

Sustaining livability and a sense of place in a changing South African urban context - an environmental management pilot case study

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Quotes:

Livability concerns a state of meaningful life-experience within an environment that is safe and life sustaining, where social and political stability prevails and where people can relate to their social and spatial life-context with a positive sense of place and place attachment. Livability implies a context where people can access and cope with their real and tangible, as well as their remembered and perceived intangible realities (author's definition inspired by various sources 2017).

Place is a geographical space that is defined by meanings, sentiments and stories, rather than by a set of co-ordinates. As a phenomenological concept, place is powerful both theoretically and practically because it offers a way to articulate more precisely the experienced wholeness of people-in-the-world, which phenomenologists call the lifeworld – the everyday world of taken-for-grantedness normally unnoticed and thus concealed as a phenomenon. This phenomenon is integral to human life and place holds lifeworlds together spatially and environmentally, marking out centres of human meaning, intention and comportment that, in turn, help make a place (Relph 1976).

Sense of place (or *genius loci*), involves a concern for the familiar and implies a sense of belonging, rootedness, stability and identity (Horn 1998).

The sense of place experience is determined by the physical context and also springs from the perceived intangible context and the sum of the social energy and agency that forms the collective consciousness (Giddens 1984).

The sense of place is, in the end, the result of a complex mixture of physical, social and personal factors – the choices we make, the attitudes we assume, and the extent to which we seek quality place experiences for ourselves and promote them for others (Steele 1981).

Identification is the basis for man's sense of belonging and 'dwelling' means belonging to a concrete place [home] (Norberg-Schulz 1976).

To say that mortals are, is to say that, in dwelling they persist through spaces by virtue of their story among things and locations (Heidegger trans. 1962).

It is evident that the eye is educated by the things it sees from childhood on (Goethe 1786).

Transforming space to place implies an open accountable process during which people can influence decision-making about how and what their physical spaces should become (Strydom and Puren 2014).

Sense of place can be enhanced and strengthened through appropriate architecture and townscape planning and appropriate design of streetscapes, buildings and avenues. Yet it can be impacted upon and compromised through interventions such as destruction of features within the tangible landscape/townscape as well as through disturbance of the intangible surrounds (Loots 2014).

We have to transform to create walkability, equity and sustainability, but we also have to protect to create identity ... towards a densified city that is sustainable, liveable and memorable (Loots 2017).

Keywords: South African urban case study, livability, sense of place, sustainability, environmental and social management, heritage management, Tshwane, Pretoria, Arcadia

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Abstract

This is a pilot study based on qualitative case research that was undertaken to identify methods and procedures that could lead to a greater understanding of the role played by sense of place in sustaining livability in urban contexts. The study uses a socio-spatial approach which focuses on social, rather than economic and environmental concerns. The study proposes that sense of place is a prerequisite for livability and sustainability. It also proposes that livability and sense of place can be sustained, enhanced and secured through protection and maintenance of identity as well as through stakeholder engagement, management procedures and design intervention.

To debate this premise, Arcadia Precinct area was selected as a case study. It is situated in the prestigious suburb of Arcadia, one of the most historical residential areas in Pretoria (City of Tshwane), South Africa. The area lies close to the University of Pretoria, the Union Buildings that is the seat of Government, the Hatfield business-and-accommodation growth point, and lies within walking distance from the Gautrain rapid rail terminal in nearby Hatfield. The majority of houses in Arcadia Street, in the selected Arcadia Precinct case study area, are more than sixty, and some more than a hundred years old. Arcadia Precinct constitutes an appropriate case study, since sense of place is under threat here due to rapid development in the area.

The focussed study objective was to determine how sense of place can be secured, enhanced and sustained in this area amid rapid and drastic urban transformation. Locally applicable sustainability principles and management procedures, that could contribute towards maintaining sense of place within Arcadia Precinct needed to be identified. The study endeavours to establish what the essential elements of sense of place are as perceived by members of the local community and what management plan and strategy should be followed to enhance livability and sustainability.

The research problem was centred on the need to manage development in a way that would ensure that the case study area remains sufficiently stable to sustain local sense of place. The study therefore aimed to provide a framework for future implementation that could sustain the livability and sense of place in the Arcadia Precinct in Pretoria, Tshwane. The framework that is put forward in the study consists of theoretical aspects to develop a way of thinking about sustaining sense of place as well as practical aspects to devise methods and procedures to maintain it. The procedure that is recommended stresses the need for consultation with members of the local community as well as professionals from diverse fields that include among others, environmental, social and heritage impact assessment specialists as well as spatial planners and architects. This framework also recommends that the Circles of Sustainability - Urban Profile Process' and Soft-Systems Procedure' (as discussed in this study) should be introduced to transform the study area to the envisioned and aspired future state.

The study also concludes that an effective, enforceable, development-management-plan, that is generated according to an "open accountable process during which people can influence decision-making about how and what their physical spaces should become" (Strydom and Puren 2014) should constitute the core tool of its management. This strategy should respond to local needs, while development should be guided by planning professionals and environmental, social and heritage specialists. It should be guided by assessment procedures and monitored according to review cycles and feedback programmes.

For the Arcadia Precinct study area to move towards the aspired state depends to a large extent on the implementation of a management plan and effective social and spatial planning strategies. Once this is implemented and a new spatial development framework for the Precinct becomes operational, the situation will be much improved. Planning impediments need to be removed and the actions stipulated in the framework proposed in this study need to be implemented. What is needed most of all is commitment by the local community and the local authority, to effectively apply the appropriate tools. Above all, individual people have to take the initiative and responsibility to achieve the desired state.

ETHICAL STATEMENT:

Please note that all participants in this study and associated interviews and surveys agreed that the information they shared may be used in this dissertation.

1 Introduction: context of study, problem statement, objectives, research questions

It should be noted that the Arcadia Precinct study is a pilot case study meant to inform a subsequent full study. It was undertaken to identify and explore the efficacy of tools, methods and procedures that may be used for further more comprehensive investigations that could lead to greater understanding of the role played by sense of place in sustaining livability in urban contexts. By definition the pilot study serves as preparatory investigation to determine the suitability of specific research methods to be used in a further, more comprehensive follow-up study. Leedy and Ormrod describe a pilot study as "a brief exploratory investigation [to] try out particular procedures, measurement instruments, or methods of analysis [to determine] which approaches will and will not be effective in helping you solve your overall research problem" (Leedy and Ormrod 1993:110). The outcomes of this study should be viewed in pilot study context, and should not be seen as results of a full study.

1.1 Arcadia Precinct case study context

1.1.1 Historical and geographical context

Arcadia Precinct, the study area of this study, is located in the City of Tshwane in the Gauteng Province of South Africa. The selected Arcadia Precinct case study is situated in the prestigious historical suburb of Arcadia, one of the most authentic and attractive historical residential areas in the City of Tshwane. The Precinct area lies close to the University of Pretoria, the Union Buildings, Hatfield business and accommodation growth point, and within walking distance from the Gautrain rapid rail terminal. The small case study area extends roughly from Eastwood Street to Festival Street and from Church (now Stanza Bopape) to Park Streets, as indicated on the map (Figure 1). Discussion of the Precinct area is set against the background of the broader area of which the borders extend roughly from the Union Buildings and Eastwood Street, along Lynnwood Road and up Duncan Street and to Church Street (Stanza Bopape), thus within a kilometre from the University of Pretoria and Hatfield rapid rail and bus stations. The current transition period in South Africa is expressed on socio-political and socio-economic fronts as well as in the transformation of land use and urban densification, especially along urban transport routes (Turok and Parnell 2009). The selected case study area provides a local perspective on the position and development challenges within the national socio-economic and socio-political context.

The area where Pretoria is located was called Phelindaba in pre-colonial times. Due to its landscape setting in well-watered valleys interspersed among protective ridges, the wider area provides a desirable living environment and during different stages of its history had repeatedly

become a place of contestation as is reflected in repeated acts of empowerment and landscape control. The deep-time occupation of the area is supported by excavated archaeological deposits, such as at the Wonderboom Early Stone Age site that lies close to the narrow gorge where the Apies River has carved its way through the northern section of one of the landscape barrier ridges, providing a strategic narrowing where, from prehistoric times, the game passed through to reach nutritional seasonal grazing to the north. The thousands of archaeological artefacts that still crop up along pavements and waterways, and in gardens and open spaces, indicate that, through time, people enjoyed living in these well-watered valleys that provided good grazing as well as on the hills that provided protection to pre-colonial people (Batchelor 2011). It was the farming potential provided by the powerful artesian fountains between its southern ridges that attracted the first colonial farmers. The Voortrekkers, the Dutch farmers that had left the Cape Colony in the 1830s to escape from British rule, moved into the interior north of the Vaal River from the 1840s. With the growth of the farming community followed traders and transport links, leading to the establishment of a regional town. Wagons laden with produce would head for the towering spire of the church in the town centre (Batchelor 2011). The town was named Pretoria after one of the Voortrekker leaders. The seat of the government of the South African Republic, the Boer republic north of the Vaal River, moved from Potchefstroom to Pretoria around 1860, because of its more central location for the various Voortrekker communities in the different parts of the Transvaal (Batchelor 2011). Turbulent times followed when the British took control of Pretoria in 1877 and again in 1900. Church Square had become the centre of political, economic and social life. The imposing Raadsaal, seat of government, stood close to the home of President Paul Kruger and Church Square had become the symbol of the values of the Boer republics.

In 1910 Pretoria became the administrative capital of the newly created Union of South Africa. It was decided to move the seat of government from the Raadsaal on Church Square and to construct a totally new and imposing complex of governance a few kilometers due east of Church Square, a site in an elevated position. The architect Herbert Baker selected this site on the southern slopes of Meintjieskop ridge for the imposing complex because it "provided broad vistas and a vantage point from which the building could dominate the landscape below". Situating the Union Buildings in this position formed part of a carefully designed strategy of visual control and dominance. The natural platform on the southern slope of Meintjieskop enabled visual links with other features within the grand scheme of urban design that included, across the valley, Pretoria Boys High School as well as Pretoria High School for Girls, the Old Letters Building on the campus of the University of Pretoria and the Arcadia Precinct case study area (Batchelor 2011).

Pretoria has retained its position as administrative capital of the South African state and the imposing Union Buildings has remained as seat of government through subsequent political

dispensations. Significantly, it is also from this platform that Nelson Mandela was inaugurated as the first democratic president of South Africa in 1994. Mandela committed South Africa to a new era based on justice for all (Mandela 1994). The Union Buildings became the symbolic epicenter of a political philosophy that represents true democracy - the symbol of the birth of the new South Africa (Batchelor 2011). In the current era of democracy since 1994, the greater city was renamed City of Tshwane, after a traditional leader from pre-colonial times. This brings the statement by Horn into perspective (1998:22) that: "The names Tshwane, Pretoria and Phelindaba represent different reflections of time, space and meaning in relation to the locale, symbolizing the flexibility of time and space and spatial construction of society".



Figure 1: Google Map of Arcadia Precinct with Hill House in Hill Street is circled

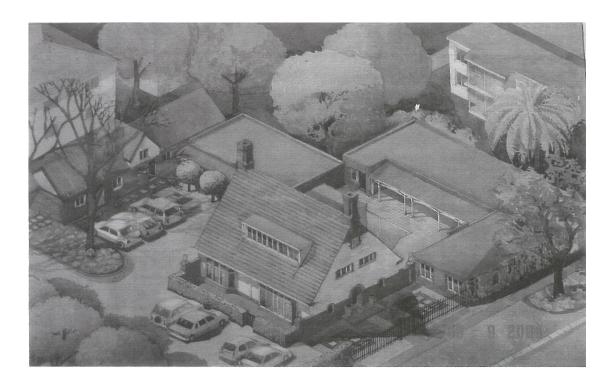


Figure 2: Sketch of Hill House (also known as Hill Village) student complex in Arcadia Street next to the University. The site development plan is illustrated in Figure 8 in Chapter 3.

(All artwork in this mini-dissertation was done by architect/artist Trevor Lloyd-Evans.)

As can also be seen on the site development plan of Hill House (see Figure 8, Chapter 3, p 65) the complex is arranged around courtyards. The 90 years old white house in the centre, where the author stays, was designed by Gordon Leith, an associate at the Herbert Baker office in Pretoria. The street view along Hill Street and Arcadia Street can be tracked on Google Maps. (Hill Village has a website ("Hill Village Accommodation Pretoria").

Hill House student accommodation enterprise that belongs to the author of this study, lies within the Precinct, and serves as nested case study example (Figure 2). The sense of place of the broader area has recently come under threat due to accelerated development that followed an increase in the demand for student housing and the establishment of a rapid rail and bus network as part of the City of Tshwane (Pretoria) transit-oriented development planning.

The wider South African urban landscapes have been subjected to major changes for decades, and have experienced accelerated development. In the decades of transition since the inception of the democratic dispensation in 1994, change processes were accelerated to accommodate the national policy of redressing the imbalances in the spatial economy. In this regard see e.g. the South African Constitution (Republic of South Africa (RSA) 1996), Integrated Development Plan (IDP) (RSA 2003), Spatial Planning and Land Use Management Act (SPLUMA) (RSA 2013),

Hatfield Spatial Development Framework (City of Tshwane (COT) 2012), Parnell and Pieterse 2014, Turok and Parnell 2009 and Van Donk et al 2008).

Following the rapid development in the adjoining suburb of Hatfield that accompanied the establishment of the rapid rail and bus system and the exponential growth of the University of Pretoria, the Precinct area of Arcadia has been dramatically transformed, to the degree that the purely residential land use has now been replaced by "other uses", predominantly offices and student accommodation (Batchelor 2006). While this has resulted in intensification of development and major financial investment in the area, it has impacted on the historical residential character and sense of place of the area.

1.1.2 Lived-experience research – the author

The multi-disciplinary nature of the study was enthusiastically engaged by the author whose professional background is in archaeology and art history, fields in which she had lectured at a local university. The disciplines of environmental science and spatial planning, in which this study is situated, provided a challenge and valuable study opportunity for extensive literature study by the author. This was most enriching and will benefit the future research that will be undertaken. But it did take more time than was available for the study, leaving less time for empirical study. Limitations associated with a pilot study as compared to a full comprehensive study result from the small sample and limited data collection and could result in one-sidedness and lack of accuracy.

While this research had benefitted from the 30 years of experienced knowledge of the author, the study also used data that was collected over many years, which complicated the data analysis. The deep involvement of the author could also have brought with it a degree of bias and lack of objectivity and reflexivity.

The author knew most of the participants in this study and associated interviews and surveys. They were aware that the engagements were for reasons of the study. Verbal consent was given by all participants that the information gathered could be used in my studies and dissertation. Also note that this study commenced before the formalities of the current ethics regime were in place at the North-West University. Lack of a formal signed consent form could, however, be seen as a limitation of this study. This aspect should be appropriately addressed in future research.

1.2 Outline of the research

An outline of the pilot study, as dealt with in this document, is provided in Table 1.

Table 1:

Outline describing need for and nature of the study, aims, objectives, research questions, key theoretical concepts, assumptions, methods used and recommendations

What type of study is it?	Chapter 2
It is a qualitative pilot case study situated in Arcadia Precinct in Pretoria South Africa. The study	
follows a socio-spatial approach and focuses on social rather than economic or environmental	
aspects of environmental management. The study has two main sections namely a pilot baseline	
study (illustrated in Figure 3) and a model for future implementation (illustrated in Figure 4).	
What is the focus of the study and how does the study relate to different disciplines?	Chapters 2 and 3
The study considers the key concepts sense of place, sustainability and livability in an urban	
context as viewed from within the discipline of environmental management. The study also	
relates to certain aspects of urban spatial planning and land use management as well as	
phenomenology and human geography.	
Why was there a need for the study?	Chapter 1
The need for the study derives from the need to sustain livability and to secure, enhance and	
sustain sense of place in the study area where it is threatened due to rapid development.	
What were the research objectives?	Chapter 1
To supply a baseline study from an insider perspective of how Arcadia Precinct has changed and	
what the current situation is.	
To determine how the concepts of sense of place/place attachment, livability and sustainability	
are locally perceived.	
To determine what the social and environmental aspirations of the residents are and what they	
think should be done to address the challenges of urban change in the area.	
What were the research questions?	Chapters 1,3,4,5
How have recent changes impacted on the study area and what is the current situation?	
How have the concepts of sense of place/place livability, and sustainability evolved in the	Chapter 3.
literature, what relevance do they have for this study and can the principles contained in these	
concepts be used as points of departure for future planning?	
What are the views/attitudes/fears of the different stakeholders about the concepts of sense of	Chapter 4
place, livability and sustainability that are applicable to the study area?	
How do the different stakeholders perceive the situation in the study area and what are their	Chapters 4 + 5
ideas/plans on what needs to be done to address the challenges of urban change?	
What was the assumption or basic premise (hypothesis) of the study?	Chapter 1
The assumption was that livability could be sustained if sense of place could be retained in the	
case study area. Further assumptions were that maintenance of sense of place had the potential	
to strengthen sustainability, that sense of place and that sense of belonging can be sustained,	
enhanced and secured through implementation of management procedures and design	
intervention.	

	ı ag
What were the methods used in this qualitative pilot case study?	Chapter 2
This was a qualitative pilot case study that used empirical methods that included a street-view	
survey, along with community engagement through semi-structured interviews, residents	
meetings, information-sharing sessions (public participation) and notation of the author's own 30	
year lived experience at Hill House, the nested case study in Arcadia Precinct. What suggestions were made to address the need for the study?	Chapter 5
It was suggested that a framework should be developed to address the core needs and that a	
detailed strategy should be devised to implement the framework and that the recommendations	
should be introduced as a matter of urgency.	
What recommendations are made in the study? The following was recommended:	Chapter 5
1. This pilot study should be followed by a more comprehensive study that includes environmental and social impact assessment. This should also include a comprehensive baseline study as well as extensive stakeholder engagement programmes to determine current needs and future aspirations of the local community.	
2. Environmental (including social) Impact Assessment (EIA) should be undertaken. Due attention should be given to the perceptions held by the community on livability and sense of place as well as their aspirations for the future of the Precinct study area. Heritage practitioners should draft a conservation management plan while urban planners then need to combine the inputs from other disciplines to engage in land use planning that will ensure the maintenance of sense of place for the sustainable development of the area.	
3. Based on these impact studies a new spatial development framework as well as a development-management plan should be developed for the study area in order to strengthen livability and sense of place. The plan should include locally applicable principles of social, economic, political and environmental sustainability.	
4. Both the framework and the management development plan should be developed so as to recognise the current concerns and aspirations of the local community. This should be developed in conjunction with spatial planners and architects (to optimise the potential of the area through form-based design), as well as with social and environmental impact assessment professionals and heritage specialists.	
5. It is also recommended that the current state in the study area should be described according to the Circles of Sustainability Urban Profile Process (Figure 9 in Chapter 5) and that a technique known as Soft Systems Methodology should be engaged to support the progression from the current state to the envisioned future state in the area.	
6. The development-management plan for the area should comply with principles specified in the model for future implementation as agreed to by all relevant parties, including the local community. Compliance monitoring of the development management plan should follow prior agreed-on, and clearly identified, compliance stipulations, report-back procedures and time-phased review cycles. The development management plan and associated monitoring regime should be binding and enforceable.	

- 7. Liaison should be strengthened within the community as well as between municipal planning officials and spatial planners, social and environmental impact assessment professionals, architects and heritage specialists.
- 8. The matter of Arcadia Street as heritage street should be resolved through further investigation and through public participation.
- 9. A new communal-living-and-densification concept ("complex stay") should be introduced to provide in the needs of people from different walks of life.

1.3 Problem statement

Background to the problem

The broader problem addressed by this study is linked to the current development dynamics in Arcadia Precinct.

In the study area (Arcadia Precinct) recent rapid change in land use has created a threat to the stability of this area as a livable environment for the residents. There is the possibility of urban decay. Is it possible to develop a framework for policy-making and management that can counter this threat? Such a framework will have to take into account the combined elements of sustainable development in an urban context in the following domains: economics, ecology, politics and culture. How can the needs of the different stakeholders be reconciled and accommodated in such a framework? Many factors must be taken into account: the physical environment (buildings, trees, gardens, etc) and its heritage and aesthetic values, the spatial development and planning frameworks of the municipality, the social needs of stakeholders, sense of place/place attachment of the permanent and temporary residents, the economic/financial viability of the area, etc.

The study provides perspective on the position and development challenges of the study area within the national socio-economic and socio-political context. The Arcadia Precinct provides a typical example of the challenges of densification and land use change in the local sphere. Hill House, that provides annual lodging to female and male students, serves as nested example within the Precinct case study. The owner and tenants represent two important stakeholder groups in the Precinct. The owner, author of this study, is a long-time permanent resident of the Precinct with strong vested interests in the study area. Most of the students are in their twenties and come from different provinces of South Africa, as well as elsewhere in Africa and are enrolled in different disciplines. Most students stay at Hill House for the duration of degree studies, i.e. for a period of

at least three years. Hill House was also considered to be a suitable case study example since tenants largely reflect the diversity of the wider South African population.

In the Arcadia Precinct case study area densification poses a challenge to residents who wish to capitalise on the development potential yet wish to conserve the heritage character and the sense of place in the Precinct. The development dynamic in the Precinct along Arcadia Street has been further challenged as a result of the Municipality's intension to proclaim Arcadia Street, the core focus of the study, as heritage street. The implication thereof is that no further development will be allowed on properties along the street as well as up to the middle of the block. Since high density development is allowed on bordering properties, multi-storied apartment buildings now directly overlook some of the heritage properties.

The stated objectives of the Hatfield Spatial Development Framework are to provide directives for spatial restructuring. It indicates that developments must be holistically evaluated, economically viable, must satisfy the needs of both investor and user, and that the emphasis in Hatfield should be shifted away from strict development controls, towards the facilitation of a high quality urban environment. It clarifies that "the objective of this framework is to facilitate transit orientated development within a quality urban environment" (COT 2012:54).

It must also be noted that at the time the Spatial Development Framework for Arcadia Street of the City of Tshwane Metropolitan Municipality City Planning Department was tabled in 2002 it was already outdated, and it clearly predates the conceptualization of the development of the Gautrain rapid rail network. Furthermore, the deductions made in the 2002 report were based on a survey that had been undertaken nine years earlier by Schalk le Roux in 1993 (Le Roux 1993; COT 2002:6). Yet the stipulations contained in the Framework (COT 2002) are still applied in the evaluation of development applications submitted to the Tshwane planning department.

When considered in the wider perspective of Tshwane development objectives expressed in the Integrated Development Plan for Tshwane that is currently being finalised (in 2017), the Arcadia Street Development Plan (COT 2002) is in non-alignment. This is the result of decisions taken by Tshwane Municipality to declare Arcadia Street, that lies at the heart of the Precinct, as heritage street. Yet the Precinct forms part of the City of Tshwane's transit-oriented development planning that proposes densification. Such a declaration has resulted in the entire area being subjected to unnecessary stringent control measures and may curtail the development potential of the area. Instead of contributing to the maintenance of sense of place, this has had the opposite and undesirable effect of perpetuating the transitional and tenuous position of the Precinct.

Further discrepancies also exist in terms of planning permission granted by the municipality in that detail contained in planning submissions and the physical final outcome thereof on the ground lack of correlation. The stated written intentions submitted as part of the application by developers, often differs significantly from the physical building that is eventually constructed on the site. The prevailing urban fabric and character that is closely linked to sense of place is compromised by this lack of correlation. What is needed is an effective mechanism of control and enforcement. Integrated planning, as well as closer networking between communities and authorities, will assist in remedying this form of non-alignment.

In this pilot study a start is made towards designing a framework and strategy that can address the above problem. This study serves as a baseline study of Arcadia Precinct and consists of two main components. The literature study component focuses on best practice for sustaining sense of place and livability in urban contexts and the empirical study focuses on establishing the views of stakeholders on the concept of sense of place and their ideas on possible solutions to keep the study area a livable neighbourhood.

1.4 Objectives of the study and research questions

The Arcadia Precinct study is a pilot study and was undertaken to identify and explore the efficacy of tools, methods and procedures that could be used for further more comprehensive investigations to clarify the role played by sense of place in sustaining livability in urban contexts. The aim of the study was to identify methods and procedures that held potential of sustaining sense of place and strengthening livability in the case study area and should be used in the subsequent full study.

The following research objectives of the pilot study were thus formulated:

- To investigate what methods to compile a baseline study had promise, and could therefore be used in the more comprehensive study (that is to follow this pilot study). This baseline study had to reflect an insider perspective of how Arcadia Precinct has changed and what the current situation is.
- To clarify the concepts of sense of place/place attachment, livability and sustainability.
- To establish the views/attitudes/fears of a number of stakeholders about the concepts of sense of place, livability and sustainability applicable to the study area.
- To record the ideas/plans of different stakeholders on what needs to be done to address the challenges of urban change in the study area.

Once these objectives are realised it will provide a basis for further investigation into a possible future framework that will counter and/or mitigate the threats, bring stability to the area and

maintain it as a livable urban residential environment, and to design an appropriate and feasible strategy to introduce and implement the proposed framework in the study area.

The objectives of this pilot study will be reached by answering the following research questions:

- How have recent changes impacted on the study area and what is the current situation?
- How have the concepts of sense of place/place attachment, livability and sustainability evolved in the literature and what relevance do they have for this study?
- Can the principles contained in these concepts be used as point of departure for future planning?
- What are the views/attitudes/fears of the different stakeholders about the concepts of sense of place, livability and sustainability applicable to the study area?
- How do the different stakeholders perceive the situation in the study area and what are their ideas/plans on what needs to be done to address the challenges of urban change.

1.5 Governance context and legislative framework

A wide variety of documents, principles, criteria and procedures guide sustainable development at national, provincial and municipal levels in South Africa. This section provides reference to the overarching legislative setting and considers the relevance and effectiveness of official development frameworks and other guiding documents and processes relevant to environmental (including urban environmental) management.

The significance of the South African sustainability framework should be viewed in global perspective. The Division for Sustainable Development (DSD) of the United Nations, for example, seeks to provide leadership towards the implementation of development goals and these include seventeen Sustainable Development Goals (SDGs). SDG 11 is directed towards sustainable cities and communities. SDG 11.1 states: "By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums'. SDG 11.3 proposes: 'By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries'. The most recent United Nations global summit that focused on urbanisation (Quito, Ecuador 17-20 October 2016), considered aspects such as: 'community habitat', 'safer cities', and 'cities going slower to create more livable cities' (United Nations (UN) 2016).

Over and above official legislation and guidelines, non-binding agreement documents such as Agenda 21 (the action plan to promote sustainable development) also play a significant role at local government level. Agenda 21 obliges adherence to the voluntarily implemented action plan of the United Nations with regard to sustainable development. It is a product of the Earth Summit (UN Conference on Environment and Development) held in Rio de Janeiro, Brazil, in 1992 (UN 1992).

Agenda 21 argues that local governments are key role players in the implementation of sustainable development due to their planning and developmental activities. It also emphasises the importance of the link between local government and the public and is expressed in South Africa's Local Agenda 21 (LA 21) that exists as a framework for sustainability to be applied across a multitude of local authorities with their unique needs, histories and resources (UN 1996). In the South African local government context, LA 21 has been formally adopted and is closely aligned with the Integrated Development Planning (IDP) process. LA 21 places significant emphasis on creation of partnerships between local communities and local authorities to establish local sphere sustainability (UN 1996).

This part of the study provides an outline of documents that relate to environmental (including urban environmental) development. It discusses core documents such as the National Environmental Management Act (NEMA) (Act 107 of 1998), the Spatial Planning and Land Use Management Act (SPLUMA) (Act 16 of 2013) and the National Heritage Resources Act (Act 25 of 1999). For the City of Tshwane the Regional Spatial Development Framework (COT 2014), Tshwane Vision 2055 (COT 2002) and especially documents related to strengthening sustainability in the Integrated Development Planning Process (DEAT 2002; Sowman and Brown 2006) should be consulted when development is being considered. Documents of the City of Tshwane relating to Pretoria East, including the Hatfield Spatial Development Framework (COT 2012) and the Spatial Development Framework for Arcadia Street (COT 2002) provide guidance on spatial planning on the local level.

The Constitution of the Republic of South Africa, 1996

The concept of sustainable development is fundamental to environmental management in South Africa as underlined in the Constitution of South Africa. Section 24 of the Constitution provides that everyone has the right:

- (a) to an environment that is not harmful to their health or well-being; and
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
 - (i) prevent pollution and ecological degradation;
 - (ii) promote conservation; and
 - (iii) secure ecologically-sustainable development and use of natural resources while promoting justifiable economic and social development (RSA 1996).

This section requires that the environment (implying both the natural and cultural environment) is protected through reasonable legislative and other means to secure ecologically sustainable development and use of natural (and cultural) resources. The "environment" is included in Schedule 4 of the Constitution. Functional areas listed in Schedule 4 include nature conservation, housing, public transport, regional planning and development, urban and rural development among others (RSA 1996).

National Environmental Management Act (Act 107 of 1998) (NEMA) and locally applicable sustainability principles.

The use of the term sustainable development, as applied in this study, agrees with its use in the National Environmental Management Act (NEMA), which gives effect to Section 24 of the Constitution.

NEMA's preamble states that "sustainable development requires the integration of social, economic and environmental factors in the planning, implementation and evaluation of decisions to ensure that development serves present and future generations" (RSA 1998). Sustainable development is defined in Section 1(1) of NEMA as the 'integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that development serves present and future generations' (RSA 1998).

The NEMA principles set out in Section 2 are central to environmental management in South Africa (Van der Linde and Feris 2008:198) and also serve as point of departure in consideration of sustainable development principles at a local level, as in this case study. NEMA principles constitute the primary tool for achieving sustainable development because they recognise that the consideration of environmental factors requires the integration of social, economic and ecological factors into decisions. NEMA principles are applicable to all decisions that relate to the interpretation and implementation of NEMA and other laws concerned with environmental management or protection. They serve as the general framework within which environmental management and implementation plans must be formulated.

Section 2(2) of NEMA requires that people and their needs must be placed at the forefront of concerns in order for environmental management to serve the people's developmental, cultural and social interests. NEMA reflects the three pillars of sustainable development by providing in Section 2(3) that 'development must be socially, environmentally and economically sustainable'. According to Glazewski (2005:141) this indicates that the provisions in Section 3(2) are a commitment to sustainable development. Section 2(4) provides that 'sustainable development

requires the consideration of all relevant factors'. These factors include the preventative principle, environmental justice, equitable use of natural resources, sustainable use of resources, the public trust doctrine, polluter pays principle, environmental health and environmental assessment (RSA 1998).

Chapter 5 of NEMA provides for the development of procedures for the assessment of the impact of policies, plans and programmes and seeks to give effect to this imperative by promoting the application of appropriate environmental management tools to ensure the integrated management of activities that may impact on the environment. It is important that an Environmental Impact Assessment (EIA) considers the NEMA principles for two key reasons, namely to determine whether the proposed development meets the 'sustainability test', that is, does it represent a move away from or a move towards sustainable development and to enable the decision-maker to consider the development proposal in light of these principles, which they are obliged to do. Impact of a proposed development on socio-economic conditions must be determined in the light of the concept of sustainable development, the principle of integration of socio-economic development and the protection of the environment.

Assessment as a tool towards sustainability:

Environmental assessment (EA) is the term used for the assessment of the environmental (and social) consequences (positive and negative) of a plan, policy, programme, or concrete projects, prior to the decision to move forward with the proposed action (Aucamp 2009:59-61).

The term environmental impact assessment (EIA) is usually used when applied to concrete projects by individuals or companies and the term strategic environmental assessment (SEA) applies to policies, plans and programmes most often proposed by organs of state.

The National Environmental Management Act (Act 107 of 1998) (NEMA) prescribes the use of assessment as a technique that will strengthen sustainability (UN 1992, 2002, 2003; Sowman and Brown 2006; Gibson, 2013; James 2015). Assessment tools such as EIA (Petts 1999; Vanclay 2004; Newman and Jennings 2008), Social Impact Assessment (SIA), Heritage Impact Assessment (HeIA) and Community Value Assessment (CVA) are considered as analytical and planning tools that are used to steer development by specialists according to their different fields of expertise and are important in the case study research and in consideration of sense of place since they recognise the dynamic interaction among people within place. Elements within these assessment fields were applied within the Precinct study area, and aspects thereof are included in

Table1. Note that a Heritage Impact Assessment (HeIA) is required in terms of Section 38 of the NHRA when heritage resources may be affected by any proposed development.

Social Impact Assessment (SIA) should be acknowledged as a significant tool towards sustainability. Some of the principles of SIA relate to locally experienced sense of place and the study concludes that SIA should receive greater recognition for the role it can play as over-arching assessment tool, and should be incorporated throughout the life cycle of development projects (Aucamp et al. 2011; Vanclay and Esteves 2011).

Gibson (2006) states that SIA is aimed at achieving livelihood sufficiency and opportunity, and that it can ensure that all communities and individuals have the opportunity to lead a decent life without compromising the opportunities of future generations. According to Aucamp (2009:160) SIA makes a contribution to ensuring that 'future and present generations are served' if it is effective and is therefore an important part of sustainable development. Therefore socio-economic aspects must be considered during the EIA process in terms of the Constitution and NEMA principles. SIA includes the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, plans and projects) and any social change processes invoked by these interventions (DEAT 2002:48). SIA can add value to decision-making processes, because it can protect the rights of communities and it can ensure sustainable development if it is used correctly (Aucamp 2009:120).

The potential future assessment actions affecting the Arcadia Precinct area could be undertaken by the Municipality as a SEA whereby it reviews existing policies and programmes related to potential future development in the Precinct area, and the potential impacts (social, heritage and economic) that these may have on the sense of place and sustainability of the Precinct area. Such a SEA would be initiated and managed by the Municipality guided by an Assessment Practitioner. An EIA (including a social and heritage component) in terms of the NEMA requirements, could be required for a proposed development (listed in terms of NEMA). In this case the study would be initiated and funded by the property developer and undertaken by an independent EIA Practitioner. This EIA report would then be submitted to the competent authorities for authorisation.

Spatial Planning and Land Use Management Act (Act 16 of 2013) (SPLUMA)

The Spatial Planning and Land Use Management Act (SPLUMA) was enacted in 2013, and implemented in 2015. Section 24 of SPLUMA specifies that a municipality must, after public consultation, adopt and approve a single land use scheme (LUS) for its entire municipal area within five years from the commencement of the act.

SPLUMA relates to current development in the study area. It specifies the principles that should guide spatial planning, i.e. the principles of spatial justice, spatial sustainability, efficiency, spatial resilience and good administration. It thus obliges municipalities to develop spatial frameworks that identify the designation of areas in which more detailed local plans must be developed. It provides for shortened land use development procedures and the amendment of land use schemes. SPLUMA underlines development principles that are relevant to sustainable development in the national and local spheres and that also apply in the Precinct area.

Tshwane's Integrated Development Plan is aligned with the SPLUMA principles. A number of Tshwane spatial planning and land use documents relate to Region 3 in which the Precinct is situated. These include, among others, the City of Tshwane Compaction and Densification Strategy (COT 2005), the Tshwane Metropolitan Spatial Development Framework Region 3 (COT 2013), the Tshwane Vision 2055 (COT) and the Tshwane Rapid Transit: Spatial Development Policy – Densification and Intensification Guidelines (COT 2014). These documents were scrutinised for the purpose of this study to determine how the principles of sustainable development, and especially the need to maintain the sense of place, could be realised in development planning for the study area.

National legislation that relates to heritage

According to the National Heritage Resources Act (NHRA) (Act 25 of 1999) heritage resources include places or objects of cultural significance. They are controlled in the national sphere by the South African Heritage Resources Agency (SAHRA). The Gauteng Provincial Heritage Resources Authority (PHRAG) is responsible for the management of heritage resources that are of provincial significance (grade II) as stipulated in Section 8(1) of the NHRA. In accordance with Section 34 of the Act, no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit from PHRAG.

The NHRA provides legislation to promote good management of the national estate (i.e. all the declared heritage resources in the country), and to enable and encourage communities to nurture and conserve their legacy so that it may be bequeathed to future generations. It stresses that our heritage is unique and precious and it cannot be renewed. It helps us to define our cultural identity and therefore lies at the heart of our spiritual well-being. It has the power to build our nation and has the potential to affirm our diverse cultures. Heritage conservation can be achieved through the compilation of Conservation Management Plans (CMPs) for cultural heritage (RSA 1999: 72, 74), which is supported by the Site Management Plans and Guidelines provided by SAHRA.

The NHRA describes heritage resources as valuable, finite, non-renewable, irreplaceable, unique, having an intrinsic value worth preserving, having the capacity to promote reconciliation, understanding and respect, and contribute to the development of a unifying South African identity. In terms of the NHRA, Sections 13(2)(c) and (d), the SAHRA has the overall responsibility for the systematic identification and recording in data bases of the national estate, i.e. all heritage resources specified in the Act (RSA, 1999a: 28).

In terms of South African legislation there is a legal obligation, applicable to the state and private individuals, to protect and conserve heritage. NEMA, NHRA, the World Heritage Convention Act (WHCA), Act 49 of 1999 and the National Environmental Management: Protected Areas Act (NEMPAA), Act 57 of 2003, constitute the most important legislation introduced in post-1994 South Africa for the protection and conservation of heritage. Jointly they have created a management system for the protection and conservation of all types of heritage throughout the country on state-owned and privately-owned land. There are several bodies that are responsible for aspects of heritage management in South Africa, performing their heritage management duties by means of different types of management plans.

Section 31 of the NHRA describes particular actions that must be implemented with respect to heritage management by authorities. Sub-section 5 has relevance to the study area and states:

"A local authority may, by notice in the *Provincial Gazette*, designate any area or land to be a heritage area on the grounds of its environmental or cultural interest or the presence of heritage resources, provided that prior to such designation it shall consult—

- (a) the provincial heritage resources authority; and
- (b) owners of property in the area and any affected community, regarding *inter alia* the provisions to be established under subsection (7) for the protection of the area".

In addition sub-section 7 states:

"A local authority must provide for the protection of a heritage area through the provisions of its planning scheme or by-laws under this Act, provided that any such protective provisions shall be jointly approved by the provincial heritage resources authority, the provincial planning authority and the local authority, and provided further that—

(a) the special consent of the local authority shall be required for any alteration or development affecting a heritage area;

(b) in assessing an application under paragraph (a) the local authority must consider the significance of the area and how this could be affected by proposed alteration/ development; and (c) in the event of any alteration or development being undertaken in a heritage area without the consent of the local authority, it shall have the power to require the owner to stop such work instantly and restore the site to its previous condition within a specified period. If the owner fails to comply with the requirements of the local authority, the local authority shall have the right to carry out such restoration work itself and recover the cost thereof from the owner".

The Gauteng Heritage Resources Authority (PHRAG) is responsible for the management of Grade II heritage resources, i.e. heritage resources that are of provincial significance/as stipulated in Section 8(1) of the NHRA. In accordance with Section 34 of the Act, no person may alter or demolish any structure or part of a structure which is older than 60 years and without a permit from PHRAG. This legislation is therefore of particular significance in the case study area.

Legislation and non-binding agreement documents that relates to the local municipal level

In terms of the Local Government Municipal Systems Act, 32 of 2000 (MSA) a municipal council is required to adopt an Integrated Development Plan (IDP) which is a strategic planning instrument guiding and informing planning and development. The IDP is a tool used by local government to address transformation and to fulfill its developmental role (Sowman and Brown 2006:696). The IDP is intended to be the principal strategic planning instrument which guides planning and development and informs budgeting and management decisions in local authorities over a five-year period. An IDP must include a spatial development framework (SDF) which provides guidelines for land-use management within in the municipality. Section 25 requires that an IDP be compatible with national and provincial development plans and planning requirements that bind the municipality (RSA 2000).

Spatial Development Frameworks as well as a Land Use Management Schemes are tools used by municipalities to guide and manage development according to the vision, strategies and policies of the Integrated Development Plan (IDP) and in the interests of the general public to promote sustainable development and quality of life. The general purpose of a Land Use Management Scheme is to create coordinated, harmonious and sustainable development of a municipal area in such a way that it efficiently promotes health, safety, order, amenity, convenience and general welfare, as well as efficiency and economy in the process of development. Related documents are therefore of particular significance to development in the case study area (RSA 2002).

Land use schemes that relate to the case study area include, among others, Tshwane Vision 2055 (COT 2002), City of Tshwane Compaction and Densification Strategy (COT 2005), Tshwane Metropolitan Spatial Development Framework Region 3 (COT 2013), Tshwane Rapid Transit: Spatial Development Policy – Densification and Intensification Guidelines (COT 2014), Tshwane Town Planning Scheme (2008) that was revised in 2014 and is again up for revision. Apart from these the following documents that relate to the Precinct will also have to be consulted when development is being considered in the Precinct area:

- Hatfield Spatial Development Framework of the City of Tshwane Metropolitan Municipality City Planning Department (2012).
- Tshwane Regional Spatial Development Framework (2014).
- Tshwane (Draft) Regional Spatial Development Framework 2017-21 currently in the public participation phase.
- Combined Precinct Plans for participating residents' associations (Loots 2017).
- Region 3: Regional Integrated Development Plan City of Tshwane (www.Tshwane.gov.za>sites>council).

When the stipulations contained in the two main development frameworks that relate to the Precinct area, i.e. the Hatfield Spatial Development Framework (COT 2012) and the Spatial Development Framework for Arcadia Street (COT 2002) are compared to guidance contained in the more over-arching documents mentioned above, certain discrepancies are identified. While the Hatfield Spatial Development Framework encourages densification around rail and bus stations, the Arcadia Street Framework proposes that the street should be developed as a heritage street, thus inhibiting development along the entire street. Yet, within the context of the entire Gautrain rapid rail line, from the terminus in the centre of Johannesburg (Park Station) to the Pretoria terminus in Hatfield, the Hatfield station surrounds, including Arcadia Street is the only area suited for densification of settlement. It is a challenge to reconcile these seemingly conflicting objectives for development in the Precinct, namely the expansion of the transport hub as opposed to heritage conservation. This is the most basic conflict of interest applicable to the study namely how to reconcile heritage conservation with urban development.

The map of the street view survey undertaken by the author of this study was included in the Hatfield Development Framework as "Arcadia Street Map" in COT 2012:37). The survey provides information on the character and quality of the street and street-front of houses as well as on the diverse uses of the buildings, and it is thus directly significant in terms of sense of place as well as the development potential of the case study area.

The Spatial Development Framework for Arcadia Street (COT 2002) is now outdated by more than a decade and the survey that it bases its information on is even older (Le Roux 1993), yet it is still used as benchmark in the evaluation of applications for development (personal communication

with Tshwane Planning Department 2014). Although the heritage quality of the street is protected by the NHRA, and the national assets are protected, the outdated framework still plays a decisive role in the municipal decision-making process. This stresses the importance of the integration of the planning processes, especially in the local sphere. The study indicates that the need exists for networking among authorities and the community as well as for a more flexible approach from the municipal planning department.

1.6 Literature review

1.6.1 Purpose of the literature review

The first main component of the research method applied for the Arcadia Precinct study is the literature review. A literature review was undertaken of relevant local and international sources as well as development frameworks that relate to the study area.

A literature review includes the current knowledge available about a particular topic, including substantive findings, theoretical and methodological contributions to the topic. In the case of an academic dissertation it serves to situate the current study within the body of the relevant literature. According to Fink (2014) a literature review surveys the published works (including books, scholarly articles, and any other relevant sources) dealing with a particular topic in order to provide a description, summary, and critical evaluation of these works in relation to the research problem being investigated. Literature reviews are designed to provide an overview of sources and to demonstrate to readers how the research fits within the larger field of study.

In the social sciences and also in this study, the literature review has a purposeful organisational pattern. It combines both a summary and synthesis of the literature within identified conceptual categories. The purpose of the literature review is, amongst others, to identify areas of prior scholarship, to interpret the published literature, to trace the intellectual progression of the field, to evaluate sources and advise the reader on the most relevant research, to place important works in the context of their contribution to understanding the research problem, to describe the relationship between works, and to locate this study within the context of existing literature (Fink 2005; Hart 1998; Jesson 2011; Ridley 2012).

For the current study sources were used to gain better understanding of the field of study and research methods. Such sources enabled better understanding of the various approaches, core concepts and methods employed by disciplines related to the study and also provided valuable background and perspective in developing the socio-spatial research approach while it also

provided background information on the geographical, historical and socio-political context of the study.

Different types of secondary sources were used for the study, including books, articles in academic journals, academic dissertations and documents published by departments of the public sector in the national, provincial and local spheres. See the list of references at the end for full details. **Databases** To search for and identify relevant material for this study the following databases were used namely NEXUS, SAePublications, Science Direct and JSTOR.

1.6.2 Sources - international

The work of Norberg-Schulz serves as theoretical point of departure of this study. In *Genius Loci:* Towards a Phenomenology of Architecture Norberg-Schulz describes genius loci as the sense people have of a place that reflects the sum of all physical and symbolic values they attach to nature and the human environment (Norberg-Schulz 1976:422). He considers people's life world as a basis for orientation and identity. Identification is in his opinion the basis for humankind's sense of belonging. True freedom, he states, presupposes belonging, and 'dwelling' means belonging to a concrete place [home] (Norberg-Schulz 1976:425). Place is a "discrete, temporally and perceptually bounded unit of psychological meaningful material space", which finds its highest expression in the concept of home (Norberg-Schulz 1976:419). He recognizes that a person's experiences of place and of self-identity develop from childhood and remain as a formative influence throughout life. Place identity relates to personal and cultural identity and the way we experience sense of place and sense of belonging (Norberg-Schulz 2003:125).

Norberg-Schulz thus considers the concepts of sense of place and sense of belonging as being the essence of identity. Pertinent to the current study is Norberg-Schulz's definition of sense of place as related to "sense of belonging" and "dwelling in a livable environment" where quality of life can be retained (Norberg-Schulz 1976. See also Giddens 1984; Tuan 1977; Jacobs 1961). Following this approach the focus of this study is on spirit of place, sense of belonging, livability ('dwelling' in a livable environment) and the sustainability of a place (Norberg-Schulz 1976:417).

Sources that were of particular value to the research included among othes the work of human Geographers Tuan, Relph and Cresswell provided valuable insight on place, sense of place and livability (Relph 1976; Cresswell 2004). Scholars generally agree that place is location-orientated and instrumental in fostering a sense of security (Tuan 2007:6; Leach 2002:129). Tuan states that "an undifferentiated space only becomes a place when we endow it with value" (Tuan 1977:6).

Relph in *Place and Placelessness* considers how ideas of place are formed and communicated. He states that "place" means "those fragments of human environments where meanings, activities

and a specific landscape are all implicated and enfolded by each other" and that place is informed by memory, as well as through visual, aural, olfactory and tactile sense experiences. Therefore place is a geographical space that is defined by meanings, sentiments and stories, rather than by a set of co-ordinates" and Relph also explains that "as a phenomenological concept, place is powerful both theoretically and practically because it offers a way to articulate more precisely the experienced wholeness of people-in-the-world, which phenomenologists call the lifeworld – the everyday world of taken-for-grantedness normally unnoticed and thus concealed as a phenomenon. This phenomenon is integral to human life and place holds lifeworlds together spatially and environmentally, marking out centers of human meaning, intention and comportment that, in turn help make a place" (Relph 1976:37).

Tuan, in *Topophilia: A study of environmental Perceptions, Attitudes and Values* (1974) examines environmental perceptions and values at different levels. (Topophilia, topos meaning place and philia meaning love in Greek, means a strong sense of and bond with place.) In *Space and Place* he underlines the importance of home in people's lives and states that "engineers create localities by time is needed to create place and to 'build up care' (Tuan 1977:421).

Cresswell refers to human geographers (Relph 1976; Tuan 1974) and traces the roots of this engagement back to the philosophies of meaning and refers to Heidegger in this respect. Cresswell describes place as space invested with meaning in the context of power and refers to Tuan who described space as movement and to place as pauses or stops along the way, where each pause in movement makes it possible for location to be transformed into place (Tuan 1977:6).

Steele in *The Sense of Place* describes two aspects of place-association related to settings. Sense of place refers to the particular experience in a particular setting and spirit of place describes the combination of characteristics that contribute to the 'personality' of a place (Steele 1981:11). He considers settings, place and experience and the transactional nature of the relationship between people and places and concludes that states "sense of place is in the end, the result of a complex mixture of physical, social and personal factors" (Steele 1981:205).

Stedman, in *Is it really just a social construction?* States that the contribution of the physical environment to sense of place enlightens the significance of the environment where one lives, and his research based on a thousand questionnaires indicates the importance of extensive empirical data collection (Stedman 2003).

Soini et. al. consider a case study seated at the rural-urban interface in *Residents' sense of place* and landscape perceptions at the rural-urban interface. They discuss the multiform relationship

between sense of place and landscape perceptions, and the emotional ties, social relations, roots and adaptability to a specific place (Soini et al. 2012).

In Manzo and Devine-Wright's edited compilation of chapters by authors from diverse fields related to place attachment that is called *Place attachment: advances in theory, methods and research* (2013). In Seamon's chapter in this book, *Place attachment and phenomenology: the synergistic dynamism of place, he* explains that place can be identified as any environmental locus in and through which individual or group actions, experiences, intentions, and meanings are drawn together spatally. He also refers to Casey (2009), Relph (1976), Creswell (2004) and Lewicka (2011) as having made significant contributions to the field of place attachment.

Seamon in *Place attachment and phenomenology: the synergistic dynamism of place* writes about the emotional bonds between people and a particular place or environment in terms of three concepts namely 1. holistically, 2 dialectically 3 generatively. People and their worlds are integrally intertwined. He states that place is powerful because it articulates the experienced wholeness of people-in-the-world, or lifeworld. Seamon considers two lived dialectics of relevance to place attachment, first, movement and rest that he calls habitual regularity (or routine) as well as in terms of inwardness and outwardness (Seamon 2012 and 2000).

In Key Thinkers on Space and Place edited by Phil Hubbard, Rob Kitchin and Gill Valentine, a compilation of texts on space and place from the perspective of human geography is brought together. An Australian case study of sense of place can be found in Silva Larson, Debora De Freitas and Christina Hicks, Sense of place as a determinant of people's attitudes towards the environment: Implications for natural resources management and planning in the Great Barrier Reef, Australia.

Environmental psychologists Scannell and Gifford in *Defining place attachment: A tripartite organizing framework* consider place attachment and the emotional bonds that people form with their physical surrounds. They state that place attachment informs our sense of identity, creates meaning in our lives, facilitates community and influences action. They provide an interpretation of the interdependent relationship of person, process and place in the formation of place attachment. Their model is included in this study as Figure 5 (Scannell and Gifford 2010).

The influential work of Jane Jacobs, *The Death and Life of Great American Cities* (Jacobs 1961) introduces key concepts relevant to this study, including a concern for meeting social needs, correcting inequality and offering more opportunities for public participation. At the time of the publication of her study she observed that the vitality of cities was being destroyed by strict zoning

and the implementation of simplistic solutions. It is stated in *The Oxford Handbook of Urban Planning* (2012) that her work encourages planners to adopt a more flexible approach to urban development. She calls livability 'conviviality' and relates it to sense of place. She encourages new approaches to spatial planning and put forward people-centred principles upon which to base urban sustainability.

In Cities as sustainable ecosystems: principles and practices Newman and Jennings provide valuable information that relates to socio-spatial dynamics in international contexts and also unpack the concept of sustainability in the urban context. They conclude that "sustainability can only be achieved when cities are approached as systems and components of nested systems in ecological balance with each other" (Newman and Jennings 2008:4).

Edward McMahon, in *The Distinctive City,* aligns sense of place and livability with concepts such as walkability, transit orientated development and aging in place. This approach is further associated with principles of New Urbanism and Smart Growth. He considers the significance of community character or distinctiveness, likened to sense of place, to be a key element in the economic success of an area or of a city (McMahon 2012).

1.6.3 Literature - South African

A particularly useful source that was consulted from the University of Pretoria was Horn, A.C. 1998. *Tshwane, Pretoria, Phelindaba: structure-agency interaction and the transformation of a South African region up to 1994, with prospects for the immediate future*. Pretoria: University of Pretoria. (Thesis - DPhil.). The extensive research that Horn included in this rich resource reflected many aspects of the history of Pretoria. In this study on the socio-history of Pretoria Horn states that 'the term sense of place or "*genius loci*" involves a concern for the familiar and that it implies a sense of belonging, rootedness, stability and identity. His work contains valuable insights on the perceptions of belonging, entitlement, control, conflict and contestation (Horn 1998).

In terms of environmental management and social impact the publications by Becker, Vanclay, Esteves, Aucamp, Du Pisani and others informed the socio-environmental (socio-spatial) approach of the study (Becker and Vanclay 2003; Du Pisani 2005; Vanclay and Esteves 2011). The chapter by Aucamp et al in *New Directions in Social Impact Assessment – Conceptual and Methodological Advances* by Vanclay and Esteves (eds) was particularly helpful, since it points to the need for better understanding of the needs of local communities as well as the need to introduce measures to redress South Africa's imbalanced spatial economy (Aucamp et al. In Vanclay and Esteves 2011)

The main local official sources that were consulted on principles of sustainable development include National Environmental Management Act (Act 107 of 1998) (NEMA), the Melbourne Principles of Sustainable Urban Development (UNEP/IETC 2002) and Gibson's sustainability criteria and principles (Gibson 2006, 2013; UN Agenda 21 1993; Local Agenda 21 initiative in South Africa 1996).

A significant part of the literature for this study comprised of publications dealing with spatial planning in the South African context. These publications deal with a variety of aspects, including governance, development parameters and management requirements. The main focus of the study in this regard was on spatial planning in the City of Tshwane. Important documents were consulted that are particularly relevant to governance aspects within the current development in the study area, since they relate to spatial planning and socio-spatial sustainability. These include framework documents such as the National Environmental Management Act (Act 107 of 1998) (NEMA) and the Spatial Planning and Land Use Management Act (Act 16 of 2013) (SPLUMA). These legislative measures form the foundation of the legislative framework applicable to this study.

Turok provides a valuable background, overview and significant insights on the social and political dynamics that have had a formative role on South African society. He also provides insights into the need for reconceptualising the socio-spatial landscape. The current transition period in South Africa is expressed on socio-political and socio-economic fronts as well as in the transformation of land use and urban densification, especially along urban transport routes (Turok and Parnell 2009).

Van Donk et al (2008) and Parnell and Pieterse (2014) also provide greater understanding of socio-spatial and socio-political dynamics in South Africa that have brought about spatially imbalanced settlement patterns. These authors also underline the need for a directional shift in urban planning to accommodate this disparity. The compendium of articles by Van Donk et. al. (2008) provides an overview and significant insights on the social and political contexts that have had a formative role on South African society. It also stresses the need for reconceptualising the socio-spatial landscape. Related approaches are reflected in publications by Van Donk, Turok and Parnell among others (Parnell and Pieterse 2014). These works provide a background to the changes that have occurred in cities and suburbs in South Africa to accommodate the national policy of redressing the imbalanced spatial economy.

Sowman and Brown (2006), in Mainstreaming environmental sustainability into South Africa's integrated development planning process provide insight on the role of integrated development planning at the national and local levels within the context of national socio-economic needs.

All relevant official documents, frameworks and guidelines that relate to spatial management, urban planning and heritage management practices, with special reference to the case study area in Region 3 in the City of Tshwane, have been analysed for this study. These documents include the Hatfield Spatial Development Framework (COT 2012), Hatfield Urban Development Framework (COT 2011), Arcadia Street Development Framework (COT 2002), Street View Survey of Arcadia Street by the author of this study (Batchelor 2006), Tshwane Town Planning Scheme (COT 2008, revised 2014), Tshwane Regional Spatial Development Framework (COT RSDF 2017) and the Combined Precinct Plans for participating residents' associations in Old Pretoria East (Loots 2017).

The Precinct Plan that Annemarie Loots compiled for OPERRA (Old Pretoria East Residents and Ratepayers Association) in 2017, represents the wider area of eastern Pretoria and also includes the Arcadia Precinct case study area. This document is directly relevant to this study and to the case study area and provides valuable insight since it defines the spatial principles that form the backbone for effective development. The Precinct Plan outlines certain form-based design parameters while it also outlines the concepts of livability and sense of place. The document emphasizes that the unique character of a neighbourhood should be protected, respected and enhanced by all developments and states that the character of a suburb is "defined also by the grain and built form, the leafiness, the relationship between buildings and streets and the sense of community in general" (Loots 2017:14).

Loots advises that the following question with regard to any development should be asked: what does the development do / look like to respond to and reinforce locally distinctive characteristics with regard to e.g. Built form; Streetscape; Historic elements; Landmark buildings; Public art; and Natural elements (Loots 2017:6). She explains that restructuring a city is not about densification, but about transformation. Densification is considered to be merely one of the tools for transformation. The transformation process calls for the creation of sustainable human settlements, neighbourhoods and communities and not for the mere provision of dwelling units. She concludes that integrated transformation will bring us closer to a sustainable city which is functional, liveable and memorable (Loots 2017).

Literature sources associated with social impact assessment and socio-spatial dynamics in international and national contexts in general, and dealing with different understandings, views and insights on socio-spatial aspects related to place, sense of place, place attachment, livability and sustainability in particular served as a crucial component of the literature review. For the researcher, who is an archaeologist/art historian by training, this literature study served as valuable introduction to these key concepts.

Valuable sources for further reading:

Publications from leading lecturers and academics from diverse fields of research at the North-West University and the University of Pretoria provided significant insight to the study and are recommended for further reading.

Drewes, J.E., Roos, V. & Puren, K. 2008. A sense of place and spatial planning in the Vredefort Dome, South Africa. *South African geographical journal*, 90(2):134-146.

Du Pisani, J.A. 2005. Social impact assessment: the status of practice in the North West Province of South Africa. Potchefstroom: North-West University. (Dissertation - MSc.)

Du Pisani, J.A. 2006. Sustainable development: historical roots of the concept. *Environmental sciences*, 3(2):83-96.

Du Pisani, J.A. & Sandham, L.A. 2006. Assessing the performance of SIA in the EIA context: a case study of South Africa. *Environmental impact assessment review*, 26(8):707-724.

Puren, K. & Jordaan, T. 2009. Exploring place-making in the Vredefort Dome, South Africa: a mixed-method approach. Potchefstroom: North-West University. (Research paper.)

Puren, K. & Jordaan, T. 2014. Towards integrating built heritage resources in urban development through spatial planning. *Transactions on ecology and the environment*, 191:209-220.

Puren, K., Drewes, E. & Roos, V. 2007. An exploration of sense of place as informative for spatial planning guidelines: a case study of the Vredefort Dome World Heritage Site, South Africa. *Academic science research*, 22:217-224.

Roos, V., ed. 2016. Understanding relational and group experiences through the Mmogo-method. New York: Springer.

Van Rensburg, L., Drewes, J.E., Puren, K. & Roos, V. 2006. Vredefort Dome World Heritage Site: determination of sense of place. Report for the VDWHS Strategic Environmental Assessment (SEA). Mmabatho: North West Department of Agriculture, Conservation and Environment.

The methods used in this study are explicated in the next chapter.

2 Methods used in the pilot study

The logical sequence of the method used in this pilot study consisted of first establishing the overall purpose of the study, then breaking up the overarching objective into research questions to guide the study. This was followed by a literature study to determine what concepts could be of value in trying to answer the research questions and which theories could be applicable and useful to the study (Ridley et. al.1998; Ridley 2012). A selection was then made of tested research methods by which the concepts and theories could best be applied to the case study and what empirical processes to follow (Leedy and Ormrod 1993; Miles and Huberman 1994; Checkland 2000; Merriam 2009). The empirical process consisted of social and spatial data collection. Spatial data was collected through a street view survey. Various techniques of social data collection were utilised that included individual discussions, semi-structured interviews, as well as stakeholder engagement/information sharing meetings and notation and finally a public participation session. The study also included analysis of the collected data, stating the conclusion reached and writing the recommendations (Faegin 1991; Stake 1995; Tellis 1997; Baxter et al. 2008; Swart 2011; Thomas 2014; Broto and Westman 2016). In compliance with the methodology of a pilot study, recommendations were made as to the methods that should be followed in the follow-up study.

2.1 Approaches used in the research

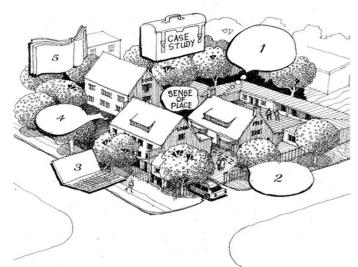


Figure 3: The Hill House student complex pertrayed here forms a nested case study example within the Arcadia Precinct case study area in Pretoria, South Africa. Figure 3 outlines the methods used in the completed pilot baseline study namely 1. literature study to provide background and to inform the sociospatial study in terms of the geographical, historical and socio-political context of the case study area, 2. using empirical research methods such as stakeholder engagement and expert consultation, 3. street view survey to provide a perspective on the environmental/built environment and the state of the study area, 4. engaging local issues and debates such as heritage debates, 5. developing a framework/model and strategy

of implementation for future action aimed at sustaining sense of place and maintaining livability, sense of place and sustainability in the case study area.

Structuration theory

A socio-spatial approach that relates to structuration theory is used in this study. Structuration theory recognizes that members of a community relate to the place where they live with a sense of place and a sense of belonging. It thus serves as an appropriate point of departure to discuss sense of place. This place-identity, or relatedness to the place where one lives, embodies the essence of sense of place and provides the context within which meaningful interactions of economic, social and political life may be organized (Norberg-Schulz 1976; Giddens 1984; Loots 2014a; Horn 1998; Turok and Parnell 2009).

The case study takes as its theoretical point of departure the view that there is a deep seated inner frame of reference that is shared by members of a certain community. This structuration theory has been widely applied by the influential British sociologist Anthony Giddens's insight on the deep understanding of the functioning of societies. It provided insight into the social significance of sense of place. This theory is elaborated on in The constitution of society: Outline of the theory of structuration (Giddens 1984) and Conversations with Anthony Giddens: Making sense of modernity (Giddens and Pierson 1998). Its proponents have expanded the theory and it remains a pillar of contemporary sociological theory. Although there are many universal correlations within the inner structures of different communities, certain differentiating factors within their cosmological frame will prevail. The inner structure is seated within the cosmology of the group, it reflects their identity and it determines how perceptions are formed, including perceptions of sense of place. In short, structuration theory explains the creation and reproduction of social systems by analysing both structure and agents. Giddens suggests human agency and social structure are in a relationship with each other. Social structures, including e.g. traditions, institutions, moral codes, and established ways of doing things, are maintained and adapted through the exercise of agency. Structuration theory recognizes that actors operate within the context of rules produced by social structures. When human agents act in a compliant manner social structures are reinforced, but they are modified when agents act outside the constraints the structures place on them by ignoring them, replacing them, or reproducing them differently (Giddens & Pierson, 1998: 77; Gauntlett 2002; Gibbs 2017).

Research approach - Socio-spatial approach

The socio-spatial approach used in this study endeavours to understand the sense of place of the community of the Arcadia Precinct case study area, and is also related to the memories of place

embedded in the local community (Giddens 1984; Norberg-Schulz 1980 and 1985; Horn 1998; Batchelor 2011).

Over and above social aspects that were considered through stakeholder engagement, the study also investigated the value of the built environment, landscape features and other spatial aspects. The street-view survey that had been undertaken by the author can be viewed in this respect. It is important to undertake another and more extensive survey of the social and spatial dynamics in the Precinct.

2.2 Type of study

This is a multi-disciplinary, qualitative, applied, pilot case study. It is of an exploratory nature and it employs purposive sampling to determine how livability and sense of place can be sustained in the case study area (Stake 1995; Yin 1998).

Applied research

The study can be described as applied research since it uses accumulated theories, knowledge, methods and techniques for a specific purpose. It employs empirical methodologies in solving the practical problem of sustaining livability and sense of place.

Exploratory research

Exploratory research is the initial research which forms the basis for more conclusive research as was done in this study. It was of an exploratory nature since it considers various models for suitability and applicability to the study. The study uses semi-structured interviews, the most popular primary data collection method with exploratory studies, while it explores the research questions and does not intend to offer final and conclusive solutions to existing problems. It is not intended to provide conclusive evidence, but helps us to have a better understanding of the problem, as was done here.

Qualitative research

This case study follows a qualitative research approach that uses smaller but focused samples, for example interviews with experts. Qualitative research is of great value to sociological studies that can shed light on the functionality of society and human interaction (Stake 1995; Yin 1998).

Purposive sampling/judgment sampling

This type of research was well suited to this study as an important technique learning about meaning. It was employed here since the sample was small with only a limited number of primary data sources. The disadvantage of purposive sampling is that, by using this sampling technique the researcher had to rely on her own judgment when choosing members of a population to participate in the study, and this could lead to subjectivity, especially since, according to this technique the researcher selects/chooses elements for the sample through personal judgment as in the Precinct study (see section 2.5 under limitations of the study).

Multi-disciplinary approach related to aspects of other disciplines

Certain aspects of a number of disciplines relate to the study. These include, among others, aspects of urban spatial planning and land use management (within the discipline of Town and Regional Planning) (Drewes et al. 2008; Moore 2008; Puren and Jordaan 2014; Loots 2017a). The study also relates to Human Geography (Heidegger 1962; Norberg-Schulz 1963, 1976, 1980, 1985; Tuan 1974, 1977; Cloke et. al. 1991; Horn 1998; Day 2002; Gauntlett 2002; Larson et al. 2013; Burton 2014), Environmental Studies (Carson 1962; Cashmore et. al. 2007; Aucamp 2009; Strydom and King eds. 2009), social impact assessment (Auckamp et al. *in* Vanclay and Esteves 2011; Du Pisani 2005), Heritage and Heritage Conservation Management (ICOMOS 1996; Walker 1996; Du Pisani 2006; Du Pisani and Sandham 2006; Batchelor 2011), Urban Contexts Study (Katz 1994; Benninger 2001; Louw 2012; McMahon 2012; May and Perry 2016; Sullivan and Ridin 2014), Phenomenological Theory (Seamon 2012; Van Manen 1990), Structuralism (Giddens 1984; Gibbs 2017) and Socio-political Studies (Pieterse 2006, 2008; Turok and Parnell 2009; Parnell and Pieterse 2014).

2.3 Case study research

Case study methodology was selected as research method while a socio-spatial approach was followed in this study. Harrison, Birks, Franklin and Mills (2017) state: "Case study research has grown in reputation as an effective methodology to investigate and understand complex issues in real world settings ... over the last 40 years, through the application of a variety of methodological approaches; case study research has undergone substantial development." This particular case study relates to literature from the wider field of case study research (Miles and Huberman 1994; Stake 1995; Tellis 1997; Faegin et al. 1991, Van Rensburg et al. 2006; Baxter et al. 2008; Swart 2011; Thomas 2014; Broto 1916; Harrison et al. 2017).

The initial assumption of the study was that sense of place was a key component of livability and a core element in maintenance of sustainability in urban localities. Case study methodology was elected as research method and Arcadia Precinct was selected as a suitable case study area since it is a typical urban area where rapid change in land use had created a threat to the stability of the area.

Case study research is research carried out to determine a "case", which is defined by Miles and Huberman (1994) as, "a phenomenon of some sort occurring in a bounded context". There are a variety of definitions of case study research, the best known by Yin (2014), Stake (1995), and Merriam (2009). Yin's definition (2014) emphasises that case study inquiry is predominantly

empirical, and that context to the case is of particular importance. Stake (1995:xi) views case study research as "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances". Merriam (2009:40) defines case study as "an in depth description and analysis of a bounded system".

Cresswell et. al. (2007) capture the various elements of case study design in the following definition: "Case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audio-visual material, and documents and reports) and reports a case description and case-based themes."

Case study research has certain benefits which also apply to the Arcadia Precinct case study. It is ideally suited to holistic, in-depth investigations (Feagin, Orum, & Sjoberg, 1991), when the researcher needs to answer "how" and "why" questions and when contextual conditions need to be explained (Yin 2003). Case study research investigates a variety of "issues" linked to political, social, historical and personal contexts (Stake 1995; Baxter & Jack 2008:552). A qualitative case study enables a researcher to study a complex phenomenon within its context using a variety of data sources (as has been done in this study). The use of multiple data sources (documentation, archival records, interviews, direct observation, participant-observation, etc.) and the convergence of these sources in the process of data analysis is a hallmark of case study research (Patton 1990; Yin 2003: Baxter and Jack 2008:554). Case study research also allows the researcher to apply complex interventions and relationships (also done in this study). This ensures that the phenomenon is not explored through a single lens, but rather several lenses, which allows for multiple facets of the phenomenon to be revealed and understood. Case studies are multiperspectival analyses. A case study makes it possible for the researcher to deconstruct and subsequently reconstruct the phenomenon under investigation. Because of its flexibility and rigour case study research is valuable to develop theory and interventions (which is planned in the longer term for this research project). Another advantage of case study research is the close collaboration between the researcher and the participant, enabling participants to tell their stories and describing their views of reality. This enables the researcher to better understand the participants' thoughts and behaviour (Baxter & Jack 2008:544-5)

Thomas (2014) provides an overview of the potential and value of case study research, highlights the holistic approach that is made possible when concepts are explained within a case study context, and provides a most helpful step-by-step method of case study analysis. According to Thomas theory "is about seeing links between ideas, noticing where patterns exist, abstracting ideas and thinking critically about your own ideas and those of others" (Thomas 2014: 180).

Thomas, then, considers theory both as a tool that can be used in any design frame and as the line motif that conceptually connects your data (Thomas 2014:178.) He states that "the process is about not just seeing connections in the data you are collecting yourself but also bringing in and assimilating to your story your reading and knowledge of the world" (Thomas 2014; Yin 2003).

Different types of case studies have been identified. In terms of the classification by Stake (1995) the Arcadia Precinct case study may be regarded as an intrinsic case study, because the researcher has a personal interest in the case (Baxter & Jack 2008:548). In terms of Yin's classification (1993) this study can be regarded as an exploratory case study, i.e. a prelude to further investigation, which may later result in a descriptive case study, based on a descriptive theory, and an explanatory case study, for doing a thorough causal investigation. The current study can be described as a single, holistic case study, because it is limited to one study area, but seeks to investigate the research problem in the selected study area holistically.

Yin, Stake, and others have developed robust procedures for case study research. For the Arcadia Precinct study tools and techniques were identified that could be used towards meeting the objectives of the study. Experts advise that case studies must be bound, i.e. boundaries for the scope of the research must be set, in order to avoid too many objectives for one study (Yin 2003; Stake 1995). The Arcadia Precinct study is bound by place and context – it is limited to a small study area and the focus is on the social context.

In case study research, as in all research, consideration must be given to validity and reliability (Yin, 1989). The validity of the data, the research process and the findings is achieved by means of triangulation, the well-known technique by which data are validated through cross verification from two or more sources (Yin 1994). Triangulation also implies the application and combination of several research methods in the study of the same phenomenon (Feagin, Orum, & Sjoberg, 1991; Stake 1995; Yin, 1984; Tellis 1997).

Data collection was performed systematically over a period of time. A purposeful sampling strategy was used for the empirical study. Records were kept to maintain a systematic chain of evidence over the duration of the study. Qualitative data analysis was performed as accurately as possible. These were some of the techniques employed to ensure the validity, reliability and credibility of the research findings (see Russell et al. 2005). In the absence of the statistical analysis of quantitative data for the Arcadia Precinct study it was challenging to achieve the trustworthiness of research findings. In the description below of the literature study and empirical research more information is supplied of how triangulation was achieved in the study through the use of a variety of methods and sources.

Comparative research

Although the current study focuses on a single case study (Allen 2001), comparative research forms a small part of the methodology and the exploration was broadened through literature study (Ofosu-Kwakye 2009; Swart 2011; Larson et al. 2013 and Puren 2016).

The first example of comparative research consists of a comparative international case study, that of Adriana Allen, who focuses on the emergence of a socio-environmental conflict following densification in fishing villages in Mar del Plata, Argentina (Allen 2001). The experiences she describes also represent those facing other cities where the demand for densification is intensifying. She indicates how the three circle model for sustainable development is of value, yet it does not go far enough in that the political (governance) dimension, that plays a determining role in sustainability, does not receive appropriate recognition.

The second example of comparative research concerns the principles and guidelines according to which sense of place can be strengthened. A comparison of principles of sustainability as expressed in South Africa's National Environmental Management Act (Act 107 of 1998), Gibson's 8 international sustainability criteria, the 10 Melbourne Principles for sustainable cities, and Principles for sustaining sense of place and strengthening sustainable development identified for the Precinct case study were compared and presented in table form (Table 2).

2.4 Empirical study

Research design

This is a qualitative pilot study that uses case study methodology along with further purposive empirical research methods to consider spatial and social aspects of livability, sense of place and sustainability in the case study area. This study takes the form of exploratory research rather than conclusive research. The research purpose of exploratory research is to generate insights about a situation.

Pilot study

As a pilot study it is of an exploratory nature and is not a final study. A pilot study serves as preparatory investigation to determine the suitability of research methods for use in the subsequent more comprehensive follow-up study. The outcomes of this study should, accordingly, be viewed in

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pilot study context, and should not be seen as results of a full study. It should be seen in perspective of the statement by Leedy and Ormrod that reads: "a pilot study is a brief exploratory investigation [to] try out particular procedures, measurement instruments, or methods of analysis [to determine] which approaches will and will not be effective in helping you solve your overall research problem" (Leedy and Ormrod 1993:110).

Case study

Case study methodology was elected as research method in this study and Arcadia Precinct was selected as a suitable case study area since it is a typical urban area where rapid change in land use had created a threat to the stability of the area. Case study research is research carried out to determine a "case", which is defined by Miles and Huberman (1994) as, "a phenomenon of some sort occurring in a bounded context".

Data collection methods and research instruments

Spatial data: The street view survey

This survey was undertaken by the author to provide a perspective on the environmental/built environment and the state of the study area. Spatial data was collected in 2006 through a street-view-survey of Arcadia Street in the Precinct from Beckett Street in the west to Festival Street in the east. This survey was primarily undertaken to determine the heritage value of the street. This was needed since the heritage proclamation that was in process at the Municipality was heavily debated among the group of owners since it would influence the value of their properties and also severely limit the development potential of all properties involved. This survey consisted of an onfoot exploration along Arcadia Street and taking photographs of the street-front view of each house. It also involved notation of the visual and notable heritage features, the condition of the built structures, the physical environment and garden setting, what the property was used as, as well as the sense of place it projected if at all. Notation was done by hand and the information of each property was separately placed within a field notebook. Each of the features were given a value from one to five, and these were then worked out as percentages of the total. The most important element that was recorded, involved an evaluation significance in terms of heritage grading.

Collection and processing of social data

A combination of methods, tools and techniques used in the empirical study followed an intrinsic and over-arching social research approach while the research design and methodology link the

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data and conclusions to the initial questions of study, namely how livability and sense of place can be sustained (Yin 2003:19). The different methods are explained below.

Author's lived experience

The author/researcher has resided in the study area for thirty years as owner and manager of Hill House. Her lived-in personal pre-knowledge of the area and its current dynamics provided the starting point for determining the *status quo*, the current (real) state of the case study area. Hill House, owned by the author, is considered as nested case study within the Precinct. The Sage Encyclopedia of Qualitative Research Methods defines lived experience as "a representation and understanding of a researcher or research subject's human experiences, choices, and options and how those factors influence one's perception of knowledge" **DOI:** http://dx.doi.org/10.4135/9781412963909.n250. Accessed March 2018.

As is discussed under limitations of this study, the inclusion of the lived experience as part of the research may include problematic aspects. While this study had benefitted from the 30 years of experienced knowledge of the author, the study also used data that were collected over many years and this complicated the data analysis. The deep involvement of the author could also have brought with it a degree of bias and lack of objectivity and reflexivity. In future research subjectivity could be addressed through more comprehensive and objective surveying techniques and by bringing in additional team members.

Meetings and debates among Arcadia Precinct residents

No random selection of participants was done but specific people were identified by the author for inclusion in the study since, due to the small size of total population, most members of the community were known to the researcher.

Discussion-group sessions and community meetings

Arcadia Precinct Alliance (APA) meetings

A further source of information was from discussion-group sessions and community meetings that had been held over a number of years in the Precinct as such. This group was known as the Arcadia Precinct Alliance (APA). These meetings were initiated by the author and every member that was known to the author was invited by email with an agenda attached. An attendance list was circulated at each meeting while minutes were compiled and sent to all members that were on the email list. Smaller core-group meetings also took place more or less every second month for a

number of years. Notes were also kept in a dedicated book of the points discussed and the different points of view voiced at each of these meetings.

Meetings of the larger group namely Arcadia Residents and Ratepayers Association (ARRA)

Concern was already expressed by the author in 2009 at meetings of the Arcadia Residents and Ratepayers Association (ARRA) over the many changes that had taken place in the Arcadia landscape. An article by her written in 2009 captures the concerns of the time and serves as a time capsule that relates to the challenges faced today. The author concludes that it is essential to sustain sense of place if development is to be sustainable in the study area and that sustaining sense of place lies in balancing development potential, social needs and heritage quality. This can only be achieved if an appropriate, professional and enforceable strategic plan is implemented. Such a guidance document has to be developed through engagement with professional town planners, heritage architects, and through comprehensive social impact assessment. The article concludes that engagement of social impact specialists is essential from the outset and throughout the various stages of development that will impact upon the livability of the area (Batchelor 2009).

Information-sharing sessions were arranged in the Precinct by the author. These community meetings dealt with reports, frameworks and procedures that impacted on the area. Meetings were arranged to discuss the Hatfield Spatial Development Framework (Tshwane 2012), the Spatial Development Plan for Arcadia Street (Tshwane 2002), the Spatial Planning and Land Use Management Act (SPLUMA) (Act 16 of 2013) and the Integrated Development Programme for Tshwane initiated in 2016, while the stakeholder engagement/information-sharing meeting in August 2017 was held in response to the proposals included in the draft Regional Spatial Development Framework. Through the meetings residents were engaged in local debates. The sessions provided a platform where the concerns of local people could also be voiced. Valuable data on local perceptions and topics such as heritage, densification, communal living and aspirations (vision) for the future were exchanged. Concern was expressed by residents about issues such as development, densification, management and the negative impact of the heritage proclamation of Arcadia Street in the Precinct.

Semi-structured interviews with individuals as well as group discussions

Purposive sampling

Leedy and Ormrod state that in purposive sampling people are chosen for a particular purpose, for instance, as in this study, since they represent diverse perspectives on an issue (Leedy and Ormrod 1993:212). Limitation here is that "the researcher should always provide a rationale

explaining why he or she selected the particular sample of participants" (Leedy and Ormrod 1993:214).

This study can be described as exploratory research rather than conclusive research. Accordingly it aims to explore specific aspects of the research area and does not aim to provide final and conclusive answers to the research questions (Saunders, M., Lewis, P. & Thornhill, A. (2012) "Research Methods for Business Students" 6th edition, Pearson Education Limited).

The research purpose of exploratory research is to generate insights about a situation. The sample is relatively small, subjectively selected to maximize generalization of insights, data collection is flexible, no set procedure, data collection is informal and typically non-quantitative while inferences and recommendations are more tentative than final https://research-methodology.net/research-methodology.net/research-methodology/research-design/ Accessed March 2018.

As is discussed below, purposive sampling concerning social data were collected through individual conversations, discussions and semi-structured interviews. In the context of this pilot study interviews are important in determining the approach, methods and procedures that should be followed in the follow-up comprehensive study that this study recommends should be done.

Semi-structured interviews

Three types of semi-structured interviews were conducted. The first was in the form of interviews with residents of Arcadia Precinct, the second comprised of interviews with the tenants at Hill House who are student residents for the duration of their studies, and the third type consisted of interviews with professionals in the field of study, including experts on urban planning as well as municipal officials of the City of Tshwane. (A list of the respondents interviewed is included in Appendix B.)

A structured questionnaire was developed for the purpose of the interviews, and a list of relevant questions was drafted. These questions are listed in Appendix A. In practice much of the full list of questions could not be used during interviews due to time constraints. The list was, however provided to the respondents who requested it to be forwarded to them by e-mail as was the case with the Grobler family in Hill Street.

The set of questions is in line with the problem statement and research questions of the study, with the purpose to determine how the respondents view the concepts of sense of place and livability and what they think should be done to create a livable and sustainable environment in Arcadia Precinct. Included among the questions are biographical questions with regard to the respondent,

questions on the respondent's relationship with Arcadia Precinct and specific questions concerning:

- The larger area from Lynnwood Street up to the Union Buildings
- The physical environment of the smaller Arcadia Precinct area
- The social environment of the smaller Arcadia Precinct area
- The connection between sense of place, sense of belonging, quality of living and sustainability
- The declaration of Arcadia Street as a heritage street.

The discussions around these questions were structured as a SWOT analysis that related to strengths, weaknesses, opportunities and threats in the Precinct area. Certain tenants were identified so as to be representative of the broader group. The interviews took place in the lounge of Hill House. The purpose of the meeting was explained to them as having the objective of determining what their perceptions were of the place, the physical surroundings, and convenience for studying and how they perceived the spirit among tenants. After asking for their permission to use the information that would be gained from the interview session for inclusion in my studies each interview was structured, and notated as a SWOT analysis that centred around what they perceived the 1. strengths, 2. weaknesses, 3. opportunities, and 4. threats were of living at Hill Village and in the surrounding area of the Precinct and how they would describe the 5. 'sense of place' they perceived here. Each person was given the opportunity to formulate answers to items 1 to 5. Further opportunity was then given for general discussion. The notes were studied afterwards and a general conclusion was made based on items 1 to 5 and the discussion at the end of the interview. Special attention was also given to form-based elements such units facing courtyards, and buildings facing in rather than on the street.

The general outcome of the semi-structured interviews was that tenants perceived a positive sense of place at Hill House and would consider staying in the general area, should they find employment in Pretoria after completing their studies. This aspect of the pilot study therefore pointed to the suitability of this method to be used in a subsequent more extensive study.

The overall objective of the narrative engagement was to gain better understanding of local perceptions and the value attribution of the participants. This was considered in terms of the sense of place in the Precinct and Hill House as well as how character, quality and spirit of place was perceived, and how it could be secured, enhanced and sustained in the study area. One aim was to establish what residents considered the essential elements of sense of place were, and in what way sense of place served as a key component in creating a liveable environment. Another objective of the interviews was to gain understanding of the social and physical dynamics that prevail in the area as well as the future aspirations held for the area, along with the principles that are shared in terms of future development in the area. Interviews inform the enquiry about the

'aspired-towards' future state and ways of determining what development principles might be agreed on to serve as basis for sustainable development. Techniques of enquiry also focused on concern among local people that the current rapid development will have a negative impact in their lives since it will affect the sense of place in the area and will have a negative effect on the sustainability of development. The semi-structured interviews thus aimed to determine perceptions held of the current and potential future sense of place, as well as the current state and conceptions of future prospects for the area.

Certain pre-set introductory statements were used in the semi-structured interviews (see Appendix B). It was requested that the respondents answer the questions as if they had to describe the area to someone who was considering visiting the area or moving here. The questions guided the participant to consider if and how the Precinct offers a sense of place, how it projects a feeling of belonging [home] (Norberg Schulz 1976) and which characteristics of the Precinct have a positive and which have a negative influence on the sense of place, and what measures could be introduced to preserve and enhance local sense of place. The analysis of the interviews was done by notating the answers and then establishing the shared narrative by looking at similar and dissimilar answers. The results of these interviews are reflected in another section of the study. The interviews provided valuable data on local perceptions of livability and sense of place, heritage, principles on which development should be based, densification and communal living and aspirations (vision) for the future.

Expert sampling

The researcher's interaction with professionals and experts who relate in significant ways to Arcadia Precinct differed from that with residents, because these interactions were often not in the form of a semi-structured interview with an individual, but rather in the form of a conversation or a group discussion or written correspondence. A list of the fourteen professionals that were consulted, including urban planning professionals, architects and built environment specialists, is included in Appendix B.

Meetings with the spatial planning professionals and architects focused on sense of place and socio-spatial and socio-environmental qualities within the Precinct. Discussions provided insight on sense of place, the development potential of the area and the social implications of development in the case study area. It pointed to the need for developing and implementing a co-ordinated planning strategy that should include an effective, enforceable, management plan for the broader area. The researcher also had discussions and corresponded with officials at the Tshwane planning department about current development dynamics and future prospects for the area.

2.4.1 Developing a model for future action

A further method used in the study consists of conceptualising a model for future action aimed at sustaining livability and a sense of place in the case study area and formulating a strategy for the implementation thereof. Figure 4 outlines the model that is proposed in this study for future strategies to support livability and preserve, sustain and perpetuate sense of place in the case study area. This model stresses that the vision and principles agreed on by the local community are upheld and that the accompanying development guidelines are respected.

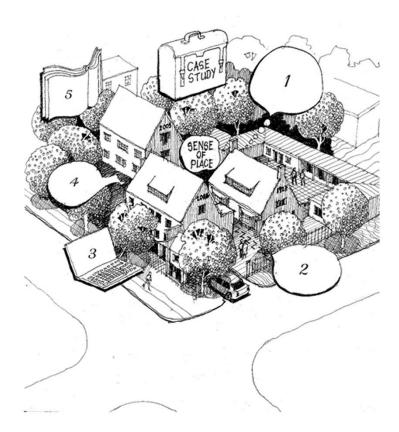


Figure 4 outlines the model proposed for future strategies to preserve, sustain and perpetuate sense of place and achieve sustainability in the case study area. The legend follows.

Legend for Figure 4: 1. Consult planning specialists and social impact professionals and utilise further literature sources and specialised reports to inform future strategies.

- 2. Undertake an Environmental (including Social) Impact Assessment of the case study area, identify the aspirations of the community as part of the assessment, and monitor sustainability using the Circles of Sustainability Urban Profile Process that is illustrated in Figure 8.
- 3. Describe the current state in the study area according to the Circles of Sustainability Urban Profile Process (Figure 9 in Chapter 5) and engage the technique known as Soft Systems Methodology to support the progression from the current state to the envisioned future state in the area.

- 4. Compile and implement a development management plan that builds on the three steps above and that recognises local development potential. It should be guided by planning specialists and social impact professionals, and should rest upon principles agreed on by the local community.
- 5. Strengthen liaison in the community and also with planning officials, and ensure compliance with the development management plan, using communication and facilitation techniques that include monitoring and assessment procedures, review cycles and feedback programmes.

2.5 Limitations of the study

- * Pilot study: Leedy and Ormrod describe a pilot study as "a brief exploratory investigation [to] try out particular procedures, measurement instruments, or methods of analysis [to determine] which approaches will and will not be effective in helping you solve your overall research problem" (Leedy and Ormrod 1993:110). Limitations associated with a pilot study as compared to a full comprehensive study may result from the small sample and limited data collection and could result in one-sidedness and less accurate interpretation.
- * The topic that had been selected called for a multi-disciplinary approach and this required an extensive literature study. This was most enriching and will benefit the future research that will be undertaken. It did take more time than was available, leaving less time for empirical study.
- * The multi-disciplinary nature of the study was engaged by the author whose professional background is archaeology and art history, a field in which she had lectured at a local university. The study is situated within the disciplines of environmental science and spatial planning. This posed both challenges and valuable study opportunities that will deepen in the process of further reading and will benefit future research.
- * The extent of the empirical study that was required to meet the needs of the selected study topic proved to have been very ambitious, especially as a mini dissertation. For this pilot case study the researcher had envisaged doing: firstly a baseline study, secondly a survey of the built environment of Arcadia Street, thirdly a survey of the views held by the case study community and experts about sense of place and what measures could be implemented to sustain livability in the study area, fourthly the study wanted to determine the efficacy of tools, methods and procedures that could be used for further more comprehensive investigations that could lead to greater understanding of the role played by sense of place in sustaining livability in urban contexts. This was too ambitious a task within the resources available since an excessive amount of time was required to complete the literature review, apply the methodology, and gather and interpret the results. In the end the sample size was too small and some of the findings were somewhat

provisional. Limitations related to methodology and the research process may also have impacted the results. These shortcomings could be corrected through further research and investigation.

- * Lived experience of the author: While this study had benefitted from the 30 years of experienced knowledge of the author it also posed challenges to data analysis. The deep involvement of the author could also have brought with it a degree of bias and lack of objectivity and reflexivity. In future research subjectivity could be addressed through more comprehensive and objective surveying techniques and by bringing in additional team members.
- * Aligning lived experience with the specific needs of the study provided a further challenge. It is the opinion of the researcher that this research approach has potential, and will provide valuable insights and should be extended and fine-tuned.
- * The challenges that accompanied some of the research techniques that were used could not be anticipated, for example the questionnaire that was prepared for the semi structured interviews proved impractically time consuming while the outcome of semi-structured interviews tended to be less predictable. https://www.researchgate.net/...Limitations...Research.../Strength-and-Limitations (Accessed March 2018).
- * While the purposive sampling techniques enabled time-effective results they could also be open to prejudice and subjectivity re purpose and people interviewed (Leedy and Ormrod 1993:212).
- * Ethical aspects: All participants in this study and associated interviews and surveys were well aware that the engagements were for reasons of the study. Verbal consent was given by all participants that the information gathered could be used in this study. Also note that this study commenced before the formalities of the current ethics regime were in place at the North-West University. Lack of a formal signed consent form could, however, be seen as a limitation of this study. This aspect should be appropriately addressed in future research.

Theoretical aspects relevant for this study are analysed in the next chapter. Core concepts such as sense of place, sustainability and livability, as described in the literature and their applicability to the study are explained.

3 Sense of place, place, livability and sustainability

3.1 Sense of place and related concepts

3.1.1 Place

Place is more than geographic space. It is not only defined as "a particular position or area, a location", but also "a portion of space occupied by or set aside for someone or something" (Oxford English Dictionary 2005:775). The "for someone", linking place to a human person, already notes the idea of belonging. Place is location-orientated with boundaries, but it encompasses more than physical space. For humans place fosters a sense of security and pause in movement (Tuan 2007:6; Norberg-Schulz 1976:419; Leach 2002:129). According to Norberg-Schulz (1976:419) place is a "discrete, temporally and perceptually bounded unit of psychological meaningful material space" which finds its highest most intimate expression in the concept of "home". Tuan states that "an undifferentiated space only becomes a place when we endow it with value" (Tuan 1977:6). This value emanates from both the social constructs of shared cultural understandings of a particular place and the conscious choices people make regarding their use of places (Swart 2011:14). "Transforming space to place implies an open accountable process during which people can influence decision-making about how and what their physical spaces should become" (Strydom and Puren 2014:462). (See also Day 1976; Buttimer 1980; Seamon and Sowers 1992; Hubbard et al. 2008; Hubbard and Kitchin 2010.)

3.1.2 Sense of place

Sense of place is a social phenomenon (Seamon 2012). In different disciplines the term has been used in various ways. Urban planners, psychologists, sociologists, anthropologists, human geographers, historians, architects, ethnographers, and others have studied why certain places have special meaning to particular people (Heidegge 1962; Norberg-Schulz 1963, 1976, 1980, 1985; Tuan 1974, 1977; Cloke et. al. 1991; Horn 1998; Day 2002; Gauntlett 2002; Larson et. al. 2013; Burton 2014).

Sense of place refers to the way in which a specific, physical environment may be experienced among the people in that environment. The term is often used in relation to those characteristics that make a place special or unique and those that foster in people a sense of attachment and belonging. Sense of place is mostly ascribed to communities when denoting a special attachment to a specific place where they feel at home. This relatedness to aspects of place identity translates to a sense of place (Giddens 1984; Loots 2014). Sense of belonging may be viewed as experiencing acceptance in the place and among the people in one's environment. According to

Norberg-Schulz "orientation" and "identification" form the basis for humankind's sense of belonging (Norberg-Schulz 1976:423).

In *Genius Loci: Towards a Phenomenology of Architecture* (1980) Christian Norberg-Schulz describes sense of place, or "genius loci", as representing the sense that people have of a place, understood as the sum of all physical as well as symbolic values in nature and the human environment (Norberg-Schulz 1980). Horn states that "the term sense of place or genius loci involves a concern for the familiar and implies a sense of belonging, rootedness, stability and identity" (Horn 1998).

Sense of place is directly linked to a person's identity. Human geographers and social psychologists have investigated the process by which a sense of place develops, emphasising the importance of childhood experiences at a location. Childhood experiences build a person's identity and the childhood landscape usually remains a focal point of comparison for assessing subsequent places later in life. Norberg-Schulz states that "human identity presupposes the identity of place" and that "identification is the basis for man's sense of belonging" and "to belong and to dwell, is to be free", as "our actions and behaviour constitute our identity" (Norberg-Schulz 1976:413). There is a measure of nostalgia involved in the concept of "genius loci", because it creates the context in which one is reminded and reassured that one's life (with that of others) is rooted in a narrative of meaningful moments and experiences (Burton 2014).

Sense of place relates to three aspects of place identity, i.e. character, quality and spirit of place (Norberg Schulz 1976; Loots 2014). From a town planning perspective, character of place relates to the physical identity, such as built form, streetscape, historic elements, landmark buildings, public art and environmental elements. Quality of place relates, among others, to the quality of public spaces (hard and soft, linear and nodal), architectural quality, infrastructure services, vehicular movement and parking, overall design and public facilities. Spirit of place also relates to non-physical identity. It concerns, for example, sense of community, sense of safety, memory associations, community events, vibrancy in public spaces and other non-tangibles that development should respond to in order to reinforce the locally distinctive structure and spirit (Loots 2014). Spirit of place relates to the classical Roman concept of the protective spirit of a place, a location's distinctive atmosphere (Norberg-Schulz 1980).

Sense of place thus prevails in features associated with aspects of character, quality and spirit of place and it is enriched by the architectural and natural features of the place and by interactions among the people and memories associated with the locality (Loots 2014; Giddens 1984; Giddens and Pierson 1998). Sense of place, or place identity, within this urban case study is, accordingly

interpreted as relating to three dynamics of locality. It relates to, firstly the physical environment (that includes natural as well as culturally established features such as buildings, gardens and streetscapes), secondly to people's interactions in and experience of that place, and thirdly to the socio-culturally constructed meanings that people attribute to such a place (Giddens 1984; Horn 1998; Turok and Parnell 2009). Sense of place is thus perceived physically as well as socio-culturally, in natural landscapes or in cultural settings in which people experience a sense of belonging. It is a dimensional involvement of all one's senses and embraces the social sense of community, the surrounds, features such as buildings, trees, avenues and gardens, through the immediate present, as well as through the resonance it has with one's world of past experiences (Norberg-Schultz 1976; Tuan 1977; Van Manen 1990; Day 2002; Seamon 2012 and 2000).

Sense of place is considered both socio-experientially and socio-spatially in terms of the actions and interactions that take place within a certain space. Giddens (1989:25) emphasises the complexity and interrelatedness of setting, and the actions and interactions that take place within it. The value attribution may be enriched by the tangible (real) features of the place and social interactions as well as through memory association that relates to the place.

The value that people attribute to a place also relates to shared cultural understandings of a particular place and the conscious choices people make regarding their use of places (Du Pisani 2006; Giddens 1984; Horn 1998; Swart 2011). Sense of place is instrumental in strengthening social, economic, environmental and heritage layers of environmental sustainability (Becker and Vanclay 2003; Vanclay 2004).

Sense of place has an impact on social structures and human behavior. Giddens relates sense of place to a deep understanding of the meaningful functioning of the underlying structure of society within a specific place. His structuration theory can be applied as a tool to determine the meaning of actions, interactions and circumstances of people in a locale (Giddens1984). Localities (such as the Precinct case study area) provide the setting within which interactions are organised in the context of economic, social and political life (Giddens 1984; Horn 1998; Turok and Parnell 2009). Giddens illustrates that the interactions among people takes specific shape in a particular spatial context or locale (Giddens 1984; Giddens and Pierson 1998). Changes that result from rapid development in changing environments, when they are not adequately managed, can thus negatively impact on local sense of place.

Moore (2008:167) views sense of place from a planning point of view and states that people prefer to live in certain places because different meanings are expressed by places of different dimensions. She refers to statements by different authors (Buttimer 1980; Godkin 1980:73;

Jackson 1994:151; Behrens and Watson 1996:11; Cuthbert 2007:369; Tuan 2007:4), who recognise symbolic, emotional, cultural, political, and biological dimensions of place. Moore's reference to Buttimer's statement that "people's sense of both personal and cultural identity is intimately bound up with place identity, and, therefore, if one has no place to identify with, your own identity becomes lost", is of particular relevance. Buttimer states that this lack of place identity is especially problematic in South Africa where people have cultural, spiritual and symbolic connection to places. He also states that "without defined place identity communities lack a sense of group identity and in turn a sense of belonging" (Buttimer 1980).

Sense of place is something of value that needs to be protected. During the interviews at Hill Village Thabiso Gumede, a tenant at Hill House, stated that "everybody here is in the same (academic) space, it becomes part of you, and it becomes your identity.... that means that you want to protect it" (Gumede interview with author 2016).

In the light of all the characteristics of sense of place identified in the literature the author of this study defines sense of place as a meaningful place-context within which identity is expressed and that is viewed by members of a community with a sense of meaningful belonging. It refers to one's experience of a specific place as a platform where one's social and physical, tangible and intangible, remembered and re-enacted associations are expressed. Sense of place therefore relates to the extent to which meaningful life-experience is determined by one's experience in the locality (environment) in which one lives. Sense of place and sense of belonging relate to concepts such as one's experience of a place being liveable. Experience of place relates to one's experience of one's own identity, one's identity in place, and orientation in the environment in which one lives. Place identity relates to the physical objective environment and people's experiences of place and socially constructed meanings of places. This is in agreement with the initial assumption of the study that it would be possible to preserve a particular sense of place in the Precinct in order to maintain the cohesion of the community and thereby ensure their concerted efforts to conserve the local heritage and physical environment.

3.1.3 Place attachment

The Tripartite model of Place Attachment (illustrated in Figure 5) relates to the premise of the study, namely that sense of place is essential in maintenance of livability. The 'person' section on the left of the diagram represents the person in 'the now', complete with all the personal attributes, as shaped through individual experiences, as well as experiences as part of the cultural group. The 'place' section below the central bubble relates to the physical/environmental and social 'givens'. The 'process' section on the right represents the willingness to engage in the process of relating, at a deeper level, to a place. This is inferred by the reference to 'proximity-maintaining' and 'reconstruction of place' as schematically represented in the 'behaviour' bubble.

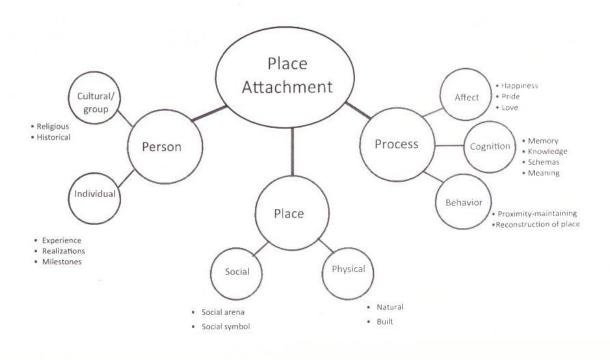


Figure 5: Tripartite model of place attachment from Scannell and Gifford *Defining place attachment: a tripartite organizing framework 2010:1.*

Florek in *No place like home: Perspectives on place attachment and impacts on city management* refers to place attachment as the emotional bond between person and place (Florek 2011). Scannell and Gifford in *Defining place attachment: a tripartite organizing framework* (2010:1) refer to the essential constituent components of place attachment as person, process and place (ppp). Figure 5 illustrates their 'tripartite' model of place attachment that was published in their article in *Journal of environmental psychology*, 30(1):1-10. Lewicka describes place attachment as being highly individual and that it comprises a main concept in environmental psychology (Lewicka 2011). In the context of this study aspects of these three elements could theoretically also be brought into alignment with the essential aspects of sense of place and sustainability. It is therefore recommended that this correlation should be investigated in the main study that will follow on this pilot study.

3.1.4 Livability

Livability concerns a state of meaningful life-experience (in the phenomenological sense), within an environment that is safe and life sustaining, where social and political stability prevails and where people can relate to their social and spatial life-context with a sense of place and place attachment. Livability implies a context where people can access and cope with their real and tangible, as well as their remembered and perceived intangible realities

A livable place is a place suitable for living in, a habitable and comfortable place. Scholars have put forward different definitions of livability. In *Community and Quality of Life: Data Needs for Informed Decision Making* (National Research Council 2002) livability is defined as "the sum of the factors that add up to a community's quality of life—including the built and natural environments, economic prosperity, social stability and equity, educational opportunity, cultural, entertainment and recreational possibilities." (Also see Land 1996; AARP Livability Index. 2017; IMCL, International Making Cities Livable in Kasef 2016.)

Livability refers to a meaningful life experience and may perhaps be best defined by juxtaposing it with its opposites, including placelessness, unlivability, homelessness and insecurity.

Instruments have been developed to determine the livability of places such as neighbourhoods, cities and regions. In the USA the Public Policy Institute compiled a Livability Index. The index assesses the following seven categories of livability: housing, neighbourhood, transportation, environment, health, engagement and opportunity. On a scale of 0 to 100 points are awarded for each category and the total livability score is calculated as the average of the seven category scores (AARP 2017).

3.2 Sustainability

3.2.1 Sustain/Sustainable/Sustainability/Sustainable Development

According to the Cambridge Dictionary sustain means to keep alive, and to cause to allow something to continue for a period of time. The Merriam-Webster dictionary defines sustain as the capacity to endure, and to provide what is needed for something or someone to exist, continue etc (Merriam-webster.com/dictionary/sustain). Thesaurus lists synonyms such as assist, continue, preserve, uphold, verify, accommodate, aid and support. When something is sustainable it is able to be maintained at a certain rate or level.

In general sustainability is the ability to be sustained, supported, upheld, or confirmed in the longer term or even indefinitely. When it is used in terms of biological systems or the environment sustainability is the ability of giving and receiving sustenance. Thus sustainability can be thought of as "the capacity to nourish humans and the wider life community in the long term" (Newman and Jennings 2008: 264). Du Pisani (2006) provides valuable insight to the historical and cultural depth of the concept of sustainability which has evolved over centuries.

In the English-speaking world the term "sustainable development" was coined relatively recently in the early 1970s, although what we today view as sustainable development discourse already featured in publications from the 19th century (see Du Pisani 2006). Sustainable development is defined in the Brundtland Report (also known as *Our Common Future*) as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs"... "It contains within it two key concepts, the concept of needs (especially the need for continuing economic growth) and the idea of limitations on the environment's ability to meet present and future needs" (WCED 1987).

In the 1970s, 1980s and 1990s sustainable development, to make it understandable for the public, was encapsulated in the triple bottom line concept, it is as a process driven by a combination of ecological, economic and social determinants. With the further evolution of the concept in the 21st Century it has become clear that those three components do not sufficiently cover all aspects of sustainable development and new models have been developed. This study supports the view of Allen, who states that urban sustainability can only be achieved when it is strengthened through social, economic, physical and ecological sustainability, if it is enabled through effective governance, and if it receives political support (Allen 2001).

3.2.2 Sense of place, sustainability and the socio-spatial approach

Sustainable development was put forward in the early 1970s as a compromise to try and resolve the conflict between economic development and environmental sustainability. It was realised in studies of the time, e.g. *The Silent Spring* (Carson 1962) and *The Limits to Growth* (Meadows et al 1972) that in the quest of economic growth people were destroying the planet. Sustainable development was defined, e.g. in *Our common future*, the Brundtland Commission report of the World Commission on Environment and Development (WCED 1987), as development to meet the needs of the present generation without depriving future generations of the possibility to meet their needs.

As was discussed above, livability denotes a meaningful life experience. Together, the concepts of sustainability and livability help us to consider the quality of life of all members of a community or

residents of a place, and how the activities and choices of these individuals will impact on the lives of future generations (USNRC 2002). The study concludes that to create and maintain a liveable urban environment is essential for the sustainability of the local community. Members of the local community will deem it worthwhile to put in a special effort to preserve the livability of their environment when they are convinced that it provides them with a space where they can continue to experience a fulfilling livelihood.

The socio-spatial approach that was introduced by Henri Lefebvre acknowledges and endeavours to understand the social structure of a specific community in a specific locality (Lefebvre 1992). This approach recognizes the profound effect that the environment has on social development of individuals and on a social group (Stanek 2011; Stedman 2003). The term was introduced by the New Urbanism movement to describe and investigate the interaction between society, the built environment and infrastructure (UNU-IAS 2003). It also acknowledges the impact that urban structure and design has on social processes. Both Louw and Ofusu-Kwaye advised that sustainability could be enhanced if socio-spatial principles are adhered to (Louw 2012; Ofusu-Kwaye 2009; Benninger 2001).

3.2.3 Further discussion on strengthening sustainability

The concept of environmental sustainability became well established in environmental circles after the Brundtland Report (WCED 1987) that had a formative influence on environmental thinking and inspired much of the forty chapters of Agenda 21 and the 27 principles of the Rio Earth Summit Declaration on Environment and Development of 1992 (United Nations 1992). Principle 1 states: "Human beings are at the centre of concern for sustainable development" (Strydom and King 2009: 811). Over decades approaches to sustainable development had to be adapted to the changing global situation. However, the commitment to the implementation of sustainable development on a global scale remained intact. A significant additional outcome of Rio +20 (Rio Earth Summit 2012) was the focus on integration. Under Item 3 of the *Outcome of the Conference, Agenda Item 10, Our common vision* it is stated that: "We therefore acknowledge the need to further mainstream sustainable development at all levels, integrating economic, social, and environmental aspects and recognizing their inter-linkages so as to achieve sustainable development in all its dimensions" (Rio Earth Summit 2012).

The concept of sustainable development is thus also fundamental to environmental management in South Africa. In the section of this study dealing with the legislative framework it is indicated how the ideal of sustainable development features in both the Constitution (South Africa 1996) and NEMA (South Africa 1998b). The NEMA principles are central to environmental management in

South Africa (Van der Linde and Feris 2008:198) and serve as point of departure in consideration of sustainable development principles at a local level, as in this case study. Newman and Jennings (2008:4) conclude that "sustainability can only be achieved when cities are approached as systems and components of nested systems in ecological balance with each other". Aucamp et. al. describe social sustainability as "something that nourishes the self-actualisation of persons and communities and indicate that it must accommodate growth from within and adaptation to changes from without and must make things better for people" (Aucamp et. Al. 2011:41).

The triple bottom line concept that combines ecological, social and economic considerations of sustainability emerged as a model to reflect the interlinking spheres of sustainable development (Du Pisani 2006). In diagrams that portray these aspects, three interlocking circles were used to represent the social, economic and environmental aspects of sustainable development with sustainability in the central overlap. For the purpose of this study other perspectives on sustainable development were considered as alternatives to the three-circle model.

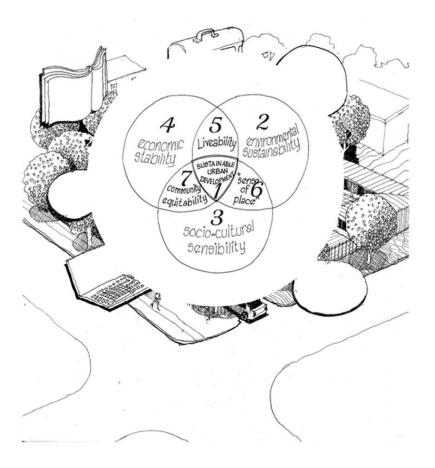


Figure 6: In this figure the classic three-circle schematic sustainability representation was adapted by the author to illustrate the significance of livability (5), sense of place (6) and community equitability (7) in sustainable development (1). Sustainable urban development, (1) in the centre of the three overlapping circles, is dependent on environmental sustainability (2), socio-cultural sensibility (3) and economic stability (4).

In Figure 6 the author introduces a conceptual adjustment to the classical model to accommodate the dynamics of urban sustainability and to make the model applicable to Arcadia Precinct as study area of this case study. The adjustment of the traditional meanings and definitions of the three circles encapsulates, in sequence of significance, firstly socio-cultural sensibility, secondly environmental sustainability and thirdly economic stability. Livability is enabled where the second and the third circles overlap. Community equitability will be possible where the first and the third spheres overlap while sense of place can be sustained in the context where socio-cultural sensibility and environmental sustainability is valued.

3.2.4 Comparative research related to sustainability

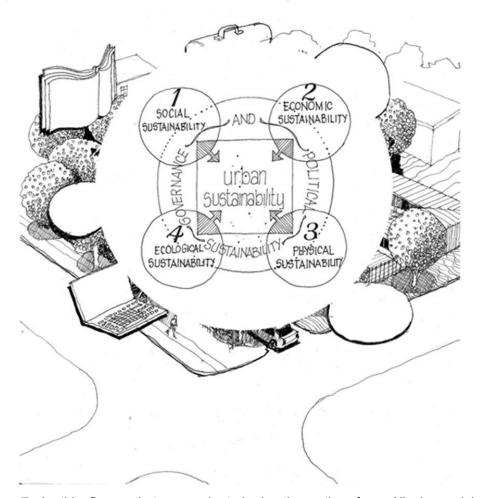


Figure 7: In this figure, that was adapted by the author from Allen's model (2001), urban sustainability rests upon four pillars of sustainability namely social (1), economic (2), physical (built and other) urban features (3), and ecological well-being, that includes natural and environmental features and conditions such as climate and atmospheric health (4) As illustrated in the figure, urban sustainability is also surrounded by a circle that represents the influence of governance and politics.

Adriana Allen, who focuses on the emergence of a socio-environmental conflict following densification in fishing villages in Mar del Plata, Argentina, extends the conceptual adaptation of the previous three circled sustainability representation. She indicates how an otherwise sustainable

situation can be compromised due to political unrest that follows in the wake of a lack of appropriate governance guidance and intervention (Allen 2001). She concludes that while urban sustainability depends on social, economic, physical and ecological sustainability it remains vulnerable unless it is enabled through effective governance and if it also receives political support (Allen 2001:44). The model was further adapted by the author to accommodate additional perspectives. In terms of the power of political intervention parallels could be drawn with recent student unrest in the wider Precinct case study area (See Figure 7).

3.2.5 Urban neighbourhood sustainability

Much research has been done in recent years on the sustainability of urban neighbourhoods. Sullivan and Ridin (2014) compiled a literature review in this regard. (Also see Katz 1994; Benninger 2001; Louw 2012; McMahon 2012; May and Perry 2016; Sullivan and Ridin 2014 as well as Neighbourhood sustainability frameworks - a literature review, UN 2016.)

Several initiatives to address the challenge of urban sustainability have been undertaken in different parts of the world:

- The New Urbanism movement in the USA from the early 1980s the main focus was on creating liveable urban areas. Innovative architects and developers reacted to suburban sprawl and failed urban development and strove to provide urban communities with culturally-diverse housing, easy access to work and schools and efficient transportation.
- The Urban Villages movement in the UK from the late 1980s focussing on dense nodes of development in wider patterns of urban dispersal and the repopulation of existing cities by increasing densities.
- The Smart Growth movement in the USA –opposing urban sprawl, promoting high density, mixed-use development, sustainable resource use, and open space conservation, and aiming to foster a sense of community and a sense of place.
- The Compact City in Europe resulting from the European Commission's Green Paper on Urban Environment – opposing the dispersed city, combating high energy consumption levels, addressing accessibility issues, reusing existing infrastructure, promoting green space, and rejuvenating existing urban areas to produce a higher quality of life and dynamic sites of economic interaction.
- The SUN (acronym for sustainable urban neighbourhood) urban design model developed in the
 UK by the Urban and Economic Development Group in Manchester a model to assist smallscale urban areas within cities to achieve social, economic and environmental sustainability,
 while recognising that cities are formed by historical processes which have resulted in the
 complexity and disorder of urban areas (Rudlin and Falk 1999).
- The Neighbourhood Sustainability Framework created by Beacon Pathway in New Zealand a framework to assess neighbourhoods around six elements (neighbourhood satisfaction, functional flexibility, effective governance, appropriate resource use, maximised biophysical health, minimised costs) for their resilience, adaptability, community feel, amenity, and sustainability (NSF 2008).

Of course models designed in developed countries cannot be applied in un-adapted form in developing countries, but these models do identify the relevant issues that need to be addressed in all localities to create sustainable neighbourhoods.

3.2.6 Principles and guidelines associated with sustainability

The socio-spatial research approach proposed in this study as a suitable method to conduct the study of the Arcadia Precinct needs to be based on principles that will contribute towards sustaining sense of place while supporting sustainable development. These principles must be aligned with the frameworks and guidelines for development planning in the national, provincial and local spheres contained in the documents mentioned in a previous section. Strategies for the adaptation and implementation of the relevant principles in such a way that they will adequately address the requirements specific to the Arcadia Precinct, need to be developed through social engagement processes.

Such strategies could be further supported if assessment processes, such as Social Impact Assessment and Citizen Value Assessment (Becker and Vanclay 2003; Aucamp et. al. 2011) are engaged in, as is recommended in the concluding section of this study. Locality-specific procedures for the application of development principles need to be formulated in each context where development projects will have an effect on the local sense of place, as it applies in the case study area. These local applications of principles have to be decided on through transparent, representative, locally valid stakeholder engagement processes.

Sustainability principles provide a means of managing and supporting maintenance of sense of place and livability and sustainable development (Allen 2001; Pieterse 2008). Different sets of principles of sustainable development were compared with locally applicable principles. These included the principles contained in the National Environmental Management Act, Act no. 107 of 1998 (RSA 1998), the Melbourne Principles of sustainable urban development (UNEP/IETC 2002) and Gibson's sustainability criteria and principles (Gibson 2006; Gibson 2013). These principles are compared in table format in Table 1 (See later).

The study stresses the importance of the development of locally applicable principles, which may be arrived at through public engagement techniques such as the semi-structured interviews and through the documentation of local narratives of residents and other stakeholders in the Precinct Study area. Local principles were also identified through documenting pre-knowledge imbedded in residents that, in this study, included the author. It is concluded that agreed-to principles, that would characterise the aspired towards state are needed and have to be implemented to provide a secure base to ensure that development would be sustainable. A set of specific guidelines has to be developed that would spring from the agreed-to-principles.

3.2.7 Local and international principles for sustainability

While the study mainly focused on the application of a number of locally identified sustainable development principles a further important method that was introduced to gain insight into the locally applicable principles consisted of comparisons with other studies. A comparison was accordingly made of principles identified in NEMA, Gibson and Melbourne principles to enlighten the specific Precinct Principles, as in Table 1.

Case studies in other parts of the world provide clues as to how principles aimed at sustainable development can be implemented successfully. The literature study includes publications dealing with international projects that were initiated to serve local needs and circumstances. In York, for example, project principles were formalised as a set of shared values and resulted in the York Village Design Statement (York 2001). The study was also guided by the 10 axioms set out in the Principles of Intelligent Urbanism. These axioms have as their objective to direct the formulation of city plans and urban designs and to reconcile and integrate diverse urban planning and management concerns and include environmental sustainability, heritage conservation, appropriate technology, infrastructure-efficiency, placemaking, social access, transit-oriented development, regional integration, human scale and institutional integrity (Benninger 2001). These axioms evolved from the city planning guidelines formulated by the International Congress of Modern Architecture (CIAM), the urban design approaches developed at Harvard's pioneering Urban Design Department and the concerns expressed by Team Ten and characterise the designs of Christopher Charles Benninger (Benninger 2001).

Some internationally recognised sets of principles are discussed and compared here. They contain universal principles that can be adapted for implementation in the Arcadia Precinct case study.

At the World Summit on Sustainable Development, or the so-called Johannesburg Earth Summit, in 2002, the Melbourne Principles for Sustainable Cities were endorsed by governments.

The ten Melbourne Principles are:

- 1. Vision: Provide a long-term vision for cities based on sustainability as well as intergenerational, social, economic and political equity and their individuality. Visions need to reflect a city's distinctive qualities.
- 2. Economy and Society: Achieve long-term economic and social security.
- 3. Biodiversity: Recognise the intrinsic value of biodiversity and natural ecosystems, and protect and restore them.

- 4. Ecological footprints: Enable communities to minimise their ecological footprints (amongst others through transport-orientated development, e.g. in the Precinct).
- 5. Model cities on ecosystems: Build on the characteristics of ecosystems in the development and nurturing of healthy and sustainable cities.
- 6. Sense of place: Recognise and build on the distinctive characteristics of cities, including their human and cultural values, history, and natural systems.
- 7. Empowerment: Empower positive initiatives and foster participation.
- 8. Partnerships: Expand and enable cooperative networks to work toward a common, sustainable future.
- Sustainable Production and Consumption: Promote sustainable production and consumption through appropriate use of environmentally sound technologies and effective demand management.
- 10. Governance and Hope: Enable continual improvement based on accountability, transparency, and good governance (UNEP/IETC 2002).

The importance and impact of Gibson's sustainability criteria become evident when one considers Gibson's contribution to literature on sustainable development and sustainability assessment (Gibson 2013). It is therefore fitting to view South Africa's legislative sustainability mandate in the context of Gibson's criteria to gauge South Africa's standing within the international sustainable development context.

Gibson identifies the following criteria as being instrumental in the success of sustainable development: preservation of the ecosystem integrity, including the capability of the natural systems to maintain its structure and functions and support biological diversity, respect for the rights of future generations to sustainable use of renewable resources and achieving durable and equitable social and economic benefits (i.e. viable and equitable livelihoods). He underlines that the promotion of sustainable development is a fundamental purpose of environmental impact assessment. Projects should make long term positive contributions towards ecological and community sustainability and not only focus on the avoidance or mitigation of significant negative environmental effects (Gibson 2006).

Gibson's (2006) eight core generic criteria for sustainability assessment:

- Socio-ecological system integrity building human-ecological relations in order to protect and maintain the on-going integrity of the irreplaceable life support systems on which all life depends.
- Livelihood sufficiency and opportunity ensure that all communities and individuals have the opportunity to lead a decent life without compromising the opportunities of future generations.
- Intra-generational equity ensure that less materially- and energy-intensive choices are pursued so as to reduce the gap between rich and poor with regard to inter alia health, security, social recognition and political influence.

- Intergenerational equity choose development options that will most likely preserve and/or enhance the opportunities of future generations to live sustainably.
- Resource maintenance and efficiency ensure sustainable livelihoods by reducing extractive damage to ecological systems, optimizing production via decreasing of energy and material use and waste production.
- Socio-ecological civility and democratic governance develop the capacity, motivation and propensity of individuals, communities and decision making bodies to recognise their collective, reciprocal responsibility to apply sustainability principles in all decisions and actions.
- Precaution and adaptation respect uncertainty, avoid poorly understood risks of serious or irreversible damage to the foundations for sustainability, plan to learn, design for surprise and manage for adaption.
- Immediate and long term integration applying all the sustainability principles simultaneously and pursuing mutually reinforcing gains and benefits.

In a later publication Gibson (2013) proposes six imperatives of sustainability assessment:

- Aim to reverse prevailing unsustainable trends by insisting on positive contributions to a desirable and durable future;
- Ensure integrated attention to all key intertwined factors that affect prospects for a desirable and durable future;
- Seek mutually reinforcing gains by considering and serving the interdependence of ecology, economy and society;
- Seek to minimise trade-offs and compromises that sacrifice ecological and human interests for economic gains;
- Respect the particulars of the context, specifying effective criteria for evaluation and decision making in lieu of the key issues, aspirations, capacities and concerns of the people and places involved;
- Be open and broadly engaging and utilize all opportunities to foster the capabilities and understanding of citizens and civil society organisations.

Comparative discussion of sustainability principles

In terms of the sustainability principles that were put forward as a means of managing and supporting maintenance of sense of place and sustainable development in the Precinct (Allen 2001; Pieterse 2006, 2008 and Agenda 21) different sets of principles of sustainable development were compared – those contained in the NEMA, the Melbourne Principles of sustainable urban development (UNEP/IETC 2002) and Gibson's sustainability criteria and principles (Gibson 2006, 2013) as discussed above. However, in the case study locally applicable principles were arrived at through pre-knowledge, public engagement and interviews conducted among residents and other stakeholders in the Precinct Study area.

Table 2 below compares the following: NEMA Principles, Gibson's criteria, Melbourne Principles of Urban Sustainability and the locally relevant principles in the Precinct case study. The table should be read from right to left. The right hand column that lists principles for sustaining sense of place and for maintenance of sustainability in the case study area should thus be read first.

Table 2: Comparison of principles of sustainability as expressed in South Africa's National Environmental Management Act (NEMA, Act 107 of 1998), Gibson's 8 international sustainability criteria, The 10 Melbourne Principles for sustainable cities, and Principles for sustaining sense of place and strengthening sustainable development identified for the Precinct case study.

development identified for the Precinct case study.				
NATIONAL ENVIRONMENTAL MANAGEMENT ACT 'NEMA' PRINCIPLES, aligned with Section 24 of the South African Constitution	GIBSON CRITERIA 8 International Sustaina- bility Criteria	MELBOURNE 10 PRINCIPLES for sustainable cities endorsed at Earth Summit [MP1-10]	Developed LOCAL PRINCIPLES for Sense of Place and sustainable development in the case study area as proposed in the conclusion of this study	
NEMA Sections 2(2- 4) and 3(2) indicate a commitment to sustainable development that must be socially, environmentally and economically sustainable. It places people and their needs first in order for environmental management to serve the people's developmental, cultural and social interests and to maintain Intra-generational equity Section 2(3)]	Intra-generational equity [Gibson 3]: Ensure a sustainable livelihood for all people (security, recognition, political influence); Reduce the gap between rich and poor; Reduce material and energy usage	MP1 Vision: Provide vision on long term sustainability, intergenerational, social, economic and political equity; and individuality	1. Vision for sustainability: Develop vision of long term sustainable urban development based on socio-cultural sensibility, environmental sustainability and economic stability so as to support community equity as well as equitability. The case study area is ideally situated to contribute towards the national South African strategy to reduce the gap between rich and poor since local densification will contribute towards more equitable settlement along transit routes.	
Public Trust Doctrine: Section 2(4)(o) The environment is held in trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage Environmental Justice: Adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons [Section2(4)(d)] Equitable access to environmental resources NEMA affirms commitment to sustainable development that is socially, environmentally and economically sustainable. People to be considered first	Intergenerational equity [Gibson 4]: Favour options and actions that are most likely to preserve or enhance opportunities and capabilities of future generations to live sustainably Livelihood sufficiency and opportunity [Gibson 2]: Ensure that everyone and every community has enough for a decent life and everyone has opportunities to seek improvements that do not compromise future generation's sufficiency and opportunity Socio-ecological system integrity [Gibson 1]: Human-ecological protection of life support systems	MP1.Vision as above as well as MP9. Sustainable production and consumption: Promote sustainable production and consumption through sound technologies and demand management MP4. Ecological Footprint: Enable communities to minimize their ecological footprints MP2. Economy and Society: Long-term economic and social security	2. Sustainability Principles: Develop principles for long term sustainability, intergenerational, social, economic and political equity; and individuality (as per Vision MP1 and NEMA Section 2) Promote sustainability through adherence to developmental principles that will sustain sense of place while simultaneously supporting social, economic, environmental and political needs. Balancing optimization of transit orientated development with sense of place and heritage requirements in the area. Ensure that spatial and land use planning principles are implemented that will serve people's developmental, cultural and social interests	
Preventive principle: Prevent disturbance of land- scapes and sites that constitute the nation's cultural heritage [section 2(4)(iii)] Avoid or minimize: Disturbance of ecosystems, loss of biological diversity; pollution [section 2(4)(i-ii)]	Resource maintenance, efficiency [Gibson 5:] Ensure sustainable livelihoods for all; Reduce threats to the long-term integrity of socioecological systems; Avoid waste and minimize energy use	Sense of Place: MP6 Recognize and build on the distinctive characteristics of cities, including their human and cultural values, history and natural systems.	3. Sense of Place: Sustain Sense of Place through recognizing and building on the distinctive character, quality and spirit of place in the study area. This approach recognizes tangible and intangible sociocultural and historical values of the area. Densification along the local rapid transit route will contribute towards improved livelihood and reduced material and energy usage	
Integrated Environmental Management: Environmental Management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of	Immediate and long term integration [Gibson 8]: All principles of sustainability to be simultaneously applied, thereby achieving mutually supportive benefits and multiple gains.	MP5. Model cities on ecosystems: Nurture sustainable cities on ecosystem principles	4. Integrated socio-spatial planning: Pursuing best practicable environmental option for development in the area. Such an option will have to sustain sense of place while meeting people needs in terms of optimizing on	

decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option. [Section 2(4)(b)]	Resist convenient immediate compromises		the development potential. Recognising the importance of local Integrated development, and adhering to Local Integrated Development Plans
Precautionary Principle Section2(4)(p) A risk-averse and cautious approach, which takes into account the limits of current knowledge about consequences of decisions and actions Democratic governance: Decisions must be taken in an open and transparent manner and access to information [Section2(4)(k)]; Intergovernmental coordination and harmonization of policies, legislation and actions relating to the environment [Section 2(4)(I)]	Precaution and adaptation [Gibson 7]: Respect for uncertainty and avoid poorly understood risks. Plan to learn, manage for adaptation Socio-ecological civility and democratic governance [Gibson 6]: Integrated governance structures; Strengthen individual and collective understanding of sustainability; Build civil capacity for effective involvement in collective decision-making	MP2. Economy and Society: Achieve long-term economic and social security MP10.Governance of Hope: Enable continual improvement based on accountability, transparency, and good governance MP7. Empower people MP8.Partnerships: Expand and enable cooperative networks to work towards a common, sustainable future	5.Democratic Governance: Decisions must be taken in an open and transparent manner and reasonable access to information [Section2(4)(k)]; Coordinated management is required to meet the needs and to optimize development potential in the study area to ensure long-term economic, environmental (including urban built environment), and social (including political) security. All role players need to work together towards a common, sustainable future for the area. Recognize the important role of local Integrated development

The comparative table highlights the close correlation of the principles that crystallised through the Precinct case study "that were inspired by the NEMA Principles", with Gibson's criteria and the Melbourne Principles of Urban Sustainability.

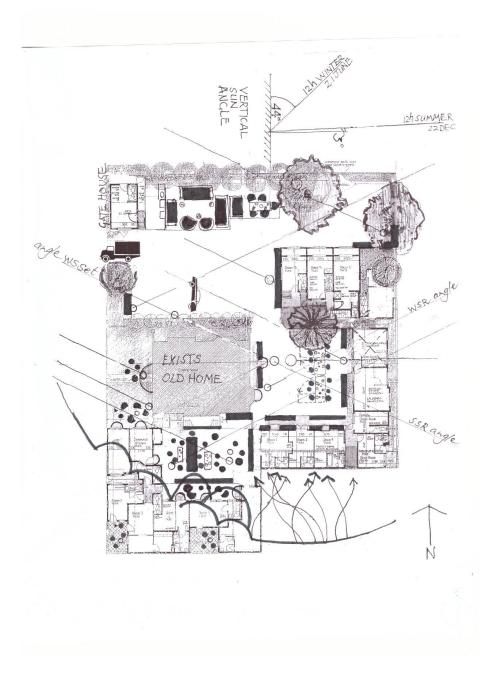


Figure 8: The Hill House site development plan illustrates how form-based design strengthens livability.

The 'existing old home' at Hill House was designed by Gordon Leith in 1927, while all other structures were built in related style by the author in the last three decades. While the original old home is centrally positioned, all other buildings hug the perimeter of the total site to face in on courtyards. Open internal social areas are used for multi-purpose group activities and are furnished with easy-to-move seating. The edges of the buildings have built-in seats (in black in Figure 8) where tenants thaw and relax in the winter morning sun (winter sunrise wsr) or shelter from the summer sun. The buildings also act as barriers from the cold southerly winter winds. (Visit Hill Village Pretoria website and track the street view along Hill Street and Arcadia Street on Google maps).

3.2.8 Form-based design supporting livability, sense of place and sustainability

In the Precinct Plan for the Residents' Associations in Old Pretoria East Loots points to the following underlying form-based concepts in relation to the process of transformation of an established area with unique neighbourhoods, unique elements and many heritage features such as the case study area (Loots 2017:8-17): We have to define a specific, practical line between the densification area of the linear zone and the core residential area in order to achieve a balance between transformation and preservation. We have to promote site assembly in order to protect the mobility function of a mobility spine through access management, We have to promote site assembly in order to manage the quality of the living environment through form-based parameters that can achieve even higher densities within improved quality urban environments, We have to promote walkability in order to support public transport and a sustainable city through short walking distances and a vibrant, quality walking environment', We have to protect the quality of a neighbourhood and its community life to enhance identity of the city through selection of housing typologies that fit within the character of the neighbourhood. We have to promote the appropriate typology for a specific density in order to ensure better quality public spaces on site and in the public domain, We have to manage built form in support of land use and density controls in order to get the quality urban environment which we all want to live in.

A paradigm shift is needed to counteract the disadvantages brought about by building typologies that currently dominate our thinking about development (high-rise flats with low coverage or low-rise townhouses with high coverage). We have to move away from introverted buildings ignoring the public domain, towards developments that contribute to quality and vibrant public spaces to benefit of the community at large. Public space, even only street space, should be integral part of the development (Loots 2017:8-17).

After this theoretical analysis, a discussion of the empirical component of the study and its main findings follows in the next chapter which makes proposals with regard to future strategies to address the identified challenges in Arcadia Precinct.

4 Analysis of the outcomes of the research

4.1 Spatial data: Outcomes of the street-view survey

Management of the Tshwane municipal area is compromised since the existing policy documents are outdated. The 15-year old Spatial Development Framework for Arcadia Street (COT 2002) is still currently used as benchmark when considering development applications. It no longer complies with the guidance contained in SPLUMA (RSA 2013). Administrative procedures do not allow for adjustments needed to address the imbalanced spatial economy (Batchelor 2006; Horn 1998; COT 2002; Giddens 1984; Turok and Parnell 2009).

The street-view survey that the author of this study (a heritage practitioner) undertook, underlined the considerable land use and architectural changes that had occurred over the decades since the previous and last survey that had been done in 1993 by Schalk le Roux (Le Roux 1993), which was indicated in the *Spatial development framework for Arcadia Street* (COT 2002:6).

The more recent street-view survey undertaken by the author in 2006 (Batchelor 2006) established that only a small percentage of structures displayed adequate historical architectural features, and that the street could therefore not be described as a heritage street. From the comprehensive street-view survey of all structures along Arcadia Street, between Becket and Festival Streets that the author undertook, it transpired that only 16 out of the 94 structures, or 16 %, could still be considered to have significant heritage value. On a scale of 1-5 only five buildings were rated as of 'exceptional' heritage value and were allocated a value of 5, six buildings displayed 'historical characteristics of merit' and were allocated a scale value of 4 and another five less exceptional buildings displayed 'recognisable historical characteristics' and were allocated a value of 3. The Arcadia Street survey concluded that the street as a whole did not warrant heritage status.

The survey also provided statistical information on land use changes. Of the buildings where land use could be determined 21% of the 94 structures were used as offices compared to 20% residential use, 15% was used as combined family and student rental use, 14% were exclusive student rental use, 11% were embassies and 5% were guest houses. The land use of the remaining 20% could not be clearly determined and needs further investigation. This leads to the conclusion that Arcadia Street can no longer be defined as predominantly residential, since it is now overshadowed by 'other uses'. The result of the survey was made available to the town planning department of Tshwane and was included in the Hatfield Development Framework of 2012.

4.2 Social data: outcomes of stakeholder engagement

4.2.1 Place attachment among students

(Note that a list is included in Appendix B of the people who were interviewed and the meetings that were held as part of this study.)

In semi-structured interviews held with eight students, tenants at Hill House, they said the following about their perceptions around sense of place:

- I like the layout around cool central areas where there is a place to chill. This is attractive so we can gravitate to these central areas when we come home.
- It is close to everything yet secluded from the rush. You need to get out of the rush after work.
- In an apartment block you do not have these shared central spaces where you can chill.
- It is a chilled residential space and with a built in support system.
- I don't think it is the number of people but it is the type of people that makes it safe and happy.
- It is important to control and prevent unknown elements.
- You have your personal space but others are near.
- Here we live in a 'different' diverse community that inspires and informs us.
- It is a good thing that we are all busy here.
- It is good to have each other's support.
- We can make friends here, and understand people that are different to us.
- I prefer it that there are not too many people here.
- Seeing success inspires me.
- The courtyards and the trees, plants and birds create a happy safe space; it makes you feel protected and quiet.
- It is good that we have guidelines as to how we should do things.
- We are together but private.

An individual interview with Thabiso Gumede, final year student in the planning department at the University of Pretoria, on 14 October 2016 was of particular value. He describes the greater Arcadia area as conveniently situated and as vibrant and imposing, especially with the Union Buildings and other government buildings, as well as the university being nearby. The wider area is serious and it calls to be respected and "it fills you with pride and patriotism". The history makes the place. He describes the smaller Arcadia Precinct as clean, well looked after, and green, and steeped in history. He likes the quiet carefree feel of the Precinct and describes it as "a pocket of quietness". The Hill House (Village) feels safely enclosed where there is enough space for everybody to relax in and that you can identify with. "Everybody here is in the same (academic) space, it becomes part of you, and it becomes your identity. That means you want to protect it." He also said that: "I am aware that personal attachment depends on the person, but it is easier to develop that attachment when you come into a place that already has history" This history and all the features in the area should be protected, and development should take place around it. It is important to respect and keep what is already there. We can still improve the area by improving the

quality of the local streets. Streets can be improved by care of the pathways, edges of the roads, aesthetics, having local security patrols. "Then streets can become streets again where everybody can walk in safety".

The thoughts of the students can be summarised as follows: Apart from the convenience and close proximity to university, shops, bus, taxi and rail transport, the students value Hill House because it has the feel of a quiet retreat just off the business of life outside in the street. They enjoy the 'atmosphere' that is created by the 'old world' buildings and old trees. They value the quietness, the attractive shared courtyard spaces and the fact that the rooms arranged around the edges face into the courtyards. They like the diversity of people who live at Hill House and feel that it provides the opportunity also to get to know people who are different. While the majority of respondents value the heritage feel they feel that it is difficult to maintain. Some are concerned about the safety of the area, being so close to the railway station. They also suggest that we should ask Tshwane to provide more effective street lights and that there should be more visible security in the streets.

It is clear that, because of the expansion of private student accommodation in the study area the student tenants are an important stakeholder group. Although they reside here temporarily for the duration of their studies their needs must be taken into account. The students need an environment where they can study and relax and where they feel safe. They give expression to their place attachment and mention specifically their appreciation for the elements of heritage and history pervading the Precinct.

4.2.2 Concerns of property owners

Because of the need for accommodation in the proximity of Pretoria University and the Hatfield Gautrain Station the Precinct has experienced rapid densification over the last years. This is not a unique situation in South African urban areas. Because of the increase in student numbers the need for student accommodation within walking distance of the universities in other cities and towns where universities are located has caused drastic changes in the character of residential areas. This has caused varied responses from home-owners in the affected neighbourhoods. While some home-owners may feel aggrieved by the perceived loss of their sense of place and decide to sell their properties to move elsewhere into more peaceful residential areas, others may see it as an economic opportunity to cash in on supplying in the need for student accommodation by converting their properties themselves or selling off to developers at inflated prices.

Densification in Arcadia Precinct has caused concern among permanent residents. At a meeting held on 3 February 2012 residents discussed the Hatfield Urban Development Framework (COT

2011) that had been tabled in September 2011. Altogether 60% of the residents attended the meeting, and 20 out of 21 people who attended were in agreement about the following:

- They wished development to happen with recognition of the input of the community.
- They were in favour of retaining aspects of the historical character of the area.
- The land owners present wished to be part of the process of deciding on densification and the number of storeys that should be allowed.
- They were clearly opposed to the suggestion made in the Hatfield Urban Development Framework (Tshwane 2011) to declare the area as a heritage street since that would place unnecessary restrictions on the rights of the land owners.
- For various reasons, primarily security, they considered it advisable to develop the area as an access control area both for vehicles and pedestrians.

A significant component of the debate among Arcadia Precinct residents has been discussions of the proclamation of Arcadia Street as 'heritage street' and the potential impact that this may have on future development of the area. Already in 2012 the author wrote to an official of the Tshwane Planning Department and opposed the declaration as a heritage precinct as undesirable for the area. Concern was publicly raised following a workshop arranged by the Old Pretoria East Residents and Ratepayers Association (OPERRA) to discuss the implications of the introduction of the Spatial Planning and Land use Management Act (SPLUMA), (Act 16 of 2013).

Discussions at meetings revealed that while the inhabitants of the area are in agreement with maintenance of heritage quality buildings, and the strengthening of the historical feel/character of the area, they disagree with the constraints that the status as heritage street imposes upon development in this area. Discussions and interviews with residents made it clear that their concerns were mainly financial. They wish to protect the capital investment they have made in property in the Precinct. The minutes of a meeting in May 2014 about the Spatial Development Framework for Arcadia Street state that the residents were "unhappy since their properties, being their pension investment, would be negatively affected by the proposals contained in the report" (hand-written comment on the report). This concern was confirmed in subsequent interaction between the researcher and individual property owners. They were emphatic about not wanting to be subjected to the stringent restrictions on further development that heritage status of Arcadia Street would imply.

The author raised this matter again at a community meeting held on 13 October 2016. She advised that since the National Heritage Resources Act (Act 25 of 1999) provided full protection to structures, there was no need for heritage street proclamation, and such a proclamation would only stifle the development potential of properties along Arcadia Street. She requested that proclamation of Arcadia Street as heritage street should be reconsidered.

Changes in land use and zoning are threatening the sense of place in Arcadia Precinct. This was also discussed at the community meeting of 13 October 2016. Multi-storied buildings have been constructed directly overlooking the properties of home owners in Arcadia Street. As a result of the change in the character of the area some current owners are concerned that livability will be compromised and contemplate moving out of the area.

Communal living is another contentious matter in Region 3, that includes the Precinct study area. At a stakeholder engagement meeting held on 18 July 2017 and hosted by the commune owners group there was considerable discussion on the definition and composition of accommodation units. Commune owners felt that municipal policies, frameworks and guidance documents, which relate to communal accommodation enterprises and communes, should be re-assessed and that clear, unambiguous guidance should be provided by Tshwane Municipality. Such regulatory documents should be based on the principles and guidance provided in the National Environmental Management Act (NEMA Act 107 of 1998) and should respond to the current socio-spatial and economic climate in the country and in Tshwane. Appropriate definitions that reflect the need for places of communal living should be formulated to replace current definitions. With regard to student communes, there are two main components, i.e. land use/zoning issues and socio-spatial issues. Socio-spatial issues that need to be carefully controlled include incompatible social behaviour, poor maintenance of properties, lack of adequate facilities, poor or no landscaping, degradation of heritage assets, increased crime, overcrowding and burdening of aged infrastructure. Guidelines must be put in place to ensure well run communes. They must be regulated to ensure smooth running.

At the meeting the researcher expressed the view that communal accommodation was much needed by people of all ages and walks of life. A definition of a more inclusive accommodation type should therefore be introduced that could cater for a wider diversity of tenants of all ages. Such a new 'village-type' accommodation of 'organised collective' or 'complex stay' would strengthen the concept of livability and should be introduced by Tshwane Municipality to better accommodate the needs of Region 3 residents.

4.2.3 Expert advice

Planning experts and municipal officials are aware of the concerns of the residents of Arcadia Precinct about the threat of loss of sense of place. However, they take a more objective position and propose strategies to try and reconcile conflicting interests.

At a meeting held on 13 February 2013 professionals, including an architect and spatial planners pointed out that development in Arcadia Precinct was inevitable. Mike van Blommestein stated: "Development will happen, we cannot stop it. The whole area, from Festival to Becket will be subject to densification. The residents have to decide what they want and then manage the process to ensure that they do not lose environmental quality and that the area will remain safe". Stephan Botha supported the idea of devising a master plan for the area and said: "Since it is clear that densification will happen we have to devise plans, strategies and guidelines to steer it".

Subsequent meetings with several spatial planning professionals and architects provided insight on the development potential of the area and pointed to the need for developing and implementing a co-ordinated planning strategy that should include an effective, enforceable, management plan for the broader area. Architects and spatial planning specialists view proclamation of Arcadia Street as heritage street from different perspectives, but they agree that the matter will have to be further debated. While Karel Bakker, for example, felt strongly about the heritage status, he did not foresee the important role that the area would play in the densification of the area following the establishment of the Gautrain rapid rail service. He also did not anticipate the loss of privacy and resultant loss of property value that would affect land owners of properties bordering on multi storied apartment blocks.

Other architects, Roger Fisher for example, realise that, in order to ensure the survival of older buildings, they will have to be adapted to serve contemporary needs. He stresses, however, that the advice of heritage professionals and architects should be sought in order to ensure that heritage quality is retained. Paul Bosman recommends that some reference to the past should be included in the design of new buildings in the area. Trevor Lloyd-Evans is of the opinion that the original buildings, along with the landscaping of the gardens and the trees, curb stones and other original features of the streetscape should be retained in order to retain the character and quality of the entire heritage area. Claus Schutte, who is a resident of Arcadia, advises that articulation and scale between the street and the architectural backdrop should be considered in designing new buildings in the context of existing structures.

Planning specialists, including Annemarie Loots, Theo Pretorius, Karina Landman, Reinier Minny and Elsa Moore stress the importance of design intervention in landscaping and in the articulation between the street and the structures. Annemarie Loots advises that the Precinct area should be viewed within its larger context and that streetscapes as well as the articulated spaces between the street and the architectural backdrop should be creatively mediated to strengthen the role it could play in providing much needed shared living-and-meeting spaces. Such design intervention could

contribute significantly to strengthen sense of place, livability and sustainability in the Precinct area.

In response to the Tshwane Municipality's invitation to comment on the Regional Spatial Development Framework (RSDF) that would serve as benchmark for development planning in Tshwane for the five years from 2017 to 2021 Loots prepared a Precinct Plan at the request of Old Pretoria East Residents and Ratepayers Associations (OPERRA) representing eleven residents associations in the 'old east' of Pretoria. In it she outlines the design logic as well as the structuring elements and key principles that should guide development of a city that has the livable gualities that are needed. It is important to note that designing for livability is not only about densification, but also about restructuring and transformation. Aspects that need to be considered in this respect include much more than just the mere provision of dwelling units and services. It involves detailed planning and design considerations to ensure a sustainable, liveable and memorable city. Loots stresses that livability and sense of place can be strengthened through design principles, by maintaining environmental quality and protecting the unique character and spirit of a neighbourhood. She indicates that the purpose of the Precinct Plan is to provide proposals that will attempt to balance city-wide transformation objectives, as contained in the RSDF, with sentiments and concerns of the communities regarding the distinct character and context of their areas as unique neighbourhoods in the City of Tshwane. The Precinct Plan thus calls for the recognition of the city's individual neighbourhoods whilst building on the unifying elements of the proposed city structure. Loots also expressed a specialist opinion on the issue of the declaration of Arcadia Street as a heritage street. In a letter dated 19 October 2016, she responded to the suggestion that the heritage street declaration should be reconsidered. She cautioned that not only individual buildings needed to be preserved, but also, in deserving cases, the character of streets and even of a whole neighbourhood. She indicated that she would be hesitant to scrap the heritage proclamation without having other mechanisms in place to ensure the preservation of character. If such mechanisms were not put in place, it might be that one or two historic buildings would be preserved, but that new blocks of flats, insensitive to the character of the street, would be constructed and would completely dominate the area and destroy its character. Therefore she advised that a set of enforceable guidelines should be put in place before scrapping the heritage proclamation.

5 Processes put forward

5.1 Framework to sustain sense of place in the case study area

A framework is required to work towards the objective of the case study, namely to sustain sense of place in the case study area. A two part framework consisting of conceptual and procedural branches is considered and discussed in this section. The first part consists of formulating a way of thinking (theory) that has potential to sustain sense of place, while the second part consists of selecting procedures (methods) with which this concept can be implemented on the ground in the Precinct case study area. This study, then, includes the development of a conceptual framework (in the 'theory' sense) and a practical ('method') framework. The first part of this method described in this dissertation consists of the completed pilot baseline study while an outline of a model that is put forward for future implementation is also discussed. The word 'framework' in this study refers to the practical guidance provided that outlines the procedures that need to be implemented. It also refers to the legislative frame and principles to be adhered to.

The first part of the work cycle consists of developing a conceptual framework as summarised below. The steps used in the process of developing the conceptual-and-procedural framework are:

- Determine what the problem is that needs to be addressed, i.e. problem statement.
- Formulate the research question, i.e. to sustain sense of place and ensure sustainability in the Precinct.
- Use case study as tool/instrument to find an answer to the research question.
- Choose a specific case study, the Precinct, to investigate the study question.
- Determine what further methods to use and what procedures to implement to address the problem that needs to be addressed.
- Get to know more about the problem in order to be in the position to develop a theory about the way in which the problem of developing a framework for sustaining sense of place can be addressed.
- Do a literature study and speak to people who are knowledgeable in the fields of study that relate to the study focus.
- The literature study leads to a decision to use the work of Norberg-Schultz (1976) and Giddens (1984) as points of departure. They emphasise the relationship between the individual and the group within the environment in which they live. They also develop specific theories about the underlying structure that supports the formation of sense of place and indicate that this sense-of-place-experience serves as structure that underpins the life orientation of the individual and, by implication, the life orientation of the community.
- Find out more about the perceptions of people about the place and the community among whom they live, i.e. the Precinct case study area, through semi-structured interviews.

On the basis of this enquiry, it was decided that a socio-spatial approach could serve as a suitable framework and point of departure to determine how sense of place can be sustained.

Table 3 Different sections of the Framework that may sustain sense of place FRAMEWORK

CONCEPTUAL BRANCH (THEORY) = how to think about	PROCEDURAL BRANCH (METHOD) = how to do
Developing conceptual framework (theory) concerns formulating the frame of the approach followed, namely the socio-spatial approach	Developing a method As is illustrated in Figures 3 and 4 the method consisted of two parts namely Part 1: Method used in completed pilot baseline study, Figure 3: Iliterature study to develop approach and learn about the socio-spatial and historical context of the area interviews to gain insights on local perceptions of sense of place and current issues street view survey to gain perspective on the environment and state of the study area engage in debates about spatial regulations imposed on area formulate a strategy/model for future research. (This is outlined in the model below) Part 2: Method recommended to be used in a model for future implementation Figure 4: Consult planning professionals and social impact professionals and specialised reports Undertake an Environmental (including Social) Impact Assessment of the area and identify the aspirations of the community as part of the SIA Introduce the Urban Profile Process as well as the soft systems methodology to move from the current to the envisioned state Compile and implement a management plan that is based on the above steps, and that includes specified compliance stipulations, review cycles and report back procedures. Communicate, facilitate, and monitor: Strengthen communication and facilitation among residents and with officials, adhere to report-back programmes review cycles, monitor progress and regulate compliance with management plan.
	Sections 1.5, 3.2.6, 3.2.7 and 3.2.8 outline the official legislative frame that guides sustainable development, and includes the principles that have to be adhered to.

5.2 Model for future implementation

As illustrated in Figure 4, earlier, the study puts forward a model for future implementation and tools that hold potential to counter loss of sense of place and social fabric and that may arrest environmental deterioration in the Precinct. The model was developed based on the sources that were consulted as well as on the empirical research that was undertaken as part of the pilot baseline study. The model includes the following two components:

- Consultation with planning professionals and social impact practitioners. Specialised publications and reports should also be studied to gain further insight.
- Environmental and Social Impact Assessment should be undertaken in the case study area and the envisioned aspirations of the community should be identified as part of this process.

Urban Profile Process ECONOMICS ECOLOGY Materials & Energy Production & Resourcing **Exchange & Transfer** Water & Air Accounting & Regulation Flora & Fauna Habitat & Settlements Consumption & Use **Built Form & Transport** Labour & Welfare **Embodiment & Sustenance** Technology & Infrastructure Wealth & Distribution **Emission & Waste** Organization & Governance **Identity & Engagement** Law & Justice Creativity & Recreation Communication & Critique Memory & Projection Representation & Negotiation Belief & Meaning Security & Accord Gender & Generations Dialogue & Reconciliation **Enquiry & Learning** Ethics & Accountability Well-Being & Health **POLITICS** CULTURE Vibrant Good **Highly Satisfactory** Satisfactory Basic Unsatisfactory **Highly Unsatisfactory** Bad Critical

Figure 9: Urban Profile Process. This figure was published in *Urban Sustainability in Theory and Practice - Circles of Sustainability* by Paul James, Liam Magee, Andy Scerri and Manfred Steger (James et. al. 2015).

Circles of Sustainability

5.2.1 The Urban Profile Process

This study recommends that a more comprehensive impact assessment study should be undertaken in the case study area. The study should focus not only on economic, social and environmental aspects of livability, sense of place and sustainability, but should also give prominence to 'political' aspects, that include governance, liaison, and negotiation.

The study also advises that an Urban Profile Process should be initiated (as is illustrated in Figure 9) as part of the more comprehensive study. The Urban Profile Process was developed as part of the Circles of Social Life project as a tool to strengthen resilience, adaptation and livability. James and Magee describe this as a process that can support sustainable lifeworlds where livability can prevail in terms of culture, ecology, economics and politics. This process stresses that 'political' aspects (including governance, communication, negotiation, ethics for example) should be focused, over and above economic, on socio-cultural, and ecological/environmental aspects (James and Magee in Circles of Sustainability/ Circles of Social Life Project log 2016).

As is illustrated in Figure 9, the four domains of sustainability discussed according to the Circles of Sustainability process are divided in seven sub-domains (James et. al. 2015:160). When applying this process in the Arcadia Precinct case study, sustainability could locally be viewed in terms of four related, but somewhat different domains of a sustainable lifeworld. In the Precinct case study context 'ecology' would stress the built environment while 'culture' would refer to social aspects and will also include memory, belief, meaning, sense of place and livability. Politics would stress negotiation and intra-personal relatedness as well as governance and accountability. Note that 'economics' falls beyond the range of this study. Also note that there is some correlation between the four domains of Circles of Sustainability (Figure 9) and the four pillars of urban sustainability (illustrated in Figure 7) (Allen 2001).

5.2.2 Soft-systems methodology

Soft systems methodology enables the researcher to gain better understanding of the workings of a specific community in a specific place, thus sense of place. This provides a way to unpack the prevailing system that underlies the functioning of people within a specific place. Soft systems methodology (an extension of systems thinking) should be used as primary analytical tool in the model for future implementation. In the case of the follow-up study in the Precinct case study area this method could provide greater understanding how aspects of behaviour are interconnected (Thomas 2014; Checkland 2000). In the follow-up study the Urban Profile Process described in Figure 9 can serve as an implementable, practical, monitoring tool.

From the stakeholder engagement experience that formed part of the pilot case study it was concluded that soft-systems methodology should be introduced to enable progression from the current to the envisioned (idealised) state in the area. This should be done by taking into account the past; the current position and development challenges, along with future maintenance of sense of place and sustainability. An "idealised" model (of aspired-towards state) should be developed through extensive stakeholder engagement in the Precinct area (Thomas 2014: 173).

The results of the pilot case study confirmed the potential of engagement techniques such as semi-structured interviews, residents meetings, information-sharing sessions (public participation) to gain better understanding of the prevailing social dynamics of place. It is therefore recommended that these techniques should be applied in the follow-up study in order to make the conceptual transition towards an aspired-towards state. A comparison is then be made between the prevailing and aspired-towards states. The process of moving between these states should then be unpacked and steps should be devised to strengthen the transition towards the aspired-towards state in the case study area (Thomas 2014; Checkland 2000).

The following soft-systems methodology actions outlined by Thomas (2014) were taken in the pilot study through stakeholder engagement and the street-view survey. – This study recommends that similar actions in the follow-up study.

- · Outlining the problem through a baseline study and field analysis
- Organising the problem into its constituent elements and indicating the various elements and how they fit together, also including for example, relationships and attitudes as well as fears and hopes, agreements and conflicts
- Comparing the ideal, coming from conceptual models, with the real world and enquiring why the actual and the imagined are not the same
- · Definition of feasible, desirable changes
- Introducing measures to improve the problem situation.

5.3 Spatial Development Framework and Management plan

5.3.1 Spatial Development Framework

Since no recent or effective development management plan (Precinct Plan) that specifically relates to the case study area is operational a new spatial development framework should be developed for the study area. Outdated documents still guide decision-making by the planning department of the City of Tshwane and results in mal-alignment and discord (COT 2002; Batchelor 2017). Although a new spatial framework for the area east of Hill Street is in the process of being developed the Spatial Development Framework for Arcadia Street (COT 2002) that is still currently used as benchmark in consideration of development applications should be adjusted to accommodate the guidance contained in the Spatial Planning and Land Use Management Act (Act 16 of 2013) (SPLUMA) and the Hatfield Spatial Development Framework (COT 2012). SPLUMA specifies that a municipality must, after public consultation, adopt and approve a single land use scheme for its entire municipal area within five years from the commencement of the act. It is recommended that all stakeholders must take proper care to ensure that the Arcadia Precinct is included in the City of Tshwane's SPLUMA process by instituting a fresh process in the study area to collect and process new/current data to replace the outdated data from the 1993 survey (Le Roux 1993) on which current development planning is based. For this purpose comprehensive and transparent public participation programmes need to be undertaken in the study area. The logistical possibilities for including Arcadia Precinct in the Integrated Development Planning (IDP) process are to ensure proper public participation in the exercise from the very outset. This would involve a new round of applying the relevant instruments: First a Strategic Environmental Assessment (SEA) and a Spatial Development Framework (SDF) for the bigger area, then an environmental Impact Assessment (EIA), including a social Impact Assessment (SIA) as well as a Heritage Impact Assessment (HeIA) for the smaller area.

5.3.2 Development-management plan

A development-management plan for the area should be compiled and implemented as this will enhance sustainability. Development and implementation of a development-management plan should be considered as a priority in IDP planning for Tshwane Municipality. A monitoring regime should be developed for the development-management plan for the area according to the principles specified in the model for future implementation agreed to by all relevant parties

including the local community. Development of this plan should be guided by planning specialists and social impact professionals, and should rest upon agreed-on principles as underlined in this pilot study. This plan should integrate social, economic and environmental factors in the planning, implementation and evaluation of decisions, as is stated in the preamble of NEMA (RSA 1998).

The management plan should be based on consultation with planning professionals and social impact specialists and is further informed through local and international reports and publications. The management plan should include clearly stated compliance stipulations as well as time-phased review cycles and report back procedures. Communication, facilitation and monitoring should be enhanced. This should include facilitation among residents and with officials. Report-back programmes and review cycles should be implemented to monitor progress and to regulate compliance with the management plan. Both the management plan and the monitoring regime should be binding and enforceable. Compliance with the development-management plan should be ensured using communication-and-facilitation techniques that include monitoring, assessment procedures, review cycles and feedback programmes.

Both the framework and the development management plan should be developed in conjunction with social and environmental impact assessment professionals, heritage specialists, spatial planners and architects (to optimise the potential of the area through form-based design) and should accommodate the concerns and aspirations of the local community.

5.3.3 Further Processes to be engaged in Arcadia Precinct

The study proposes that development of a vision for Arcadia Precinct depends on and should be based on a deep understanding of what the local people consider to be of value and their vision for the future. It is further proposed that such a vision should rest upon the prevailing 'value system', and that it is through a process of better understanding of this underlying social structure that insight may be gained for the development of a shared vision. This point of departure relates to the 'Structuration Theory' as proposed by Giddens (Giddens 1984). As part of the method to be followed in the future the study stresses the importance of networking and of linking and facilitating between planning, governance and the prevailing politics in order to support the development and implementation of procedures and guidelines. Effective networking and liaison among communities and authorities that work with implementing these guidelines would improve the efficacy of these measures in approaching the desired end result.

In the final chapter the main findings of the study are summarized to reach conclusions and make recommendations about possible means to address the challenges facing Arcadia Precinct.

6 Summary, recommendations and conclusion

6.1 Summary

The study concerns sense of place, sense of belonging and "belonging to a concrete place [home]" (Norberg-Schulz 1976:417; Giddens 1984; Tuan 1977; Jacobs 1961). These concepts provide the context which enables the development of livability and sustainability of a place. The study proposes that sense of place is a prerequisite for livability, that livability is essential for sustainability and that sense of place and sense of belonging can be sustained, enhanced and secured through engagement of management procedures and design intervention.

The study argues that a socio-spatial approach is well-suited to serve as conceptual framework for future planning for sustainability in Arcadia Precinct. This is because such an approach recognises the value that people attribute to the place where they live (Norberg-Schulz 1976; Giddens 1984). The socio-spatial approach could therefore be instrumental in strengthening social, economic, environmental and heritage layers of sustainability (Becker and Vanclay 2003; Vanclay 2004). Yet Note that the study does not focus specifically on economic aspects.

Case study methodology was selected and a suitable case study area, known as Arcadia Precinct was identified. The case study area lies close to the Union Buildings, South Africa's administrative seat of government and among embassies in the prestigious historical South African suburb of Arcadia, Pretoria (City of Tshwane). Within Arcadia Precinct, Hill House, the author's student accommodation enterprise, served as nested case study example. The Precinct borders on the University of Pretoria and is encircled by established national major road and rail transit routes as well as by recently established metropolitan rail and bus transit networks. Further situational advantages include proximity to schools, shopping centres, places of entertainment and international sporting facilities. Note that the dynamics experienced in the case study area are also compared to other challenging local and international localities (Allen 2001; Pieterse 2008; United Nations (UN) Agenda 21 1992).

The main challenges faced in the area stem from accelerated development. While development in the area followed broader urbanisation trends, the establishment of a rapid rail and bus network as part of the City of Tshwane's transit-oriented development, accompanied by an increase in the demand for student housing, resulted in drastic changes that have placed the sense of place in the study area under threat.

The study objective was to determine how to secure, enhance and sustain livability and a sense of place amid rapid and drastic urban transformation in the study area. The study therefore wanted to

determine what the essential elements of sense of place were as perceived by members of the local community as well as their views on how sense of place can be sustained, enhanced and strengthened and which tools could be used to achieve this.

The empirical part of the study included initiating a pilot baseline study, a street view survey, community meetings, focus group discussions and interviews with residents and other stakeholders as well as a stakeholder engagement meeting in 2017. The baseline study and street-view-survey was followed by stakeholder engagement initiatives aimed at establishing the views of stakeholders about the concept of sense of place as well as determining their views on possible ways to keep the study area a livable neighbourhood. In this pilot study initial steps were taken towards dealing with these challenges in the form of designing a framework and strategy that could sustain livability and a sense of place in the study area.

The pilot study also considered the suitability of developing a framework that can guide future development in the study area. The two-part framework consists of conceptual and procedural (methodological) aspects. The two main sections of the study relate to the pilot baseline study (illustrated in Figure 3) and the model for future implementation (illustrated in Figure 4). The conceptual or theory branch involves formulating a way of thinking (theory) that has potential to sustain sense of place while the second part consists of selecting procedures (methods) with which this concept could in the future be implemented 'on the ground' in the Precinct case study area.

Observations from the empirical part of the pilot study highlighted the value of stakeholder engagement and of techniques related to social assessment. The pilot study stressed the value of engagement through narrative techniques, focus group discussions, community meetings and public participation sessions. Recording of pre-knowledge, such as that of the author (who belongs to the Precinct community) also contributed towards understanding local dynamics and future planning. The study concludes that such a framework, in conjunction with the socio-spatial approach, can sustain livability and support sense of place. These techniques should therefore be systematically employed in the comprehensive study that should follow on this pilot study. The study also recommends that a technique known as Soft Systems Methodology should be introduced to support progression from the current to the envisioned (idealised) state in the area (Thomas 2014). It is also recommended that sustainability should be monitored using the Circles of Sustainability Urban Profile Process as illustrated in Figure 9.

The model for future implementation (summarised in Figure 4) is based on the empirical research that was undertaken as part of the pilot baseline study. The study recommends that a future model as well as procedures and programmes that will be beneficial to sustaining livability should be

initiated in a subsequent more comprehensive study. It also recommends that a development-management plan should be developed for the Precinct using stakeholder engagement (public participation) techniques. Development of this plan should be guided by recommendations from environmental (including social and heritage impact assessment professionals) and spatial planning specialists (Aucamp et. al. 2011; Puren et al 2007; Puren et al 2010; Puren et al 2012; Puren and Meiring 2015). The plan should include prior agreement on clearly identified compliance stipulations and report-back procedures as well as time-phased review cycles. Such a management plan should be initiated by Tshwane Municipality. It should be implemented as a matter of urgency considering the rate of impact.

The study concluded that the methods investigated were well suited for sustaining livability and sense of place and it is therefore recommended that the methods that were used in the pilot study should be applied in a more comprehensive study in the Precinct area.

6.2 Recommendations

The following recommendations have been drawn from the study:

- 1. Follow-up study: This pilot study should be followed by a comprehensive study that should include the development of a new spatial framework for the area. Planning specialists and social impact professionals should be consulted in such a study and further literature sources and specialised reports should be studied to inform this framework. Due to the diversity of the challenge of sustaining sense of place, future research should be guided by a multi-disciplinary approach. Town planners, social impact assessment specialists and heritage architects should be involved. The history of the study area should be considered with a focus on collective public memory as an important element of sense of place. Shared Built Heritage (SBH) should be documented from an architectural perspective to determine how it can be incorporated into the evolving city-scape in a way that will contribute towards the maintenance of sense of place.
- 2. Environmental (including social) Impact Assessment (EIA) should be undertaken. Due attention should be given to the perceptions held by the community on livability and sense of place as well as their aspirations for the future of the Precinct study area. Stakeholder engagement should include surveys, interviews and information-sharing sessions to determine the shared vision and principles. Heritage practitioners should draft a conservation management plan to protect, conserve and manage heritage resources in the study area while urban planners then need to combine the inputs from other disciplines to

engage in land use planning that will ensure the maintenance of sense of place for the sustainable development of the area.

- 3. Based on these impact studies a new spatial development framework as well as a development-management plan should be developed for the study area in order to strengthen livability and sense of place. The plan should include locally applicable principles of social, economic, political and environmental sustainability.
- 4. Both the framework and the management development plan should be developed so as to recognise the current concerns and aspirations of the local community. This should be developed in conjunction with spatial planners and architects (to optimise the potential of the area through form-based design), as well as with social and environmental impact assessment professionals and heritage specialists.
- 5. It is also recommended that the current state in the study area should be described according to the Circles of Sustainability Urban Profile Process illustrated in Figure 9 and that a technique known as Soft Systems Methodology should be engaged to support the progression from the current state to the envisioned future state in the area.
- 6. The development-management plan for the area should comply with principles specified in the model for future implementation as agreed to by all relevant parties, including the local community. Compliance monitoring of the development-management plan should follow prior agreed-on, and clearly identified, compliance stipulations, report-back procedures and time-phased review cycles. The development-management plan and associated monitoring regime should be binding and enforceable.
- 7. Liaison should be strengthened within the community as well as between municipal planning officials and spatial planners, social and environmental impact assessment professionals, architects and heritage specialists and compliance with the development management plan should be ensured using communication and facilitation techniques that include monitoring and assessment procedures, review cycles and feedback programmes (5 in Figure 4). Communication is a key factor. Change can be facilitated through communication, listening, hearing and awareness of the relevant information. It is recommended that social engagement techniques should be introduced in facilitating communication not only within and between communities but also with the officials that are involved in development planning. Stakeholder engagement techniques related to social assessment have the greatest potential to provide the best outcome. Social engagement techniques should receive recognition for the role they can play towards over-arching enhancement throughout the life cycle of this development project (Vanclay and Esteves

2011; Aucamp et al 2011; Puren et al 2007; Puren et al 2010; Puren et al 2012; Puren and Meiring 2015; Joao 2011, Vanclay and Den Broeder 2011).

- 8. Heritage street: The matter of Arcadia as heritage street should be resolved through further investigation and through public participation. The researcher is of the opinion that a process ought to be initiated to overturn the decision to declare the street a heritage street.
- 9. Complex Stay: To address the need for safe, affordable, and socially fulfilling accommodation close to town (these being important criteria for livability) it is proposed that a new collective accommodation/communal-living and densification concept (or "complex stay") should be introduced that could accommodate people from different walks of life. The study proposes that this concept should be developed in conjunction with spatial planners to determine how best to improve current living conditions in South African urban areas.

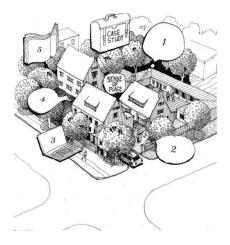
The following questions should be asked in terms of communal living in the study area:

- What are the best plans and strategies that can devised to support the safety, security and livability needs of the people?
- What specific form-based design parameters can be implemented to provide the best contextual solutions to strengthen livability in specific areas?
- What development and management plans can be formulated?
- What should be done to adapt existing official documents to meet the needs of the moment?
- How can this process be accelerated and who will take this forward.

6.3 Conclusion

The necessary regulatory framework (legislation and regulations) to achieve all the stated aims in the study area already exists, as does the institutional framework in the Tshwane Municipality. The tools to achieve the aims are there, but depend for their application on the social capital/human resources. What is needed, amongst others, is commitment, by the local community and the local authority, to effectively apply the available tools, and perhaps above all else leadership – individual people have to take the responsibility and the initiative to move towards the desired state. Once appropriate and creative social and spatial planning strategies are implemented, and once planning impediments such as heritage proclamation of Arcadia Street are redressed, the sustainability of the Precinct case study area would be enhanced. This will be possible once the actions proposed in the model developed in this study have been engaged and once a new spatial development framework for the Precinct becomes operational. It depends to a large extent on the implementation of a management plan and effective social and spatial planning strategies. The study acknowledges the importance of communication and facilitation, and of holistically meeting the challenges that we face in order to work towards a space and place of security where we can engage each other with an attitude of mutual understanding. Only then will the Precinct live up to its potential to become a livable, meaningful and sustainable urban space where sense of place prevails.





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Appendix A

Questions that guided semi-structured interviews

Discussion of the Precinct area (roughly from Eastwood Street to Festival and from Church to Park Street) is set against the background of the broader area of which the borders extend roughly from the Union Buildings and Eastwood Street, along Lynnwood Road and up Duncan Street and to Church Street. In discussing these questions the participants were asked to focus essentially on the smaller Precinct and only refer to features in the broader background area if it should be of particular relevance to their experience of sense of place in the Precinct.

The questions guide the participant to consider if and how the Precinct offers a sense of place, and how it projects a feeling of belonging (home) as well as to identify which characteristics of the Precinct have positive and which have a negative influence on the sense of place and to identify what specific measures could be introduced to preserve and enhance local sense of place so as to attain their future vision.

Note that semi-structured interviews with local people clearly indicated support for the protection of significant heritage quality buildings, the street front and especially the trees, but they felt that development along the length of Arcadia Street was hampered by the proposed 'blanket' proclamation of Arcadia Street as heritage street.

What the questions that introduced the semi-structured interviews focused on:

It was requested that the respondents answer the questions listed below in one or more sentences as if they had to describe the area to someone who was considering visiting the area.

- a. Give a short personal description of yourself, for example are you male or female, young, middle aged or senior.
- b. Indicate if you are an owner, tenant, student or visitor here.
- c. Describe your current or past involvement with the area.
- d. Indicate your approximate age e.g. older than 30, 40 or 60
- e. How long have you lived here?
- f. Why did you come here?
- g. Would you consider still living here for five years or longer? How long?

h. May I use this discussion for my studies?

- 1. Questions that concerned the larger area from Lynnwood Street up to the Union Buildings as indicated above:
- 1.1 How would you describe the larger physical area?
- 1.2 Describe your feeling of sense of place in the larger area.
- 1.3 What is the emotional value thereof?
- 1.4 What contributes to the sense of place thereof?

2. The Physical environment of the smaller Arcadia Precinct area:

- 2.1 How would you describe the physical environment of the smaller Arcadia Precinct area?
- 2.2 Are there specific features that you personally value?
- 2.3 How would you describe your experience of sense of place of the small Precinct?
- 2.4 What is the emotional value thereof?
- 2.5 What contributes to the sense of place thereof?
- 2.6 Does the Precinct lend itself to developing a sense of belonging?
- 2.7 What elements/features contribute to the sense of belonging?
- 2.8 Explain how physical characteristics/features such as buildings, trees etc. contribute to your experience of sense of place and sense of belonging.
- 2.9 Which physical features in the area serve as navigation points in your daily life?
- 2.10 Which physical features contribute to your positive experience of the sense of place of the Precinct?
- 2.11 What specific physical features contribute negatively to your experience of sense of place in the small precinct area?
- 2.12 How would you like the Precinct to become in the future? / What vision for the future do you have for the Precinct?
- 2.13 How do you think that vision could be attained? What can be done to attain it?
- 2.14 What can be done in the Precinct to secure, enhance and sustain the sense of place, and livability in order to enhance sustainability of the local environment?

- 2.15 What town planning adaptations and usage adjustments can be done in the Precinct to safeguard, enhance and sustain the sense of place and sense of belonging?
- 2.16 What could be done to improve the street view and to make the street fronts more user-friendly?
- 2.17 How and by whom should such alterations be done?
- 2.18 How important is it that all old structures, even those with little aesthetic or historical value, be retained 'as is'?
- 2.19 Is it important that all new structures reflect a historical character?
- 20.20 How important is it that the street features and features of the street-view character should be retained, enhanced and sustained?
- 2.21 What can be done to protect and enhance sense of place and the asset value of the Precinct?
- 2.21 Do you have any further suggestions or points to mention?

3. The social environment of the smaller Arcadia Precinct area:

- 3.1 How would you describe the social dynamic in the Precinct area?
- 3.2 Explain how your experience of sense of place is influenced by the people in the smaller Precinct area.
- 3.3 Explain to what extent your current experience of sense of place is determined by past experiences. Please mention what specific memories come to mind.

4. The connection between sense of place, sense of belonging, quality of living and sustainability:

- 4.1 Is sense of place and sense of belonging determinant in terms of maintaining livability?
- 4.2 Is livability determinant in terms of the sustainability of the Precinct environment?
- 4.3 What planning and physical usage adjustments could be introduced to protect, enhance and sustain the sense of place and sustainability of the area?

5. Questions about the declaration of Arcadia Street as a heritage street:

- 5.1 Are you aware that Arcadia Street has been declared a heritage street?
- 5.2 What advantages can the declaration hold for the Precinct?

- 5.2 Do you know what obligations and development restrictions this declaration places on properties on both sides of Arcadia Street up to the mid-blocks?
- 5.3 What do you think the pros and cons as well as the implications are of this declaration?
- 5.4 Would it not have been adequate to have relied on the current heritage legislation that provides protection to all houses older than 60 years?
- 5.5 Did you, at the time, receive an invitation from the city council to attend a public meeting concerning this matter? If you did, please discuss this with the author of this study.
- 5.6 Would you support an initiative to have the heritage declaration repealed and replaced by an enforceable negotiated management plan, in which the aspirations of the local community is incorporated along with the guidance of planning professionals and social impact assessment specialists?

Appendix B

People interviewed, data collection through individual discussion, meetings

A. Semi structured interviews:

A.1 With Hill House Resident:

24.10.2014: Werner, Michelle, Travis

25.10.2014: Sam

27.10.2014: Pearl, Zukizo, Ogodiseng.

Thabiso Gumede

A.2 with regular Visitors to Hill House:

Ronelle, Joe

A.3 with residents in the Precinct area:

Santie, Schalk, Rustelle, Stephan, Frik, Tineke, Jansie

B. Stakeholder meetings:

C. Engagement initiatives

07.06.11: Summary of discussions between the author and Lodie Venter, Tshwane Planning Department.

- 03 02.2012: Meeting of residents to discuss the Hatfield Urban Development Framework (COT 2011) document that was tabled in September 2011.
- 10.02.2012: Feedback letter to Lodie Venter, Tshwane Planning Department, following the Hatfield Urban Development Framework (COT 2011).
- 10.02.2012: Letter from the author to Lodie Venter, Tshwane Planning department commenting on aspects of the Hatfield Spatial Development Framework (COT 2012).
- 13.02.13: Meeting arranged by the author to discuss development scenarios for the Arcadia Precinct area in the context of the Hatfield Spatial Development Framework. Speakers at the meeting included Professor Roelf Visser from the planning department of the University of Pretoria, while spatial planners that included Stefaan Botha, Mike van Blommestein and Claus Schutte (architect).
- 16.03.13: Meeting with Professor Roelf Visser from the planning department of the University of Pretoria,
- 04.09.14 Meeting with Annemarie Loots independent spatial planning professional and Trevor Lloyd Evans, architect.

Group meetings arranged for information sharing: (These meetings that related to development in the Arcadia Precinct also took place, over and above the monthly committee meetings held by the Arcadia Precinct Alliance Action group that the author served on)

- 07.08.2014: Arcadia Precinct Alliance group information sharing meetings.
- 16.08.2014: Information sharing meeting arranged by the Old Pretoria East Residents and Ratepayers Association to discuss heritage issues.

C. Discussions with built environment professionals:

Lodie Venter, Tshwane Planning Department.

Francois Naude, Tshwane Planning Department.

Annamarie Loots, independent spatial planning professional.

Theo Pretorius and Elsa Snyders, Plan Associates.

Eric Basson, Plan Practice Group

Trevor Evans, architect and lecturer at Tshwane University of Technology.

Roger Fisher, University of Pretoria Architecture Department.

Karel Bakker, University of Pretoria Architecture Department.

Claus Schutte, architect who serves on the committee of the Arcadia Residents and Ratepayers Association.

Paul Bosman, Urban Concept architects.

Karina Landman, lecturer in Spatial Planning at the University of Pretoria.

Johnny Coetzee, lecturer in Spatial Planning at the University of Pretoria.

Reinier Minny of Cadre Project Management, Local Government Services and Town and Regional Planning.

Appendix C

Arcadia Street Heritage Debate 2006-2016

Development dynamics in the Arcadia Precinct case study area

Arcadia Street as heritage street

Concern was already expressed by the author in 2009 at meetings of the Arcadia Residents and Ratepayers Association (ARRA) over the many changes that had taken place in the Arcadia landscape. The article that the author of this study wrote in 2009 captures the concerns of the time and serves as a time capsule that relates to the challenges we face today. The author concluded that it is essential to sustain sense of place if development is to be sustainable in the study area and that sustaining sense of place lies in balancing development potential, social needs and heritage quality. This could only be achieved if an appropriate, professional and enforceable strategic plan should be implemented. Such a guidance document has to be developed through engagement with professional town planners, heritage architects, and through comprehensive social impact assessment. It concludes that engagement of social impact specialists is essential from the outset and throughout the various stages of development that will impact upon the livability of an area.

The study therefore concludes that a new spatial development framework needs to be developed for the area east of Hill Street since no recent or effective management plan that specifically relates to the area is operational and since outdated documents still guide decision-making by the planning department of the City of Tshwane that results in dis-alignment and discord (Tshwane 2002; Batchelor to be published in 2017 in Appendix B).

Once a newly developed spatial framework for the area between Hill and Festival Streets has been developed and once appropriate and creative social and spatial planning strategies are implemented, as well as planning impediments such as heritage proclamation of Arcadia Street are redressed, the area would have the potential to develop into a vibrant village that will give recognition to the past and will also reflect a new, recreated spirit of place that will accommodate current aspirations.

Abstracts from the article in *The Arcadian*, the community newspaper of the Arcadia Residents and Ratepayers Association (ARRA), Autumn 2009 by Anna Batchelor, resident, 356 Hill Street, Arcadia follow.

The title of the article was: 'Arcadia Street, Potential and threat - Can Arcadia street retain its historical character while also realising economic potential?'

'Adapting family homes to suit office requirements had, for example, involved altering not only the interior spaces but also the external architectural balance. Fear of further loss has spurred a new heritage conservation drive. It stated, and I quote, from the article, that 'most of the Arcadia Street residents currently find themselves in an uncomfortable in-between space for a number of reasons. At the one hand the residents feel that the residential character has been marred due to the drastic transformation taking place. Traffic, private and public, has escalated and we fear the day that the hooting taxis might also encroach upon our area. Pedestrian traffic has become a challenge, especially since pavement parking is rife. Crime has escalated and the mixed nature of land use has shaken the very core of the social fabric. The response of residents has been to put up higher perimeter walls and electric and razor-wire fences'.

Some residents feel that the Gautrain station, being on Arcadia Street, holds the key to future potential growth in the area. Rapid rail systems have, globally, given rise to new developments and novel settlement dynamics, with transformation of areas in proximity of access points. Arcadia Street is bound to become a desirable option for people living in other parts of Pretoria and even Johannesburg along the Gautrain route. Should this be seen as potential or threat? And how can this best be dealt with? These issues are currently under consideration in the planning offices of Tshwane and have been tabled in documents such the Spatial Development Framework for Arcadia Street of 2002 by the City of Tshwane Metropolitan Municipality City Planning Department.

In essence these documents accept the need to extend residential use to allow for mixed land uses but no detailed guidance was provided. Development, they had concluded, was inevitable, just as it had been in Sandton, where this process had played itself out a decade earlier. In Sandton, as in Arcadia, development had been accompanied by an intensification of conservation initiatives. The suggestion of declaring Arcadia Street as a heritage street is the local case in point. [A similar initiative by Tshwane Municipality in Van Boeschoten Avenue in Sunnyside Pretoria has not been sustainable].

To assist this initiative the Arcadia Residents and Ratepayers Association initiated a survey of Arcadia Street with the aim of providing baseline information to work from. This was urgently required since the last survey had been undertaken by the Pretoria municipality in 2002. Results from the survey (undertaken by Anna Batchelor, resident of Arcadia Street) highlighted the considerable changes that had taken place in the seven years since the previous survey. As ARRA-elected street representative for Arcadia Street the author took up the challenge and did a face-value street inventory which provided some sobering statistics, concluding that the street could no longer be defined as predominantly residential since it was now overshadowed by 'other uses'. It transpired that a considerable number of buildings had been altered to be used as offices, often with loss of historical character. Fortunately a number of

lovely buildings had been spared the onslaught and are pulling the street through, be it by the skin of the teeth.

How, then, do we deal with conservation and development of the street? What about the initiatives currently afloat to declare Arcadia Street as a heritage street? What does this imply? And might it not be preferable to rather highlight those lovely relics that have been preserved in a sufficiently authentic state still to have retained their intrinsic heritage value? "[– end of the quote from Anna Batchelor's 2009 article in *The Arcadian*].

Further concern was raised by the author over the proposed proclamation of Arcadia Street as heritage street following a workshop arranged by the Old Pretoria East Residents and Ratepayers Association (OPERRA) to discuss the implications of the introduction of the Spatial Planning and Land use Management Act (SPLUMA), (Act 16 of 2013).

When the Ward Councilor invited comment on the implications of the SPLUMA Act (Act 16 of 2013), the author of this study responded and a copy of the letter was also sent to the Municipal Town Planning Department on 03 September 2014. In the letter it was requested that outdated municipal documents such as the Spatial Development Framework for Arcadia Street of August 2002, that recommends proclamation of heritage status to Arcadia Street, be adapted to reflect the principles expressed in SPLUMA and related documents and that development criteria should be adjusted accordingly.

The letter referred to the need to accommodate the national policy of redressing the imbalanced South African spatial economy and the necessity to strategically reengineer the spatial and social change processes through spatial planning and social engagement strategies to ensure maintenance of sense of place and to strengthen sustainable development in areas under pressure. It stressed that social and spatial development therefore has to be designed around maintenance of sense of place and with acknowledgement of the historical character and heritage quality of the area, while architectural assets have to be maintained through adaptive re-use. It pointed out that due to the position of the Precinct, it was clearly earmarked for development and densification, considering its accessibility to transport nodes and proximity to centers of learning. It therefore referred to the challenge that is faced in dealing with transformation during transition on how to balance heritage quality and sense of place with densification needs and development pressures at a time when many of the existing policy documents are still lagging behind, and administrative procedures do not allow for the necessary adjustment to compensate for the imbalanced spatial economy. The letter also pointed to the fact that while the Precinct lies within a kilometer from Hatfield Gautrain station and other rail and bus stations, an outdated document is still used as reference by the planning department, namely the Spatial Development Framework for Arcadia Street of August 2002. This document puts forward the proclamation of Arcadia Street as heritage street, and clearly contradicts densification needs as expressed by the SPLUMA. While the inhabitants of the area are in agreement with maintenance of heritage quality buildings, and the strengthening of the historical feel/character of the area, they disagree with the constraints that the status as heritage street would impose upon development in this area. The letter concluded that once the creative social and spatial planning strategies that are currently being planned were implemented, the area would have the potential to become a vibrant village with a historical character, quality developments and a new, recreated spirit of place that will accommodate current aspirations that will give recognition to the past and will strengthen appreciation of our shared heritage. Yet this would not be possible within the constraining recommendations of the street being proclaimed a heritage street and that "without undue restraints the area has potential to strengthen sustainable development on economic, social and heritage/environmental levels and will be a true asset to the City of Tshwane" (End of reference to the letter to the Ward Councilor).

The author raised this matter again at a community meeting and the author also provided feedback as expressed in the letter that follows arranged by Councillor Abel Tau (13.10.16) and indicated that since the National Heritage Resources Act (Act 25 of 1999) provided full protection there was no need for heritage street proclamation, and such proclamation would only stifle the development potential of properties up to mid-lock along Arcadia Street. As a result to multi-storied buildings directly overlooking their properties some current owners are contemplating moving out of the area. The resulting loss of historic community memory would adversely affect the sense of place of the area. Reversal of the intended heritage street proclamation, and engagement with professional town planners, heritage architects, and social impact assessment specialists to guide development, would encourage current owners to remain in the area.

Feedback letter written after the community meeting of 13 October 2016:

I [author of this study] requested at last night's community meeting that proclamation of Arcadia Street as heritage street should be reconsidered. I explained that the National Heritage Resources Act (Act 25 of 1999) provided adequate protection to all buildings over 60 years old, and this included most buildings along Arcadia Street. Heritage street proclamation as has been recommended in the Spatial Development Framework for Arcadia Street of August 2002 is clearly stifling the development potential of properties up to mid-block along Arcadia Street.

Some residents to the east of Hill Street are contemplating moving out of the area since heritage proclamation had resulted in loss of development potential and property value, and since the newly built multi-storied buildings now directly overlook their properties. It is feared that when established residents move out of the area it would result in loss of historic community memory and intangible heritage quality. This will adversely affect the historic character and local sense of place. Reversal of

the intended heritage street proclamation will encourage residents to remain in the area. Engagement with professional town planners, heritage architects, and social impact assessment specialists will free the considerable local development potential and will support sustainable development in this important transport node that lies within a kilometre from the Gautrain station at Hatfield, the University of Pretoria and the new Loftus development.

This feedback letter by the author [dated 14 October 2016] was also sent to, and response invited from, among others, the people whom I interviewed for this study, and that included the Pretoria independent town planning specialist, Annemarie Loots. Annemarie Loots responded as follows on 19 October 2016: (Also Included is the author's response to her reply.

Annemarie Loots replied to the letter that was written by Anna Batchelor (the author of this study) on 14 October 2016 and that served as feedback to local residents, following the meeting that was initiated by the Ward Councillor (held on 13 October 2016 at the Arcadia Scout Hall in Becket Street].

Annemarie Loots replied on 15 October 2016: 'I completely understand your sentiment regarding the stifling of development potential. However, I strongly believe that it is not only individual buildings that need to be preserved, but also in some cases the character of streets and even a whole neighbourhood's character. I would thus be very hesitant to scrap the heritage proclamation without having other mechanisms in place to ensure the preservation of character. The character has, amongst others, to do with the character of the street space (e.g. trees etc), the type of interface between the private properties and the public domain, the scale and envelope of buildings etc. If other mechanisms are not put in place, it might be that one or two historic buildings are preserved, with new blocks of flats completely insensitive to the character of the street dominating the area and destroying the character. I would thus propose that you first put in place a set of (ENFORCABLE!) guidelines which should be agreed upon and endorsed by the Council before the proclamation is ['voor die voet'] scrapped.' (End of quoted reply from Annemarie Loots).

Anna Batchelor-Steyn (the author) replied as follows to Annemarie Loots on the 16 October 2016, with a request for advice on the way forward. [This letter was translated from Afrikaans]:

Thank you Annemarie for your insightful feedback. I totally agree with your sentiment concerning the need to preserve features such as trees and the attention that should be devoted to street-front detail and the character of the street. I had also had a long discussion with heritage architect Trevor Lloyd Evans on the topic. During our discussion I specifically referred to your thoughts as well as to your previous guidance on preservation of trees and street-fronts, as well as the attention that

should be given to the spaces between the street and the structures on the properties (as you again pointed out in your letter). We hold the same sentiment.'

Please note that I had raised the matter at the meeting as a way of opening discussions on addressing the check-mate situation that had arisen around the evaluation of planning applications that related to Arcadia Street. The current situation is that, when building plans are submitted, the officials reply that, at this stage, they could only work according to the (outdated) Arcadia Street Framework (of 2002), since no more recent document had been developed. The Arcadia Street Framework thus still remains as the evaluation criterion. That means that all the heritage limitations, as specified in the 2002 Development Framework for Arcadia Street remain in place. That also includes a height restriction of two storeys". (Note that this restriction remains, even though, on the bordering properties, at mid-block along Park Street, development plans had been passed for multi-storeyed blocks of flats that now directly overlook the properties at Arcadia Street mid-block). The matter that was raised at the meeting relates to this check-mate situation'.

'The letter continued noting that "part of the unhappiness among residents was that we were not consulted, neither were we invited to attend a public participation meeting on the matter, as is legally required when decisions of this nature, that impact on the rights of citizens, are taken. We are now requesting clarification on the date, agenda, notification procedure, minutes and attendance register of such a meeting'.

'Now that the concern has been voiced, and following the response from residents, we now have to take the next step, namely to publicly debate the matter and to engage with professional town planners, heritage architects, and social impact assessment specialists, (as was indicated in the letter I sent to the Ward Councillor as feedback on the meeting that was held on 13 October 2016 at the Arcadia Scout Hall)'. Residents also requested an urgent meeting to strategise on the road ahead.

Appendix D

Extracts from the minutes of the Information-sharing meeting of 18 July 2017

As part of the present study, the author organised an information-sharing meeting that was hosted by the commune owners group predominantly from the Arcadia Precinct. The meeting was held at the University of Pretoria on 18 July 2017. The objective of the meeting was to build bridges between commune owners, residents, resident associations and Tshwane municipality in order to find resolve on the much needed, yet contentious matter of communal living, in Region 3 of Tshwane Municipality, Pretoria.

Among the fourty seven (47) persons that attended the meeting were the speakers Annemarie Loots and Bertus van Tonder, planning professionals, Councillor Muller, a Tshwane representatives, various residents' association members, representatives of learning institutions, urban planners, architects, rental agencies and people who provide accommodation.

Extracts from the MINUTES of the information sharing meeting concerning

COMMUNE OWNERS ISSUES and NOTICES SERVED FOR 'NON PERMITTED' USE

The meeting was hosted by the Commune Owners Group (COG)

Venue: Auditorium HPC (High Performance Centre), University of Pretoria

Date and Time: 18.07.17 at 17:30

The minutes were compiled by Anna Batchelor, chairman of the Commune Owners Group (COG) and coordinator of SCAN Socio-Cultural Assessment Network.

The agenda of the meeting included:

- An introduction stating the objectives of meeting (Anna Batchelor)
- Discussion of the PRECINCT PLAN prepared by Annemarie Loots
- Outline of compliance requirements and applications procedures (Bertus van Tonder)
- Outline of the point of view of Tshwane Municipality (Councillor Siobhan Muller)
- Questions and answers session
- The way forward and concluding remarks

Introductory notes and background to the information sharing meeting of 18 July 2017:

It was decided to call a meeting when commune owners were alerted to the fact that a division Municipality was systematically investigating illegal land uses, and that notices for 'non permitted' use had been served on communes, businesses, etc. The next step that the Municipality follows after finding such an "illegal land use" is to issue summons through the Municipal court, which will lead to escalated rates and taxes being levied on owners concerned. It had also come to our notice that, it will be possible to request that a policy

document be issued by Tshwane Municipality with regard to amnesty applications whilst applying for rights, as had been done by the City of Johannesburg.

It was decided to call a meeting of role players with the objective of **building bridges** between commune owners, residents, resident associations and Tshwane municipality **to** find resolve on the much needed, contentious matter of communal living, in Region 3.

Speakers were invited to an information sharing meeting with the request that they should provide us with information on why certain **structuring elements are needed to** guide development (Annemarie Loots) what procedures should be followed in the process of becoming compliant (Bertus van Tonder), and what the point of view of Tshwane Municipality is on the matters of our concern (Councillor Shiobhan Muller).

The **point of departure** for the meeting would be the combined Precinct Plan that Annemarie Loots had compiled at the request of OPERRA, that represents 11 residents associations in the 'old east' of Pretoria (OPERRA = **O**ld **P**retoria **E**ast **R**esidents and **R**atepayers **A**ssociations). The Precinct Plan followed Tshwane's invitation to comment on the Regional Spatial Development Framework that will serve as benchmark for development planning in Tshwane for the next five years, from 2017 to 2021. [Note that Annemarie had indicated that an electronic version of the Precinct Plan will be made available at your request - contact anna.steyn@gmail.com]

The speakers had been requested to provide the meeting with information on why certain structuring elements were needed **to** guide development (Annemarie Loots), what procedures should be followed in the process of becoming compliant (Bertus van Tonder), and what the point of view of Tshwane Municipality was on the matters of concern (Councillor Siobhan Muller).

Commune owners felt that municipal policies, frameworks and guidance documents, which relate to communal accommodation enterprises and communes, should be re-assessed and that clear, unambiguous guidance should be provided by Tshwane.

Such regulatory documents should be based on the principles and guidance provided in the National Environmental Management Act (NEMA Act 107 of 1998) and should respond to the current socio-spatial and economic climate in our country and in Tshwane. Appropriate definitions that reflect the need for places of communal living should be formulated and should replace current definitions.

Anna Batchelor (chairman of the Commune Owners Group (COG)) expressed the view that communal accommodation was much needed by people of all ages and walks of life, and that one should be focussing much wider than just student communes. A definition of a more inclusive accommodation type should therefore be introduced that could cater for a diversity of tenants of all ages and walks of life. Such a new 'village-type' accommodation of 'organised collective' or 'complex stay' would strengthen the concept of livability and should be introduced by Tshwane to better accommodate the needs of Region 3 residents.

Regional Spatial Development Frameworks (RSDFs) relate to the Integrated Development Plans (IDPs) that all municipalities are obliged to compile every five years in order to comply with the legal requirement set out in the National Environmental Management Act (NEMA, Act 107 of 1998). The stated aim of this Act is to ensure social, economic and environmental sustainability and municipalities such as Tshwane accordingly should support and encourage economic, social and environmental sustainability. The Act also obliges municipalities to encourage input from citizens through extensive public participation before finalising such frameworks (RSDFs).

As had been mentioned in our circulated Agenda, it had been cleared with Tshwane before this meeting that our suggestions about the introduction of more appropriate definitions of communal living enterprises, as well as the queries of commune owners regarding perceived unfair treatment and billing by Tshwane, such as raised at the meeting, would be forwarded to the Planning Department, by whom it will be taken into consideration before finalization of the Regional Spatial Development Framework (RSDF) for the period 2017-21.

Commune owners felt that municipal policies, frameworks and guidance documents that relate to communal accommodation enterprises and communes should be re-assessed and that clear, unambiguous guidance should be provided by Tshwane.

Such regulatory documents should be based on the principles and guidance provided in the National Environmental Act (NEMA Act 107 of 1998) and should respond to the current sociospatial and economic climate in our country and in Tshwane. Appropriate definitions that reflect the need for places of communal living should be formulated and should replace current definitions. (Some examples of non-alignment are listed in Attachment 1)

There was considerable discussion on the definition and composition of accommodation units.

Regarding the Precinct Plan Annemarie Loots outlined the design logic as well as the structuring elements and key principles that should guide development of a city that has the livable qualities that were needed. It was important to note that designing for livability is not only about densification, but also about restructuring and transformation.

Aspects that had to be considered in this respect included much more than just the mere provision of dwelling units, services and such but that it involved detailed planning and design considerations to ensure a sustainable, liveable and memorable city. Annemarie Loots stressed that livability and sense of place could be strengthened through design principles, by maintaining environmental quality and protecting the unique character and spirit of a neighbourhood.

Annemarie indicated that the purpose of the Precinct Plan was to provide proposals that would attempt to balance city-wide transformation objectives, as contained in the RSDF, with

Sentiments and concerns of the communities regarding the distinct character and context of their areas as unique neighbourhoods in the City of Tshwane. The Precinct Plan thus calls for the recognition of the city's individual neighbourhoods whilst building on the unifying elements of the proposed city structure.

With regard to student communes, there were two main components namely, land use/zoning issues and socio-spatial issues. Socio-spatial issues that needed to be carefully controlled include incompatible social behaviour, poor maintenance of properties, lack of adequate facilities, poor or no landscaping, degradation of heritage assets, increased crime, overcrowding and burdening of aged infrastructure.

<u>Important note</u>: Commune owners also felt that, as in the case in Johannesburg, **amnesty** should be granted, and that they should not be fined while in process of becoming compliant. Commune owners also needed the assurance that they would be treated reasonably, currently and in the future, in terms of bulk service contributions and monthly levies. It had also come to our notice that it would be possible to request that a policy document be issued by Tshwane Municipality with regard to amnesty applications whilst applying for rights, as had been done by the City of Johannesburg.

SESSION A: WELCOME BY CHAIRMAN: JULIAN LOMBARD

SESSION B: CHAIRMAN: ANNA BATCHELOR (COMMUNE OWNERS GROUP CHAIR)

- B1. INTRODUCTORY STATEMENTS/OBJECTIVES OF MEETING (Anna Batchelor)
- B2. Discussion of the PRECINCT PLAN by ANNEMARIE LOOTS
- B3. Outline of compliance requirements and applications PROCEDURES by BERTUS VAN TONDER, planning professional
- B4. COUNCILLOR SIOBHAN MULLER OUTLINES THE POINT OF VIEW OF TSHWANE MUNICIPALITY

SESSION C. QUESTIONS AND ANSWERS

SESSION D. THE WAY FORWARD AND CONCLUDING REMARKS

Attachments:

Attachment 1. Bertus van Tonder, planning professional – discrepancies in Tshwane frameworks and guidance documents

Attachment 2. Anna Batchelor's suggested new definition for *Complex Stays* / communal accommodation

Attachment 3. The point of views of rental agencies

Attachment 4. Recommendations on Security, Fire Safety and compliance with neighbourhood standards – From the chairman of Sector 1 Community Police Forum

About communal accommodation:

Batchelor expressed the view that communal accommodation was much needed by people of all ages and walks of life, and that we should be focussing much wider than just student communes. A definition of a more inclusive accommodation type should therefore be introduced that could cater for a diversity of tenants of all ages and walks of life. Such a new 'village-type' accommodation of 'organised collective' or 'complex stay' would strengthen livability should be introduced by Tshwane to better accommodate the needs of Region 3 residents.

The suggested new definition of 'complex stay' (also in Attachment B) reads:

'COMPLEX STAY' (organized community collective accommodation)... means land and buildings (with or without kitchenettes and/or ablutions) that may include a dining room and lounge and facilities such as a laundry for the exclusive use of tenants. It may also include ancillary and subservient accommodation for the manager and caretaker as well as for security and service staff. A *complex stay* excludes any use as 'place of entertainment'. A *complex stay* shall be managed by the owner, manager, caretaker, rental company or body corporate.

Such a collective accommodation type would be more inclusive, safer, more affordable and more sustainable (socially, economically and environmentally). The Precinct Plan that Annemarie Loots compiled for the OPERRA group of Residents Associations in the Old

East of Pretoria underlines the need to strengthen livability through the implementation of appropriate design principles.

The chairman confirmed that the agenda had been widely distributed to interested parties. He thanked members of the Commune Owners Group who were responsible for the formation of this interest group and commended their committee for taking the initiative for this meeting that would focus on important aspects related to communal living in Region 3.

SESSION B. CHAIRMAN: ANNA BATCHELOR (COMMUNE OWNERS GROUP CHAIR)

B1. Introductory statements and objectives of the meeting:

Anna indicated that the main objective of the meeting was to build bridges that will enable us to find resolve on the much needed, yet contentious matter of communal living, in Region 3. Bridges need to be built between land owners who provide communal accommodation, residents, resident associations, and Tshwane municipality. Planning professionals Annemarie Loots and Bertus van Tonder and Councillor Muller were thanked for their presentations and their role in assisting us in finding resolve.

Anna felt that we could consider this bridge building meeting as our '67 minute dedicated contribution' towards the spirit of Mandela Day that was commemorated on the day. The meeting should therefore be viewed as an opportunity for strengthening communication between interested and affected parties with the objective of moving towards greater environmental, social and economic sustainability in Region 3.

The **objectives** of this meeting were thus to **find resolve through communication among the different role players** and to ask Tshwane for reasonableness, fairness, guidance and support in the process of becoming compliant, and for an amnesty period while in this period.

The importance of communicating with town planners as well as Residents Associations was stressed. Anna mentioned that the Tshwane Municipality Planner for Region 3, who had applogised for not being able to attend the meeting tonight, had indicated that he would appreciate feedback from the meeting and assured us that he would assist property owners.

A number of committee members from Residents Associations had also requested that it be mentioned at this meeting that they would assist commune owners in the process of becoming compliant. Anna thanked the Arcadia Residents and Ratepayers Association (ARRA) that had assisted her years ago in registering as a boarding house. She also confirmed that, as a result of this compliance, she had been treated fairly by the Municipality.

B2. DISCUSSION OF THE PRECINCT PLAN BY ANNEMARIE LOOTS:

Annemarie indicated that Tshwane had invited public comments on the Draft RSDF (2017-21) and that she was asked by OPERRA, (the **O**ld **P**retoria **E**ast **R**esidents and **R**atepayers **A**ssociations) to compile a combined Precinct Plan on behalf of 11 participating Residents and Rate Payers Associations in Region 3. [Annemarie advised that the Precinct Plan could be made available via e-mail, if so required, and could also be emailed by committee members should you contact them.]

Annemarie outlined the **design logic as well as the structuring elements and key principles** that should guide development of a city that has the livable qualities we all want.

It was important to note that designing for livability is not only about densification, but also about restructuring and transformation.

Aspects that had to be considered in this respect included much more than just the mere provision of dwelling units, services and such but that it involves detailed planning and design considerations in order to ensure a sustainable, liveable and memorable city. Annemarie stressed that livability and sense of place could be strengthened through design principles, by maintaining environmental quality and protecting the unique character and spirit of a neighbourhood.

Annemarie indicated that the purpose of the Precinct Plan was to provide proposals that would attempt to balance city-wide transformation objectives, as contained in the RSDF, with

sentiments and concerns of the communities regarding the distinct character and context of their areas as unique neighbourhoods in the city of Tshwane. The Precinct Plan thus calls for the recognition of the city's individual neighbourhoods whilst building on the unifying elements of the proposed city structure.

Annemarie elaborated on the underlying planning concepts that serve as rationale for proposals, stating that *restructuring a city is not about densification, but about transformation*. Densification is considered to be merely one of the tools for transformation while the transformation process calls for the creation of sustainable human settlements, neighbourhoods and communities and not for the mere provision of dwelling

units. Integrated transformation will bring us closer to a sustainable city which is functional, liveable and memorable. We have to transform to create walkability, equity, and sustainability, BUT We also have to protect to create identity (p 19).

By way of a projected map and photographs Annemarie outlined development in specific zones. Tshwane's Compaction and Densification Strategy and consequently also the RSDF,

proposes four key density zones namely concentration zones, linear zones, suburban densification zones and low-density zones.

She indicated that while communes might not yet have been thought through in detail in the Precinct Plan communes could mainly be approved in the linear zones – and only under certain conditions. Routes that form the basis for linear movement within Linear Zones include Mobility spines, Mobility roads, Activity spines and Activity streets. Densification along these spines should be encouraged to maximise the public transport opportunities provided by these routes.

With regard to student communes, there were two components namely land use/zoning issues and socio-spatial issues. Socio-spatial issues that that needed to be carefully controlled include incompatible social behaviour, poor maintenance of properties, lack of adequate facilities, poor or no landscaping, degradation of heritage assets, increased crime, overcrowding and burdening of aged infrastructure.

The following was QUOTED FROM Annemarie Loots's Precinct Plan submitted on behalf of OPERRA (Old Pretoria East Residents and Ratepayers Associations) in response to Tshwane's RSDF 2017-21):

OPERRA endorses the following principles as adopted in the City's plans:

*Principle of spatial restructuring of the city in order to improve access of less privileged citizens to the services and activities offered by the city;

- *Principle to use the Tshwane Rapid Transit (TRT) routes and stations as basis for spatial restructuring in order to promote urban sustainability through public transport and non-motorised transport (NMT);
- *Principle of densification in Transit-Oriented Development (TOD) precincts around TRT stations in order to maximise access to the public transport network;
- *Principle of safe and prioritised walkability and liveability in these TOD precincts in order to create pockets of quality urban living zones in the city;

Although OPERRA endorses the abovementioned principles. The Precinct Plan states that the contextual application of principles is critical to build a city with a unique identity.

OPERRA thus holds the following beliefs:

- OPERRA holds the belief that the **UNIQUE CHARACTER** of a precinct or neighbourhood should be protected, respected and enhanced by all developments. The question with regard to any development should be asked: What does the development do / look like to respond to and reinforce locally distinctive characteristics (with regard to e.g. Built form; Streetscape; Historic elements; Landmark buildings; Public art; and Natural elements).
- OPERRA holds the belief that the **ENVIRONMENTAL QUALITY** of a precinct or neighbourhood should be protected, respected and enhanced by all developments. *The question with regard to any development should be asked*: What does the development do / look like to respond to and reinforce a sense of quality (with regard to e.g. Quality of public spaces (hard and soft; linear and nodal); Architectural quality; Infrastructure services; Vehicular movement and parking; Non-motorised movement; Universal design; and public facilities).
- OPERRA holds the belief that the UNIQUE SPIRIT of a precinct or neighbourhood should be protected, respected and enhanced by all developments. The question with regard to any development should be asked: What does the development do / look like to respond to and reinforce the locally distinctive activity structure and spirit (with regard to e.g. Sense of community; Sense of safety; Community events; and Vibrancy in public spaces).

UNDERLYING CONCEPTS IN THE PROCESS OF TRANSFORMATION OF AN ESTABLISHED AREA WITH UNIQUE NEIGHBOURHOODS, UNIQUE ELEMENTS AND MANY HERITAGE FEATURES [quoted from the Precinct Plan compiled by Loots]:

*we have to define a specific, practical <u>line between the densification area of the linear zone</u> and the core residential area in order to achieve a balance between transformation and preservation (p 8)

*we have to promote <u>site assembly</u> in order to protect the mobility function of a mobility spine through access management (p 9).

*we have to promote site assembly in order to manage the quality of the living environment through form-based parameters that can achieve even higher densities within improved quality urban environments (p 10).

*we have to promote <u>walkability</u> in order to support public transport and a sustainable city through short walking distances and a vibrant, quality walking environment (p11).

*we have to protect the quality of a neighbourhood and its community life to enhance identity of the city through selection of housing typologies that fit within the character of the neighbourhood (p 14).

*we have to promote the appropriate typology for a specific density in order to ensure better quality public spaces on site

and in the public domain (p 15).

*we have to manage built form in support of land use and density controls in order to get the quality urban environment which we all want to live in. To counteract the disadvantages brought about by building typologies that currently dominate our thinking about development (high-rise flats with low coverage or low-rise townhouses with high coverage), we have to make a paradigm shift. As such we have to move away from introverted buildings ignoring the public domain, towards developments that contribute to quality and vibrant public spaces to the benefit of the community at large. Public space (even if it is only the street as public space) should be embraced as integral part of the development (p 17).

The proposed spatial framework (as consolidated precinct plans) is based on the communities' understanding that our neighbourhoods will – through the City's transformation and densification initiatives - change significantly in future. The spatial framework is the proposal of the communities to define how this change should be facilitated to guide development towards a sustainable city that is functional, liveable and memorable for all its residents.

PROPOSALS TO MANAGE THE INTRINSIC IMPACT OF TRANSFORMATION (p 21)

To achieve the goals for a city which is sustainable, liveable, and memorable, it is critical that densification goes hand in hand with:

- · Improved service infrastructure;
- · Improved community facilities;
- Integrated traffic and transport networks;
- · Protected cultural heritage elements; and
- · Protected natural features and elements.

B3. OUTLINE OF COMPLIANCE REQUIREMENTS AND APPLICATIONS PROCEDURES BY BERTUS VAN TONDER: (bertus@planassociates.co.za)

Bertus van Tonder, a professional planner at Plan Associates, who does a lot of land usage applications, etc in the area, addressed the meeting. Bertus stressed that there is a demand for the communal type of accommodation and that it is important that resolve must be found.

He advised that he does not speak on behalf of the Municipality and that his information is based on existing municipal policy guidelines. He would explain what development involves on the ground, and what procedures are to be followed. Bertus confirmed that the issue of communes was contentious and that trying to strike a balance is difficult. [See also at Appendix A of these minutes, abstract from Bertus van Tonder's correspondence that outlines lack of clarity within definitions provided in municipal guidance documents].

Bertus explained that there were different zoning rights allocated to properties, such as for *residential* or *commercial* use. Communes and student accommodation are mostly conducted on Residential 1 properties.

There is a current set of rules set out in a governing document, namely the **Tshwane Town Planning Scheme 2008 (Revised 2014 and soon to enter a new revision period)** that relates to the whole municipal area. This scheme can be accessed at

http://www.tshwane.gov.za/sites/Departments/City-Planning-and-Development/Tshwane%20Town%20Planning%20Scheme%202008/TSHWANE%20TOWN-PLANNING%20SCHEME%202008%20(REVISED%202014).pdf

This document provides the following definition: "a commune means a building designed as a Dwelling-house which is used by not more than six persons other than a family for residential purposes and who share communal facilities, such as a kitchen, lounge: Provided that the owner or manager may reside on the same property in a separate 'Caretaker's flat' and provided that a Home Enterprise shall not be exercised by any such occupant".

Bertus explained that regardless of the size of a property, if more than six non family members are staying on a property, as per the chief of town planning, it requires that application has to be made to rezone to Residential 4 or 5 (that relates to building or dwelling units), such as those near the University. The considerable cost implications involved herein include rezoning, appointing consultants, bulk service contributions, etc.

Bertus further alerted the meeting to the fact that the Municipality has an active division investigating illegal land uses, which serves notices for illegal communes, businesses, etc. The next step that the Municipality will follow after finding such an "illegal land use" is to issue summons through the Municipal court, which will lead to escalated rates and taxes being levied on owners concerned.

He indicated that he has a document that could be distributed to interested parties via the Chair, from the City of Johannesburg, who have a policy document with regard to amnesty applications whilst applying for rights.

He also explained the differences in zoning rights, eg - Residential 1 in terms of town planning scheme - Clause 15, table B - primary rights - one dwelling house, one additional dwelling

house, subject to consent. He explained that after application for consent to use a property as a commune, a zoning certificate could be drawn, which will show residential 1, but attached thereto would be the approval of the upgraded zoning right.

If you sell your property, the consent and land use right attached to property would transfer to the new owner. But consent can also be withdrawn if land use management by-laws are contravened. He re-iterated that the Municipality has the right to withdraw consent.

Re-zoning by completely changing the zone of property eg. to business, etc. can be done in the case of Residential 4 or 5, or if purposefully built zonings, land use zonings are changed if rezoned to business, etc. Approval to 4 or 5 is far higher than 1. In this respect, bulk service contributions are payable to the Municipality.

Calculations are made by the Municipality, and these increased rates are used to do bulk service upgrades of roads and storm water, electricity and water, etc. All Municipalities impose bulk service contributions.

A query was raised as to what the logic is of six persons staying in a house, with rates of say R2000pm vs. six students staying in a house, with rates of R12000pm being charged. Mr Van Tonder confirmed that in a meeting with the Municipality, it was stated that the nett effect is the same. Re the rates and taxes issue, in cases where consent use is granted, rates and taxes need not necessarily go up unreasonably. However, high rates and taxes are levied on illegal usages of these houses as communes.

One must refer back to the definition of a commune, under consent use – consent use for guest house also, and look at the difference between guest house, residential, commune and reverts back to 'type of person' occupying such a premise [see definitions in the Attachment 1 A attached to these minutes].

Van Tonder noted that people have been applying for guest house rights and then students move in. A commune refers to a person other than family, using these premises for residential purposes. Guest house definition means land and building consisting of three and not more than sixteen rooms..... for a maximum of 32 guests. A guest, per definition – means a person who stays overnight for a short period away from his/her normal place of permanent residence.

Illegal commune owners were urged to get land use rights in place and to have approved building plans, etc. done. Mr Van Tonder urged these owners to engage with Municipality.

A suggestion was tabled from the floor that as many of the land users presently are illegal, the Municipality should look at an amnesty period for such persons to finalise their applications.

Van Tonder advised in terms of Municipal By-laws. Should all required documentation be submitted and no objections be received, such applications should be finalised within six months. If an objection is received and same is then forwarded to the Municipal Tribunal etc, this should be heard within twelve months. It is a legal requirement that Bondholder consent is also required and the Municipality requires this to proceed with an application. In terms of legislation, the Municipality requires this consent as they deem the property still belonging to the bank.

B4. COUNCILLOR SIOBHAN MULLER:

Councillor Siobhan Muller, of Ward 82, then addressed the meeting. Ms Muller tabled a broad outline of her duties and advised that she is also the DA spokesperson for Spatial development, handling up to 8 applications a week.

Councillor Muller confirmed that the RSDF is under review at present. Regional Spatial Development is revised every five years. It used to be put out for public participation for a 30day period and this has now been extended to 60 days. Since the DA came into power, some changes have been made. Officials will review applications with inputs from councillors, MEC of transport, etc.

They now have the ability to appoint task teams of professionals and to work with officials and along the principles that Annemarie Loots had touched on. Principles need to be put in place, rather than nitty-gritty. Must be principle orientated for good development, heritage protection, etc.

A short list of professionals will be contacted in future, which will include urban designers, town planners, forward planners, architects, etc, where after National Treasury will be approached for assistance.

All changes will be placed on the Tshwane.gov.za website and there will be a link taking interested parties to these changes.

Thereafter there will be a final task team and together with input from officials, this will go to Council for final RSDF approval.

Communes are not an RSDF issue, the constitution states how things should function.

Guidelines must be put in place to ensure well run communes. They must be regulated to ensure smooth running.

Councillor Muller explained the procedure followed for illegal communes. These procedures were put in place to ensure law and order is maintained.

Councillor Muller advised illegal commune owners to get a Town planner on board and to sort out rezoning applications.

SESSION C. Chair: ANNA BATCHELOR: QUESTIONS AND ANSWERS SESSION

SESSION 4: CONCLUSION and the way forward: JULIAN LOMBARD

Attendees then discussed the way forward:

Ms **Anna Batchelor**, on behalf of the executive committee stated that from the outcome of this meeting, it transpired that there were many challenges and issues to be addressed.

While the committee will take these challenges further we will also need input, suggestions and proposals from commune owners. Anna requested that these be sent by email to the email address of the chairman of the Commune Owners Group, as indicated on the Agenda.

The question regarding an **amnesty period** was again discussed. There should be guidelines in place to take owners to that point as a group. It was felt that if there was pressure placed on the Municipality, they may be prepared to accede to a moratorium. It was generally felt that excessive rates are a NO GO. Town planners must be central to these discussions, with a very formal document being given to Council. Nothing is cast in stone and anything can be changed and d that if laws are outdated, they can be changed.

A suggestion was tabled that the Municipality be requested to make clear as to where they will support communes and where they will oppose communes. Pretoria is a University town, and as such, they must accommodate. What assistance from the University?

It was decided to enter into a step by step process. The buck does not stop with the Councillor. If anyone has access to legal experts, etc. they are requested to please assist this committee in finding ways to help find answers.

A suggestion was also tabled than application to high court be brought to deem the Bylaws unconstitutional.

It was decided to encourage dialogue in order to find solutions and to start a lobbying group to get things rolling.

Bertus Van Tonder advised that the method that needs to be used is to place pressure on the Municipality as the Tshwane Town Planning Scheme comes up for revision in the next year. This committee should engage with them. The RSDF doesn't speak intrinsically to communes there are town planning schemes, rules, etc. and that is the mechanism that must be used at the end of the day.

In view of the proximity of UP, TUT, UNISA, etc, if necessary, student bodies, etc. should also be brought on board.

In moving forward, positive, proper proposals are to be furnished to Ms Batchelor, for implementation by the executive committee. Solutions must be put forward that can be worked with.

The Municipality does not have a vested interest in this, so commune owners must act.

CONCLUDING REMARKS AND CLOSURE: JULIAN LOMBARD

The speakers were thanked for the information they provided and the participants were thanked for the views they shared. It was felt that the communication should be continued since open discussion between the various role players is essential in the process towards greater environmental, social and economic sustainability in Region 3.

It was agreed that the committee will communicate with interested parties via the e-mail.

CONCLUDING REMARKS: ANNA BATCHELOR

- a. We need to network with as many people as possible and that information and suggestions could be sent to her email.
- b. Urgent measures have to be introduced to meet the crisis that our country faces in terms of economic challenges
- c. New, less cumbersome, procedures need to be introduced to speedily address the crisis, also in terms of the current time delay in obtaining land use rights
- d. There should be an amnesty period during which people should **not be fined**.
- e. There should be a reduction in bulk contributions
- g. There should be reasonable **monthly municipal property rates**, **considering the country wide 'depression'**

Attachment 1:

Abstracts from Bertus van Tonder correspondence:

Definitions: The following concepts of communal living are defined in the Tshwane Town Planning Scheme 2008 (TTPS) that was REVISED in 2014:

This TTPS may be accessed at http://www.tshwane.gov.za/sites/Departments/City-Planning-and-

<u>Development/Tshwane%20Town%20Planning%20Scheme%202008/TSHWANE%20TOWN-PLANNING%20SCHEME%202008%20(REVISED%202014).pdf</u>

'Commune' means a building designed as a Dwelling-house which is used by not more than six persons other than a family for residential purposes and who share communal facilities, such as a kitchen, lounge: Provided that the owner or manager may reside on the same property in a separate Caretaker's Flat provided that a Home Enterprise shall not be exercised by any such occupant.

'Residential building' means a Hotel, Block of Flats, Block of Tenements, Boarding House, other residential types not elsewhere defined and Hostel together with such outbuildings as are ordinarily used therewith.

'Guest-house' means land and buildings, consisting of a minimum of three and not more than 16 bedrooms, which may include a kitchenette in each bedroom/habitable room, for a maximum of 32 guests, a dining-room, lounge, bar and may include ancillary and subservient facilities for the exclusive use of such guests but does not include any building mentioned whether by way of inclusion or exclusion in the definitions of a "Place of Refreshment", "Place of Amusement", "Social Hall", "Adult Premises" and which shall be managed by the owner or manager who shall reside on the same property and may include ancillary and subservient staff accommodation.

'Guest' means a person who stays overnight for a short period away from his/her normal place of permanent residence. This leads to my enquiry. We have been approached by the above mentioned leasing agent in conjunction with a lot of land owners who want to obtain the required land use rights for thee students they are accommodating ie communes. Clause 17 (2) of the said scheme refers to lodging and boarding and do not refer to a commune CLAUSE 17: USES NOT SUBJECT TO TABLE B 17.

Without prejudice to any powers of the Municipality derived from any other law or any provision of this Scheme, nothing in Clauses 14(3) or 16 of this Scheme shall be construed as granting powers to the Municipality to prohibit or restrict: (1) (deleted) 3 (2) the letting, subject to the by-laws relating to lodging- and boarding houses, by any owner or occupant of a Dwelling-house on a "Residential 1", "Agriculture" or "Undetermined" zoned property of any part of the Dwelling-house excluding its outbuildings, on condition that not more than two bedrooms for a maximum of two persons in any Dwelling-house are so let;

'Boarding house' means land and buildings consisting of **habitable rooms** with or without a kitchenette and/or ablutions, which are let or rented to **persons** and where one or more meals may be provided in a communal dining room and a communal kitchen and may include a Caretaker's Flat on the property and other communal ancillary and subservient facilities for the residents only.

' **Block of tenements**' means a building containing two (2) or more habitable rooms and may include communal kitchens and communal ablution facilities and other communal ancillary and subservient facilities such as a laundry and vending machines for the residents only subject to Schedule 2.

There is lack of clarity in the various definitions, for example the following:

From a scheme point of view it is difficult to propose a specific land use due to the fact that each application site differs with regard to:

Rooms vs dwelling unit vs flat

Depending on kitchen student vs guest vs person vs resident

Caretaker vs manager vs host vs not at all

Boarding house vs block of tenements vs guesthouse vs block of flats

Number of guests vs number of students, vs number of persons

Guesthouse vs Clause 17(2) vs commune vs residential building vs block of flats etc

Commune is defined in the said scheme and student accommodation is defined under residential building – meaning it is not the same land-use.

In terms of the definition of the Tshwane Town Planning Scheme 2008 (Revised in 2014) a commune is for up to 6 persons.

Commune is for persons while Guest house is for guests and Boarding house is again for persons. Yet 'student housing' is for students.

Attachment 2:

Batchelor's concluding thoughts following the community meeting held 18.07.17:

The objective of the meeting was to strengthen communication between commune owners and other role players. At the closure of the meeting it was concluded that we had established the foundations of bridges that needed to be built between all the role players. The meeting helped to facilitate better understanding of the principles of town planning as well as the dynamics related to communal living. These principles and dynamics needed to be addressed in order to strengthen livability in the region.

Livability concerns a state of meaningful life-experience within a social and spatial life-context. It refers to a positive state of being, within an environment that is safe and life sustaining, where social and political stability prevails and where adequate economic opportunities are accessible. Livability implies a context where people can access and cope with their real and tangible, as well as their perceived intangible realities and can relate to their life-space with a sense of place and place attachment (author's definition 2017 inspired from various sources).

