



The road to the future . . .

SurfaceTalk

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BRANCHES COUNTRYWIDE

COLOUR ME ASPHALT

New decorative asphalt for Port
Elizabeth beachfront cycle track

The logo for Murray & Roberts, consisting of the company name in a bold, black, sans-serif font inside a yellow hexagonal shape.

**Murray
& Roberts**

A Murray & Roberts company

A South African first for Much Asphalt, read about it on page 3

Exceeding customer expectations



Much Asphalt
Chief Executive
Phillip Hechter.

The financial year to June 2006 has been very successful for Much Asphalt. The employees of this company continue to enhance the Much brand through their commitment, dedication and determination to meet the ongoing upsurge in industry demand with increased capacity and service levels to match.

Sustainability is integral to our ongoing drive to supply world class products and service. We are focusing on action plans to ensure not only our own sustainability but also that of our industry to the ultimate benefit of our country.

I am continually amazed by the passion our people show for their jobs. The company, in turn, takes its responsibility to develop the skills of its people very seriously. Three staff members have recently received CETA registration for learnerships, with another 35 awaiting registration. Our graduate development programme continues to add value to our people and our company.

At the same time we remain determined to attract talented people to Much Asphalt.

One area of concern is our safety record over the past year. We are dedicated to ensuring safe working practices by and

for our employees and our customers, and are taking stringent steps to reverse what has been a less than perfect year in this regard.

Transforming our business

Much Asphalt is proud of its progress in transformation. The promotion of Thandi Mokgalagadi to branch manager in George is evidence of our commitment to transformation and gender equality. (See a profile on page 5) We have set ourselves stringent targets in terms of the DTI scorecard and it is encouraging to see all our people supporting our initiatives.

We remain committed to exceeding the expectations of our customers and client bodies. But investment in world class plant and technology is meaningless without world class service delivery. We have an intervention in progress that will take our customer relationships to new levels. Customer surveys have been undertaken and, based on the results, staff training is taking place to improve service delivery in certain areas. This drive for excellence will be an ongoing part of our activities into the future.

Revisiting customer service

Much Asphalt is taking its relationships with its customers – internal and external – very seriously and has enlisted the services of a well known marketing consultancy to undertake a customer service audit and train staff on improving customer relationships.

“The customer audit involved a random selection of customers, whose perceptions of our service delivery were recorded,” says Much Asphalt marketing director John Onraet. “Now we are in the next phase

of the programme, which involves feedback sessions and focused training of all our people to develop and sustain a culture of customer service.”

John points out that the process includes internal customers. “All our employees provide their colleagues with customer service in some form or another and internal service delivery is critical to achieving the world class service levels we want to achieve for our customers externally,” says John.

The next issue of Surface Talk will feature a full report on this initiative and its benefits to our customers

Technology

In the past financial year we made another substantial investment in technology and we now believe our plants and laboratories compare favourably with world best practice. A highlight of the year was achieving SANAS accreditation for our central laboratory at Eersterivier, a first for our industry. We are now working towards accreditation for our regional laboratory in Benoni, Gauteng.

We are equally proud of our introduction of the “SpraySaver” system to South Africa. Tipper trucks are now sprayed with a non-destructive, organic release agent prior to loading of asphalt. The system has been introduced at Benoni and will be rolled out to all our sites in the coming months.

Another innovation is the manufacture of decorative asphalt, put to the test for the

first time (and enthusiastically received) on the new cycle track at the Port Elizabeth beachfront.

All these steps have been taken in response to our customers’ needs.

Corporate social investment

We are always mindful of our obligation to plough back into the communities in which we work and all our regions keep a lookout for meaningful projects that we can support. We are particularly proud of our involvement in the traffic training facility for junior learners in Motherwell, Port Elizabeth.

We at Much Asphalt can rightfully state that “Much” has been achieved during the past year and we look forward with optimism to a new year in which “Much” still has to be done.

Accreditation for Central Laboratory



Much Asphalt's Central Laboratory in Eersterivier, Cape Town, has become the first South African commercial asphalt supplier to receive ISO/IEC 17025 accreditation from the South African National Accreditation System (SANAS).

This ground breaking achievement demonstrates Much Asphalt's commitment to validating its products and to providing its customers with world class service.

The accreditation, announced on 8 August 2006, is a culmination of two years of effort and

perseverance by a very dedicated team. Those responsible were (back, from left): Alec Rippenaar (Central Laboratory manager), Henry Appollis and Morgan Strydom; (front, from left): Daniel Mohotsi, Nesia Barnes and Jonathan September. The process was assisted by Johan Beukes and quality assurance manager Raj Rajcoomar. Congratulations to you all. "We aim to achieve accreditation for all our plants, with Gauteng planned in the next year and KwaZulu-Natal after that," says chief executive Phillip Hechter.

Décor Asphalt gives PE cycle track a new look

Months of hard work finally paid off for Much Asphalt PE when we embarked on an exciting new project for the Nelson Mandela Metropolitan Municipality in August.

The contract, secured through Consulting Engineers Africoast, is for the surfacing of a cycle track on the Port Elizabeth beachfront using decorative coloured asphalt. The new product, to be known as Décor Asphalt, is a

first for Port Elizabeth and possibly even South Africa.

The colour chosen for the cycle path was beige, a shade that is both aesthetically pleasing and blends with the environment better than the traditional, harsher, black asphalt.

"When we were first approached by Africoast to produce decorative asphalt, we made up a selection of 15 briquettes in different

colours in our laboratory using clear Mexphalte C binder from Shell UK," said technical director Chris Lange.

Mexphalte C is a synthetic, pigmentable binder specifically for decorative and natural asphalt. Used extensively overseas, it finds application in multi-coloured surfaces for pavements, tennis courts, playgrounds and indoor and outdoor

sports field. Décor Asphalt can also be used to highlight specific traffic situations such as crossings, cycle paths and bus routes and stops, to indicate differences in pavement functions and to improve visibility and promote safety when lighter colours are used.

Manufacture of the new product required the installation of specialised equipment by Much Asphalt.



Much Asphalt's new Décor Asphalt was launched to about 75 consulting engineers, contractors and metro officials at an open day on the new PE cycle track on 24 August. The unique product was extremely well received and both the local government and private sector consultants showed an interest in using it in the future.

Twin drum plant reduces emissions

In a venture to develop local technology, Much Asphalt and plant manufacturer Comar have designed and built the country's first counter-flow drum mix plant in which the heating and drying phase is separated from the mixing phase.

The simple to operate and cost effective two-drum system helps reduce emissions at Much Asphalt's Roodepoort Plant, with aggregate flowing in the opposite direction to the hot gases and heating and mixing of components taking place away from direct contact with the flame.

A 150-ton storage silo has been added for finished product and a second is planned.

The new plant is clearly demonstrating its energy efficiency and, since upgrading to the finished product silo and skip system, consistently produces at a rate of 160 tph.

Bitumen is heated electrically with special low-watt density and energy efficient elements and element sleeves to prevent hot spots and carbon formation. The bitumen temperature is controlled and monitored by a computerised logging system.

Mixing of Recycled Asphalt Pavement (RAP), aggregate and fillers all takes place in the rotary mixer. Any hydro-carbon smoke produced here is blown back into the flame area, where it is incinerated.

"The Windows-based SCADA operating system controls every aspect of production and monitors critical operating process variables, enabling us to optimise both mix and plant performance and improve productivity," says Much Asphalt technical director Chris Lange.



The unique locally designed and built twin-drum mix plant at Much Asphalt Roodepoort.

New drying drum for PE

Louis Blume and his maintenance team replaced the drying drum in the Port Elizabeth batch plant in just over 24 hours, a full day quicker than expected.

The original drum was more than 20 years old.

According to Louis and regional manager Colin Brooks, the job went like clockwork. The team started removing the overhead walkway from the cabin to

the mixing tower, drum gantries and lime silo at 12h00 on Friday. By 15h00 on Saturday the commissioning was complete and at 16h00 everyone went home.

Challenges that had to be overcome prior to installation included more than an hour spent getting a 60t crane into the tight area and lifting and removing the old drum, which was achieved without

mishap.

The project included removing and replacing

- the overhead walkways to the tower
- the front-end plate, burner and combustion chamber
- the chute (drum to elevator)
- the old drum
- the two drum gantries (used to lift the drum for servicing of the rollers and tyres)
- the lime silo
- the drum gearbox.

On Monday morning the first hot mix asphalt was made without a hitch.

The PE team would like to thank Comar for its excellent service... "the Comar team really exceeded our expectations!"

The drying drum was replaced in just over 24 hours.



No longer such a man's world



Becoming a doctor or a lawyer was never an option for Thandi Mokgalagadi. She knew from the time she could walk that she would work with machinery. Little wonder then that she is so successful in her position as branch manager of Much Asphalt, George, a position she has held for almost 18 months.

"I was born for this," says

Thandi. "Even as a child I loved fixing gadgets and looking at machines, so when I was exposed to engineering at a career guidance seminar, I knew that was what I wanted to do."

But it hasn't been all plain sailing. Proving yourself as a female in this male dominated environment brings its own difficulties and heartaches. "I always knew it would be challenging," says Thandi. "Let's face it, when you are the only female in your first year at technikon, you have to know it's going to be hard."

She completed her mechanical engineering diploma at the Cape Technikon

and joined Much Asphalt in Cape Town in 2001 for her in-service training.

The first woman to work in the plant, Thandi faced many skeptics who didn't think she would make it. A year later she had proved them all wrong.

She stayed with Much Asphalt on a permanent basis first as a trainee technician and then as a trainee manager in Cape Town. "I was basically thrown into the deep end on the N2 contract, but I survived and I learnt so much from my manager and mentors Stanley de Goede and Jannie Grobler."

At the end of March 2005, Thandi accepted the post of branch manager at George.

"The first four months were very demanding. I was quite surprised by the initial negative reaction to my being there.

"The expectation of having to be tough can be quite overwhelming," says Thandi. "But it has been important to me to retain an element of femininity – albeit difficult when you are dressed in coveralls and a hard hat.

"I have had to fight for the respect I now have from everyone here in George. We are working well together and I am getting the support I need from the team," she says. This is just as well as the branch is the busiest it's been in 10 years."

EASTERN CAPE UPDATE

Since completion of the Outeniqua Pass upgrade in 1996, the George plant has been one of Much Asphalt's smaller branches, producing about 800 tonnes per month.

But this changed dramatically at the start of 2005 with the start-up of four relatively large contracts: N2 George to Knysna (29 000 tonnes), Da Nova interchange (15 000 tonnes), George Mall parking areas and access road (7 000 tonnes) and Outeniqua Pass realignment (15 000 tonnes).

Most of these contracts ran concurrently, says regional manager Colin Brooks. "This put enormous strain on the local infrastructure, and some aggregate raw material had to be imported from Oudtshoorn to achieve the required asphalt design grading."

Several thousand tonnes of Micropave have also been supplied to George Municipality over the same period. Colin adds that Micropave is now firmly established in the George area and is being vigorously marketed in the surrounding towns.

New developments

To meet increased demand from both national and local customers, some exciting new developments have taken place at the George plant in the past six months. These include

- a new control cabin with U-con operating systems and variable speed cold feed drives;
- an additional 80 tonnes of hot storage;
- a new 60m² laboratory;

- a weighbridge;
- four cold feed bins.

The area in which George plant is located is environmentally sensitive, with the Malgat River on the eastern and southern boundary and an extensive hop farm to the west. "Dust emissions control

has been a key focus area this year, with stack emissions, dust suppressant and filler removal receiving special attention," says Colin.

The new 60m² laboratory built this year at George.



Paul Roos, maintenance supervisor at Benoni, responsible for the installation and success of SpraySaver.



SpraySaver gets the job done, and fast

Much Asphalt is proud to be the owner of the first automatic truck bed lubrication spray system in the country, known as SpraySaver and located at its Benoni plant.

Offering a simple solution to a longstanding problem, this system prevents hot mix asphalt from sticking to unwanted areas, such as the haulage trucks' load-bodies. "If the truck-bed is not lubricated, asphalt builds up on the metal surface and it becomes a major problem to remove and clean," says Chris Lange, technical director, Much Asphalt.

"The traditional, rather unsophisticated way to prevent this is for the driver to climb to the back and spray diesel oil

over the sides and bed of the load body using a 2l plastic bottle with holes in the lid.

"However, there are a number of problems associated with this method, particularly the fact that diesel acts as a solvent and softens the bitumen. If a truck-bed is uneven, the diesel tends to pool in the hollows. Thirdly, besides the cost of the diesel there is also the cost of the driver having to stop his truck and spend time in the back preparing and spraying the surfaces, which also poses a safety and environmental hazard," says Chris.

Much Asphalt has spent a long time researching the problems culminating in the purchase of the new spray

system. As a result, drivers no longer have to disembark from their trucks prior to passing under the hot storage bins for loading. They simply pause before the spray bar and then drive through slowly. The system automatically sprays a fine spray to the bed and sides of the load body with a bio-degradable release agent.

The imported spray system consists of a spray bar support system, specially designed spray nozzles, automatic spray mechanisms and piping, a

release agent dosing pump, water pump, operating software and electronic circuitry, a wind resistant hood and wind skirts.

Various bio-degradable release agents are being tested but to date the imported products appear to be the most efficient.

"Much Asphalt is looking into the feasibility of manufacturing some of the components of the spray system locally to cut costs and we envisage installing these at our bigger production facilities around the country," says Chris.

New control cabin

A new control cabin for Much Asphalt's plant in Pietermaritzburg, designed and built in-house, was commissioned on 2 May 2006 at a total cost of R395 000.

This project formed part of the company's plant upgrade programme, which aims to bring our plants up to speed with the latest technological trends in asphalt manufacturing processes world wide.

"After more than 20 years' operation, the old cabin was a far cry from modern designs, with electric panels that made it difficult to trouble-shoot during electrical breakdowns," explains PMB branch manager Brian

Mchunu. "It was also small and needed to be moved for a better view of the plant."

The plant operating control room was designed by Much Asphalt's group technical specialist, Leon Westraadt, in line with the plant upgrade criteria established by technical director Chris Lange, the project sponsor.

The new cabin incorporates several improvements:

- It is now located in an elevated position to give the operator a better view of the plant;
- Electric panels, switchgear and temperature control indicators are neatly positioned



The enhanced environment of the Pmb plant. (inset) New control cabin.



and clearly marked for simplified trouble shooting;

- A non-contact temperature detector with an indicator is fitted inside the cabin to provide better temperature control of the mix;
- No-flow indicators in the cold feed bins are linked to an alarm in the cabin to alert the operator when the cold-feed bins are empty;

- Plant landscaping was carried out to improve the overall environment.

"The plant has not suffered any electrical breakdowns since commissioning of the cabin and our image as a supplier of quality premix has improved," Brian concludes.

Empowering children on road safety

A step towards reducing the shocking fatality statistics on South Africa's roads was taken recently with the official opening of the Traffic Training Facility for Junior Learners in Motherwell, Eastern Cape by the Mayor of Port Elizabeth, Councillor Nondumiso Maphazi, and MEC for Transport, Thobile Mhlahlo.

The idea was sparked after the World Road Congress held in South Africa highlighted the fact that 80% of the world's road accident fatalities occurred in developing countries. It was also stated that more children die on African roads than of AIDS.

With this in mind the East Cape Branch of the South

African Road Federation (SARF) initiated the Traffic Training Facility for Junior Learners (TTFJL). The main objective was to create an environment, in a previously disadvantaged community, where learners from pre-school to approximately grade 5 could be taught the basics of road safety in fun surroundings.

With financial sponsorship from Murray and Roberts, DG Murray Trust, Much Asphalt and Ninham Shand, and with time and materials provided by Scribante Construction and Penny Farthing Construction, the R250 000 facility was developed as part of the Motherwell Urban

Renewal Programme.

It consists of 190m of 2m wide asphalt surfaced and kerbed roadway on 100mm G3 base and 150mm compacted sub-grade. A special bitumen-based seal was applied to the asphalt to increase life span and give the finished product a smooth, uniform texture.

Miniature versions of line markings, traffic lights, a raised traffic circle, pedestrian crossing, road traffic signs and a bus stop are included.

The main contractor, Jadelyn Construction, worked closely with Scribante to ensure that a facility of the highest quality was handed over to the Nelson

Mandela Metropolitan Municipality, which will operate the TTFJL together with the Metro's Traffic Training College.

Much Asphalt's technical director, Chris Lange, who is also chairman of the SARF (Eastern Cape) said of the project: "As a company committed to improving the safety on South Africa's roads, Much Asphalt is proud to be associated with the TTFJL. This may just be the tip of the iceberg when it comes to improving road safety, but whatever the effect this facility has on saving lives on our roads will make the investment worthwhile."



The Mayor of Port Elizabeth, Councillor Nondumiso Maphazi, and Much Asphalt's technical director, Chris Lange, with some of the learners.



Children from schools in the area come to terms with the basics of road safety at the Traffic Training Facility for Junior Learners in Motherwell.

KZN UPDATE

The KwaZulu-Natal region has a healthy order book, reports Daryl Jorgensen, adding that this has enabled the region to focus on forming sustainable relationships for further growth.

The Coedmore branch has been particularly busy, with numerous major contracts now completed (including EB Cloete, ACSA, Quality Street and Marionnhill, among others), in addition to a multitude of smaller contracts and the sundry

market. "We have been working day and night shifts, seven days a week, at Coedmore to meet demand," says Daryl. "Challenges such as staff resources, safety, materials quality and asphalt plant uptime, not to mention rain, kept the team on its toes."

The Marionnhill contract, with RoadMac Surfacing, is worth mentioning for the use of SASOBIT Modifier, a fairly new product to the industry. This project was tendered with extremely tight margins and successful completion was critical.

Pietermaritzburg has experienced one of its most productive years to date and is enjoying the benefits of a growing market. With new branch manager Brian Mchunu and a very good team in place, PMB has a very positive outlook. Numerous upgrade projects are in progress and we have recently supplied numerous major projects such as the upgrade of the TLC's roads with ELCO Asphalters and the Mooi River and Greytown contracts for the KZN-DOT.

Empangeni was quieter until we were awarded the Umhlatuzana TLC contract, paved by BEE contractor Zamimpilo. The next prospect for this area is the John Ross Highway, for which earthworks have already commenced.

Margate remains a small but consistent market. We completed the Shelley Beach Mall contract and then moved our plant to Staffords Post for another major SANRAL contract (Staffords Post to Brookes Nek) for RoadMac Surfacing.

Striving to become a world class company

All the employees at Much Asphalt's Port Elizabeth branch experienced a working day with a difference recently when they toured the General Motors assembly plant.

The motivation behind the visit was to expose employees to a world class factory. "If we are to become a world class company ourselves, we have to experience and learn from other world class facilities," says Chris Lange, technical director.

"General Motors is an excellent example, with the factory producing one complete Corsa vehicle every three minutes. The company operates

a Lean Manufacturing System with approximately 70% of the components, including all body panels and engines, shipped in from GM Brazil and the balance sourced locally, facilitating shorter stock holding days," says Chris.

The tour impressed all who attended. Safety, order and cleanliness are clearly high priorities and the plant is bright and spotless. This is enhanced by incentives and competitions for housekeeping, cleanliness, productivity and quality. Visual management is practiced and display boards depicting various statistics are everywhere.

Everyone came away from the experience excited and eager to implement some of the processes at Much Asphalt. When asked what stood out most, replies were varied. Joseph Hess said: "For me it was the working atmosphere. They did not seem to be working under pressure." Debbie Jacobs liked the way everyone worked as a team.

Thoughts were also exchanged on what could be incorporated into Much Asphalt's working environment. Improving communication was a common theme and there were some more specific ideas.

Lulama Jacobs (no relation!) thinks there might be an opportunity to improve on the planning for mixing for customers. Louis Blume suggested putting up work instructions at all workstations. And Colin Brooks, who was impressed by how the process flowed and how every employee contributed to the success of the system, has so many ideas he has decided to tackle them one at a time "to ensure sustainability".

All in all it was an extremely worthwhile exercise and one that will be repeated in the not too distant future.



Touring the General Motors assembly plant were (picture left): From left: bitumen operator Andre Scholtz; admin assistant Debbie Jacobs; lab assistant Siyasange Patuleni; senior lab technician Joseph Hess; plant operator Lulama Jacobs; and office assistant Elsie Xoli; (Picture right): technical director Chris Lange; lab technician Thabo Matung; Eastern Cape regional manager Colin Brooks; operations and maintenance supervisor Louis Blume; and maintenance assistant Eric Leyi.

HELPING US TO SERVE YOU BETTER

Much Asphalt has welcomed the following new staff members in 2006:

Nevlon Chinsamy as regional accountant, Brett van Rensburg as plant maintenance supervisor and Desire De Koning as admin clerk at Coedmore in KZN; Johan Kilian as plant manager, Melanie Thomson as accounts clerk, Justice Ramagoma as quality

assurer, Tankiso Mofokeng as lab assistant, and Evert Smith and JJ Joubert as plant fitters at Benoni; Hendrick Mtsweni as plant fitter at Kempton Park; Karen Kriel as site administrator in Bloemfontein; Siyanda Sijila as plant

operator in George; Nikiwe Mabasa and Chiawello Maluleke as lab assistants at Roodepoort; Sello Pietersen as lab assistant at Eikenhof, Gauteng; Kagiso Malebo as lab supervisor and Linda McGregor as site administ-

rator in East London; Pamela Jam Jam as lab technician, Unathi Njeza, Rozaan Jones and Thobile Manzi as lab assistants at Contermanskloof, Western Cape; Glen Williams and Busisiwe Xayimpi as lab assistants at Eersterivier, Western Cape.

Do you have any interesting news regarding Much Asphalt's people, products or projects? If you do and you'd like to tell everyone else about it, please contact Lynne Hancock at 082 441-4513 or e-mail lynne@lhcom.co.za