EFFECTIVE ENGINEERING SOLUTIONS FOR SUSTAINABLE DEVELOPMENT
Asogan Pillay

It is with immense delight that we launch ETL’s inaugural newsletter. As many are aware, ETL was established as a result of deviation in strategy and principle at LTE Consulting, which culminated in my untimely departure from one of the largest 100 percent black owned consulting services firms in South Africa. Despite navigating challenging circumstances in a turbulent industry our current and future success appears to be vested in the strong belief that engaging the best skills, whilst enabling freedom of our thought leaders when it comes to ingenuity and innovation, can only produce positive results.

ETL has undoubteldy assembled one of the finest teams of professionals in the built environment sector, offering our clients a complete range of quality services. The team includes prominent professionals such as Dr. Murunwa Makwarela, a genetic scientist specialising in water and waste water engineering; accomplished civil engineer Dr. Wynand Pretorius, and John Powell who boasts more than forty years as a leader in the architectural field. Our CEO, Moses Maliba, is a former lecturer, board member of ECSA, and president of IMESA. He is a registered professional in the civil engineering sphere with over 35 years of relevant experience in engineering and project management.

ETL is all about its people who form the bedrock of our organisation. Despite being just a few months old, ETL’s accomplished management team has hand picked fifty professionals who I believe will grow our business and help mould it into the success I believe it is destined for. The driving force behind assembling such a comprehensive set of professionals, in such a short space of time, hails from our conviction that ETL is striving to become leaders in the built environment sector. This is consistent with our vision of “providing innovative and cost effective solutions based on unsurpassed quality service delivery”.

Another sterling example of our commitment to success is the experienced board recently established. I thank my fellow directors for their hard work, commitment, insight and the will to ensure we trade ethically, adhere to corporate governance principles, manage risk and grow the business. I wish to thank them for the considerable effort they have put into their work and the strength they continue to display under these challenging start-up conditions. I also thank the entire management team and staff for their contributions to positioning ETL firmly towards sustainable growth. Finally, thank you to our clients and associated service providers for their loyal support and for choosing to partner with ETL.

Colleagues – for we must now all see ourselves as colleagues working towards a shared goal – we stand at the brink of a new era. Let us hope that when we look back from the vantage point of 2040, we will be able to tell our grandchildren about this period in our history and that they will see, feel and live the successes all around them, that we have initiated today.
EFFECTIVE ENGINEERING SOLUTIONS FOR SUSTAINABLE DEVELOPMENT
Roman soldier and poet Horace observed ‘dimidium facti qui coepit habet’ meaning ‘He who has begun has the work half done’. This is particularly poignant as we open this life chapter, the chapter of the newly formed ETL (PTY) Ltd. It marks a major milestone in the lives of all those who took the decision to go with their hearts and with the belief that what is about to be born is going to be huge and is worth being associated with.

In my many years of engineering experience I have never been so excited. We have started a new journey and the momentum is gathering, once in motion it cannot be stopped. When I left my previous job I had no idea of the adventures that awaited me, I have been pleasantly surprised and I am happy that I have embarked on this journey. We have now arrived at the stage where we are standing up and being counted. We have started a new entity Ethical Technical Leadership (ETL Pty Ltd). This will be our new brand name.

Theory has it that 80 percent of new start-ups fail within the first five years of being established, we love to believe that the remaining 20 percent who succeed are founded on a solid base of ethics, honesty, professionalism and accountability - traits we are striving to uphold. Starting a new company in this competitive environment is not easy and will require much commitment and sacrifice from all concerned. Our staff members are not in need of any motivation because they share a common goal and vision with the management of this company. We all agree that we are not going to sit and watch events pass us by, but rather we will take our opportunities and our destiny in our own hands and make things happen for ourselves.

Thus, the moral of the story is that we are eagles and not chickens, we are not going to spend our lives on the ground picking at scraps, we will soar high above the ground exploring the world and living on mountain tops.

The Economic Climate in SA
We have launched at a time when the South African economic outlook is far from its brightest. We are starting when the sceptics balk as they fear the unknown, the uncertainty of what the future holds. Yet we are confident that now is the right time to start, when the odds are against you, when things are at their worst. This is the best time, because going forward things will only improve.

Our Growth Strategy
We are all aware of the constraints posed by our procurement legislation on new and small businesses, especially when it comes to previous experience and track records. We however, will not allow this challenge to prevent us from bringing our much sought after services to the market. We are small in numbers but not on experience, and will stop at nothing. Where we need expertise we will find them, this is the key to vigorously growing. We will adopt strategies of acquiring the type of people we need and even partner with organisations that have similar objectives, we will find and secure the services of those that can add value to our organisation. Watch this space and let’s review in a year, I predict that our growth will be enormous, for now is the time that we roll up our sleeves and get down to work.
As one of the founding members of my previous organisation I have gained extensive experience in the corporate services environment. Developing and implementing systems during the start-up phase of the previous organisation has taught me the importance of a virtuous corporate culture being adopted. My aim as the Chief Operating Officer (COO) is to promote and spread the ETL culture to the board of directors and staff, enabling them to understand that following a structured manner of operating is crucial for any successful business. Furthermore, being affiliated to the recognised institutions within the engineering and corporate professions enables ETL to add value to the field of engineering, empower individuals and in turn help contribute to our country’s economy.

My role as COO is to ensure ETL’s governance is run strictly according to best practices, such as implementing the King Code of Governance Principles. This enables the board of directors and stakeholders to be confident of the systems in place, which have been tried and tested by the giants in many successful industries. Corporate governance is the way a corporation polices itself. In short, it is a method of governing the company like a sovereign state, implementing its own customs, policies and laws to its employees from the highest to the lowest levels. Corporate governance is intended to increase the accountability of the company and to mitigate against crises before they occur. Well-executed corporate governance is seen to be similar to a police department’s internal affairs unit, weeding out and eliminating problems with extreme prejudice.

From a financial point of view, having a solid structure in place, by taking into consideration the seven most important key performance indicators, assists the company in good performance and management of the finance department. The results of implementing these indicators help the finance department to see:

- Revenue growth rate
- Net profit
- Net profit margin
- Gross profit margin
- Operating profit margin
- Return on investment
- Cash conversion cycle

Being a member of the Institute of Directors of South Africa (IODSA), I continually attend courses to ensure ETL is current with policies and procedures. This has empowered me to implement strong governance at ETL. As a member of the 17% of female directors in South Africa I am inspired to improve, implement and monitor good governance within ETL.

I am currently studying my MBA at Henley University (University of Reading, UK) and my next short term milestone is a Project Management course at CESA (Consulting Engineers of South Africa). My current objectives include encouraging the board of directors to become members of the IODSA and urging members to attend courses to improve their knowledge on how to be an efficient and effective member of the board.

As we embark on this new chapter, it gives me immense pride to assume the mantel of COO of ETL. We are abiding by all ethical standards whilst enjoying a strong, qualified board of directors and the support of seasoned professionals within our team.
Licungo Hospital

a shot in the arm for Maputo’s healthcare system

Background:
Healthcare is one of the world’s largest and fastest growing industries. There is always a global market in which demand for capital investment in healthcare facilities is increasing, due to population growth, clinical developments, technology innovations and life expectancy. Many countries have already noted near trebling of GDP health investment over the last 40 years and expectations of further major rises to 2030. Currently, demand for new and refurbished health facilities is high in the emerging economies such as the Middle East, Africa and Asia, while construction activity in most of Europe and the USA has not recovered to the pre-2008 crash levels and the consequential austerity programme.

ETL’s Role in delivering the Licungo Hospital:
The Licungo Hospital will be situated in Rua Garcia de Resende 407 (Main Entrance) and Rua Pedro Nunes in Summerschield, Maputo. The land has been secured under consent from the Mozambique Government for 30 years and with various lease back options after the investment tenure. The existing building will be evaluated by the team and the final structure will be based on the required services to be provided and the availability of existing space to be utilised optimally. The site is ideally situated in a relatively quiet area and therefore ideal for healthcare services, while being easily accessible to the wider community of Maputo.

ETL has been tasked by the Government of Mozambique to deliver the above project, together with its capital partners on a design, build, own/operate and transfer arrangement with the Government of Mozambique. Our role primarily revolves around the provision of professional services by participating in partnerships with commercial partners, development banks and financial institutions. Conceptual designs will include the following wards and operating infrastructure:

I. Medical Ward
II. Surgical Rooms
III. Maternity Ward
IV. Paediatrics and Trauma Units

Our multi-disciplines and skills sets assures engineering services of record, to government or private institutions, while our acquired continental track record in providing reputable consulting services such as project studies, design and concept delivery, complements the project team perfectly.
Facts Around the Project & Financial Arrangements

The scope of work included under this project includes:

1. Full feasibility studies for the renovations of all existing sections, covering technical, project economics, environmental and final designs to accommodate both social/macro-economic issues as the base case for the project. The final report will provide the client with sufficient information for decision making on the preferred alignment and the proposed funding plan of the hospital;

2. Preparation of detailed engineering designs, drawings, cost estimates and tender documents for the procurement and contracting stages.

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Gross Floor Area: 3,846m²
Possible Gross Leasable Area: 3,846m²

Professional Fees: ZAR 15,114,000.00 *Professional fee of 8% of the Project value
Total Funding ZAR 224,447,000.00

ETL’s role includes overseeing all consulting work including programme management, professional engineering services and final procurement.

**Funding Strategy:**

In general, the lowermost cost of capital will be achieved by combining grant finance and a consortium led fund-raising exercise. When debt to equity percent split of 33/67 is achieved, we will maximise on loans post-construction by offering a percentage equity to contractors in order to reduce cost of total capitalisation and the amortisation schedule for the project debt is not negligible. This will be done as closely as the financial markets will permit, to the cash flows of the project.

Finance Quantum: USD 21 million, own equity contribution portion will be USD 6.3 million with final debt amount of approx. USD 14.7 million to complete the funding arrangement. Construction grants of 20% can be ceded to the project and used to offer incentives to the prime contractor for an exchange of equity and guarantees swaps, which expire on the eve of the debt maturity.

Attention to quality healthcare is an increasingly important issue in a global economy, particularly in the healthcare field. Quality healthcare is an increasingly important issue particularly in the last decade, with growing demands presented by providers, payers, patients and even policymakers in the hospital environment. ETL is honoured to have been afforded the opportunity to participate in this essential sector. Our skills base coupled with our experienced professionals will ensure that the confidence placed in the company by the Government of Mozambique is justified.

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Asogan Pillay
ETL is proud to be associated with the Infrastructure Asset Management training program of the Institute of Municipal Engineers of Southern Africa (IMESA) through our CEO, Mr. Moses Maliba. In this program ETL, through a contract with IMESA, offers training to various municipalities and government departments. The offered training is accredited and in line with the International Infrastructure Management Manual (IIMM) and all related courses that the institute provides. The most popular of these courses include:

- 10 steps to developing an asset register,
- GRAP 17 Compliance and
- Infrastructure Asset Management, a 4 Day Course

The intended benefits of this program include but are not limited to the following:

- Standardised asset reporting and componentisation
- Determine and quantify asset condition and impairment of infrastructure of assets
- Develop asset maintenance budgets for a three to five year cycle
- Carry out long term planning relating to cost of replacing infrastructure assets
- Prioritise the maintenance of infrastructure
- Generate own Asset Management Plans and compliance with the GRAP 17 requirements

ETL will also assist municipalities to use the Innovative Asset Management methodology (software) developed by IMESA. It will assist with the capture of all data required to generate GRAP 17 registers and apply this information to improving their long term asset management and maintenance planning. The data is hosted by IMESA but is accessible to the municipality 24 hours a day. An added advantage of the system is that it is offered free of charge, with no limit to the number of users within each municipality. The only charge will be a nominal monthly maintenance and hosting fee payable to IMESA. ETL will only charge for the normal professional services fee for the physical work of data collection, analysis, GRAP 17 reporting and development of an Asset Register and Asset Management Plan for the municipality.

In order to implement this system the municipality would be required to provide basic information with regards to their asset data such as the existing infrastructure, asset number in the financial system, type of asset and date of acquisition/construction and asset location (GIS). If, however, this information is not available it can be collected on site.

ETL has the requisite personnel to develop the asset register for any municipality in South Africa and will partner with the best professionals in the field. We are currently engaged in a number of partnership projects with other professional service providers in this field and are doing exceptionally well.
Schools in the rural areas of South Africa have starkly different levels of infrastructure provision and aesthetic appeal as compared to schools in urban centers. Mud buildings, pit latrines, broken windows, coupled with no sporting facilities, as well as a dearth of libraries are the norm in rural areas. In order to rectify this historic imbalance, the Department of Basic Education has launched several programs that seek to improve the environment within which learners and educators work.

The Limpopo Provincial Department of Education embarked on a program to rehabilitate/rebuild and upgrade certain storm damaged schools in the province. The Department of Trade and Industry (DTI) was mandated to oversee the implementation of the program. The upgrades also included additions of facilities which were lacking before the schools were damaged. ETL was appointed through our partner Lehuma Consulting Architects to handle the civil engineering components of the project.

There are a total of 15 schools within the project. The first phase, which included the design of all the storm-water facilities, parking areas, drainage, sewerage facilities and water supply systems, is now complete and ETL is awaiting approval to embark on the next stage which is procurement and bid adjudication. It is envisaged that the program will commence shortly, before the existing structures deteriorate further and possibly become unsafe for occupation, especially by school children.

It is also safe to assume that the upcoming rain-free season would be ideal for construction work, thus the DTI may wish to press on during this opportune time and get as much building work done as possible. New facilities which were not there before the upgrade will include all or some of the following facilities per school: Resource centres, feeding scheme and nutritional centres, additional classrooms, libraries, office blocks, administration centres and parking facilities for educators.

ETL is committed to proceed with the project as it considers the upgrading of our educational facilities as one of the most important and critical elements to the overall advancement of the quality of life in the country.
As an energy crisis looms in South Africa and the cost of renewable energy reaches grid parity ETL is geared up to partake in the energy space. Renewable energy can be regenerated for an indefinite period of time and is clean and efficient. Energy sources that are dependent on fossil fuels such as coal and oil will eventually be depleted or are too expensive to access. Fossil fuels also generate greenhouse gases, which appear to be the cause of rising temperatures and climate change. Some known renewable energy sources are:

- Solar (heating and electricity generating).
- Wind
- Geothermal
- Hydro power.
- Biogas or biofuel

With the ever-rising cost of traditional fossil fuel based energy, renewable energy is becoming a viable option. Renewable energy can be produced on a macro scale, to a small microenvironment such as solar heating.

**SOLAR WATER HEATING**

ETL is currently in negotiations to acquire a Solar Water Heating (SWH) manufacturing plant in order to participate in the government’s Integrated Development Plan (IDP). Our key role will be to:

1. Develop and support the local Solar Water Heater manufacturing Industry in SA.
2. Create job opportunities within the SWH sector
3. Youth development through education and training

![High Pressure Residential (4m² per unit)](image)

**Figure 1.0 - The South African Solar Thermal Technology Roadmap (SASTTR)**

SWH Installations Target up to 2030
South Africa’s potential for renewable energy

South Africa still has an abundance of fossil fuels in the form of coal, which accounts for the many existing and newly developed coal powered power stations. At the same time South Africa has an abundance of sunshine, which lends itself very well to solar water heating and electricity generation. With increasing prices of coal powered electricity, solar powered heating and electricity is becoming more attractive. One major hurdle is however, still legislation.

Currently domestic grid tied solar systems in South Africa are legally not allowed to feed back into the grid, the main reason being that majority of the municipality’s income is derived from the sale of electricity. However the PV industry and government are in talks to consider the Feed-in-Tariff system.

The Honourable David Makhura, (Premier of Gauteng) vowed to invest in local solar technologies with the intention of establish a manufacturing plant in Gauteng – an initiative that would be undertaken with the University of Johannesburg. “This project, which is worth R7bn, will supply 500MW of solar energy and create more than 15 000 direct and indirect jobs,” he said. “Our estimate is that we have available 8 million square metres of rooftop space suitable for this and will be able to generate 300-500MW of electricity.”

In light of these positive steps, ETL has considered developing a PV Module manufacturing plant in SA to accelerate the use of renewable energy in the country, using locally manufactured components. The project is in the feasibility stage and it is hoped to be complete in the first quarter of 2016. The development will be a turnkey greenfields operation and will be supported by our German counterparts JvG Thoma, GmBH, who have developed Turnkey PV module and cells factories in Russia, Germany, India, Bangladesh, Estonia, Korea, Poland, Romania, Tunisia and Nigeria.
The Republic of Mozambique is a country in southeast Africa bordered by the Indian Ocean to the east, Tanzania to the north, Malawi and Zambia to the northwest, Zimbabwe to the west, and Swaziland and South Africa to the southwest. It is separated from Madagascar by the Mozambique Channel to the east. The capital and largest city is Maputo.

Mozambique is endowed with rich and extensive natural resources. The country’s economy is based largely on agriculture, but industry, mainly food and beverages, chemical manufacturing, aluminum and petroleum production, is growing. The country’s tourism sector is also expanding. South Africa is Mozambique’s main trading partner and source of foreign direct investment. Portugal, Brazil, Spain and Belgium are also among the country’s most important economic partners. Since 2001, Mozambique’s annual average GDP growth has been among the world’s highest. However, the country ranks among the lowest in GDP per capita, human development, measures of inequality, and average life expectancy.

Shortly after independence, the country was plunged into a two decade long and violent civil war, that pitted opposition forces of the anti-Communist Mozambican National Resistance (RENAMO) rebel militias and the FRELIMO regime. This conflict, combined with sabotage from the neighbouring white-ruled state of Rhodesia and the apartheid regime of South Africa, ineffective policies and failed central planning, resulted in economic collapse. This period was also marked by a collapsed infrastructure, lack of investment in productive assets, and government nationalisation of privately owned industries as well as widespread famine.

Following an end to the civil war and the introduction of multiparty democracy in 1993, Mozambique has experienced an economic and investment boom. In the past decade it has consistently shown an economic growth rate of between six and seven percent.

Despite these promising gains, the road infrastructure in Mozambique is still in need of significant investment if the country wants to assume its position as one of the leading economies of the region. In Mozambique, some communities are isolated during the rainy season, when bridges frequently collapse, and new roads are riddled with potholes because of poor maintenance and/or poor construction work. This affects trade even between neighbouring provinces, depriving small and medium enterprises of key markets. When direct and indirect costs are combined, Mozambican firms spend an average of 22 percent of their revenue on issues related to transportation infrastructure. Only about 25 percent of rural Mozambicans live within two kilometres of the road network. This is highly problematic in a country in which 70 percent of its population are rural dwellers, and whose agricultural sector contributes 22 percent to the GDP.

The Mozambique Government, through their Roads Agency, Administração Nacional de Estradas (ANE), has signed a Memorandum of Understanding with ETL to conclude a feasibility study, engineering, design and construct the Moatize to Zero Road.
Road. Moatize is a town and district located in the Tete Province. The road is located near the town of Moatize and near the Zambezi River. The total length of the road is 388 kilometres and costs are estimated at US$600 million.

Our role as development partners is to initiate private funding for the equity portion ETL holds. This amount is limited to 15 percent which ETL will re-invest directly into the project participation. Our sole investment criteria, is a successful project mandate and evaluation of the project and the bankability and nature of the risk by the government, shadow tolling and/or fuel levies to conclude the proposed capital plan. If we are satisfied by the investment grade, a call for further investment will be concluded through our financial partners (“Prime Investors”) who have a track record of successful delivery of capital infrastructure funding and consummate knowledge of public and private partnerships as well as the corporate capital for funding.

Construction is expected to start in May 2016 and should take a further three years to complete.
Zeerust Police Station
A new policing hub

The Zeerust Police Station is a novel project in the town of Zeerust. It serves as a commercial hub for the Ramotshere Local Municipality in the North West Province, South Africa. It lies in the Marico Valley, approximately 240 kilometres northwest of Johannesburg.

The small border town between Botswana and South Africa was originally named after Hendrik Coetzee as “Coetzee’s Rust” and was later abbreviated to Zeerust.

The Zeerust Police Station project is centred around the town’s oldest properties and busy central business district. The police station which was modestly built by the old government, had started to age very badly and is in need of serious renovations. The Department of Public Works awarded the R72 million project to our partners, who were tasked with rebuilding and expanding the police station to provide effective policing in the district. On completion the Zeerust Police Station will be the biggest branch in size and capacity in the area. It will provide much needed service delivery and policing in the community.

ETL’s role in this project stems from a finance perspective – raising start up capital that assists the emerging contractor to establish site and commence construction. In order to mitigate our risk, we are also providing project management services. The project became a milestone for our new project finance business unit, as it tests our internal mission statement and our robust understanding of project finance methods.

Construction is currently underway and is scheduled to complete, on time and within quality standards.
New Water Project brings Fresh Life to Communities

The Magalies Water Board has embarked on a massive program of upgrading and refurbishing water infrastructure in its area of supply. The Water Board, has engaged various professional service providers to assist them with the planning, design and implementation of this upgrade. Most of the water infrastructure in the area is ageing and dilapidated and requires urgent attention to keep it functional and to ensure the services to the affected communities are uninterrupted.

Two water treatment plants were identified as needing urgent refurbishment and upgrading namely: Cullinan Water Treatment Plant and Wallmannsthal Water Treatment Plant. Both these projects are unique in that the work must be executed while the plants are in operation and there should be no shut downs, water shortages or disruption. Initial suggestions indicated that the plants were not delivering the required volume or quality of water, making expansion the solution.

ETL through our specialist water purification and treatment team conducted extensive tests on site and in the laboratory to determine the raw water quality before engaging in the design of the process of effective treatment of the water. The water source was found to have certain quality problems, requiring it to first be treated and only then focusing on the water within the treatment facilities.

The work is currently underway and various design options are being evaluated. The ultimate aim is to deliver an innovative solution that will once again demonstrate to our clients our commitment to resolving the issues unique to these plants and going beyond a text book ‘one size fits all’ solution.

ETL is committed to making advances in solving traditional problems by challenging conventional approaches in all possible instances to bring about improved and innovative solutions.
“He taught us that it’s not power or wealth that makes a leader great, but the power of truth and integrity.” Ray Flynn, former mayor of Boston and former U.S. ambassador.

ETL is proud to announce its alignment with the upcoming launch of “Mandela in Focus”, a coffee table pictorial of about 260 pages featuring photographs of the Father of our Nation, some of which have not been seen in public before.

Nelson Rolihlahla Mandela (18 July 1918 – 5 December 2013) was a South African anti-apartheid revolutionary, politician and philanthropist who served as President of South Africa from 1994 to 1999. He was the country’s first democratically elected leader. His government was focused on dismantling the legacy of apartheid through tackling institutionalised racism, poverty and inequality, and fostering racial reconciliation. Politically an African nationalist and democratic socialist, he served as President of the African National Congress (ANC) party from 1991 to 1997. Internationally, Mandela was Secretary General of the Non-Aligned Movement from 1998 to 1999.

A Xhosa born to the Thembu royal family, Mandela attended Fort Hare University and the University of Witwatersrand, where he studied law. Living in Johannesburg, he became involved in anti-colonial politics, joining the ANC and becoming a founding member of its Youth League. After the Afrikaner minority government of the National Party established apartheid in 1948, he rose to prominence in the ANC’s 1952 Defiance Campaign, was appointed superintendent of the organisation’s Transvaal chapter and presided over the 1955 Congress of the People. Working as a lawyer, he was repeatedly arrested for seditious activities and, with the ANC leadership, was unsuccessfully prosecuted in the Treason Trial from 1956 to 1961.

Influenced by Marxism, he secretly joined the South African Communist Party (SACP) and sat on its Central Committee. Although initially committed to non-violent protest, in association with the SACP he co-founded the militant Umkhonto we Sizwe (MK) in 1961, leading a sabotage campaign against the apartheid government. In 1962, he was arrested, convicted of conspiracy to overthrow the state, and sentenced to life imprisonment in the Rivonia Trial.

Mandela served 27 years in prison, initially on Robben Island, and later in the Pollsmoor and Victor Verster Prisons. An international campaign lobbied for his release, which was granted in 1990 amid escalating civil strife. Mandela joined negotiations with Afrikaner Nationalist President F. W. de Klerk to abolish apartheid and establish multiracial elections in 1994, in which he led the ANC to victory and became South Africa’s first black president. He declined to run for a second term, and was succeeded by his deputy, Thabo Mbeki. Mandela became an elder statesman, focusing on charitable work in combating poverty and HIV/AIDS through the Nelson Mandela Foundation. He is held in deep respect within South Africa and the World, where he is often referred to by his Xhosa clan name, Madiba, or as Tata (“Father”); he is often described as the “Father of the Nation”.

The photographs contained in ‘Mandela in Focus’ were taken over a 25 year period, from 1990 to the passing away of the global icon in 2013. Private family functions,

Kevin Joseph
gatherings at home, traditional festivals and even moments of grief have been captured and preserved for posterity. This book contains exclusive pictures of the funeral of the statesman and the very first published pictures of his gravesite. It records the first visit of his second wife, anti-apartheid stalwart Mrs. Winnie Madikizela Mandela. It captures touching and private moments of President Mandela and his wife Mrs. Graca Machel at their home. The book also tells the moving story of how a prison warder smuggled a slice of brown whole wheat bread daily into Robben Island so that President Mandela could enjoy his favourite, sour milk sandwiches.

A bit about the Photographer

Kevin Joseph is a career photographer who started work as a teenager on the streets of Durban snapping happy holiday makers. He was recruited by the Leader Newspaper to work on their social pages before he graduated to the hard news pages. His photographs highlighting the hardships and sufferings of people of colour under the brutality of apartheid, made him a much sought after photo-journalist by publications from abroad. After a decade on the beat, by now a seasoned newsman, he met the late President Mandela on the eve of the Conference for a Democratic South Africa (CODESA) at the world Trade Centre.

This led to a friendship which endured a quarter of a century. He was taken into the inner circle of the Mandela family. He became the personal photographer for the statesman and was able to capture some of the most poignant moments in the life of our iconic leader. Kevin Joseph is a regular at state functions and travels extensively throughout the country for government events.

The launch of the book will be held in New York on 18 July 2015 and the guest list is expected to include US President Barak Obama and television talkshow queen Oprah Winfrey among others. The US release will be followed by launches in Canada, Cuba and South Africa. An ETL delegation will be accompanying Mr. Joseph to these events.

This book gives an amazing insight to the man who brought democracy to South Africa and ETL is proud to be associated with the launch of “Mandela in Focus”.

To view the complete portfolio please visit: http://mandelainfocus.co.za
ETL Director recognised for outstanding leadership

The Oliver Empowerment Awards recognises outstanding leaders who exemplify inspiration, vision, innovation, leadership, and action for empowerment and transformation. Recognised as South Africa’s premier awards for business leadership and innovation, the Award has created a legacy of inspiration for the country’s business elite.

It is with great pride that ETL announces that on 23 April 2015 one of our Board Members, Bongani Mabizela, was recognised for his contribution as one of those trailblazers in business who have deliberately and bravely championed the cause of empowerment and transformation, for the betterment of the country’s economic landscape. Mr. Mabizela was recognised as South Africa’s Top Empowered Male Leader of the Year 2015.

The criteria for adjudicating the Award included using one’s executive position whilst displaying leadership qualities that are reflected in service to the industry as well as demonstrating how he/she has implemented and driven the strategies of B-BBEE in the areas of enterprise development, social economic development, skills development and employment equity.

In a time where empowerment and transformation have become cliché it is imperative that we revisit our understanding of these concepts. Empowerment is a multi-dimensional social process that helps people gain control over their own lives and destinies. As we do so we must guard against the trappings of greed, corruption and dishonesty. Transformation as we understand it, presupposes a marked change in appearance, usually for the better.

It is in this light that we see empowerment and transformation being intertwined. In the South African business context, one cannot happen without the other. They are deliberate actions with the intent to produce something innovative, a new formation or structure, an improved situation.

Mr. Mabizela has been accordingly recognised for his service to the South African business community and commitment to empowerment and transformation. Despite our short period of existence, ETL is already showing, through professionals like Mr. Mabizela, that we are a company of substance and expect to reach great heights in the future.

ETL congratulates and salutes one of our leaders.
ETL-Tata Partnership
Investing in the next Generation

By definition, a strategic partnership is a formal alliance between two commercial enterprises, usually formalised by one or more business contracts. Typically two companies form a strategic partnership, when each possesses one or more business assets, that will help the other.

There can be many advantages to creating strategic partnerships. As Robert M. Grant states in his book Contemporary Strategy Analysis, “For complete strategies, as opposed to individual projects, creating option value means positioning the firm such that a wide array of opportunities become available”. Hence, firms taking advantage of strategic partnerships can utilise other company’s strengths to make both firms stronger in the long run. One of the most important types of relationships are those where engineering teams work hand in hand to integrate existing technologies, skill and resources.

Tata Consulting Engineers is a best-in-class integrated engineering consultancy solutions provider. The company boasts expertise of over five decades, presence in almost all key industry segments, capabilities to handle multi-dimensional, large scale assignments and long-term relationships built across the globe, making TATA Consulting Engineers distinguished. TATA’s specialised, in-house talent pool and the ability to provide holistic solutions under-one-roof makes them unique.

Tata Consulting Engineers is a signatory to the Brand Equity & Brand Promotion Guidelines (BEBP) which ensures that the Tata Group philosophy on ethics, transparency and accountability is applied across the organisation in the conduct of its’ day-to-day business.

In line with ETL’s vision, strategic partnerships are essential to project the company into a market that demands technical excellence at all times. The challenge arises when we are tasked with delivering on mega projects that require multi-disciplinary engineering skills sets working in unison. It is with great pleasure that ETL announces it will be signing a co-operation agreement with TATA Consulting Engineers. The ETL Board has full confidence that such a strategic partnership with one of the formidable giant’s in our industry will only ensure ETL’s emergence as a leading service provider in Africa.
As part of our constant strive for excellence, ETL has adopted ISO 9001:2008 quality standards. ISO 9001:2008 is based on eight quality management principles:

- Customer focus
- Leadership
- Involvement of people
- Process approach
- System approach
- Continual improvement
- Fact-based decision making, and
- Mutually beneficial supplier relationships

A fully operational certified ISO 9001:2008 system demonstrates a real commitment to product and service quality. The staff complement at ETL appreciates the conformity to processes afforded by a controlled system. This permits ETL the ability to manage the business of “providing effective and efficient engineering solutions based on international standards” to clients and the communities in which we are privileged to work.

Consistently being able to produce the same outcome builds reliability and trust in ETL both as a service provider and as a responsible corporate citizen. Staff are being trained in the operation of the system and procedures to be followed when completing tasks. Improvements have already been identified and implemented. Management is currently in the process of ensuring a suitable enabling environment for staff to function optimally.

The planned date for the first stage audit is to be decided by the Executive Committee at the next scheduled strategic session (in June 2015). The schedule for the internal audits as well as the Management Review has been established and training is ongoing.

Given ETL’s prescriptive rapid growth strategy, ISO 9001: 2008 compliant systems offer conformity of operations which will be handed over to and implemented at the various offices that will be opened.

Samantha D. Pillay supported by Lionel Padayachee are the appointed leaders of the initiative. Both have had significant experience and education in change management and ISO 9001:2008.
New Offices, Fresh Start

ETL is rapidly developing a reputation for quality service delivery in the Built Environment Sector. After careful consideration of several ideally located office parks we have settled for Hampton Office Park, in Bryanston for ETL’s new home in Gauteng.

The Office Park hosts several major companies such as the Power Group, Lohnro Mining and Group 5. ETL is located on the first floor of Fulham House, with the Consulting Engineers of South Africa (CESA) being housed on the ground floor.

As a young company, we see the launch of this first office as the catalyst to many great things to come. Our strategy includes opening offices in KZN, Mpumalanga, Eastern Cape and North West Provinces in the next few months.

Projects in Tanzania, Mozambique, Botswana, Zambia, Zimbabwe and the Democratic Republic of Congo will necessitate offices being opened in these countries in the foreseeable future.
ETL’s investments in education helps to strengthen communities. As part of our Bursary Initiative, we’ve teamed up with a leading educational institution to create opportunities for deserving students from disadvantaged backgrounds, providing financial aid for these students to complete their studies in the Science and Technology sector. This is a typical example of ETL’s approach to meaningfully engage with and give back to the communities we work in. It is also envisioned that through our commitment to education, entrepreneurs such as those that have emanated from the ETL breeding ground will ultimately contribute to society as a whole.

The following is a first-hand reflection on ETL’s commitment by one of our bursary students:

**A Dream Made A Reality**

My name is Ashraf Sayed Hoosen and I am currently a fourth year medical student at the Nelson R Mandela Medical School in Durban. My studies involves understanding the various systems in the human body and how to assess and treat any problems related to these various systems. My studies also enable me to not only make a difference clinically, but to also assist society in a non-clinical way, an example being recognising abuse and unhealthy work environments and helping to provide an effective plan to manage such situations.

To give some background of my relationship with ETL, it is important for me to relay my first encounter with Mr. and Mrs. Pillay (Directors at ETL). Mrs. Pillay was asked...
to be the Guest of Honour at the Verulam Secondary School awards ceremony in 2011, and I was one of the matriculated awardees at the ceremony. Mrs. Pillay had given a few words about herself, and the trust fund that she was involved in and made mention of her willingness to assist any student financially to attain a tertiary education. My parents had then contacted her to ask for financial assistance on my behalf as both my parents are unemployed and without any assistance I would not be able to attain my dream of being a medical doctor and assist the community.

Being awarded this bursary allowed me to enter a profession that I had been passionate about from a tender age. It is also through this assistance that I was able to attain a good pass, obtaining a Dean’s Commendation. From my parents’ perspective, getting this assistance has brought an immense amount of joy, knowing that I would be able to make a difference in society and follow in the footsteps of many greats in the profession. ETL has made it possible for me to make my dreams and aspirations a reality. I am very grateful for their financial contribution to my education and I thank them immensely.

Kiravani Pillay
Tshepo Lesejane
Building ETL’s future
A Profile on John Powell

Having worked closely with Asogan Pillay for over a decade, it is with great excitement that I have taken the helm in the new Architectural Department of ETL.

I have been a practicing architect for over thirty years and I have indepth experience in planning and designing an array of buildings. Two areas that are great sources of interest and sabbatical research are those described below:

• Transport nodal interfaces of various sorts have been a motivating factor in my career so far; and my experience in this field includes working on airports (JIA/OT International, including the master planning for the Mid-Field Development) and bus, taxi and railway stations. With regard to the latter, designing stations from Mabopane in the north of Gauteng, through eParkies, to Kwezine in the south. That transport experiences led me to be heavily involved in the development of the Bombela Submission for the Gautrain right up to the BAFO stage.

• Education is an abiding interest and has been a firm commitment of mine to provide real growth to the people of South Africa, in a meaningful manner. I have transformed learning spaces under trees in the communities of Magoba ba Kwena and Moetse III into formal classrooms and provided schools to communities across the country representing all sectors of the Rainbow Nation. I have worked on schools throughout the spectrum from rural schools in communities such as Magopa and Moetse, to private and, special needs schools. I have also worked on tertiary institutions from specialist training centres to universities.

What I find so inspiring, being involved at ETL from its inception, is that it merges experiences and knowledge. The ability to do this makes our team a new, truly South African multi-disciplinary consultancy at the forefront of technologically based infrastructural development in our country, and Africa. This comes at a time when skills and delivery are in critical shortage.

Ten years ago, NHBRC and ABSA combined efforts by creating the Housing Innovation Project, which grew into the showplace for alternative housing solutions at the Eric Molobi Housing Innovation Hub. I was a founding and award-winning contributor to the formation of the Hub. While the humble, adaptable and user friendly clay brick has been the backbone of development for a long time, its usefulness is on the wane. The dwindling stocks of raw clay, coupled with new technological innovation, have led to alternative building methods being developed. While the majority of these systems do not have the inherent ability to be cost effective in themselves, the basic standards and requirements such as being environmentally efficient or able to reduce building time on site, have made these alternatives the foundations of our future infrastructure.

ETL is uniquely placed to exploit those appropriate alternative systems and using these technologies as the portal for future sustainable infrastructural development.
EFFECTIVE ENGINEERING SOLUTIONS FOR SUSTAINABLE DEVELOPMENT