# CONTRACTORS IN THE MUNICIPAL ENVIRONMENT



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#### 1. INTRODUCTION

Co-Author:

The past 10 years we have seen a decline in the number of qualified electricians with suitable experience to maintain Municipal Electrical Networks.

In 1998, Buffalo City had a shortage of over 10 electricians and was unable to fill the posts. This situation resulted in existing electricians to being overworked. As a result our electricians sought employment elsewhere.

BCM then had to consider other means of completing maintenance and capital work while at the same time reducing the work load on the already over extended staff.

The decision to use contractors was not taken lightly, as BCM had already tried this method for the provision of Electricity services in Mdantsane, a suburb having about 30 000 houses. The original Mdantsane contract had met all the technical objectives and yet it had still been necessary to go to mediation. The Municipality had incurred substantial extra costs.

#### 2. **FUTURE CONTRACTS**

Even though we had a shortage of electricians, the option of doing the work in-house had to be considered to ensure that Buffalo City would either be paying the same or less when using outside labour.

When considering the use of contractors to undertake work for Buffalo City, we had to reconsider the various options as detailed below.

#### In House staffing: a)

The first contract to be considered was the continued maintenance of the suburb of Mdantsane.

In 2003, the Municipality was in a far worse state in terms of gualified electrical staff than it was in 1998. Many attempts to fill vacant posts had been unsuccessful.

An investigation of costs to provide in-house staff for the operation of Mdantsane was conducted in calculating the staff requirements for Mdantsane, the existing staff requirements for East London were used as a basis. This indicated an additional cost of ±R20 million to provide internal staff over a five year contract period.

### b) <u>Outsourcing:</u>

While the additional costs for the operation and maintenance of Mdantsane had been substantial, their value can be accounted for in relation to electricity sales. The Municipality did in the long run get Value for money.

When considering the use of contractors for a second term for the operation and maintenance of Mdantsane, the reasons for the additional costs incurred during the previous maintenance/upgrading contract were determined to ensure that all future contracts where "produced" in such a manner so as to keep variations (and additional costs) to a minimum.

### 3. PROBLEMS ENCOUNTERED IN THE ORIGINAL MDANTSANE CONTRACT

After analyzing the contract it was established that most of the problems were basic.

- a) The scope of the contract was not clearly defined and the contractor took advantage of the undefined scope.
- b) The area of works was not clearly defined. The contractor was thus able to argue that various areas on the outskirts of Mdantsane were not included for in the contract.
- c) The conditions of contract were contradictory.
- d) The type of contract was not clearly defined (fixed price or bill of quantities). This enabled the contractor to select whichever option suited him.
- e) Municipality had no control of staff being used for the contracts. The contractor was able to utilize staff assigned for Mdantsane for other projects.

### 4. <u>NEW CONTRACTS</u>

After careful consideration shortcomings in the former Mdantsane contract were addressed and dealt with as follows:

- a) Most contract conditions are FIDIC, NEC etc. These conditions deal mainly with new works and are not maintenance type contracts. BCM appointed an Engineering Construction Contract Consultants firm to provide a set of Contract Conditions suitable for maintenance contracts.
- b) Before preparing specifications, all aspects of the job are investigated and then the work to be done is clearly identified. A specification is then written around this work.
- c) The geographical area in which this work is to be done is clearly defined in the specification.
- d) To ensure that there are no contradictory conditions or instructions a standard set of documents have been produced. For all contracts, only the specification and bill of quantities is changed to avoid ambiguity.
- e) Staff Requirements: In all new contracts which have been awarded we have refined the staff relationships as set out below:
  - i) In the original Mdantsane maintenance and operation contract, the contractual relationship was directly between BCM and the main contractor with no direct input on staff compliment from BCM. As previously stated this led to difficulties.

ii) In the second Mdantsane contract, BCM tried to rectify the above problem by specifying team requirements (e.g. Overhead mains, streetlighting, etc.) with the contractor allowing for the number of teams. A further control was included in the contract which allows for the engineer to call for additional teams if required.

Two years into the second Mdantsane contract we have found that this also does not work, as the contractor still controls these teams directly (less work more profit) with no input from BCM. We have altered this as shown below.

iii) Each section of work such as overhead lines, underground cables, substations etc. are contracted out. Contracts are directly with BCM. A Controlling Agent contract is also awarded. The Controlling Agent contract is based on the performance of the sub contracts, and how well they are controlled.

#### 5. THE IMPACT OF CONSTRUCTION REGULATIONS

Regulation 22 of the Occupational Health and Safety Act needs to be considered whenever a tender is invited.

This regulation has come into force to regulate all construction work due to numerous accidents having taken place in the Construction Industry, and has some very clear requirements for both contractor and employer to consider.

The Employer is required to ensure that the contractor conforms to these regulations. The contractor is required to produce a Health and Safety Plan, which is based on the Health and Safety Specification prepared by the Employer.

No contractor should be permitted to commence work on site without this requirement being met, since the Employer would be contravening the OHS Act.

#### 6. <u>USE OF LOCAL LABOUR</u>

One of the other major concerns which needed to be considered is the use of local labour and the extent it should be used:

Over a number of years we have used local labour successfully and have required contractors to provide training is such area as RDP house connections and MV/LV Linesmen.

Buffalo City Municipality have also learnt that care should be taken in relation to the type of training provided, and have stopped house connection training, as we have found a number of our "trainees" have continued providing a service within the community by by-passing meters.

Besides the above downfall, our training programme has been successful and has created a number of permanent jobs.

This should be managed carefully within the contract to ensure that proper training is provided for the nominated trainees.

## 7. <u>CONCLUSION</u>

Buffalo City has recently completed a number of contracts effectively with very little additional costs being incurred. We believe that by careful implementation of sound principles the use of contractors can be highly beneficial to the Municipality.

In the case of BCM we have major backlogs in relation to both maintenance & capital works. The contracts listed below have helped address some of these backlogs effectively:

Rebuilding of 66kV line (Pembroke to Buffalo)	(17km of line; value ±R4m)
Refurbishment of 66kV line (Pembroke to Kemba)	(6 km of line; value ±R1.1m)
Bush Clearing of Servitudes	(±R2m per annum)
Streetlighting Duncan Village	(±R350 000)
Streetlighting NEX	(300 luminaires; ±R350 000)
Overhead Mains Contracts	(Various minor projects)
Mini Substations Contracts	(Various minor projects)
Installation of under ground cable	(±R3m per annum)