AT ACEM ....SOILS TECHNOLOGY IS OUR BUSINESS..WHAT EVER PROJECT IS UNDERTAKEN..WE MAKE IT OUR BUSINESS TO ACHIEVE THE BEST AS WE ARE THE BEST........WHEATHER IT IS BIG AS IN THE MIING INDUSTRY, MEDIUM AS IN ROAD OR AIRPORT CONSTRUCTION OR BUILDING CONSTRUCTION FROM A FLAT TO A 30 LEVEL HIGH RISE...WE ARE ALQAYS THERE.





**ACEM GEOTECHNIQUES is nationally owned** Geotechnical Engineering Consultation Firm and Soils Laboratory Firm providing services to all Construction industries in Papua New Guinea

Established in October 1995, **ACEM GEOTECHNIQUES** is amalgamated with Bowler Geotechnical Group of Companies of Queensland, Australia building its reputation in the field of consulting geotechnical engineering and geomorphology, environmental, testing drilling & soil laboratory services, (PNGLAS) registered laboratory and is specialized in geotechnical engineering and testing.

#### THE VISION AND GOALS

**THe vision of ACEM Geotechniques** is to provide professional geotechnical engineering and construction control testing services in conformance with the needs and requirements of our clients.

We provide prompt services that are;

- customer driven,
- quality oriented,
- innovative and
- responsive to the needs of the construction industries.

We see the provision of our geotechnical engineering services as being based on responsiveness to the needs and requirements of our clients, with strong communication links with clients and direct contact between the user of information and the provider. That is, the geotechnical engineer that will be involved in carrying out the fieldwork and preparing the investigation report, will establish and maintain direct contact with the individual client who will be using the information supplied.

The vision of **ACEM Geotechniques** is to become a highly respected professional organisation in provision of geotechnical engineering and construction control testing services in conformance with the needs and requirements of our client. **ACEM Geotechniques** will establish client loyalty by consistently meeting and exceeding our client's expectations now and beyond.



Geotechnical Engineering Consultants Soil, Concrete & Construction Testing PNGLAS/AS ISO-IEC 17025 Accredited Lab No:028

# INFORMATION BROCHURE



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## THE SERVICE WE PROVIDE.

**ACEM Geotechniques** offers services in principally three (3) related areas.

- 1. Consulting Geotechnical Engineering and Geomorphology
- 2. Construction Control Testing.
- 3. Specialist Testing and Geotechnical Foundation Drilling.

#### 1. GEOTECHNICAL ENGINEERING.

We <u>ADD VALUE</u> in the delivery of our geotechnical engineering services by adopting the following approaches;

- i) We put ourselves in the clients position to understand their <u>wants</u> and needs before we commence the investigation work.
- ii) We save the client money by <u>not assuming</u> what the client wants but we gather information to develop a scope of work that <u>adds value</u> to the project without performing unnecessary fieldwork or laboratory testing.
- iii) We test and review our report from the clients perspective to ensure our reports are concise with clear conscious and recommendations to satisfy the objectives of the investigation.
- iv) We <u>deliver on time</u>. We produce reports in accordance with agreed program.

Our geotechnical engineering services are provided to a wide client base including Consulting Engineers, National, Provincial and Local Government Departments, Statutory Authorities, Mining and Industrial Companies, Developers, Builders, Contractors, and private individuals. This work is carried out for extensive range of projects including:

- . Tall buildings.
- . Bridaes
- . Embankments
- . Cuts and Natural Slopes
- . Dams
- . Resource Evaluation
- . Mine Infrastructure
- . Geological / Terrain Map ping
- . Subdivisions
- . Commercial and Industrial Buildings
- . Wharves
- . Residential Apartments
- . Contaminated sites

Geotechnical Investigation for Residential Apartments: SVS Apartments Lae



Mining Infrastructure: Lihir Lihir Floatation Project



# 2. QUALITY CONTROL TESTING. (REGISTERED SOILS LABORATORY)

Our soils laboratories will emphasize effectiveness and efficiency in delivery of test results;

- With the services been provided by competent and experienced technicians,
- Able to confidently interact with clients,
- Able to under stand clients requirements.
- And use their initiative where necessary to satisfy the client's requirements.

We provide <u>FAST</u> services that are customer driven, quality oriented, innovative and responsive to the needs of the civil construction industry.

Our soil laboratory emphasises **SPEED** of response time and delivery of test results.

We <u>ADD VALUE</u> in the delivery of our quality control testing services because:

- i) We produce fast test results. This will save money in machine time because test results are available earlier.
- ii) We assist the foreman in the field as far as possible. For example, if a nuclear densometer is obviously going to fall, we abort the test and advise the foreman. There would be no charge to the contractor in these circumstances.
- iii) Our technicians are competent and well trained. They are encouraged to use their initiative and judgement to assist the contractor whenever possible.
- iv) We work overtime and at weekends (at no extra cost to our clients), to ensure that test results are available within the shortest possible time.
- Professional geotechnical engineering advice and support is given available as required to assist the client if we encounter any problems with materials, the specification and compaction etc. Geotechnical engineering advice over the phone is provided at no cost.

Construction control testing services are provided by our PNGLAS Registered Laboratory for the following broad categories of projects.

- Mining Infrastructural
- ° Arterial roads.
- ° Subdivisions
- ° Commercial / Industrial Developments
- ° Site Laboratories
- ° Quarry Products

#### 3. GEOTECHNICAL DRILLING.

Geotechnical Drilling services are provided to asses subsurface conditions for a wide magnitude of projects. These services may be included as part of a geotechnical investigation being directed by ACEM Engineers or a drilling rig can be engaged directly by a client.

Our Geotechnical Drilling Services are characterized by the following features.

- ° Well maintained equipment
- ° A positive "can do" attitude of drilling crews.
- ° An ability to tackle difficult access problems.
- ° An understanding of the geotechnical engineering imperatives of investigation work.



Geotechnical Drilling: Lae Wharf

Our Geotechnical Drilling division as so far undertaken many drilling for the following clients which are as follows;

- Central Drillers
- 2. New Britain Drillers
- PNG Ports
- 4. Nautilus Mining
- New Britian Drillers

#### MAJOR PROJECT ACHIEVEMENT.

**ACEM Geotechniques** is a foremost provider of all geotechnical engineering and materials testing services in PNG. The following list indicates some of the recent major projects that the company has achieve through its services.

- ° The Jacksons International Airport Major Re-development.
- ° Lihir Gold Mine Development
- ° Quality control testing for South Gobe Project
- Provision of senior laboratory staff to Southern Highlands Department of Works for major road projects.
- ° Kokopo Water Supply Project.
- ° DCA Hangar Jacksons Airport
- ° Australian High Commission Housing Subdivision.
- ° Chevron Terminal Nadzab.
- ° Kokopo Radio Station
- ° PNG Harbours Board Complex
- ° Port Moresby Harbour Relocation Feasibility Study.
- ° Napa Napa Oil Refinery
- ° Poreporena Freeway
- ° Godwit Drive
- ° Boroko Drive

°Wapenamanda Airport

° Mt. Hagen Airport

Tari Airport

° Tokua Airport

° Telikom Subdivision - Gabaka Street

° Kokopo Road Upgrade

° Kavieng Airport Upgrade

° Vanimo Airport Upgrade

° Chimbu Airport

° Girua Airport Upgrade

° Kerema Airport Upgrade

Madang Airport Upgrade

Koki Heights

° Lings Freezers – Kokopo

° Ulaveo Industrial Subdivision

° Numando Mill Factory

° Workers Mutual Insurance - Office complex - Gabaka Street.

° Kumagai Gumi – BSP Boroko

° SBS Electrical – Jacksons International Airport Lightings

° L&A ILB - Salvation Army Social Center - Koki

° Clough Niugini – PNG Refinery, Napa Napa

° Nosrida Limited - Anderson Supermarket, Harborside City.

°Kiau Concrete - Anderson Freezer, Koki

Atlas Plant

° Habou Construction - All major projects under Hebou

Kwikila Water Supply Porject

Airways Extension

Media Center, Waigani

Hanuabada Upgrading, Road Works

Bautama Subdivision Rainbow Reconstruction Workers Mutual Haus

Taurama Rd. Tatana Rd.

Bereina Water Supply

Theodist Car Park

° Global Construction - All major projects under Global

Asaro River QA Tests, Goroka Kainantu – Kassman Pass

Cameron Rd.

Bava Rd. Scratclev Rd.

Waigani Cameron Intersection

Waigani Drive.

°Nebiri Querry - Cameron Road & All Material quality Testing

° Blue Chip - Kumul & Muruk Building

°Shorncliffe - Quality Testing

° NCDC - Hohola Health Clinic

Mokohara & Morata Rd.

° Rouna Querry - All material Quality Testings

° Bee Construction ADB Project

° Four Square Church - Kaugere

° Infratech Management – Latter Day Saints

° Peddle Thorpe – Office Complex

° GHD- LONGMAC - Kerowagi Airport, Phase 2

#### **RESOURCES**

#### Staff

**ACEM Geotechniques** employs 6 professionals and 6 technical staff who are paraprofessional and experienced technicians. It is the company policy to have on average, technicians with more experience as to get into the scope and depth of work required by clients. This means that clients benefit by having more experienced staff involved with their projects in which advice can add value to Contractors operations.

Brief details of experience and qualifications of staffs can be provided if required.

#### **Computer Software Compliance**

ACEM have a comprehensive library of geotechnical application software which include the following;

- Various pile design
- Retaining wall Analysis program. (Wallup)
- Finite element programs (AFENA & Microfine)
- Slope Stability programs
- Test Report programs
- Engineering Geological Mapping
- Statistical Rock Fracture Surveys
- Surface and Subsurface Investigation
- Stability Analyses
- Risk Analysis and Hazard Ranking
- Excavation Design
- Rock slope Monitoring
- Identification and Design of Stabilization Options
- Design and Supervision of Stabilization Works.

#### **Laboratory Resource**

**ACEM Geotechniques** laboratory is PNGLAS Registered Accredited number 028. This laboratory is equipped and resourced to carry out a comprehensive range of quality control tests for civil construction projects. We are also equipped with mobile laboratory available for establishment on site upon request. This depth of resource means that we can respond quickly to requirements for testing services throughout Papua New Guinea.

#### CONCLUSION

**ACEM Geotechniques** is committed to the adoption and implementation of formal **Quality Assurance Procedures** as a means of achieving the mission and vision of the firm.

Quality Assurance is the responsibility of everyone. The continued success of the company requires that we deliver our service in conformance with the requirements of our clients. Quality could be described as "conformance to requirements" and it intents that all staff direct their efforts to ensure that all works confirms to the requirements of the client at all times.

This capability statement has been provided for existing and potential clients as a guide to the professional geotechnical engineering and soils laboratory services available from **ACEM Geotechniques**, it is guide that explains how hard we work in **ADDING VALUE** to our clients operations.

We have grown strongly since our inception and has build our reputation and integrity on following factors which considered to be the corner stone of our success:

- an obsession with delivering FAST and high quality services
- business development and marketing skills to focus on the NEEDS of clients
- the ability to attract and retain competent staff who are accessible to clients at all times.
- the ability to constantly meet and EXCEED customer expectations
- and the implementation of quality management system



Civil Works on Dam at Hidden Valley Gold Mine:- MMJV