currently 10; 0-3 Years = 14; 3-6= 17.

7. Potential effects on the environment which may result from the existence of the project i.e., land, soil, water, air, the use of natural resources, etc. A brief description of each potential effect.

Noise – Will be created from vehicle movement and some lifting activities and the use of a compressor. However, this is extremely limited as it will only occur when tools/equipment must go offshore. Compressor will be utilized once or twice per day or shorter periods of time. Noise is currently produced by several commercial activities within area.

Dust – Some dust movement will occur with vehicle movement however the land will be completely compacted and cover with concrete to minimize this.

Air – There will be emissions from the vehicles and equipment in operations, forklift, crane, vehicle and spray booth, etc. All certified equipment to ensure compliance and minimal impact.

Water/Land – improper disposal of wastewater from the wash bay and washroom facility can pollute around land and water.

8. Proposed plans to mitigate environmental impacts.

Weatherford takes care of the environment and reducing impact on the environment very seriously by implementation of a 4 TENETS program (see attached 4 TENETS brochure) across all Weatherford locations. This program outlines rules to live by under WASTE, WATER, LAND & ENERGY which must be followed by all Weatherford employees, visitors and contractors of Weatherford. In addition to this program, Weatherford will implement the following measures below to mitigate impact to the Environment and deploy any other measures recommended by the Environmental Protection Agency to reduce the project footprint on the environment.

Noise

- *Services and maintenance of the machine will be done according to manufacture specifications and use of the Compressor will be keep to minimum.*
- *The Compressor will be housed in a separate room (common walls will be insulated for noise dampening)*

Air

- *Services and maintenance of the machine will be done according to manufacture specifications.*
- *Spraying/painting will be done inside a spray booth equipped with an extract fan, filter and exhaust stock.*

Water/Land

- *Sceptic tank system will be installed for treatment of wastewater and sewage from the washroom facility.*
- *Water from the wash bay will be discharged into an oil/water separator before final discharge.*
- *All chemicals will be stored within a spill contained area and spill kit present in the area*

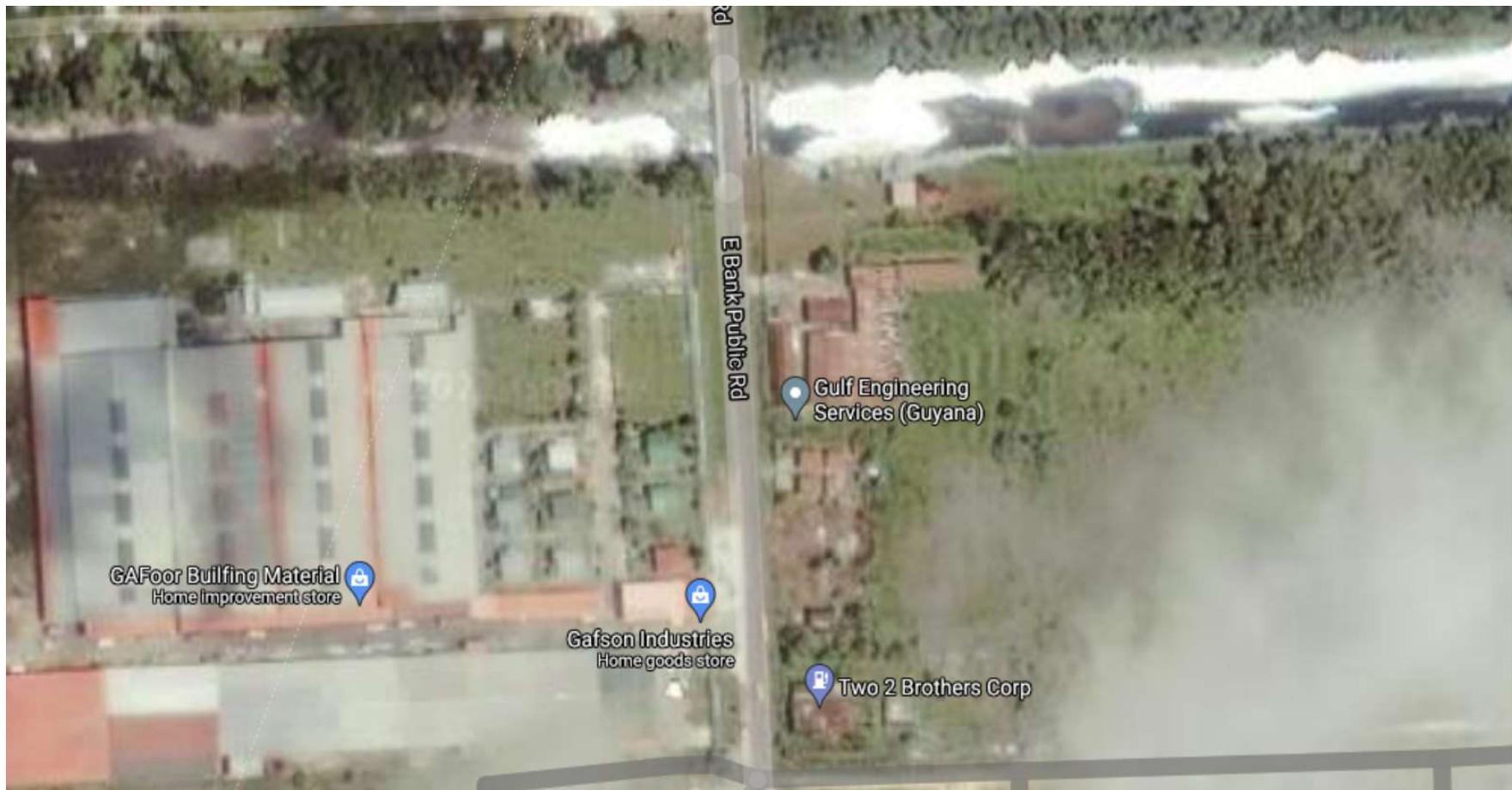


Figure 1. Showing surrounding Land Use



Figure 2. Showing surrounding Land Use (zoom in)

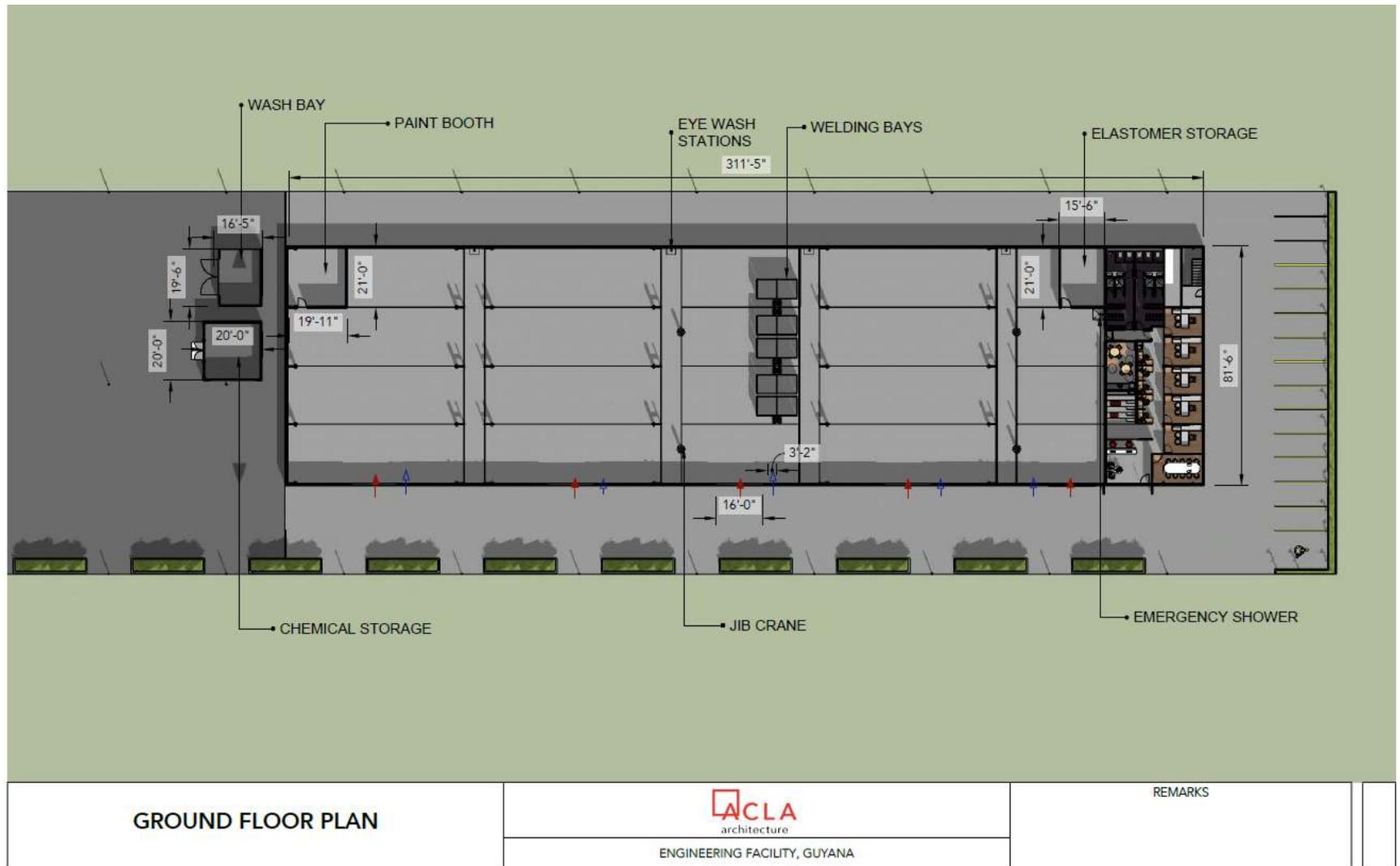


Figure 3. Showing operation layout