

# IMESA Northern Provinces Branch Annual Seminar and AGM



27 August 2010

#### **Aurecon Overview**

#### Vision, mission and values



- Vision
  - Leading. Vibrant. Global.
- Mission
  - We foster human development by:
    - Deploying deep-rooted professional technical skills; and
    - Teaming with our clients for positive outcomes

#### Values

- We foster human achievement through excellence, innovation and collaboration
- We respect others by celebrating diversity and acting with integrity and honesty
- We work to build a vibrant and brighter future for all



#### **Heritage**

 Aurecon was created in March 2009 by the coming-together of three world-class companies, namely:

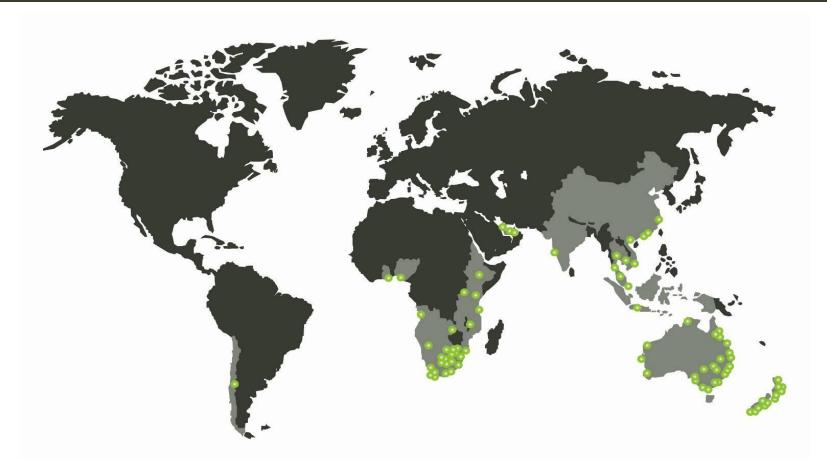








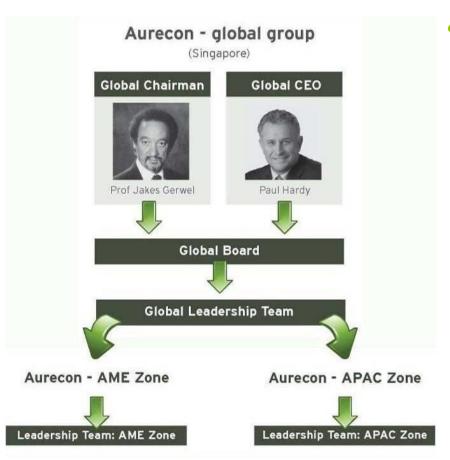
### Global network, global resources





- 6 000 employees
- 85 offices
- 28 countries

#### **Group Structure**



The group is privately owned and principally by the management who are all full-time employees and intimately involved in managing and delivering project outcomes on behalf of clients



## **Global Board**





## Africa-Middle East (AME) Zone Board





## **Industry Sectors**



- Aurecon's service offering encompasses the following industry sectors:
  - Community development and infrastructure
  - Energy
  - Mining and industrial
  - Property
  - Transport
  - Water



### **Pre-Development Services**

Aurecon provides extensive support towards township establishment and the conceptual planning of new developments. Our planning skills span the full spectrum of the municipal environment. In particular, the following services are provided:

- Strategic master planning on municipal, provincial and national level
- Preparation of policy and design guidelines
- Feasibility and financial affordability studies
- Funding and financing applications
- Assistance and engineering support for township and development rights establishment
- Environmental impact studies and formulation of EMS
- Integrated land use and infrastructure planning
- Community consultation and participation
- Negotiations and liaison with local authorities/statutory bodies
- Arrangements and interpretation of topographical surveys

Alexandra urban renewal project, Gauteng Province, South Africa, 2005





## Development services

#### Engineering design

Aurecon has extensive experience in the engineering design and construction monitoring of the following services:

- Mass earthworks
- Bulk water supply, water treatment and storage
- Pumps and pump stations
- Water supply and reticulation
- Sewer drainage and sewer reticulation
- Sewage treatment facilities and effluent control
- Gas reticulation systems
- Stormwater drainage systems and reticulation networks
- Roads, access routes, intersections, parking areas and traffic
- Electrical supply and reticulation systems
- Solid waste disposal facilities
- Irrigation systems
- Security and electronic/data networks
- Civil and building structures.

Moreleta Spruit outfall sewer, Gauteng, 2012



Upgrading of the greater
Atteridgeville bulk sewerage system,
Gauteng, 2004



Ceres waste disposal site



## **Development services**

Where called upon, the following may be included:

- The management of large multi-company, multi-disciplinary teams for projects and programmes
- Design reviews
- Approval of designs and drawings with local authorities
- Provision of contract and tender documentation
- Contract administration, implementation and management
- Construction monitoring and site inspections
- Quality control
- Financial auditing
- Budget reporting.





## **Quality management**

- Aurecon has an entrenched management system encompassing all its operations worldwide
- The management system has been certified by external auditors according to international ISO 9001 standards



#### **Awards**

 Aurecon's commitment to fostering human achievement through excellence, innovation and collaboration has been recognised by way of numerous business and industry association awards





#### Sustainability



- Aurecon is involved in projects around the world that have a direct impact on people's lives. The group's intention is that these projects should create lasting legacies based on social, environmental and economic sustainability
- Aurecon is an active member of the Green Building Councils of Australia, New Zealand and South Africa



# Broad-based black economic empowerment (BBBEE)



- Aurecon is committed to the implementation of BBBEE
- Aurecon South Africa has been verified as a Level 4 contributor to BBBEE – this translates into a 100% procurement recognition level



#### BEE VERIFICATION AGENCY CC



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157 Voorbekker Rd, PAROW, 7499 Tel: (021) 930-1811 Fax: (021) 930-9936 Call Centre: 0860 722 222.
PO Box 46, PAROW, 7499 Email: info@bee-verification.com. I www.beever.co.za

Our System is Honest

#### Black Economic Empowerment Verification Certificate

#### Measured Entity

 Registered Name
 Aurecon SA (Pty) Ltd

 Reg. Number
 1977/003711/07

 Trade Name
 Aurecon SA

 Location
 1040 Burnette Street

 VAT Number
 4320109703

#### **BEE Status**

BET 1517 Certificate Number Verification Date 2010/02/03 2011/02/02 Explry Date BEP Generic Applicable Scorecard Code 2100 - 2700 Applicable BEE Codes Level Four Contributor BBBEE Status Procurement Recognition Level 23.6 % Black Ownership Black Female Ownership 5.8 %

#### **BEE Score Per Element**

Yes

 Ownership
 20, 18/25

 Management Control
 7,81/10

 Employment Equity
 5,46/10

 Skills Development
 17,78/20

 Preferential Procurement
 17,74/20

 Enterprise Development
 0/10

 Socio-Economic Development
 0/5

 Total:
 89,06/100

BEE Verification Agency CC (BVA014) has assessed the BEE credentials of the above verified entity and certifies hereby that the BEE status, as certified above, is a true and imparital reflection of the BEE status of the enterprise.

BEE Compliance Manager BEE Verification Agency CC www.beever.co.za

Value Added Company



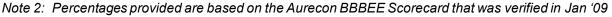
#### **Ownership**

 23.6% of the Aurecon South Africa's equity is under Black ownership

#### **Management control**

- AME Zone Board
  - Comprises 11 executive members of whom five (45%) are Black people while two (18%) are Black women
- AME Executive Committee
  - Comprises 16 members of whom one (6.25%) is a Black person

Note 1: Percentages calculated according to the definitions as set out in the Construction Sector BBBEE Charter as gazetted on 9 Feb '07





#### **Employment equity**

- Representation of Black people at all management levels – 33%
- Representation of Black women at all management levels – 11%



#### Skills development

- Training costs: 49% of expenditure spent on Black people
- Learnerships: Black learnerships as a % of total learnerships – 63%
- Bursary costs: 43.6% of payroll spent on Black people
- Aurecon also has an approved mentorship programme



#### **Procurement**

 Percentage procurement spend from Black suppliers and service providers – 48.36%

#### **Enterprise development**

- Provided management support to over 70 Black enterprises
- Cooperated with more than 200 Black enterprises on different projects







#### **Corporate social investment**

- Various initiatives including:
  - SAICE bridge building competition training session
  - SAACE Job Shadow Day
  - Construction Week





## Why choose Aurecon?

- Clients have access to the group's global resource pool
- Clients benefit from the group's global delivery capability
- Clients share in Aurecon's extensive project experience and thought leadership
- Clients gain peace of mind through Aurecon's sound understanding and knowledge of critical project success factors
- Clients experience a close relationship with Aurecon ensuring that their business and project objectives are clearly understood.



#### **Showcase projects**





#### Rabat Saphira Project (Phase 1)

Country: Morocco

Completion date: Ongoing

Services & solutions:

- Master planning of the marine, traffic, roads and infrastructure engineering which includes:
  - Marine erosion studies
  - Marine edge protection designs
  - Establishing safe setback lines
  - Traffic analysis and modelling
  - Road network surveys
  - Road geometry designs
  - Road upgrades
  - Bulk infrastructure calculations and assessments







#### Peter Mokaba Sports Stadium

- Country: South Africa
- Completion date: 2010
- Project cost: ± \$115 million USD
- Services & solutions:
  - Detailed structural engineering design
  - Contract documentation
  - Construction supervision
- Value adding:
  - Structural design is not only elegant but costeffective with the repetitive concept of the structural elements reducing construction time by a year when compared to similar projects





#### **Malibamatso Bridge**

- Country: Lesotho
- Completion date: 1990
- Services & solutions:
  - Bridge engineering, including:
    - Planning
    - Design
    - Documentation
    - Support
    - Supervision

#### Awards:

- Fulton Award for Excellence in the Use of Concrete
- SAICE Branch Award for Excellence in Civil Engineering
- Interesting facts & figures:
  - Length of bridge 465.5 m
  - Pier heights 16m to 85 m









# Lesotho Highlands Water Project (Phase 1A)

- Country: Lesotho
- Completion date: 1998
   Project cost: R3,5 billion
- Services & solutions:
  - Surface water resources planning and integrated management
  - Groundwater availability and pollution assessment
  - Heavy civil engineering
  - Water treatment
  - Wastewater treatment
  - Stormwater management and flood control
- Interesting facts & figures:
  - Highest dam in Africa 185 m high
- Awards:
  - SAICE Engineering Award of the Century awarded for Technical Excellence in the Water Sector
  - Concrete Society of South Africa Fulton Award for the effective use of paving at the Ash River outfall of the Delivery North Tunnel





# **Kgalagadi District Sanitation Programme**

Country: South Africa

Completion date: 2007

Project cost: ± \$250 000 USD

Services & solutions:

- Establishment of a programme management system which included:
  - Distribution
  - Finance
  - Payment
  - Reports
- Training of community members
- Developing a health and hygiene campaign
- Monitoring and evaluation of project









# Maguga Dam and Maguga Hydropower Project

Country: Swaziland

Completion date: 2002

Project cost: R522 million

#### Services & solutions:

- Groundwater availability and pollution assessment
- Dams
- Water treatment
- Wastewater treatment
- Stormwater management and flood control
- Institutional and Advisory institutional and policy development support

#### Awards:

- SAACE Golden Jubilee Award for Technical Excellence
- SAACE Commendation of Maguga Dam joint venture for a project value greater than R5m
- SAICE Awards for Most Outstanding Civil Engineering Achievement in the International Category











# Nova Vida Housing Development (Phase 1 & 2)

- Country: Angola
- Completion date: 2009
- Project cost: ± \$362 million USD
- Services & solutions:
  - Detailed engineering design
  - Construction supervision
  - Contract management
- Interesting facts & figures:
  - Site covers 400 ha
  - 4 397 residential units





#### **Eland Substation and Power Lines**

Country: South Africa

Completion date: 2007

Project cost: \$19 million USD

Services & solutions:

- Management of the complete life-cycle of the subtransmission from project design to energising and commissioning of the substation
- Project management responsibilities included:
  - Material procurement and management
  - Procurement of internal and external contractors
  - Planning and coordination of network outages
  - Design modifications
  - Project status and progress feedback









# **Lubango-Ondiva Road and Cunene Bridge**

Country: Angola

Completion date: 2008

Project cost: ± \$75 million USD

Services & solutions:

Feasibility studies

Engineering surveys

Pavement and materials investigations

Detailed engineering design

Bridge condition assessments

Construction supervision

Contract management





#### **Gautrain Rapid Rail Link Project**

- Country: South Africa
- Completion date: Ongoing
- Services & solutions:
  - Detailed design of a section of the rail network, including:
    - Principle review
    - Construction design and as-built drawings
  - Design of viaducts and bridges
  - Design of large culvert and retaining walls
  - Earthworks
  - Local road upgrades
  - Geotechnical design
  - Project management









#### **Berg Water Project**

Country: South Africa

Completion date: 2009

Project cost: R1,3 billion

#### Services & solutions:

- Surface water resources planning and integrated management
- Groundwater availability and pollution assessment
- Dams
- · Pumps and pipelines
- Water treatment
- Wastewater treatment
- Stormwater management and flood control
- Coastal engineering
- Institutional and Advisory institutional and policy development support

#### Awards:

- CESA Glenrand MIB Engineering Excellence Award for engineering excellence with a value greater than R5m
- Wiehahn SAICE Award for Technical Excellence
- SA Chapter of the International Association for Impact Assessment Premium Award





# **Emergency Medical Services Information System (EMS)**

Country: South Africa

Completion date: 2004

Project cost: ± \$150 000 USD

Services & solutions:

Turnkey emergency readiness solution

Control centre software

Fleet management

• In-ambulance software

Emergency ward software

Value adding:

Modular system (allowing further expansion)

Web portal (allowing real-time monitoring)





# Madinat Jumeirah Arabian Leisure Resort Development

Country: UAE

Completion date: 2004

Services & solutions:

Geotechnical studies

- Detailed engineering design of 3,5 km water canals
- Structural engineering design
  - all bridges
  - external civil structures
- Fire safety design and coordination
- Design and commissioning of the gas reticulation system







#### **Moreleta Spruit Outfall Sewer**

- Country: South Africa
- Completion date: Ongoing
- Project cost: ± \$25 million USD
- Services & solutions:
  - Feasibility studies
  - Preliminary and detail design
  - Project documentation
  - Environmental impact assessment
  - Construction engineering
  - Geotechnical investigation
  - Construction supervision





### R-1000 Traffic Study

Country: UAE

Completion date: 2006

Services & solutions:

- Designing the public transportation system
- Expanding the private transport network
- Citing environmental stressors, such as air and noise pollution
- Addressing the lack of space for the construction of new roads

### Interesting facts & figures:

- The network will include:
  - 100 km of new major corridor extensions
  - 200 km of upgraded corridors
  - an extensive secondary network covering 350 km
  - 250 new improved junctions





# HIV/Aids Strategy Plan for the Construction Industry

- Country: South Africa
- Completion date: 2004
- **Project cost:** ± \$170 000 USD
- Services & solutions:
  - Development of best practice
  - Procurement documentation
  - Programme monitoring and evaluation
  - Project management
  - HIV/Aids strategy revision
  - Training
  - Facilitation











# Malawi Expanded Public Works Programme

- Country: Malawi
- Completion date: 2005
- Project cost: €23 million
- Services & solutions:
  - Programme management
  - Technical assistance
- Interesting facts & figures:
  - More than 200 000 beneficiaries
  - Rehabilitated 2 481 km of district feeder roads
  - Constructed 69 bridges
  - Planting and forestry management of 35.5 million trees
  - Planting of 30 214 fruit trees
  - Establishment of 1 552 nurseries
  - Brought 400 ha under irrigation





#### The Palm Deira

- Country: UAE
- Completion date: Ongoing
- Services & solutions:
  - Detailed master planning
    - Infrastructure and utilities
    - Lighting
    - Marina facilities
    - Transportation

#### Interesting facts & figures:

- World's largest man-made island
- Comprises 23 interconnected islands in the form of a palm
- Will extend 12,5 km into the sea and will be 6,5 km wide
- 1,14 billion m³ of sand will be reclaimed during its construction





# Rehabilitation of the Pungue River Bridge

- Country: Mozambique
- Completion date: 2002
- Project cost: ± \$300 000 USD
- Services & solutions:
  - Engineering surveys
  - Detailed structural engineering design
  - Construction supervision
- Awards:
  - SAACE Engineering Excellence Award
- Engineering solutions provided to overcome:
  - Remoteness of the site 6 week lead time required on materials
  - Limited design information
  - Need to accommodate traffic during construction.
     Achieved by means of a Bailey bridge bridging two portions of decking that had to be demolished and rebuilt







### **Delft-Leiden Housing Project**

- Country: South Africa
- Completion date: 2003
- Services & solutions:
  - Engineering surveys
  - Detailed structural engineering design
  - Construction supervision
  - Contract documentation
  - Tender evaluation

#### Interesting facts and figures:

- The single largest housing project ever undertaken by the City of Cape Town on a turnkey basis
- Encompassed 6 320 residential units

#### • Awards:

 Housing Best Practice Award presented by the Western Cape Institute of Housing







### Kruger-Mpumalanga International Airport

- Country: South Africa
- Completion date: 2002
- Project cost: \$51 million USD
- Services & solutions:
  - Engineering surveys
  - Detailed structural engineering design
  - Construction supervision
  - Airport and airside infrastructure
  - Geometric and geotechnical design
  - Pavement, road, parking, terminal building design
- Value adding:
  - Construction completed within 16 months





### **Lobatse and Kanye Bypass Roads**

Country: Botswana

Completion date: 2004

Project cost: ± \$2 million USD

Services & solutions:

Detailed engineering and geometric design

Material investigations

Pre-contract services

Construction supervision





# Pinnacle Point Beach and Golf Resort

- Country: South Africa
- Completion date: 2006
- Services & solutions:
  - Detailed civil and structural engineering design
  - Contract documentation
  - Construction supervision
- Engineering solutions provided to overcome:
  - Environmental sensitivity of the site
  - Water seepage
  - Steep slopes
  - Hard rock conditions
  - Architectural and landscaping challenges
- Awards:
  - SAICE Branch Award for Excellence in Civil Engineering





### The Freedom Park (Phases 1-3)

- Country: South Africa
- Completion date: 2009
- Services & solutions:
  - Detailed engineering design
    - Civil
    - Electrical & mechanical
    - Structural
    - Wet services
  - Construction supervision
- Engineering solutions provided to overcome:
  - Geometrical design of Sikhumbuto
  - Extensive use of high-quality, exposed off-shutter concrete with minimal construction joints
  - Use of quartzite cladding to blend in with the environment





# **Upgrading of Route EN1** (Inchope Caia Road)

Country: Mozambique

Completion date: 2002

Project cost: \$1 billion USD

Services & solutions:

Environmental and material investigations

- Bridge, pavement, geotechnical and topographical surveys
- Economic analysis
- Detailed roads and bridge engineering design
- Construction supervision
- Rehabilitation and repair of bridges and stormwater drainage systems









### Modimola Expanded Public Works Programme

Country: South Africa

Completion date: 2006

Services & solutions:

- Detailed engineering design
- Construction supervision
- Programme management
- Environmental impact assessment
- Socio demographic assessment
- Local economic development

#### Interesting facts & figures:

- 2 400 beneficiaries
- 180 permanent and 260 temporary jobs created
- 46 SMMEs established
- ± \$480 000 USD generated by construction and maintenance activities





# Central Terminal Building, OR Tambo International Airport

- Country: South Africa
- Completion date: 2009
- Project cost: ± \$250 million USD
- Services & solutions:
  - Detailed engineering design
  - Construction supervision









# **Bucket Toilet Eradication Programme**

Country: South Africa

Completion date: 2008

Project cost: R9.5 million

Services & solutions:

Technical and management support to 56 municipalities

Assessment of obstacles to the eradication

 Development and implementation of a Project Execution Plan (PEP)

Document lessons-learnt report



# The Asbestos Cement(AC) Pipe Replacement Project

- The Project commenced in July 2007 with a mandate from eThekwini Water and Sanitation (EWS) to relay asbestos cement pipes of 150mm or less in diameter throughout eThekwini Metro.
- Priority Zoning for pipe relay was allocated to areas with the most burst prone pipes.
- Information from eThekwini's Faultman system was used to identify these areas.



# Temporary Relocation Village consisting of living and storage units





### **Aurecon Training Academy (ATA)**

#### ATA primary focus is to provide

- innovative accredited training products in the water sector, and
- best practice capacity building consulting services to municipalities, private sector and parastatal clients.

#### One of the primary features of this market

is the lack of institutional capacity and skills

#### Who do we train?

- Operators & Supervisors
- Unemployed youth

#### Recently appointed by DBSA as training service provider

- Water treatment plant operators
- Asset management



## PATULA CONSTRUCTION – GAUTRANS Road Construction Project 242 Learners













- Technical Training Guardrails, stonepitching, paving etc.
- Occupational Health & Safety Training
- HIV Training





## Thank you

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