

# ROBUST



## SUSTAINABILITY

SPECIAL FOCUS ON  
CORPORATE SOCIAL  
RESPONSIBILITY

## ENVIRONMENT

**REDUCING  
THE CARBON  
FOOTPRINT**

## WE CARE

BUILDING  
SUSTAINABLE  
COMMUNITIES

## MAJOR PROJECTS

Green Point Stadium delivered on time

## EXPLORING SOUTH AMERICA

Mining opportunities in Chile

Dawn of a new

# Decade

A new focus; new opportunities





# ■ EMBARKING ON A NEW ERA

A NEW FOCUS; NEW OPPORTUNITIES

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## MESSAGE FROM THE CE

### DEAR READERS

While our financial results may reflect some concern for our present, the many opportunities in our various markets give much confidence for the future. Our order book has been remarkably stable over the past year following the drama of cancelled contracts during the global economic crisis. We have recorded a slight increase in activity at the half-year, but it is our project pipeline that holds all the potential.

In Middle East we have submitted our first tender into the Kingdom of Saudi Arabia with our partner Saudi Oger and are positive about its outcome. In the meantime, we are in the final stages of preparing our joint tenders for the design and build of Jeddah Airport. Apart from the recent nuclear bid and at a combined value of about R50 billion, this is the largest project we have tendered. We are also bidding for about R40 billion of work in Abu Dhabi.

Clough has grown its order book by more than R6 billion over the past six months and has captured a significant share of the Liquid Natural Gas (LNG) market in Australia. The company has made some key strategic acquisitions in the period, giving it a better platform from which to expand its business further.

The Cementation Group now functions as an integrated business, which has significantly improved its access to the global marketplace. Sharing of knowledge, resources and capability has helped secure projects in a number of locations ranging from Chile to Mongolia, Irian Jaya in Indonesia, Hong Kong and north of the Arctic Circle in Canada. This is a truly global business and its future market pipeline looks very promising.

In South Africa, the market remains muted, although we have a significant order book in the power sector and of course, we have to complete the Gautrain Project. Unfortunately we have been subjected to severe delays and disruption on these projects and are being forced to work hard to recover our contract and cash entitlements.

We are planning some organisational changes over the next few months as we streamline our statutory structures and improve line of sight between our group and operations. Our new executive leadership team is almost in place with just a few more changes to be made. We are preparing ourselves for an exciting period ahead, the worst of the recession behind us.

Please take note of the feature article in this edition of Robust. We have much work ahead of us.

**Brian Bruce**

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# DAWN OF A NEW DECADE

A recessionary end to the last decade may have muted the successes achieved by Murray & Roberts since 2000, but the Group has set its sights on even greater advances in the ten years that lie ahead.

**H**istory does not repeat itself, human nature does. This was a philosophy lesson learned by Murray & Roberts Group CE Brian Bruce

from his school history master Brian Thiel. "I attended what was a government school in Port Elizabeth, but such was the quality of its reputation that it attracted the best teachers and staff, who sought to make a real difference to learners who were there to succeed." The system created its own brand of success and continues to do so today, even under challenging circumstances. "Herein lies a lesson for Murray & Roberts and South Africa."

History is full of key events, many of which occur at the turn of decades, centuries and millennia. While the global economic crisis and recession may be just such an event, it cannot be compared to the changes that occurred in the pre-millennium decade of the 1990s.

## The new decade calls for a new generation of leaders whose primary goal is the development of young executives, "the real untapped opportunity in Murray & Roberts."

These included the fall of the Berlin Wall and of course, apartheid, which heralded the release of Nelson "Madiba" Mandela 20 years ago after 27 years in prison. His was a personal sacrifice on behalf of all South Africans, but also for all humanity.

But it was also Tiananmen Square in 1990 that heralded the rise of China as a global economic giant and changes to the world in which we will live in the future. 2010 heralds a new decade of change for Murray & Roberts. "It is again time to put the past behind us and prepare for new challenges.

We're challenged to shed unnecessary baggage, slim down and lighten our structures and so be fitter to take advantage of the opportunities ahead," says Brian.

### UNTAPPED POTENTIAL

Achieving the transformation Brian seeks will require new styles of leadership that sees its primary role as unlocking rather than exploiting the developmental potential of the organisation.

Murray & Roberts has always prided itself on a culture of empowering young engineers, and Brian and his colleagues are examples of a generation of engineers who had significant opportunities thrust on them at an early stage. "We were given enormous responsibility, which we accepted not for personal benefit but for its value to ourselves and the organisation. Our own personal enhancement naturally followed without being the primary motivation."

Can this be replicated with the current generation? Brian intends to ensure it is by putting in place leaders whose primary goal is the development of young executives, "the real untapped opportunity in Murray & Roberts." However, he emphasises that age and a 'developmental focus' are not mutually incompatible: "One can be developmental without being young, of course, as critical to what we are looking for is an understanding of the importance of diversity of our workforce." But, the decade Brian sees being ushered in for Murray & Roberts is one that places greater emphasis on inherent potential and experience than on age.

### ENTREPRENEURIAL INNOVATION

"We cannot wait for the market to come to us, or hope to win tenders by being cheaper than the opposition. We need entrepreneurial management ready to be innovative and prepared to seek out new business and methodologies. "This demands a developmental and innovative mindset rather than a tradition-bound one of doing things the way they have always been done."

Breaking the mould comes at a cost. A new generation freed from the constraints of tradition also implies they may not feel bound by the history and values of Murray & Roberts. This creates challenges to the institutional memory and brand within the organisation. However, one thing that will not change is the overriding purpose of Murray & Roberts to serve the developmental needs of emerging societies and nations.

What can Murray & Roberts expect? Brian says a widely expressed and common fallacy now is that there is limited market opportunity in the post recession environment. "The world abounds with opportunity, but that opportunity may not be accessible in the conventional manner, so there is no point seeking it according to the old paradigms. It has to be flushed out by people prepared to do something different."

### IBM OR GOOGLE?

Over the past three decades the computer industry experienced rapid growth, but simultaneously spawned massive competition and constant innovation. As a result, the large incumbents that had pioneered the sector had to fight existing and new competitors for their market. And what competitors these new entrants were: Intel, Microsoft and Google, for example. An innovative business model like Google can always succeed, even in a mature market, but only by creating new markets that incumbents find difficult to copy. The philosophical question is whether the future of Murray & Roberts is IBM or a Google.

New markets and innovations are unlikely to emanate from executives thoroughly immersed in the day-to-day running of historically structured operating entities or in the constant search for solutions to internal challenges. "It is a future-orientated focus that brings innovation and new markets," says Brian. "Companies that prosper and create brand new markets are those



that actively invest in exploration (oil & gas companies) or research and development (pharmaceutical companies). This is expensive both in resources and personnel, and a company like Murray & Roberts requires investment in training and personal development of people.”

### **FUTURE OPPORTUNITIES**

A future opportunity Brian sees for a new market focus is sustainability management in construction, power and mining.

“Health and safety are important issues which are key to ensuring our market acceptance. By creating a safe and healthy working environment we are creating a more sustainable future for ourselves, our society and our organisation.”

Another opportunity is to lead standardisation in the construction industry. “Construction is the last of the engineering industries where design and build are still separated. This is largely traditional and reinforces an expectation that all structures are unique.” Brian sees an opportunity in the convergence of design and build by offering an integrated solution, where uniqueness is possible but the focus is on common materials, systems and structural platforms.

Brian sees similar opportunities in the fields of power and energy, water and sanitation and in dealing with the impact of climate change. There is already evidence that current infrastructure is not withstanding the onslaught of even marginal short-term climatic changes in various parts of the world.

These concepts are gaining traction around the world, but to capitalise on them, it is necessary for Murray & Roberts to introduce and develop a new generation of leaders. Brian notes that at the recent inauguration of the Group’s new Graduate Development Program, a number of new engineers registered serious interest in participating in these initiatives.

“Leadership does not constitute management of the status quo. Rather

it is the capability to see opportunity. Leadership is a vehicle by which to direct our business out of the current recession into new, better opportunities,” says Brian.

South Africa is a country which for 300 years has “punched above its weight” in global influence and innovation. It has over many decades developed leaders who strode the First World stage in politics, business and the professions.

But that forward focus seems to have been replaced by inward focus, and our country is losing its ranking among the foremost emerging markets of the world. Just a few years ago South Africa was regularly mentioned in the same breath as the BRIC countries of Brazil, Russia, India and China (originally BRICS), but has slipped beneath the radar and is now seen as part of the next wave alongside the likes of Turkey. When we choose to compete only with ourselves, we set a performance standard that is determined by our average past.

“South Africa stopped investing in its natural potential,” Brian notes following his recent visit to China. The reason for their ascent and our descent lies in that philosophical line, “History does not repeat itself, human nature does.” China has been a bear in hibernation. It may have been asleep, but it is still a bear. Now it is renewed and has awoken to claim its place on the world stage.

Along the same philosophical line, Brian states that “The only predictor of future performance is past performance.” There is no basis to believe that an individual, organisation or nation can deliver a different future without tangible and meaningful change. Organisational DNA is “like a self-fulfilling prophecy” writes Pakistani philosopher Gharajedachi.

Brian notes that Murray & Roberts has consolidated its strong growth profile in the current financial year and may face business decline unless it invests now in new opportunity and importantly, in a decade of people development.

EAMONN RYAN & BRIAN BRUCE ○

## **AFRICAN DECADE?**

**It has long been mooted that the decade of Africa is imminent, as we are currently experiencing the Chinese decade. Brian Bruce cites the philosophies referred to alongside as to why he feels the continent is not yet ready to achieve this on its own. “Despite all the development in China, its people still fight the revolution to achieve a better life for their future generations.”**

**In preparing for a recent visit to China, Brian researched the Africa story. His objective was to find a basis for strategic partnership that could offer a cooperative future to Murray & Roberts, Chinese enterprise and Africa south of the Sahara. He used the formidable performance platform developed within Murray & Roberts over the past decade and primarily focused on the global engineering and natural resources sector, as the catalyst for his engagement.**

**“Africa holds more than one third of all the world’s known natural resources,” says Brian. “It comprises 20% of the world’s land mass, has 15% of the population, but only generates 2% of global GDP.” A long list of specific natural resources shows Africa’s share ranging from between 50% and 98% of known reserves.**

**“I am confident that such a strategic partnership holds the potential to be a catalyst for Africa’s development,” says Brian. “But,” he warns, “this is about South Africa, not Murray & Roberts. China is a centralised economy where the state is in control. It is the government and people of South Africa that must seize this opportunity to fulfil their destiny in the future development of the continent of which they are such a critical part.”**

**Murray & Roberts is a committed and capable vehicle to serve this purpose. The Group has built a formidable performance platform that contains the best of what is both local and global.**

# Major Project Update

## GAUTRAIN

The Gautrain Rapid Rail Link project is due to start full system trial operations on the section between Sandton Station and the OR Tambo International Airport in March, with completion of a 10-week trial scheduled for early June 2010.

The contractual completion date for this first phase of the project is end June but Bombela, of which Murray & Roberts is a lead partner, and the client, the Gauteng provincial government, are negotiating an earlier completion date in time for the 2010 Soccer World Cup.

### PROJECT MILESTONES FOR 2010

Key project milestones for phase 1 include completion of all the electrical and mechanical (E&M) installation work in January, with the exception of some automatic fare collection equipment, and complete area integration testing in February.

Completion of the main bus depot, which will feed into the train route is expected in February.

Commencement of the trial running for phase 1 is due in March, with completion due early in June.

OR Tambo International Airport, and Rhodesfield, Marlboro and Sandton stations should all be largely completed and operational before the end of May.

### PHASE 2 MILESTONES

Key project milestones for phase 2 in 2010 include the completion of viaduct 5 construction through Centurion and handing over of Hatfield Station by the civil contractor to the E&M installation contractor.

Testing and commissioning of the Midrand section, testing and commissioning of systems for the Centurion section, trackwork installation and power supply and distribution are also due for completion in 2010.

Most of the physical construction and installation work, as well as the bulk of the testing and commissioning on the Gautrain should be completed by the end of 2010.

Handover and access to stations for E&M installation is expected to take place at the Pretoria, Rosebank, Centurion and Park stations between February and June 2010.

### ROLLING STOCK

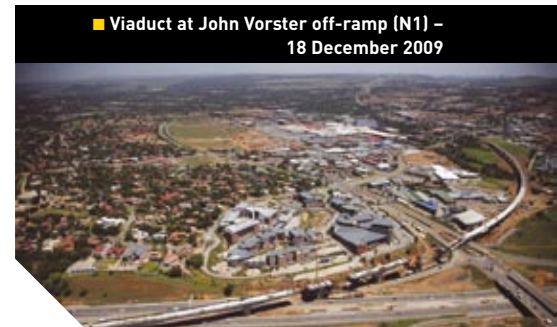
The last sub-assembly for the rolling stock cars delivered from Derby to the UCW partnership in Nigel is expected to be completed by February, while the last rolling stock 4-car unit is expected to be completed for final acceptance testing by June.



■ Sandton Station. View towards west – 28 January 2010



■ East-West Link / Heartland



■ Viaduct at John Vorster off-ramp (N1) – 18 December 2009

■ Depot to Midrand Station. View towards the north – 18 December 2009





## MEDUPI POWER STATION

Boiler erection work has commenced at Eskom's R120 billion Medupi power station near Lephalale in Limpopo Province, with the setting of the first boiler house column in January and erection of the boiler supporting structure in February and March.

The setting of the column was preceded by more than two years of groundwork, which included completion of the design and manufacture and fabrication of the pressure parts, steel works and other components. The main cranes were also assembled, while the structural steel for the boiler supporting structure was delivered.

The Medupi project, which is the largest dry-cooled power station currently under construction globally, will eventually comprise six units with a total of 4 800 MW installed capacity. The first unit is scheduled for commercial operation in 2012 and the last unit late in 2015.

■ Setting of the first boiler house column at Medupi power station



## GREEN POINT STADIUM

The keys to the new Green Point Stadium were handed over to the Cape Town's Executive Mayor, Alderman Dan Plato, on 14 December 2009.

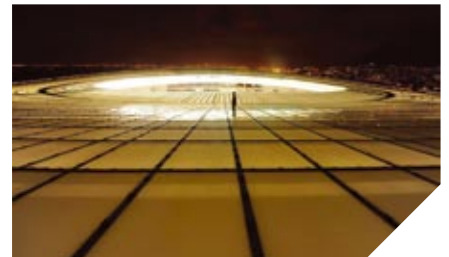
Construction of the 68 000-capacity stadium for the 2010 Soccer World Cup commenced in March 2007 and in just 33 months was completed, ahead of schedule, by Murray & Roberts and its partner. The stadium will host five first round World Cup matches, one second round match, one quarter-final and one semi-final.

Enclosed by a façade of woven fiberglass coated with Teflon, the stadium resembles a rose-coloured bowl floating on a base when lit up at night. Capetonians have dubbed it "the Diva of Cape Town" as it reflects the constantly changing moods of the city in different weather conditions.

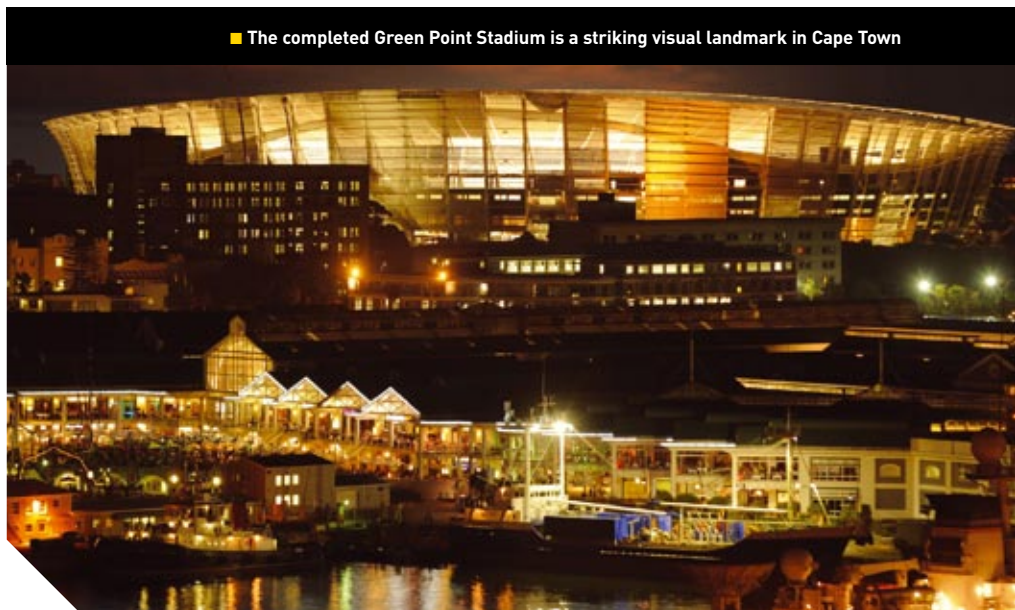


More than 2 800 workers were employed on site during construction and almost 1 200 artisans received training from the contractors.

A consortium comprising the South African Sail Group and the French-based Stade de France was awarded the service contract to operate the stadium and ensure that it remains a sustainable multi-purpose venue after the 2010 World Cup.



■ The completed Green Point Stadium is a striking visual landmark in Cape Town



# News

## MURRAY & ROBERTS CREATES A NEW MAJOR PROJECTS EPC CONTRACTOR

Murray & Roberts has merged its engineering solutions and mechanical, engineering and instrumentation operations to form a larger scale engineer, procure and construct (EPC) contractor called Murray & Roberts Projects.

The new company will serve the industrial market with a focus on major industrial projects in the power, oil and gas, mineral beneficiation and water sectors in the SADC region.

With the mechanical contracts for the major power station projects, Medupi and Kusile, forming the core of its current work, Murray & Roberts Projects has an order book of approximately R8 billion in South Africa alone. The business is strongly positioned in the SADC region by its knowledge of local market conditions, such as pricing, procurement and black economic empowerment.

## CEMENTATION CANADA SETS A NEW MINING RECORD

Cementation Canada has set the North American record for the longest and largest diameter hole raisebored in hard rock at Goldcorp's Red Lake mine in Canada. It was completed in 2007 and is 694 metres in length and 5,52 metres in diameter. Murray & Roberts' mining contracting group has four of the largest raisebore machines in the Americas.

## CHILEAN PROJECT MARKS START OF NEW MINING SYNERGY

In 2009, Murray & Roberts expanded its fledgling presence in Chile with the establishment of Cementation Sud America to supplement the established mining contracting operations of 50% owned local company TerraCem.

Murray & Roberts was recently selected as one of the preferred contractors for the shaft design packages at the Chuquicamata mine, in Chile – a development that marks the start of greater synergy between the Group's mining contracting operations in the established mining markets of South and Southern Africa, North America and South America, Australia and Southeast Asia.

Murray & Roberts Cementation business development director, Allan Widlake explains that the copper mines in Chile have reached the depth at which opencast operations are no longer economical and this requires the mines to start underground mining operations. As a result, Chilean State mining entity Codelco has decided to expand some of its larger operations, such as the Chuquicamata mine, into underground mines.

"We were selected because of our experience in the design, engineering and installation of large capacity hoisting systems. This includes the system at Phalaborwa mine, which has one of the largest hoisting systems installed for one of the largest mining capacity systems in South Africa for decades. The hoisting capacity at Chuquicamata will be five times that amount," he says.

While the project will be run by the group's Canada-based company, Cementation Canada, the South African operation will work together with its Canadian company to provide the people and resources for the project, using additional services from South Africa.



■ (L to R): Henry Laas (Murray & Roberts Cementation), Raul Dagnino (TerraService), Peter Adams (Murray & Roberts UK), Roy Slack (Cementation Canada) and Richard Pope (Murray & Roberts UK)





## STOP.THINK

### SAFETY CAMPAIGN

The Murray & Roberts STOP.THINK campaign encourages employees to think before they act and to execute work properly the first time. The active participation of management and the labour force in the STOP.THINK campaign, coupled with the active implementation of cardinal rules entrenches the ultimate goal of 'Zero Harm'. STOP.THINK is continually reinforced with personal two-way communication and interaction throughout the whole organisation and is supported by an open door policy. This is further strengthened by a policy of personal identification where each individual in the company wears a name tag to remove the barrier between management and worker.

In addition, the close involvement and interaction between the client, AQP (SA), organised labour and Murray & Roberts, and the clear understanding of each role players responsibility and accountability towards our goal of 'Zero Harm', has played a major role in the implementation of STOP.THINK.

## SAFETY BY DESIGN

### KROONDAL PLATINUM MINE HAS ACHIEVED AN IMPRESSIVE SAFETY RECORD OF THREE MILLION FATALITY-FREE SHIFTS.

Almost unheard-of in the mining industry, this exceptional feat has been attained in just under three years, and is attributed to Kroondal's approach to safety as an integral, vital part of the entire business management process and the personal responsibility of each individual.

"Safety and associated safety systems should never be stand-alones," says Koos Oosthuizen, Murray & Roberts Cementation risk executive. "Safety is embedded in every aspect of the organisation and is a natural part of production. It is implicit in our entire business management system and infuses every activity from procurement to rockface and final production."

A number of tightly interwoven factors have led to a major shift in the way that safety is managed at Murray & Roberts Cementation. The "care" philosophy lies at the heart of the new approach. Care stands for Contribute, Add Value, Respect and Energise. It may seem abstract, but

it helps employees to recognise the value and importance of each individual and his role in the work process.

"We've moved away from the remote impartial authority concept to more personalised behaviour that is integrated into our three-sided 'procedures/training/coaching' principle," adds Oosthuizen. "Underlying this is the importance of knowing the individuals who work with and for you. This encourages everyone to become more personally involved in the lives and safety of others."

Complementing the drive to implement the best procedures and systems and to empower each individual is a communication process that promotes and sustains the safety ethic with regular 'safety flash' briefs, cartoon illustrations and considerable informal monitoring.

Information sharing, analysis of accidents, risk assessments and preventative measures form the foundation of Murray & Roberts Cementation's safety strategy.

## NEW STRONGER BUILDING PRODUCTS BUSINESS EMERGES

Murray & Roberts has merged its building product manufacturing businesses to form Murray & Roberts Building Products.

In 2009, Technicrete and Ocon Brick decided to align their operations and explore opportunities to improve synergies and financial performance. After working closely together since September, a decision was taken to merge the operations into a single company.

The Technicrete and Ocon Brick brands both have a strong presence in the building products market and will retain their individual brands.

Concrete products will continue to be sold under the Technicrete brand and clay products will continue to be sold under the Ocon Brick brand.

This development follows the decision in 2009 to separate Concor Technicrete from Concor and rebrand it as Technicrete.



## RESIGNATION



Sean Flanagan has resigned as a director and employee of the Group, citing health concerns.

Sean joined Murray & Roberts in 1991 and

was appointed an executive director in 2004. For the past three years he has held principle executive responsibility for the Group's South African major projects portfolio, including Gautrain, Medupi power station civils contract and the successfully completed Green Point Stadium.

# MUCH ASPHALT REDUCES CARBON FOOTPRINT WITH NEW TECHNOLOGY



■ Much Asphalt's warm-mix asphalt plant

**M**urray & Roberts company, Much Asphalt, is gearing up for the South African National Roads Agency's Gauteng Freeway Improvement Project with new production plants at its Benoni and Pomona facilities that will supply an additional 300 tonnes and 250 tonnes per hour, respectively.

Both are twin drum configurations capable of handling a wide range of different mixes, including efficient use of recycled asphalt, an important requirement in the drive for sustainability of natural resources.

Of particular interest, however, is the plant built by Astec in Tennessee, USA, which is now being commissioned at Much Asphalt Benoni. This installation will allow Much Asphalt to employ foam technology for the manufacture of warm-

mix asphalt (WMA) for the first time in South Africa. Not only will this enable the company to substantially decrease its carbon footprint, but WMA provides several additional benefits in both asphalt production and paving.

WMA allows the asphalt manufacturer to reduce the temperature at which the material is mixed and placed on the road through the use of either chemical additives or foam technology.

**Temperature reductions of up to 30°C are possible, with the obvious benefits of cutting fuel consumption and decreasing the production of greenhouse gases.**

"We will be the first South African company to produce WMA using foam technology on a big scale," says Much

Asphalt technical director Herman Marais. "Foam technology as a cold process has been around for some time, but has been used to manufacture bitumen stabilised base course material rather than asphalt."

All previous technologies for warm-mix production rely on chemical additives, special bitumen, special procedures or special bitumen delivery systems to reduce the viscosity of the binder at lower mixing and placing temperatures. The additives add significant cost per tonne of mix.

The Double Barrel Green System built for Much Asphalt by Astec eliminates the need for additives through the use of small quantities of water that come into contact with the hot bitumen, generating steam and in turn causing foaming of the bitumen. The volume of the bitumen is drastically increased and the viscosity of the binder is reduced, improving coating on the rock and enhancing its distribution in the mix. The lower viscosity of the binder allows lower than normal compaction temperatures.

## **BENEFITS**

Temperature reductions of up to 30°C are possible, with the obvious benefits of

cutting fuel consumption and decreasing the production of greenhouse gases. This will reduce energy costs and the

## HOW ASPHALT TECHNOLOGY HAS CHANGED

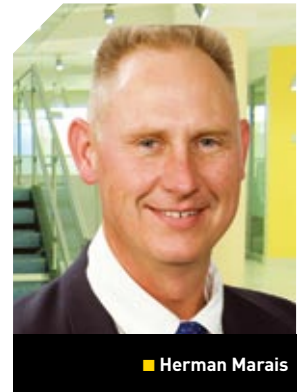
“Asphalt technology is very much like the fashion industry in that it keeps on repeating itself. We often return to asphalt mixes that were used a long time ago and ‘reinvent’ them to suit current conditions,” explains Much Asphalt’s technical director, Herman Marais.

“The warm mix asphalt (WMA) technology, for example, has been around before but was not properly understood and fell by the wayside because of poor performance in the stripping of the binder due to trapped moisture.”

In addition to the new Double Barrel Green System for foam WMA production at Benoni, Much Asphalt has the technology to produce WMA using chemical additives at all its plants around South Africa. “We are currently investigating the best WMA technologies for each of our operations,” says Marais.

“Major strides have also been made in recent years in modified binders and almost all the asphalt used on high traffic roads is made with modified binders today,” he adds. One modified binder that has proven itself well in the past 20 years is bitumen rubber, a blend of penetration grade bitumen and rubber crumbs. The rubber crumbs are graded buffings of old truck tyre casings. The bitumen rubber has environmental benefits associated with recycling of truck tyres, which are generally a major environmental problem.

As a result of the success of the bitumen rubber binder on major freeways around South Africa, it is now being specified for most of the Gauteng Freeway Improvement Project as well as on the Johannesburg Development Agency bus routes.



■ Herman Marais

## IMPROVED CONDITIONS FOR WORKERS

Lowering the production temperature will drastically reduce emissions, fumes and odours at the plant and improve conditions for workers. Smoke and smells are eliminated because the light oils in bitumen never reach boiling point.

There is a longer safe window period between manufacturing and placing the asphalt on the road (because it is warm and not hot), which means it can be hauled longer distances. There is less wastage, less haste in getting the product to site and reduced need to set up mobile plants to produce asphalt on more remote sites.

Chemical additives are not used to lower the temperature of the asphalt, keeping the process free of potentially harmful pollutants.

There is also good news in this new development for emerging contractors who do small asphalt projects (driveways, sidewalks, skating tracks, small road repair and surfacing projects) by hand. The WMA is easier to work at lower temperatures and therefore safer and better suited to labour intensive projects.

What are you doing to reduce your carbon footprint? Join Much Asphalt in slowing down global warming and making our planet a greener place.

carbon footprint at Much Asphalt’s biggest and busiest plant, Marais points out.

In theory, an energy saving of 11% can be achieved with a 10°C reduction in heat. However energy savings of 30% to 35% have been reported due to the reduced heat losses during the mixing operation. Processes where the aggregate is not heated above boiling point of water have savings as high as 34% to 47%.

Operational benefits include an increase in plant production with no increase in the cost of the mix. This can be attributed largely to reduced temperature differentials. The greater the differential between the asphalt and ambient temperatures, the faster it cools off. With WMA this differential is low and therefore it cools more slowly. This allows a longer period for compaction to take place, improves density, and the asphalt can be stored for longer, hauled longer distances and used in colder temperatures.

### HAND LAID ASPHALT

Much Asphalt offers best practice workshops on hand laid hot mix asphalt as a value adding service for emerging contractors and local and provincial authorities. “The aim is to establish a uniform, industry-wide standard for high quality hand laid asphalt,” says Marais. “The WMA should benefit small hand asphalt projects as the constructability time-window for successful compaction will be extended due to the workability of the mix at lower temperatures. We are also busy with research in conjunction with the CSIR on the use of high recycled asphalt content mixes with the WMA technology that will be aimed at labour based township road upgrades.”

### INTERNATIONAL ACCEPTANCE

WMA has received much attention world wide as a technology that saves energy and improves conditions for workers and is now being widely adopted in Europe and the USA. ○



# BUILDING SUSTAINABLE COMMUNITIES

The last few decades have seen rapid growth in the scale and scope of corporate social responsibility, thanks to an increasing awareness of the role companies play in the development of communities. Murray & Roberts recently launched a campaign to strengthen awareness and employee involvement in its CSI program.



**S**trategic social investment and responsible business practices are now imperative for companies: by uplifting poor communities today, companies are safeguarding their markets for tomorrow; by investing in sustainable practices, they are ensuring the future survival of the communities in which they operate.

Murray & Roberts has a long track record as a good corporate citizen and, for over 50 years, the Group has

recognised the link between business sustainability and the sustainable functioning of its social surroundings. Corporate Social Investment (CSI) has served as the conduit through which Murray & Roberts realises its goal of positively impacting on individuals and communities.

To increase awareness of its CSI program, Murray & Roberts recently launched a campaign called 'Building Sustainable Communities'. Using a combination of posters and weekly

newsflashes, the campaign profiles the work that is being done in communities, through the Group's CSI program. The program prioritises the advancement of quality maths, science and technology education in schools. This is a deliberate strategy aimed not only at improving the quality of education, but more specifically to increase the pool of young people who take up a career in engineering. The

## FACT FILE

### DID YOU KNOW?

- Murray & Roberts has supported community development in South Africa for over 50 years.
- We invest R20 million per annum in socio-economic development projects.
- Our CSI activity is strategic and sustainable – focusing on the development of the critical skills needed in construction and engineering.

### WHAT IS CSI?

**Corporate Social Investment (CSI)** is the voluntary investment of time, goods and money by companies into projects that will produce measurable change in communities.



■ Posters to communicate the CSI awareness campaign

campaign also highlights the work of the Murray & Roberts Child Welfare fund which has been supporting vulnerable children for more than 50 years. Many Murray & Roberts employees have expressed their interest in CSI activities by volunteering to become CSI

champions. In this role, they become a channel between the corporate office and communities in which their entities operate. This enables increased awareness and communication of CSI activities and assists the CSI team to understand the needs of communities.

**PARTNERSHIPS = IMPACT**

Murray & Roberts believes that partnerships and collaboration enable it to maximise its impact on communities. By proactively engaging with NGOs, government, other companies, our employees and stakeholders in

**CSI PROJECTS**

TERTIARY EDUCATION	SCHOOL SUPPORT	EARLY CHILDHOOD DEVELOPMENT	ENVIRONMENT EDUCATION
University of Stellenbosch University of Witwatersrand University of Johannesburg University of Pretoria FET College Construction Industry Partnership	JET – North West Schools Development Project SAIMechE Technology Olympiad The Maths Centre PROTEC – Tongaat TRAC South Africa Science Education Resource Initiative Old Mutual MTN Science Centre – Gateway MTN Science Centre – Cape Town Sci-Bono Discovery Centre The Lapdesk Company UP with Science	HeadStart Early Childhood Project Khululeka Community Education Ntataise ECD Network Penreach ECD Molteno Institute for Language & Literacy	School Environment Education Development Food & Trees for Africa South African Institute for Aquatic Biodiversity Eco-Access

development, we stimulate the multiplier effect and leverage our CSI budget to have an even greater effect on building sustainable communities in South Africa.

Murray & Roberts funds a variety of successful projects with the aim of improving the quality of mathematics, science and technology education. Because numeracy and literacy are prerequisites to advanced education in maths, science and technology, Murray & Roberts also supports the training and advancement of early childhood development projects. Our business activities unavoidably impact on the communities in which we operate so our focus on environment education enables us to contribute to the sustainability of environments where we operate.

Murray & Roberts also supports several smaller projects including the Bedfordview Community Policing Forum & Tembisa Child Welfare.

In 2010 we remain committed to the national education and social economic development goals and will continue to proactively explore new partnerships in pursuit of good quality education that will lead to long term, sustainable empowerment.

## OUR CSI STRATEGY

**Murray & Roberts has a long track record as a good corporate citizen. We are mindful of the role we can play in contributing to social and economic development in South Africa by building sustainable communities. This is the common theme that runs through our CSI activities.**

**CSI at Murray & Roberts builds sustainable communities in a number of ways:**

- **Through our CSI program which makes strategic investments in projects in three focus areas: mathematics, science and technology education; literacy and numeracy education in early childhood development; and environment education.**
- **Through Murray & Roberts Child Welfare activities, supporting vulnerable children.**
- **Through our Letsema Sizwe Community Trust which promotes and enables the social upliftment of designated groups and communities within which Murray & Roberts operates.**
- **We also make use of other opportunities which arise from our projects, to make a difference in communities.**

## GET INVOLVED

If you would like to be more actively involved with CSI at Murray & Roberts email: [csi@murrob.com](mailto:csi@murrob.com).

## WE ARE THE CHAMPIONS

### DID YOU KNOW?

- **The Murray & Roberts Child Welfare Fund is run entirely by employee volunteers.**
- **Murray & Roberts encourages employees to submit applications for funding on behalf of their communities.**

**Volunteering is an easy, inspiring way to make a difference to the development of the country. The spirit of volunteering is reflected in the values of ubuntu, where people are seen in relation to others, as part of a larger community.**

**Employees are the human face of Murray & Roberts in the community. Staff engagement in building sustainable communities is actively supported. Employee involvement activities such as volunteering, payroll giving and staff-motivated funding are a way for us to support smaller**

**organisations that may not necessarily fit with our formal CSI strategy. You can get involved in CSI at Murray & Roberts in a number of ways:**

- **You are the champions: CSI Champions act as ambassadors of Murray & Roberts in their communities and work to raise employees' understanding of the value of CSI. As CSI Champions, these employees will:**
  - Assist in identifying new projects for support
  - Help the CSI team to support existing projects by participating in events
  - Communicate the Group's CSI activities to internal and external stakeholders and clients
- **Motivate for funding: Murray & Roberts employees are encouraged to submit applications for funding on behalf of their communities.**



# MURRAY & ROBERTS CARES

**For many, 2009 was a difficult year. Organisations and households across South Africa felt the financial pressure and stress created by the global recession.**

In February 2009, Murray & Roberts launched the Murray & Roberts Employee Wellness Program (EWP) to assist employees with these pressures and stresses in their personal and professional capacities. A significant number of employees have benefitted from the services provided by ICAS's professional staff. These services include 24 hour telephonic counselling, telephonic financial and legal assistance, face to face counselling with a therapist (available nationally), as well as health and wellness information – either online or telephonically.

ICAS gained valuable insight during the first year of service delivery which has informed an improved strategy to communicate the benefits of the EWP service to all Murray & Roberts employees. An ICAS representative will be visiting work sites within the next few months, so please be sure to attend the briefing sessions and engage with the ICAS representative to find out more about how ICAS can assist you and your family.



**CONTACT ICAS AT:**  
**Toll free number:** 0800 212 772 **Sms “please call me” service:** 071 119 2463  
**Email:** murrobwellness@icas.co.za **eCare Website:** <http://murrob.healthinsite.net>  
**ICAS services are a free benefit provided to all employees and their dependents. Everything discussed with our professionals is confidential.**

## Developing our future leaders

The Murray & Roberts Graduate Development Program (GDP) is an initiative developed to assist young graduates make the transition from a learning environment, where they have received

the key to their future, to the working environment where experience is gained.

The focus of the GDP is on skills not necessarily available to learners at the various institutions but fundamental in creating a sound foundation to development in their chosen field.

The program is part of the Group's leadership pipeline approach to addressing human capacity and transformation issues. It aims to provide a steady pipeline of future leaders for the Group.

As it enters its sixth year, the GDP has an ex-bursary intake of 52 graduates, 29 of whom are black and 12 female.

The top 10 graduates of 2009 are Heindrich Albertyn, Christopher Bosman, Jeffrey Chan, Matthew Cross, Mazlan Govender, Michael Koen, Neeleshan Naidoo, Cebolenkosi Ndabandaba, Lloyd Price and Uys Steyl. They will soon depart on a trip to Cape Town where they will visit group companies and projects, including Much Asphalt, Cisco and the recently completed Green Point Stadium.

■ The top 10 GDP graduates of 2009



# WINNING AGAINST THE ODDS

**Murray & Roberts  
introduces new sports  
development award**

**T**he 2009 Murray & Roberts Jack Cheetham Memorial Award was presented to the South African Tug-of-War Adopt-a-School project at a gala dinner in Johannesburg on 20 October.

In partnership with the South African Sports Confederation and Olympic Committee (SASCOC) and Sowetan newspaper, Murray & Roberts selected the development program in recognition of its excellence and significant community impact.

In a surprise development, Murray & Roberts announced the launch of a new annual sports award, the Murray & Roberts Letsema Award, to recognise development projects for sports people with disabilities. The inaugural 2009 Letsema Award was presented to Judo for the Blind and Visually Impaired in recognition of its excellent achievement in the sport and development of visually impaired young sports men and women.

The winners of the two awards each receive prize money of R500 000, payable over five years. A runner up of each of

the awards receives R150 000 over three years. These awards are funded by the Letsema Sizwe Broad-Based Community Trust, part of the broad-based BEE shareholder structure established by Murray & Roberts in 2006.

## **SA TUG-OF-WAR ADOPT-A-SCHOOL PROJECT**

The project represents the vision of the South African Tug-of-War Federation to transform and develop the sport at schools. Initiated in 2007, the project requires that senior clubs adopt one school annually in their geographic area and develop the sport at the schools. Schools in historically disadvantaged communities are the primary target.

To date, 30 schools in eight provinces are benefiting from the Adopt-a-School project, and plans to establish a core growth area in the ninth province, KwaZulu Natal, have been implemented. To ensure sustainability, the senior clubs remain responsible for the sport at adopted schools and junior participants are mentored by champion players and encouraged to join the senior clubs when they become eligible. This transfers the development at schools to senior levels and it expands the membership base of the sport.

Tug-of-War, a fast-growing sport in 54 countries, is recognised by the International Olympic Committee and is an official event at the International World Games. It teaches children the values of teamwork, discipline and good sportsmanship. At schools it is played in summer and serves as a basis to establish fitness for winter sports. Since the Tug-of-War Federation established the sport at the Gateway Home for intellectually impaired in Gauteng, a significant decline in disciplinary transgressions and general aggression has been reported.

The Adopt-a-School project is contributing significantly to growth in

■ SA Tug-of-War Adopt-a-School Project was awarded the 2009 Jack Cheetham Award for contribution to sport and community development. (Left to right) Jackson Waweni, Burton Beukes, Johan Moller, Tumiza Nkanunu and Anton Botha



the sport, particularly in the rural areas. Uptake growth of 11% per annum over the past two years has exceeded the federation's expectations and the recent SA Junior Tug-of-War Championships recorded an all-time record of 183 teams participating in the event.

One of the early successes of the project has been the Suurbraak Primary School near Swellendam in the Western Cape. Based in the impoverished rural village of Suurbraak, the school has produced a steady stream of medal winners and a number of champions, including Jackson Waweni and Tumiza Nkanunu, the first black athletes to compete in the SA U/23 and SA U/19 teams (the latter won the Junior World Championships in 2008).

The Suurbraak program is managed by Burton Beukes, deputy principal of Suurbraak Primary School whose personal commitment to the sport has had a profound impact on the community. Suurbraak was the venue of the successful 2009 SA Junior Championships – testimony to the contribution this small village and its people have made to the sport.

### **JUDO FOR THE BLIND AND VISUALLY IMPAIRED**

In 2006, Mike and Lorraine Job introduced Judo to the Athlone School for the Blind in Cape Town. Judo is one of only a few competitive sports in which the blind and visually impaired can participate fully with sighted players without concessions and, from an early stage in their training, the Athlone pupils were encouraged to compete in able-bodied events.

By 2008, the number of players practising Judo at Athlone school had almost doubled to 68 and now stands at 78. 15 Athlone players represented the winning Western Province team at the first National Championship of the South African Sports Association



■ Judo for the Blind and Visually Impaired was awarded the inaugural 2009 Letsema Award for contribution to the development of sports men and women with disabilities. (Left to right) Michael & Lorraine Job, Roesang Lefusa, Nomhla Bhozo, Sipho Langa and Khanyisa Masebeni

for the Physically Disabled, which was initiated by Mike and Lorraine Job. Five of the Athlone players were selected to represent Western Province in the able-bodied team in their individual weight and age categories. Fourteen-year-old, Khanyisa Masebeni was selected to represent South Africa in the able-bodied national team that toured Japan. He won six out of eight preliminary bouts during the tournament and was awarded the Western Province Sports Award for the Sportsman of the Year with a Disability.

The club has continued to achieve exceptional growth and performance. This year, four of its players participated in the able-bodied national trials for the Youth Olympics qualifying tournament where Namphla Bhozo was placed second and Khanyisa Masebeni third. Five players participated in the South African National Judo Championships and three were selected to participate in the World Youth & Student Championships in the US, where they won a gold, a silver and a bronze medal.

Judo for the Blind and Visually Impaired has excelled because of Mike and Lorraine Job. Both are 6th degree Judo black belts and instructors who have provided 40 years of service and Olympic

experience to the sport and are now committed to imparting their expertise to players with disabilities.

Judo promotes spatial awareness, agility and strength, it enhances performance in other sports and is an excellent form of self-defence. These factors help people with disabilities to build confidence in their physical ability and to leave behind an otherwise isolated and often sedentary existence. The program also offers them future career opportunities as coaches.

With additional funding, Mike and Lorraine Job will be able to extend their program to about 600 blind and visually impaired pupils at Athlone School and Pioneer School in Worcester as well as children with other disabilities, such as deafness or intellectual impairment.

The Jack Cheetham Memorial Award was initiated by Murray & Roberts 28 years ago in recognition of the special qualities of Jack Cheetham, a former director of the company and the inspirational captain of the South African cricket team in the 1950s who was able to instill in young people the belief that they could win. The award targets sports development projects, focusing on individuals or teams that have the potential to be champions. ○



# Divine decadence



Exquisite indulgences at Fairlawns ...

**O**ne lucky reader and a partner can win a two-night stay including bed and breakfast at the Fairlawns Boutique Hotel & Spa in Morningside.

Fairlawns Boutique Hotel & Spa is the ideal destination to revitalize body and soul with a Balinese Spa treatment, delectable lunch in the restaurant or on the terrace and some well-deserved quality time in five-star style. And, if you

wish to extend this divine decadence, spend the night and enjoy a scrumptious dinner in the Terrace Restaurant, overlooking the romantic gardens.

This established hotel and spa is one of Sandton's best-kept secrets where guests are treated like royalty, and their privacy is key. Each suite, no matter what the theme, is opulent and spacious, with bespoke furniture.

Apart from the marvellous cuisine on offer in the Terrace Restaurant, which is

open to non-resident guests, the Balinese Spa is also available to day visitors. The private Spa gardens, with the sound of running water and birdsong, are a true restorative for the soul...

#### **RATES AND FACILITIES:**

##### **Sunset Package:**

- Welcome drink
- Hydrotherapy Soak for two in the soft glow of candlelight sipping sparkling wine

**R12 000  
Total  
Prize  
Value**



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fax 011 802 7261;

web [www.fairlawns.co.za](http://www.fairlawns.co.za);  
Address: Alma Road, Morningside Manor Ext 6, Sandton, Johannesburg, South Africa ○

**Winner of the Misty Hills competition: Rita van der Vyver**

**RULES OF THE COMPETITION:**

1. The prize will be awarded to the first correct entry drawn.
2. The judges' decision is final and no correspondence will be entered into.
3. The prize is subject to availability.
4. All extras are to be settled direct.
5. Transport to the destination is not included.
6. The prize is not transferable and cannot be exchanged for cash.
7. E&OE

Answer the easy question, complete the entry form and send to Murray & Roberts Competition, PO Box 1151, JHB 2000 – to reach us before 16 April 2010. You can also fax to (011) 646-6040 or e-mail [competitions@profpart.com](mailto:competitions@profpart.com) (remember to put Murray & Roberts Competition in the subject line).

**ENTRY FORM: MARCH 2010 COMPETITION**

Name: \_\_\_\_\_  
 Phone number: \_\_\_\_\_  
 Question: What is the new Murray & Roberts CSI awareness campaign called? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Strictly one entry per person



*The future is in our hands. Every day, in every way,  
we are building communities in South Africa.*

**Murray  
& Roberts**



Find out  
more on the  
interchange  
or email  
[csi@murrob.com](mailto:csi@murrob.com)

# **BUILDING SUSTAINABLE COMMUNITIES**

**Corporate Social Investment at Murray & Roberts**

*MATHS, SCIENCE & TECHNOLOGY EDUCATION  
LITERACY & NUMERACY IN EARLY CHILDHOOD DEVELOPMENT  
ENVIRONMENT EDUCATION*