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**CITI-CON'S CONCRETE
KNOWLEDGE DEPLOYED
ON NEW DEVELOPMENT**

**The importance of
structured mentorship in
SA's construction industry**

**KORUSON 1 WIND FARM
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**REDEVELOPMENT OF CAPE TOWN
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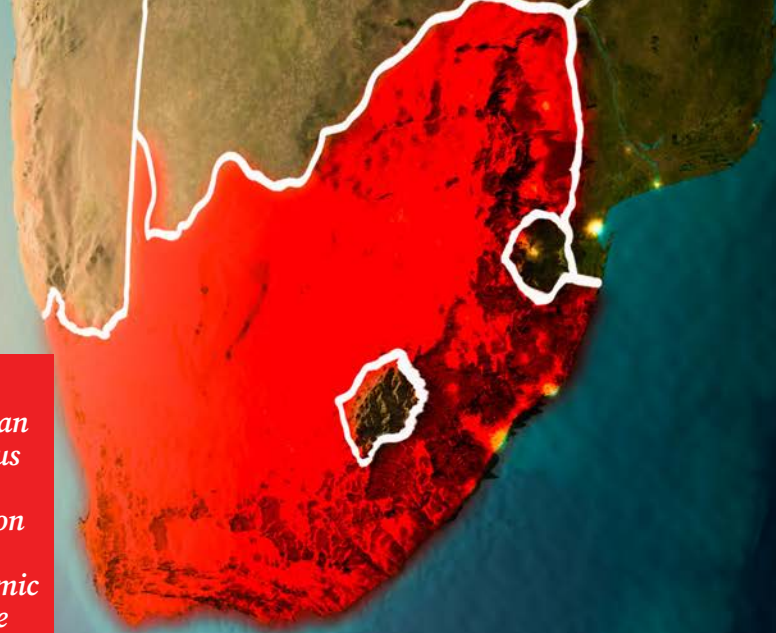
ON THE COVER

GVK-Siya Zama has worked around the clock to complete the redevelopment of Cape Station into a mixed-use residential and retail space. This is despite experiencing one of Cape Town's wettest winters in 10 years, which threatened to derail the process. The site is located between Strand Street, Adderley Street, Old Marine Drive and the existing Station Concourse. This precinct, centred on the station forecourt, is part of a much larger site that extends into Woodstock and measures 36,6 hectares.

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The new Minister of Public Works and Infrastructure, Dean MacPherson said that the focus of his department will be to 'unleash a wave of construction projects in the country' to increase South Africa's economic growth and create sustainable jobs.



Infrastructure has, for years, been identified as a top priority in South Africa as a means to bring socio-economic change and for the country to overcome economic shocks.

Construction World has a focus on both civil engineering and building, and while building buoyed activity in the built environment for many years during the increasing decline of the industry from an infrastructure point of view, private sector building has been on the decline in recent years as the economic climate increasingly had an effect.

Private sector building is intrinsically linked to infrastructure investment, and one can only hope that with the less the opaque political situation and the renewed focus on rebuilding the country, infrastructure development will be embraced as a means to lift households out of poverty.

There are three areas where Dean MacPherson and his administration need to get projects approved as soon as possible: housing, roads and water and sanitation.

Housing

Studies have shown that the informal

housing generates 11% of the total rental income in South Africa. This means that the more South Africans own houses, the more people can have a stream of income from potential spaces they can rent out. The bottom line is that this will lead to the improvement of living standards while being a driver of economic growth.

Roads

It is a known fact that road development is directly linked to economic growth. The World Bank's study by Fedderke and Bogetic, analysed 30 years of data in South Africa between 1970 and 2000 and found that an increase of 1% in road network, leads to a 2,8% increase in productivity growth. This is a clear indication that the improvement of the road network will have a hugely positive impact.

Water and sanitation

Infrastructure is interrelated and an improvement in the housing situation will require the inhabitants of these houses to have access to clean running water and sanitation systems.

This is not just a South African problem. Worldwide water-related

health issues cause the death of millions, a situation that can be salvaged by the availability of running water for drinking, sanitation and hygiene.

Wilhelm du Plessis
Editor

T W E N T Y - T H I R D

BEST

P R O J E C T S

2024

Last chance

In this issue we publish the last call for entries for Best Projects 2024. Turn to page 20 for an overview of the awards and the criteria for entering. The electronic entry forms can be downloaded from our website. Entry is free. Share your company's excellence in the execution of a project with the entire built environment.

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The state of the civil **CONSTRUCTION INDUSTRY**

The FNB/BER Civil Confidence Index reached an almost eight-year high of 47 in 1Q2024. In 2Q2024, sentiment edged lower to 44.

The current reading means that more than 55% of respondents are dissatisfied with prevailing business conditions.

The slight deterioration in the business mood mimics the slowdown in activity. Nonetheless, the activity growth indicator is still well above its long-term average. According to Statistics South Africa (Stats SA), the real value of construction works decreased by 7,8% year-on-year in 1Q2024. A more upbeat reading is possible for 2Q2024. “The survey results of the last few quarters are not nearly as pessimistic as the Stats SA data suggests. This is largely due to the nature of the survey, which is predominantly focused on very large contractors and those that work in the private sector,” remarked Siphamandla Mkhwanazi, Senior Economist at FNB.

Encouragingly, work is expected to increase over the next few months. The rating of the lack of new demand as a business constraint – a proxy for order books – reached its best level since 2008. “The significant improvement in order books is a very positive development and in effect means that prospects for future work are similar to that registered when the bulk of construction related to the 2010 FIFA World Cup final was underway or about to start,” remarked Mkhwanazi.

In conclusion: The FNB/BER Civil Confidence Index fell

to 44 in 2Q2024, from 47 in 1Q2024. While slightly lower, activity growth remained well supported. Moreover, the pipeline of work improved noticeably. According to Mkhwanazi, “projects related to renewable energy have continued to sustain civil construction activity. However, there seems to be a shift away from predominantly solar projects to wind”.

As a general comment, while still above the long-term average, sentiment is relatively low. “Given the underlying conditions, especially activity, confidence should be higher. However, uncertainty regarding the political environment and the impact of crime, corruption and government inefficiency is likely weighing on business confidence,” said Mkhwanazi. ☺

ABOUT THE SURVEY:

The FNB/BER civil confidence index can vary between a maximum of 100 (which indicates that all respondents were satisfied with prevailing business conditions) and a minimum of zero (indicating that all respondents were dissatisfied). A level of 50 indicates that the respondents are equally divided between those satisfied and dissatisfied.

The fieldwork for the second quarter survey was conducted between 9 and 27 May 2024.

Resilient infrastructure solutions for the **THE FUTURE OF CLIMATE CHANGE**

*Recent extreme weather events have devastated thousands of homes and businesses across South Africa, leaving communities in the Eastern Cape, Western Cape, and KwaZulu-Natal reeling. Against this backdrop, it's vital for infrastructure developers to play a proactive role in addressing the realities of climate change by rethinking and redesigning infrastructure for the future. **By Roelof van den Berg, CEO of the Gap Infrastructure Corporation***

The costs associated with the aftermath of extreme weather events can be staggering, both in terms of lives and livelihoods, as well as the expense of repairing and rebuilding infrastructure. Consider that in June alone, the floods in the Eastern Cape have caused infrastructure damages totalling over R5 billion, and the tornado which tore through Tongaat another R1,3 billion.

In fact, researchers estimate that while climate change cost South Africa less than 5% of GDP in 1995, this figure could rise to 3% of GDP by 2030. As such, building sustainable, durable, adaptable infrastructure that can withstand adverse conditions is not just an environmental and social imperative, but an economic one.

Here's a closer look at three of the most pressing challenges posed by accelerating climate change, as well as some of the available solutions that should be emphasised to enhance infrastructure resilience:

Rising temperatures

According to the Council for Scientific and Industrial Research (CSIR), temperatures in southern Africa are rising twice as quickly as the global average, raising the risk of El Niño events and extreme heat.

In response, developers can introduce passive cooling systems into designs. Light-coloured or reflective roofing materials that reflect more sunlight and absorb less heat can significantly reduce indoor temperatures, reducing the need for air-conditioning. This is a relatively low-cost solution that can be easily implemented in new construction projects and retrofitted onto existing buildings.

Proper insulation in walls and roofs can further help maintain comfortable indoor temperatures by keeping heat out during the day and retaining cool air at night. Further incorporating efficient ventilation systems, such as natural ventilation and mechanical fans, can likewise enhance airflow without incurring significant energy costs.

Water scarcity

Rising temperatures and the growing frequency of droughts will aggravate water scarcity. To safeguard South Africa's future water security, it's therefore vital to implement advanced water management techniques and technologies into developments. For example, advanced leak detection systems can markedly reduce water loss in distribution networks, as acoustic sensors, pressure monitors, and smart meters can help to identify and locate leaks quickly for immediate repairs. Additionally, decentralised water storage facilities can provide a buffer against supply disruptions by storing excess water during rainy seasons or wet periods, which can then be treated and reused during dry periods.



On a smaller scale, housing and residential developments can incorporate greywater systems that treat and reuse water from sinks and showers for non-potable uses, such as irrigation and flushing toilets.

Extreme weather events

Extreme heat, thunderstorms, strong winds, and hailstorms can all potentially degrade a building or service infrastructure's integrity, eventually leading to expensive repairs.

To avoid this, and mitigate potential maintenance and repair costs, utilising high-performance materials such as reinforced concrete and advanced composites can improve building strength and durability to better withstand abnormal weather events and natural disasters. Moreover, corrosion-resistant materials can extend the lifespan of infrastructure exposed to harsh environments, while eco-friendly materials should be prioritised to reduce the environmental impacts of construction.

This said, our philosophy at Gap Infrastructure Corporation (GIC) is that physical structures themselves are easy; it's the planning that's more often complex and challenging. Responsible development begins by analysing the environmental and social factors at play, and performing proper risk assessment to better understand and protect against future threats when creating project blueprints – which is where technology such as 5D BIM and Smart City Digital Twins have become gamechangers.

Ultimately, by innovating, performing careful planning, and maintaining a focus on longevity throughout projects, infrastructure developers can play a leading role in protecting our communities, and placing people and planet first. ©

Construction sector a significant contributor TO YOUTH DEVELOPMENT

As the nation celebrated Youth Day and Youth Month, Wilson Bayly Holmes-Ovcon (WBHO) is proud to highlight its extensive commitment to youth development in South Africa



Students that are successful on the bursary programme are employed in the company after completion of their studies. WBHO also has a formal mentorship programme in the fields of engineering and quantity surveying with 120 participants in the last five years.

WBHO's in-house Engineering School programme is widely recognised as a leader in the industry. Engineering graduates in various company positions are invited to participate in three School Levels over a period of six years, post-graduation. Participants in the Group assemble from around the country and are exposed to intensive technical modules, written and presented by our top management. These technical sessions are based on over 40 years of experience and comprise all fields within construction.

The Engineering School is also a launch-pad to aid newly qualified engineers and

The construction industry has a pivotal role to play in addressing our country's youth unemployment crisis. The sector employs one of the highest percentage of unskilled workers of any industry. Its presence in remote areas with high levels of unemployment also positions it as a sector that has a unique responsibility to provide opportunity for the upliftment and employment of youth in these communities.

In the past five years, WBHO has continued its youth upliftment drive to great success. The employment of youth has increased from 34% to 36% of all employees over the past five years. At the heart of this success, is the belief that youth employment should function as a pipeline for talent development and retention. Entry-level unskilled workers are immediately exposed to quality and safety systems, which contribute to ongoing employment opportunities; and wherever possible, employees are given opportunities to further their skills.

The WBHO Youth Initiatives are implemented across a number of fields that include bursaries, mentorships, in-house training, professional development and registration, as well as employee children scholarships.

In the past five years 109 engineering and built environment students have received full bursaries, including accommodation and study materials for their studies.

construction management professionals in the detailed process of registering with The Engineering Council of South Africa (ECSA) and The South African Council for the Project and Construction Management Professions (SACPCMP).

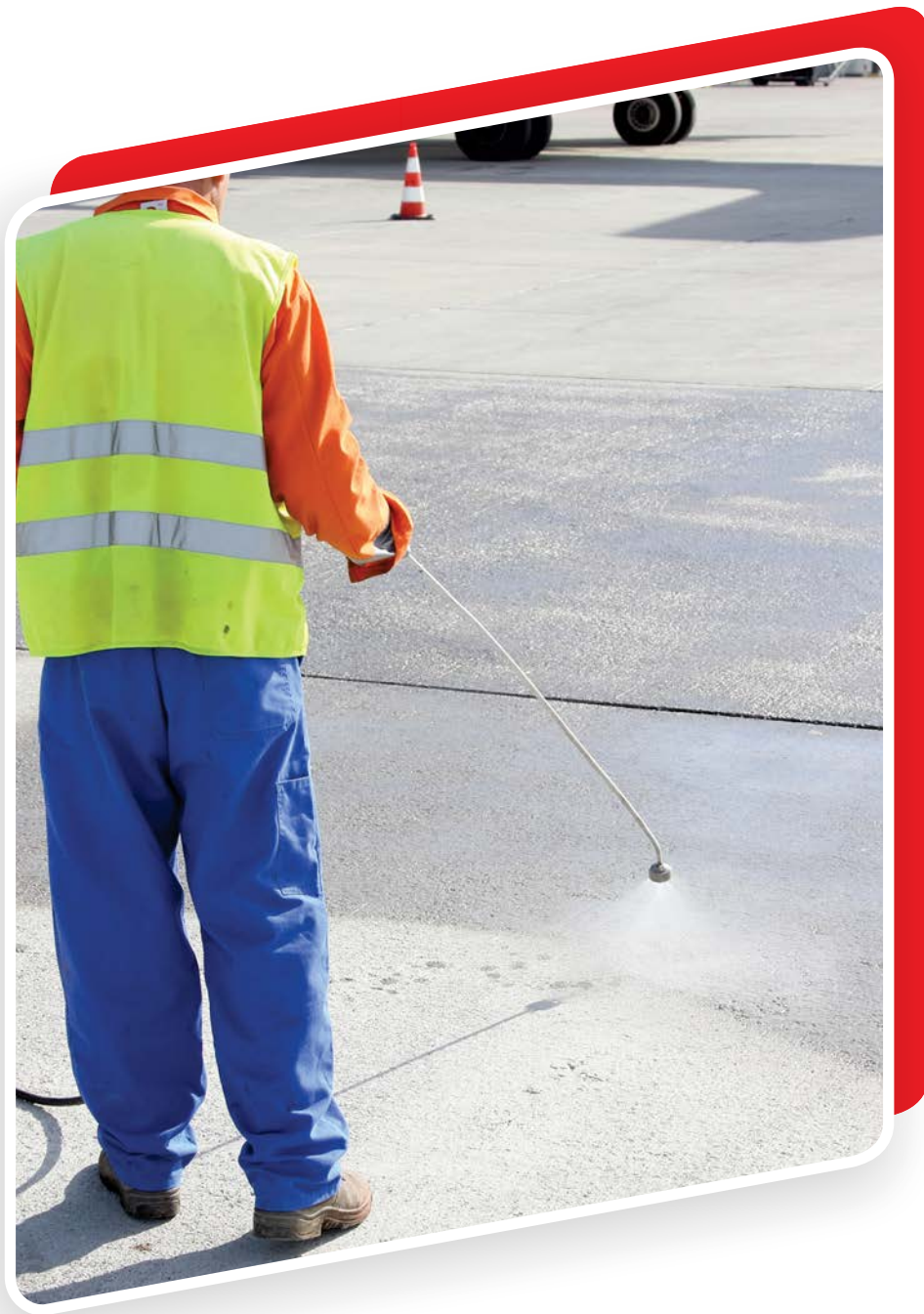
"As part of WBHO's commitment to transformation in South Africa, the group continues to implement its Akani Broad-Based Incentive Share Scheme," explains Wolfgang Neff, CEO of WBHO. "One of the trusts under this scheme is the Akani Defined Beneficiary Trust, which operates specifically to empower black women and youth, with a focus on rural upliftment." WBHO's commitment to youth extends to the children of its employees. Over the past five years 104 qualifying employees' children have been given full scholarships in their chosen field of study through the trust.

WBHO recognises that the entrepreneurial spirit of our youth is essential for economic growth, and therefore supports it as a matter of principle, including the Groups Enterprise Development initiatives, where some employees from participating companies are invited to attend the Engineering School.

"On Youth Day one must acknowledge our country's present challenges, but also its immense promise. Investing in the development and employment of our youth, is a non-negotiable imperative for our future," said Neff. ©



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Finalists announced for the CESA Aon **ENGINEERING EXCELLENCE AWARDS 2024**



Chris Campbell, CEO of Consulting Engineers South Africa.

With infrastructure becoming increasingly vulnerable to economic fluctuations, climate change, and natural disasters, the need for resilient infrastructure has now become imperative. Engineering excellence is therefore critical in developing systems that can withstand these challenges, ensuring safety, sustainability, and stability for communities and economies alike.



celebrating innovation and excellence in our country's infrastructure projects. To every finalist, we acknowledge and appreciate the foundational role that our consulting engineers play in societal progress and economic development.

"By creating innovative solutions to complex problems, improving infrastructure, and fostering sustainable practices, you significantly enhance the quality of life and contribute to the stability, growth and resilience of our economies in South Africa and around the world.

"As you forge ahead and shape new engineering feats, know that as Aon, we stand ready to support your business

"Engineers and innovation in the industry have played a critical role in increasing the quality of life in South Africa," says Chris Campbell, CEO of Consulting Engineers South Africa (CESA). "From developing enhanced water supply, to providing healthcare, reliable electricity, fixing natural disaster-ravaged areas, building transportation systems and developing innovation in agriculture, the resilience of these projects is a testament to the ingenuity of this industry and changing the infrastructure narrative in South Africa," he adds.

To recognise and celebrate South Africa-based consulting engineers, who are members of CESA, and the difference they are making to the country, CESA is proud to host the upcoming CESA Aon Engineering Excellence Awards in August.

Now in its 52nd year, the CESA Aon Engineering Excellence Awards feature a range of categories, highlighting the quality of engineering design, ingenuity, originality, innovation, business excellence and outstanding leaders in the industry.

"By fostering innovation and collaboration, we are not only enhancing the longevity and reliability of our projects, but also contributing to the overall stability and growth of our economy," Campbell highlights. "The finalists for this year's awards showcase a diverse range of projects across the board. We congratulate every organisation, their clients and individuals," he adds.

Dr. Nolwandle Mgoqi, CEO of Aon South Africa, the platinum sponsor for this year's awards, highlights: "The CESA Aon Engineering Excellence Awards are about

to make better decisions around all aspects of risk and opportunity, as we lay the foundations for a more optimistic future for our communities, businesses, and the economy. Congratulations to all the finalists! Your achievements are a testament to the transformative power of engineering excellence," she adds.

The finalists for the CESA Aon Engineering Excellence Awards 2024 are:

Engineering Technology and Innovation: Water Sanitation and Hygiene Design Excellence Award

- Zutari: The Coegakop Wellfield and Water Treatment Works project

Engineering Technology and Innovation: Renewable Energy Systems Design Excellence Award

- Zutari: Anglo American Carbon Neutrality Energy Storage PFS-A
- Knight Piésold: Kikagati Hydropower Plant

Engineering Technology and Innovation: Smart Building Systems Design Excellence Award

- Spoomaker & Partners: NuMeRI Main Centre

Projects less than R50 million

- Naidu Consulting: SANRAL N.002-250-2020/3: The Rehabilitation of B112 - Sarnia Road Grade Separation on N2, Section 25, km 11,4
- SCIP Engineering Group: Monaghan Farm Road Bridge Remedial Work Project
- Naidu Consulting: SANRAL N.002-270-2022/1: For Repairs to B999A Mhlali River Bridge on National Route 2, Section 27, km 15,42
- Bigen Group: Department of Mineral Resources and

Energy Provincial Integrated Electrification Master Plan for Gauteng, Limpopo & Mpumalanga

- Ensync Engineers: Drieziek Public Transport Facility

Projects ranging from R50 million to less than R250 million

- SMEC South Africa: N4 Montrose Interchange Upgrade Project
- BMK Group: The Construction of Bayhead Bypass Road at Bayhead Container Terminal
- AECOM: Main Road 281 (MR281) – Theewaterskloof Road Upgrade
- Ingerop South Africa: Rehabilitation of the Cape Flats 1 and 2 Bulk Gravity Sewers By Means of Trenchless Construction Methods
- WSP Group Africa: MediMix Ancillary Building

Projects ranging from R250 million to less than R1 billion

- MPAMOT Africa & WSP JV: The Southern Corridor Phase 1 – Farm 694 Kosovo Housing Development
- BVi Group: Widening of National Route R22 Section 5 Through Kwangwanase Town

Mega Projects greater than R1 billion

- MPAMOT Africa: Department of Agriculture, Land Reform and Rural Development Office Accommodation **Public Private Partnership Project**
- Zutari: Upgrading of the Zandvliet Wastewater Treatment Works

Best International Projects

- Zutari: PAIX DKR1 Senegal 21 Data Centre project
- Zutari: Conco Warehouse Extension Project

Business Excellence Award

- Royal Mndawa Holdings (ROMH)

- Naidu Consulting
- BVi Group
- Bigen Group

Small/Medium Company of the Year

- Robust Consulting Engineers
- AvenirHoldings

Mentoring Company of the Year Award

- Bigen Group
- Ensync Engineers

Young Engineer of the Year Award

- Erika Braune from AECOM
- Matthew Funnel from AECOM
- Istiaan Lubbe from Zutari
- Omaira Jajbhay from Zutari
- Janice Zhang from Knight Piésold
- Dr. Andries Nel from Spoomaker and Partners
- Parellin Naidoo from Bosch Projects
- Aditi Beesham from Ensync Engineers
- Akshay Samker from MPAMOT Africa
- Michelle Murigo from Royal HaskoningDHV
- Christian Charmoy from Bigen Group

Mentor of the Year Award

- Ashveer Goorun from Naidu Consulting
- Isak Frederik Malherbe from AECOM
- Robert Greyling from Knight Piésold

Lifetime Industry Achievement Award

- Johan Hattingh from Ensync Engineers
- Alan Chemaly from Zutari
- Francois Swart from Bigen Group

The CESA Aon Engineering Excellence Awards is set to take place on 14 August 2024 at Vodacom World, in Midrand. ☺

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How can concept of ‘decent work’ create a thriving **AND SUSTAINABLE BUILDING INDUSTRY?**

‘Decent work’ not only ensures excellent working conditions, but a sustainable building industry as well. The Building Industry Bargaining Council unpacks the role of employers, workers and the public at large.



Danie Hattingh, the BIBC's spokesperson for business.

The concept of ‘decent work’ is one that government, labour unions, employers and market analysts encourage if South Africa is to further its growth ambitions.

The idea is that work is not only seen as a source of income but a vehicle for personal dignity, societal stability and job creation.

However, as Luyanda Mqgamqo, labour spokesperson for the Western Cape-based Building Industry Bargaining Council (BIBC) points out, decent work can only be realised when there are meaningful benefits for employees.

“This has advantages for both employer and employees in that labour turnover is limited while labour is also migrated from informal to formal employment. This in turn increases productivity and creates a safer building industry,” Mqgamqo says. The country’s construction

sector, of which the building industry forms a significant part, is an important player in job creation with an impact on a range of other sectors such as manufacturing, mining, transportation, real estate, and business services. It accounts for 8% of total registered employment with a 2,5% share of nominal GDP.

At the same time, it is also worth noting that about 70% of labour employed in the construction industry is semi-, low- and unskilled.

In 2022, the governments of South Africa and Switzerland, in partnership with the International Labour Organisation (ILO), officially launched the ILO Productivity Ecosystems for Decent Work programme, which identifies the root causes of decent work deficits and develops capacity and local and national actions to address them.

But Mqgamqo says the reality is that stakeholder engagement is not always possible in the informal sector, leading to exploitation and other unintended consequences.

He says there can be very little chance of decent work without upskilling the building sector’s workforce.

The decline of skilled personnel, particularly artisans, puts the industry at risk and must be addressed systematically to ensure that the sector attracts and retains recognised skilled employees, Mqgamqo adds.

The BIBC has played a significant role in ensuring building sector employees receive meaningful benefits.

It has achieved this by focusing on four key pillars, the first being “Productive Employment and Sustainable Enterprise”, which is evident in a workforce that comprises a core team with the requisite skills to contribute productively to the types of building activities performed. New entrants to the business will also be exposed to learning opportunities.

The second pillar, “Standards and Basic Rights at Work”, focuses on collective bargaining which provides a platform for all labour players to engage in negotiations for minimum wages to be improved at industry-level, ensuring that labour costs are standardised. When every workplace negotiates directly with employees on wages and employment benefits, strikes and work stoppages often occur.

“Social Security/Social Protection for all” is the third pillar and involves negotiating at industry level for improved

“The BIBC has played a significant role in ensuring building sector employees receive meaningful benefits.”

wages and employee benefits for all, even those at the lowest level. Labourers picked up at the roadside, on the other hand, most likely will be paid exploitative wages and no benefits.

The fourth and final pillar, “Promotion of Social Dialogue, including Collective Bargaining”, emphasises the mandate of bargaining councils with respect to dispute prevention and resolution.

According to Danie Hattingh, the BIBC’s spokesperson for business, employers also have a responsibility to create conditions conducive to advancing the decent work agenda.

This can be done by providing solid employment opportunities, upholding rights at work in compliance with labour laws, respecting the collective bargaining process and communicating effectively with employees.

In addition, the public at large – encompassing all stakeholders in society who benefit from and influence the labour market in the building industry – can ensure the provision of decent work in a variety of ways.

“They can provide work to employers who are registered with the BIBC, demonstrate ethical labour practices, including patronising businesses that are known for treating their employees well,” Hattingh says.

“They can also support policies and regulations that protect workers’ rights, such as fair wages, benefits, reasonable working hours and safe working conditions.”

Other ways the public can contribute include supporting financial institutions and investment funds that prioritise ethical practices. Stakeholders should also be willing to pay fair prices for building services and projects, understanding that lower costs often come at the expense of decent living

wages. “Government initiatives aimed at improving labour conditions and promoting decent work should be supported, while collaborations with non-profit organisations (like the BIBC) can make a substantial impact,” Hattingh says. ©

ABOUT THE BUILDING INDUSTRY BARGAINING COUNCIL (BIBC)

Established by employer organisations and trade unions in the Western Cape’s building industry, both sides come together to engage in collective bargaining. Employer organisations and trade unions who are currently parties to the BIBC include the Master Builders Association Western Cape (MBA WC); MBA Boland; Consolidated Employers Association (CEO); Building, Wood and Allied Workers Union of South Africa (BWAUSA); Building Workers Union (BWU) and the National Union of Mineworkers (NUM).

Collective bargaining is a process in which employees/workers, through their unions, negotiate terms and conditions of employment with employers who are members of employer organisations. Through this process, a bargaining council contributes to and facilitates labour peace, stable employment, and the development and maintenance of a free, just, and prosperous South Africa.

Terms and conditions of employment include basic pay or wages, employee benefits like pension, bonus and leave, and agreements on industry hours of work and leave.

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A multi-faceted issue: **SANITATION IN SOUTH AFRICA**

Sanitation in South Africa is a complex challenge intertwined with social, economic, and environmental factors, as highlighted by the South African Institution of Civil Engineering's (SAICE) Water Engineering Division. Vice-chairperson of SAICE's Water Engineering Division (WED), Zweli Mahlangu, and its former chair and current Treasurer, Abri Vermeulen PrEng, emphasise that sanitation transcends engineering and requires a holistic approach that encompasses critical social issues.

Globally, sanitation remains a significant crisis, with three billion people lacking access to safe facilities. In South Africa, access has improved from 50% in 1994 to 84% today. Yet, the rapid population growth, from 36 million in 1994 to 62 million in 2021, continues to challenge the provision

of adequate sanitation. In explaining the need for a holistic lens to solve many of the sanitation challenges facing the country, Vermeulen asks a simple question, as an example, "We speak about access to sanitation infrastructure and services, but the question that arises, do we have the water



Zweli Mahlangu, Vice-Chairperson of SAICE's water engineering division.

constructed pit toilets have brought this issue to national attention, urging immediate action to replace them with safer options.

Additionally, some sanitation programmes have been hampered by the appointment of inexperienced contractors, leading to compromised quality and project abandonment. Mahlangu notes, "Contractors often compromise on quality, leading to poorly constructed toilets that frequently fail." This issue exacerbates the sanitation crisis, especially in rural and underfunded schools.

Various technologies, from ventilated improved pit (VIP) toilets to decentralised wastewater systems, offer potential solutions to some of the country's sanitation challenges. However, Mahlangu stresses the need to tailor these technologies to each community's unique needs, particularly in informal settlements. "Each community is different," he says. "We need solutions that address their specific challenges and resources."

As an example, Vermeulen and Mahlangu point out that gravity-driven sewerage systems require sufficient installation density to prevent blockages. Dispersed rural homesteads often lack this density, making extensive pumping systems unfeasible. Hence, there is also a need for stand-alone systems that don't rely heavily on water. Historically, the government's reliance on VIP toilets has been effective, but the surge in population and urbanisation calls for sustainable alternatives.

While significant progress has been made in South Africa's sanitation sector, much work remains. The challenge is not only technical but also social, requiring ongoing engagement and education.

Raising public awareness and educating communities on proper sanitation practices is essential. "Community involvement and education are essential," Vermeulen says, highlighting the importance of understanding sanitation and system maintenance. Mahlangu agrees, noting, "By empowering communities with knowledge, we can foster long-term change and improve public health."

Vermeulen aptly concludes: "People need to understand that this is an ongoing challenge everywhere in the world. Addressing it effectively demands a concerted effort from all stakeholders in this country." ©

to flush everything down?" South Africa faces significant water scarcity, with less water per capita than its much drier neighbours, Namibia and Botswana. Climate change is expected to further reduce water availability. This scarcity is evident in an average annual rainfall of 450 mm, compared to the global average of 750 mm; great variability in rainfall, resulting in frequent droughts and floods; and a skewed distribution of precipitation, with a relatively wet southern and eastern coastal strip becoming progressively drier to the northwest, not aligning well with population centres and major economic hubs. However, in regions with sufficient water supply, managing sludge, sewage, and wastewater is critical. Yet, many sewer systems face blockages, breakages, pump failures, and lack of affordable emptying services.

A critical issue is the condition of pit toilets in schools, which often pose significant health risks to students and teaching staff. The SAICE WED stresses the urgency of addressing this issue, noting that ensuring safe and clean sanitation in schools is critical for the health and safety of our children and the teachers themselves. Despite some successful projects, many have been compromised by full pits and improper waste disposal, including building rubble and vehicle parts. The tragic deaths of children in poorly

Mosha Senyolo makes history as first black female **PRESIDENT OF THE ASAQS**

ASAQS' newly elected president, Mosha Senyolo, may describe her appointment as “a surprise” - but for those around her, it was nothing but expected.

After all, Senyolo has been shattering glass ceilings for years - and the fact that she is the first black woman to be chosen as president of ASAQS is one of many firsts she has achieved in her career.

“Becoming the first black woman president of such a globally respected organisation was never something I aimed for personally,” Senyolo notes. “However, I am tremendously honoured and filled with gratitude. This achievement stands as a testament to the dedication, unwavering commitment, and deep passion I have for our profession.”

A new perspective on an established legacy

In 2021, she was appointed as junior vice president at ASAQS, and says that role provided her with invaluable insights and preparation for the presidency.

“I had the opportunity to closely observe the responsibilities of senior leadership within our organisation. I also gained a deep understanding of the ASAQS operations, challenges, and strategic direction.”

She cites collaborating closely with her predecessors - Keith Skinner and Newton Baloyi - as instrumental to her effective leadership and decision-making skills.

“Serving as junior vice president taught me the importance of humility, listening to diverse perspectives, and making decisions that prioritise the collective good of our members and the built environment as a whole.”

As president, she hopes to build on the ASAQS legacy while also making some necessary changes.

“With my tenure, I aim to prioritise turning innovative ideas into tangible, measurable achievements which will be built on the strong foundation laid by past presidents,” she explains. “I intend to focus on enhancing member engagement and satisfaction through tailored programs and communication strategies.”

She would also like to see opportunities to expand the association's influence both locally and internationally, ensuring the ASAQS remains at the forefront of industry standards and advocacy.

“Ultimately, my goal is to foster a culture of continuous improvement, where every initiative contributes to our collective success and the advancement of our profession.”

Patriotism at the heart of her dedication to QS

Senyolo says though the challenges are not to be taken lightly, she is excited about the future of Quantity Surveying in South Africa.

“Beyond traditional cost estimation and management roles, Quantity Surveyors are increasingly recognised for our ability to provide strategic insights and mitigate risks on behalf of clients, thereby maximising returns on investment for diverse stakeholders.”

She acknowledges that it takes a lot of time and commitment to serve on the ASAQS board, and says the



“Becoming the first black woman president of such a globally respected organisation was never something I aimed for personally.”

Mosha Senyolo,
President of the ASAQS.

simple reason for her dedication is “patriotism” - a value which drives her in her personal and professional life.

“My first inspiration was my father, Thabo Senyolo, who has been noted by the School of Construction, Economics and Management at Wits University to be the first black-qualified Quantity Surveyor. Patriotism, in my lived experience, embodies a belief in something greater than oneself. I draw inspiration from fellow South Africans who zealously represent both their professions and our nation.

“South Africa has achieved much to be proud of—our advancements and global influence are testament to this. The ASAQS epitomises these enduring values, navigating challenges with resilience. It is our collective duty to uphold this legacy, placing the common good above individual interests.” ©

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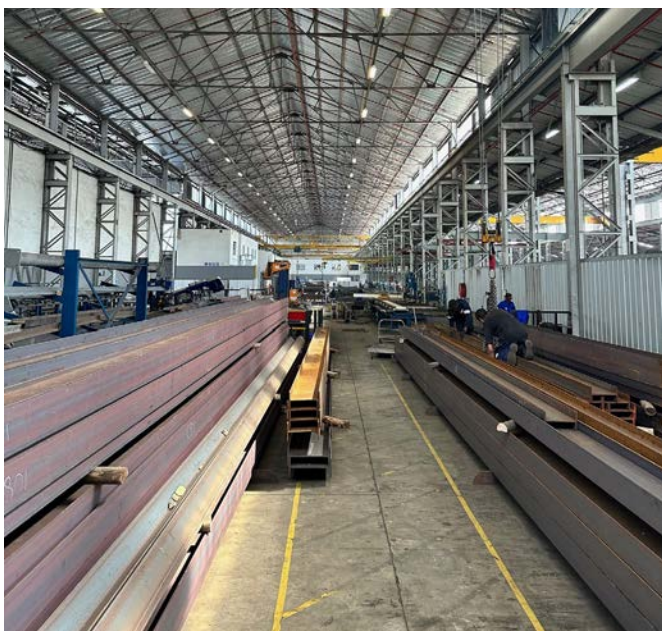


ASAQS

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Cousins Steel International: **STRONG STEEL SUCCESSION AND SYNERGY**

In South Africa's dynamic and frequently volatile steel sector, succession planning and the creation of robust synergies are often the exception to the rule, but dynamic structural steel company Cousins Steel International (CSI) demonstrates that these can indeed be successful and enduring.



Cousins Steel International steel fabrication facility in Old Mill Industrial Park KZN.

The company - which adeptly blends its decades-old legacy with modern steel technology and insights - is very proud of its roots and track record, and equally, of its current synergies which energise and drive the business forward.

Strong steel relationships

Cousins Steel CC, a 55-year-old fabrication company located in Pietermaritzburg was started by brothers Lynton and Craig Cousins. Highly experienced structural steel fabricators, and well-connected, savvy businesspeople, the brothers grew their business into a respected large-scale fabrication facility with a sound reputation.

Meanwhile in Durban, professional engineer Mike Oldfield had opened his own business on the Berea, specialising in residential, commercial and industrial projects - and building his own very successful civil and structural engineering practice, completing many successful projects.

Oldfield began exporting steel structures into Africa in the early 2000s, and numerous distinctive structural steel projects - from prawn farms to mines - followed, predominantly in Madagascar.

A long-standing relationship with the Cousins brothers saw Oldfield outsource the fabrication of the more than 2 000 steel structures from 2001 onwards - bound mostly for the Madagascan ammonia sulphate mines - to the Pietermaritzburg-based operation.

This mutually beneficial relationship culminated in a joint venture for the Madagascan and other pan-African export projects, known as Cousins Steel International (CSI), in

2001. The latter acted as a design office, with the fabrication taking place at Cousins Steel CC's Mkondeni facility.

Steel serendipity

In the ensuing years, the volatile political climate in Madagascar meant that CSI shifted its market focus to the local design supply sector, which was gathering momentum. Then Adam Oldfield, who had followed in his father Mike's structural engineering footsteps, joined CSI and went on to become a company director.

The CSI - Cousins Steel CC relationship and collaboration prospered for a further 20 years, until Lynton and Craig Cousins stopped fabricating in 2021. "As CSI, we had to make some tough decisions. Should we find another fabrication partner or - in a somewhat revolutionary move at the time - should we take on the challenge of fabricating in-house ourselves?" Adam Oldfield recalls.

Backed by all he had learnt from his father's effectiveness on-site and practical, inclusive approach to all disciplines involved in structural steel projects - but taking into account that he was wanting to retire - the Oldfields had to quickly decide if he had the energy to take over the reins at CSI with a new fabrication arm - and to introduce a whole new element of the business into the mix.

"We decided to go for it - and quickly began making calls, as there was no time to waste! We struck a deal with Lynton and Craig to purchase their surplus steel, vehicles and fabrication equipment, but not the CC itself, as we were effectively going to start fabricating ourselves as CSI," he adds.

Looking around for larger premises, given that CSI needed to start fabrication at the beginning of 2021, Oldfield found what he describes as the ‘perfect structural steel facility’ in Mount Edgecombe Industrial Park: “We had constructed a number of buildings there, and were told that one of the tenants was in business rescue and would be vacating a facility that was ideal for steel fabrication,” he recalls.

In a case of ‘steel serendipity’, CSI relocated to the facility, and undertook the monumental task of moving all the ex-Cousins Steel CC fabrication equipment to the new facility in Mount Edgecombe, from where they currently operate, having recently signed a second lease.

Steel succession

Although Cousins Steel CC closed when the brothers retired in 2021, its proud steel fabrication legacy lives on in Cousins Steel International, which has innovatively combined design, engineering, fabrication and supply into a strong steel synergy, while remaining true to its safety, quality and client service ethos.

“In 2021, we worked hard to consolidate fabrication into CSI’s operations, and to proactively market the company and reassure the structural steel sector – which is a small, tightknit community – that although Lynton and Craig no longer looked after the fabrication side and had sold their Mkondeni premises in Pietermaritzburg, Cousins Steel International was still very much in operation – and going from strength to strength,” Oldfield emphasises.

In just three short years, he and his team have built up an enviable track record of structural steel project delivery – including several award-winning projects – extending from

Riverhorse Valley to Phoenix and the Dube TradePort, which is expected to grow into the R1 trillion Durban Aerotropolis. Currently, CSI is putting its stamp on Durban’s most recent industrial park, Brickworks, at Avoca. Recently completing a 40 000 m² superstructure that will feature in this year’s SAISC Steel Awards.

Oldfield leads the company with seasoned fabrication and steel industry professionals at his side: CSI’s factory manager, experienced fabricator Lee-Roy Britz, and well-known steel industry stalwart Gordon McNeill, who has been in the sector for over 50 years, starting in Ireland at the age of 16.

“Lee-Roy was a natural first choice. He is a meticulous fabricator and is doing what he loves. We have a wonderful synergy and blend of competencies, experience and personalities. This is built on a solid foundation of trust and, because of their experience, I am always willing to receive their input and guidance,” says Oldfield.

With this strong management team in place, and his now-retired father available to consult if required, Oldfield is excited about CSI’s prospects, and is confidently looking to the future. “The multiple synergies and the rich, multi-layered and multi-disciplinary legacy at the core of our business benefit not only CSI itself, but also, very importantly, our valued clients and industry partners.

We are proud to be a company where engineering and design do not reside in an ‘ivory tower’ – separated from the realities of every day structural steel construction – but rather, prosper at ground- and project-level, alongside fabrication,” Oldfield concludes. ☉

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Jobs of the future: how the wind industry **USHERS IN NEW OPPORTUNITIES**

Within South Africa's challenging economic landscape, the potential for job creation in the wind industry offers a beacon of hope. According to Statistics South Africa, the official unemployment rate rose slightly to 32,1% in the fourth quarter of 2023. The largest employment losses were in the community and social services sector, which shed 171 000 jobs, with significant job losses also recorded in construction, agriculture, trade, and manufacturing.

Amidst these challenges, the wind industry stands out as a key player in the renewable energy landscape, promoting job opportunities, environmental sustainability and economic growth. In the first quarter of 2024, wind technology accounted for 4,9% of the electricity produced, making it the leading renewable energy technology in South Africa's energy mix.

On the greater continent, Africa's manufacturing output is expected to grow by more than 6% annually until at least 2025, amplifying the need for a robust and sustainable energy supply.

South Africa is at the forefront of this transformation, accelerating its transition to a low-carbon future anchored by the South African Renewable Energy Master Plan (SAREM). Wind energy contributes significantly to alleviating the impact of climate change, boosting job creation and community development. The rapid expansion of the wind

industry requires a diverse array of skills and roles.

Emerging positions required in the industry include engineers, project managers, environmental experts and data analysts.

Santosh Sookgrim, Senior Technical Advisor at the South African Wind Energy Association (SAWEA), highlights the importance of a multifaceted talent pool: "The wind industry requires a blend of technical, policy, legal and environmental expertise across the full value chain. We are seeing an increasing need for professionals in monitoring and control systems, AI-based maintenance and data analysis."

To meet these evolving needs, the industry is actively expanding its talent pool. Initiatives such as SAWEA's Wind Industry Internship Programme are essential in attracting new graduates. Furthermore, the sector is tapping into related industries and upskilling workers through

short courses and on-the-job training such as SAWEA's Management Development Programme for Women in Renewable Energy. Ensuring accessibility and opportunities for entry remains a priority to sustain this growth.

The wind industry's contribution to South Africa's economic and environmental goals is undeniable. As the country continues to embrace renewable energy, the job opportunities created by this sector will play a crucial role in driving sustainable development and prosperity for future generations. Sookgrim unpacks these benefits further.

Economic impact and community development

The economic impact of the wind industry in South Africa is profound. Sookgrim notes that over the past decade, the sector has attracted investments exceeding R89 billion, creating over 23 000 job-years and powering over three million homes annually. Wind farms also contribute significantly to local communities, funding initiatives within a 50 km radius of their sites as part of the Renewable Energy Independent Power Producer Procurement (REIPPP) programme. These initiatives include educational support, food security programs, healthcare services and community safety projects, fostering community development.

Innovation and technology driving job creation

Technological advancements are driving job creation in the wind sector. Innovations extend beyond turbine technology, including advanced monitoring and control systems, AI-driven maintenance and avifaunal detection systems.

The data analysis and software development fields

are growing within the industry. Additionally, local manufacturing, such as Nordex's establishment of a concrete tower manufacturing facility in the Eastern Cape, underscores the sector's commitment to job creation and localisation.

Future outlook and challenges

Sookgrim emphasises: "The wind industry's future in South Africa is promising, with job growth projections closely tied to the sector's expansion. As the demand for renewable energy rises, so will the need for a skilled workforce.

"However, challenges such as regulatory hurdles, grid integration and the need for continuous innovation remain. These challenges need to be addressed through strategic planning, enhanced training programmes, policies that support sustainable growth and collaboration between industry and government. "We are committed to meeting today's energy needs and ensuring a sustainable and prosperous future. By investing in technological innovation, skills development and community engagement, the wind industry can be a catalyst for transformative economic and environmental change," Sookgrim concludes.

The sector is vital to South Africa's renewable energy landscape, driving environmental sustainability and economic transformation. By focusing on emerging roles and skills, economic impact, technological innovation, sustainability and future job growth, the wind industry is set to create new opportunities and a greener, more prosperous future. As SAWEA continues to champion these initiatives, the benefits of wind energy will become increasingly evident. ☺





2024 TWENTY-THIRD BEST PROJECTS CALL FOR ENTRIES



Construction World's Best Projects showcases excellence in the South African building, civil engineering, supply and project management sectors. In its 23rd year, the aim of **Construction World's** Best Projects is to recognise projects across the entire construction industry: from civil and building projects to professional services to specialist suppliers and contractors.

There are **SEVEN** categories in which to enter. Projects may be entered in several categories, provided they meet the prerequisites for entering each one, and meet the criteria.

This competition is by submission only – it is judged solely by what you submit – so it is essential to take careful note of the entry requirements.

JUDGING

A panel of independent judges from the construction industry has been appointed. These judges represent ECSA, SAICE, MBA and CIOB.

Each criterion set out for the various categories will be scored out of 10 – with 10 being the highest score and one being the lowest. It is therefore **VERY IMPORTANT** that the entry address the criteria for the particular category it is entering.

If a criterion is not answered, it will be awarded a medium of five points.

In each category a 'Winner' is announced as well as a 'Highly Commended Award'. A 'Special Mention Award' may be given.

SPECIAL ISSUE

The December issue of *Construction World* is dedicated to the various winners and entries and is an overview of activity in the entire built industry during the past year.

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How to submit entries

- Each entry must be accompanied by the **completed entry form**, available from www.constructionworldmagazine.co.za or by requesting it from constr@crown.co.za.
- The maximum length for submissions is **2 000 words**.
- Each submission must clearly state which **category** is entered.
- **IMPORTANT** It is to the entrant's own advantage to address **ALL THE CRITERIA** as set out in the category being entered. If the criterion falls outside the scope of the contract, please state this. It is advantageous to use the criterion as subheader and then to address this directly.
- The written submission must be accompanied by up to **six high resolution** photographs with applicable captions.
- The photographs and copy must be submitted separately. The photographs must be .jpgs and the copy in Word (not PDF format).
- The submission must also contain a **summary of important project information** such as the client, main contract, etc. – i.e. the professional team involved in the project.
- **Electronic submissions only.**

Prerequisites for entry

All the categories have the same prerequisites (unless otherwise stated). These are:

- Only South African civil and building projects that are executed by locally based companies.
- Projects are eligible during the execution of the project and up to 18 months thereafter (within reason).
- Projects must be at least 50% complete at the time of entry.

Awards evening

Information about the format/venue and date of the awards evening will be available in July.

Entry form available on

www.constructionworldmagazine.co.za
or by requesting it from constr@crown.co.za

Contact

For more information contact the editor,
Wilhelm du Plessis, on 011 622 4770 or constr@crown.co.za

<p>1 <i>Category</i> Civil Engineering Contractors</p>	<p>2 <i>Category</i> Building Contractors</p>
<p>Please address the following criteria:</p> <ul style="list-style-type: none"> • Construction innovation technology • Corporate Social Investment • Design innovation • Environmental Impact Consideration • Health & Safety • Quantifiable time, cost and quality • Risk management • Motivation facts about the project 	<p>Please address the following criteria:</p> <ul style="list-style-type: none"> • Construction innovation technology • Corporate Social Investment • Design innovation • Environmental Impact Consideration • Health & Safety • Quantifiable time, cost and quality • Risk management • Motivation facts about the project
<p>3 <i>Category</i> Civil Engineering and Building Contractors (outside South Africa)</p>	<p>4 <i>Category</i> Specialist Contractors or Suppliers</p>
<ul style="list-style-type: none"> • In addition to the common prerequisites, projects outside South Africa must be executed by a South African contractor. <p>Please address the following criteria:</p> <ul style="list-style-type: none"> • Construction innovation technology • Corporate Social Investment • Design innovation • Environmental Impact Consideration • Health & Safety • Quantifiable time, cost and quality • Risk management • Motivation facts about the project 	<p>Please address the following criteria:</p> <ul style="list-style-type: none"> • Construction innovation technology • Corporate Social Investment • Design innovation • Environmental Impact Consideration • Health & Safety • Quantifiable time, cost and quality • Risk management • Motivation facts about the project
<p>5 <i>Category</i> Consulting Engineers</p>	<p>6 <i>Category</i> Architects</p>
<p>Please address the following criteria:</p> <ul style="list-style-type: none"> • Construction innovation technology • Corporate Social Investment • Design innovation • Environmental Impact Consideration • Health & Safety • Quantifiable time, cost and quality • Risk management • Motivation facts about the project 	<p>Please address the following criteria:</p> <ul style="list-style-type: none"> • Construction innovation technology • Corporate Social Investment • Design innovation • Environmental Impact Consideration • Health & Safety • Quantifiable time, cost and quality • Risk management • Motivation facts about the project
<p>7 <i>Category</i> The AfriSam Innovation Award for Sustainable Construction</p>	<p>ConstructionWORLD</p>
<p>Please address the following criteria:</p> <ul style="list-style-type: none"> • Construction innovation technology • Corporate Social Investment • Design innovation • Environmental Impact Consideration • Health & Safety • Quantifiable time, cost and quality • Risk management • Motivation facts about the project 	<p><i>Main Sponsor</i> AfriSam Creating Concrete Possibilities</p> <p><i>Gold Sponsor</i> CHRYSO SAINT-GOBAIN</p> <p><i>Silver Sponsor</i> be SAINT-GOBAIN</p> <p><i>Bronze sponsor</i> BAKERBAYNES</p> <p><i>Associate sponsor</i> BUILDING TRUST Sika</p> <p><i>Associate sponsor</i> SACPCMP The South African Council for the Project and Construction Management Professions — CONSTRUCTING NEW PERSPECTIVES —</p>
<p>Entry Deadline Friday, 6 September at 17:00</p>	



Cape Town Station's redevelopment: **REINFORCING CONNECTION**

GVK-Siya Zama has worked around the clock to complete the redevelopment of Cape Station into a mixed-use residential and retail space, for Eris Property Group. This is despite experiencing one of Cape Town's wettest winters in 10 years, which threatened to derail the process. The site is located between Strand Street, Adderley Street, Old Marine Drive and the existing Station Concourse. This precinct, centred on the station forecourt, is part of a much larger site that extends into Woodstock and measures 36,6 hectares.

The project, which started in 2021 and was completed late last year, is one of the company's largest projects to date, by value, and its largest in the Western Cape. It has opened a direct corridor between Strand Street and the Cape Town railway station. It boasts an unrestricted and pedestrian-friendly thoroughfare through a 'grand entrance' galleria and now contributes to the upliftment and modernisation of the station precinct. It is a shot in the arm for the precinct and has resulted in a vibrant community supported by a vast retail offering and the repurposing of a fairly squalid and defunct facility.

Aligned with similar projects in European cities where less desirable spaces are being transformed into sought-after residential and retail offerings, the 77 000 m² redevelopment incorporates a 22-storey, 3 000-bed purpose-built student

accommodation facility, 6 700 m² of retail space and a new world-class public square.

Architectural considerations

This building connects students through rail and rapid bus transport nodes and has a clean and contemporary style that mimics the existing concourse block.

In terms of landscaping, Station Square forms the main landscape element and seamlessly ties the station to the rest of the Cape Town CBD's infrastructure and pedestrian routes.

The aim of the project was to enhance the station forecourt as a key public open space in the precinct and within the city, to enhance connections between the space and the surrounding urban structure, and providing a dignified and active space for

commuters, shoppers and office worker to sit, relax and engage. The forecourt design also accommodates spill-out spaces for informal retail activities and for periodic events.

Building the precinct

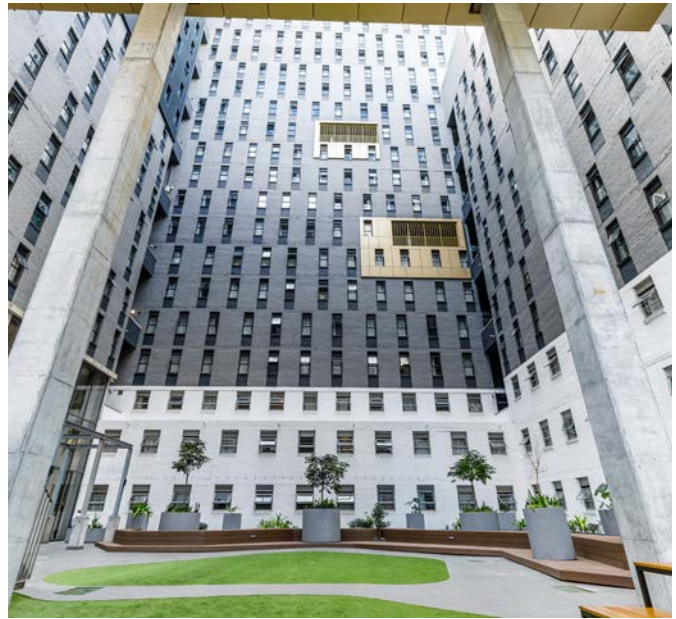
GVK-Siya Zama's Managing Director of its Cape business unit, Chris Maughan, says the purpose was to introduce student accommodation in a transport node that could service both UCT, CPUT and other significant tertiary educational campuses.

"The project had to be completed in time for the 2024 student intake. The 22-storey building required hoisting of some 9 000 000 bricks, which meant many extra hours of crane hook time and additional protection and resources while navigating adverse weather conditions," says Maughan.

While it was not a particularly difficult build, the volume of the project within the time frame posed challenges and required considerable thought, especially the vertical movement of people, plant and materials over 22 floors while the traffic up and down stairwells was a logistical challenge – especially at the height of the project when 999 workers were on site.

Cost innovations

It was a cost sensitive project and the team was challenged to find innovative solutions that still "looked good" and enhanced the overall aesthetic of the design. "Many elements had an industrial look and feel. We had to find ways to retain the architectural features without making the development feel too rudimentary," adds Maughan. Due to the size of the



project, financial consideration played a critical role in product selection, as the smallest design tweak and cost saving had a huge impact on the final project cost. With student safety and wellbeing as primary focus, the development includes several study hubs, seven-a-side football fields on the fourth floor of the building and cinema and relaxation areas to create a safe, enjoyable and practical living space.

Overcoming challenges

The location of the project posed a challenge in terms of security and required considerable additional resources to safeguard materials and project staff.

The site is also located “in the teeth” of Cape Town’s notorious southeaster wind and therefore extra measures had to be taken to ensure the safety of materials and people. Scaffolding and plant had to be adequately secured to avoid accidents and injury. The building façade comprised of several different elements ranging from specialised plaster/paint

applications, sheeted cladding, off-shutter concrete, flush painted brickwork, and several different types of Travertine face brickwork. The massive quantities of brickwork coupled with the usage of both cement and clay Maxis added to the production complexities.

The main station façade plays with the light quality of Cape Town with a soft satin type reflection, while the stone-like quality allows it to blend in.

Maughan says the building boasts solar and energy efficient appliances including many safety features, specifically related to fire compliance. “Due the large number of students to be housed in the building, it was essential that control measures were put in place to monitor water and electrical usage alongside an efficient, centralised water heating solution.” He says GVK-Siya Zama is delighted with the outcome of the project. “It showcases our ability to work on large, complex projects within tight budget and time constraints. We also believe our success is due to our ability to attract



the best people in the industry and create a work environment that is supportive and friendly.” Cape Station stands as testament to Eris Property Group, a visionary developer, and a team committed to delivery of this fine project. ©



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CIVIL ENGINEER: Nako Isiso
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Step into safety with the **MAXIMUS SAFETY BOOT**

In a world where safety and comfort are paramount, the Lemaitre Maximus Safety Boot stands out as a symbol of excellence. Proudly crafted in South Africa by the largest manufacturer of safety footwear on the continent, the Maximus is designed for those who build, manufacture, and mine towards a stronger nation.

These boots are not just products but a testament to the skill and dedication of the workforce, representing the quality and resilience of South African craftsmanship.

Attention to detail

Engineered with meticulous attention to detail, the Maximus redefines what you expect from safety footwear. It features a lightweight sole unit, which provides effortless movement and reduces fatigue, even during the longest workdays. This thoughtful design ensures that every step you take is supported by a structure that offers both stability and ease.

The Maximus also allows you to stay agile and responsive, which is vital for the dynamic demands of today's industrial environments.

Unmatched comfort

The boot's wider fit ensures enhanced comfort, accommodating various foot shapes and sizes, so you don't have to compromise on fit or feel. This makes the Maximus ideal for all-day wear, providing the roominess needed for comfort without sacrificing the snugness required for support.

Tailored support

The improved ergonomics of the Maximus offer tailored support with every step, focusing on critical areas such as the arch and heel, which are often prone to stress and strain in demanding work conditions. This ergonomic design translates into less fatigue and more energy, enabling you to focus on your tasks with confidence and efficiency.

Built to protect

Beyond comfort and ergonomics, the Maximus is built to protect. Its square cleat design significantly improves slip resistance, with a larger contact area enhancing stability and reducing shock impact. This feature is particularly crucial in environments where every step must be secure, reducing the risk of slips and falls and contributing to a safer workplace.

The genuine leather upper guarantees exceptional durability, standing up to the rigours of daily use while maintaining a professional appearance. Reflective strips are strategically placed to ensure visibility in low-light conditions, adding an extra layer of safety for those who work in environments where lighting can be unpredictable.

Durable to the end

The TPU heel support structure further enhances durability and provides essential support, particularly in the toughest work settings. This support is designed to withstand heavy wear and tear, offering long-lasting performance and reliability.

Whether working on a construction site, in a manufacturing plant, or in the field, the Maximus provides the robust protection you need to stay safe and productive.

Building better

Lemaitre believes in creating products that are more than just functional - it is a part of your journey to building a better future. Its safety footwear is proudly manufactured by workers, for workers, who together build a greater and stronger South Africa. Lemaitre understands the importance of supporting its local economy, which is why it is committed to employing South African workers and sourcing materials locally whenever possible. This not only supports the community but also ensures that its products meet the highest standards of quality and safety.

Up to standard

Lemaitre's ISO:9001-accredited factory in Port Elizabeth is strategically located for optimal access to sea, road, and air transport. This allows it to efficiently transport products across South Africa and to the SADC regions, where the brand has established a strong reputation for quality and reliability.

The Maximus Safety Boot reflects Lemaitre's commitment to excellence, adhering to stringent international safety standards while embodying the spirit and strength of South African manufacturing. ©





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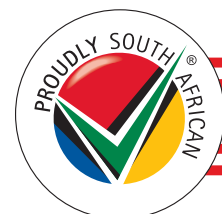
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Its wider fit ensures enhanced comfort, while the improved ergonomics provide tailored support with every step. Experience all-day comfort and protection. Experience the Maximus Difference.

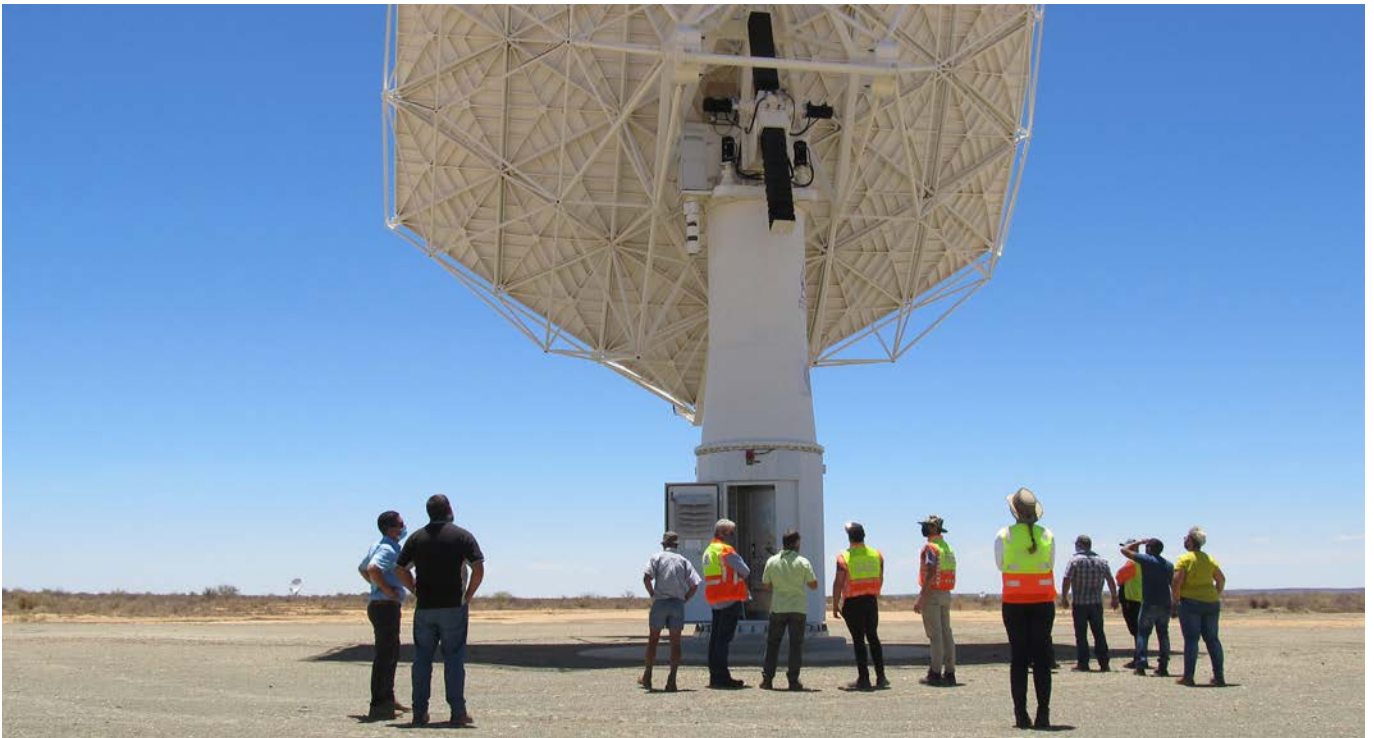
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**FROM ONE WORKER
TO ANOTHER**



Zutari coordinates global project efforts for MEERKAT RADIO TELESCOPE ARRAY

Consulting engineering and infrastructure advisory practice Zutari is continuing its involvement with the world-leading MeerKAT radio telescope array, where it has played a leading role since the project first broke ground, according to Major Projects Director Jana Jooste. “Zutari has been involved with this initiative for about 15 years. It is one of our flagship projects and close to our heart. We are very proud and privileged to be a part of such an exciting global venture.”



Jooste adds: “What makes our ongoing involvement unique is that, whereas we previously only designed the infrastructure for MeerKAT, our current appointment is as a professional services consultant for the client. It means we are embedded in the client’s team, a testament to the incredible collaboration we have had as part of a global professional team on this flagship international project.”

With the main client, the Square Kilometre Array Observatory (SKAO), based in the United Kingdom, Zutari’s current role is to guide the infrastructure construction contractors through the designs and subsequent construction work. “The local design and construction activities need to be closely aligned with other work packages being developed, specifically the telescopes being developed in China. Where this becomes interesting and challenging is coordinating all of these global efforts and to find ways, tools, and mechanisms to make sure that ultimately there is a single integrated telescope array,” explains Jooste.

“We regularly sit in on meetings with the other design teams, based all over the world,” she adds. Zutari is also developing power solutions for the site. “Hence, there is an international flavour to what ultimately will be a South African solution on the ground here in the Northern Cape.”

Zutari’s longstanding involvement with the project extends

to assisting the National Research Foundation (NRF) with the necessary technical support to ensure South Africa could demonstrate that it had the capability to host the telescope. The telescope is operated by the South African Radio Astronomy Observatory (SARAO), a NRF facility.

The 64-dish MeerKAT is the largest radio telescope in the Southern Hemisphere and one of two SKA precursor instruments based in South Africa. Located in the Karoo semi-desert, it was expanded with an additional 24 dishes under the MeerKAT+ project. This was jointly funded in 2019 by SARAO and the Max-Planck-Gesellschaft (MPG) of Germany and since 2020 with the *Istituto Nazionale di Astrofisica (INAF)*. The telescope will later be gradually integrated into the Square Kilometre Array Mid-frequency telescope (SKA-Mid).

The SKA Observatory (SKAO) is an intergovernmental organisation bringing together expertise worldwide to build and operate cutting-edge radio telescopes to transform our understanding of the universe and deliver benefits to society through global collaboration and innovation.

The SKAO has a global footprint, consisting of its global headquarters in the UK, the two telescopes at radio-quiet sites in South Africa and Australia, and associated facilities to support the operation of the telescopes. Once fully operational, the SKAO will

be a single global observatory operating two telescopes across three continents on behalf of its member states and partners.

Local community engagement is a high priority for the SKAO. “The telescope will be operating for an extended period of time, and therefore, the buy-in and benefits to the local community is a major focus area.” The Northern Cape where the telescope is being constructed, has a high level of poverty and unemployment.

As a result, a range of initiatives have been implemented to benefit and upskill local companies and entrepreneurs, from providing physical labour, local contractors and suppliers to related soft services. “We are looking at the entire region both during construction and post-construction when the telescope is operational,” confirms Jooste.

Another benefit for the South African economy is the anticipated construction of a data centre and operations centre based in Cape Town, which will attract international researchers and boost local tourism. “We are sure that anyone who visits in this capacity will fall in love with the country, as well as boost our international standing in the scientific community,” says Jooste.

Zutari’s involvement with the project has garnered it major local accolades. It won in the project category from R50m to R250m at the CESA Aon Engineering Excellence Awards 2023. It

subsequently received a commendation for Most Outstanding Civil Project (Technical Excellence) at the SANRAL SAICE National Awards 2023. The project was declared a winner in the Consulting Engineers category at the 2023 Construction World Best Project Awards on 9 November last year.

“We are proud to have provided the critical base infrastructure needed for these SKA dishes to operate effectively,” says Dr. Gabi Wojtowicz, who oversaw the foundation and geotechnical work. Zutari conducted preliminary and detailed design, verification and construction monitoring for the 24 dish foundations for MeerKAT+, as well as the power and fibre needed to collect and relay data over vast distances.

The project included the complete design verification and design of the access and foundation elements for the remaining 109 dish positions for the SKA-Mid array. ©

With the main client, the Square Kilometre Array Observatory (SKAO), based in the United Kingdom, Zutari’s current role is to guide the infrastructure construction contractors through the designs and subsequent construction work.



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Healthcare real estate is transforming MAURITIUS' INVESTMENT LANDSCAPE

Mauritius, long known for its beautiful beaches, is becoming a hotspot for a different kind of investment: healthcare. As the population ages and expats seek better care, the private sector is stepping in, attracted by the potential for returns and the chance to transform the island into a medical hub and alternative real estate opportunities.

The shift in healthcare property funding in Mauritius is highlighted by Kevin Teeroovengadam, CEO of JCG. "It's no longer just about government funding through taxes. The private sector has identified the opportunity as the ageing population, and ex-pats demand better care. Alternative healthcare investment can be driven forward with strategic planning from both public and private investment. This would position Mauritius as a preferred destination for people seeking good healthcare facilities, especially from the African continent, as it's not easy to access suitable healthcare in Europe due to visa and currency issues."

He adds that while Mauritius might seem a small market for healthcare, it has big potential. Backing from the hospitality, banking, and real estate sectors makes it an attractive investment market well suited to offering private care for patients who may otherwise have to travel to India or Europe.

Demonstrating this shift is the growth of Falcon Healthcare Group, which aims to become one of the largest healthcare operators in Mauritius and elevate the island into a regional

medical hub, serving countries like Madagascar, Seychelles and even eastern and southern Africa.

It launched its first multispecialty hospital, Artemis Curepipe Hospital, with 81 beds in mid-2023, and a year later, it is about to start the construction of its second hospital, Artemis Coromandel Hospital, with 140 beds, offering oncology services to the island. These assets are developed and owned by GREA, the development arm of London-listed Grit Real Estate Income Group as part of their diversification into more defensive impact real estate.

Falcon's principals have already started the construction of a third hospital in the west of Mauritius, which will be a multispecialty regional hospital servicing close to 150 000 people in the West of the country, taking its total beds to 331. Its entry into healthcare in Mauritius has added greater choice to the sector, for both patients and doctors and introduced the most modern healthcare facilities, equipment and technology on the island.

Falcon Healthcare group has partnered with from Artemis Medicare, one of India's healthcare pioneer operating in New Delhi.

Falcon is led by high calibre investors, including impact investor Safyr Capital Partners, Dr Zouberr Joomaye, Groupe Filatex, a leading renewable energy and real estate company based in Madagascar, and GRIT Mauritius.

Bronwyn Knight, CEO of GRIT Mauritius, reveals, “When we were presented with the opportunity to partner with Artemis and Safyr in bringing exceptional healthcare expertise to the island, we saw it as a perfect fit, offering financial performance and aligning with our growth plans and investment goals. Our investments into healthcare in Mauritius represent the cornerstone of creating a unique platform, backed by private investors, that could position Mauritius as a regional healthcare hub.”

Knight points out that healthcare real estate, by its very nature, is defensive and resilient, and the pandemic had clearly highlighted Mauritius's need for advanced care. “Diversifying the offering further through specialised, world-class care and treatments can improve lives in Mauritius and boost the economy through investment and medical tourism. But finance and operations expertise are major hurdles.”

Deva Marianen, MD of Safyr Capital, a key shareholder in Falcon Healthcare Group, also notes that healthcare in Mauritius has its challenges, but they can be managed and overcome.

“Licensing is tough. There is a shortage of specialised staff and we have consequently we're partnered strategically with universities to train local talents.. Providing top doctors with a state-of-the-art platform is key to our business model which allows them to treat patients with the latest technology available in the medical space globally. We value the skills and expertise of our operating partner, Artemis Medicare Services, which allows us to blend the right mix of skills between India and Mauritius both from a medical and operational perspective. Our aim ultimately is to service our local population but at the same time position our country as a regional hub and a centre of excellence in the healthcare space”

The 2nd annual API Mauritius & Indian Ocean Property Forum, which will be held on 13 June 2024 at the InterContinental Hotel & Resort, will unpack opportunities and lessons learned in

various markets, astute use of financing options and focus on emerging alternative asset classes, including healthcare real estate, in its not-to-be-missed ‘Growth Levers’ panel.

Somaya Joshua, Absa Africa Head: Commercial Property Finance: Africa Region (Outside South Africa), says, “Absa Commercial Property Finance is proud to contribute to the ‘Growth Levers’ panel at the API Mauritius Property Summit. Our insights and on-the-ground presence allow our teams to structure to market using diverse financing strategies, including green financing, and is a reflection of our expertise and commitment to the African real estate market.”

Murray Anderson-Ogle, GM of marketing and commercial at API Events, says, “Mauritius is starting to compete with India and Europe, offering world-class healthcare to patients from across Africa. It's a bold vision, but with the right funding and expertise, it could become a reality, boosting the economy, improving lives, and creating an exciting new opportunity for real estate. The API Mauritius & Indian Ocean Property Forum's ‘Growth Levers’ panel will shine a light on this and other promising opportunities, strategies, and tactics for the property sector.” ☺



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Citi-Con's concrete knowledge successfully **DEPLOYED ON NEW LANDMARK DEVELOPMENT**

The extensive skills and experience of concrete repair specialist, Citi-Con, were successfully harnessed to solve abnormal discolouring of exposed concrete of the new 38 000 m² Amazon head office in Precinct 2 of the R4 billion River Club mixed-used development. Notably, Citi-Con finalised a project that should have taken three months to do so in only two months.

Working closely with architect, Paragon Architects, WBHO, the principal contractor; and StonCor Africa, a leading supplier of asset repair and maintenance systems, Citi-Con designed a system that would remove the efflorescence. Importantly, this had to be done in an extremely short timeframe to avoid delaying the opening of the building to its tenant.

The repair method was tested on various sample areas and approved by Paragon Architects. "It was not only effective, but also practical and feasible – among the other important considerations for a successful concrete repair method. Bear in mind that our operations coincided with the various specialist trades which

were completing the final aspects of the build," Andre Vermeulen, Managing Director of CitiCon, says.

About 8 000 m² of exposed concrete was significantly stained. This included the full length of the entire concrete beam around the perimeter of the building. There, the efflorescence was so severe that it had to be removed by grinding off a thin layer of concrete. Other areas were washed by hand with a weak-acid solution cleaner.

The concrete was then sealed with StonCor's Pro-Struct 670. Pro-Struct 670 is a modified siloxane solubilised in aliphatic hydrocarbon for deep penetration in concrete substrates. This



system is very effective in resisting water and salts that are normally encountered in natural-weathering conditions.

As an approved StonCor applicator, Citi-Con has extensive experience working with the product. This also means that the company can guarantee its workmanship for the maximum available term. It is very important considering since the leading cause of concrete repair failures is shoddy workmanship, including the incorrect use of repair systems.

The substrate was first thoroughly cleaned to remove all dirt and loose particles. Pro-Struct 670 was then applied to a dry surface with a low-pressure spray. As per StonCor's instructions, the surface areas were flooded with the solution, with Citi-Con's team ensuring a run-down on the masonry of between 150 mm and 200 mm. To avoid a high spread rate that would greatly reduce Pro-Struct 670's effectiveness as a water repellent, a litre was used for every 2 m² to 4 m². This was dependent on the irregularities of the substrate surface.

Two coats of Pro-Struct 670 were applied with the second placed after about six hours and then allowed to cure over seven days.

Before the concrete could be sealed in this way, all of the

windows had to be masked to avoid permanently staining them. This was an extensive undertaking that entailed covering 8 500 m² of glass within the vicinity of the various working areas.

Moreover, various areas of the building had to be prepared simultaneously. This is so that the programme could continue when the Citi-Con team was unable to work between the two towers due to very high wind speeds. Considering Cape Town's "micro-climate" that presented new and unforeseen safety risks almost on a daily basis, Citi-Con had to adapt its programme regularly. This was done while working closely with WBHO to ensure minimal impact on the final aspects of the build.

Accessing the various work faces was a significant challenge. Initially, Citi-Con intended undertaking the entire project with rope access. This is considering that it is a quicker, more cost-effective and safer method of working at height, doing away with the need to erect scaffolding.

However, the building's many overhangs obstructed the rope technicians. They were, therefore, equipped with window-suction cups to pull themselves closer to the working areas. While effective, it was a slow and tedious process. Thus, Citi-Con also deployed suspended cable systems and mobile scaffolding towers that could be easily moved around the perimeter of the building to the worksite. Adjusting them to the site elevations, the mobile

scaffolding towers provided safe and quick access to the fourth-floor level.

Thirteen Citi-Con team members worked on this project. Among them were the company's certified rope-access technicians. By bolstering the team and incorporating various innovative work-at-height methods into the programme, the company was able to finalise the scope of work a few days before the "builder's holiday", saving the client in both construction time and costs.

Impeccable health and safety practices were implemented on this project. Integrated health and safety specialist, KBC Health and Safety, was employed to assess and manage occupational health and safety risks on behalf of Citi-Con. Throughout the project, Citi-Con's own robust occupational health and safety practices were in line with those of WBHO. The principal contractors' own "zero harm" policy extends beyond its own operations to all its project stakeholders.

Upholding these high health and safety standards was also facilitated by a team that is very skilled and experienced working at height. Many of them have been with Citi-Con for more than 10 years, during which time they have received ongoing training to develop, hone and refine their skills. This includes regular health and safety training, which also involves revisiting the "basics".

Vermeulen concludes by noting that he is very proud of his team's performance on this project. "We have again demonstrated why we are the preferred provider of building revamp services. Together with a guarantee of quality workmanship performed by professionals, we provide an efficient, practical, cost-effective and safe method of repairing new and existing concrete," he says. ©



Enza Civils' crucial role in shaping SA'S INFRASTRUCTURE FUTURE

Enza Civils, a division of Enza Construction, is strategically positioning itself to play a pivotal role in addressing South Africa's pressing infrastructure needs in the water, transport, and energy sectors. As the country grapples with significant infrastructure challenges, Enza Civils stands at the forefront, ready to provide essential solutions. Coen Naicker, Divisional Director at Enza Construction, along with Civils Contracts Directors Riaz Cassoojee, Ian Ferguson, and new team member John Hopewell, shared key insights into the company's future, outlining an optimistic long-term outlook.



Together, they provided a comprehensive overview of the civil engineering industry and Enza Civils' strategic direction, highlighting the company's readiness to tackle the nation's infrastructure demands.

In the recent budget announcement, the South African Minister of Finance committed R943,8 billion to public infrastructure over the next three years. This investment is poised to rejuvenate and expand the nation's infrastructure, with allocations of R486,1 billion from state-owned enterprises, R224,8 billion from provincial and national governments, and R213,8 billion from municipalities. Key focus areas include energy, water and sanitation, transport, digital infrastructure, human settlements, and agriculture.

The government's strategy includes a transformative approach to infrastructure financing and delivery, emphasising public-private partnerships (PPP) and innovative institutional frameworks to attract private investment.

Building more than just roads – building a future

Founded with a mission to specialise in bulk earthworks, roadworks, and the installation of essential services such as water and sewerage, Enza Civils has spearheaded numerous large-scale infrastructure projects across South Africa. Under the leadership of Coen Naicker, who joined Enza in 2016, the division has experienced significant growth and diversification, positioning itself as a key player in the industry.

"South Africa's infrastructure, energy and water challenges are

well-documented," says Coen. "There is quite a lot of concern in the industry about whether or not, as an industry in South Africa, we have the resources and capacity to execute the work that's coming and the work that is already out there."

Tackling water challenges

Starting with the water challenges in South Africa, Coen discussed the ambitious Lesotho Highlands Water Project (LHWP), which involves the construction of the Polihali dam and the connecting tunnel to the Katse dam.

"The LHWP is a monumental endeavour, aiming to create a reservoir on the Senqu and Khubelu rivers to bolster South Africa's water supply from the Katse Dam to the Integrated Vaal River System, serving Gauteng and its neighbouring regions," he explains. "Given Lesotho's limited resources for such a project, much of the needed expertise and materials must be sourced from South Africa and abroad, including Europe and China."

As part of the LHWP, numerous bridges are being constructed to maintain road access, particularly where existing low-level bridges will be submerged once the Polihali Dam is operational. Among these, the Senqu Bridge project stands out, stretching 825 metres in length and reaching a height of 90 metres.

Awarded in August 2022, the construction contract for this bridge was granted to the WRES joint venture (JV), consisting of Webuild S.p.A, a prominent Italian construction firm, in collaboration with South Africa's Raubex Construction, Lesotho's Sigma Construction, and Enza Construction.

Roads and Infrastructure Development

The imperative of maintaining and enhancing South Africa's road network is widely recognised, with SANRAL embarking on

numerous projects, including the upgrade of the N2/N3 freeways in KZN. While some projects are already in progress, others are yet to be put out for tender.

In October 2016, seven construction sector companies entered into an agreement called the Voluntary Rebuilding Programme (VRP) to drive transformation in the industry. This initiative entails mentoring and nurturing smaller contractors while contributing to a construction fund for socio-economic development, as part of an industry settlement agreement with the government.

Under the VRP, Raubex committed to mentoring two partners, one of which was Enza Civils, with the objective of helping them reach 25% of Raubex's South African turnover.

Coen elaborates on the collaboration with Raubex, stating, "Through our partnership, we have successfully completed three road rehabilitation projects in Kimberley, the Bakwena Platinum Corridor Upgrade, which added 32 km of carriageway, and the widening of the N4 bridge over the Crocodile River to accommodate a dual carriageway. Additionally, we undertook a 30 km partial upgrade of the R23 national road near Standerton in Mpumalanga. This included the construction of 4 km of dual carriageway, a pedestrian crossing, traffic circles, and the completion of six bridges and sections of the R23 highway, with the project being delivered on 26 April 2023."

Future Transportation Projects

Looking ahead, Enza Civils is poised to expand its footprint in the transportation sector. John Hopewell highlights the potential opportunities: "Over the next two to three years, we are considering re-entering the road space, depending on SANRAL's awarding and releasing of tenders. We see huge opportunities in upcoming road projects issued by the KwaZulu-Natal Department of Transport."

Large-scale construction in the energy sector

Riaz explains, "Among our significant energy-related endeavours is the second phase construction of the Combustion Waste Facility at Kusile Power Station, a venture secured through a joint venture with Grinaker LTA."

"The facility spans over 1 080 900 square metres and comprises an HDPE-lined storage area for ash residue from the coal-fired boilers. Our contract encompasses the construction of access roads, drainage systems for both contaminated and clean water, as well as pollution control measures such as dams and drains, in addition to the storage dam."

Renewable energy ventures

Through its partnership with Tractionel Enterprise, Enza Civils has entered the renewable energy space. Their collaboration is currently focused on the Umbila Emoyeni Renewable Energy Project in Mpumalanga. Tractionel serves as the EPC contractor for grid connection, while Enza Civils takes charge of civil and building work for the main transmission station.

Owned by Seriti Green, Umbila Emoyeni represents a commitment to sustainable wind turbine and solar energy solutions. Enza Civils is poised to solidify its position as Seriti Green's preferred contractor for future projects, marking a significant step toward a greener, more sustainable future.

Growing capability and expertise

Looking ahead, Enza is strategically focusing on various areas of business development, particularly in the energy sector where Tractionel Enterprise plays a leading role. By leveraging Enza

Civils' expertise in engineering and construction, the company aims to excel in energy-related projects. Additionally, Enza is committed to enhancing its presence in the water infrastructure sector. The transportation sector remains another key focus, with a specific emphasis on road and rail projects.

Coen emphasises the value of the Voluntary Rebuilding Programme (VRP) partnership with Raubex, which has diversified Enza's portfolio, enabling independent tendering for projects. With a CIDB grading of 9CE, Enza can now tender for projects of any size, although it remains prudent and open to joint ventures for larger endeavours.

Continuously enhancing capabilities is a priority for Enza. Recently, the company acquired a significant shareholding in Post Tensioning and Structural Solutions (PTS-S), specialising in post-tensioning, construction hydraulics, and structure repair. This strategic move aligns with Enza's diversification strategy and aims to bolster its specialist capabilities.

Commitment to skills development

Enza has long been acknowledged as a construction group recognised for its strong work ethic and unwavering commitment to quality, alongside its inclusive policies. This reputation is upheld through the firm belief that its people are its greatest competitive advantage. Enza prioritises skills development and retention as core business imperatives.

Demonstrating its dedication to industry advancement, Enza is steadfast in nurturing and enhancing its workforce. The Learnership and Graduate Development Programmes serve as vital entry points, attracting young talent to the business.

Recently, Enza introduced a Foremen Development Programme tailored for experienced foremen lacking formal qualifications in the industry. This initiative involves a year-long mentoring process, acknowledging their expertise while facilitating the attainment of formal qualifications.

Enza's Graduate programme targets construction management, engineering, and quantity surveying graduates, offering specialised training. The application window for the 2025 programme opened in May 2024, and typically draws between 4 000 to 6 000 applicants annually. Enza typically welcomes between 15 to 20 graduates each year, with 14 graduates joining the 2024 intake.

Looking ahead

Coen Naicker is optimistic about the future, not just for Enza Civils but for the industry. "While South Africa faces numerous challenges, including water supply issues and deteriorating infrastructure, these problems present opportunities for Enza to provide solutions," he says.

"With our strategic partnerships and a diverse portfolio, we are well-positioned to deliver quality infrastructure solutions. Our CIDB grading of 9CE allows us to tender for any size project, and we look forward to what lies ahead." ©

"Over the next two to three years, we are considering re-entering the road space, depending on SANRAL's awarding and releasing of tenders."

FUCHS LUBRICANTS' OIL CHOOSER SIMPLIFIES maintenance for off-highway equipment

When it comes to heavy-duty machinery and off-highway equipment, efficiency and reliability are key. Every second of downtime due to maintenance can translate into significant losses in productivity and revenue.



Left: Lesley Barnard, Automotive Aftermarket Sales Manager at FUCHS LUBRICANTS SOUTH AFRICA. Right: Jarryd Tate, Application Engineer at FUCHS LUBRICANTS SOUTH AFRICA.



Recognising this challenge FUCHS, a global leader in lubricants, has an Oil Chooser function on its website that allows customers to easily and quickly search for and select the correct engine oil, transmission oil or service product for their yellow equipment. The Oil Chooser functionality can even be accessed on your smartphone on-site by simply opening up a new window.

The FUCHS Oil Changer has been designed to streamline the oil change process for off-highway equipment, ranging from construction machinery to other vehicles. It encourages proactive maintenance, offering myriad benefit to equipment operators and fleet managers alike.

“The aim is to minimise downtime and maximise efficiency,” explains Jarryd Tate, Application Engineer at FUCHS LUBRICANTS SOUTH AFRICA. Traditional oil changes for off-highway equipment often involve time-consuming and labour-intensive procedures, such as draining the old oil, replacing filters, and refilling with fresh lubricant. These tasks not only demand significant labour but also pose safety risks and logistical challenges, particularly in remote or rugged environments.

Therefore, making sure you always have the correct product on hand is critical to assist operators to complete

these tasks quickly and effectively, even in the field. Selecting the best lubricant is crucial for optimal performance and longevity.

“However, with a myriad of lubricant options available on the market, selecting the most suitable product can be a daunting task, especially given stringent OEM requirements and the common problem of a lack of in-depth technical knowledge on the part of the end user,” says Lesley Barnard, Automotive Aftermarket Sales Manager at FUCHS LUBRICANTS SOUTH AFRICA.

Accessible directly through the FUCHS website, the Oil Chooser is an intuitive online tool to streamline the lubricant selection process for off-highway equipment. By leveraging comprehensive product data, the innovative platform empowers equipment operators and maintenance professionals to make informed decisions customised to their specific requirements and operating conditions.

A series of simple prompts and dropdown menus guides users through the lubricant selection process, considering factors such as equipment type, operating conditions, and environmental considerations. Based on this input, the platform generates specific recommendations for the equipment in the customer’s fleet.

With its user-friendly interface

and intuitive design, the Oil Chooser simplifies the complex task of lubricant selection, eliminating guesswork and uncertainty. Whether choosing a hydraulic fluid for a construction excavator or a gear oil for a front-end loader, users can rely on the platform to provide accurate and relevant recommendations quickly and efficiently.

By matching equipment specifications with the most appropriate lubricant formulations, the Oil Chooser maximises equipment performance and efficiency. Whether enhancing wear protection, minimising friction, or extending service intervals, the selected lubricants are tailored to deliver optimal results in terms of reliability, durability, and overall operational excellence.

Selecting the correct lubricant is not only vital for equipment performance but also to minimise maintenance costs and maximise asset longevity. By guiding users to choose the most suitable products for their specific applications, the Oil Chooser reduces the risk of premature component wear, downtime, and costly repairs, ultimately driving bottom-line savings for companies.

Barnard adds that FUCHS is committed to sustainability and environmental stewardship. The Oil Chooser promotes responsible resource management by recommending lubricants that meet or exceed industry standards for performance, efficiency, and environmental impact. By choosing FUCHS lubricants by means of the Oil Chooser, users can contribute to a greener, more sustainable future.

Tate concludes that the Oil Chooser is a cinch for anyone to use, simply requiring the end user to input the of type of vehicle, make, and model, etc. “It then essentially provides you with all the information regarding the fluids and lubricants you need. If we do stock it, it will say contact your local OEM, or you can contact FUCHS directly for technical assistance.” ©

Volvo's electric trucks reach 80 million **KILOMETRES IN FIVE YEARS**

Volvo's electric trucks have driven more than 80 million kilometres or 2 000 laps around the world since Volvo launched its first electric truck models in 2019. These trucks have reduced CO₂ emissions and at the same time improved the working environment for drivers significantly.



the environmental gains – drivers are experiencing a significantly better working environment with much lower levels of noise and vibrations

Growing electric presence globally

Volvo Trucks' global deliveries of electric trucks increased by 256% to 1 977 trucks in 2023 and the company sees continued interest from customers in 2024. In Europe, more than half of the electric truck customers chose a Volvo during the first quarter of this year – Volvo's share of the electric truck segment was 56%. In the United States, Volvo represented 44% of all sold electric trucks.

Volvo has so far delivered more than 3 500 electric trucks to customers in 45 countries on six continents. During 2023,

New monitoring data for Volvo's fleet of electric trucks reveal that they have driven more than 80 million kilometres in commercial traffic around the world since 2019. Covering the same distance with equivalent diesel-powered trucks would have consumed more than 25 million liters of diesel and in the process tailpipe carbon dioxide emissions have been reduced by 68 000 tons.

"I am happy to see how transport companies are embracing the benefits of electric trucks in daily operations. The transport sector represents 7% of global carbon emissions and battery-electric trucks are an important tool to reduce the climate footprint. Thanks to many early adopters we can already now see the huge potential of this technology," says Roger Alm, President Volvo Trucks.

Five years of electric know-how

Volvo's early entry in the electric truck segment has built a unique expertise in electric zero-emission transport – learnings that are used in the development of Volvo's next-generation electric offers.

- It pays to be an early adopter – transport companies with electric trucks have a strong competitive advantage when being able to offer emission-free transport to transport buyers
- Maximising the utilisation of the investment in both the electric truck and charging infrastructure builds a strong business case for transport companies – by optimising logistics and driving routes, and sharing charging facilities between operators
- The benefits of electric trucks go beyond

Volvo Trucks expanded its electric truck presence as it delivered its first extra heavy electric trucks to Latin America, with vehicles going to customers in Brazil, Chile, and Uruguay. Volvo also became the first truck maker to deliver battery-electric in Morocco, South Korea, and Malaysia, as well as the first to introduce extra heavy electric tractor models in South Africa.

"Not only transport companies but also buyers of transport- and logistic services are signing up to our SBTi (Science Based Target initiative) and are starting to demand sustainable transport solutions from their providers. This is yet another driver of the shift to electric trucks," says Alm.

Battery-electric trucks for all transport needs

Volvo's electric trucks meet the needs in a wide range of applications – from urban distribution and waste management to regional haul and construction. Over the five years of electrification, Volvo has also built a strong expertise in optimising the use of installed energy, charging and servicing of electric trucks. ☺

"The transport sector represents 7% of global carbon emissions and battery-electric trucks are an important tool to reduce the climate footprint."



From left: Masafumi Kawabata, the Senior Executive Co-ordinator from Hino Motors Limited in Japan; Hino SA Sales Executives Chris Jansen van Vuuren, National Service Manager; Itumeleng Segage, General Manager; and Nico Hamman, Senior Manager Sales and Dealer Network.

Hino SA wins awards for **13TH CONSECUTIVE YEARS**

Hino South Africa has again won global Service and Parts Distributor of the Year Awards from Hino Motors Limited, in Japan. This is the 13th consecutive year that Hino SA has won these two accolades which are contested by Hino distributors worldwide. Hino SA also won another award from HML which was for its sales effort in 2024.

“Each distributor is scored monthly against a set of criteria for each discipline and these scores are then totalled for the year. The score must be a minimum of 80% of target to get an award,” explained Sudesh Sanilall, Hino SA’s Senior Manager – Customer Services.

“Some of the criteria for the Service Distributor of the Year Award are customer experience ratings, workshop productivity measuring efficiency and profitability for the dealer network and Hino SA itself.

“The Parts Distributor of the Year Award is based on specific criteria set out by HML to deliver an excellent parts supply to dealers and customers, including the ability to supply parts on first request, stock holding and emergency parts supply by Hino SA and the dealer network,” explained Sanilall.

“Accolades such as these are a tribute to the hard work, planning

and commitment of the staff at our dealerships and head office,” said Itumeleng Segage, Hino South Africa’s General Manager - Sales. “We also focus a great deal of our marketing effort on the training of our own staff as well as those people involved in these important aspects of our business at the 67 Hino dealers countrywide.

“We have a huge advantage over most of our competitors since our Hino parts are stored and managed in the state-of-the-art Toyota Africa Parts Centre in Ekurhuleni we share with Toyota SA Motors.

This recently enlarged facility now covers 80 000 m², making it the largest warehouse of its type in the Southern Hemisphere. It serves not only South Africa, Namibia, Botswana, Eswatini, and Lesotho, but also 36 other countries in Sub-Saharan Africa besides a further six international export markets.

“The whole operation is digital and much of it automated to ensure quick response times to dealer orders. There are also special arrangements to fast-track vehicle-off-road (VOR) orders to ensure minimum downtime for our customers,” added Segage.

“Dealers located within a 100 km radius from the TAPC get two deliveries a day and other dealers get daily deliveries. Besides getting parts quickly the dealers also benefit from a 96% first time pick rate in the warehouse.

“Hino is playing another role at the TAPC in that it has three diesel-electric Hino 300 Hybrid trucks on trial with Namlog, one of the logistical companies involved with this efficient parts operation.

The facility itself is being made increasingly environmentally friendly and self-sufficient in terms of electricity generation and water supply,” concluded Segage. ©

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a.b.e.[®] enhances concrete works with duracure **CURING COMPOUNDS RANGE**

a.b.e.[®] Saint-Gobain, a leading provider in the field of concrete works, repair, and protection, has expanded its product offerings to include the duracure range of curing compounds. These compounds are designed to retain moisture in freshly poured concrete, ensuring effective curing and significantly reducing the risk of shrinkage cracks. The comprehensive duracure range is developed to cater to various concrete application needs, reflecting a.b.e.[®]'s commitment to quality and innovation.



The technologies underpinning the duracure range are diverse, encompassing formulations based on acrylic, wax, water-based, solvent-based petroleum resins, and pliolite resin. This variety ensures that there is a suitable product for every specific curing requirement, whether for large-scale industrial projects or smaller, more intricate concrete applications.

- The acrylic-based curing compound in the duracure range offers excellent durability and UV resistance, making it ideal for outdoor and indoor applications, and dries clear therefore will not cause staining on off-shutter concrete applications and can receive further coatings.
- The wax-based duracure WB compound, on the other hand, is particularly effective in forming a moisture-retentive film on the concrete surface, promoting uniform curing and also dries clear with no staining but should not be used where overlay coatings will be required.
- The white-pigmented duracure WPR is also ideal for spraying large areas like airport aprons, concrete roads, bridge decks or external hardstands because the white pigment in this particular curing compound offers light reflectance and heat reduction off the surface to minimize plastic drying shrinkage cracking.

The water-based formulations are environmentally friendly, easy to apply, and clean up, and for spray application to large areas.

Solvent-based petroleum resin compounds provide quick-drying solutions with superior adhesion, suitable for projects requiring fast turnaround times. In the duracure range these include:

- duracure SB (solvent-based) white or clear resin that is liquid membrane-forming which facilitates hydration thus increasing strength, wear resistance and reduced dusting. Ideal for concrete floors and



external hardstands.

- Finally, pliolite resin-based curing compound, duracure PR offer exceptional performance in maintaining moisture retention, especially in challenging environmental conditions. It is a multi-purpose curing, sealing and protective membrane. It acts as a primer and final coat for external applications where the clear is ideal on floors and plaster while the white acts as a primer for bitumen and asphalt overlays and as a top coat to concrete structures and windfarm tower bases.

The introduction of the duracure range signifies a.b.e.[®]'s dedication to advancing concrete technology in South Africa, providing construction professionals with reliable, high-performance solutions. By addressing the critical aspect of moisture retention during the curing process, these compounds play a vital role in enhancing the durability and longevity of concrete structures, thereby contributing to the overall quality of construction projects and the resilience in infrastructure. ☺



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