THE APPLICABILITY OF MINERAL AND MINING RIGHTS CONCEPTS IN FACILITATING VALUE CAPTURE IN SOUTH AFRICA

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ABSTRACT

South Africa needs additional funds for public infrastructure investment. Value Capture could potentially be implemented as a mechanism to raise additional funding. Value Capture depends on maximising land value. Ownership constraints to land development prevent land value from being maximised. The study uses doctrinal legal research to investigate how the principles found in South African mineral rights legislation overcome ownership constraints to developing mineral rich land to its highest and best use. The study also investigates how these mineral rights principles could be applied to land in general, in order to overcome ownership constraints to development. Within this context the study demonstrates how land might be expropriated for development purposes, and how such expropriation could create opportunities for Value Capture.
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1 INTRODUCTION

South Africa envisions eradicating poverty and inequality by focussing amongst other things on faster economic growth and higher investment and employment; strengthening links between social and economic strategies and building collaboration between private and public sectors (National Planning Commission, 2011). Some of the critical requirements to realising this vision include a strong focus on public infrastructure investment, as well as densifying cities, improving transport and building a society that minimises travel time between the workplace and home (National Planning Commission, 2011).

South Africa plans on spending R22.9 billion on upgrading commuter rail services and R143.8 billion on municipal infrastructure over the three years following the 2014 budget (Gordhan, 2014). Public works projects such as these can produce benefits that are immediately capitalised into surrounding land values (Peterson, 2009). Cities’ ability to finance necessary infrastructure will significantly depend on their ability to capture a portion of these land value gains, to pay for the infrastructure (Peterson, 2009). With its significant commitment to infrastructure expenditure, in the light of a budget deficit of four per cent in 2013/14 (National Treasury, 2014), South Africa should consider capturing land value increases to finance infrastructure investment (Brown-Luthango, 2011).

1.1 Background

The process of generating funds for infrastructure development by identifying increases in land value that were brought about by public investment in infrastructure, and capturing these value increases for funding government expenses can be defined as Value Capture (Mathur & Smith, 2012).

1.1.1 Value Capture

There are four stages in the Value Capture process, namely: the creation of property value, the calculation of additional value created, capturing of the value created and finally using the funds from the captured value (McGaffin, Napier & Gavera, 2013). Value Capture in South Africa requires the realisation of two broad outcomes, which are to maximise the value of land by increasing the use potential thereof, and for public
authorities to capture the value increment for the purpose of investing in infrastructure (McGaffin & Gavera, 2012).

Value Capture mechanisms found in the literature include the sale or lease of publicly held land, public-private development partnerships, betterment levies, development impact fees, acquisition and sale of excess land, and various land value taxation tools (Peterson, 2009; Mathur & Smith, 2012; Zhao et al., 2012).

1.1.2 Creating incremental land value

Value Capture is dependent on maximising the value of land, because incremental value that might be captured is created when land value is maximised (McGaffin, Napier & Gavera, 2013; Peterson, 2009).

Land owners are assumed to be rational payers – motivated by self-interest – who will because of a profit motive generally strive to maximise the value of their land (Furubotn & Pejovich, 1972). Land is most valuable when it is developed to its highest and best use. The highest and best use of land is defined by the Appraisal Institute (2008:278) as "the reasonably probable and legal use of vacant land or an improved property that is legally permissible, physically possible, appropriately supported, financially feasible, and that results in the highest value".

The value of land with development potential is typically calculated using the residual method of valuation (RICS, 2008; Appraisal Institute, 2008). The residual value of land equals the difference between the income that the land will generate when it is developed to its highest and best use, minus all development costs (including reasonable developer profit, but excluding the purchase price of the land) which are associated with developing it from its current use to its highest and best use (Appraisal Institute, 2008).

From the definition of highest and best use one identifies three aspects that collaborate in order to realise higher value potential on land: the market and the property’s physical characteristics need to support the higher and better use, development and legal rights need to be obtained on the property, and an entrepreneur needs to be willing and able to capitalise on the opportunity.

In terms of the market and physical aspects of highest and best use; investment in public infrastructure often has the effect of making a higher and better use of property
possible (Smith & Gihring, 2006). Generally the highest and best use of properties increase because of the improved accessibility and amenity created by infrastructure (Rodriguez & Mojica, 2009). Improved accessibility and amenity typically bring more people into an area, creating favourable market conditions that demand more property space such as offices, retail space and homes in the area.

Regarding the legal aspect of highest and best use; government permission is required to develop land to a higher use in South Africa, as land use is government regulated according to the Spatial Planning and Land Use Management Act, No. 16 of 2013 (SPLUMA, 2013). In terms of this act, municipalities are to define in their Spatial Development Frameworks (SDF) areas within which specific property uses are envisioned. Land use rights can be applied for in accordance with the SDF. The approved zoning and use rights of each portion of land within a municipality is recorded in the municipality’s Land Use Management Scheme (LUMS). Land use rights are classified and defined under different usage zonings, such as agricultural, industrial, commercial and single or multi-residential land.

Land may only be developed in accordance with its zoning, as set out in the LUMS. If land falls within an area earmarked on the SDF for a higher and better use, the owner of the land may apply for and be granted re-zoning to that higher use. Such re-zoning is likely to be granted by the state, provided that the community has no objections to the higher use on the specific land. The use rights recorded in the zoning of land are attached to the land, and typically vest in the owner of the land.

If the market favours development in an area and government consent for development is obtainable, a property developer entrepreneur might want to capitalise on the opportunity of developing the land. A developer would have to acquire the use right from the landowner in order to develop the land (Badenhorst, Mostert & Pienaar, 2006). Typically this is done by purchasing the land or by entering into an agreement where the landowner acquires a share in the profits of the envisioned development project.

Ownership constraint to development is said to happen when development cannot take place, because the necessary ownership rights cannot be acquired fast enough through normal market processes (Holtslag-Broekhof et al., 2014; Adams & Hutchison, 2000). The invisible hand argument of market efficiency – professing that supply will
rise to meet demand at the right time, place and price – fails in the development land market, because of such ownership constraints (Adams et al., 2001; Lichfield & Darin-Drabkin, 1980). In essence, the rights vested in landownership are able to prevent land from being developed to its highest and best use. Landowners have the right to not sell land to developers, or to price it unrealistically high. In this way, land ownership effectively prevents land value from being maximised – and therefore prevents incremental land value from being created by developers. Value Capture – which seeks to capture incremental property value – is constrained because land ownership rights prevent the creation of incremental property value.

This constraint could potentially be overcome by applying principles that are found in mineral rights legislation to property development in general.

1.1.3 Mineral rights – an alternative model for property development rights

Mining and mineral rights utilisation is in essence a highest and best use of land, to which land owners cannot prevent development.

As with other property development, the three factors determining highest and best use of land are also at play in mining and mining-related development of mineral rich land. Market demand for the land use needs to exist (in this case: the extraction of minerals, rather than the creation of building space), permission from authorities is required (MPRDA, 2008) and an entrepreneur needs to be willing to capitalise on the opportunity.

In terms of the legal aspect, South African legislation on mineral rights offer some interesting concepts in how a right to develop and profit from land is created and governed (MPRDA, 2008; White paper: A minerals and mining policy for South Africa, 1998):

- The right to mine and profit from minerals (i.e. to use and develop land) can be held separately from the ownership of land.
- The owner of the land with mineral deposits can lose the right to use and develop his land, if he does not exercise the development right and develop the land to its highest and best use.
- A person interested in exploiting minerals and accordingly developing mineral rich land to its highest and best use, can through a process apply to government to acquire the relevant rights over another person’s property.
- Legislation deems exploitation of minerals to be a preferential use of land, allowing a holder of mineral rights to enforce this use of the land over most other uses.
- Expropriation of land is possible to assist the mineral rights holder with enforcing his right to exploit minerals and develop the land accordingly.

The mining industry maximises land value by generating substantial revenue from land use (Chamber of Mines of South Africa, 2014; Appraisal Institute, 2008). South African mining companies typically pay the landowner a three to five per cent royalty on the value of minerals extracted from his land, which might go as high as seven per cent in exceptional cases, and ten per cent in diamond mining (Hartman, 2015). These royalties – when capitalised – give a land value which is normally higher than the land value realisable for any other use of the land. Mineral rights legislation thus enables willing parties to acquire mineral rich land for mining related development, and thereby promotes developing mineral rich land to its highest and best use.

The question arises whether the principles found in the mineral rights legislation can also be applied to provide developers with access to non-mineral land with development potential. This question is worth investigating, because developers might maximise land value by developing the land to its highest and best use if they are given access to the land. This development would then create incremental land value, which effectively maximises the potential for Value Capture.

1.2 Problem statement

The problem to be addressed by this study is summarised as:

Landownership rights can prevent real estate developers from developing land to its highest and best use, which constrains land value and limits the Value Capture opportunities that might be utilised to finance infrastructure in South Africa.
1.3 Research questions

The research questions to be answered by this study are:

- How does landownership prevent real estate developers from developing land and maximising land value in South Africa?
- Can the development promoting principles from mineral rights legislation be applied to non-mineral land, to enable developers to develop land without being constrained by landownership?

1.4 Research proposition

This study will test the proposition that:

*The development promoting principles found in mineral rights legislation can be applied to non-mineral land, which enables developers to develop land without being constrained by landownership - leading to land value maximisation and opportunities for incremental land Value Capture by public authorities.*

1.5 Aims

The aim of this study is to investigate how acquiring and enforcing the right to develop land without negotiating with property owners might create an effective value capturing mechanism.

The study therefore aims to:

1. *Demonstrate how landownership prevents real estate developers from developing land and maximising land value in South Africa.*
2. *Determine whether the development promoting principles found in mineral rights legislation can be applied to non-mineral land, to enable developers to develop land without being constrained by landownership.*
1.6 Objectives

The research questions will be answered by realising the following objectives.

- Reviewing the literature on:
  - Value Capture and how it might be applied to fund the infrastructure investment envisioned by South African government.
  - How land ownership obstructs the maximisation of land value.
- Applying a methodological approach applicable to legal research:
  - A doctrinal legal research approach will be applied – which is typically applied to answer what the law is and how it applies to a particular situation.
- Applying a research design that is able to conduct doctrinal legal research:
  - Legal discourse will be conducted. It is an argumentative writing process that is typically used to conduct doctrinal legal research. It gathers legal data and interprets it by stating the law and developing new connections and ideas about how it is applicable in a particular situation.
- Concluding on whether legislative principles found in mineral rights law can be applied to promote development of non-mineral land.

1.7 Research methodology

A literature review will be conducted to answer the first research question, and determine how landownership prevents real estate developers from developing land and maximising land value. To answer the second research question, research within a legal research paradigm is required.

Doctrinal legal research will be conducted, which determines what the law is and how it applies in a particular context (Chynoweth, 2008). This study will construct a hypothetical case to determine whether the South African legal framework offers developers opportunities to acquire and enforce the right to develop land without being constrained by landownership. This will be done by writing a legal discourse – which reflects the reasoning process that judges and lawyers use when they review legal documents and synthesise the results thereof into an overall principle (Dobinson & Johns, 2007). A doctrine will be presented that might guide legal practitioners in making decisions when they come across cases where landowners refuse to sell
developable land, or demand unreasonable high prices for such land. The legal discourse will endeavour to argue that it is desirable to overcome ownership constraints to development, and that it is possible to do so within the South African legal framework.

1.8 Structure of the report

Chapter one provides an introductory background to Value Capture in the South African property rights context, from which the problem statement is formulated. The research questions and research proposition are stated, and aims and objectives of the study are formed. Furthermore, the research methodology is introduced and limitations of the study are described.

Chapter two provides a literature review on Value Capture, demonstrating its desirability in the South African context. It is shown that Value Capture could be applied to fund South African infrastructure investment, and it is concluded that Value Capture is a matter of national interest. The chapter also conducts a literature review on how development and the maximisation of land value is constrained by property ownership.

Because Value Capture is indirectly constrained by land ownership, the study sets forth to determine whether the South African legal framework offers developers opportunities to acquire and enforce the right to develop land without being constrained by landownership.

Chapter three describes the research methodology applied in this study. It sets the research paradigm, within which it proposes a doctrinal legal approach to research.

The legal data gathered in the study is presented and analysed in chapter four of the report. South African mineral resources legislation is found to overcome ownership constraints to value maximisation. Developers are able to acquire and enforce the right to develop mines and mining related structures on mineral rich land, without being constrained by property owners. Expropriation is even used in extreme cases to enable those who have acquired mineral rights to use and develop the land over which the rights are held.
The study draws a comparison between government’s policy and intent for development of mineral rich land, and government’s policy and intent for development of non-mineral land. The comparison justifies that the principles found in mineral rights legislation should also be applied to non-mineral land, to provide developers with access to the land when sellers refuse to sell or demand unreasonable prices.

The study further demonstrates how the principles found in mineral rights legislation might be applied to enable a developer to legally acquire land for development when the owner refuses to sell or demands an unreasonable price. Expropriation for the purpose of maximising land value could be constitutionally justified within the context of Value Capture and other national land priorities.

1.9 Limitations and delimitations

Findings of this study are primarily based on interpretive reasoning by the researcher. The research proposes and tests a controversial political and economic concept, which would have to undergo practical implementation, court rulings and extended public commentary before it can be accepted as a definite means of furthering the Value Capture motive.

This paper is not to be considered as professional legal counsel. It is solely intended for academic purposes, which include stimulating discussion on the topic among academics and practitioners. The author and the university accept no liability for the actions or consequences of actions taken by any person as result of reading this material.
2 LITERATURE REVIEW

This literature study reviews South Africa’s need for infrastructure funding and reviews Value Capture as a potential funding source for public infrastructure. It reviews the workings of Value Capture and finds examples of where Value Capture was successfully used to fund public infrastructure. It determines that maximising land use and land value is important for the success of Value Capture programs.

2.1 South African development focus

The National Planning Commission (NPC) of South Africa advises on issues impacting the long term growth of South Africa by means of a National Development Plan (National Planning Commission, 2011). The report lays the strategic plan whereby South Africa seeks to eliminate poverty and reduce inequality by 2030, which is briefly summarised by the NPC (2011:10) as:

“In 2030, the economy should be close to full employment; equip people with the skills they need; ensure that ownership of production is less concentrated and more diverse (where black people and women own a significant share of productive assets); and be able to grow rapidly, providing the resources to pay for investment in human and physical capital.”

Focus areas include faster economic growth and higher investment and employment, as well as strengthening links between social and economic strategies and building collaboration between private and public sectors (National Planning Commission, 2011). Realising this vision requires amongst others a strong focus on public infrastructure investment, densifying cities, improving transport and building a society that minimises travel time between the workplace and home (National Planning Commission, 2011).

2.2 South Africa’s need for additional infrastructure funding

In accordance herewith R22.9 billion is budgeted for upgrading commuter rail services and R143.8 billion on municipal infrastructure over the three years following the 2014 budget (Gordhan, 2014). The municipal infrastructure budget for the three years following the 2015 budget was increased to R145.5 billion (Nene, 2015), demonstrating a growing commitment to infrastructure expenditure in South Africa.
South Africa however had a budget deficit of four per cent in 2013/14 (National Treasury, 2014) and three point nine per cent in 2014/15 (National Treasury, 2015). This budget deficit is still expected to exist in 2017/2018, despite it narrowing to two point five per cent by then (National Treasury, 2015). As a result, alternative funding sources are needed to finance the required infrastructure. Internationally such alternative funding has been raised through the concept of Value Capture.

2.3 Value Capture

2.3.1 Defining Value Capture

Value Capture broadly describes the process whereby public authorities extract additional value accruing to a property because of public investment, in order to effect or fund a public purpose (McGaffin, Napier & Gavera, 2013). The value that the term refers to may include the financial value of rising land value, as well as the achievement of planning and developmental objectives such as densification of urban areas or inclusionary housing programmes (Rodriguez & Mojica, 2008).

In essence, extracting monetary value from land through Value Capture comprises of four stages (McGaffin, Napier & Gavera, 2013):

- creation of additional property value
- calculating the additional value created
- capturing the value
- using the funds for public purpose

2.3.1.1 Creation of additional property value

Because Value Capture is aimed at extracting the incremental land value that is created by infrastructure investment, it goes without saying that any such project is dependent on the land value actually increasing – and hopefully being maximised.

The value of land is maximised when the land is developed to its highest and best use. The Appraisal Institute (2008:278) defines the highest and best use of land as “the reasonably probable and legal use of vacant land or an improved property that is legally permissible, physically possible, appropriately supported, financially feasible, and that results in the highest value”.

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This definition of highest and best use highlights several factors that influence and set upper limits for the use of the land. The use must be legally allowed, the physical characteristics of the land and its surroundings must be such that the intended use is possible, and sufficient market demand needs to exist for the type of land use so that it can be developed and sold or leased into the user market. Within these constraints there might be several possible uses for any land, but the highest and best use is the single use that would result in the highest value.

In order to realise any potential value of land, the land would have to be developed. A valuation method for land with development potential is required when determining the land values realisable in the various possible uses. The residual method of land valuation is typically used in valuing land with development potential (RICS, 2008; Appraisal Institute, 2008). The residual method calculates land value by deducting all development costs required for realising the intended use from the value of the completed development (Appraisal Institute, 2008). The cost of land is excluded from development costs in this calculation, as it is the variable that one aims to calculate. In simple terms residual land value is equal to what is left after all other costs are deducted from a development project’s income.

2.3.1.2 Examples of infrastructure leading to higher land value

Public infrastructure assists with the movement of people and resources between neighbouring areas – creating accessibility and amenity for land (Kastrounia, Heb & Zhangc, 2014). The improved accessibility and amenity brought about by infrastructure investment is generally thought to be a driver of land value increase (Dorantes, Paez & Vassallo, 2011; Rodríguez & Mojica, 2009). Investment in public infrastructure may improve the highest and best use of land by raising its physical limitations and improving the market demand for land use in the areas near the infrastructure (Smith & Gihring, 2006).

Improving transportation infrastructure enables more profitable land use, leading to regional economic growth (Chen, 2015), improved agricultural output (Tong et al., 2013), production growth (Cohen & Paul, 2007) and improved industrial output (Moreno & López-Bazo, 2003). Several studies showed that access to transport infrastructure and transport stations positively influences the values of retail, office and residential properties (Efthymiou & Antoniou, 2013; Dorantes, Paez & Vassallo, 2011;

There are however environmental, social and economic components to the positive effects that sewers, highways and other public infrastructure create – making it difficult to measure the positive effects (Lemer, 1999). The percentage of value increase attributed to new infrastructure investment is furthermore difficult to determine in relation to other factors that might also drive value changes (Debrezion, Pels & Rietveld, 2007; Banister & Thurstain-Goodwin, 2005).

Land value increase however relies heavily on how well the opportunity for value increase is managed by the person controlling the land (McGaffin, Napier & Gavera, 2013). This study therefore does not focus on value increase that might potentially be created when infrastructure investment takes place, but looks to when the person controlling the land acts upon the potential. Value increase might be determined more accurately when rights are acquired to develop land to a more profitable use. This might be done by calculating the difference between the residual land value of the proposed development and the current use property value (ignoring the potential for development). Accordingly, the focus of the literature review shifts towards land development – which changes land use from its current to a more profitable type of land use.

### 2.3.2 Examples of successful development Value Capture

The literature offers many examples of where incremental land value, brought about by developing land to a higher use, was successfully captured to finance public infrastructure investment. Examples from Egypt, Columbia, China, India and Brazil are discussed to illustrate the concept.

#### 2.3.2.1 Egypt – New Cairo

In New Cairo a 3360 hectare development was undertaken to provide much needed property, to accommodate Egypt’s growth. The development, called Madinaty, was undertaken by the Alexandria Company for Urban Development, who was given free desert land by government in return therefor that the developer will install internal infrastructure valued at £E110 per square meter and external infrastructure valued at £E127 per square meter (World Bank, 2006a; World Bank, 2006b). The developer
furthermore provided the state with low-income houses equal to seven per cent of the total development costs.

2.3.2.2 Bogota - Columbia

A concept called valorización was administered in Colombia, combining elements of benefit capitalisation and cost recovery (Peterson, 2009). Land parcels that were located in districts where re-zoning for higher density or conversion of land from rural to urban use had been approved, could have been subject to a betterment levy of between 30 and 50 percent on the price increment that a landowner enjoyed as a result of the planning authorisation. Payment of the levy was due when the value gain was realised, i.e. when the land was sold or developed.

Between 1997 and 2007 Bogota financed 217 public works projects such as street, bridge, and drainage improvements through valorización (Rojas Rojas, 2007; Saldies Barrenocha, 2007). The mayor of Bogota furthermore announced plans to raise Col$2.1 trillion or US$1.1 billion to finance citywide infrastructure improvements between 2008 and 2015 through valorización (Peterson, 2009).

2.3.2.3 China - Changsha

Changsha, China offers an example of maximising the leverage of land values into infrastructure (Peterson, 2009; Peterson, 2007). A six-lane highway costing about US$730 million was projected in 2001. The municipality used a public-private joint venture company listed as the Ring Road Corporation on the Shanghai Stock Exchange, and financed the total cost of the highway at a zero out-of-pocket cost.

The municipality transferred land-use and development rights for 200m wide land strips on both sides of where the highway was planned to the Ring Road Corporation, totalling about 3300 hectares. Before the highway, only about 1200 hectares thereof had significant market value form existing infrastructure access and development approvals. Roughly half of the highway’s cost was financed upfront through the sale of leasing rights to the land with infrastructure services. Remaining land would have been sold once the highway was built and market value thereof was increased. The public land served as collateral for financing the remainder of the project.
2.3.2.4 India

In 2006 the Indian prime minister authorised an investment plan of about US$10 billion for modernising the country’s airports (Peterson, 2009). More than seventy five per cent of the costs would be financed by public-private partnerships, where private partners had the responsibility of managing the airports. The most of airports’ revenue does not come from aviation activities, but comes from using the land that surrounds the airport for non-aviation activities such as hotels, restaurants, convention centres and commercial-industrial centres (KPMG, 2008).

Land for these airport developments was contributed to the partnerships mainly by the government, who acquired land by means of compulsory acquisitions. This raises issues relating to the use and justification of compulsory acquisitions of land – known in South Africa as expropriation – and the standards used in determining the market based compensation in such cases (Peterson, 2009).

2.3.2.5 Brazil - São Paulo

Incremental land value generated by infrastructure projects can be captured by selling rights to convert rural land to urban land, and by selling rights to build at greater densities than would normally be allowed (Peterson, 2009).

Certain areas in São Paulo, Brazil were earmarked for development, and within these areas development rights – called Certificates of Additional Construction Potential bonds – were sold upfront to finance the infrastructure required to service the areas (Sandroni, 2010).

In the 410 hectare development area of Faria Lima land values rose from around US$300 per square meter before public development, to US$7000 per square meter thereafter. The municipality offered development rights to construct 2.25 million square meters of floor space. These rights sold for prices up to US$630 per square meter of allowable floor space. Between 2005 and 2009 approximately 42 percent of the envisioned floor space construction stock was sold, generating a total of US$190 million in revenue to finance infrastructure for the district.

This approach demonstrates the concept of government creating land value potential by granting the right to add floor space beyond normal zoning restrictions, and thereby capturing a large part of the value before it is realised (Peterson, 2009).
The abovementioned examples all demonstrate Value Captures’ dependency on first creating additional land value, before it can attempt to capture it. Enabling property developers to develop land with development potential can therefore be seen as an important factor in the success of a Value Capture program.

2.4 Ownership constraints to land development

Developers might however be prevented by landowners from developing land with development potential. Owners of property rights in land hold powerful positions in urban redevelopment programmes, which they could use to pursue their own goals (Muñoz Gielen, 2010). This section of the literature review specifically aims to determine the role that land ownership plays in developing urban land to higher and better use.

A determining factor in the success of any land development project is land assembly, which involves acquiring ownership of the land and removing any existing limited real rights in the land that might be able to prevent development (Adams & Hutchison, 2000; Gore & Nicholson, 1991). The feasibility of redevelopment projects can be harmed by costs and delays in the land assembly stage of a development project (Adams & Hutchison, 2000).

Ownership constraint happens when land development cannot proceed because the necessary ownership rights cannot be acquired fast enough through normal market processes (Holtslag-Broekhof et al., 2014; Adams & Hutchison, 2000). Adams and Hutchison (2000) conducted an extensive empirical study on ownership constraints in eighty potential large redevelopment sites in Britain. The study revealed that ownership constraints disrupted use, marketing, development or purchase in 64 of the 80 sites researched between 1991 and 1995. Adams et al. (2001) demonstrate that ownership constraints to developing a site may either arise because of deficiencies and limitations to the extent of ownership rights in the land, or because of strategies, interests and actions of people who hold the rights.
2.4.1 Classification of ownership constraints

Ownership constraints can be divided into five categories (Adams et al., 2001; Adams & Hutchison, 2000). The five categories are:

- Ownership is unknown or unclear
- Ownership rights are divided
- Assembly of land and ownership rights is required for development
- Owners are willing to sell, but not on terms that potential purchasers can accept
- Owners are unwilling to sell

2.4.1.1 Ownership unknown or unclear

In the first category of ownership constraint, title deeds may be incomplete or missing, or the ownership of land may be in dispute (Adams et al., 2001). This would have the effect that the developer would not know with whom to contact in order to acquire ownership rights – stalling or even preventing development.

South Africa has an established deeds registry system, which in most cases rules out this category of ownership constraint in the South African land development market (Deeds Registry Act, No. 47 of 1937, as amended, 2006).

2.4.1.2 Ownership rights divided

Property ownership is said to be a basket of rights, containing all the possible legal entitlements to land that exist (Badenhorst, Mostert & Pienaar, 2006). An owner might however cede some of these rights to other people, who then obtain a limited real right in the land. The owner of land must allow the holders of limited real rights to exercise their rights in the land (Van der Walt & Pienaar, 2009).

As redevelopment of land is likely to interfere with the exercise of limited real rights, such rights have to proverbially be put back into the basket by re-acquiring them from their respective holders. Re-acquiring the limited real rights in land is the second category of ownership constraints that hinders redevelopment of land (Adams et al., 2001).

In South African Property Law limited real rights include praedial and personal servitudes granted over land or acquired by means of use, express security held over
land such as mortgages, and tacit security such as hire purchase and lessor’s hypothecs and builders’ lien (Mostert & Pope, 2010; Badenhorst, Mostert & Pienaar, 2006). Land use rights may also have been leased out. These rights are enforceable by their holders, who might prevent developers from using the land for development. Re-acquiring all these rights would be necessary before development could safely take place, during which time the feasibility of developing the land might lapse.

2.4.1.3 Ownership assembly required for development

The third category of ownership constraints found by Adams et al. (2001) relate to the assembly of multiple pieces of land for a development site.

Adams et al. (2001) describe what they call a ransom strip; a piece of land that is too small to be developed on in isolation, but that is essential for the development of adjacent land – as it provides access from the development site to a public road.

A site might also have to be assembled from multiple pieces of land that belong to different owners. Where a developer buys out multiple pieces of adjacent land, the last owner to sell his land to a developer is afforded an exceptional strong bargaining position (Swope et al., 2011). Adams et al. (2001:468) note about this category of ownership constraint, that while more profitable developments afford developers greater leeway to bargain for land purchase, it is often exploited by sellers of land to “extract even higher payments from any developer”.

When sellers initially withhold selling their property in order to sell it and bargain for more money later in the land assembly process, it is termed holdout (Mailath & Postlewaite, 1990). Miceli and Segerson’s (2012) model for holdout predicts that unsold land prices will rise as the land assembly process progresses, and that the final seller will receive the highest price.

Such strategic delay in selling leads to inefficient allocation of land (Menezes & Pitchford, 2004) and may prevent or significantly delay development of land (Plassmann & Tideman, 2007). The model of Miceli and Segerson (2012) identifies holdout problems, which include that the sum of the prices paid for the various land parcels may exceed the value of the project to the buyer, which causes that some efficient projects may have to be foregone. The holdout problem furthermore raises development cost, creating urban sprawl because developers tend to favour sites on
the urban fringe where ownership is less dispersed and lot sizes are larger (Miceli & Sirmans, 2007; Miceli & Sirmans, 2004).

Although Plassmann & Tideman (2007) would prefer that private bargaining should be used to attain efficient land assembly, Adams et al. (2001) found that holdout as a form of ownership constraint is difficult to resolve without prospects for lucrative commercial development or government intervention. Results from an experimental study by Swope et al. (2011) suggest that government subsidy or compulsory acquisition might be required to overcome the holdout problem. Miceli and Sirmans (2007) also support government’s forced taking of land as a method of enabling developers to overcome the holdout problem and acquire land in city centres. Miceli and Segerson (2012) support the notion that compulsory taking might be necessary, especially where the sellers are able to judge with certainty that the buyer is committed to purchasing the land.

2.4.1.4 **Owner willing to sell on unacceptable terms**

The fourth category of ownership constraints found by Adams et al. (2001) is where sellers place unacceptable terms on the sale of their land, which include restrictive conditions of sale and unrealistic price expectations.

Unrealistic price expectations could include setting too high asking prices for land, or holding unrealistically high expectations of the land’s value and refusing to entertain offers below that expected value. A seller’s perception of value might also be based on historical values that fail to adjust for economic decline (Adams et al., 2001).

Owners might also be unwilling to sell below book valuation or acquisition cost (Howes, 1989), possibly reflecting a reluctance to accept that sunk costs have no market value and are not recoverable when exiting the property investment (Mata, 1991). Three categories of sunk costs in land transactions are set-up costs that reflect the initial capital investment, accumulated sunk costs that reflect the normal costs of conducting business, and sunk costs upon exit (Clark & Wrigley, 1995).

In the study conducted by Adams et al. (2001) on eighty large development sites in Britain, twenty-one sites were affected by owners setting unrealistic conditions upon the sale of their property. In seventy four per cent of the instances where this type of
ownership constraint was found, it caused significant or very significant disruption to the development.

2.4.1.5 Owner unwilling to sell

The last category of ownership constraints found by Adams et al. (2001) is where the owner is not willing to sell the land to a developer. This category of ownership constraint disrupted twenty-nine of the eighty sites researched, causing significant or very significant disruption in eighty per cent of the instances where it was present. The disruption was mainly attributed to owners retaining land for continued occupation or for developing the land themselves at a later stage. Delayed marketing because of uncertainty or because of speculation also caused constraint in some cases. In five of the cases land was retained for no specific purpose (Adams et al., 2001).

Landowners do not respond equally to the development and profit opportunities that their land offers. The main reasons why owners wish to retain ownership of land is to occupy it, to hold it for investment purposes, to make the land available to others on a non-profit basis or for control (Goodchild & Munton, 1985). Retention for control specifically aims to prevent development of land, possibly to protect land’s amenity, preserve a view, maintain a historical connection, or act as a buffer between own and neighbouring uses (Adams et al., 2001; Moss, 1981).

Retention for eventual own development might see land underutilised for many years (Adams et al., 2001). Manufacturing owner-occupiers are likely to retain land for possible development many years into the future, so that space is available in case their operations need to expand. It is however difficult to distinguish whether owners who retain land for subsequent development do so because of a long-term investment strategy or as a precaution (Adams et al., 2001). Retention for subsequent sale could be because of indecision caused by the seller’s bureaucratic decision-making structures, or because it will be more advantageous to sell at a later stage because of considerations such as the seller’s tax position (Adams et al., 2001; Goodchild & Munton, 1985). Tax considerations likely to influence a seller in South Africa include estate duty and capital gains tax (SARS, 2015).

Selling land involves risk, uncertainty and transaction cost for the seller (Evans, 1999). Sellers might keep their land off the market because they are uncertain about the
marketability and value of the land, or because they are uncertain about their own future needs (Howes, 1989).

Land may also be retained for speculative purposes, hoping to get more money by selling at a later stage. This either entails a passive approach – holding land in the hope that land market values will rise, or an active rent-seeking approach where owners try to increase the site value by pursuing planning permission for higher and better use (Adams et al., 2001; Benson, 1984).

Inertia – doing nothing with land – could also be encountered as a constraint where small portions of land are owned by entities for whom the opportunity cost of keeping the land dormant is better than devoting the time, effort and cost necessary for selling the land (Adams et al., 2001).

2.4.2 Resolving ownership constraints

Adams and Hutchison (2000) argue that although most ownership constraints might be resolved over a period of time, the time and resources that it requires could prevent redevelopment. The property development market cycle affords short windows of opportunity for many proposed development sites (Barras, 2005), which might be missed altogether because of delays caused by ownership constraints. In such cases, sites could potentially remain underutilised until the next upturn in the development cycle or even longer, because of ownership constraints.

The literature review shows that ownership constraints applicable to South African land development could be caused by division of ownership, difficulty in assembling land and land rights for development, owners placing unacceptable conditions and prices on the sale of their land, or owners simply refusing to sell their land.

Based on South Africa’s need for infrastructure funding and the value capturing potential that is realised when land is developed to higher and better use, it is worth researching whether the South African legal framework offers developers opportunities to overcome these ownership constraints. One might narrow this down to asking whether the development promoting principles found in mineral rights legislation can be applied to non-mineral land, to enable developers to develop land without being constrained by landownership. The next chapter will outline the methodology followed in answering this research question.
3 RESEARCH METHODOLOGY

This section sets out the research paradigm within which the research will be conducted, as well as the research strategy that will be used to answer the research questions.

The research questions to be answered are:

- *How does landownership prevent real estate developers from developing land and maximising land value in South Africa?*
- *Can the development promoting principles from mineral rights legislation be applied to non-mineral land, to enable developers to develop land without being constrained by landownership?*

The literature review conducted in this study has already answered the first research question, while the answer to the second question can be found by conducting an appropriate research study. The nature of the second question is seated firmly in the legal domain, and research of a legal nature will have to be conducted to answer it.

3.1 Research paradigm

The research paradigm is set by describing the ontological and epistemological position of the researcher in terms of the topic. Ontology describes the nature of the phenomenon being researched, while epistemology describes the nature and basis for acquiring knowledge about the topic – especially referring to the limits and validity of such knowledge. The methodological approach that is typically used for studying legal topics is also presented.

Typical legal analysis relates more to the subjective, argument-based methodologies of the humanities than to the detached, data-based analyses of the natural and social sciences (Bhattacherjee, 2012; Chynoweth, 2008). Legal research is a new phenomenon in the built environment, compared to other built environment disciplines such as management, economics, law, technology and design (Chynoweth, 2008). When critics from these other disciplines evaluate legal research, they should be careful to evaluate it as legal research and should not unduly try to mould it into the paradigms and methodologies associated with their disciplines (Bedulskaja, 2014; Dobinson & Johns, 2007).
3.1.1 Ontology
The ontology of law describes the underlying assumptions of what the law is and what law consists of (Engle, 2008). Reality in the legal domain consists of shared beliefs about valid legal norms. A valid legal norm is a social and conventional fact that exists because society mutually believe in it and shape their behaviour according to it (Aarnio, 2011).

The most common ontological view on law simply divides reality into either legal rules or cases (Valente & Breuker, 1994). Knowledge about law therefore simply relates to what the legal rules are, and how they apply to specific cases.

3.1.2 Epistemology
In order to gain knowledge about the law, a researcher interprets the mutual beliefs about valid legal norms and combines beliefs into a coherent whole (Aarnio, 2011). At an epistemological level, typical academic legal research is defined as a normative process of doctrinal analysis (Chynoweth, 2008).

Doctrinal legal research is placed within the humanities research tradition, because the methodologies typically used in doctrinal legal research correspond to those used in the humanities (Hutchinson, 2010; Northrop, 1947). It makes use of interpretive, qualitative analysis (Hutchinson, 2010; Chynoweth, 2008). This differs epistemologically from the type of questions asked by empirical investigators in other built environment research areas, such as management, economics, law, technology and design disciplines (Bhattacherjee, 2012; Chynoweth, 2009; Chynoweth, 2008).

Legal rules are normative in character, dictating and prescribing how people ought to behave – as opposed to any attempts to explain, predict, or understand how people behave (Kelsen, 1967). In doctrinal research the researcher acts as a participant in creating knowledge by searching for legal rules and arguing how it should apply (Hart, 2012). It can therefore be described as research in law, as opposed to research about law (Arthurs, 1983).

Doctrinal research asks ‘What is the law?’ in particular contexts, in order to discover and develop legal doctrines for publication in academic works (Hutchinson & Duncan, 2012). Scholastic arguments are developed, to subsequently be criticised and reworked by other scholars (Chynoweth, 2008).
3.1.3 Axiology

Axiology is the science of moral choice and fundamental values – seeking to determine whether research is value biased or value neutral (Grix, 2010).

Doctrinal legal research is normally expected to be subjective and value-biased, because the application and interpretation of legal rules in any given situation is based on reasoning and logic – much similar to the humanities (Engle, 2008).

3.1.4 Summary of research paradigm

Ontologically the phenomena to be studied are legal rules and cases. Epistemologically the knowledge about the phenomena relates to what the legal rules are and how the legal rules apply to specific cases. The axiology of the research can be classified as value biased and subjective.

3.2 Methodology

Methodology – the study of research methods and their use – is concerned for any particular research project with how it should be conducted (Grix, 2010). As shown in the ontology and epistemology sections, doctrinal legal research will be required for this study. This section will discuss the methodology, focussing on answering what is typically done in doctrinal legal research projects, and why this is done. In the section after this one, a research design is provided that is able of conducting doctrinal legal research.

Doctrinal legal research involves developing scholastic arguments to be subsequently criticised and reworked by other scholars (Hutchinson & Duncan, 2012; Chynoweth, 2008). Any so called methodologies in legal research are at most employed subconsciously by scholars and lawyers, who consider the process to be an exercise in logic and common sense, rather than the formal application of methodology expected by typical scientific researchers (Chynoweth, 2008). Lawyers would typically answer ‘what is the law?’ for real and well-defined situations, while legal scholars would typically answer it hypothetically for a class of situations in order to inform practitioners’ deliberations in the future (Hutchinson & Duncan, 2012).
This study will go about answering the question of what the applicable law is and what the outcome might be when a developer wants to acquire land for development, while the owner of the land is unwilling to sell or demands an unrealistic sales price.

Such legal reasoning typically involves applying a legal rule to a factual situation by means of deductive logic, as discussed by MacCormick (1978). The formula $R + F = C$, or Rules plus Facts yield a Conclusion can be used to summarise this process. First a general rule is identified, which prescribes a certain outcome if particular facts are present. An example of a legal rule is ‘If a person drives a vehicle on a public road between one and five kilometres per hour faster than the speed limit, he should pay a fine of R300; and if between six and ten kilometres per hour faster than the speed limit, he should pay a fine of R700’. Second the factual situation in question is described. In this example a person might have been caught driving 68km/h in a 60km/h zone. Conclusion is then drawn on whether the rule applies to the facts in the particular situation, and whether the prescribed legal outcome should accordingly take effect (MacCormick, 1978). The fact in this example is that the person was driving 8km/h faster than the speed limit. The conclusion reached is that the second rule is therefore applicable – prescribing that he should pay a fine of R700, which he is accordingly obliged to do. Following this deductive logic process, the study will find legal rules from relevant acts of parliament and apply it to the hypothetical situation of acquiring land for development.

This deductive logic model will however often be inadequate to produce a conclusive answer on what the law and applicable outcome is in complex situations (Hart, 2012). This is because legal rules are expressed in general terms capable of several interpretations – requiring further analysis. Where such further analysis is required, judicial decision makers are guided by the social conventions within the legal community, known as the rules of legal discourse (Bell, 1986). Such further analysis involves verbally manipulating the available sources of law, intending to solve the legal problem by discovering the underlying logic and structure of the rules and how they should be applied (Smith, 2009). This verbal manipulation of legal rules represents the dominant paradigm for legal scholarship and practice, despite academic criticism of its assumptions (Chynoweth, 2008).
The study will accordingly require a research design that is able to find and verbally manipulate legal rules, in order to propose feasible solutions for when developers want to acquire land that owners are not willing to sell, or land for which landowners ask too high a price.

3.3 Research design

In order for the research to be recognised as a contribution to knowledge, the research design and research outcome must be deemed to have been reliable and valid.

3.3.1 Validity

Scientific research in natural and social sciences collects empirical data as a basis for developing or testing theories; where research validity is based on whether the investigation process that was followed measures the correct constructs (Bhattacherjee, 2012). The validity of doctrinal legal research findings is however unaffected by the empirical world (Chynoweth, 2008).

Because of the normative character of the law, the validity of doctrinal research does not rely on an appeal to any external reality, but inevitably rest upon developing a consensus about the findings within the scholastic community (Chynoweth, 2008). Doctrinal research can therefore be seen as a step in the direction to consensus on a doctrine, and is accordingly expected to generate discussion and criticism within the legal community. Validity of the research will therefore only be revealed in time, as other legal scholars respond to the research.

3.3.2 Reliability

Reliability is concerned with the consistency of research findings – asking whether similar observations would be made by other researchers that have similar methodological training, similar understanding of the research setting and similar rapport with the members of the research setting (Stebbins, 2001).

As stated earlier, legal analysis is not dictated by a ‘methodology’ in the same sense as the term is used in the sciences. It rather involves reasoning, using a variety of techniques to construct a convincing argument according to accepted, instinctive conventions of discourse within the discipline (Hutchinson & Duncan, 2012). Credibility is thus dependent on the researcher demonstrating that he understands and adheres
to accepted conventions and norms of legal discourse (Chynoweth, 2008). This is achieved by applying recognised patterns of reasoning that exist in the legal community, to supplement the deductive model. One such pattern of reasoning is analogical legal reasoning, which involves examining previously resolved court cases that are apparently similar, to determine whether the specific factual situation falls within the ambit of a rule (Hart, 2012). Another is inductive legal reasoning – which creates general rules from specific previously resolved cases to supplement legal reasoning (MacCormick, 1978).

3.3.3 Research method

Doctrinal legal research is a qualitative type of research that is done to analyse the complex legal environment. Legal discourse is a commonly used method of conducting doctrinal legal research within the complex legal environment (Freeman & Farley, 1996). Legal discourse will therefore be used to collect and analyse data for this study.

This section provides an understanding of what legal discourse is and how it is done – bearing in mind the notion stated earlier that most legal scholars consider the legal research process as an exercise in logic and common sense, rather than the formal application of methodology. An understanding of what legal discourse is and how it works, will not only guide the researcher in conducting the study, but will also enable the reader to appreciate that appropriate procedures are indeed followed by the researcher.

Legal discourse is a writing process that creates knowledge by writing about legal rules and their application in hypothetical cases and situations that have not yet occurred (Rideout & Ramsfield, 1994; Berthoff, 1981). It serves as an independent source of knowledge, because it alters and enriches the nature of legal thought with new connections and ideas about the law and its application (Kissam, 1987). Freeman and Farley (1996) model legal discourse as an information structure where arguments are presented by connecting claims with supporting data, and also as a dialectical process where opposing sides alternate in presenting their arguments. It can be described as a conversation between the student as a reader and as a writer – negotiating meaning through a series of argument statements about the law, the legal context and the hypothetical situation (Berger, 1999; Scardamalia & Bereiter, 1985).
Accordingly, this study will engage in a writing process with the intent of stating the law and developing new connections and ideas about how it is applicable to the hypothetical case of developing property and acquiring land for development, when a land owner refuses to sell or demands an unreasonable price.

Legal writers should reason on paper so that their conclusions are self-evident and necessary (Jaff, 1986), which can be done by formulating and arguing a thesis (Volokh, 1998). A thesis statement is an original, supportable assertion about a topic – articulating a problem and targeting a specific aspect of the law with the intent to resolve the problem (Lambert & McLamb, 2013). A hypothetical case could be developed and argued to demonstrate how the law applies and what the outcome should be, if ever such a case were to present itself in the future. This study will accordingly formulate and argue a thesis statement and hypothetical case in a written legal discourse.

Volokh (1998) provides the process to follow in constructing a legal discourse:

- The first step is to concretely show that there is a problem, to which the study should present a novel, non-obvious and useful claim about the law that could resolve the problem.
- Secondly the background facts and legal doctrines applicable to the claim should be provided.
- In the next step the proof for the claim must be presented; proving the claim on doctrinal and policy levels, and demonstrating that it is practical and morally sound. Theoretical arguments must be demonstrated with concrete examples from real cases and realistic hypotheticals.
- Lastly any interesting implications and twists that arise from the discourse should be connected into the existing broader academic debates on the topic, in order to derive a useful solution to the problem statement.

This process of legal discourse is applied in the following chapter of the study.
4 RESEARCH ANALYSES AND FINDINGS

The legal discourse described in the research methodology chapter is applied in this chapter.

In accordance with the methodology, the introduction section demonstrates the problem, and presents a novel, non-obvious and useful claim about the law that could resolve the problem.

4.1 Legal discourse – step one: Introduction

It has been demonstrated in this study that South Africa is committed to significant investment in public infrastructure over the coming years, for which it has to explore additional sources of financing. The literature review has shown that Value Capture is a possible option for financing South Africa’s public infrastructure. It was also demonstrated in the literature review that Value Capture is dependent on maximising land value through development. The literature review also showed that ownership constraints to property development could prevent maximisation of land value, which limits the Value Capture opportunities that might be utilised to finance infrastructure in South Africa.

Ownership constraints to developing a site may arise because of deficiencies and limitations to the extent of ownership rights in the land, or because of strategies, interests and actions of people who hold the ownership rights (Adams et al., 2001). Five categories of ownership constraints were shown to exist in the literature, of which four categories were applicable to South Africa. One such constraint is that ownership rights in South African land might be divided because of lease agreements, praedial and personal servitudes granted over land or acquired by means of use, express security held over land such as mortgages and tacit security such as lessor- and hire purchase hypotheccs and builders’ lien. The opportunity to develop specific land might pass while a developer has to try and re-assemble and re-acquire all these rights before development could take. As a developer tries to assemble adjacent pieces of land, sellers that hold out the sale of their land gain bargaining power. This ownership constraint can drive the total land price of a development so high that development becomes unfeasible. Another ownership constraint is restrictive sale conditions and
unrealistic price expectations that could prevent developers from acquiring developable land. Owners might even be unwilling to sell their land altogether.

A solution to these ownership constraints is proposed, because land development is desirable within the context of funding South Africa’s infrastructure through Value Capture. It is accordingly necessary to determine what opportunities the South African legal framework offers developers to overcome ownership constraints to land value maximisation.

The problem can be summarised as “Landownership rights can prevent real estate developers from developing land to its highest and best use, which constrains land value and limits the Value Capture opportunities that might be utilised to finance infrastructure in South Africa”.

The problem would be resolved if the South African legal framework offered developers opportunities to acquire and enforce the right to develop land without being constrained by landownership. Mineral rights offer principles that promote land development and overcome ownership constraints. Therefore, as a solution to the problem, this discourse will argue the claim that “The development promoting principles found in mineral rights legislation can be applied to non-mineral land, which enables developers to develop land without being constrained by landownership”.

4.2 Legal discourse – step two: Background facts and legal doctrines

In order to establish the context within which the claim is made, this section provides background information on the facts and legal doctrines that apply to property ownership rights and the regulation of property development. It also describes how mineral rights legislation overcomes ownership constraints in developing land to its highest and best use. National policy and national objectives on land with development potential is also described.

4.2.1 How is development regulated

In absolute terms, property is best described by the Roman Law concept of *dominium*. *Dominium* includes all the possible rights that a person could own over a thing: *usus* (the right to use the thing), *fructus* (the right to the fruits of the thing) and *abusus* (the right to dispose the thing) (Van der Walt & Pienaar, 2009).
Dominium over land grants the holder thereof the right to do whatever he wants to on, under or above his land (Mostert & Pope, 2010). When dominium is unrestricted, the owner would absolutely be able to decide what to do with his land – the ‘an’ (whether to do or not to do), the ‘quomodo’ (how, in which way, what for), the ‘quantum’ (how much) and the ‘quando’ (when) (Van der Walt & Pienaar, 2009).

Property rights in land ownership are however restricted in almost all countries with mature legal systems (Needham, 2006). Both private law and public law restrict the exercise of rights in land. Private law regulates the relationship between individuals in terms of their property, while public law regulates the relationship between the government and individuals in terms of their property (Badenhorst, Mostert & Pienaar, 2006). Public law allows the state to impose restrictions on the use of land rights, and also to compulsorily take away land rights from the holder thereof (Mostert & Pope, 2010; Needham, 2006).

In South Africa the use of land and the development thereof is primarily regulated by the Spatial Planning and Land Use Management Act, number 16 of 2013 (SPLUMA, 2013), which came into effect on 1 July 2015. The act provides a “system of regulating and managing land use and conferring land use rights” (SPLUMA, 2013:1(1)). The purpose of determining the use and development of land within a municipal area is to promote economic growth, social inclusion and efficient land development, and also to minimise the impact of development on public health, on the environment and on natural resources (SPLUMA, 2013:25(1)(a)-(d)).

The act imposes restrictions on the use of land rights (SPLUMA, 2013:3), with the object to:

“(a) provide for a uniform, effective and comprehensive system of spatial planning and land use management for the Republic;

(b) ensure that the system of spatial planning and land use management promotes social and economic inclusion;

(c) provide for development principles and norms and standards;

(d) provide for the sustainable and efficient use of land;

(e) provide for cooperative government and intergovernmental relations amongst the national, provincial and local spheres of government; and
The restrictions are imposed by means of land use schemes, which must be adopted by all municipalities. A land use scheme essentially includes a map that indicates the zoning of land parcels within the municipal area, and “regulations setting out the procedures and conditions relating to the use and development of land in any zone” (SPLUMA, 2013:25(2)(a)-(c)). Land may only be used according to its specific zoning.

A land use scheme must “give effect to and be consistent with the municipal spatial development framework” (SPLUMA, 2013:25(1)). In section 12 (1) of SPLUMA (2013) a spatial development framework (SDF) is defined as a policy document that interprets and represents the spatial development vision of the government, in order to guide planning and development decisions and guide spatial planning and land use management. In essence it is a holistic policy document that guides decisions made regarding land use restrictions, in order to achieve the outcomes desired by government and society as a whole.

According to SPLUMA (2013:26(2)(a)), land may only be used for the purposes permitted by a land use scheme. It is considered a punishable offence if a person “(b) uses land contrary to a permitted land use” or “(c) alters the form and function of land without prior approval in terms of this Act” (SPLUMA, 2013:58(1)).

Measures are in place for a municipality to enforce its land use scheme. These measures, stated in SPLUMA (2013:32(2)), include that:

“A municipality may apply to a court for an order-

(a) interdicting any person from using land in contravention of its land use scheme;

(b) authorising the demolition of any structure erected on land in contravention of its land use scheme, without any obligation on the municipality or the person carrying out the demolition to pay compensation; or

(c) directing any other appropriate preventative or remedial measure.”

4.2.2 Obtaining development rights

Land within a municipal area may typically be utilised for the 'land use' specified in the Land Use Management Scheme of that Municipality. Land use means “the purpose for which land is [used] or may be used lawfully in terms of a land use scheme, existing
scheme or in terms of any other authorisation, permit or consent issued by a competent authority” (SPLUMA, 2013:1(1)).

The act works on a restrictive basis. SPLUMA effectively works by approving or prohibiting the exercise of real rights that already exists in land – through granting or refusing development rights in terms of such real rights. No real right in land pertaining to land use or land development may be exercised without the corresponding use rights or development rights. If a person wishes to develop land, he would have to already hold such use right or development right in terms of legislation that preceded SPLUMA, or he would have to apply to the relevant public authority for development rights in terms of SPLUMA.

Development rights means “any approval granted to a land development application” (SPLUMA, 2013:1(1)). For the purpose of the act, land development includes “the erection of buildings or structures on land, or the change of use of land, including township establishment, the subdivision or consolidation of land or any deviation from the land use or uses permitted in terms of an applicable land use scheme” (SPLUMA, 2013:1(1)).

Applying for development rights essentially means applying to change the approved land use (commonly referred to as its zoning) on the Land Use Management Scheme (LUMS) to a more intensive type of land use. Land use is defined by SPLUMA (2013:1(1)) as “the purpose for which land is or may be used lawfully in terms of a land use scheme, existing scheme or in terms of any other authorisation, permit or consent issued by a competent authority, and includes any conditions related to such land use purposes”. Once the land use is changed to such a higher use, the land may accordingly be constructed or developed upon.

SPLUMA does however not only limit what land may be used for, but in conjunction with other laws also specifies who may use the land. SPLUMA (2013:45(1)) states that a land development application may be applied for by the owner of land, the owner’s duly authorised agent, or “a person to whom the land concerned has been made available for development in writing by an organ of state”:

“(1) A land development application may only be submitted by-
(a) an owner, including the State, of the land concerned;
(b) a person acting as the duly authorised agent of the owner;

(c) a person to whom the land concerned has been made available for development in writing by an organ of state or such person's duly authorised agent; or

(d) a service provider responsible for the provision of infrastructure, utilities or other related services."

SPLUMA (2013:1(1)) specifically defines land to include any real right in land – where the definition of land is “any erf, agricultural holding or farm portion, and includes any improvement or building on the land and any real right in land”.

Any person holding a real right in land would therefore be able to apply for the corresponding development right in terms of SPLUMA, which should be granted if it falls within the vision of the SDF and no sound public objection against the specified use exists.

A concept worth exploring arises if the definition of land is substituted into section 45 (1)(c) of SPLUMA (2013):

“A land development application may … be submitted by.”

“(c) a person to whom the land concerned [which is any erf, agricultural holding or farm portion, and includes any improvement or building on the land and any real right in land] has been made available for development in writing by an organ of state”

Although it was most likely not the intent of the legislature to create such a mechanism, this interpretation might point to a mechanism for acquiring the right to develop land from the government, as opposed to a private owner of the land. Such a mechanism would be useful in overcoming ownership constraints to development when a landowner refuses to sell, or demands an unreasonable price for the land. The question arises whether the state could actually intervene so that land or real rights in land are obtained without having to negotiate with the landowner for it, but by rather applying to government for it. Such precedent exists in the mineral and mining rights legislation, which will be discussed below.

4.2.3 Mineral rights – an example of acquiring development rights over another's property from the state

Mineral rights legislation offers an example of acquiring real rights in land by applying to the government, rather than negotiating with the owner of the land. In extreme cases, acquiring such rights would not even require the consent of the owner of the
land. The legislation that enables this acquisition of rights is accordingly discussed as part of the background information to the legal discourse.

4.2.3.1 Obtaining mineral rights

The Mineral and Petroleum Resources Development Act, number 28 of 2002, as last amended in 2008, has the purpose “To make provision for equitable access to and sustainable development of the nation's mineral and petroleum resources” (MPRDA, 2008:preface).

The act makes provision for parties to acquire real rights in land. These rights relate to the exploration for and the extraction of minerals and petroleum from the land, and the use of the land to facilitate such extraction. The act functions on the principle that “Mineral and petroleum resources are the common heritage of all the people of South Africa and the state is the custodian thereof for the benefit of all South Africans” (MPRDA, 2008:3(1)). The State, being the custodian of the nation's mineral and petroleum resources may according to the MPRDA (2008:3(2)(a)) “grant, issue, refuse, control, administer and manage any” rights in land that relate to prospecting for, mining of, exploration for and production of minerals and petroleum from the land. Such rights could include a prospecting right, a mining right, a mining permit, a retention permit, an exploration right, a production right, a reconnaissance permit or a technical co-operation permit (MPRDA, 2008). For the purpose of this discussion these rights will be referred to collectively as mineral rights.

Such a right that is granted in terms of MPRDA and registered in terms of the Mining Titles Registration Act, No. 16 of 1967, as amended (2003) is “a limited real right in respect of the mineral or petroleum and the land to which such right relates” (MPRDA, 2008:5(1)).

According to MPRDA (2008:5(3)) the holders of such rights may:

“(a) enter the land to which such right relates together with his or her employees, and bring onto that land any plant, machinery or equipment and build, construct or lay down any surface, underground or under sea infrastructure which may be required for the purpose of prospecting, mining, exploration or production, as the case may be;

(b) prospect, mine, explore or produce, as the case may be, for his or her own account on or under that land for the mineral or petroleum for which such right has been granted;
(c) remove and dispose of any such mineral found during the course of prospecting, mining, exploration or production, as the case may be;…

(e) carry out any other activity incidental to prospecting, mining, exploration or production operations, which activity does not contravene the provisions of this Act.”

The exercise of these mineral rights in land are prioritised over other surface rights – except for farming and land that has already been approved for township use by the minister of mineral affairs, as shown in MPRDA (2008:53):

“53 Use of land surface rights contrary to objects of Act

(1) Subject to subsection (2), any person who intends to use the surface of any land in any way which may be contrary to any object of this Act or which is likely to impede any such object must apply to the Minister for approval in the prescribed manner.

(2) Subsection (1) does not apply to-

(a) farming or any use incidental thereto; or

(b) the use of any land which lies within an approved town-planning scheme which has applied for and obtained approval in terms of subsection (1)”

In cases where the owner or holder of other surface rights suffers or is likely to suffer loss because of the exercise of mineral rights, the afflicted and the mineral rights holder should negotiate for due compensation to the afflicted. In the literature review it was shown that a landowner would typically receive a small portion of the value of the minerals extracted as a royalty. Where parties however fail to reach a compensation agreement, the minister has the power to “expropriate any land or any right therein and pay compensation in respect thereof” (MPRDA, 2008:55(1)) in order to enable the utilisation of the mineral right.

Because the MPRDA potentially provides for such a controversial application of property law, it is necessary to understand the objectives of the act and the context within which the act was passed.

4.2.3.2 Objectives of the MPRDA

The stated purpose of the MPRDA is “To make provision for equitable access to and sustainable development of the nation’s mineral and petroleum resources; and to provide for matters connected therewith” (MPRDA, 2008:preface).

The act actively promotes equitable access to mineral resources. Anyone willing and able to satisfy the requirements of the act is allowed to apply for mineral related rights;
not only the owner of land underneath which minerals are located. Applications are dealt with on a first-come-first-serve basis. Interested and affected persons have the ability to object to the granting of rights applied for. Assisting historically disadvantaged persons to conduct prospecting or mining operations is also promoted.

The act furthermore promotes sustainable development of mineral resources. Development is promoted by enabling interested parties to acquire mineral rights in suitable land, provided that mineral rights are not already held in the land. It fosters an environment where developing the land to its highest and best use is not hampered by land owners or other surface right holders who wish to utilise the land in a less profitable manner. Sustainability is promoted by imposing strict economic, environmental and social obligations on holders of mineral rights.

4.2.3.3 Background to the implementation of the MPRDA

The need for equitable access to and sustainable development of South Africa’s mineral and petroleum resources was determined through an elaborate legislation review process. The white paper on mineral legislation discusses the review and recent reform of mineral rights in South Africa, which was necessary because of changes that have come about in the country. It states that South Africa’s mining industry is one of the cornerstones of its economy, warranting a review of the legislation in order to prepare for challenges, problems and opportunities confronting the industry (White paper: A minerals and mining policy for South Africa, 1998).

The Mineral Policy Process Steering Committee was formed in 1995, mandated to “conduct an extensive consultative process to canvass stakeholder opinion for the preparation of a new minerals and mining policy for South Africa” (White paper: A minerals and mining policy for South Africa, 1998:2). The end result was a document with proposals on mineral policy, drafted after carefully considering a very broad range of views. This was edited into the Green Paper: Mineral Policy of South Africa - 3 February 1998. Further consultation followed, and based on the responses a draft white paper was prepared. Further amendments were requested by the Cabinet Committee for Economic Affairs, after which Cabinet approved the document as the White Paper: a Minerals and Mining Policy for South Africa on 23 September 1998.

The White Paper has six main themes: Business Climate and Mineral Development, Participation in Ownership and Management, People Issues, Environmental
Management, Regional Co-operation, and Governance. Each chapter and subchapter contains general background information to the particular issue, a policy objective stating the legislative intent, the different stakeholders’ views and the Government’s policy statements. The Business Climate and Mineral Development chapter considers policy that is conducive to investment. It includes a section on Mineral Rights and Prospecting Information, presenting changes to the system of access to and mobility of mineral rights. The Participation in Ownership and Management chapter examines racial and other imbalances in the industry. The People Issues chapter considers issues such as health and safety, housing needs, migrant labour, industrial relations and downscaling.

Based on the extensive findings of the white paper, the MPRDA was enacted, governed by the following principles (MPRDA, 2008:preamble):

“RECOGNISING that minerals and petroleum are non-renewable natural resources;

ACKNOWLEDGING that South Africa’s mineral and petroleum resources belong to the nation and that the state is the custodian thereof;

AFFIRMING the State’s obligation to protect the environment for the benefit of present and future generations, to ensure ecologically sustainable development of mineral and petroleum resources and to promote economic and social development;

RECOGNISING the need to promote local and rural development and the social upliftment of communities affected by mining;

REAFFIRMING the State’s commitment to reform to bring about equitable access to South Africa’s mineral and petroleum resources;

BEING COMMITTED to eradicating all forms of discriminatory practices in the mineral and petroleum industries;

CONSIDERING the State’s obligation under the Constitution to take legislative and other measures to redress the results of past racial discrimination;

REAFFIRMING the State’s commitment to guaranteeing security of tenure in respect of prospecting and mining operations; and

EMPHASISING the need to create an internationally competitive and efficient administrative and regulatory regime”.

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4.2.3.4 Enabling legal principles in mineral wealth legislation

From the discussion above, one can identify legal principles that specifically collaborate to enable and promote the development of mineral resources. These principles can be summarised as:

1. Development and utilisation of mineral wealth potential is desirable.
2. Development and utilisation of mineral wealth potential is prioritised over other less profitable land uses.
3. The state is custodian of mineral wealth, appropriating to interested parties the right to develop land for extracting mineral wealth.
4. Land value maximisation is stimulated in that if a landowner does not apply for and utilise mineral rights, such rights may be obtained and exercised by a party other than the landowner.

4.2.4 Comparing development of mineral and non-mineral land

The abovementioned principles are clearly not presently applied in the development of non-mineral land. This is demonstrated in a comparison between the development of mineral rich land and the development of non-mineral land. Topics used for this comparison are the desirability of developing the land, how the rights to develop the land are obtained and how the right to develop the land ranks in terms of other rights that might be held in the land.

4.2.4.1 Desirability of development

Both the white paper and the MPRDA demonstrate that the development of mineral rights is desirable. Some of the stakeholder views reflecting desirability of development in the White Paper (1998), are:

“The creation of wealth and employment is required for the economic empowerment of communities, both directly and through the multiplier effect. This is especially relevant in the underdeveloped regions of the country…”

New investors need opportunities for access to mineral rights...

Equitable access to all natural resources is required, based on economic efficiency and sustainability.”

Government accordingly responded to the desirability of development with policy objectives, stating that “Government will seek to create a macro and regulatory
environment conducive to economic growth and development, in which the mining industry can make effective use of its human and capital resources” and “Government will aim to lower barriers to entry to prospective new investors in the industry” (White paper: A minerals and mining policy for South Africa, 1998:1.4.1). This lead to the enactment of MPRDA in 2002, seeking “To make provision for equitable access to and sustainable development of the nation’s mineral and petroleum resources; and to provide for matters connected therewith” (MPRDA, 2008:preface). The desirability of development is evident, with the preamble of MPRDA (2008) also affirming “the State’s obligation … to ensure ecologically sustainable development of mineral and petroleum resources and to promote economic and social development”.

The objects of the Act also confirm the desirability of developing mineral and petroleum resources, which necessarily includes development of the land underneath which the resources are located (MPRDA, 2008:2):

“The objects of this Act are to-

(c) promote equitable access to the nation's mineral and petroleum resources to all the people of South Africa;

(e) promote economic growth and mineral and petroleum resources development in the Republic, particularly development of downstream industries through provision of feedstock, and development of mining and petroleum inputs industries;

(f) promote employment and advance the social and economic welfare of all South Africans”

MPRDA (2008) goes so far as to prescribe in section 3 the development of mineral and petroleum resources – under the State’s custodianship thereof – for the benefit of all South Africans:

“(3) The Minister must ensure the sustainable development of South Africa's mineral and petroleum resources within a framework of national environmental policy, norms and standards while promoting economic and social development.”

A further demonstration of how desirable such development is, is the mandate that the minister is given to invite development applications where land is found to have potential, as reflected in section 49(4), section 73(1) and section 22(5) of MPRDA (2008):

“(4) Subject to subsection (2) (b), the Minister may by notice in the Gazette invite applications for a prospecting right, mining right or mining permit in
respect of any mineral or land, and may specify in such notice the period within which any application may be lodged and the terms and conditions subject to which such right or permit may be granted.”

“(1) The Minister may by notice in the Gazette invite applications for exploration and production rights in respect of any block or blocks, and may specify in such notice the period within which any application may be lodged with the designated agency and the terms and conditions subject to which such rights may be granted.”

“(5) The Minister may by notice in the Gazette invite applications for mining rights in respect of any land, and may specify in such notice the period within which any application may be lodged and the terms and conditions subject to which such rights may be granted.”

It is evident that development of mineral rich land is desirable, and that government has appropriately responded with applicable legislation. As with mineral rich land, it can be shown that developing non-mineral land resources is also desirable for South Africa.

Developing non-mineral land is desirable because of its potential benefits for municipalities and for Value Capture programs. Vacant land can be utilised for urban renewal and revitalisation and can create municipal revenue (Brown-Luthango, Makanga & Smit, 2013). Development of land also offers opportunities for Value Capture, which has previously been shown to be desirable within the South African context.

Certain passages of legislation also demonstrate the desirability of developing land resources, along with South Africa’s commitment thereto.

SPLUMA (2013:8) states that “(1) The Minister must… prescribe norms and standards for land use management and land development” and “(2) The norms and standards must…(d) include… (iv) mechanisms for identifying strategically located vacant or under-utilised land and for providing access to and the use of such land”.

Furthermore, the norms and standards prescribed by the minister must “reflect the national policy, national policy priorities and programmes relating to land use management and land development” (SPLUMA, 2013:8(2)(a)). Such national policies and priorities are:

resources, to foster conditions which enable citizens to gain access to land on an equitable basis”.

- Access to adequate housing, reflected in Section 26 of the Constitution (2012): “(1) Everyone has the right to have access to adequate housing. (2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right”.
- Redress, reflected in SPLUMA (2013:7(a)): “(i) past spatial and other development imbalances must be redressed through improved access to and use of land”.

It is evident that South Africa is committed to making provision for equitable access to and sustainable development of the nation’s land resources. The development of both mineral rich land and non-mineral land is shown to be desirable in South Africa.

The state is empowered to provide equitable access to and sustainable development of mineral rich land. This is done in section 53 of MPRDA (2008), by effectively prohibiting the use of land surface in a manner that is contrary to the objects of the act:

“(1) Subject to subsection (2), any person who intends to use the surface of any land in any way which may be contrary to any object of this Act or which is likely to impede any such object must apply to the Minister for approval in the prescribed manner.

(2) Subsection (1) does not apply to-

(a) farming or any use incidental thereto; or

(b) the use of any land which lies within an approved town-planning scheme which has applied for and obtained approval in terms of subsection (1); or

(c) any other use which the Minister may determine by notice in the Gazette.

(3) Despite subsection (1), the Minister may cause an investigation to be conducted if it is alleged that a person intends to use the surface of any land in any way that could result in the mining of mineral resources being detrimentally affected.”

The enactment of MPRDA made it impossible for an owner of mineral rich land to prevent his land from being developed to its highest and best use, which is the exploitation of minerals. This was confirmed by Judge Mogoeng, saying in Agri SA v Minister for Minerals and Energy (South Africa, 2013:2) that the act had “the deliberate
and immediate effect of abolishing the entitlement to sterilise mineral rights, otherwise known as the entitlement not to sell or exploit minerals”.

There is however an apparent lack of legislation that makes applicable provision for equitable access to and sustainable development of the nation’s non-mineral land resources – especially in overcoming ownership constraints to land development.

4.2.4.2 Creation and control of rights

MPRDA regards mineral resources as a national resource, stating that “South Africa's mineral and petroleum resources belong to the nation and … the state is the custodian thereof” (MPRDA, 2008:preamble).

Section 3 of MPRDA (2008) deals with the custodianship of the nation's mineral and petroleum resources. It gives the state the authority to create mineral rights in land – rights that have not previously existed - by granting them:

“(1) Mineral and petroleum resources are the common heritage of all the people of South Africa and the state is the custodian thereof for the benefit of all South Africans.

(2) As the custodian of the nation’s mineral and petroleum resources, the State, acting through the Minister, may-

(a) grant, issue, refuse, control, administer and manage any reconnaissance permission, prospecting right, permission to remove, mining right, mining permit, retention permit, technical co-operation permit, reconnaissance permit, exploration right and production right”

The legal nature of these mineral rights and the rights of their holders are set out in section 5 of MPRDA (2008):

“(1) A prospecting right, mining right, exploration right or production right granted in terms of this Act and registered in terms of the Mining Titles Registration Act, 1967, (Act 16 of 1967), is a limited real right in respect of the mineral or petroleum and the land to which such right relates.”

Section 5 read together with section 3 effectively gives the state the ability to create – out of nothing – a limited real right in property.

Applying for and obtaining mineral rights is not limited to landowners only. Application for rights on suitable land is open to anyone willing to comply with the requirements of MPRDA. Accordingly, the phrase “Any person who wishes to apply to the Minister for a … [right] must lodge the application…” is repeated throughout MPRDA for reconnaissance permission in section 13(1), prospecting right in section 16(1), mining
permit in section 27(2), reconnaissance permit in section 74(1), technical co-operation permit in section 76(1) and production right in section 83(1).

This stimulates development of the mineral resources and promotes developing mineral rich land to its highest and best use – effectively bypassing ownership constraints to development and opening the land development market by removing barriers to entry. Government intervention in the case of the MPRDA has the effect of improving market efficiency in the market for mineral rich development land, by forcing landowners to develop the land to its highest and best use themselves or to dispose thereof to people willing to develop it.

The landowner is able to object to mineral rights being granted, as stated in section 10 of MPRDA (2008):

“(1) Within 14 days after accepting an application lodged in terms of section 16, 22 or 27, the Regional Manager must in the prescribed manner-

(a) make known that an application for a prospecting right, mining right or mining permit has been accepted in respect of the land in question; and

(b) call upon interested and affected persons to submit their comments regarding the application within 30 days from the date of the notice.

(2) If a person objects to the granting of a prospecting right, mining right or mining permit, the Regional Manager must refer the objection to the Regional Mining Development and Environmental Committee to consider the objections and to advise the Minister thereon.”

The discretion in whether these objections are to prevail against granting mineral rights however lies with the minister – who is the only person with the capacity to prevent or restrict the granting of any mineral right. This capacity is granted in section 49 of MPRDA (2008):

“(1) Subject to subsection (2), the Minister may after inviting representations from relevant stakeholders, from time to time by notice in the Gazette, having regard to the national interest, the strategic nature of the mineral in question and the need to promote the sustainable development of the nation’s mineral resources-

(a) prohibit or restrict the granting of any reconnaissance permission, prospecting right, mining right or mining permit in respect of land identified by the Minister for such period and on such terms and conditions as the Minister may determine…

(2) A notice contemplated in subsection (1) does not affect prospecting or mining in, on or under land which, on the date of the notice, is the subject of a reconnaissance permission, prospecting right, a mining right, a retention permit or a mining permit.”
As the minister also has the task of promoting mineral exploitation, the owner would have no substantial means of preventing mineral rights from being granted. At most, the owner would have a claim for compensation for damages caused by the exercise of the mineral rights, after the rights have been granted.

There is however no legislation in terms of which the state can create development rights over non-mineral land. SPLUMA regulates land development rights, but does not create or appropriate rights. It works simply by limiting the exercise of rights already held. When government approves land use rights and development rights in terms of SPLUMA, it permits the exercise of rights already held.

Development and use rights for land are applied for by a person already holding the real right to use land, which includes (SPLUMA, 2013:45(1)):

“(a) an owner, including the State, of the land concerned;
(b) a person acting as the duly authorised agent of the owner;
(c) a person to whom the land concerned has been made available for development in writing by an organ of state or such person’s duly authorised agent; or
(d) a service provider responsible for the provision of infrastructure, utilities or other related services.”

Despite government’s apparent policy intent to provide equitable access to land and to improve the use of underutilised land, there is currently no source of law that specifically aims to enable a developer to acquire the right to develop land to a higher and better use, if the owner of the land does not cede the right to the developer.

The South African legal framework therefore seems to succeed in overcoming ownership constraint to the development of mineral rich land, but fails in overcoming ownership constraints that are in the way of developing non-mineral land to its highest and best use.

4.2.4.3 Conflict of surface rights

A third important principle contributing to the development of mineral rich land is that holders of mineral rights can enforce them over other surface rights. This principle was first established in Van Vuren and Others v Registrar of Deeds (South Africa, 1907:294), when Judge CJ Innes said that “a mineral right entitles the holder thereof
‘to go upon the property to which they relate to search for minerals, and, if he [the holder] finds any, to sever them and carry them away’.

Section 5 of MPRDA (2008) describes the legal nature of the rights created and granted by the act, and the rights of the holders thereof:

“(1) A prospecting right, mining right, exploration right or production right granted in terms of this Act and registered in terms of the Mining Titles Registration Act, 1967, (Act 16 of 1967), is a limited real right in respect of the mineral or petroleum and the land to which such right relates.

(2) The holder of a prospecting right, mining right, exploration right or production right is entitled to the rights referred to in this section and such other rights as may be granted to, acquired by or conferred upon such holder under this Act or any other law.

(3) Subject to this Act, any holder of a prospecting right, a mining right, exploration right or production right may-

(a) enter the land to which such right relates together with his or her employees, and bring onto that land any plant, machinery or equipment and build, construct or lay down any surface, underground or under sea infrastructure which may be required for the purpose of prospecting, mining, exploration or production, as the case may be;

(b) prospect, mine, explore or produce, as the case may be, for his or her own account on or under that land for the mineral or petroleum for which such right has been granted;

(c) remove and dispose of any such mineral found during the course of prospecting, mining, exploration or production, as the case may be;

(cA) subject to section 59B of the Diamonds Act, 1986 (Act 56 of 1986), (in the case of diamond) remove and dispose of any diamond found during the course of mining operations;

(d) subject to the National Water Act, 1998 (Act 36 of 1998), use water from any natural spring, lake, river or stream, situated on, or flowing through, such land or from any excavation previously made and used for prospecting, mining, exploration or production purposes, or sink a well or borehole required for use relating to prospecting, mining, exploration or production on such land; and

(e) carry out any other activity incidental to prospecting, mining, exploration or production operations, which activity does not contravene the provisions of this Act.”
If any person tries to prevent the exercise of mineral rights, the holder of the mineral rights may apply to the state for assistance in enforcing the rights according to MPRDA (2008:54):

“(1) The holder of a reconnaissance permission, prospecting right, mining right or mining permit must notify the relevant Regional Manager if that holder is prevented from commencing or conducting any reconnaissance, prospecting or mining operations because the owner or the lawful occupier of the land in question-

(a) refuses to allow such holder to enter the land;

(b) places unreasonable demands in return for access to the land; or

(c) cannot be found in order to apply for access.

(2) The Regional Manager must, within 14 days from the date of the notice referred to in subsection (1)-

(a) call upon the owner or lawful occupier of the land to make representations regarding the issues raised by the holder of the reconnaissance permission, prospecting right, mining right or mining permit;

(b) inform that owner or occupier of the rights of the holder of a right, permit or permission in terms of this Act;

(c) set out the provisions of this Act which such owner or occupier is contravening; and

(d) inform that owner or occupier of the steps which may be taken, should he or she persist in contravening the provisions."

The owner or lawful occupier of the land therefore cannot prevent the exercise of mineral rights, but may nevertheless claim compensation for loss or damages caused by the exercise of the mineral rights according to MPRDA (2008:54):

“(7) The owner or lawful occupier of land on which reconnaissance, prospecting or mining operations will be conducted must notify the relevant Regional Manager if that owner or occupier has suffered or is likely to suffer any loss or damage as a result of the prospecting or mining operation, in which case this section applies with the changes required by the context.”

“(3) If the Regional Manager, after having considered the issues raised by the holder under subsection (1) and any written representations by the owner or the lawful occupier of the land, concludes that the owner or occupier has suffered or is likely to suffer loss or damage as a result of the reconnaissance, prospecting or mining operations, he or she must request the parties concerned to endeavour to reach an agreement for the payment of compensation for such loss or damage.

(4) If the parties fail to reach an agreement, compensation must be determined by arbitration in accordance with the Arbitration Act, 1965 (Act 42 of 1965), or by a competent court.”
MPRDA (2008:54) furthermore allows expropriation of the land in question, if no
agreement can be reached with the landowner by which the holder of mineral rights
can exercise his rights:

“(5) If the Regional Manager, having considered the issues raised by the
holder under subsection (1) and any representations by the owner or
occupier of land and any written recommendation by the Regional Mining
Development and Environmental Committee, concludes that any further
negotiation may detrimentally affect the objects of this Act referred to in
section 2 (c), (d), (f) or (g), the Regional Manager may recommend to the
Minister that such land be expropriated in terms of section 55.”

Such expropriation may be conducted by the Minister of Minerals and Energy in terms
of section 55 of MPRDA (2008):

“(1) If it is necessary for the achievement of the objects referred to in section
2 (d), (e), (f), (g) and (h) the Minister may, in accordance with section 25 (2)
and (3) of the Constitution, expropriate any land or any right therein and pay
compensation in respect thereof.

(2) (a) Sections 6, 7 and 9 (1) of the Expropriation Act, 1975 (Act 63 of 1975),
apply to any expropriation in terms of this Act.”

Section 25 (2) and (3) of the Constitution (2012), which is referred to above, pertains
to expropriation, and states that:

“(2) Property may be expropriated only in terms of law of general application-
(a) for a public purpose or in the public interest; and
(b) subject to compensation, the amount of which and the time and manner
of payment of which have either been agreed to by those affected or decided
or approved by a court.

(3) The amount of the compensation and the time and manner of payment
must be just and equitable, reflecting an equitable balance between the
public interest and the interests of those affected…”

Section 6 of the Expropriation Act referred to above (Expropriation Act, No. 63 of 1975,
as amended, 1994) relates to the inspection of property for purposes of expropriation.
Section 7 thereof relates to the notification that the property is to be expropriated.
Section 9(1) thereof relates to the duty of the landowner to supply a written statement
in response to the expropriation and the land in question.

A new bill for expropriation has been presented to parliament in 2015, but has not yet
been accepted (Expropriation Bill, 2015). Similar conclusions would be reached in this
discourse, regardless of whether the existing act is used or whether the new bill comes into power.

Regarding non-mineral land with development potential, SPLUMA (2013) regulates who may apply for a land development application, but no reference is made to any conflicting surface rights or ranking of rights. It is simply implied that the real right or limited real right to use land must already be held by a person, in order for him or his agent to apply for permission to use the land in accordance with the rights. Besides when an owner cedes or grants a right to a developer, there is no way to acquire a right that ranks higher than existing surface use rights for non-mineral land.

4.2.4.4 Comparative conclusion

The existence of mineral and petroleum deposits under land fosters a profitable and desirable highest and best use of the land, i.e. the mining and extraction of these minerals. MPRDA (2008) recognises that the wealth potential that mineral deposits afford is not created by any person, but that it is a national inheritance which is controlled by the state for the benefit of all South Africans. MPRDA (2008) stimulates and regulates developing land with mineral deposits to this highest and best use, for the benefit of all South Africans. It effectively overcomes ownership constraints to the development of mineral rich land.

South African legislation however does not presently regard the potential wealth inherent to other types of property development as a resource to be managed for the benefit of the nation. This should however be reconsidered, because development of non-mineral land could also benefit the nation – especially from a perspective of financing public infrastructure through Value Capture.

The development potential of non-mineral land could be regarded as a national resource, since it is not specifically created by any person. It is mostly public factors that afford any land its potential for higher and better use. Public infrastructure creates amenity and access for land parcels. Market demand for higher and better land use in an area is brought about by such access and amenity. Furthermore land use rights, as contemplated in SPLUMA (2013), become useable because society favours using land in certain areas in certain ways – as shown in the Spatial Development Framework – and because land use rights are approved or prohibited by the state, who acts on behalf of society. Once the potential for development is created by society,
the person controlling the land may elect to act thereupon and create value by developing the land.

Therefore – whether it be mineral deposits under a land parcel that foster potential for mining related development, or a concentration of people and infrastructure near a land parcel that fosters potential for residential, retail or office related development – the potential was not created by the landowner. Potential is simply acted upon. There is therefore an argument to treat land development potential as a national resource, which should be managed for the benefit of all South Africans – as is demonstrated by the mineral and petroleum resources legislation.

In the context of Value Capture, the study therefore proposes treating land development potential as a national resource that should be capitalised upon. The study accordingly seeks to overcome ownership constraints to development, which would imply that any party interested and willing to comply with legislation can obtain a land development right over land – provided that no such right is already held or has been applied for.

Treating non-mineral land in the same way as mineral rich land might also be justified by demonstrating that government desires equitable access and sustainable development of both mineral and non-mineral land.

4.2.5 National policy on property development wealth

The existing mineral legislation was enacted with the overarching purpose “To make provision for equitable access to and sustainable development of the nation's mineral and petroleum resources; and to provide for matters connected therewith” (MPRDA, 2008:preface). As discussed on the previous section, the act realises this purpose by providing applicable mechanisms for overcoming ownership constraints.

There is however no clear cut application in sources of law for overcoming ownership constraints to non-mineral land with development potential. The study however proposes implementing such applications, because an examination of existing policy clearly demonstrates the intent to promote sustainable development of land in general, as well as the intent to promote equitable access to land with development potential. This policy is accordingly discussed next.
4.2.5.1 Sustainability

The preamble of SPLUMA (2013) sets the scene for eradicating places defined and influenced by previous laws that promoted unsustainable settlement patterns. The preamble of SPLUMA (2013) furthermore expands on Section 26 of the Constitution (2012) which reads “(1) Everyone has the right to have access to adequate housing” by stating that adequate housing includes “an equitable spatial pattern and sustainable human settlements”.

According to section 8 of SPLUMA (2013) the minister must prescribe norms and standards for land use management and land development that “(b) promote social inclusion, spatial equity, desirable settlement patterns, rural revitalisation, urban regeneration and sustainable development”.

Sustainable development according to the preamble of SPLUMA (2013) requires “the integration of social, economic and environmental considerations in both forward planning and ongoing land use management to ensure that development of land serves present and future generations”.

SPLUMA (2013:3) states the objects of the act, where one of the objects is to “(d) provide for the sustainable and efficient use of land”. The act furthermore sets out general principles in chapter 2 that guide amongst others “(c) the sustainable use and development of land” (SPLUMA, 2013:6(1)).

The principle of Spatial Sustainability is furthermore applicable to spatial planning, land development and land use management according to section 7 of SPLUMA (2013).

It can accordingly be concluded that policy does have the intent to promote sustainability in the use of land resources.

4.2.5.2 Importance of development

Another principle that applies to spatial planning, land development and land use management according to section 7 of SPLUMA (2013) is “(c) the principle of efficiency, whereby- (i) land development optimises the use of existing resources and infrastructure”. This corresponds with the notion of developing land to its highest and best use, as doing so would make best use of existing land resources and infrastructure.
Section 8 of SPLUMA (2013) mandates the Minister to make provisions for identifying and developing land that is not developed to its highest and best use:

“(1) The Minister must… prescribe norms and standards for land use management and land development…

(2) The norms and standards must… (d) include… (iv) mechanisms for identifying strategically located vacant or under-utilised land and for providing access to and the use of such land”

Furthermore, another principle that propagates improving access to and use of land – in other words developing land to higher and better use – is the principle of Spatial Justice (SPLUMA, 2013:7):

“(a) The principle of spatial justice, whereby-

(i) past spatial and other development imbalances must be redressed through improved access to and use of land”

Based on the obvious policy intent of existing legislation – and the benefits that might be realised through Value Capture programmes when land is developed to its highest and best use – it is concluded that developing land to its highest potential is desirable within the South African context.

4.2.5.3 Equitable access

Section 25 of the Constitution (2012) makes provision for the state to implement legislative and other measures that will improve access to land:

“(5) The state must take reasonable legislative and other measures, within its available resources, to foster conditions which enable citizens to gain access to land on an equitable basis.”

In the preamble of SPLUMA (2013) “the State’s obligation to realise the constitutional imperatives” is recognised as a reason for the act, recognising a need for “measures designed to foster conditions that enable citizens to gain access to land on an equitable basis”.

It is evident that equitable access to land, as well as the sustainable development of land is important to South Africa. This broadly includes all land with potential to be developed to higher and better use – not only land with development potential because of mineral and petroleum deposits.
4.2.6 Conclusion of background facts and legal doctrines

Land use is regulated by government in South Africa. It is evident that developing land to its potential is a matter of national importance. Land should be developed sustainably, and people should be provided with equitable access to land resources. Ownership constraints to development should therefore be overcome.

The MPRDA provides a successful mechanism for overcoming ownership constraints to developing mineral rich land to its highest and best use. There is however still a need for overcoming ownership constraints to developing non-mineral land to its highest and best use.

4.3 Legal discourse – step three: Proof for the thesis claim

Having stated relevant background facts and legal doctrines, this discourse will now set forth in constructing proof of, and support for the thesis claim: “The development promoting principles found in mineral rights legislation can be applied to non-mineral land, which enables developers to develop land without being constrained by landownership”. Realistic hypotheticals and concrete examples from real cases will be provided to demonstrate theoretical arguments.

The discourse demonstrates how the enabling principles found in mineral rights legislation might be applied to enable a developer to legally acquire land for development, when the landowner refuses to sell or demands an unreasonable price. A doctrine is developed by verbally manipulating legal rules – using deductive, analogical and inductive reasoning, as described in the methodology chapter of this study. A hypothetical case is developed to demonstrate how expropriation for the purpose of maximising land value could be constitutionally justified, within the context of Value Capture and other national land priorities.

4.3.1 Application for overcoming ownership constraints

The application found in MPRDA effectively creates a system where a developer interested in developing mineral rich land to its highest and best use may apply to government for the right to do so. Government then grants – and effectively creates – a real right in property to the developer. This real right supersedes other surface use rights to land, and the developer can start developing.
There is however no law besides MPRDA by which the government can create a development right in land, that supersedes surface rights held by the owner. The statement “(c) a person to whom the land concerned has been made available for development in writing by an organ of state” in Section 45 of SPLUMA (2013), gives the wrought impression that a developer interested in developing non-mineral land can apply for such rights to government, rather than obtaining the rights from the landowner. Government however is not able to create and grant development rights – besides mineral rights – that supersede surface rights held by the landowner.

In order for the state to make non-mineral land available for development in writing to a developer, the state would have to pass surface use rights on to the developer. This requires that the state first acquires the right, or already holds the right. Without first obtaining the surface use rights, the state would not be able to make land “available for development in writing” (SPLUMA, 2013:45(1)), because the owner of the land would still hold the dominium right, which is able to prevent the developer from entering onto the land and using the land. The state would have to own, purchase or expropriate the land, or any surface use rights that might supersede development rights, if it wants to make land available for development to a developer.

4.3.2 Expropriation

As discussed in the literature review, government intervention in the form of compulsory land acquisition might be required to overcome ownership constraints and enable developers to develop land to its highest and best use value. In South Africa it is called expropriation when the government compulsorily acquires land for public purpose use.

In Kelo v New London (United States of America, 2005) the Supreme Court of Connecticut, USA ruled that land may be compulsory acquired by the state on behalf of a private developer, provided that the development demonstrated to be of Public Use. Similar application might be possible in South African law, even though it has never been attempted yet.

Section 25 of the Constitution of South Africa (2012) makes provision for expropriation of land for public purposes:

“(2) Property may be expropriated only in terms of law of general application-
(a) for a public purpose or in the public interest; and

(b) subject to compensation, the amount of which and the time and manner of payment of which have either been agreed to by those affected or decided or approved by a court…

(4) For the purposes of this section-

(a) the public interest includes the nation’s commitment to land reform, and to reforms to bring about equitable access to all South Africa’s natural resources; and

(b) property is not limited to land."

Section 2 of the Expropriation Act (1994) gives the Minister of Public works the right to expropriate property for public and certain other purposes:

"(1) Subject to the provisions of this Act the Minister may, subject to an obligation to pay compensation, expropriate any property for public purposes or take the right to use temporarily any property for public purposes."

If a developer is able to demonstrate that his intended development on land is in the public interest, he might be able to apply to the minister to expropriate the land for him – assuming that the owner of the land either refuses to sell, or demands a price above the market price of the property. In accordance with the wrought reading of section 45(c) of SPLUMA mentioned earlier, the land can then be made available for development in writing by the state. This would necessarily imply that a type of public-private initiative be followed whereby the state maintains ownership of the land and the developer develops the land – or the land can simply be sold or granted to the developer once it has been expropriated.

The Expropriation Act does not compel the minister to expropriate, which implies that the public purpose should be so clearly evident that it convinces the minister of the need to expropriate.

The study will now present a hypothetical development project case that caters for Value Capture and other public purposes, which might be able to convince the minister to expropriate the land for public purposes. Assumptions for such a case are:

- The owner refuses to sell the land to a developer, or demands a price that makes development unfeasible.
- Re-zoning (amendment of the land use scheme according to SPLUMA) is required for realising the development potential that the developer envisions in the land.
- The owner of the land has not submitted a re-zoning application, and pays tax on the current use value of the property.

This case will argue how land might be expropriated at a value which is lower than the residual value that could be realised if the land were re-zoned and developed according to its new zoning rights. The difference between the compensation paid for the expropriation, and the residual value that is eventually realised, might be available for capturing in Value Capture.

4.3.2.1 Compensation under expropriation

When land is expropriated, the convention is to pay the market value of land plus actual financial damages in accordance with the Expropriation Act (1994:12):

“12 Basis on which compensation is to be determined:

(1) The amount of compensation to be paid in terms of this Act to an owner in respect of property expropriated in terms of this Act, or in respect of the taking, in terms of this Act, of a right to use property, shall not, subject to the provisions of subsection (2), exceed-

(a) in the case of any property other than a right, excepting a registered right to minerals, the aggregate of-

(i) the amount which the property would have realized if sold on the date of notice in the open market by a willing seller to a willing buyer; and

(ii) an amount to make good any actual financial loss caused by the expropriation”

A landowner would typically argue that the value of the expropriated land should be the residual land value realisable if the land were developed to its most profitable potential, rather than the value of its current use, as the prior is expected to be higher than the latter.

Value Capture theory however states that if the owner were to receive such residual value, and not the current use value, he would receive a public windfall benefit that he did not create (Smith & Gihring, 2006). The owner is unlikely to lose any of his original capital investment in the land, should he receive the full current use value but not the residual land value realisable if the land were developed to its most profitable potential.
Furthermore, if land could be acquired for development at a value that is lower than the residual land value that a developer might realise on the land, the difference in value should be available for capture through Value Capture programs.

In expropriation so far, the convention has been for the landowner to receive the residual land value that might be realised on the land, had it been developed to its highest potentiality. There are however arguments that support the notion that a landowner of expropriated land should not receive the residual land value of the use to which a developer might potentially put it, if re-zoning in terms of SPLUMA is required to realise that potential. These arguments are accordingly provided.

4.3.2.2 Burden to prove that potentiality will be taken into account by a buyer

If the owner of expropriated land wants to claim compensation for any potential of the property, he must prove that the potential exists, as judged in Town Board of Port Edward v Kay (South Africa, 1997:23-26) and Loubser en andere v Suid-Afrikaanse Spoorweë en Hawens (South Africa, 1976:608G–615F). In such a case, potential of land was defined in Town Board of Port Edward v Kay (South Africa, 1997:25) as “a use, additional to its current use, for which the property is suited and reasonably capable of being put in the future” – with reference to the cases of South African Railways v New Silverton Estate Ltd (South Africa, 1946) and Thanam NO v Minister of Lands (South Africa, 1970).

It was furthermore judged in Town Board of Port Edward v Kay (South Africa, 1997) that the party that relies on the potential in setting the value may select the possibility that is most advantageous to him as the highest and best use of the property, as long as both the typical buyer and seller would have considered the use in their price negotiations. It was nevertheless highlighted in Davis and another v Pietermaritzburg City Council (South Africa, 1989) that such potentiality is not yet a reality and remains at best a bargaining chip in the theoretical negotiations between a willing buyer and seller, as stated in Town Board of Port Edward v Kay (South Africa, 1997).
In Town Board of Port Edward v Kay (South Africa, 1997:25-26) it was set out that there are three components to proving the existence of potential:

- a) The potential must exist and must be shown as a reasonable possibility, as demonstrated in Minister of Water Affairs v Mostert (South Africa, 1966), Jacobs v Minister of Agriculture (South Africa, 1972) and in Bestuursraad van Sebokeng v M & K Trust & Finansiële Maatskappy (Edms) Bpk (South Africa, 1973).

- b) A willing buyer and seller should take the potential into account in fixing the price, which must be proved on a balance of probabilities – as demonstrated in Thanam NO v Minister of Lands (South Africa, 1970) and in Bonnet v Department of Agricultural Credit and Land Tenure (South Africa, 1974).

- c) The quantum, upon which Loubser en andere v Suid-Afrikaanse Spoorweë en Hawens (South Africa, 1976) determined that there is no onus in the narrow sense, once components (a) and (b) have been conceded or established.

The second component of proving potential involves proving that a willing buyer must take the potential into account in fixing the price. A willing buyer is likely to consider the potential of a property, but will also consider the risk and likeliness of obtaining appropriate zoning when considering what use the property should be put to.

It was said in Minister of Agriculture v Estate Randeree and Others (South Africa, 1979b:219) that:

“an open market and a plurality of buyers demands that in determining compensation regard must be had, inter alia, to what potential buyers would consider to be the prospects of obtaining a special consent or a re-zoning”.

It was furthermore said in Davey v Minister of Agriculture (South Africa, 1979a:113) that:

“A prospective buyer will normally have an eye to the potential of property he is considering buying but will be circumspect and conservative in attaching value to it for a number of reasons: In the nature of things the potential is not a reality and it follows that there may be risks, foreseen or unforeseen, attendant upon its development”

While restrictions on land must be considered when determining its potential, the chance that these restrictions might be discharged should also be kept in mind, as was judged in the cases of Dutch Reformed Church v town Council of Cape Town (South Africa, 1898), Secretary for Inland Revenue v Sturrock Sugar Farm (Pty) Ltd
(South Africa, 1965), Minister of Water Affairs v Mostert (South Africa, 1966), Bestuursraad van Sebokeng v M & K Trust & Finansiële Maatskappy (Edms) Bpk (South Africa, 1973) and in Southern Tvl Buildings (Pty) Ltd v Johannesburg City Council (South Africa, 1979c).

A developer however might be especially cautious of paying for development potential if realising such development potential would require amendment of the land use management scheme in terms of the recently enacted SPLUMA. Changing the use of the land could easily be prevented by society raising objections against such use change, during the public participation process which is required by SPLUMA before re-zoning is approved.

Because of the risk, prudent developers enter into purchase agreements on development land, subject to them obtaining appropriate zoning permission on the land. This type of agreement is effectively an option and obligation to buy the land if the legal characteristics and potential of the land change. Specific reference is made to suspensive conditions, as the sale in a contract with a suspensive condition is only effective once the condition is fulfilled; no sale is enforceable in terms thereof on the land and situation as it is now. For the purpose of expropriation, the value of the land is “the amount which the property would have realized if sold on the date of notice in the open market by a willing seller to a willing buyer” (Expropriation Act, 1994:12(1)(a)(i)). The definition refers to a sale, and not to an option to buy land if the nature and legal characteristics of the land significantly changes. The conclusion is therefore that since the enactment of SPLUMA, a buyer should reasonably be willing to conclude a purchase agreement without any suspensive conditions only for a value that can be realised in terms of the land’s current use zoning – as that is the only certain legally permissible use. A buyer is not likely to conclude an enforceable purchase at a price higher than the residual land value for property’s best use in terms of its existing zoning rights.

The compensable land value in expropriation, which is “the amount which the property would have realized if sold on the date of notice in the open market by a willing seller to a willing buyer” (Expropriation Act, 1994:12(1)(a)(i)), is therefore unlikely to be higher than the residual land value realisable in terms of the property’s existing zoning.
This supports the argument that re-zoning potential on land can no longer be taken into account when determining the compensation payable under expropriation.

### 4.3.2.3 Re-zoning constitutes development

Another argument favouring such an approach arises from the definition of land development, which was recently enacted in terms of SPLUMA. Re-zoning constitutes acquiring a change of approved land use on the land use scheme, which is considered to be land development in terms of SPLUMA (2013:1(1)):

> “‘land development’ means the erection of buildings or structures on land, or the change of use of land, including township establishment, the subdivision or consolidation of land or any deviation from the land use or uses permitted in terms of an applicable land use scheme”

In Davis and another v Pietermaritzburg City Council (South Africa, 1989) it is established that in expropriation cases where the value of the land is contested, it is land with its then existing potentialities that is to be valued – and not the value of what the land would be once the potentialities have been realised by development:

> “But it is the property as it is on the date of notice, with its potentialities, that must be valued; the property must not be valued as though the potentiality had been realized and the development taken place (see Southern Transvaal Buildings case, supra; cf Lochner v Afdelingsraad, Stellenbosch 1976 (4) SA 737 (c), at p 744 B - F).”

The convention so far has been that the landowner would receive the residual land value of what might reasonably be developed on the land, even if such a development required re-zoning of the land.

SPLUMA however distinctively defines that the change of the use of land – which is synonymous with re-zoning the land – is to be grouped as development. In terms of SPLUMA’s definition of development, read together with the judgement in Davis and another v Pietermaritzburg City Council (South Africa, 1989), there are grounds to ignore any potential in land that would require re-zoning, when determining the compensation payable in expropriation. Since expropriated land value should be determined “as it is on the date of notice, with its potentialities”, and “must not be valued as though the potentiality had been realized and the development taken place”, it could be interpreted that land should be valued according to its presently approved land use, and not as if development – which includes applying for and obtaining re-zoning – had taken place.
This is however a highly controversial application of the law, which was most likely not foreseen when SPLUMA was drafted. Nevertheless the loophole for such application was opened by SPLUMA, and remains to be challenged in court.

If a landowner is not able to claim re-zoning development potentiality as part of the land value, he might try to claim for “an amount to make good any actual financial loss caused by the expropriation” (Expropriation Act, 1994:12(1)(a)(ii)).

The owner might however fail with such a claim, as it would constitute a claim for the loss of the potential profits from development – taking into account that re-zoning is now classified as development by SPLUMA. In expropriation, the owner of the land receives the value of the land in question, and not the profits that could be realised by a potential development, as was judged in Kangra Holdings (Pty) Ltd v Minister of Water Affairs (South Africa, 1998:28):

“What the owners were entitled to, therefore, was the market value of the property as it was at date of expropriation, not to the benefits flowing from what it would have become later.”

In Davis and another v Pietermaritzburg City Council (South Africa, 1989:382) this principle was also demonstrated in judging about a claim for loss of profit that would have been realised had development taken place:

“It would mean in effect that in such a case the owner of the property expropriated would be compensated not for the market value of the property on the date of the notice of expropriation with its then-existing potentiality for development, but for the present value of what would have accrued to him had the potential been realised and the development carried out. This seems to me to be contrary to principle and likely to lead to anomalies which could not have been intended by the Legislature.”

The comment confirms that the market value of the property should be paid, but since the enactment of SPLUMA there are grounds to disregard potentiality that requires re-zoning (development) when determining the market value – which remains to be challenged in court, as discussed in the previous two sub-sections. What is however of relevance here is the fact that forfeiting development (which now could include re-zoning) profit because of expropriation, constitutes an indirect financial loss. Such loss is not compensable in terms of the Expropriation Act (1994:12(5)(e)):

“(e) no allowance shall be made for any unregistered right in respect of any other property or for any indirect damage or anything done with the object of obtaining compensation therefor”
An example of such a judgement is the case of Kangra Holdings (Pty) Ltd v Minister of Water Affairs (South Africa, 1998:28):

“the award of the additional amount claimed would, in effect, have afforded the owners the benefits they would have enjoyed had the property, as at date of expropriation, been finally developed. What the owners were entitled to, therefore, was the market value of the property as it was at date of expropriation, not to the benefits flowing from what it would have become later.”

The judge further added that the owner could neither claim the increase on market value of the land, nor the profits realised if development of the land were to take place in Kangra Holdings (Pty) Ltd v Minister of Water Affairs (South Africa, 1998:28-29):

“Just as the owners could not have claimed the sum by which the market value of the property would have increased had development taken place, so must it be equally plain that they could not get the profits it was alleged they would have earned had development taken place”

This statement implies that one cannot claim for an increase in market value caused by development. If the SPLUMA definition of development holds, this statement would imply that neither a claim for increased market value because of re-zoning, nor a claim for financial loss because re-zoning was prevented, should succeed.

On appeal, the judge in Kangra Holdings (Pty) Ltd v Minister of Water Affairs (South Africa, 1998:233) confirmed that if expropriation prevents potential future development, not receiving potential future development profits does indeed constitute an indirect loss:

“The loss for which appellant claims was not caused directly by the expropriation. It was not caused by the loss of the coal rights. It was caused by non-exploitation of those rights. As in the cases of Pienaar and Davis, before the profits in question could have been earned appellant would have had to take a series of steps to establish its income-producing structure. Those steps were all links in the chain of causation of the loss and they had nothing to do with the expropriation. One may test it this way. Had expropriation not occurred and had appellant retained the rights for another say ten or fifteen years before disposing of them without having done any more about coal mining than it had by the time of expropriation, its loss, or, more accurately, the financial expression of its non-realisation of profits, would have been exactly the same as the loss it now claims. The loss claimed was at best only an indirect result of the expropriation and, on the statutory interpretation stated above, not compensable.”

These above judgements clearly distinguish between land that is already developed and land that is not developed, when determining the market value of the land. In terms of profits foregone because of expropriation, there is also a clear distinction
made between whether development had already been realised at the time of expropriation, or not. If the SPLUMA definition of development – which includes re-zoning – holds, it would necessarily imply that distinction should also be made between whether the land had already been re-zoned or not.

SPLUMA (2013:1(1)) clearly classifies re-zoning of land as land development. Since the enactment of SPLUMA, there are grounds to argue that land potentiality which would require re-zoning (development) must be disregarded when expropriating, whether such value might be realised in the market value of the land, or whether it is in the potential profits that re-zoning might have brought about. This approach contrasts with how cases were treated before the enactment of SPLUMA, where the convection was to compensate for potentiality even if it required re-zoning.

### 4.3.2.4 Disregard for value enhanced by illegal use of land

Besides the arguments stated above, the law might even require that certain potentialities of land be ignored altogether when determining the value of a property.

Section 12 (5) of the Expropriation Act (1994) determines the basis on which compensation is to be determined in the case of an expropriation – providing for certain value enhancement that shall not be taken account of:

“(5) In determining the amount of compensation to be paid in terms of this Act, the following rules shall apply, namely-

(c) if the value of the property has been enhanced in consequence of the use thereof in a manner which is unlawful, such enhancement shall not be taken into account”

Section 26 of SPLUMA (2013) states that:

“(2) Land may be used only for the purposes permitted-

(a) by a land use scheme”

Section 58 of SPLUMA (2013) furthermore states that:

“(1) A person is guilty of an offence if that person-

(b) uses land contrary to a permitted land use as contemplated in section 26 (2);

(c) alters the form and function of land without prior approval in terms of this Act for such alteration”
It might therefore be argued that contenting to receive the residual value of a development in a different land use zoning than that which is currently approved, rather than the current use value, would constitute claiming for a value enhancement “in consequence of the use thereof in a manner which is unlawful”.

Supporting such argument is the definition of highest and best use. Highest and best use is defined by the Appraisal Institute (2008:278) as “the reasonably probable and legal use of vacant land or an improved property that is legally permissible, physically possible, appropriately supported, financially feasible, and that results in the highest value”. The International Valuation Standards Council (2015) define it in their online glossary as “The use of an asset that maximises its potential and that is physically possible, legally permissible and financially feasible”. Where no development rights exist (where re-zoning to a higher use has not yet been applied for and approved) the highest and best use must evidently fall within the existing zoning – because any use not yet approved in terms of SPLUMA constitutes an illegal use of land.

4.3.2.5  Disregard for improvements after expropriation date

A further rule in terms of the Expropriation Act (1994:12(5)) that applies in determining the amount of compensation to be paid when expropriating, is:

“(d) improvements made after the date of notice on or to the property in question (except where they were necessary for the proper maintenance of existing improvements or where they were undertaken in pursuance of obligations entered into before that date) shall not be taken into account”

According to this rule, acquiring re-zoning – which is classified by the act as land development, and hence would be an improvement made on or to the property – should not be taken into account if is done after the date of expropriation notice. This supports the argument that a landowner cannot claim the residual land value that might be realised by a development that would require re-zoning. In terms of this argument any land value attributed to the land’s potentiality would have to be possible within the existing zoning, as it is recorded in the land use management scheme at the time of expropriation.
4.3.2.6 Disregard for value in terms of the purpose for which land is taken

The Expropriation Act (1994:12(5)) provides a further rule in determining the amount of compensation to be paid when expropriating:

“(f) any enhancement or depreciation, before or after the date of notice, in the value of the property in question, which may be due to the purpose for which or in connection with which the property is being expropriated or is to be used, or which is a consequence of any work or act which the state may carry out or perform or already has carried out or performed or intends to carry out or perform in connection with such purpose, shall not be taken into account”

Omitting some of the alternative phrases offered by this rule, it reads that “any enhancement… in the value of the property… which may be due to the purpose for which… the property… is to be used… shall not be taken into account”.

This rule opens a loophole that the legislature most likely never considered. Should the Minister expropriate land for the purpose of re-zoning it to another use and constructing buildings in terms of this newly approved use, the value attributed to using the land in such a way should not be taken into account, according to this rule. It might therefore imply that if land is taken for re-zoning and consequent development, the value that can be realised by re-zoning and consequent development should be disregarded when expropriating. This implies that land might be expropriated at a valuation lower than its most profitable potential value, provided that the land expropriated is to be re-zoned to a higher land use in order to realise the potential, and that the land is taken for such purpose. The legislature most likely never considered expropriating land for re-zoning and consequent development when the Expropriation Act was drafted, but the loophole was nevertheless opened.

4.3.2.6.1 Disregard value which is a consequence of an act of the state

Rule (f) of the Expropriation Act (1994:12(5)) could also be read as “any enhancement… in the value of the property… which is a consequence of any… act which the state may carry out or perform… in connection with such purpose, shall not be taken into account”.

Reviewing applications for, and granting higher land use rights and development rights can be considered to be “act[s] which the state may carry out or perform”. If that holds, it implies that alleged value enhancement due to changed land use rights or
development rights that the state must still review or grant, cannot be taken into account when determining the amount of compensation to be paid in terms of the expropriation act. This would also then imply that any potentiality of land that requires re-zoning should be disregarded when determining compensation for expropriation.

Again, the legislature most likely never considered such application of the rule, but the loophole does exist for potential application.

4.3.2.7 Conclusion on determining compensation for expropriated land

When the arguments above are combined into one case, they support the notion that if land is acquired by expropriation for the purpose of developing it to a specific higher land use zoning, the compensation that the landowner receives can be no higher than the best value realisable in terms of its existing land use zoning.

Such conclusion would imply that land might be expropriated at a value which is lower than the residual land value of what the property will be developed to in future. The difference between the compensation paid for the expropriation and the residual land value realised through a re-zoning development should then be available for distribution between the parties or potential capture by Value Capture programs.

4.4 Legal Discourse – step four: Deriving a useful solution to the problem statement

An aspect of the argument not addressed yet, is that the minster of land affairs has no obligation to expropriate land for re-zoning and development. The public purpose of such an expropriation should be demonstrated in order to convince the minister to expropriate the land.

4.4.1 Value Capture as a public purpose

One public purpose aspect of an expropriation for re-zoning development would come from the potential that such a case would create for Value Capture. Acquiring development land at a price (compensation payable in terms of the expropriation) that is lower than the residual land value of the envisioned development, creates an increment of value that does not accrue to any specific party. This increment might be captured by the state as part of a Value Capture program, in exchange for conducting the expropriation.
If a developer presents a re-zoning development plan to the government, pledging the incremental land value to the state, he might be able to obtain the land by means of expropriation, if the landowner refuses to sell or demands an unreasonable price for the land.

Expropriating land for development at a value lower than the residual land value which will be realised does not only seem to be possible, but might even be justifiable in the South African context.

As stated in the assumptions of the hypothetical case, the owner in such a case paid property tax on the present use value, and not on any higher residual land value that could be realised by a developer. It would be just as unfair for an owner to receive the residual land value of the land’s highest and best use without having paid tax on that land value, as it would have been for the owner to pay tax on the highest and best use land value without the land being developed to that value.

The owner in the hypothetical case also demonstrated no interest in realising the higher potential value by applying for such use rights. Furthermore, it is mostly public factors that afford a land parcel its higher and better use: Public infrastructure that affords amenity and access to a land parcel, the market demand for a higher and better use, as well as use rights granted by the state – who acts on behalf of society. As such, for the landowner to receive a significant part of the profits realisable by a developer on the land could be deemed inequitable, as he would be receiving a windfall benefit that he did not create.

The owner of the land in this hypothetical case typically did nothing more than another person whose land is located in a different part of town, where land is not as well served by infrastructure, and which falls in areas not intended for development on a Spatial Development Framework. Accordingly there is an argument to be made that land value increases realised when land is developed by a developer should not accrue to the landowner, but might rather be captured by the state in Value Capture programmes.

According to the arguments presented, it might be justifiable and possible to acquire development land through expropriation, and capture incremental land value realised by re-zoning and developing the land in a Value Capture program. Expropriating land
at its present zoning value, as part of a Value Capture program, might even be constitutionally justified.

The Constitution (2012:25(3)) states about compensation payable in the event of expropriation that:

“(3) The amount of the compensation and the time and manner of payment must be just and equitable, reflecting an equitable balance between the public interest and the interests of those affected, having regard to all relevant circumstances, including-

(a) the current use of the property;
(b) the history of the acquisition and use of the property;
(c) the market value of the property;
(d) the extent of direct state investment and subsidy in the acquisition and beneficial capital improvement of the property; and
(e) the purpose of the expropriation.”

Having regard to the current use of the property corresponds with the arguments presented earlier to ignore any potential claimed that might be realised in terms of land re-zoning – as re-zoning entails changing the current use of land to another land use in terms of SPLUMA (2013).

Having regard to the extent of direct state investment in the beneficial capital improvement of the property, links with the notion that public infrastructure leads to increased potential for maximising land value. It contributes to justifying the idea of implementing Value Capture, as the potential for realising value is created by society.

The equitable balance between the public interest and the interests of those affected might be supported by the notion that a Value Capture expropriation would only be applicable where the landowners undermine the development potential of the land. It could be considered as undermining or sterilisation of development potential if landowners themselves do not develop the land to its highest and best use, and also overprice the land or refuse to sell the land to a developer. A Value Capture expropriation might in this instance improve the equitable balance between the public and the land owner’s interests. In addition, expropriating land to prevent sterilisation of development potential might advance other national priorities such as equitable access to land and sustainable development of land.
4.4.2 Additional public purposes

Section 25 (2)(a) of the Constitution (2012) justifies expropriation “for a public purpose or in the public interest. Section 25 (4)(a) of the Constitution (2012) further states that “the public interest includes the nation's commitment to land reform, and to reforms to bring about equitable access to all South Africa's natural resources”. Furthermore the Constitution (2012:25) states that:

“(5) The state must take reasonable legislative and other measures, within its available resources, to foster conditions which enable citizens to gain access to land on an equitable basis.”

Expropriating land from a person who neither intends to develop the land to its potential, nor intends making the land available for development at a feasible price, seems to fall within the scope of reforms to bring about equitable access to land. It also seems to be a reasonable legislative measure within the state’s available resources to foster conditions which enable citizens to gain access to land on an equitable basis.

4.5 Conclusion of the legal discourse

Interesting implications and twists arose from the discourse, which have been connected into the existing broader academic debates on Value Capture in order to derive a useful solution to the problem statement.

The discourse has shown that existing sources of law apparently fail to stimulate equitable access to, and sustainable development of non-mineral development land. The discourse furthermore justifies that principles found in the mineral rights legislation should be applied to overcome ownership constraints to developing non-mineral land – which could promote equitable access to, and sustainable development of land.

The discourse demonstrates how expropriation might be used as a method of overcoming ownership constraints to development. The South African legislative framework potentially offers developers the opportunity to overcome ownership constraints by applying to the Minister of Public Works to expropriate the land and make it available to the developer for re-zoning development.

The discourse demonstrates that SPLUMA (2013) might have enacted a loophole in setting the compensation payable for expropriating land with development potential.
Such compensation could potentially be set below the residual land value realisable by re-zoning development, which creates a value increment available for capture by Value Capture.

An expropriation for the purpose of developing the land to its highest and best use – with certain pre-suppositions as demonstrated in this discourse – could be justifiable as it furthers public purposes. The public purpose derives from the potential for Value Capture that it could create. Public purpose could also derive from the improved equitable access to land and sustainable development of land that it might promote.

4.6 Commentary on validity and reliability

Law is normative, because it prescribes what human behaviour should be. The validity of this legal doctrinal research therefore does not rely on an appeal to any external reality, but rest upon developing a consensus about its findings within the scholastic community (Chynoweth, 2008). This doctrinal research study can be seen as a step in the direction to consensus on a doctrine, and accordingly discussion and criticism is expected to arise as a result of the research. The reader should therefore not discredit the validity of the research when differing in opinion with the findings of the discourse, but embrace it as part of a process in developing consensus on the doctrine within the legal community.

As stated in the methodology chapter, legal analysis involves reasoning by using a variety of techniques to construct a convincing argument according to accepted, instinctive conventions of discourse within the discipline. The discourse that was used to conduct this study applied legal rules to a hypothetical factual situation by means of deductive logic. It was further complimented with analogical legal reasoning, which involved examining previously resolved court cases that are apparently similar, to determine whether the legal rules were applicable. Inductive legal reasoning furthermore created general rules from specific previously resolved cases to supplement the legal reasoning. The credibility of this research can thus be attributed thereto that the accepted conventions and norms of legal discourse – as set out in the methodology chapter – were understood and applied in the writing of this discourse.
5 CONCLUSION

The study found by means of a literature review that South Africa needs additional funding for public infrastructure. The literature demonstrated that Value Capture is a potential source of such funding. The literature further demonstrated that maximising land value by developing the land is required for Value Capture to be effective. Ownership constraints to development were however found in the literature, which could prevent development in South Africa.

The study therefor investigated whether the development promoting principles found in mineral rights legislation can be applied to non-mineral land, to enable developers to develop land without being constrained by landownership. Doctrinal legal research was conducted by writing a legal discourse. No clear cut application was found to exist in sources of law for overcoming ownership constraints to non-mineral land with development potential. The study however demonstrated how the principles found in mineral rights legislation might be applied to enable a developer to legally acquire land for development, when the landowner refuses to sell or demands an unreasonable price. It was demonstrated how land might be expropriated for re-zoning and development purposes – effectively overcoming ownership constraints to development. The study also showed how expropriation for the purpose of maximising land value might be constitutionally justified within the context of Value Capture and other national land priorities.

5.1 Suggested further research

Further research would have to be done in order for the application proposed in this study to be implemented successfully.

5.1.1 The public purpose element of an expropriation for development

One specific aspect that would require further research revolves around the public purpose aspect of the proposed expropriation.

The typical mechanism proposed would require that a developer asks the state to expropriate land – and grant or sell the land to the developer – in return that the developer pledges a percentage of the profits to the state in return. Profits are only realised at the end of a property development. Such public purpose might therefor be described as indirect. Further research is required to ascertain whether such indirect
public purpose is sufficient to allow the minister of public works to expropriate land in terms of Section 2 of the Expropriation Act.

The study also states that land could be expropriated to promote equitable access to land – which is seen as public purpose. Whilst this may well be a public purpose, equitable access to land is not explored in great detail in this study. Further analysis is required to determine how equitable access to land might be furthered by the expropriation model proposed in the study – and how such equitable access to land might serve as a motivation for expropriating land for development purposes.

5.1.2 Application of the proposed expropriation

Another aspect that requires further analyses is the application of the proposed expropriation for development purposes. There is a difference between the application found in the MPRDA, and that proposed by the study:

- The MPRDA only removes certain rights from landownership, i.e. rights relating to minerals – and confers the power on the State to grant these rights to a third party. Rights that do not relate to minerals remain intact for the owner. Where the remaining ownership rights do not prevent the exploitation of mineral rights, it might be possible for the landowner to use his remaining rights concurrently with mineral rights exploitation. The landowner is also restored to a position of enjoying his remaining ownership rights once minerals have been extracted and any mines on the land have been issued with closure certificates. It is only in certain extreme circumstances that the State will expropriate full ownership rights under the application of the MPRDA.

- In order for the concept presented in this study to work, it appears that the State would have to expropriate full ownership rights, as this appears to be the only way that a developer might sell the development and pay a portion to the state as part of value capture. Such application goes far beyond that found in the MPRDA.

It is not clear which property rights might remain with a landowner under the application proposed by this study, and which rights would have to be expropriated. This matter would have to undergo further research.
The MPRDA furthermore removes and grants property rights relating to minerals by operation of law. A similar law of general application would have to be created to formalise the taking and granting of the potential development right. Such law would have to deal with the detail and proper procedures of the concept proposed by the study.

Further research in this regard might include an elaborate legislative review, seeking to understand the views of all stakeholders involved, in order to propose applicable policy for regulating and enabling developers to capitalise on the development potential of land – for the benefit of all South Africans.
6 REFERENCES


KPMG. 2008. *Indian airports: Global landing ground.* Mumbai: KPMG.


Muñoz Gielen, D. 2010. *Capturing value increase in urban redevelopment: a study of how the economic value increase in urban redevelopment can be used to finance the necessary public infrastructure and other facilities*. Leiden: Sidestone Press.


[http://dx.doi.org/10.4135/9788132101314](http://dx.doi.org/10.4135/9788132101314).


South Africa. 1898. Dutch Reformed Church v Town Council of Cape Town (1898) 15 SC 14
South Africa. 1907. Van Vuren and Others v Registrar of Deeds 1907 TS 289

South Africa. 1946. South African Railways v New Silverton Estate Ltd 1946 AD

South Africa. 1965. Secretary for Inland Revenue v Sturrock Sugar Farm (Pty) Ltd 1965 2 All SA 97 (A)

South Africa. 1966. Minister of Water Affairs v Mostert 1966 4 All SA 304 (A)

South Africa. 1970. Thanam NO v Minister of Lands 1970 (4) SA 85 (D)

South Africa. 1972. Jacobs v Minister of Agriculture [1972] 3 All SA 589 (W)


South Africa. 1974. Bonnet v Department of Agricultural Credit and Land Tenure [1974] 1 All SA 18 (T)

South Africa. 1976. Loubser en andere v Suid-Afrikaanse Spoorweë en Hawens 1976 (4) SA 589 (T)

South Africa. 1979a. Davey v Minister of Agriculture 1979 1 All SA 109 (N)

South Africa. 1979b. Minister of Agriculture v Estate Randeree and Others [1979] 1 All SA 213 (A)

South Africa. 1979c. Southern Tvl Buildings (Pty) Ltd v Johannesburg City Council 1979 1 SA 949 (W)

South Africa. 1989. Davis and another v Pietermaritzburg City Council 1989 2 All SA 379 (A)


South Africa. 1998. Kangra Holdings (Pty) Ltd v Minister of Water Affairs [1998] 3 All SA 227 (A)


*SPLUMA.* 2013. See: Spatial Planning and Land Use Management Act.


EBE Faculty: Assessment of Ethics in Research Projects

Any person planning to undertake research in the Faculty of Engineering and the Built Environment at the University of Cape Town is required to complete this form before collecting or analysing data. When completed it should be submitted to the supervisor (where applicable) and from there to the Head of Department. If any of the questions below have been answered YES, and the applicant is NOT a fourth year student, the Head should forward this form for approval by the Faculty EIR committee; submit to Ms Zabrya Chittle (Zabrya.chittle@uct.ac.za); New EBE Building, Ph 021 650 7539. Students must include a copy of the completed form with the dissertation/thesis when it is submitted for examination.

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If a Research Contract indicate source of funding/sponsorship:

N/A

Research Project Title:

THE APPLICABILITY OF MINERAL AND MINING RIGHTS CONCEPTS IN CREATING A VALUE CAPTURING MECHANISM IN SOUTH AFRICA

Overview of ethics issues in your research project:

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If you have answered YES to any of the above questions, please append a copy of your research proposal, as well as any interview schedules or questionnaires (Addendum 1) and please complete further addenda as appropriate.

I hereby undertake to carry out my research in such a way that

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- the findings could be subject to peer review and publicly available; and
- I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

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<td>Robert McGaffin</td>
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For applicants other than undergraduate students who have answered YES to any of the above questions.

Signed