



BEACON
ENGINEERING PLC

COMPANY **PROFILE**

TABLE OF CONTENT

01

Managing
Director's message

02

Company Statment

03

Company's Overview

04

Organizational Chart

05

Design Department

06

Contract
formulation & Supervision
Department

07

Geotechnical
Engineering Department

08

Hydrogeology and Water
Well Drilling
Department

MISSION STATEMENT

To ensure the delivery of cutting-edge construction & consultancy services and products which enhance the development of quality life of the society.

BEACON realizes these ideals through:

- Strategic Business Plan
- Attracting and retaining skilled employees
- Creating and maintaining partnership on the basis of mutual benefits technical advances
- Taking care of natural environment

VISSION STATEMENT

The vision of BEACON engineering Plc is to be a dependable construction & consultancy Engineering service and product provider nationally and internationally.

QUALITY POLICY

BEACON Engineering plc is committed to satisfy customer's needs and expectations by providing on time quality service. The Management and Employees' commitment to continual improvement and meeting customers' expectation is the foundation for achieving our quality objectives.



Let's build future homes with us.



Birhanu Assefa

Managing Director (Engineer)



14 Years ago, we dreamt of having world class, Multi-National, Ethiopian Engineering Company and, with God's Grace and Blessings, we achieved it. I take this opportunity to pay my earnest gratitude to all who directly and indirectly contributed to this success and are still deeply committed to take this dream to new heights. But most of all, I give my gratitude in total humbleness, to the highest of all the Almighty God.

In this journey, in pursuit of excellence and to serve mankind by developing a sustainable Business Module, we faced lots of challenges; but the team at BEACON has consistently been determined to overcome any challenge with utmost professionalism, sincerity, hard work and team spirit. Most of all, it has always been intrinsic of BEACON employees and team of managers-to regard challenges and advancement.

We are also focused on getting certifications nationally shortly preparing our employees and team of managers and relying on their commitment to that effect.

Customers around the world recognize BEACON for its dedication to excellence in all of its activities of providing products and services. We assure all stake holders that BEACON will collaborate with the best of company's and successful international business establishments in order to widen its capacities through introduction of modern technology and going into new areas of business for the best benefit of the nation.

We are sure that with continued support from our Employees, Customers and all stakeholders, we shall take our Organization to new heights in the years to come realizing our vision of becoming in the process one of the best international Engineering Consulting and Construction companies.

Company's over View

BEACON has the capability of performing tests on a wide range of construction material including: water quality; soils; cement; aggregate; concrete; blocks and rocks. A range of comprehensive services are offered in the following areas:

- Architectural Engineering
- Interior designs
- Real state
- Foundation specialist
- Road Engineering
- Building Engineering
- Bridge Engineering
- Geo-technical Engineering
- Water Engineering

BEACON has strength in Project management, Resource planning – both human and material - making it obvious choice as partner for development by customers as well as professionals and other companies around the globe. The company has been involved in various projects of such nature and achieved quite a reputation for surpassing clients' expectations.

- Environmental Assessments
- Feasibility study & Traffic Engineering
- Assistance during Tender Process
- Construction Supervision
- Civil works Construction
- Electromechanical Works
- Manufacturing of Construction Material
- Supply Business
- Asset valuation service

DESIGN DEPARTMENT

Introduction

Design is one of the five operational departments of the company. It is organized to provide a wide and full range of engineering services in the design roads, bridges, buildings, water supply and sewerage systems. Beside this the department conducts detailed ground surveying works and evaluation of aerial photographs. The department has been playing pivotal role for the last fourteen years in building the country's infrastructure.

Setup of Design Department

The department has four divisions which are well organized to render tailor made engineering service for our customers specific to their need.

Photometry & Topographic Surveying Division

The division is staffed with well experienced GIS experts and surveyors well acquainted with local and international geophysical conditions. The division carries out the evaluation aerial photographs, digital maps and satellite imageries relevant to specific project the department engaged. Beside this the division carries out ground surveying work for the development of a ground model that could be used in the detailed engineering design.

Road & Bridge Design Division

This division provides consultancy service related to road and bridge design. The design process is very complicated and involves multi disciplinary engineering solutions.



DESIGN DEPARTMENT

Geometric design, the provision of drainage structures, pavement design and tender document preparation are the major elements of the division's activities.

- Traffic engineering
- Transportation management
- Aerial photography
- Photogrammetric evaluation
- Route selection
- Detailed ground survey.
- Detail design of new Roads
- Detail design of Existing Roads
- Upgrading, Rehabilitation, Maintenance
- Building Design
- Architectural, Structural, electrical, sanitary
- Water Supply & sewerage systems
- Tender document preparation Evaluation of Bids
- Feasibility studies
- Socioeconomic studies
- EIA

Building Design Division

This division is engaged in the architectural and structural design office buildings, dwelling apartments and modern villas, factories etc. The design process also involves sanitary and electrical installation designs most appropriate to service the building designed to render.

Water Supply & Sewerage Design Division

The division involved in the design water supply system for major towns. The design process includes the intake, mechanical, biological, chemical treatment and the distribution system of drinking water. The design of sewerage system is generally involves the design of sewer collection pipes, its treatment through different mechanical, chemical and biological menses and the releasing of discharges to the required quality standard that consider the environment.

DESIGN DEPARTMENT

Manpower

The department has more than forty permanent staffs who are experts on the specific area of their assignments. The team of experts comprises road designers, structural engineers, architects, hydrologists; contract engineers, location engineers surveyors, economists, sociologists Auto CAD technicians etc. Beside this the department also uses high caliber professionals as freelancers whenever a need arises

Equipment

The department uses quite modern equipments related the design activities. This includes Lieca and Pro Mark GPS, surveying equipment like Sokia total stations and Levels, computers, plotters etc. SAP 2000 and ETABs are used for Architecture and structural designs.

Software


The department uses various authentic & licensed software for the design various type infrastructures. Road design software such as In Roads, 12D and SDR are widely used by road designers. It also applies HECRAS, HECHAMS, EPANET and Water CAD software for drainage and storm analysis. Beside these Arc View and Arc GIS are widely used for the development of geo referenced digital maps.

Principal projects

Currently the department is engaged on projects of the most challenging nature. Some of them are Mabayasa Afar Horn Developmental Organization Mega Projects which are located at the most difficult terrain and inaccessible location.

Future plans

In line with BEACON's vision the department has planned and working to build its capacity and expand its frontier to more African and other countries around the world. It is also working to reorganizing itself to function as autonomous entity believed to bring effectiveness and efficiency to the department tasks.



Contract formulation & Supervision Department

This is one of the five Departments of BEACON Engineering PLC which is involved in contract administration and supervision of road projects. The Department has two divisions; Contract Formulation and Supervision. The Contract Formulation Division is responsible for preparation of tender documents and pre-contract services.

The Supervision Division is responsible for;

- Supervising, inspecting, testing and approving the physical construction of works
- Monitoring the progress of the works and adequacy of the contractor's mobilization and resources for meeting the program
- Measuring and valuing the works and certifying both interim payments and final payments
- Dealing with technical matters that arise and providing instructions or drawings
- Dealing with any contractual matters that arise including claims and disputes
- All supervision staff including resident or intermittent staffs are particularly accountable to the Head of the Division.
- The Department is staffed with BSc. level and above, plus diploma holding professionals experienced in construction supervision and management.

The Department and its Engineers are using latest project monitoring software's such as, MS Projects, Primavera, etc. for utmost utilization of resources and timely delivery.

- Tender documents & Contact agreements Preparation
- Organize, supervise and direct supervision crew
- Supervise and follow up the progress of projects
- Prepare and submit to the Client
- Monthly, Quarterly & Annual reports
- Prepare and submit to the Client
- Inception, Mobilization, Contract Completion & Consultancy Completion Reports
- Certify the Contractors payment certificates
- Make correspondence with Client & Contractor on the project matters
- Approve the Contractor's work programme i.e. equipment, Material & manpower
- Review and analyze the contractor's claims
- Prepare variation orders & supplementary agreements
- Conduct provisional and Final acceptance for completed projects and issue Completion Certificates

Geo-technical Engineering Department

The department has delivered consultancy services in the field of Material Investigation and Pavement Design as well as Foundation Investigations for various sustainable development projects here in Ethiopia and extending its reach in East African countries, recently. As leading and experienced geotechnical engineering firm, we have served a wide range of clients, that is, public, private, religious institutions, national, and international organizations. The department is actively engaged in many prestigious projects thereby contributing its share to the development of the country for which we have received testimonials or acknowledgments for the successful and timely completion of the assignment. The department is staffed with task oriented, disciplined, well integrated professionals and semi-professionals with strong team spirit, vast experience, capable in disposing their responsibilities under difficult circumstances, and bad climatic conditions.

Services Delivered by the Department are:

- Soil and Material Investigations and Pavement Design.
- Slope Stability Calculations and Analyses.
- Geo-technical Investigations of Dam Sites, Reservoirs, and Tunnels.
- Static Plate Load Test.
- Dynamic Cone Penetrometer (DCP) Test.
- Schmidt Hammer Rebound Test.



Hydro-geology and Water Well Drilling Department

The Department is one of the five main operational departments of the company organized to provide a full range of expert service in the water well construction, drilling for environmental and waste disposal, water related studies and sewerage works, well maintenance and abandonment.

The History of the department dates back to 2000, where BEACON started groundwater exploration and water well drilling services as part of its main activities. The entry point was one DTH/Rotary drilling machine rated for 700m. The growing demand of potable water for urban centers, rural population, industrial and agricultural use in Ethiopia and neighboring regions has encouraged BEACON to build up its capacity in the sector. Towards this end, BEACON Engineering PLC has gradually increased the number of drilling machines, highly qualified and intermediate professionals and has also strengthened all support facilities required for effective and efficient operation. Today BEACON has three DTH/Rotary drilling rigs rated up to 600m and one Crawler type DTH/Rotary drilling machine rated at 150m with complete accessories.

The department's behavior as whole or the doing of individual employees is aimed at fulfilling their commitment and establishing the company image of credibility.

The commitment originates from its obligation to the society, to the client and to its own staff.

- Deep and shallow water well drilling
- Water well rehabilitation
- Pumping test
- Pump supply & installation
- Construction of water supply distribution systems
- Hydro geological & geophysical site investigation
- Consultancy services on
- Hydro geological, Geophysical site investigation, Water well drilling
- Water well design & construction supervision



Hydrogeology and Water Well Drilling Department

The services rendered by the department are divided in two main divisions.

Division 1

Hydro-geology & Geophysics Division

The assignment this division carries out range from ground water feasibility study to detail and comprehensive tender document and working drawing packages of various water projects.

- Conduct groundwater exploration and development works depending on the requirement of the client
- Formulate water well drilling plan and program me , develop cost and time schedule for the implementation of the same
- Water well design and construction supervision
- Conduct hydro geological and hydro-geophysical cal investigation for various water projects
- Consult on community water supply and sanitation program
- Functionality analysis and consult on water well maintenance, rehabilitation, development, solid and liquid waste disposal
- Conduct borehole and surface geophysical survey for various projects

Division 2

Water Well Drilling Division

The service provided by this division ranges from drilling deep water wells (500m) to shallow wells to rehabilitating dying wells and to well abandonment.

The works are done in conformance with the requirement of ISO 9001, 2008 and the division pays great attention to updating and improving the technical equipments and technical means to enhance the work quality and efficiency.

Well sinking i.e.

- Deep and shallow wells for production of groundwater
- For disposal waste water underground
- Environmental
- Well maintenance, rehabilitation and abandonment
- Pump supply and Installation
- Hand pumps installation and training on the principle of pump handling and maintenance.
- Pumping Test
- Construction on Water Supply Distribution System



ETHIOPIAN INDUSTRIAL INPUTS
DEVELOPMENT ENTERPRISE (E I I D E)

- OWNER E I I D E
- PROJECT B 3 D+19 MIXED USE BUILDING
- PROJECT SITE LOCATION MEXICO (GENETHOTEL)
- TOTAL AREA 3003.13 m²



MIXED USE BUILDING

- OWNER SKY VIEW
- PROJECT 4B+ G+24 MIXED USE BUILDING
- PROJECT SITE LOCATION KIRKOS
- TOTAL AREA 900 m²

OWNER BIRUK FIKADE

PROJECT 2B+G+11 MIXED USE BUILDING

PROJECT SITE LOCATION BOLE



MIXED USE BUILDING

- OWNER SAVVY TRADING
- PROJECT 2B+ G+15 MIXED USE BUILDING
- PROJECT SITE LOCATION BOLE



- OWNER EIIDE
- PROJECT INTERIOR & EXTERIOR DESIGN
- PROJECT SITE LOCATION PIYASSA



- OWNER - MELAKU FIKRE
- PROJECT LOUNGE - INTERIOR DESIGN
- PROJECT SITE LOCATION - BOLE



RESIDENCE

- OWNER ABEBE MELAKU
- PROJECT G+1 RESIDENCE
- PROJECT SITE LOCATION HAYAT



RESIDENCE

- OWNER BIRHAN ASSEFA
- PROJECT G+2 RESIDENCE
- PROJECT SITE LOCATION BOLE BULBULA