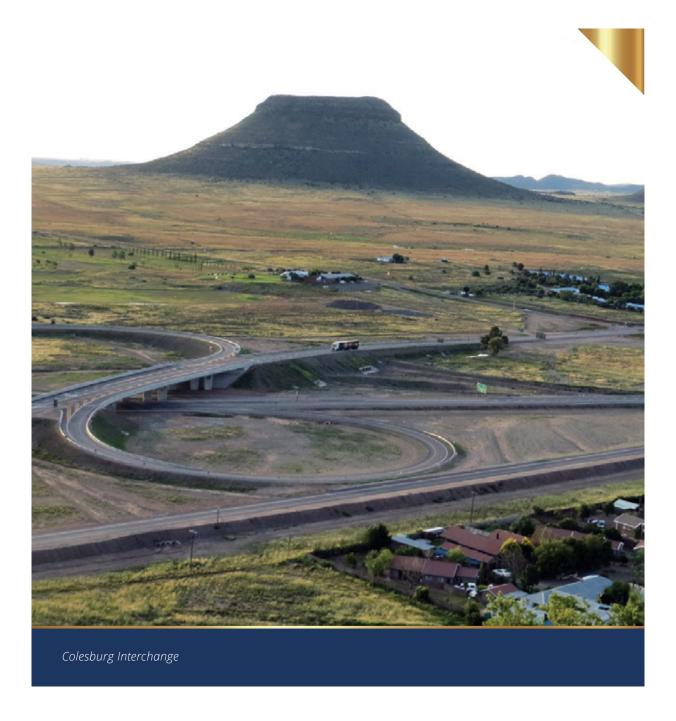


IMPROVING LIVES
ENGINEERING SOLUTIONS





IMPROVING LIVES ENGINEERING SOLUTIONS



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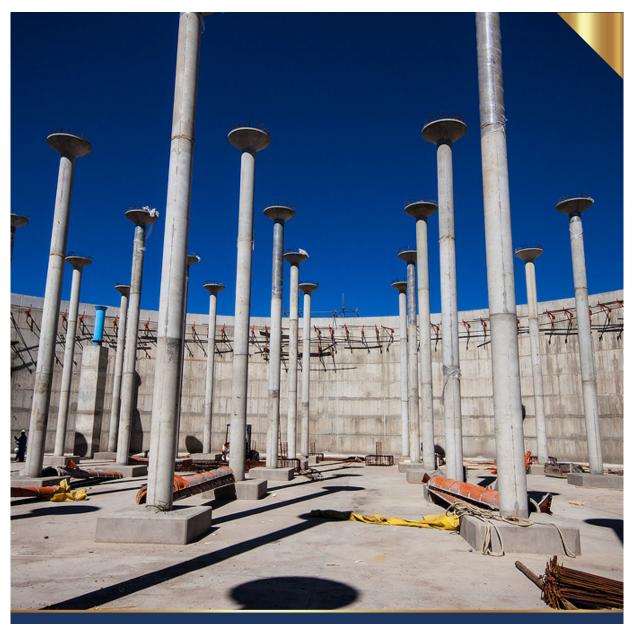
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Jane Furse Reservoir: The completed reinforced concrete (RC) circular wall and columns with conical column heads are ready to support the cast-in-situ RC roof slab.

## **PREFACE**

This book is a celebration of the strides Mariswe has made in its journey since establishment in 1972. It captures a high-level history of the company from critical points in time. It would be impossible to cover the story of everyone who has played a critical role in the company, especially noting the depth and vastness of contributions by each employee. It is for this reason that few voices were used to narrate the story setting out their experiences, challenges and their grandest of memories.

The selection of memories cover the experience and indelible mark made through projects, technical know-how, daring to dream and believing in the realm of possibilities. This 50th Anniversary book takes strength from the founders of the company, appreciating their vision and the courage to call upon others to rally behind their vision.

The book recognises the business environment within which the company operates and how this environment shapes in many instances the posture the company takes from time to time. Operating predominantly in the public infrastructure space has its challenges well beyond the broad challenges of infrastructure in general. These challenges make or break companies.

The detailed story of navigating transformation in Mariswe is highlighted in the company's response to the legislative and policy frameworks that the company must comply with. Most importantly, embracing transformation in South Africa is just and honourable as it facilitates inclusion of previously marginalised people in the economic mainstream.

The focus on women is a critical one. Our industry is thin on women and as a company we want to encourage and empower women to rise through the ranks in their different disciplines. Our ideal is to see more professional women in the industry playing critical roles in driving the county's infrastructure solutions. This insurmountable task can only be attainable if we and others are intentional in driving transformation, particularly empowering women at every level in the company.

Mariswe has a wonderful history of multiculturalism. From the very beginning of the company, it was founded on attracting employees from all walks of life. Through these exposures and interactions, we learned from the best, increased our pool of knowledge and delivered niche services.

Mariswe is a medium-size company with a humongous heart. We are not afraid of the challenge. We have delivered projects that were beyond our imagination. We have at the same time drawn from others in the industry to assist us where it was necessary for collaboration.

As the public sector is becoming more constrained in funding infrastructure projects, we have had to move into the Public Private Partnership (PPP) space seeking solutions to keep ourselves in business. We have gained enormous experience in this discipline and will be using this experience for many years to come in South Africa and elsewhere.

# WORDS OF GRATITUDE

This is a glimpse of the Mariswe story as we celebrate 50 years of existence in the civil engineering, infrastructure planning and project management space. As with everything that is done for a community or group of people, it is difficult to achieve a product without the selfless contributions of many individuals. I will not be able to mention every name of those who kindly pointed the project in the right direction. I apologise in advance if your name is not mentioned.

I wish to extend my sincere gratitude to Sybrandt van Wyk, former and now retired Executive Manager Transportation: Inland Provinces, for his generosity in sharing the information which formed the core of this book. Van Wyk worked for the company for more than 43 years and is a walking encyclopedia on Mariswe, if there ever was one.

I would like to acknowledge Frans Prins, co-founder and former MD of Uhlmann Witthaus & Prins Consulting Engineers, who opened his heart and shared wonderful stories with me. Not all the stories were captured in the book but his generosity and time he gave to this project will forever be remembered.

To Zulch Lotter, former MD of UWP, I appreciate your open mind and willingness to contribute to the project. Your honesty, attention to detail and willingness to make this project a success does not go unnoticed.



To Craig Northwood, former MD of UWP, I extend my gratitude for the time you spent in making inputs and providing honest feedback on the versions of the book. Your time and interest in the project will always be remembered.

To the Board and Management Committee of Mariswe, gratitude to you for giving the project space to be. Your leadership is always appreciated.

To the leadership of UWP Tanzania, thank you for sharing stories about UWP Consulting Tanzania's humble beginnings. For those who met the company when it was well established could hardly have thought of the journey you walked to get to this point. I am positive your story will encourage and infuse many readers with hope for the future.

To Nicole Levin, I have no words to thank you for pointing me in the right direction when I was looking for historic information about employees or events that shaped the company.

To Khomotso Masemola, thank you for coordinating the whole project, keeping me sane when my health was failing me resulting in the project being pushed well out

of timeline. I could never have done this without your persistence and organisation skills.

To Patience Mashala, the organiser, thank you for organising the many sessions that needed only your touch to be great.

To Magnificent Mndebele and your team I appreciate the hard work in pulling through the research that informed the book.

To all the contributors, whether your contributions ended up in the book or not, you are all heroes and heroines of Mariswe for making it possible to capture this momentous occasion. Your valuable contribution has helped us to celebrate the history of this company.

And to Mariswe, the company, thank you for giving us so many wonderful memories and lessons over the past 50 years. May you grow from strength to strength and offer a great future and many wonderful memories to those who will be lucky to enter your proverbial doors.

To the reader of this book, we wish to share with you the Mariswe story in our language and we hope you will relate to it!



# IMPROVING LIVES ENGINEERING SOLUTIONS







The evolution of Mariswe's corporate identity over the last 50 years.

## THE FORMATIVE YEARS OF MARISWE

The entrepreneurship journey is a roller-coaster ride as entrepreneurs go through many ups and downs to finally establish their businesses in any ecosystem. It takes years of grit and determination to make a business fully functional and self-sustainable. This is the story of Mariswe, formerly UWP Consulting, which has stood the test of time in the consulting civil engineering industry.

Mariswe, as it was renamed from UWP on 26 November 2018 with the full roll-out of the name in 2019, is a culmination of hard work and, most importantly, the transformation that has seen the company become more inclusive in terms of gender and race.

While this transformation is much yearned for in companies across South Africa, changes along the lines of race and gender are painfully slow, and often it's easier to buy the transformation changes through acquisitions than build from within. For Mariswe, this was not going to be our only story. Our transformation story was going to be mainly homegrown and authentic.

Mariswe has been the epitome of success, marching at the front-lines of progress. While not a big company, Mariswe has always punched way above its weight in terms of projects that the company has handled. The company has built a strong foundation, appointing strong and technically competent managers to drive business performance.

Like most consulting engineers in South Africa, the top management of Mariswe comprised predominantly white males until the late 1990s. Since then, through a succession of various policies and operational changes, we managed to transform Mariswe into a Level 1 BBBEE-compliant company with an ownership of more than 55% Black, 30% women and 22% Black women-owned.

This tide of change has seen the company's first woman and Black CEO, Nonkululeko Sindane, steer Mariswe through challenging economic times. Currently, Mariswe's board comprises Zwe Msomi, Louis Uys, Riyaaz Nieftagodien & Jaco Heyl as executive directors and Kuben Govender and Tracy Naidoo as non-executive directors.

What started as Uhlmann Vallis Witthaus & Prins in 1972 at 103 Simmonds Street in Braamfontein, specialising in roads, has since expanded into a successful and well-respected multi-disciplinary civil engineering firm.

While there have been many challenges in the formation of Mariswe, a solid grounding of integrity, diligence, technical excellence, professionalism, and diversity has seen the company grow in leaps and bounds in its 50 years of existence. The company's impact is far-reaching, with 10 offices spread across four of South Africa's nine provinces. Mariswe serves clients across all tiers of government alongside a growing private sector client base.

The company's core services range from transportation, water and sanitation, structures, infrastructure planning and project management. Mariswe has strong experience in mining, agriculture and telecommunications. We have gained significant experience in handling Public Private Partnership (PPP) projects responding to the ever-changing project financing in the country. The versatility and flexibility have made the company self-sustainable.

Of course, international collaborations have been fundamental to the company's success. Mariswe has made a mark in the African continent, as evidenced by its subsidiary firms in Botswana, Zimbabwe, Zambia, Tanzania, Rwanda and Ghana. The firm, delivering from its South African base, has successfully completed projects in Liberia, Uganda, Lesotho, the Democratic Republic of Congo, Mozambique, and in parts of West Africa.

The management of Mariswe has been active in the civil engineering fraternity in South Africa and occupied leading roles in organisations such as Consulting Engineers South Africa, South African Institute of Civil Engineers, South African Road Federation and the Built Environment Export Council, South African Black Technical and Allied Careers Organisation amongst others.

Over the past 50 years, Mariswe has been led by three managing directors, namely founder Frans Prins (27 years), Zulch Lötter (12 years), Craig Northwood (5 years) and current CEO Nonkululeko Sindane since 2016.



Frans Prins
Founding Member

Substantial parts of the company's story originate back to Prins, who has been there since day one. Prins recalls how he and Ken (KG) Witthaus, a senior partner of Watermeyer Legge Piesold and Uhlmann (WLPU), formed the driving force behind the establishment of Uhlmann, Witthaus & Prins to specialise in road work.

In the early 1970s, South Africa was on a massive drive to establish and expand the national road network. The various Roads Departments preferred to work with companies that specialised in roads.

WLPU had already undertaken consulting services in road design and saw it fit to try to expand its services

by appointing a specialist to their organisation. They realised they would have to offer that individual a partnership to attract the right person. Thus, they decided to form a separate associated roads practice and appointed Prins as a salaried partner.

After Prins, Dave Vallis' appointment followed "due to his exposure to opportunities in the then Natal through [his] involvement with the Durban transportation study," Prins explains. This separate entity would become UVWP, an abbreviation of Uhlmann Vallis Witthaus and Prins.

After much perseverance and diligence, Vallis obtained a commission for the traffic study and major road planning projects in Richards Bay. But after delivering the original traffic studies, work ran out, which caused Vallis to be frustrated and decided to return to Canada. The company changed its name to the remaining members; Uhlmann, Witthaus & Prins Consulting Engineers (UWP Consulting).

"Myself and KGW were jointly responsible for the dayto-day management and control of UWP," explains Prins, who got his BSc Blng in 1958. He acquired his Masters in Engineering in 1960 from the University of Stellenbosch, majoring in Soil Mechanics and Structures. He studied transportation engineering and obtained a Master of Science degree in 1966 from Northwestern University in Evaston in the USA.

The firm's first major projects were the Knysna Bypass and the Eastgate Regional Shopping Centre. Prins explains that in those early years of breaking ground, they were forced to become sensitive to the environment. One of these projects was a road planning and design of P2-4 between Hartbeespoort Dam and Rustenburg, North West.

This project needed the engineers to widen the existing road and involved the removal of many indigenous trees. But the farmers rebutted and demanded the vegetation to be protected, including a then 300-year-old fig tree.

"A special effort was made to protect as much as possible of the existing flora, mainly trees of special significance, including stiff penalties in contract documentation to protect such trees," Prins says.

Prins remembers quite vividly that those years were indeed humble beginnings. It was not always plain sailing financially in UWP, especially during those earlier years. After 22 years of operating as a subsidiary of WLPU, hard decisions were made to part ways with the parent company in 1995.

But the effects of those decisions presented equal possibilities, which in scale could either have obliterated or reinvigorated UWP. And once again, more years of grit and determination were required to make the business financially viable.



Substantial parts of the company's story originate back to Prins, who has been there since day one.





(Above) Zulch Lötter and Inkosi Phathekile Holomisa with two non-executive board members representing Contralesa (Below) The award winners during a CESA banquet with Lötter representing UWP

## GROWING THE COMPANY'S FOOTPRINT

Prins had a canny ability to identify and appoint good people. When Zulch Lötter was appointed managing director (MD) in 1999, it was the peak of a career that had developed with the company from its infancy. Lötter joined UWP in 1973, a year after its establishment.

Lötter graduated as a civil engineer from the Stellenbosch University on a CSIR (Transportec) bursary, after which he was seconded to VKE Consulting Engineers for two years, where he met Prins.

UWP sponsored him in 1976 for a Master's degree in transportation engineering at the University of California in the USA. Lotter notes a few early major projects through which UWP managed to ground itself after a small and uncertain start. Some of these projects include:

- Upgrading of roads, streets and water reticulation in the Greater Soweto area.
- Establishment of the test flight development centre and missile testing range near Bredasdorp.
- In loco investigation to construct a runway on Marion Island.
- A design-and-construct project for road upgrading in Johannesburg to prepare for the 2002 World Summit on Sustainable Development.

In the 10 years leading up to the 2010 FIFA World Cup, the company significantly increased its geographic footprint in South Africa and Southern Africa. At the turn of the century, transformation was a prominent issue. However, Lötter did not view it as mere compliance but as the right thing to do. The company's first attempt at transformation was to establish a parallel separate Black owned company called Bosele.

This was not a successful venture as it was not adequately staffed to grow independently. It was dissolved after a few years. In the early 2000s, the company restructured to bring the Congress of Traditional Leaders of SA (Contralesa) on board as its BEE partner, which owned 25% of the company.





Lower Ruvu Construction

## **CULTIVATING TRANSFORMATION**

A fter a few years of Lotter taking over as MD, he asked the directors who they would trust to look after the company post his retirement. The consensus was that it should be Craig Northwood, who graduated as a civil engineer from the University of Natal in 1976.

Northwood joined the company in 1996. One of Northwood's tasks was to open an office in East London, in the Eastern Cape. He describes his tenure in the Eastern Cape as ground-breaking, invigorating and exciting as the company's brand became successful and a dominant force. Some 14 years later, he moved to Johannesburg to assume the role of MD.

Northwood encountered a 'new' marketplace in a sluggish economy when he moved just after the 2010 FIFA World Cup. The company's strategy was revised with greater emphasis on securing work in Africa. In addition, more attention was given to staff mentorship training through the development of a Blueprint Programme and the establishment of a Quality Management System (QMS). To this effect, transformation continued whereby Black shareholding increased to 51%.

...more attention was given to staff mentorship training through the development of a Blueprint Programme and Quality Management System



Craig Northwood
Former MD of UWP

During Northwood's tenure, UWP successfully secured some large projects in other African countries, such as the expansion of the Lower Ruvu water treatment plant that supplies water to one of Tanzania's major commercial cities, Dar es Salaam, and the refurbishment and upgrading of water infrastructure in Lusaka, Zambia.



## A CHANGE OF TUNE AND RHYTHM

It was on one distinct day in April 2016 — 44 years into UWP's existence — when employees woke up to winds blowing in an unfamiliar direction. Working with the board of directors, Northwood was instrumental in this change of tune and rhythm. This is the year Sindane became the first Black person to ever climb to the highest seat in the company: Chief Executive Officer.

"The preliminary objectives I had in mind quickly evaporated as I started realising the enormity of the task of leading a company of the glowing history and stature of the then UWP Consulting. I needed to reset and start establishing my objectives all over again," Sindane explains. These objectives included:

- Growing and sustaining the business powered by a clear strategy.
- Transforming the company to align with the 51% Black ownership.
- Creating an environment for company coherence
- Ensuring good corporate governance culture in the company.



### A Point Of Departure

Sindane narrates her arduous journey, contributions to the company, her legacy and what lies ahead for Mariswe. Transformation was the first area that she needed to sink her teeth into, as this was a problem that had already defined itself.

She explains that recruiting for senior-level positions in civil engineering and infrastructure planning presents many problems. "You want to constantly create a path that will sustain transformation organically," she says.

In general, most Black technical employees in Mariswe would have joined in junior positions, and if the strategy was to only recruit from within, the quagmire would be that many of the employees would likely not qualify for management positions for a long time.

The strategy to bring in external employees needed to be implemented sensitively to consider giving internal employees opportunities for promotions, while at the same time ensuring that there are opportunities for externally targeted recruitment.

Sindane explains that a combination of strategies, such as internal and external recruitment, continue to be implemented in Mariswe to maximise value for the company.

Gender transformation in the company was not easy, regardless of race. If you thought Black South African males in the civil engineering profession are hard to find for recruitment purposes, women, regardless of race, are even harder to find. Let alone, Black women.

"It is for this reason that when we find women to work with, we work just as hard to retain them," she says

Sindane an admitted attorney with BProc, LLB from the University of Natal and a Conveyancer understood that the issues of compliance and fairness in addition to the technical competence are fundamental to the sustainability of the company.

# Becoming More Inclusive At Senior Level

Mariswe made significant progress between 2016 and 2018 for promoting from within. There was a very good pool of technical staff and transformation improved significantly. "I felt good about the progress we were making," Sindane says joyfully, adding that the Chief Operating Officer, Gareth Coleman, was instrumental in the transformation of the company. "This was extremely helpful because it takes a while to move management to think alike, and Coleman did that effortlessly on issues of transformation."

Notably, there was an uptake of strategic management positions by young Black employees, especially women. For instance, the company had Sechaba Kou promoted to Division Head for Structures, Luzuko Gwazela promoted to Office Manager for the Mthatha office, Pondy Ngxongxela promoted to Executive Manager, Management Services in KwaZulu-Natal (KZN), while Lisa Cotton had already been promoted to Executive Manager for Transport in KZN.

"This was a good position to be in as a company," Sindane says that Mariswe's management was slowly moving from racial representation to gender representation. "For me, these were the biggest successes. We had never had such good progress in transforming various levels of management as well as leadership of the company in a sustainable manner."

Sindane explains that the appointment of Kou as a Divisional Head for Structures was the most critical one, as he was the third most senior Black technical executive after Zwe Msomi and Vuyo Booi, who were both already regional heads at the time. "The future for Mariswe looked bright from the transformation point of view," says Sindane. Transformation was aligned to the BBBEE score card.

For me, these were the biggest successes. We had never had such good progress in transforming various levels of management as well as leadership of the company in a sustainable manner

Then came 2018, a difficult year where projects dried up. "We did not find an elegant way where we could retain staff when we went through that patch," she explains that they had to lay off some employees.

However, some of the Black professionals left the company but not through retrenchments. For small

engineering firms, this was the best time to enter the industry as Black economic empowerment at the government level was focused on small and medium-size businesses.

"These events set the company back considerably and threatened our Broad-Based Black Economic Empowerment (BBBEE) status," Sindane explains that despite this, they have since bounced back from the losses of staff and continue to work hard in delivering the transformation "we want to see and be proud of."

## More Black Employees Accessing Ownership

Institutionalised Black ownership in Mariswe came at a time when Sindane and Coleman negotiated the 25% shares held by Black Ginger an entity owned by Contralesa a BBBEE strategic Partner of UWP at the time. "We motivated for these shares to be bought back for the benefit of Black employees, which the board of directors approved," says Sindane.

This was fulfilled through the Mariswe Black Employees Trust (MBET), a Black employee trust that led to the establishment of a company called Abaqeshwa, which holds the shares for MBET.

While this progress was important, and groundbreaking in the company, it was not enough to sustain compliance with BBBEE purposes. "We started targeting employees and requesting them

to buy shares in their personal capacity. The policy prioritised that the buyers must first be Black South Africans and professionally registered so that we maintain an appropriate level of ownership. The company ownership remains a huge achievement. When we say we are a BBBEE level 1, we really mean it," Sindane says proudly. "We have come a long way, and indeed this change was necessary. The impact of these decisions became evident in our BBBEE scorecard," she adds.

### The Company Strategies

It is not only transformational issues that Sindane needed to actualise, but financial growth was key to the strategy developed in 2016. The business growth strategy was developed at the time to take advantage of an infrastructure environment that was expected to grow based on the planned large infrastructure projects.

Unfortunately, these projects did not materialise. In some instances, the opposite happened where sizeable projects were broken into smaller projects for which the company did not qualify, or it made no economic sense to bid for.

A drive to secure projects in Africa was given vigour through the establishment of the Mariswe's branches and subsidiaries in Ghana, Lesotho and Eswatini, among others. This came with good success as Mariswe had already cut its teeth in delivering good projects in the continent.

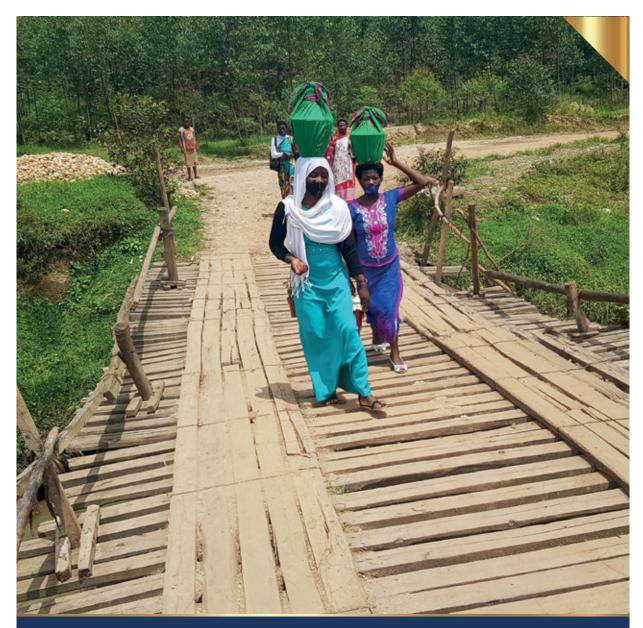
The nature of service offerings also grew to include the Output and Performance-based Road Contract 'OPRC' projects. While the OPRC model is not new in the market, Mariswe had not delivered projects using the OPRC model contract before.

"We are intentional in growing the private sector niche services. Mining, commercial agriculture, and renewable energy are sectors of high growth which are aligned to our strategy," she explains. "It came as no surprise when we secured the hemp project in the Eastern Cape with an opportunity to invest in renewable energy to power the project. We are working towards more breakthroughs in other private sector projects."

Sindane takes pride in how the company has grown to undertake Public Private Partnership "PPP" projects, a key company experience by Mariswe. "We also grew our Public Private Partnership experience in uMhlathuze Local Municipality, KwaZulu-Natal, and later won a PPP project in Mauritius.



We continue to earn our stripes in the complex projects which is testament to our tenacity and not being afraid to walk the road less travelled," she boldly explains



This is a picture from Rwanda. People used this rickety timber bridge to cross a river to get to the market. It washed away frequently during floods.



Under our project a permanent structure was constructed that is more climate resilient, and provided assurance of access for the communities to their market.

# WOMEN FINALLY TAKING THEIR RIGHTFUL PLACE

To run a company robust as Mariswe smoothly, one needs diligent and strategic people behind them. One person whose job invariably revolves around safeguarding the company's finances is Chief Financial Officer Tracy Naidoo, a qualified Chartered Accountant who joined the company in 2018.

She has expertise in accounting, auditing, taxation and company secretarial. She is registered with the South African Institute of Chartered Accountants, the Institute of Directors in South Africa and the South African Institute of Tax Practitioners.

She has served on various board committees, including those connected to her role within Mariswe, such as CESA Finance Committee, Fluor Development Trust and the Pension Fund Board, among others. Why was Mariswe her employer of choice?

"I realised this was an ideal opportunity for me to showcase my talent along with my strong leadership traits at this forward-thinking medium-sized entity that is focused on transformation and growth," Naidoo explains.

"As a woman in top management in a male-dominated industry, it gave me the space to direct, influence, mentor and empower women who were least represented in senior management and technical fields," she adds.



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Mariswe embraces the opportunity of doing business in other countries as it fosters innovation, improves the bottom line, enhances the brand and gives staff diverse experiences and best practice opportunities. But what does it take for Naidoo to manage the finances of such an extensive company while juggling different legislative requirements across regions in Africa.

"It is indeed a huge responsibility," Naidoo says. To run such a role, one needs to have deep financial, and business acumen, in-depth tax knowledge, exchange control regulations, and risk and insurance know-how.

"Compliance is non-negotiable, and as a company, we pride ourselves on integrity and our ethos."



**Lisa Cotton**Executive Manager for KZN Transportation

Compliance is non-negotiable, and as a company, we pride ourselves on integrity and our ethos.

Naidoo with Sindane, along with the board of directors, work tirelessly to ensure that previously disadvantaged employees, especially women, have a conducive environment which allows them to thrive. The following women are just a small number of Mariswe's female employees whose stories offer a glimpse of the progress thus far when it comes to women's empowerment.

Lisa Cotton, who graduated with a BSc in Civil Engineering in the 1990s from the University of KwaZulu-Natal, joined Mariswe in 2009. Some seven years later, in 2016, she was promoted to Executive Manager for KwaZulu-Natal Transportation.

Cotton, whose division has about 15 employees, is responsible for all traffic engineering for the whole company. "I fill a specialist role as a traffic engineer and transport economist. The other work that we do is mainly the geometrics designs," Cotton explains she's proud to have contributed to the development of some of the technological systems.

As someone who has been in the industry for a long time, Cotton has been imparting her knowledge and skills to her juniors. "No matter how junior you are, you can be given some [level] of responsibility.

I have different staff members who have developed relationships with different clients," Cotton explains.

Pondy Ngxongxela is the Executive Manager for KZN Management Services. She is currently finishing up a project in Lusaka, Zambia, as the Compliance and Quality Manager. She was deployed in Zambia just six days after the commencement of her employment with Mariswe on 6 May 2019.

Although she's spent most of her time in Zambia than her office in Pietermaritzburg, in her role as the Executive Manager of Management Services in KZN, she is managing and overseeing budgets, approving time-sheets, looking at timeline scopes and trying to find ways to get projects for the division.

The Millennium Challenge Corporation (MCC), a United States government-sponsored donor organisation, funded several large infrastructure construction projects in Lusaka, where Mariswe was engaged as a Construction Supervision Engineer for six projects.

Ngxongxela explains that their work include upgrading Lusaka's bulk water supply infrastructure and constructing potable water storage infrastructure and water reticulation networks.

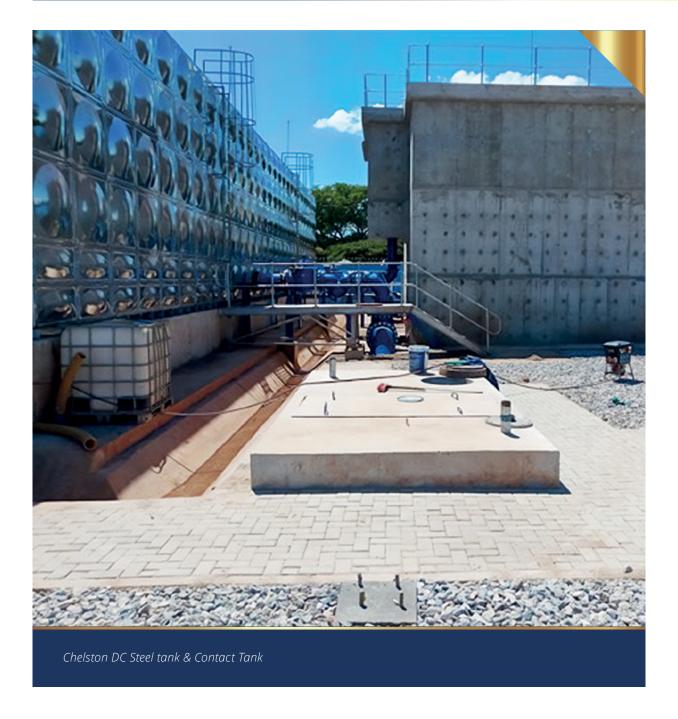
Some of the projects focus on waste management, with Mariswe undertaking the construction of sewage infrastructure in high-density areas, and upgrading and expanding sewage treatment works at Kaunda Square.



**Pondy Ngxongxela**Executive Manager for KZN Management Services

Ngxongxela is also overseeing the construction of large concrete-lined trapezoidal canals, approximately 30km in length, for stormwater management. Mariswe's role in the project is that of the construction supervisor engineer, issuing payment certificates for the contractors and ensuring quality.

Ngxongxela explains that the Zambian project is one of her favourites by far, as she got to learn so much from it.





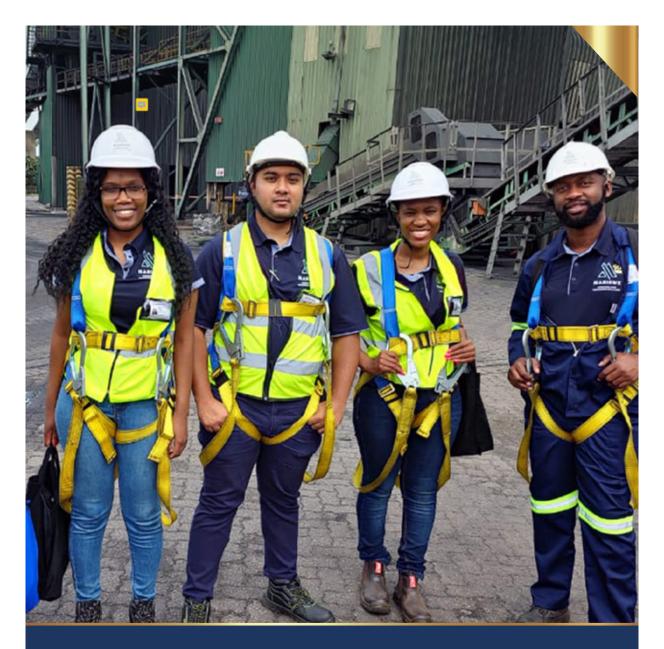
### **Quality Management Systems**

Sandra Munnik from Dullstroom in Mpumalanga joined Mariswe in 1996 as an Information Manager. She has experience in integrated water services development planning, transportation planning and geographic information systems (GIS).

Munnik became the Quality Management System (QMS) lead in 2022, a role that allows her to contribute to policy development and implementation. "Since the development of the QMS in 2006 and 2007, there have been significant changes in the way the business is managed and operated. The intention is to align QMS more directly with the company's current and future business practices.

Munnik has played a fundamental role in the 2019 leadership development programme (LDP) that grooms young and upcoming staff for leadership positions. The LDP provides structured learning for staff with leadership potential so as to fast-track designated employees into management positions and retain the best of talents.

This integrated approach provides input into every aspect of a candidate's career development and promote a well-rounded individual who can add optimum value to the organisation and enjoy a fulfilling career.



From left to right: Neziswa Noyika, Ralon Phillips, Kayakazi Kubheka, Nkosi Mahlobo

## MAKING AN IMPACT IN EMPLOYEES' LIVES



"I love the fact that my job is different to other [types of] engineering in terms of it not being calculation intensive, but it's a lot more of a holistic approach and making sure that things fit together and function well as a system," she explains.

One of the things that Shakung likes about working for Mariswe is that people of marginalised races are given as much responsibility as their white counterparts and that there is always equality.

She says she's grateful that management allowed her to attend the LDP and the ECSA programme even though people that had previously attended were in higher positions. Shakung says she's also excited about Mariswe's updated maternity leave policy, especially for women like her who are of age.

"At Mariswe, we have a maternity leave policy that works for all our women in technical and non-technical roles. Our aim is to grow women as a total package, not just as professionals," says Sindane.

ne of the people who has benefited from the LDP is Montjiwa Shakung, Lead Engineer: Geometric Design at Mariswe's head office in Bryanston. She joined Mariswe on 1 August 2017 and specialises in the geometric design of roads.

I love the fact that my job is different to other engineering in terms of it not being calculation intensive, but it's a lot more of a holistic approach



Mariswe's dedication to ensuring the well-being of employees has played a significant role in their stability and continuous growth. One of Mariswe's strengths depends on the company's ability to identify the right talent. Central to this are people like Prabashni Harry, whose responsibilities are inclusive of recruitment, selection, labour relations, and bursaries.

As Human Resources Manager, Harry has contributed to strengthening the company's relationship with its employees. Under her leadership, Mariswe has done an incredible job in ensuring employees are well taken care of.

"We also have our Long Service Award policy which is part of our retention strategy," Harry explains. "This strategy rewards employees who have been in the company for more than five years."

Harry says one of the progressive programmes that they're proud of is the Blueprint Programme. It focuses on three goals: promoting professional development through internal training, supporting personal development through expert seminars, and encouraging young professionals to be active citizens.

The Blueprint Programme has aided a lot of employees to become professionally registered. Jerry Lekalakala is one of the employees who are thankful for such a programme. In 2018, he was inspired to pursue a B-Tech in Water Engineering sponsored by the company's Blueprint Programme. He's in the process of being professionally registered as an Engineering Technologist.

Another employee who has benefitted is Shannon Souter, a Lead Engineer for Geometric Design. "I am now a mentor on the Blueprint Programme," Souter says. She notes how her ascendancy into senior positions has been facilitated by her seniors, who made sure that she becomes part of the LDP, which she completed in 2021.

Souter has been involved in the Gangra project in Liberia. This particular project came with its own set of problems as it was a mining haul road where the terrain was too steep. They had to try and cut the road up to where the mine was going to be located.

The project involved upgrading 6km of existing road as well as the construction of 8km of new road, which had been designed for 56 haul trucks. With mounting problems of the location and dry season construction period, a fast-track, low Capex solution was provided with an accelerated construction phase.

Although Souter has worked in Ghana and Lesotho, she affirmatively says the Gangra project remains one of her biggest international projects (below).







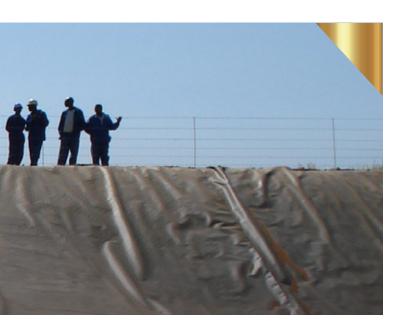


# HOW PEOPLE INTERACT WITH INFRASTRUCTURE

ariswe's Water Division is aware that water is the foundation of life. People in Africa have spent hours under the scorching sun in search of water. This is why we work tirelessly to provide safe drinking water to the continent and it's people.

Quite interestingly, Mariswe's Water Division has been the best-performing in the company. For the Water Division to perform exceptionally, special recognition goes to Christo Dudenski, who is regarded as the founding father of this division. It was 26 November 1995 when Dudenski came across an advertisement in the Sunday Times. "A company, unknown to me, by the name of Uhlmann, Witthaus & Prins Consulting solicited applications for the position of a Civil Engineer: Water Supply," he remembers.

"I asked everyone I knew in the water sector about this company. No one appeared to have ever heard of it. Then accidentally, I spoke to a road engineer friend. He told me that UWP was, in fact, a well-known and reputable consulting firm in the transportation sector. I reluctantly applied," adds Dudenski.



On 28 February 1996, he was offered the position of Principal Engineer and the Head of the Water Division. "This was the biggest and riskiest career move I ever made and the most challenging job I ever had in my life."

When Dudenski assumed a leadership position in the Water Division, there were no technical books on water engineering in the library. "Not a single SABS standard, code, guideline or manual, not a single typical drawing or sample tender documentation or design reports in any of the water sub-fields," he says.

Over time, they gradually built expertise by appointing competent water engineers across the country. "Together, slowly and patiently, we succeeded in developing the Water Division from a one-man show to by far the most profitable division in the company, not only locally, but also in Africa," Dudenski proudly shares.



Together, slowly and patiently, we succeeded in developing the Water Division from a one-man show to by far the most profitable division in the company, not only locally, but also in Africa.

The outstanding performance was noticed by management after 2008 when some of the largest and most profitable projects that Mariswe had ever undertaken were awarded to and executed by the Water Division.

The Water Division has carried the company through in terms of revenues. Although Dudenski retired in 2017, the division continues changing lives.

People like Lekalakala, a Technologist in Mariswe's Water Division, continue to harness the legacy left by the likes of Dudenski. Collaboration is an integral aspect of business because employees are working on something that is way bigger than them.

Lekalakala and the team have been working on many projects. The one they are currently working on is for the water board in the Kingdom of eSwatini through the eSwatini Water Services Corporation. They have been supplying water to the southern region of eSwatini through reservoirs and transmission lines for households.

"Communities have to walk long distances to get water. This was my first project that was [in a rural area] because we usually work in urban areas," Lekalakala says.

Through the eSwatini Water Services Corporation, not only young girls but everyone in the rural community can finally lift the load off their shoulders. "I never thought I'd be part of a project that would be this impactful" says Lekalakala.



Jerry Lekalakala
A Technologist for Water Division

What I see is that people are truly in desperate need of water in that area and to have a project that will directly impact the lives of people for the foreseeable future is a humbling experience



Reservoir base & Structural Steel placement and fixing on the Eswatini Water Supply Access Project

People interact with infrastructure differently, or rather, infrastructure ignites unique feelings in people. Sometimes infrastructure has the potential to revamp an entire town and revitalise a stagnant economy. Take, for instance, the construction of the Mthatha Multi-Purpose stadium.

Mondli Dlulane, who joined the company in 2000 but has since retired, says the Mthatha Multi-Purpose stadium remains one of the projects of interest managed by Mariswe. The project was intended to be a practice venue for a team participating in the 2010 FIFA World Cup.

As such, a competent project professional team had to be appointed to design and manage the construction. The design had to meet FIFA requirements, and an extremely tight construction programme had to be met.

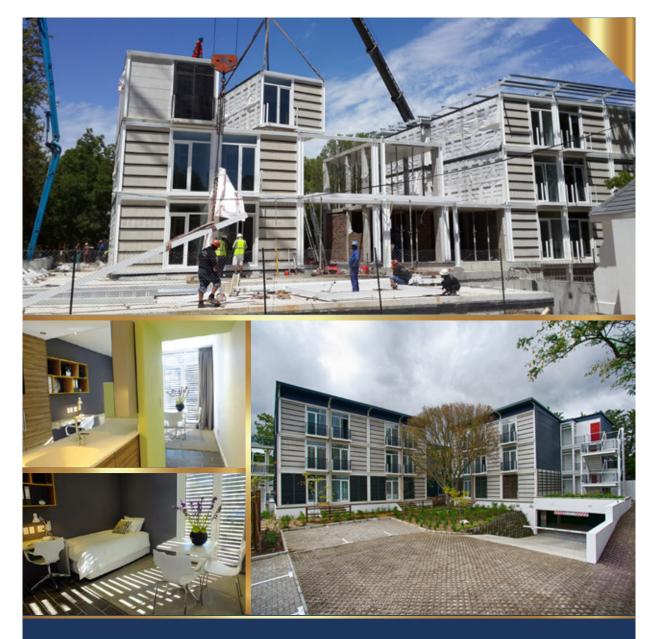
"Most interesting of all, and as was intended by the national government, the project had to serve as a catalyst for the development of Mthatha," Dlulane says. "This stadium has become a focal point of Mthatha and, in many ways, represents the regeneration of the city."



**Mondli Dlulane**Former Eastern Cape Management & Operations

Mthatha, as the birthplace of the former State President of the Republic of South Africa, Nelson Mandela, will remain a tourist attraction in years to come. "UWP Consulting managed successfully the conception, design, and construction of the stadium," Dlulane says. "This is a memorable event for the company."





Studio Vijf, upmarket student accommodation, Stellenbosch. Made from containers.



# MAINTAINING A COSMOPOLITAN LEGACY

The effort to ensure that Mariswe is cosmopolitan has been deeply ingrained in the history of the company. People like Dudenski, who came from Bulgaria, and the then Director, Peter Morrow, who left Zimbabwe in 1985 to join UWP as an associate, are two such endless talents that complement Mariswe's cosmopolitan temperament.

**Peter Morrow** Former Director of UWP In 1986, Prins offered Morrow an opportunity to relocate to Pietermaritzburg to open a new office. For two years, Morrow struggled to get projects because UWP wasn't known by major clients.

"The floods of 1987 had caused a tremendous amount of damage throughout the province and many roads, especially in the communal areas were destroyed or damaged. Most of those roads had become impassable and needed urgent attention," Morrow says.

Sometimes innovation comes out of chaos. As such, he approached the KwaZulu-Natal Department of Works in Hammarsdale, where he eventually found an audience with the Head of the Roads Division.

In that meeting, Morrow presented an unheard-of innovation; a concept of creating a construction unit that would be managed on-site by a highly experienced road builder. This innovation meant that this construction unit would operate like one of the department's own construction units, except the plant would be provided by the private sector with very strict "availability requirements which would ensure a high level of efficiency."

11

Sometimes innovation comes out of chaos.

Morrow assured the provincial government representatives that a team could be mobilised in a short space of time and would have the flexibility to undertake the required work quickly and efficiently. It was a tempting concept, and he was given a chance to bring it to fruition.

This marked the first-ever formal Integrated Construction Unit (iCU) contract system. The tender board wanted assurance that this new approach was legally and contractually acceptable.

"The name [of] this new concept, iCU, exemplified the core requirement that the contractor was contractually bound to provide an "integrated" team of plant equipment," explains Morrow. "Fortunately, the project went well with cost comparisons showing very significant savings when compared against similar road upgrading projects which were being undertaken at that time by other consultants using conventional contracts."

The Department soon appointed UWP for additional projects, and it was not long before the glory news spread to other clients. The Department of Agriculture, in what was then the Transkei, made a contact with the Pietermaritzburg office and asked for a presentation of the iCU contract system.

They had heard of the work being done in Natal. This presentation resulted in a number of project appointments and the eventual establishment of the

# In 1995, we had between 12 and 14 ICU projects running at any one time.

UWP office in Mthatha, which subsequently led to the establishment of the office in East London.

The introduction of iCU to the private sector achieved significant success with the first major project that involved repairing and raising the dykes at Illovo Sugar in Maragra, Mozambique. The success of this project led to UWP's appointment by Illovo for a major expansion of their sugar estate at Nakambala in Zambia.

This turned out to be a massive project which involved the levelling and preparation of lands for planting of sugar cane and the construction of roads, dams, canals and pump stations. "In 1995, we had between 12 and 14 ICU projects running at any one time.", says Morrow.



### iCU Penetrates Mining Sector

The successes of the iCU have also penetrated the mining sector. Rod Stewart, Divisional Head: Management Services, has played a fundamental role in amplifying the iCU in the mining sector.

"I visited a coffee shop in an old Victorian-style house where I eavesdropped on a conversation between two farmers about diamonds near Zebediela," Stewart says later he confirmed through research that a Canadian company, SouthernEra Resources, had established the Klipspringer Diamond Mine near Zebediela.

Stewart managed to convince the client that the iCU is a cost-saving construction model and UWP ended up constructing all of the infrastructure at Klipspringer and mining the open pit at the nearby Marsfontein Diamond Mine.

As fate would have it, a mineral processing company called Dowding Reynard & Associates (DRA), a leading multinational player in the mining sector, had been appointed by SouthernEra to design the diamond processing plant at Klipspringer while UWP was working there.

"DRA's Project Manager, Robin Jones, was impressed by iCU," Stewart recalls that one thing led to another, and with DRA riding the platinum wave, soon enough, UWP and its iCU system was managing all of the infrastructure at Kroondal, Marikana, Marula, Karee, Messina Plats and Two Rivers.



**Rod Stewart**Divisional Head: Management Services

In 2001, iCU ventured north of UWP's borders for the construction of the main access road and tailings dam at the Mimosa Platinum Mine in Zimbabwe. This was immediately followed by eight years of extensive work at Unki and Ngezi. Since then, multiple iCU projects have since been undertaken in Zambia, Tanzania, the DRC, Ghana and Botswana.



I visited a coffee shop in an old Victorian-style house where I eavesdropped on a conversation between two farmers about diamonds near Zebediela

# Rugare Masendeke Lead Engineer: Bridges & Transportation Structures.

# A Melting Pot of Different Cultures and Talents

Mariswe is a melting pot of different cultures and talents. Bridges have traditionally represented the human desire to connect and discover what is on the other side. There is a link between a poetic and literal representation of a bridge, and it is that they both connect human life on a personal and professional level.

Mariswe has been mastering the art of building relations through the bridges they have built and collaborated on across countries. Bridge Engineer Rugare Masendeke, born in Masvingo, Zimbabwe's oldest town, which loosely translates as "building made out of stone", can account for how bridges harness connections.

Masendeke states that even though he grew up surrounded by road construction activities in his area and found them interesting, it was his mother who saw that he was technically oriented from a young age.



Masendeke spearheaded the bridge engineering team at Mariswe from 2016 to 2023. Most of their work was on SANRAL projects and World Bank-funded OPRC projects in various African countries.

He was Mariswe's Lead Engineer in Bridges and Transportation Structures. He has completed work in Ghana, Sierra Leone, Liberia, Malawi, Mozambique, eSwatini, Lesotho and Rwanda.

Masendeke's time at Mariswe has been both educational and life-changing. Most importantly, it has been a pleasure to design bridges that have brought not only goods but people of diverse origins together.

Structural Engineering

Born in Chegutu, Zimbabwe, Kuda Mujaji is a man of vast knowledge. He is proficient in English, Russian and Ukrainian, besides his native Shona. He learned the Eastern European languages during his time in Ukraine, where he obtained his Bachelor of Science, Honours and Master of Sciences in Structural Engineering from the Ukrainian Institute of Water Management and Engineering in 1994.

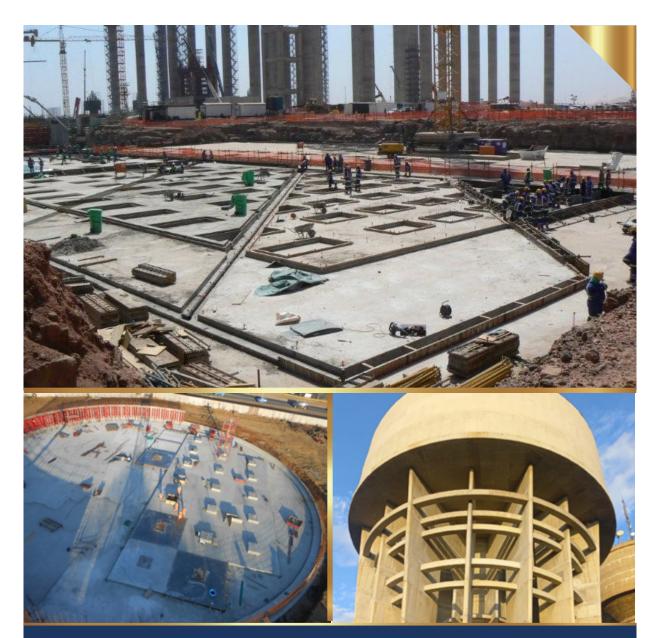
As he climbed up the ladder, he was entrusted with more responsibilities, handled the projects' finances, and had to mentor juniors. He is now an Executive Manager of Structures at Mariswe.

He has worked on many projects, such as designing water reservoirs. The largest tank Mujaji worked on was in Ekurhuleni, the 25MI reservoir. This is a 60-diameter tank with the height of the water being 12 metres.

He has designed two water towers in Northmead, Benoni. One of the towers is 5.6 megalitres, the equivalent of four Olympic swimming pools.

Between 2008 and 2012, Mujaji worked on the Medupi Power Station design structures. He has also designed student accommodations for five South African universities and worked on a 16 megalitre reservoir in Botswana.





(Top) Medupi Power Station Construction (Below left) 25 ML Kempton Park Reservoir (Below right) 5,6 ML water tower in Benoni

### EXPANSION TO TANZANIA

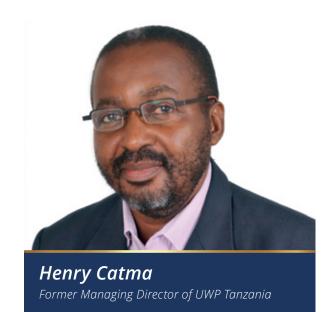
These bridges have extended beyond just finding the right talents outside of South Africa. This has expanded to a degree where Mariswe has established its base in other countries. In 2005, Henry Catma saw a newspaper advert stating that UWP was looking for a company or individuals to collaborate with them to open an office in Dar es Salaam, Tanzania.

Catma got the job, and his journey with Mariswe started following his experience with fellow engineers in Tanzania called Tangroup Professionals Limited (TANPROL). This is a firm of local professionals that offers multi-disciplinary consultancy services in engineering, planning and project management.

As much as TANPROL had talented local engineers, the company staggered to take off. This was mainly because inexperienced engineers needed the immersion and training of more experienced companies like Mariswe.

UWP Tanzania shareholders are Salome Shirima, Henry Catma, Flex Mtui, Leo Kissakwa, Ezekiel Shayo, Bruno Hena, Godliving Matowo, Julius Werongo, Gertrude Joshua, Mariana Gnahy, Asha Kambi, Fulgence Marandu, who altogether own 51% shareholding. Mariswe Holdings (Pty) Ltd owns the remaining 49%.

In early 2006, Catma saw three advertisements under the Community Infrastructure Upgrading Programme (CIUP), a brainchild of the Local Government Support Project (LGSP) funded by the International Development Association in Tanzania.



Excited for the mammoth task ahead, Catma responded to the advertisements. Lady luck smiled on UWP Tanzania as the company landed all three projects. This included the construction of bituminous and gravel roads, footpaths, roadside drains, culverts, footbridges, street lights, public toilets and solid waste containers.

One of most memorable projects for Catma is the Expansion of the Lower Ruvu water treatment plant, where UWP Tanzania was commissioned as the lead consultant. The project was quite extensive and saw UWP Tanzania collaborating with its South African counterpart, UWP.

In 2007, UWP Tanzania was appointed to design the upgrades for several major roads in Tanzania with a total length of more than 300km. The appointment included the design of the new Dar es Salaam Ring Road and upgrading the road from Peramiho Junction to Mbamba Bay and Mangaka to Mtambaswala in the south of Tanzania.

UWP Tanzania has won notable awards, such as the design of the 65km Tanga-Horohoro and 78km Peramiho-Mbinga roads.

Although UWP's name has changed to Mariswe, the Tanzanian partners have opted to retain the UWP name.



Open land along proposed route of the Dar es Salaam Ring Road



Traffic congestion on Morogoro Road



Dar es Salaam - Zimbili bridge construction

## A WOMAN TAKES OVER LEADERSHIP IN UWP TANZANIA

After 15 years, Catma officially stepped down as the MD on 1 April 2021. As he stepped down, the vibration needed to change just like it had in South Africa.

A woman, Salome Shirima, has now taken over as UWP Tanzania's MD. This is part of the succession plan that UWP Tanzania has, which drives the importance of developing young people within the company to become future leaders. Shirima, who hails from Kilimanjaro in Tanzania, is in charge of 28 employees whose mission is to become the best consultancy company in Tanzania.

"It means that anyone can be a leader, whether male or female. One only needs determination," Shirima explains. The goal is to guide and motivate employees to ensure that she achieves the company's objectives.

For Shirima there is no place like home. Other companies have offered her opportunities, but she prefers to work at UWP Tanzania. "In UWP Tanzania, there is transparency, and things are done openly. There is no segregation; we don't empower people based on their colour or tribe," she says.



**Salome Shirima**Managing Director of UWP Tanzania

### MARISWE HAS COME A LONG WAY

or the past 50 years, under calamitous and sweet circumstances, Mariswe has been fortunate to be led by thoughtful and sincere leaders who embrace Ubuntu as the company culture of looking out for the past, present and future leaders.

The successes and the milestones of Mariswe, when probed in scope and depth, are a long exhaustive tale. No words could ever articulate the company's triumphs; we will leave some of the tales and anecdotes to the individual beholders.

In an environment where conglomerate corporations have bought out many engineering firms, Mariswe's longevity in the industry is worth celebrating. "I have been here for seven years, so I can see that the way Mariswe is being led and the direction it is going will lead to another 50 successful years. Everyone in the company is amazing" says. Mariswe Technologist Lekalakala.

On the other hand, Human Resources Manager Harry speaks emphatically about the company marking its half-centenary. "It wasn't the case of buying out a Black company just to look good. We have organically transformed internally," Harry explains. "The fact that we've managed to be around for 50 years, we have continuously changed with time to ensure that we are sustainable."

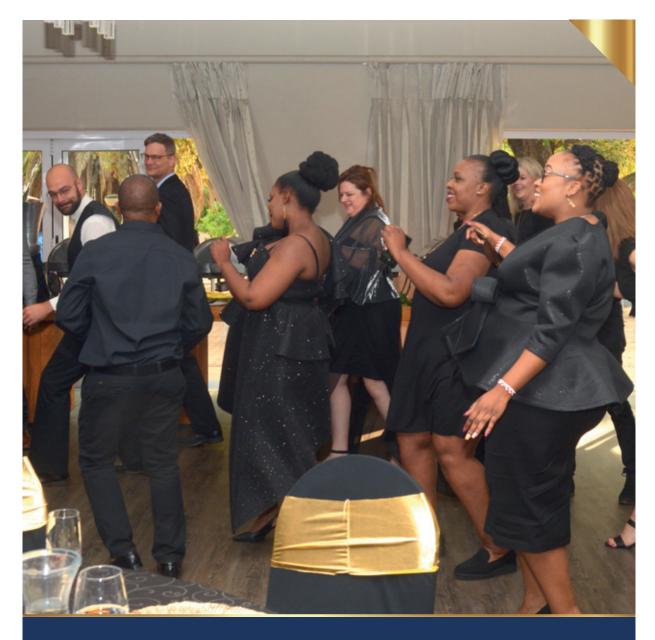
"Mariswe has been around for so long. The look and feel of this company [are] very different from what

it was 50 years ago. In terms of transformation, we are [a] real South African company," explains Cotton. "We are multiracial, multi-lingual, multi-everything. At the same time, we are all skilled and have done it organically," she says.

For Mujaji, "Mariswe's 50th Anniversary is one for the books." The Structural Engineer adds how "we can look back and wonder how we got to this moment. If we understand our history, it will be easy to proceed in the future. Our history is very important to us, and each and every profession in Mariswe has its own history that has contributed to key factors. I believe that we will go very far."

Former MD Northwood shares his piece towards Mariswe's 50th Anniversary. "I am pleased that, as a company, they are managing to adapt to changing times within South Africa and remain a successful company. I wish them all the success going into the future. I joined the right company when I moved out of the public sector. I was nurtured by the company. I led the company; I would like to think that in 20-30 years, the company will still be there in the marketplace, enhancing the quality of life for all."

Reflecting on the journey that has been, current CEO Sindane says, "From a leadership perspective, I think we've been truly blessed to have a board of directors that is very focused [on] leading the company strategically and ensuring that the values of good governance are lived."



Mariswe celebrates 50 years.









Signatures



Mariswe's story is ongoing. It's still a work in progress. "I wish for the company to outlive all of us, and in 50 years' time, we look back and say we've made the right choices regardless of the challenges," says Sindane.