

Lutech Engineering Projects completed

COMPLETED PROJECTS

1. Liberia Petroleum Refining Company

Project - Petroleum Storage Terminal Expansion and Rehabilitation Project, Phase One (March 25, 2022)

- Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning on EPC basis of Petroleum Storage Terminal Expansion and Rehabilitation Project, Phase 1 comprising of Construction of 9 Nos. Storage Tanks of various sizes (including 3 Nos. AGO Tanks with cap. 15,000 M3, 6,900 M3 & 9,540 M3 and 4 Nos. PMS Tanks with cap. 6,400 M3, 5,400 M3, 8,800 M3 & 5,400 M3, 2 Nos. Jet Tanks) One new Slop Tank and One new Fire Water Tank, Construction of a 9 Nos. Bay Tank Truck Loading Gantry, Fire protection System, environmental protection for the tank dyke, Safety, Security, including the construction of an API Oil Separator, associated Pipelines, Electrical Design for the expansion and upgrade to the existing electrical distribution system, Semi Automated System and Safety Solutions for all Storage Tanks and Loading Bays, Supply and Installation of a Truck Weighbridge and Design and Construction of 630 M2 two story Structural masonry concrete building etc.

2. Conex Petroleum Refining Company Inc,

Project : Construction of 10,000 BPD Modular Refinery at Freeport, Monrovia, Liberia (October 15, 2021)

- Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning on EPC basis of Construction of a 10,000 BPD Modular Refinery at Freeport,, Monrovia, Liberia comprising of Storage Tanks 1 No. Crude Oil, 3 Nos. Naphtha, 3 Nos. AGO and 3 Nos. HFO), Product Pump house, Utility canopy, foundations for CDU and all other equipment, OSBL Piperack and Pipelines, steam tracing and insulation, OSBL Electrical system, Instrumentation for tanks, hydrant and foam system, Effluent Treatment System, OWS system, Installation and commissioning assistance for all CDU and all ISBL as well as OSBL facilities.

3. Vihama Energy Company Limited

Project : Setting up Tema Oil Terminal (TOT) at Tema Industrial Area, Ghana (Progressively, in Phases, from 2020 to 2022).

- Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning on EPC basis of Setting up Tema Oil Terminal (TOT) at Tema Industrial Area, Ghana comprising of Construction of Storage Tanks of various sizes (including 2 Nos. AGO Tanks with cap. 15,000 M3, 10,000 M3 and 2 Nos. PMS Tanks with cap. 15,000 M3 and 10,000 M3 and 1 No. 2,200 M3 Fire Water Tank). The scope of work includes TT Gantry, Product pump house, Fire water pump house, 3 Storey office building with Glass Panel aesthetic exterior area 700 SqM., 6 Nos. Bay Loading Gantry with additive injection, fully electronically automated, Vapour Recovery System and Oil Water Separator for environmental protection, 2 Kms. Jetty Product Pipeline for filling tank from ship berth, Fire Water Pipelines, Fire Fighting System, CCTV System etc.

4. Bauchi State Water & Sewerage Corporation, Third National Urban Water Sector Reform Project (NUWSRP3)

Project : Third National Urban Water Sector Reform Project (NUWSRP3) – Expansion of Conventional Water Treatment Plant at Gubi Dam, Bauchi State, Nigeria

- Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning on EPC basis of Expansion of Conventional Treatment Plant at Gubi Dam, Bauchi State, Nigeria comprising of Gubi Water Treatment Plant has a design capacity of 45,000 m3/d. The overall objective in the expansion works is to improve the water production level from the current rate of 45,000m3/day to 75,000m3/day. The scope of work includes Construction of two radial flow Clarifiers, Four Filter Beds, Power Supply Upgrade, High Lift Pumping Station, Supply and install a new 2MVA, 11/0.4kV Transformer, Supply and installation of 3 Nos. High Lift Pumps - 625 m3/h each, 450 KW, Supply and installation of Additional of 3 Nos. HLP Starters for the High Lift Pumps Motor Control, Supply and installation of mechanical and electrical units for 2 Nos. Clarifiers of Mixers, Sludge Valves and Pumps, Scrapper Bridges, connecting pipe and cables, Supply and installation of mechanical and electrical units for 4No Filters with Consoles, Penstocks and Valves complete with Actuators Clarifiers of Mixers, Sludge Valves and Pumps, Scrapper Bridges, connecting pipe and cables, Supply and install new chemical dosing units Supply and install Small Power and Lighting Units etc.

5. Bauchi State Water & Sewerage Corporation, Third National Urban Water Sector Reform Project (NUWSRP3)

Project : Rehabilitation of Conventional Water Treatment Plant at Gubi Dam, Bauchi, Bauchi State, Nigeria. The scope of work includes:

- Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning on EPC basis of Rehabilitation of Conventional Treatment Plant at Gubi Dam, Bauchi State, Nigeria comprising of Rehabilitation of Civil Works for Flash Mixer, Clarifiers, Filters, Compressor & Control Room, Clear Water Tank, High Lift Pumping Station, Inlet Water Measuring Pit, Potable Water Measuring Pit, MV Room, Chemical Building, Chlorination Building, Gate House, Administration Building, Laboratory, Store, Workshop etc. The scope of work also includes supply and Installation of 5 MVA, 33/11 kV On Load Tap Changing Transformer with remote Control tap changer panel, Supply and Install H Pole and 33 kV Overhead Power Line Structure, 400A Air Break Switch, Arrester and Drop Fuses, Circuit Breaker, Battery Charge, Surge Arrester, XLPE 3 Core Copper Cable, Isolator, Switchgear, etc. Supply and Installation of 3 Nos. 1500 KVA and Synchronization Panels & 1 No. 150 kVA Power Generator etc. Supply and Installation of Power and Lighting and Supply of Workshop equipment etc,

6. Liberia Electricity Corporation

Project - Liberia Accelerated Electricity Expansion Project – Additional Financing (October 2018)

Construction of Pipeline Start Point and Additional works in HFO Tank Farm for HFO Handling and Storage for LEC Power Plant. The scope of work includes the Construction of Pipeline Start Point, Tie-in, Valve Pit, Instruments Installation, RCC Trench for Road Crossing, Pipeline Supports, and Additional Works in HFO Tank Farm

7. Conex Petroleum Group Inc

Project – Engineering, Procurement, Construction and Commissioning of a new Petroleum Oil Storage Terminal at Free Port of Monrovia, Liberia. (June 30, 2016)

- Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning on EPC basis of a new Petroleum Oil Storage Terminal covering all Mechanical, Civil, Electrical and Instrumentation Works at Freeport, Monrovia, Liberia. The Scope of work includes complete Project Management, Basic & Detailed Engineering Procurement, Supply of all Materials, Construction, Erection, Testing and Commissioning of all Mechanical, Electrical, and Instrumentation Works pertaining to a semi-automated Coastal Petroleum Oil Storage Terminal.

The Scope of Civil Works broadly comprised Construction of all Tanks Foundation, Tank Truck Loading Gantry and Product Pump House etc.

The Mechanical scope of works also includes Construction of New Cone roof HFO Storage Tank of Capacity 3339 M3 (9M diameter X 12M high), New Cone roof Gasoil (Diesel) Storage Tanks 2 numbers of Capacity 7583 M3 each (26.5M diameter X 14M high), New Cone roof with IFR MOGAS (Petrol) Storage Tanks 2 numbers of Capacity 6638 M3 each (26.5M X 14M high), designed and constructed in accordance with API 650. The scope of work also includes Rehabilitation of Old cone roof HFO Storage Tank of Capacity 25853 M3 (55M diameter X 11.5M high) in accordance with API 653, Fire Fighting System for the Terminal including Fire Water Tanks (2815 m3), Fire Water Pumping System consisting of 3 Fire Water Main Pumps (engine driven) with Pumping Capacity of 650 m/hr and 2 Fire Water Jockey Pumps (electric driven) with Pumping Capacity of 20 m/hr, pressurized fire water mains, Fire Hydrants, Monitors, Cooling rings with Spray Nozzles, Foam pouring system with Bladder (Foam) Tank 10 M3 capacity, pipelines, spray nozzles, Foam Monitors, Foam Chambers, Foam Deflectors, ESD, safety alarm, etc. as per relevant NFPA Codes. It also includes 1 No. x8" OD x 696 Meters Pipeline from Jetty Unloading point to Tank for MOGAS (Petrol), 1 No. x 10" OD x 377 Meters Pipeline from Jetty Manifold to Tank for HFO and 1 No. x 8" OD x 481 Meters Pipeline from Jetty Manifold to Tank for GASOIL (Diesel), 6 bays Truck Loading Gantry with 6 numbers Top Loading arms and electronic metering skids with TAS, Tank Truck loading pump sets for HFO (2 Nos. of capacity 125 m/hr.), Gasoil (2 Nos. of capacity 155 m/hr.) and MOGAS (2 Nos. of capacity 155 m/hr.) Including all associated Accessories as per API 610. Complete In plant Piping including product receipt, delivery, inter Tank Transfers, Associated Valves, Fittings and Accessories as per ASME 31.3. Installation of 2 nos. Weigh Bridges of 60 Tons Capacity for HFO.

The Scope of Electrical Works broadly comprised Installation of 400 KVA, 200 KVA & 40 KVA Diesel Generators for Electrical Power, ATS, PCC, MCC and MLDB Electrical Panels for Pump Sets, lighting, office operations, instruments, equipments, fire fighting system, control system and utility operations and Plant Earthing System for electrical, instrumentation and tanks. Plant Illumination System including High Mast Lighting, Building Lighting, and other Area Lightings, Supply and installation of Plant Communication and Laboratory Equipments.

The Scope of Plant Semi Automation Works includes Tank farm management system comprising of 6 Nos. Radar Level Gauge with tank side monitors, 6 Nos. Multi Spot Temperature and Water Transmitter, 12 Nos. Pressure Transmitters, 6 Nos. level alarm switches, 2 No. Communication Interfacing Unit (Redundant System) and 1 No. Tank Farm Management System software with 2 operator stations.

Truck Loading system including Batch Controllers, Positive Displacement Meters, Digital Control Valves, Temperature Sensors, Smart Earth Detectors, Pressure Transmitters, Differential Pressure Gauges, Air Eliminators/ Strainers, Isolation Ball Valves and System Software (TAS) to enable accurate custody Transfer and Billing of Fuel delivered.

Emergency Shut Down System

8. Conex Energy (SL) Ltd

Project – Petroleum Oil Storage Terminal at Freetown, Sierra Leone

- Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning on EPC basis of a new Petroleum Oil Storage Terminal covering all Mechanical, Civil, Electrical and Instrumentation Works at Freetown, Sierra Leone.

The Scope of work includes Construction of Vertical Petroleum Storage Tanks, One each for AGO Tank Size 34 M Dia x 21 M Height and for PMS Size 34 M Dia x 21.5 M Height including Civil Foundations, Dyke Wall, Fire Fighting Facilities, Instrumentation, Interconnecting Pipes, Valves, and Fittings with the existing Petroleum product piping network for taking AGO and PMS into respective Tanks and for discharge of PMS and AGO from respective tanks to the Tanker Truck Loading Gantry

ONGOING PROJECTS

9. Gboni Enterprises Inc

Project - Construction of a Modern Petroleum Product Storage and Bulk Distribution Terminal (est March 2025)

- Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning on EPC basis of a Petroleum Oil Storage Terminal covering all Mechanical, Civil, Electrical and Instrumentation Works at Freeport, Monrovia, Liberia. The scope of work includes Construction of Petroleum Storage Terminal with one Gasoline Storage Tank, three Loading Bays, One Fire Water Tank, and associated Pipelines, Electrical and Automation Works, Fire Fighting facilities, Office Building, Compound Wall, Dyke Wall, Security Kiosk, Tank Truck Parking Area Development, Storm water drain and Oily Water drain etc.

10. Liberia Petroleum Refining Company

Project - Construction of one 17,000 M3 Gasoline Storage Tank (est Mar 2025)

The scope of work includes Design & Engineering, Procurement & Supply, Erection, Testing and Commissioning of one new 17,000 M3 storage tank including its piping connectivity, discharge lines and firefighting systems and made an integral part of the existing system thereof.

11. Liberia Electricity Corporation

Project - Supply and Delivery of Assorted Transformers to the LEC Bushrod Warehouse for the Distribution Network