

**Division of Building and Construction Technology**

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Our ref: BR185/400  
Date: 16 September 2003



MVELAPHANDA PRIMARY  
PO BOX 86  
TEMBISA  
1628

**Fax to: 011 9241325**

**Attention: The Principal**

Dear Sir / Madam,

**RESEARCH PROJECT: ENERGY & WATER USE IN SCHOOLS  
SITE VISIT TO MVELAPHANDA PRIMARY - 10/24/2003**

**Background**

Energy in Schools

Broad based estimates of energy consumption in South African indicate that schools consume approximately 641 000 Megawatt hours per annum, costing nearly R180M. Based on recent energy efficiency studies undertaken by various consultants and specialists around the world, including South Africa, energy efficiency interventions within conventional facilities can yield reductions in consumption and cost of up to 20%.

Water in Schools

A preliminary desk top analysis, by CSIR: Green Buildings for Africa<sup>1</sup>, estimates the total water use by learners and staff, in urban schools, to be approximately 43 Megalitres per annum (R170m per annum), with an additional 32 Megalitres estimated to be used annually in the irrigation of sports fields. A further 10 Megalitres per annum may be lost due to inappropriate maintenance and management, with a great number of opportunities for water conservation, reducing water costs and increasing the variety of measures employed to curb wastage.

Resource Conservation in Schools

Conservation is already being integrated into the teaching curriculum, and further publicised and implemented within surrounding communities. The role of the school facility within communities in South Africa is rapidly changing, to become a catalyst for continuous learning, and to serve local communities in the provision of community meeting, training and sports facilities<sup>2</sup>. With this extended use of existing and new schools, the opportunities for demonstrating effective conservation, and for education in energy and water conservation, management and use, are equally extended.

**CSIR Schools Audit: Gauteng North**

During September 2003, teams from CSIR: Building and Construction Technology will be traveling around Gauteng North, visiting a sample set of urban schools, in order to collect vital information relating to the use of energy and water in schools. This research will culminate in the development and publication of performance guidelines and measures, to assist schools with the reduction of energy and water consumption and cost. The attached letter of introduction from the Department endorses our data collection initiative.

Please note that the CSIR audit team will visit your school on:

**10/24/2003 at 13h00**

<sup>1</sup> Calculations based on daily usage data currently being collated within the Green Buildings for Africa programme, relating to water use in commercial and residential contexts. Impact of maintenance estimated from rough indicators of school condition provided in the Schools Register of Needs. The actual impact of maintenance is not able to be determined with the data currently available.

<sup>2</sup> Professor Kader Asmal, MP, Minister of Education (1999) "TIRISANO – A CALL TO ACTION: MOBILISING CITIZENS TO BUILD A SOUTH AFRICAN EDUCATION AND TRAINING SYSTEM FOR THE 21st CENTURY" – Priority No. 3: Schools to become centres of community life.

The purpose of this visit is:

- To interview the Principal, Deputy Principal, or the management team member responsible for Buildings and Grounds;
- To carry out a cursory inspection of the facility, visiting the sports fields, ablutions, laboratories, change room areas, and a few classrooms. During this walk-about, the team should be accompanied by a representative from the school (perhaps the caretaker / grounds person);
- To collect copies of the latest 12 months electricity and water accounts from your school administration. **Please arrange these copies before our visit.**

We envisage that the visit should not exceed 90 minutes.

Please make the necessary arrangements with your management team, and administration, to facilitate this exercise. Your assistance in this regard is greatly appreciated. Should you require further information, please do not hesitate to contact the undersigned.

Yours faithfully,

*NNOliver*

Neil Oliver  
Project Manager: Operational Performance Management  
CSIR: Building and Construction Technology  
[noliver@csir.co.za](mailto:noliver@csir.co.za)

# Confirmation of School Site Visit

Please sign and fax this page to 012 841 3504

## MVELAPHANDA PRIMARY

712 ISITHAME SECTION

TEMBISA

Tel: 011 9264716

Fax: 011 9241325

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- We confirm that the CSIR site team will be visiting our school on **10/24/2003** at **13h00**.
  - We have arranged for an appropriate member of staff to be available for the interview and site visit;
  - We have arranged access to the buildings and spaces as requested;
  - We have made arrangements for copies of the latest 12 months electricity and water accounts for the school.

Principal: **MVELAPHANDA PRIMARY**

Date



UMnyango WezeMfundo  
Department of Education

Lefapha la Thuto  
Departement van Onderwys

Enquiries: T.E. du Plessis  
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Neil Oliver  
Project Manager: Operational Performance Management  
CSIR: Building and Constructuin Technology  
PO Box 395  
PRETORIA  
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### CSIR RESEARCH PROJECT: ENERGY AND WATER USE IN SCHOOLS

The Department has no objections to your teams visiting the schools as indicated on your list as your research would ultimately be of benefit to our schools.

You are advised to make arrangements directly with the principal of each school well in advance.

Best of luck with your project.

A handwritten signature in black ink, appearing to read 'Gilberto Martins', written over a circular stamp.

GILBERTO MARTINS  
SENIOR MANAGER

C:/PRP folder/ memorandums/memo0316/My documents/

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