

# 1 INTRODUCTION

This research report is aimed to serve as a guide for property developers, civil engineers and project managers when transforming land into residential, industrial or commercial stands. The report will highlight the critical success factors required to optimize the transformation process in order to minimize the risk of project delays, cost overruns and loss of income. The report will provide background knowledge on the township development and establishment processes and will focus on the most common current township establishment process, the Town-planning and Township Ordinance 15 of 1986. The report will also serve as a guideline to determine what activities are required and who to appoint when to develop land in terms of the Township Ordinance. The National Environmental Management Act 107 of 1998 (NEMA) as well as the Development Facilitation Act 67 of 1995 (DFA) will also be briefly discussed as the NEMA could have a significant impact on the township establishment process. The DFA serve as an alternative means to the ordinance to transform land into residential, industrial or commercial stands.

The township development process of converting land into residential, industrial or commercial properties involves the integration of a wide spectrum of professionals that includes various legal, financial and technical requirements that need to be understood and adhered to. The township establishment process which forms an integral part to the development process also relies on the input of a variety of professionals of a multi-disciplinary team and various external governmental departments. The process is time consuming and any delays can therefore have a serious impact on the programming of the project. The process necessitates thoroughness in the research and investigations done prior to the lodging of the application. The identification, performance and management of all influences are critical to the feasibility and implementation of a project.

The identification, evaluation and management of the critical success factors will enable the developer and professionals to focus resources in the most appropriate way in order to minimize the risk of cost overruns and project delays which could result in a loss of revenue.



### 1.1 INTRODUCTION TO TOWNSHIP DEVELOPMENT AND ESTABLISHMENT

### 1.1.1 TOWNSHIP DEVELOPMENT

Township development within South Africa has grown significantly over the last few years as a result of urbanization and continued economic development. The market has become very lucrative however, a number of risks exist in the process that can only be mitigated through a thorough understanding of the township development and establishment process.

Township development can take on various forms and due to its wide scope this report will therefore focus on land development where land is being developed into residential, industrial or commercial stands through the Town-planning and Township Ordinance 15 of 1986 which is applicable within the Gauteng region of South Africa.

The township development process consists of seven phases:

#### Phase 1: Idea

The developer identifies suitable land for the proposed township development or investigates alternative development options on land he or she owns.

### Phase 2: Preliminary feasibility

The primary motivator for any private sector developer is to make a profit. The developer makes a "rough cut" analysis of whether the proposed project is economically feasible. Cost estimates, cash flow predictions, risk factors and the resulting market values are determined. The project will only continue if the estimated return outweighs possible cost overruns and other quantifiable risks.

Depending on the proposed development the developer can appoint a professional team to assist the developer in determining factors such as the rights obtainable for the identified land, public opinion and possible objections to the proposed development, the availability of bulk engineering services such as water, sewer, roads, stormwater and electricity to the proposed land development as well as the associated costs to install these services. These estimates will be based on the preliminary township layout which is



compiled by a town planner. In the majority of cases the professional team would have done this preliminary work on a risk basis as the developer still has to decide whether to continue with the process or not.

### Phase 3: Gaining control of the site

Based on the preliminary feasibility this stage involves the outright purchase of the land or obtaining an option to purchase subject to certain conditions such as securing the necessary finance, zoning and permission to do the proposed development if the developer does not already own the land.

### Phase 4: Feasibility analysis and design

Within this phase of the development process a comprehensive analysis is done on the legal, market, site and financial aspects of the proposed development which is an integral part of the township establishment process.

The *legal* analysis will determine the land use and area legally allowed as prescribed by the town planning schemes of the local authority. Care should be taken by the township developer as not to purchase farm land that falls outside the development scope or guide plan of the local authority. Conflicting land uses to the guide plan will not be permitted by the local authority.

### The site analysis will include the following:

- Environmental Impact Assessment (EIA) to determine the potential impact on the environment and what the impact is of the NEMA requirements on the proposed development.
- Flood line study if applicable indicating the 1:100 flood line.
- Geotechnical investigation to determine whether the underlying soil conditions are safe for the proposed development as well as what costs might be incurred in terms of the founding and the installation of engineering services.
- Traffic impact assessment to determine the impact on the existing road infrastructure generated by the additional traffic of the proposed development.
- Municipal services report to address the level, extent and availability of municipal services to be provided as well as the estimated installation costs.



The physical feasibility of the site is then analysed in terms of site and location characteristics as well as the environmental factors to determine whether there is match between the unique requirements of the suggested development and unique characteristics of the site.

The *market* analysis will establish what future market values can be expected. This will include a socio-economic feasibility study which includes factors such as demographics, urban growth patterns, housing tendencies, personal income and expenditure patterns and local economic and political factors. The identification and analysis of these factors will have a positive or a negative impact on the development.

A *financial* analysis is then done to determine whether the project conforms to the developer's financial requirements. This will include an estimation of the total cost and projected income, cash flow projection, estimated profitability and associated risks of the proposed development.

If the project is still deemed feasible, the detail design stage will commence where construction drawings are created and issued to the council for approval.

### Phase 5: Financing

During the feasibility and design stage negotiations are started with possible financiers and finalized once the project is deemed to be feasible.

#### Phase 6: Construction

The construction is a critical success factor of the entire project. Project delays, cost overruns due to legal proceedings, cash flow constraints, high interest rates, poor estimates, labour problems or other delays could hurt or even ruin the profitability of the project.

### Phase 7: Marketing

The ultimate success of a development depends on its marketability. Decisions such as when to sell and at what price are required. Future market conditions and the availability of and the cost of capital now versus future market conditions need to be carefully



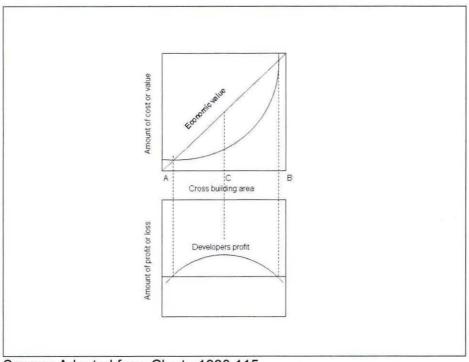
considered as these could affect the profitability. This means that any delays within the township development process can result in project delays which will impact negatively on the marketability of the project.

In order to successfully complete the township development process the developer must have a complete understanding of the entire township development process but should also meet the following requirements as stated by (Cloete 1998:123):

- Sufficient demand for the product at a price that justifies the investment
- A cost structure that ensures optimum net profit
- A design that ensure maximum demand that will meet the proposed cost structure
- Good location
- Control of costs and the effective management and selling of the development.

The developer must attempt to evaluate the costs and values associated with each development alternative in order to choose the most profitable concept. This is illustrated in the Figure 1 below which illustrates the relationship between the quantity of space, development costs, value created and developer's profit (Cloete 1998:115).

Figure 1: Relationship between development costs, economic value and developer's profit



Source: Adapted from Cloete 1998:115



The upper graph shows how development costs increase as more space is being developed on the site. The economic value curve reflects the assumption that each square metre of additional space adds the same amount of value which is not always true but only shown here to illustrate the concept.

The lower graph maps the difference between the value created and the cost, which is the profit. In the graph, point C, illustrate the maximum profit and optimum development intensity.

### 1.1.2 TOWNSHIP ESTABLISHMENT

The township establishment process is applicable to all types of township developments and is done in terms of the provisions contained in the Town-Planning and Township Ordinances of the various provinces within South Africa.

In the past the use and development of land was primarily governed by common law. However, as South Africa developed, the need for town planning controls and policies became more apparent to protect the public interest. As a result the first town planning ordinance came into existence in 1931 in the province formally known as Transvaal.

Government identified the need for strategic planning frameworks and with the help of professional town and regional planners established planning policies on a national, regional and local level to guide the physical and orderly development of regions. Regional and local planning polices were formulated into Guide Plans and Structured Plans and lately Land Development Objectives (LDO's) and Integrated Development Plans (IDP's) which were formulated in terms of Development Facilitation Act, 1995 and the Local Government Transition Act (Second Amendment Act 97 of 1996) respectively. The latter represented the concept of "Forward Planning". The formulation of LDO's and IDP's included an extensive public participation and provided information on needs, service levels and objectives that best represented the community within that specific region. All physical development and land use plans must be in accordance with the stipulated LDO's and IDP's which serves as a guide to municipal budgets and private investment within a town or city in order to direct social-economic and physical development.



Town-planning schemes and by-laws were created by a local authority for any land situated within its area of jurisdiction. It operates only on a local level and according to Cloete (1998:25) and The Town-Planning and Township Ordinance 15 of 1986 the broad goal of a town-planning scheme is to improve the general welfare of the community and to ensure the sustainability of the environment. The township establishment process should protect the public interest by ensuring that:

- the proposed township adheres to the LDO's and IDP's for that specific region;
- the location of the proposed development or township in terms of the visual exposure and proposed land use does not impact negatively on the natural environment, competing land uses or adjacent residential properties;
- the proposed development falls within the planned area's of growth of the local municipality which would facilitate economic and infrastructure development creating employment opportunities, roads, water networks, electricity, schools, hospitals and recreation facilities;

The need and desirability of each application is also assessed and judged by the controlling authority to asses whether the proposed township development falls within the listed criteria.

In order to successfully complete the township development process the developer must have a complete understanding of the township development and establishment process. The identification of the critical success factors within these processes will enable the developer to mitigate and minimise the down-side risk of township development.

### 1.2 PROBLEM DESCRIPTION

# 1.2.1 Problem Statement

Various residential development projects never realize, suffer economically, experience delays and disruptions as a result of a lack of understanding of how to plan and facilitate the rezoning of agricultural land for residential, commercial or industrial land use.



# 1.2.2 Research Question

What are the critical success factors within the township establishment process in terms of the provisions contained in the Town-Planning and Township Ordinances 15 of 1986 to minimize risk and to optimize the conversion of raw land into proclaimed land?

#### 1.3 RESEARCH OBJECTIVES

The aim of this report is to:

- Provide a thorough understanding of the township establishment process available to property developers, civil engineers and project managers.
- Describe the impact of the Town-Planning and Township Ordinance 15 of 1986
   legislative procedure on the township establishment process.
- Describe the alternative legislative procedures available to township establishment
- Describe the impact of the National Environmental Management Act (NEMA) on the township development process.
- Describe the critical success factors within the township establishment process to minimize the risk of project delays and cost overruns.
- Provide a project plan that will enable property developers to better plan, estimate
  costs and to identify milestones to facilitate the streamlining of the overall process of
  township establishment within the overall township development process.

#### 1.4 ASSUMPTIONS AND LIMITATIONS

The research will be conducted locally, limited to the South African property industry and will primarily focus on township development within the Gauteng region.

The research will depend on the participant's perceptions and experiences within the township development process. Limited information is available on the actual township establishment processes and no literature is availably on what the critical success factors are and what their impact is on the township development process.



No research will be done at this stage on the various other critical phases within the township development process such as the financing, construction and marketing phases.

#### 1.5 CONCLUSION

There are numerous requirements for successful township development. Developers, to a certain extend, have control over various factors such as the type and quality of the project that may determine success. However, over the township establishment process developers have very little control as controlling authorities have their own criteria by which the need and desirability of each proposed development is judged. If history has taught us anything the attitude of the local authority within the application process is often to discourage rather than to encourage new development. Developers therefore need to have a good understanding of how the township establishment process works to try and mitigate their risk in terms of projects delays and cost overruns to the proposed development.



### 2 LITERATURE REVIEW

#### 2.1 INTRODUCTION

The township establishment process is applicable to all types of township developments and is done in terms of the provisions contained in the Town-Planning and Township Ordinances of the various provinces within South Africa. "The township establishment process can generally be defined as the conversion of raw land (usually farm land) into proclaimed land which can be subdivided into plots and sold to buyers. The process is regulated by legislation which ensures that all parties and organisations deemed to have an interest in the land or in the proposed township have an opportunity to comment.

The outcome of the process is the creation of a new township, to which titles to specific erven or plots can be registered in the Deeds Office with the title deeds on the basis of a General Plan held at the Surveyor General's Office. All required documents are drawn up through the township establishment process." (Department of Housing/National Business Initiative, 1997:18).

The township establishment process is complex and time consuming as there are more than 130 Acts and 50 ordinances that can affect and control the use of land. As a result a thorough investigation has to be undertaken by the property developer prior to the lodging of the township application. Many developments have been delayed or never realised as the necessary preparatory work has not been done.

#### 2.2 TOWNSHIP ESTABLISHMENT PROCESS

The township establishment process is an integral part of the township development process. According to Cloete (1998:25) the township establishment process can be divided into a number of activities.

# Identifying suitable land for development.

After suitable land has been identified the acquisition of the land will in all probability be subject to a set of terms and conditions i.e. securing of the development rights. These terms and conditions are agreed upon by the seller and the purchaser prior to the purchase of the land.

### 2. Appointment of professional team

Depending on the envisaged development the property developer can appoint a professional team consisting of the following professionals to assist in the township establishment process:

- Town-planner who can act as the coordinator of the planning project and who is responsible for processing township applications for land-use rights.
- Civil engineer who is responsible for determining the location and availability of
  existing services to the new township. The civil engineer is also responsible for the
  drafting of a services report and the design and supervision of the township services
  such as water, sewer, stormwater and internal roads.
- Electrical engineer who is responsible for the determining the location and availability of existing electrical services. The electrical engineer is also responsible for the design and supervision of the electrical reticulation system.
- Engineering geologist who is competent to undertake a dolomitic or any other type
  of geotechnical investigation for the new township.
- Transportation engineer who is mainly concerned with the compilation of a Traffic
  Impact Assessment report, indicating how the surrounding roads and other
  transportation systems are affected by the new township and what needs to be done
  to accommodate the additional flow of traffic generated.
- Land surveyor who is responsible for the contour and cadastral surveys which is required for the proclamation of the township.
- Attorney who draw up all legal documentation, agreements and contract. He is responsible to assist in scrutiny of the title deed of the land.
- Conveyancer who is primarily concerned with the registration of all property and other real rights pertaining to the land.



The above-mentioned professionals are important to the township establishment process. However, there are a number of other professionals such as an architect, financier, marketing consultant, quantity surveyor and estate agent that will in all probability form part of the professional team at the different phases within the township development process.

### Investigating the legal and cadastral position of the land.

It is the responsibility of the developer to investigate the legal and cadastral boundaries as well as what the future planning is for the broader area. This involves the scrutiny of the title deed, existing leases, possible mineral rights, and what existing restrictive conditions such as water rights and servitudes for roads, railway lines, water, sewer, gas and power lines are tied into the land.

The availability and location of existing engineering services such as electricity, water, sewerage and stormwater drainage which is essential to the proposed development must also be investigated to determine what cost and time implications could arise.

Accessibility to the development and whether the proposed development is aligned with the IDP's and LDO's of the local authorities should also be investigated.

### 4. Conduct a geotechnical survey and flood line study

The existing soil conditions should be examined by an engineering geologist or geotechnical engineer who is competent to determine whether the soil conditions are safe and feasible for the proposed development.

If the proposed development falls within a dolomitic geological area, approval from the Council for Geoscience (CGS) is required as stipulated by Tshwane and Ekurhuleni local authorities as well as the National Home Builders Registration Council (NHBRC).



The Record of Decision (RoD) issued by CGS is based on a specific residential type, layout, density, foundation solution, risk management plan and proposed precautionary measures.

It is recommended that the Developer obtain a RoD from CGS before the scoping report required in the EIA process, is submitted to Gauteng Department of Agriculture, Conservation, Environment and Land Affairs (GDACEL). The CGS ROD is a prerequisite for the issuing of the ROD by GDACEL.

The flood levels or flood lines must be investigated, if applicable, by a civil engineer as required in terms of Section 144 of the National Water Act, 1998 (Act 36 of 1998). This is to ensure that no development occurs in areas deemed in danger of a 1:50 or 1:100 year flood.

## 5. Undertake an environmental and social impact study.

There are numerous environmental and conservation acts impacting on the use of land such as National Environmental Management Act 107 of 1998, Environmental Conservation Act 73 of 1989 and the National Water Act 36 of 1998. The aim of these acts is to

- protect ecological processes, natural systems and beauty as well as the preservation of biotic diversity in the natural environment;
- promote the conservation and sustainable utilization of species and eco systems;
- protect the environment against pollution, destruction and ecological deterioration as a result of the proposed development;
- establish and maintain acceptable living environments in accordance to the community environmental values and needs;
- ensure sustainable development through the integration of social, economic and environmental factors so that the proposed development serves present and future generations.



It is the responsibility of the property developer to appoint an environmental assessment practitioner (EAP) to undertake the environmental impact study. Any sensitive area's to the development must be identified and incorporated into the planning. Local authorities could have declared any part of the site as a conservation area which can either have a detrimental effect on the feasibility of the project in terms of its economical layout or could even stop the proposed development. The process is time consuming and can take several months or even years depending on the sensitivity of the proposed development on the immediate and surrounding environment. Based on the Environmental Impact Assessment and in conjunction with the EAP the Gauteng Department of Agriculture, Conservation, Environment and Land Affairs (GDACEL) will either refuse the application or release a Record of Decision (RoD) that stipules the terms and conditions to which the proposed development must adhere to. The applicant can appeal within 30 days from the date the RoD was issued to the provincial authority with all the relevant documentation. The appeal will then be considered and based on the outcome the RoD may or may not be amended.

The social impact study must also be undertaken to determine whether the social economic climate is favourable for the proposed development. Various factors must be analysed such as demographics, the urban growth patterns, property tendencies, income and expenditure factors, local and macro economic factors as well as political factors.

### Conduct a Traffic Impact Assessment Study

The access to the development and the additional traffic generated by the development and the impact thereof on the existing road infrastructure must be investigated by a transportation engineer depending on the additional trips generated. The engineer must also obtain written approval from the South African Roads Agency Limited (SANRAL) as required by virtue of the National Roads Act, 1998 (Act No. 7 of 1998) if the development requires access from provincial or national roads.

This process can have a time and cost implications if deemed that the surrounding various intersections and existing roadways must be upgraded to accommodate the proposed development



# 7. Obtain base mapping information

A contour plan of a suitable scale must be obtained either from the local authorities or from a contour survey which must be done in accordance with the regulations framed under the Township Ordinance so that the area can be planned.

# Define planning parameters

The planning parameters include the residential, industrial or commercial zoning applied for, non-residential land usage, road hierarchy with possible access routes from existing roads, geotechnical data and flood lines if applicable, established service corridors as well as the existing servitudes running adjacent and or through the proposed development.

Residential, commercial and industrial zoning has various categories with different building restrictions in terms of the maximum permitted building coverage of land, floor area ratio under a roof of a unit and the density which is the maximum dwellings allowed per hectare. The building restrictions pertaining to each zoning are summarised in Table 1.

Table 1: Residential, commercial and industrial zoning with associated building restrictions

Zoning	Building Restriction
Residential 1	One dwelling per stand or erf with maximum footprint coverage of 40%.
Commercial 1	Mostly unrestricted and allows for shopping centres or malls.
Industrial 1	Permits zoning for normal factories, warehouses or storage depots.
Residential 2	10 to 20 dwellings per hectare with a maximum coverage of 40% such as clusters of houses or larger townhouse complexes
Commercial 2	Allows for a shopping centre but with restricted businesses due to the location and immediate surroundings.
Industrial 2	Zoning specifically for operations which may involve noxious or unpleasant odours and emissions.



Zoning	Building Restriction
Residential 3	21 to 40 dwellings per hectare with a maximum coverage of 40% such as smaller clusters of houses and town house complexes.
Commercial 3	Stricter zoning that does not allow a wide variety of business to open and operate in the shopping centre.
Industrial 3	Applies for specific applications such as workshops or mini-factories.
Residential 4	41 and 120 dwellings per hectare with a maximum coverage of 40% such a block of flats.
Commercial 4	Provides zoning for office parks with or without residential use.

It should be noted that the above mentioned zonings are not universal to all the local authorities within the Gauteng region. The definitions and meaning can differ for each authority. Town planners therefore mainly apply under a special zoning heading where the township is described in detail to ensure no misunderstanding of what is applied for. Also each zoning has a different demand on utilities in terms of water supply, sewerage disposal, stormwater runoff and the possible upgrade of existing roads and intersections.

# 9. Prepare a draft layout plan

Once all the information is analysed a draft layout plan of the proposed development is complied which incorporate all the planning parameters.

Based on the above mentioned studies and the information gathered the down-side risk of the development in terms of its legal, market and cost should be revisited prior to the lodging of the township application. Public opinion and possible objections must be carefully evaluated as well as what the outcome was on recent decisions at similar developments within the surrounding area. These factors must be included in the feasibility and planning of the project as any delays could result in cost overruns as result of project delays, inflation and changes within the market demand.

# 10. Lodging of township application

On the completion of the previous activities a township application with supporting documentation is prepared and submitted to the authorised local authority (in Gauteng) planning department or else the provincial government Department of Planning Environment and Works if the local authority is not authorised.

The township application is done in terms of a planning report which defines the rezoning and the subdivision of land. The report will include the following documents.

- Township layout plan indicating
  - A suitable scale
  - Contours
  - Coordinates with a grid spacing of not more than 300m and gird values
  - North Point
  - Existing buildings, topographical features, existing and planned roads of the adjacent areas, boundaries of the proposed township, proposed access to the development, sufficient dimensions indicating the size of erven and street widths, specific uses of erven should be indicated clearly, 50 and 100 year flood lines if applicable, soil zones as per the geotechnical report, servitudes.
  - Locality plan of where the proposed township is situated
  - Table providing a summary indicating the area of township, total number of erven and special residential zoning, erven for specific uses, length and width of streets, percentage of the area covered by roads and what percentage are open areas
  - Name of township
  - Name of local authority
  - Name of registered owner and signature of applicant as well as the name and address of the firm or person responsible for the layout
  - Drawing number
  - All amendments to the plan should also be tabulated
- Geotechnical report
- Traffic impact study



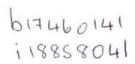
- Environmental Impact Assessment report with the Record of Decision
- Powers of attorney
- All legal documentation such as the title deed tied to the land
- Motivating Memorandum where the need and desirability of the proposed development is fully motivated. Each authority has its own set of criteria by which the desirability and need of the development is judged
- Services Reports
- Mineral Rights holder consent. Letter stating that the rights to minerals in respect of the land on which the applicant wishes to establish a township have been severed from the ownership of land or granted a lease of the rights to minerals or that the applicant has requested the local authority of the Expropriation of Mineral Rights Act, 1969 to expropriate the rights to minerals. (Town-Planning and Township Ordinance 15 of 1986:40)
- Flood Line Report if applicable

Refer to Appendix A for an example of a township layout plan.

However, the services reports are not required for the initial township application. Only when the local authority approves the township in principle with a set of detailed and general conditions will these documents be required to address these conditions.

The local authority requires that an advertisement of the proposed development be posted in the newspapers, provincial gazette and on site as to provide all interested parties the opportunity to submit their comments or objections. According to the Township Ordinance 15 of 1986 the local authority may require that the advertisement be posted once a week for two consecutive weeks. The ordinance also states that any person will have 28 days from the first date of publication to lodge an objection in writing to the local authority. Any objection will be forwarded to the applicant whereby the applicant will have 28 days to respond in writing to the local authority.

Running in parallel the local authority also consults with its own internal departments and external bodies i.e. Eskom, Randwater, Telkom, and Department of Agriculture etc. for comments or recommendations on the application. Only when all the comments have





been received will the local authority consider the application and make a recommendation to the township application. An article 60 committee of the local authority may carry out an inspection of the site and have a hearing of the views of the applicant, objectors and the local authority. However, this will only take place if objections were lodged against the development.

If the township application was denied or approved subject to certain conditions the applicant will have 60 days from the day he was notified of the decision and conditions to respond to the local authority. If there are any disputes between the applicant and the local authority the matter can be referred to a committee of the Township Board by the local authority which serves as an appeal body for disputes. The Township Board will review and make a final recommendation to the local authority for the approval or refusal of the application. It should be noted that the applicant on the request of the local authority will be allowed to amend his application while the application is pending before the Township Board or the local authority.

The local authority then issues a letter stating that the Townships Board has made a recommendation approving in principle the establishment of the township or subject to a certain set of conditions. Upon acceptance of these conditions by the applicant they become final conditions, which are embodied in a number of pre-proclamation conditions that needs to be adhered to by the applicant within a period of 12 months. These conditions will in the majority of the cases require service reports. Failure to comply with these conditions will result in a lapse of the township application.

# 11. Preparation of conditions of establishment

According to the Town Planning and Township Ordinance 15 of 1986 every township shall be provided with engineering services such as water, electricity, sewerage and roads necessary for the development of the township. Normally the developer will finance and install the internal services while the local authority will be required to install the external services and to maintain the internal services installed. The applicant and the local authority will enter into a service agreement relating to the provision of these services. Prior to the undersigning of the service agreement a service report must be compiled by a



Professional Civil and Electrical Engineer. The services reports will address the requirements of the local authority. The report from the civil engineer will include:

- a bulk services investigation indicating where the bulk services are and where possible connections can be made
- whether there are sufficient spare capacity to serve the proposed township or what possible upgrade of external services are required to serve the township
- cost estimates for the installation of the internal services and the connection to external services as well as what boundary and bulk contributions are payable.

An electrical engineer will investigate the electricity requirement of the proposed development and submit an application to the licensed electricity regulator requesting approval for the required supply.

The service agreement provide for the following according to Department of Housing/National Business Initiative (1997:51)

- the type of services to be installed and to what specifications as it may differ from each authority
- rights and the obligations of the developer in terms of the installation of the services and charges payable to the local authority in terms of boundary and bulk contributions as reflected in the services report
- method of handover of services from the developer to the local authority
- liability period of the developer to rectify any defects and what service guarantees are required by the local authority
- rights and obligations of the local authority in terms of the provision of bulk services,
   service rebates and bulk contributions payable to them

Refer to Appendix C for a typical service agreement.

# 12. Preparation of General Plan

On approval of the residential township the applicant must within a period of 12 months lodge an application for approval with the Surveyor-General. This entails a complete cadastral survey of the land by a land surveyor indicating and defining the cadastral



boundaries of the new township. A General Plan of the new township is prepared and submitted for approval. The Surveyor-General ensures that the General Plan conform to current standards and also acts as the keeper of the plan to register any changes to the cadastral of the township such as the registration of new servitudes. Failing in lodging an application within the prescribed time frame or obtaining permission from the Surveyor-General will result in the cancellation of the township application. On approval the applicant must within a period of three months from the date of approval submit a certified copy of the approved General Plan to the local authority which is forwarded to the Deeds Office.

On receipt of the approved General Plan the township amendment scheme is prepared by the local authority whereby the new approved township is included into the greater township area. Refer to Appendix B for an example of an approved General Plan.

### 13. Opening of the township register

Before the township register, which is the record of ownership in respect of the new township, can be opened at the Deeds Office, the applicant must comply with all the preproclamation conditions as determined by the local authority or the Township Board. It is the responsibility of the applicant to undertake the necessary steps to address the conditions tied to the land. Only when all the conditions have been removed, cancelled or adhered to and the documentary evidence of this has been submitted to the local authority can the Section 101 Certificate be obtained which is required to open the township register by the Deeds Office. This may include the payment of the bulk and boundary contributions as stipulated by the service agreement and the provision of a guarantee for the installation of the total or remaining services and maintenance thereof. The payment of the contributions is depended on the local authority as this is not required by the Townplanning and Township Ordinance 15 of 1986 to obtain the Section 101 certificate.

Once all the documents have been received and scrutinised by the Deeds Office the local authority will by notice in the Provincial Gazette declare the township an approved township as well as to what conditions it was declared an approved township. On receipt



of the approved General Plan, signed services agreement and approved civil construction drawings the developer may start with the installation the engineering services.

However, a Section 82 certificate is required before any transfers of erven can take place. The certificate will only be issued once all the engineering services have been installed and approved by the local authority and the bulk and boundary contributions have been paid. A guarantee to the value of 10% of the total construction cost must also be issued by the developer which must be valid for the one year maintenance period. Only then can the transfer of erven take place and will the developer start realising his return on investment.

Although the Provincial Land Use Ordinance Route is most commonly followed in current development projects there are two other legislative procedures available to undertake township establishment according to Cloete (1998:150).

Less Formal Township Establishment Act (LFTE) which is intended for lower income residential areas. The act allowed the province to establish a township without the approval of the local authority. However, since 1996 the act also requires the approval of the local authority resulting in a procedure that requires two approvals making this procedure very time consuming.

**Development Facilitation Act (DFA)** which is similar to the Provincial Land Use Ordinance route but comprises of a more comprehensive application. The DFA has two main aims.

- Fast tracking reconstruction and land development projects by providing a national uniform township establishment procedure. The application is reviewed and approved or disapproved at the Tribunal hearing, which consists of all the various role players within the township establishment process.
- Providing a policy framework at national, provincial and local level concerning land development, which facilitates the formulation and implementation of land development objectives to guide decision making on land development in the future.

The DFA has a Development Tribunal consisting of public and private sector members with experience in the planning and development fields which have been appointed to



make decisions on land development applications submitted to it in terms of the DFA process.

The DFA route may be the preferred choice for a developer as it provides a faster mechanism for township establishment than any other legislative procedure as it provides specific time frames in which local and external bodies must provide their comments. However, it is still considered highly controversial from an environmental perspective as is often used as a short-cut to circumvent the need to consider environmental and social issues in detail by bypassing both the town and regional planning and EIA processes. The DFA application is also more expensive compared to the other two procedures and requires a great deal of coordination and effort to try and get all the interested parties at the tribunal hearing. Town planners also tend to avoid the process as it is more confrontational in nature.

The Provincial Land Use Ordinance route has an advantage over the above mentioned legislative procedures as developers and local authorities are generally more familiar with how the process works making it more efficient and the fact those local authorities can be held accountable for projects following this route.

Although the ordinance route is most commonly used it is important to remember that the choice of legislation is very much dependant on the circumstances of the particular development such as underlying land issues, type of development, restrictive conditions of title and duplication of laws. These potential problems and circumstances must be considered prior to a decision being made regarding appropriate legislation to use.

#### 2.3 CONCLUSION

From the above it is evident that a wide spectrum of activities are required which involves a host of professionals and external governmental departments to obtain township establishment. It is therefore important to have a tool or guide line as to what the critical success factors are to successfully transform the acquired land into proclaimed land. A lack of understanding and knowledge in this regard can undermine the feasibility of a project.