

# **ASSET MANAGEMENT STRATEGY**



**THEMBISILE HANI  
LOCAL MUNICIPALITY**

## 1. APPENDIX A: ABBREVIATIONS

AMP – Asset management plan

CAPEX – Capital expenditure

IDP – Integrated Development Plan

KPA – Key performance area

KPI – Key performance indicator

LTIR – Lost-time incident rate

NERSA – National Energy Regulator of South Africa

PCM – Process Control Manual

AMS – Asset Management Strategy

## EXECUTIVE SUMMARY

Thembisile Hani Local Municipality is mandated to provide basic services to communities under its jurisdiction. This is achievable through managing the asset base of the municipality in the form of water, sanitation and electricity assets, amongst other asset classes. Sound maintenance and operational practices of these asset is central towards the continued provision of services. Thus, a strategy for the management of assets is essential in the sustained provision of basic services in accordance with the mandate of the municipality. A Asset Management Strategy (AMS) is formulated to clearly articulate the Asset Management System and the various components of the asset management framework, for Thembisile Hani Local Municipality. The Asset Management System illustrates the key components of the municipality's asset management system and how they relate. On the other hand, the Asset Management Framework determines the scope of the asset management system, as developed for the Local Government Sector.

Thembisile Hani's Asset Management Strategy will provide the necessary linkage between Property, Plant and Equipment (including infrastructure assets), the required funding and key business enablers (people, process and technology) through the asset management system and framework. This Asset Management Strategy also links with the Asset Management Plans (Execution Plans) developed for each asset class which enables the municipality to deliver on its asset management goals as well as the overall goals and objectives of the municipality, viz. service delivery objectives. The capability of Thembisile Hani Local Municipality to deliver on the goals and objectives of the asset management strategy and the municipality's vision is determined by the processes across the various functional disciplines within the Municipality, together with the core engineering (asset management) value chain and the supporting financial management processes. These are enabled by the supporting ICT systems and staff deployed across several disciplines, deployed in part or entirely to deliver successful asset management function at the municipality.

The municipality owns, operates, and maintains assets valued at over billions of rands. This spans all the infrastructure related assets deployed to provide services within Thembisile Hani Local Municipality. The objective of a functional asset management system is to provide effective control and governance to infrastructure assets as to realise value through managing risk and opportunity, in order to achieve the desired balance between cost, risk and performance. Accordingly, the municipality has developed its organisational objectives to focus on the provision of services to the communities it serves. These objectives have been developed in consultation with the various stakeholders. Agreement on the scope and levels of service to be provided was reached. The municipal asset management objectives were established to give effect to the Municipality's commitment to delivering quality services. This is necessary to facilitate sustainable economic growth, and the overall well-being of the society or the local community. The Municipality is governed by the principles of the Municipal Finance Management Act of 2003, the Municipal Systems Act of 2000 and the Municipal Structures Act of 1998. These support the sustainable development and management of assets, including infrastructure planning and delivery of effective services. To achieve the above, specific Asset Management Plans are developed for different classes of assets, and in particular, the water, sanitation and electricity assets.

Therefore, the asset management plans are developed to address legislative requirements, but more importantly to enable the goals and objectives of asset management, and subsequently service delivery. The asset management plans will therefore enable the asset management outcomes, within the stipulated budgets and the available resources, while ensuring that appropriate levels of service are achieved. This AMS summarises Nkangala District's Municipality's asset management scope. Furthermore, this AMS also demonstrates Municipality's commitment to aligning its management system for managing assets to the international Standard ISO55001: Management System – Asset Management and importantly, the commitment to consistently deliver quality services to the community.

# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>2</b>
<b>TABLE OF CONTENTS.....</b>	<b>4</b>
<b>1. APPENDIX A: ABBREVIATIONS.....</b>	<b>5</b>
<b>2. INTRODUCTION .....</b>	<b>6</b>
2.1. Document Purpose .....	9
2.2 Reviews and Updates to AMS .....	9
2.3. Document Structure.....	10
<b>3. THEMBISILE HANI LOCAL- ORGANISATIONAL CONTEX.....</b>	<b>11</b>
3.1. Organisational Purpose .....	11
3.2. Stakeholders .....	11
3.3. External and Internal Factors .....	14
<b>4. ASSET MANAGEMENT POLICY .....</b>	<b>16</b>
4.1. Policy Statement .....	16
4.2 Guiding Asset Management Principles .....	16
4.3 Service Delivery & Asset Management Integration .....	21
<b>5. SCOPE OF ASSET MANAGEMENT AND PURPOSE .....</b>	<b>21</b>
5.1. Asset Management in Municipal Context .....	21
5.1 Asset Management System Scope Development.....	22
5.2 Thembisile Hani Local Municipality's Asset Management System Scope.....	22
5.3. Requirements of the Asset Management System .....	25
<b>6 ASSET MANAGEMENT OBJECTIVES &amp; INITIATIVES .....</b>	<b>25</b>
6.1 Asset Performance .....	26
6.1 Capacity .....	27
6.2 Cost Optimisation .....	28
6.3 Legal and Regulatory .....	29
6.4 Future Demand for Services .....	30
6.5 Stakeholder Management .....	31
6.6 Water Conservation .....	32
6.7 Energy Efficiency .....	33
6.8 Safety .....	34
<b>7 INTEGRATING ASSET MANAGEMENT WITH OTHER FUNCTIONS .....</b>	<b>35</b>
7.1 Asset Management Policy, Strategy (AMS) and Asset Management Objectives .....	36
7.2 Setting of Asset Management Objectives.....	36
<b>8. DECISION MAKING AND RISK MANAGEMENT .....</b>	<b>38</b>
8.1 Decision Making Approach .....	38
8.2. Asset Management Risk Management Approach .....	41
<b>9. ASSET MANAGEMENT ORGANISATIONAL ROLES .....</b>	<b>42</b>
9.1 Roles, Responsibilities, Authorities and Accountabilities .....	42
9.2. Communications .....	44
<b>10. STRATEGIC ASSET MANAGEMENT INITIATIVES .....</b>	<b>44</b>
10.1. Development Process for Asset Management Plans .....	44
10.2Implementation Processes for Asset Management Plans .....	47
10.3 Monitoring Processes for Asset Management Plans .....	47
10.4 Review of Asset Management Plans .....	47
<b>11. PERFORMANCE EVALUATION AND IMPROVEMENT .....</b>	<b>47</b>
10.1. Performance Monitoring .....	48

10.2. Assessments .....	48
10.3. Management Review .....	48
10.4. Non-conformance and Corrective Action.....	49
10.5. Preventive Action .....	50
10.6. Continual Improvement .....	50

## 2. INTRODUCTION

Given the wide range of the asset base of municipalities, municipal entities are asset intensive as they deploy various types of assets to provide service delivery through operating and maintaining these assets in a sustainable manner. The management of assets is inextricably linked to the management of all other aspects of service delivery, and therefore it is necessary to adopt an asset-centred management approach to ensure the longevity and sustainability in deploying municipal assets. This implies Thembisile Hani Local Municipality should focus on efficiently and effectively managing the assets and creating value by optimally utilising such assets in executing daily management activities.

### 2.1. Document Purpose

This Asset Management Strategy document outlines the approach for deriving the Thembisile Hani Local Municipality's asset management objectives from the municipality's long-term objectives as set out in the Integrated Development Plan (IDP). Furthermore, the AMS states the Thembisile Hani Local Municipality's asset management objectives, outlines the approach for developing Asset Management Plans (AMPs) and defines the role of the asset management system in supporting the achievement of asset management objectives. This AMS should be read in conjunction with the asset management policy (summarised in Section 3 of this document) which sets out core asset management principles against which this AMS, and its implementation plans (AMPs) thereof, have been developed.

### 2.2. Reviews and Updates to AMS

The AMS is considered a dynamic document and reflects the key factors that impact the municipality's asset management system. As such, the AMS must be reviewed on an ongoing basis in line with the planning cycle of the municipality. As a result, amendments will be undertaken on a regular basis. Notwithstanding, the document is seen as part of the asset management system and will be subject to internal review as well as formal management reviews, consistent with the review of any management system, e.g. the ISO 9001 quality management system.

If there are significant change/s emanate, requiring immediate amendments or improvements to the AMS, amendments /s will be made. The review will subsequently consider any amendments /s made during the operational period and confirm or revoke their inclusion in the next edition of the AMS.

## 2.3. Document Structure

The document is structured as follows:

<b>Chapter 1-4</b>	Sets the asset management context to ensure that the approach is consistent and aligned with the Municipality's Integrated Development Plan.
<b>Chapter 5-7</b>	Outlines the asset management objectives, defines the integration with existing functions and sets out the decision making and risk management methodology.
<b>Chapter 8</b>	Defines Thembisile Hani Local Municipality asset management roles and responsibilities
<b>Chapter 9</b>	Describes the approach for asset management plan development and execution thereof.
<b>Chapter 10</b>	Outlines the performance evaluation and improvement framework for the Thembisile Hani Local Municipality's asset management system.

## 3. THEMBISILE HANI LOCAL- ORGANISATIONAL CONTEXT

Thembisile Hani Local Municipality is responsible for the acquisition, operation, maintenance, renewal and disposal of an extensive range of infrastructure assets with a substantial replacement value. These assets include land, buildings, storm water drainage system, electricity infrastructure and associated reticulation systems.

This Asset Management Strategy (AMS) takes the asset management objectives, and aligns these to the Municipality's strategic objectives defined / outlined in the Integrated Development Plan (IDP). The AMS develops the asset management objectives, principles, framework and strategies required to achieve the Municipality's strategic objectives.

### 3.1. Organisational Purpose

The purpose of the Thembisile Hani Local Municipality is to improve the physical, socio-economic and institutional environment by supporting local municipalities within Thembisile

Hani Local Municipality. These services are essential to grow the economy and improve the quality of lives for the people within the District.

### 3.2. Stakeholders

Thembisile Hani Local Municipality comprises of a range of assets in various geographical areas across the District. Stakeholders have a significant impact on the municipality’s assets and asset management related decisions. It is therefore important that stakeholder requirements and expectations are determined, recorded, and taken into account in any decision-making processes related to asset management.

Thembisile Hani Local Municipality should engage with different stakeholders in an open and transparent manner, on a regular basis, and through different forums. The development of the IDP and as well as this AMS are clear examples of such engagement. Thembisile Hani Local Municipality’s key asset management stakeholders, their interests and how these interests are accommodated in the municipality’s asset management practices are described in the table below:

**Table 1: Internal and External Stakeholders**

	Stakeholder	Main Interest	How the AM interests are addressed
Internal	Asset Management Committee	<ul style="list-style-type: none"> <li>Establishment and maintenance of the asset management system.</li> </ul>	<ul style="list-style-type: none"> <li>Regular meetings with all the attendees of the AM committee</li> </ul>
	Thembisile Hani Local Municipality’s Employees and Contractors	<ul style="list-style-type: none"> <li>Services provision</li> <li>Safe, Productive working environment.</li> <li>Continuous improvement, adoption of new technology and practices.</li> </ul>	<ul style="list-style-type: none"> <li>Regular dialogue, and internal communications</li> <li>Contractor negotiations.</li> </ul>
	Functional Departments	<ul style="list-style-type: none"> <li>Finance, Supply Chain Management, Planning And Economic Development, Community Development Services, Environment Health Services, Technical Services, Corporate Services and other sub departments</li> </ul>	<ul style="list-style-type: none"> <li>Interaction primarily focussed towards enabling asset management and subsequent service delivery</li> </ul>
	Management	<ul style="list-style-type: none"> <li>Efficient and effective business management and planning</li> <li>Governance</li> <li>Risk Management</li> <li>Compliance with legislation and standards</li> </ul>	<ul style="list-style-type: none"> <li>Asset management &amp; governance</li> <li>AM objectives</li> <li>Reporting</li> </ul>

<b>External</b>	<b>Mayor, MMCs, Ward Councillors</b>	<ul style="list-style-type: none"> <li>• Mayor provides leadership to the municipality</li> <li>• MMC representing different portfolios in the municipality</li> <li>• Councillors represent proportional representation of councillors</li> </ul>	<ul style="list-style-type: none"> <li>• Various forums to engage with Officials and Communities</li> </ul>
	<b>Customers &amp; Local Community</b>	<ul style="list-style-type: none"> <li>• Service quality and reliability</li> <li>• Price of permits and licenses</li> <li>• Information</li> </ul>	<ul style="list-style-type: none"> <li>• Consultation and Feedback</li> <li>• Quality and Safety standards</li> <li>• Customer Complaints</li> <li>• Contractual agreements</li> </ul>
	<b>State Bodies and Regulators</b>	<ul style="list-style-type: none"> <li>• Department of Labour - Labour practices etc.</li> <li>• Department of water and sanitation</li> <li>• Funding via National Treasury</li> <li>• Cooperative Governance and Traditional Affairs (COGTA)</li> </ul>	<ul style="list-style-type: none"> <li>• Acts, regulations and other requirements</li> <li>• Formal Reporting</li> <li>• On-going consultations</li> </ul>

	Stakeholder	Main Interest	How the AM interests are addressed
	Media	<ul style="list-style-type: none"> <li>Media in its role as a conduit for public information</li> </ul>	<ul style="list-style-type: none"> <li>Communicate through Municipal spokesperson and official website</li> </ul>
	Financial institutions, Rating agencies, and Insurers	<ul style="list-style-type: none"> <li>Financial institutions, Rating agencies, and Insurers in their role in securing access to funding and protecting the interests of the municipality</li> </ul>	<ul style="list-style-type: none"> <li>On-going consultations</li> </ul>

Failure to both communicate and consult in an appropriate way with relevant stakeholders about asset management activities can in itself constitute a risk as it could prevent the fulfilment of asset management objectives.

### 3.3. External and Internal Factors

The external and internal factors that can significantly influence the scope and success of the asset management system remain important considerations. These factors are summarised in the table below:

**Table 2: Internal and External Factors**

	Factor	Influence on asset management system
Internal	Efficiency & Productivity	<ul style="list-style-type: none"> <li>Given the rising costs for the provision of municipal services, it has become necessary to drive cost saving opportunities in order to close the revenue shortfall for the municipality</li> <li>The reduction of the cost base, increased productivity and improved asset efficiency are a necessity for the sustainability of the municipality</li> </ul>
	Planning	<ul style="list-style-type: none"> <li>Sector plans are required across different asset classes to inform current and future needs for services and investment</li> </ul>
	Ageing Infrastructure	<ul style="list-style-type: none"> <li>The age of the infrastructure present constant challenges including under performance and high maintenance costs.</li> <li>The use of aged infrastructure may impact on the District Municipality's.</li> </ul>
External	Economy	<ul style="list-style-type: none"> <li>The slow economic growth as a result of the world-wide economic downturn in combination with the revenue shortfall could affect the financial sustainability of the municipality.</li> <li>The constrained economic environment could also impact of the customers' ability to pay for services, impacting of the required funds to maintain assets and invest in new infrastructure</li> </ul>
	Factor	Influence on asset management system

		<ul style="list-style-type: none"><li>• Political unrest over poor service delivery continues to follow the upward trajectory. Increased labour unrest, concerns around service delivery, and corruption are the major triggers for such action.</li></ul>
	<b>Market Dynamics</b>	<ul style="list-style-type: none"><li>• At national level, trends around customers' ability and willingness to pay for services and the subsequent impact on revenue for municipalities is significant.</li><li>• Asset/infrastructure availability has become critical given the increased interdependence, market forces, and the increased dependence on the municipality to support/enable economic development.</li></ul>

## 4. ASSET MANAGEMENT POLICY

The Thembisile Hani LocalMunicipality's asset management policy has been defined as part of the asset management system for the Municipality. The key aspects of the document are encapsulated below.

### 4.1. Policy Statement

Thembisile Hani LocalMunicipality is committed to the improvement of the physical, socio-economic and institutional environment in order to address the triple challenges through sustainable development and service excellence.

Thembisile Hani LocalMunicipality is a service driven organisation that is committed to The municipality strives to provide services in a most efficient and cost-effective manner and therefore supports the need to look after its infrastructure assets for the continued provision of services in a sustainable manner.

### 4.2. Guiding Asset Management Principles

The core principles of infrastructure asset management are:

- Taking a life-cycle approach;
- Developing cost-effective management strategies for the long-term;
- Providing a defined level of service and monitoring performance;
- Understanding and meeting the impact of growth through demand management and infrastructure investment;
- Managing risks associated with asset failures;
- Sustainable use of physical resources; and
- Continuous improvement in asset management practices.

The policy principles serve as a framework for the achievement of the policy objective. These are outlined in the table below.

## Effective Governance

The municipality strives to apply effective governance systems to provide for consistent asset management and maintenance planning in adherence to and compliance with all applicable legislation to ensure that asset management is conducted properly, and municipal services are provided as expected. To this end, the municipality will:

- Adhere to all constitutional, safety, health, systems, financial and asset-related legislation;
- Regularly review and update amendments to the above legislation;
- Review and update its current policies and by-laws to ensure compliance with the requirements of prevailing legislation; and

## Sustainable Service Delivery

The municipality strives to provide to its customers services that are technically, environmentally and financially sustainable. To this end, the municipality will:

- Identify levels and standards of service that conform to statutory requirements and rules for their application based on the long-term affordability to the municipality;
- Identify technical and functional performance criteria and measures, and establish a commensurate monitoring and evaluation system;
- Identify current and future demand for services, and demand management strategies;
- Set time-based targets for projects that reflect the need to newly construct and dispose assets, where applicable in line with national targets;
- Apply a risk management process to identify service delivery risks at asset level and appropriate responses;
- Prepare and adopt an immovable (infrastructure) asset management strategy and immovable (infrastructure) asset management plans to support the achievement of the required performance;
- Prepare and adopt an immovable(infrastructure) asset maintenance strategy and immovable (infrastructure) asset maintenance plans to execute maintenance timeously;
- Allocate budgets that take cognisance of the full life cycle needs of existing and future assets;

<b>Social and Economic Development</b>	<p>The municipality strives to promote social and economic development in its municipal area by means of delivering district municipal services in a manner that meet the needs of the various customer user-groups in the community. To this end, the municipality will:</p> <ul style="list-style-type: none"> <li>• Regularly review its understanding of other local municipality needs and expectations through effective consultation processes covering all service areas;</li> <li>• Implement changes to services in response to changing needs and expectations where appropriate;</li> <li>• Foster the appropriate use of services through the provision of clear and appropriate information;</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensure services are managed to deliver the agreed levels and standards; and</li> <li>• Create job opportunities and promote skills development in support of the national EPWP.</li> </ul>
<b>Custodianship</b>	<p>The municipality strives to be a responsible custodian and guardian of the municipal assets for current and future generations. To this end, the municipality will:</p> <ul style="list-style-type: none"> <li>• Establish a spatial development framework that takes cognisance of the affordability to the municipality of various development scenarios;</li> <li>• Establish appropriate development control measures</li> <li>• Cultivate an attitude of responsible utilisation and maintenance of its assets</li> <li>• Ensure that heritage resources are identified and protected; and</li> <li>• Ensure a long-term view and life-cycle costs are taken into account in immovable asset management decisions.</li> </ul>

<b>Transparency</b>	<p>The municipality strives to manage its immovable assets in a manner that is transparent, for both now and in the future. To this end, the municipality will:</p> <ul style="list-style-type: none"> <li>• Develop and maintain a culture of regular consultation with regard to its management of immovable assets</li> <li>• Clearly communicate its plans and actual performance through Budget Implementation Plan (SDBIP);</li> <li>• Avail asset management information and</li> <li>• Continuously develop the skills of councillors and officials to effectively execute their day-to-day tasks.</li> </ul>
<b>Cost-Effectiveness And Efficiency</b>	<p>The municipality strives to manage its immovable assets in an efficient and effective manner. To this end, the municipality will:</p> <ul style="list-style-type: none"> <li>• Assess life-cycle options for proposed new immovable assets;</li> <li>• Regularly review the actual extent, nature, utilisation, criticality, performance and condition of immovable assets to optimise planning and implementation works;</li> <li>• Assess and implement the most appropriate maintenance of infrastructure assets to achieve the required network performance</li> </ul>
	<p>standards and to achieve the expected useful life of immovable assets;</p> <ul style="list-style-type: none"> <li>• Ensure the proper utilisation and maintenance of existing assets;</li> <li>• Establish and implement demand management plans;</li> <li>• Timeously maintain immovable assets based on capacity, performance, risk exposure, and cost;</li> <li>• Timeously dispose immovable assets that are no longer in use;</li> <li>• Establish documented processes, systems and data to support effective life-cycle immovable asset management;</li> <li>• Strive to establish a staff contingent with the required skills and capacity, and procure external support as necessary; and <ul style="list-style-type: none"> <li>• Conduct annual assessments to support continuous improvement of immovable asset management practice.</li> </ul> </li> </ul>

#### 4.3. Service Delivery & Asset Management Integration

Thembisile Hani LocalMunicipality will provide its services that are technically, environmentally and financially sustainable. To this end, the Municipality will:

- Identify appropriate levels and standards of services that will support and enable provision of reliable services
- Determine the current and future demand for services, and develop demand management strategies to address future services requirements;
- Set time-based targets for projects that reflect the need to construct, upgrade, and dispose infrastructure assets, where applicable;
- Apply a risk management process to identify service delivery risks at asset level and develop appropriate responses;
- Prepare and adopt a maintenance strategy and plan to support the achievement of the required performance;
- Develop operational plans that will minimise disruptions to services provision;
- Allocate budgets based on long-term financial forecasts that take cognisance of the full life-cycle needs of existing and future infrastructure assets and the risks to achieving the adopted performance targets;
- Establish defined goals, service levels, inventory guidelines and standards for asset maintenance.

The municipality shall provide district municipal services, which the municipality is responsible for, at an appropriate level, and in a transparent, accountable and sustainable manner, in pursuit of legislative requirements and in support of its strategic objectives.

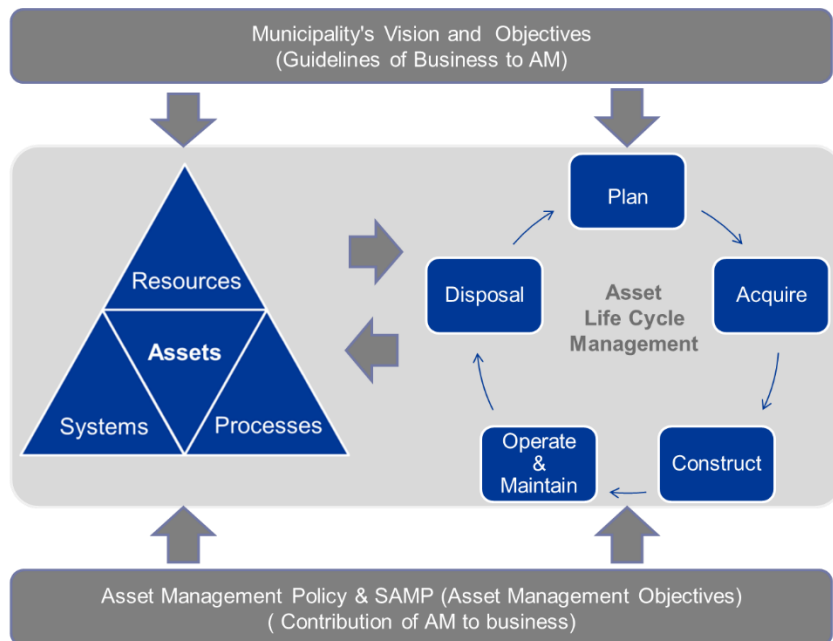
## 5. SCOPE OF ASSET MANAGEMENT AND PURPOSE

The scope of the asset management includes all the physical assets, processes, systems and resources necessary to efficiently and sustainably provide the necessary services.

Asset management refers to the coordinated activities undertaken by Thembisile Hani LocalMunicipality to realise value from its assets. In addition, asset management activities in Thembisile Hani LocalMunicipality are directed and controlled through an asset management system.

### 5.1. Asset Management in Municipal Context

Asset management is a core function of Thembisile Hani LocalMunicipality as it is central to the provision of municipal services. The diagram below illustrates some of the key elements required to align asset management strategy, objectives, plans, and activities, with the municipality's strategic objectives as well as the overall vision of the municipality.



**Figure 4.1: Alignment between Asset Management and Municipal Objectives**

The asset management policy guides the development of a AMS. In turn, the asset management objectives required for enabling the achievement of municipal strategic objectives are derived from the AMS. The outcome of the asset management planning is the Asset Management Plan (AMPs) aimed at translating defined asset management objectives into strategic initiatives that will be executed over an identified period. These (AMPs) plans are usually implemented to impact upon the productive life of an asset throughout the asset life cycle.

Within Thembisile Hani LocalMunicipality, a well-defined asset management system will provide alignment between the IDP and the various functional disciplines, thus ensuring all activities are focussed on achieving specific outcomes throughout the Thembisile Hani LocalMunicipality's core business value chain. Alignment includes various Departments within the Municipality, as well as the activities undertaken by the support functions. The ultimate aim is the achievement of the municipal objectives through the attainment or realisation of the asset management objectives.

## 5.2. Asset Management System Scope Development

The development of the asset management system scope is guided by the business and asset management activities undertaken as part of the Thembisile Hani LocalMunicipality's Asset Life Cycle Management Model illustrated below.



**Figure 4.2: Thembisile Hani LocalMunicipality's Asset Life Cycle Management Model**

Asset management applies to all of the life cycle stages illustrated in the Asset Life Cycle Management Model. As shown in the diagram, various activities are undertaken from the initial stages of Planning for the asset or a portfolio of assets through the Retire/Disposal stage of assets.

### 5.3. Thembisile Hani LocalMunicipality's Asset Management System Scope

The asset management system provides means for directing, controlling and coordinating asset management activities within different functions in Thembisile Hani LocalMunicipality. Asset management applies to all of Thembisile Hani LocalMunicipality's business functions including the core Technical Services function and the Financial Management function.

#### 5.3.1. Description of Thembisile Hani LocalMunicipality's Asset Management System

The asset management system forms part of asset management, and includes all the water, sanitation, electricity and roads asset portfolios necessary.

Furthermore, the municipal asset management system includes the following:

- Asset management policy
- Asset management strategy (AMS)
- Asset management objectives
- Processes to achieve asset management objectives
- Asset management plans (AMP)

The figure below illustrates the relationship between the various elements of the municipality's asset management system:



**Figure 4.3: Relationship Between Key Terms**

The asset management system also includes all the activities, processes and organisational structures established for the development, implementation and continual improvement of the asset management system within the municipality.

THLM's asset management system is designed such that it is not exclusive of other management systems such as safety, health, environment, quality and risk, therefore these share a complementary relationship.

### 5.3.2. Assets within Scope of the Asset Management System

An asset is described as resources controlled by an entity as the result of past events and from which future economic benefits or potential service provision are expected to flow to the entity. The assets within the scope of Thembisile Hani LocalMunicipality's asset management system comprise Thembisile Hani LocalMunicipality's asset portfolio including all the asset types as well as the asset systems as listed in this section (below).

The assets that are in scope includes property, plant and equipment (PPE) assets (such as infrastructure and community facilities) that are essentially the means by which the municipality operates. Consequently, the management of such assets is critical to meeting the strategic objectives of the municipality and in measuring its performance.

The main assets and respective asset categories outlined in the table below.

<b>Water Assets</b>	<p><b>Water assets</b> used include the following:</p> <ul style="list-style-type: none"> <li>• Storm water infrastructure</li> <li>• Drainage collection</li> <li>• Water connection</li> <li>• Water tanks</li> </ul>
<b>Sanitation Assets</b>	<p><b>Sanitation assets</b> includes all:</p> <ul style="list-style-type: none"> <li>• Reticulation</li> <li>• Sewer connection</li> <li>• Plumbing connection</li> </ul>
<b>Electricity Assets</b>	<p>: Physical, immovable plant, equipment or infrastructure that forms part of Distribution's HV, MV and LV networks, and that is electrical in nature. This includes:</p> <ul style="list-style-type: none"> <li>• Power Pole</li> <li>• Lightning protection distribution board</li> <li>• Circuit Breakers</li> <li>• Transformers</li> <li>• Electrical Installation</li> </ul>

In addition, the following assets also form an integral part of asset management:

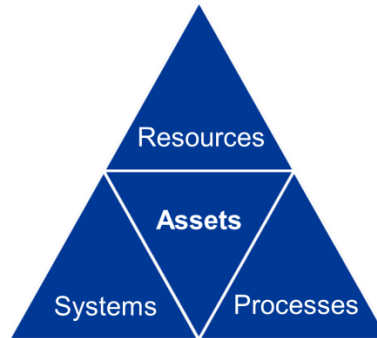
- Land under the management control of Thembisile Hani LocalMunicipality.
- Physical asset records (paper and electronic), and associated asset repositories.
- Systems used for scheduling asset tasks.
- Asset commissioning, operations, maintenance, inspection, decommissioning and asset related records.
- Standards, specifications, operational & safety procedures.
- Procedures for managing assets including staff roles and responsibilities.
- Specialist vehicles, plant, tools and equipment including those used for monitoring and measuring asset condition and/or performance.

#### 5.4. Requirements of the Asset Management System

For a functioning and effective asset management system, a few basic requirements need to be in place. The key requirements for the establishment of an asset management system includes the need for the establishment of an asset management policy and strategic direction (AMS), aligned with the Municipality's strategic objectives and supported by the Asset

Management Plans. Basic requirements including resource requirements, functional requirements, data requirements and process requirements are also considered.

In addition to the requirements outlined above, the basic components of our asset management system are illustrated in the diagram below:



**Figure 4.4: Components of our Asset Management System**

The components i.e., resources, systems, processes and assets, identified are key enablers for our asset management objectives and hence the strategy (AMS). Therefore, these support the achievement of the municipality's strategic objectives.

## 6. ASSET MANAGEMENT OBJECTIVES & INITIATIVES

The need to define asset management objectives is a business imperative as these are necessary to drive the realisation of the AMS goals and objectives. These have been prioritised in accordance with the key drivers affecting asset management and service delivery. AM objectives have been developed not only to address the water and sanitation delivery needs, but the entire asset base of THLM including various other asset classes.

The key asset management drivers have been identified as follows:

- Asset performance.
- Capacity (Technical & Management).
- Cost optimisation.
- Future demand for services.
- Legislative and regulatory requirements.
- Stakeholder management.
- Water conservation and demand management.
- Energy efficiency and capacity.
- Safety

In order to ensure consistency and alignment, the asset management objectives have been derived from the key strategic focus areas of the municipality. This ensures the objectives will support the achievement of our corporate targets. The stated objectives are based on a 5-year planning horizon. This section also specifies management strategies required to support the achievement of THLM asset management objectives and targets (KPI's).

## 6.1. Asset Performance

The performance of assets has a direct impact on the achievement of objectives of the entire municipality. Thembisile Hani LocalMunicipality continually reviews its operational strategies with a view of building sustained performance levels and ensuring asset sustainability.

The table below lists objectives, targets and appropriate strategies to improve asset performance in the Municipality.

**Table 3: Asset Performance Objectives, Targets and Strategies**

Item	Detailed Description
Asset Performance Objective	Ensure Thembisile Hani LocalMunicipality has sufficient capacity to assist municipalities with water, sanitation, roads and other infrastructure asset related services to the Nkangala District.
Item	Detailed Description
Asset Performance Targets	<ul style="list-style-type: none"> <li>• Increase the <b>Plant and Equipment availability to 80%</b> in the next five years through incorporating Thembisile Hani LocalMunicipality 's risk-based maintenance management practices in the life cycle management of assets.</li> <li>• Reduce unplanned <b>Plant and Equipment downtime to 10%</b> or less in the next five years.</li> <li>• Reduce and sustain the <b>maintenance backlog to less than 10%</b> whilst operating the equipment in accordance with the operating technical specifications.</li> </ul>
Asset Performance Strategies	<ul style="list-style-type: none"> <li>• <b>Improving plant/equipment performance:</b> Thembisile Hani LocalMunicipality will identify and implement initiatives to improve plant &amp; equipment performance. Focussed initiatives will also be identified and implemented to improve plant performance and availability.</li> <li>• <b>Enhancing processes and systems:</b> Thembisile Hani LocalMunicipality will develop and implement processes &amp; systems that will facilitate entrenching of best practices, including development of the Process Control Manuals (PCMs) for Operating and Maintenance and improved performance.</li> <li>• <b>Operations Sustainability:</b> Thembisile Hani LocalMunicipality will prioritise the sustainability of all its operations and ensure the reliability of service provision through focussed initiatives across its value chain.</li> <li>• <b>Equipment Maintenance:</b> Thembisile Hani LocalMunicipality will identify key risk areas, prioritise equipment maintenance and address maintenance backlogs appropriately.</li> <li>• <b>Asset Refurbishment:</b> Thembisile Hani LocalMunicipality will continue to identify asset refurbishment opportunities to improve asset reliability as the age profile of assets across the Municipality increases.</li> </ul>

## 6.2. Capacity

Thembisile Hani LocalMunicipality must have adequate access to a pool of competent and qualified people. These resources include a diverse workforce of highly skilled employees and service providers supported by appropriate procedures, systems and tools.

The objectives, targets and strategies in relation to improving the Municipality's capability and capacity are outlined in the table below.

**Table 4: Capacity Objectives, Targets and Strategies**

Item	Detailed Description
Capability & Capacity Objective	Ensure availability of competent resources to facilitate overall leadership, planning, operation and performance improvement of Thembisile Hani LocalMunicipality's asset management and asset performance.
Capability Targets	<ul style="list-style-type: none"> <li>• Develop Thembisile Hani LocalMunicipality's <b>asset management competency framework by 2025</b>.</li> <li>• Ensure a sustainable skills base by <b>providing training and employment opportunities</b>. Fill all vacancies by 2025.</li> <li>• Through <b>succession planning, ensure adequate resources</b> are available across the municipality to deliver asset management related activities.</li> </ul>
Capability Strategies	<ul style="list-style-type: none"> <li>• <b>Competency Framework:</b> Thembisile Hani LocalMunicipality will develop the requirements and a roadmap for the deployment of a competency framework. Use the framework to identify skills gaps and inform training requirements.</li> <li>• <b>Training:</b> Thembisile Hani LocalMunicipality will define specific initiatives aimed at ensuring appropriately skilled resources are available.</li> </ul>

## 6.3. Cost Optimisation

The availability of funds to finance Thembisile Hani LocalMunicipality's service delivery operations as well as address the capital expansion requirements continues to be a major

challenge for Thembisile Hani LocalMunicipality. This necessitates the need for Thembisile Hani LocalMunicipality to look at ways to introduce initiatives to improve cost efficiencies across the organisation.

The table below provides objectives, targets and strategies for improving cost optimisation in the organisation.

**Table 5: Cost Optimisation Objectives, Targets and Strategies**

Item	Detailed Description
Cost Optimisation Objective	Provide means to ensure asset related costs are optimally managed throughout asset life cycle, and in line with good financial management practices / MFMA requirements.
Cost Optimisation Targets	<ul style="list-style-type: none"> <li>• <b>Total Maintenance Cost to 8% (as % of total costs) in the next five years.</b></li> <li>• <b>Improve the operational cost</b> to provide services.</li> <li>• <b>Achieve the rate of return on assets (ROA) of 10% by 2027 to ensure cost-reflective tariffs.</b></li> </ul>
Item	Detailed Description
Cost Optimisation Strategies	<ul style="list-style-type: none"> <li>• <b>Productivity Enhancement Initiatives:</b> Thembisile Hani LocalMunicipality needs to introduce Productivity improvement interventions to increase efficiencies and reduce overall costs.</li> <li>• <b>Asset Life Cycle Cost:</b> Thembisile Hani LocalMunicipality will define key drivers impacting the life cycle cost of assets and implement ongoing efforts to manage these to acceptable levels.</li> <li>• <b>Cost of Funding:</b> Thembisile Hani LocalMunicipality will continuously review various funding options to ensure that cost of capital remains at an acceptable level. This also has an impact on the financial sustainability of the Municipality (e.g. catalytic projects which may require DFI funding).</li> </ul>

#### 6.4. Legal and Regulatory

Thembisile Hani LocalMunicipality cannot compromise on legal and regulatory compliance as this may result in Thembisile Hani LocalMunicipality being in contravention with legislation resulting in penalties, legal actions instituted, damage to reputation or plant may be partially or completely shut down.

The table below lists objectives, targets and appropriate strategies to improve compliance to legal and regulatory requirements.

**Table 6: Legal and Regulatory Objectives, Targets and Strategies**

Item	Detailed Description
Legal and Regulatory Objective	Ensure asset life cycle activities are carried out in accordance with the relevant legal and regulatory requirements.
Legal and Regulatory Targets	<ul style="list-style-type: none"> <li>• <b>Ensure zero environmental legal contravention</b> through improved asset efficiencies.</li> <li>• <b>Ensure zero deviations from Thembisile Hani LocalMunicipality’s procurement policies</b> and MFMA with regards procurement and disposal of all Thembisile Hani LocalMunicipality’s assets.</li> <li>• <b>Ensure zero deviations Electricity Regulations Act requirements.</b></li> <li>• <b>Ensure zero deviations from National Environmental Management Act (NEMA)</b></li> <li>• <b>Ensure zero deviations from Water Services Act (WSA)</b></li> <li>• <b>Ensure zero deviations from Roads Transports Act (RTA)</b></li> </ul>
Item	Detailed Description
Legal and Regulatory Strategies	<ul style="list-style-type: none"> <li>• <b>Asset Efficiencies:</b> Thembisile Hani LocalMunicipality will operate and maintain assets according to set standards and improvement initiatives.</li> <li>• <b>Compliance:</b> Thembisile Hani LocalMunicipality will develop compliance plans in order to address all legal and regulatory non-compliance.</li> <li>• <b>Audits and Inspections:</b> Thembisile Hani LocalMunicipality will ensure regular audits and reviews to identify and address non-compliances.</li> </ul>

### 6.5. Future Demand for Services

Thembisile Hani LocalMunicipality continues to develop and refine its capital investment plans that aim to prioritise new infrastructure projects, sustainability, environmental compliance, asset maintenance, asset replacement and refurbishment.

The objectives, targets and strategies in relation to future demand for services are outlined in the table below.

**Table 7: Future Demand for Services Objectives, Targets and Strategies**

Item	Detailed Description
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Future Demand for Services Objective	Execute capital projects (including asset refurbishment) in a way that provides value for all Thembisile Hani LocalMunicipality's stakeholder's.
Future Demand for Services Targets	<ul style="list-style-type: none"> <li>• Ensure Thembisile Hani LocalMunicipality's <b>capital expenditure/refurbishment budget is fully utilised (100%)</b>.</li> <li>• <b>Zero cost and time over-runs for all capital projects</b>.</li> </ul>
Future Demand for Services Strategies	<ul style="list-style-type: none"> <li>• <b>Infrastructure Planning:</b> Thembisile Hani LocalMunicipality will develop infrastructure master plans that will inform new capital projects.</li> <li>• <b>Capital Expenditure:</b> Thembisile Hani LocalMunicipality will ensure the available Capex budget to be spent over the planning/allocated period will be controlled and fully spent.</li> <li>• <b>Capital Efficiency:</b> Thembisile Hani LocalMunicipality will manage capital efficiency by ensuring that capital is prioritised and optimised within and across various classes of assets aligned with Thembisile Hani Local Municipality's strategic targets.</li> <li>• <b>Project Management:</b> Thembisile Hani LocalMunicipality will ensure consistent application of best practice project management practices for all its infrastructure/refurbishment projects.</li> </ul>

## 6.6. Stakeholder Management

Thembisile Hani LocalMunicipality is committed to proactively engage and manage stakeholder relationships in order to understand their needs and deliver on their expectations.

The objectives, targets and strategies in relation to stakeholder management are outlined in the table below.

**Table 8: Stakeholder Management Objectives, Targets and Strategies**

Item	Detailed Description
Stakeholder Management Objective	Proactively engage in and manage Thembisile Hani LocalMunicipality's stakeholder relationships as well as stakeholder needs and expectations to ensure Thembisile Hani LocalMunicipality can achieve its mandate and objectives whilst maintaining good stakeholder relations.
Stakeholder Management Targets	<ul style="list-style-type: none"> <li>• <b>Create EPWP jobs</b> from capital / refurbishment projects.</li> </ul>

<b>Stakeholder Management Strategies</b>	<ul style="list-style-type: none"> <li>• <b>Stakeholder Relations:</b> Thembisile Hani LocalMunicipality will improve stakeholder relations through development and the implementation of a stakeholder engagement plan.</li> <li>• <b>Stakeholder Perceptions:</b> Thembisile Hani LocalMunicipality will manage stakeholder perceptions and ensure the Municipality’s public perceptions remain positive.</li> <li>• <b>Communication:</b> Thembisile Hani LocalMunicipality will communicate effectively to all stakeholders using a range of appropriate and efficient internal and external medium.</li> <li>• <b>Integrated Development Plan:</b> Thembisile Hani LocalMunicipality’s IDP will align to National, Provincial &amp; Local priorities and address the non-negotiables of service delivery and economic development.</li> </ul>
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### 6.7. Water Conservation and Demand Management

The need to manage scarce resources has become a key imperative for Thembisile Hani LocalMunicipality. This is in line with the need to become more efficient in the distribution or reticulation of water, whilst ensuring environmental pollution is eliminated.

The table below lists objectives, targets and appropriate strategies to improve the conservation and demand for water.

**Table 9: Water Conservation & Demand Management Objectives, Targets and Strategies**

Item	Detailed Description
Water Conservation Objective	Continually identify measures to reduce water losses through ongoing efforts and improved water conservation and water demand efforts
Water Conservation Targets	<ul style="list-style-type: none"> <li>• <b>Reduce non-revenue water / water losses to below 15% by 2028.</b></li> <li>• <b>Manage demand for water</b> to match the available capacity.</li> </ul>

<b>Water Conservation Strategies</b>	<ul style="list-style-type: none"> <li><b>Water Losses:</b> Thembisile Hani LocalMunicipality will develop and implement initiatives that will reduce non-revenue water through ensuring distribution losses are reduced.</li> <li><b>WCWDM:</b> Thembisile Hani LocalMunicipality will develop and implement initiatives to improve water conservation whilst meeting demand for water as required by consumers.</li> </ul>
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## 6.8. Energy Efficiency

The reliable supply of electricity is essential for the well-being of the society and the sustainability of the economy/businesses within Thembisile Hani LocalMunicipality. This requires improved capacity and efficient supply and distribution of electricity.

The table below lists objectives, targets and appropriate strategies to improve efficiency and capacity in electricity distribution.

**Table 11: Energy Efficiency Objectives, Targets and Strategies**

Item	Detailed Description
Energy Efficiency Objective	Continually identify and introduce measures to reduce energy losses and improve energy efficiency/ capacity through ongoing efforts.
Energy Efficiency Targets	<ul style="list-style-type: none"> <li><b>Reduce the non-technical electricity losses to below 15% by 2025.</b></li> <li>Implement/ roll-out <b>initiatives to improve energy efficiency (demand management)</b> at Thembisile Hani LocalMunicipality</li> <li><b>Explore alternative energy sources</b> (including renewable energy) to enhance generation capacity for Thembisile Hani LocalMunicipality</li> </ul>
Item	Detailed Description
Energy Efficiency Strategies	<ul style="list-style-type: none"> <li><b>Energy Losses: Thembisile Hani LocalMunicipality</b> will introduce interventions to reduce non-technical electricity losses.</li> <li><b>Energy Efficiency:</b> Thembisile Hani LocalMunicipality will introduce energy efficiency/demand management initiatives.</li> <li><b>Self-Generation:</b> Thembisile Hani LocalMunicipality will undertake feasibility studies to identify alternative sources of energy to reduce reliance on Eskom.</li> </ul>

## 6.9. Safety

Thembisile Hani LocalMunicipality is committed to providing and maintaining a safe and healthy working environment for all employees, contractors and members of the public as safety is priority area for the organisation.

The safety objectives, targets and related strategies are outlined in the table below. **Table 12: Safety Objectives, Targets and Strategies**

Item	Detailed Description
Safety Objective	Ensure assets are designed, operated and maintained in a manner to ensure safety of the public, Thembisile Hani LocalMunicipality staff and contractors.
Safety Targets	<ul style="list-style-type: none"> <li>• <b>Reduce Lost Time Incident Rate (LTIR) and Fatalities to zero</b> respectively.</li> <li>• <b>Ensure zero public incidents</b> arising from Thembisile Hani LocalMunicipality's operations.</li> </ul>
Safety Strategies	<ul style="list-style-type: none"> <li>• <b>Incident Management:</b> Thembisile Hani LocalMunicipality will ensure that operational incidents are properly managed to minimise further risk and liability, to obtain and protect evidence and to effectively investigate the incident.</li> <li>• <b>Compliance to Legal and Thembisile Hani LocalMunicipality Requirements:</b> Thembisile Hani LocalMunicipality will maintain and operate its assets according with approved procedures, practices and statutory requirements.</li> <li>• <b>Design:</b> Thembisile Hani LocalMunicipality will design and construct assets to recognised and generally accepted good engineering practices and standards.</li> </ul>

## 7. INTEGRATING ASSET MANAGEMENT WITH OTHER FUNCTIONS

Different line functions within Thembisile Hani LocalMunicipality which all collectively form Thembisile Hani LocalMunicipality's organisational structure enable the Municipality to provide the necessary services. Thus, asset management is not stand-alone. A key factor for successful asset management is integrating asset management processes, activities and data with those of other organisational functions, e.g., Finance. To effectively implement asset management, there is a need to recognise the relationships between each of the functions and processes to support these functions.

Senior management is responsible for aligning asset management and the asset management system to other organisational functions, practices and management systems through collaboration. Thembisile Hani LocalMunicipality must adopt appropriate business model that will provide seamless integration of all the Municipality's capabilities and processes. Process Control Manuals (PCMs) or operational procedures need to be developed to describe the process designs/requirements at the appropriate level with the intention to provide a holistic view of all the key elements of the processes, and subsequently, the supporting ICT systems.

When planning for asset management, it is essential that PCMs are recognised and that the impact they might have on activities and decisions are considered. This includes PCMs that support asset management activities, or are integral to the performance of asset management activities.

### 7.1. Asset Management Policy, Strategy (AMS) and Asset Management Objectives

The asset management policy provides direction to Thembisile Hani LocalMunicipality's AMS. The documented asset management policy is aligned to Thembisile Hani LocalMunicipality's objectives and the Integrated Development Plan (IDP).

As a result, the asset management policy provides means of determining or defining the asset management objectives and the related plans (i.e., AMPs) which will feed into the IDP, thus providing the golden thread between asset management and the Municipality. Thus, the asset management policy provides a basis for alignment between the asset management activities and the day-to-day activities undertaken by the Municipality throughout the life cycle stages of the assets.

The asset management policy encapsulates the key drivers impacting asset management, reflects the values of Thembisile Hani LocalMunicipality and aligns with Thembisile Hani LocalMunicipality's strategic imperatives. As a consequence of this, Thembisile Hani LocalMunicipality's asset management policy is geared towards enabling Thembisile Hani LocalMunicipality's core mandate. Thembisile Hani LocalMunicipality's asset management policy is included in Section 3 of this document.

### 7.2. Setting of Asset Management Objectives

The Asset Management Steering Committee will facilitate the process of setting the asset management objectives on an annual basis. The intent is to have the process running independently of the current planning processes. This will allow the identification of asset management objectives, with representatives from different functions within the Municipality.

Once completed, each discipline (within the Infrastructure / Technical function) will review the objectives and identify specific initiatives to support the achievement of such objectives, this will be in a form of an asset management plan. AMPs will identify the required resources, associated timelines for the initiatives, the associated cost, as well as relevant dependencies. When setting asset management objectives, the objectives of other functions will be considered in the process.

As the asset management system matures, the setting of asset management objectives will remain an annual process, however, this process will directly align with the integrated planning process to ensure asset management priorities directly align with Thembisile Hani LocalMunicipality's imperatives.

The monitoring of asset management objectives is important for the purposes of ensuring corrective actions are proactively implemented through identification of deficiencies or shortcomings in the attainment of asset management objective

## 8. DECISION MAKING AND RISK MANAGEMENT

Decision making fundamentally underlies the planning process. Optimised decision making should focus on the following areas:

- **Capital investment decision making:** Allocate capital for both acquisition of new assets and for asset refurbishment.
- **Operation and maintenance decision making:** Optimise the operation and maintenance activities while reducing the costs.
- **Life cycle value realisation:** Optimise the decisions over the entire asset system or portfolio to maximise the total value achieved. This involves using life cycle cost assessment and value optimisation. Additional focus on ageing assets may need to be considered.
- **Resourcing strategy:** Determine how to deploy resources optimally to execute the AMPs.
  - **Outage strategy:** Optimise the use of outages and the completion of work within outages.

The AMS identifies areas where additional integration and standardisation between these disciplines and other functional areas will improve THLM's asset management performance.

### 8.1. Decision Making Approach

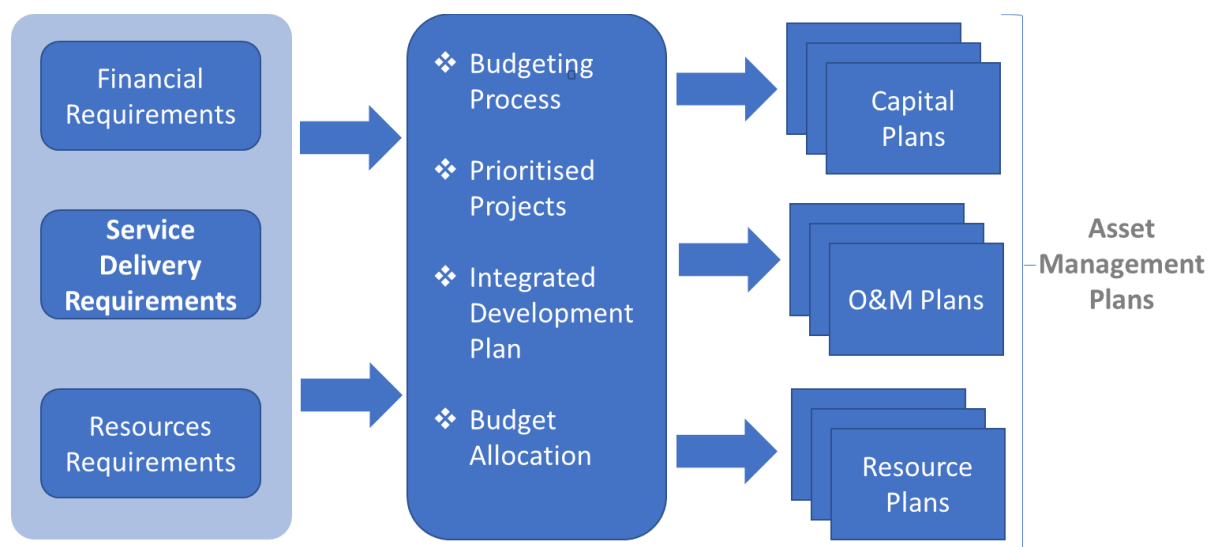
The strategic approach to decision making followed at Thembisile Hani Local Municipality is to devolve primary responsibility to the disciplines but to maintain a review the AM capability at AM Steering Committee level. The AMS identifies requirements and interfaces that must be addressed as part of the discipline decision-making process.

#### 8.1.1. Capital Investment Decision Making

Capital investment decision making is the process of allocating capital for both acquisition of new assets and for asset refurbishment. Principles of capital decision making is captured in the diagram below.

- Capital investment decision shall be optimised for life cycle cost, including the effect of risk in terms of both timing and choice of solution. Where applicable both operational and non-asset alternatives shall be considered.
- The projects shall be selected and optimised considering the following:
  - Investment opportunities are identified based on operational requirements, strategic imperatives, or identified risks or opportunities. Alternatives to address an investment opportunity are generated (including Capex, Operational expenditure and non-asset solutions). A preferred option is selected.
  - Projects that implement the optimal set of benefits/opportunities are selected. This portfolio is selected and prioritised considering the following:

- Identify investment opportunities that must be completed due to a legal or regulatory requirement or commitment.
  - Where there is backlog of capital projects, the discipline shall be responsible for considering the timing of the projects to fit within cash-flow constraints. The timing of the projects shall be considered as part of the optimisation process.
  - Areas where increased benefit to Thembisile Hani LocalMunicipality can be achieved through the combination of projects in various Disciplines are identified and the priority of these projects may be adjusted.



**Figure 3.1: Principles of Capital Decision Making**

### 8.1.2. Operation and Maintenance Decision Making

Optimise the benefit from operation and maintenance activities while reducing the costs.

- Optimisation of the operation and maintenance planning for the individual assets should be considered. This planning includes the development and optimisation of maintenance strategies for the equipment and the resourcing necessary to execute the work.
- The Technical Director / Manager will review and provide assurance that the approach to optimising the operation and maintenance plans is adequate and identify areas for further improvement.

### 8.1.3. Life Cycle Value Realisation

Optimise the decisions over the entire asset system or portfolio to maximise the total value achieved. This involves using life cycle cost assessment and value optimisation. Additional focus on ageing assets may need to be considered.

- Measures will be put in place to ensure that the best value for money plans are implemented. These include:

- Improved assessment of life cycle costs, risks, asset performance and benefits calculated over the life of assets or asset systems.
- Focus on improving the value derived at asset level.
- The assessment of life cycle cost and value applies to both capital and operation and maintenance decisions.
- Where necessary, specific strategies will be developed and documented to manage ageing assets. These will ensure that the asset performance is forecast and monitored, the approach to operating the assets to end of life (fix-on-fail or planned replacement) is determined, the end of economic life for each asset is determined.

Note: End of economic life may be driven by loss of performance, increase in operating cost, falling reliability, unacceptable increase in risk of catastrophic failure, or externally driven by change in regulation.

#### 8.1.4. Resourcing Strategy

Determine how to deploy resources optimally to execute the AMPs. Resourcing of asset management activities is the responsibility of the line managers. The resourcing strategy is part of the broader process of prioritisation and optimisation. This strategy is to address:

- The required resources to execute the AMPs. Where the resources shall be sourced (internal or outsourced)
- Spares management approaches, the management of stock levels as well as critical spares and raw materials. Where necessary, modular or standardised spares shall be considered.

#### 8.1.5. Outage Strategy

The Disciplines (Water, Sanitation & Electricity) should manage the process to optimise the use of outages and the completion of work within outages. This is documented in the discipline specific AMPs.

### 8.2. Asset Management Risk Management Approach

Thembisile Hani LocalMunicipality is operating ageing assets within a system that is under pressure due to capacity constraints. A key focus for Thembisile Hani LocalMunicipality is to manage the associated asset risks effectively to achieve the objectives. An integrated risk management approach to manage operational risks is necessary. This approach provides a capability to manage the risks identified during operations and the execution of projects.

In addition, it is especially important to control the risk represented by ageing assets. These need to be considered by a framework of determining the criticality of assets and monitoring the actual asset health with the aim to predict when the assets will no longer be fit-for-service. This is identified as a key area for improvement. The information gathered from the use of asset health and critically should be used to identify risks and possible risk mitigation actions either involving investment or changes to operation and maintenance.

### 8.2.1. Asset Criticality

Asset criticality is to be used in the asset management framework as an assessment of the consequence of asset failure. Knowledge of the criticality of the assets is part of identifying when there is a need to intervene to ensure performance objectives are met. The asset criticality model enables a systematic approach towards setting performance targets, and adopting asset management strategies that are differentiated based on the consequences of failure of the asset.

An asset criticality model should be developed for the assets that comprise the Asset Base.

### 8.2.2. Asset Health

The objective of the asset health assessment is to reflect the remaining expected useful life (or condition) of an asset. This is a proxy for the probability-of-failure and is used in conjunction with asset criticality to identify when and where there is a need to intervene to meet the set performance objectives of Thembisile Hani LocalMunicipality's assets.

The aim is to use asset health indices to prioritise interventions and forecast the future impact of investment scenarios. Asset health indices can be prepared for individual assets or classes of assets.

- An asset health index methodology will be developed and applied to the assets that comprise the Asset Base (starting with the assets of the highest criticality followed by the assets that have the highest risk).

### 8.2.3. Operational Risk Management

Thembisile Hani LocalMunicipality has adopted a structured approach to the management of operational risk. This approach uses consistent approaches to the assessment and treatment of all types of risks, at all levels and for all activities in the Municipality.

The responsibility for the management of risk rests with line management. Those accountable for the management of risks are also accountable for ensuring that the necessary controls remain in place and are effective at all times. Control assurance will focus on improving the ability to manage risk effectively, consequently, the Municipality can quickly and confidently act on opportunities to improve and sustain the quality and continuity of services, create value and achieve sustained growth.

Risk management involves achieving an appropriate balance between realising opportunities for gains while minimising adverse impacts. It is a process consisting of steps that, when undertaken in sequence, enable continuous improvement in decision making and facilitate continuous improvement in performance.

Risk management is completed at all levels of the Municipality and across all stages of the asset life cycle.

## 9. ASSET MANAGEMENT ORGANISATIONAL ROLES

This section describes the roles, responsibilities, authorities and accountabilities for performing our asset management activities.

### 9.1. Roles, Responsibilities, Authorities and Accountabilities

All persons assigned roles and accountabilities that can have an impact on asset management will have those roles and accountabilities communicated to them, be provided with the necessary training, education, development and other support needed to perform their role, and be able to demonstrate the required competence.

#### 9.1.1. Role of Thembisile Hani LocalMunicipality Leadership in Asset Management

Leadership and commitment from all managerial levels is essential for successfully establishing, operating and improving asset management within Thembisile Hani LocalMunicipality.

#### 9.1.2. Roles to Establish the Asset Management System

An individual is to be appointed by senior management to take responsibility for the overall design, maintenance, documentation, review and improvement of Thembisile Hani LocalMunicipality's asset management system, with the appropriate authority and accountability to carry out their responsibilities.

The Asset Management Steering Committee that is established will comprise of members from all internal departments / functions within THLM, with the following mandate:

- Oversee the development, implementation, maintenance and continual improvement of the asset management system.
- Review and monitor asset management system performance.
- Govern the development, execution and performance measurement of AMPs.

#### 9.1.3. Roles to Develop Asset Management Plans

As asset management activities are managed at an operational level, therefore AMPs will be developed at functional level, for major assets in the municipality.

#### 9.1.4. Roles to Update the Asset Management System

Changes to the asset management system will be the responsibility of the appointed individual having overall responsibility for the asset management system.

Each proposed change effecting the AM policy, AMS and asset management objectives will be reviewed, considering appropriate risks, to ensure continued alignment with Thembisile Hani LocalMunicipality's strategic goals and to ensure the Municipality has the capability to deliver on any change made.

Any change to the asset management system will be communicated to all stakeholders that could be affected by the changes.

#### 9.1.5. Internal Review Roles

Thembeziile Hani LocalMunicipality will develop processes to provide for the systematic measurement, monitoring, analysis and evaluation of its assets, asset management system and asset management activities on a regular basis. These results will be communicated to all relevant stakeholders.

#### 9.1.6. Management Review Roles

The purpose of the asset management review is to perform an executive level independent and objective review of the asset management system processes to ensure continuing suitability, adequacy and effectiveness of the asset management system. This role will be undertaken by an appointed management review team.

### 8.2. Communications

Asset management communications plan(s) will be developed in order to identify the appropriate method of communication and frequency of communication with each group of stakeholders.

## 10. STRATEGIC ASSET MANAGEMENT INITIATIVES

Thembeziile Hani LocalMunicipality's AMPs aligns the strategic direction and the day-to-day activities of managing the assets. This is done through aligning the "top down" aspiration of the Municipality with the "bottom up" realities and opportunities of the assets through an iterative process.

AMPs will be developed in support of the AMS, which will be based upon the following key elements:

- Taking a life cycle approach.
- Developing cost-effective management strategies for the long term.
- Providing a defined level of asset performance and monitoring.
- Understanding and meeting the demands of growth through demand management.
- Managing risks and opportunities associated with asset condition and failures.
- Sustainable use of physical resources.
- Continuous improvement in asset performance and management practices.

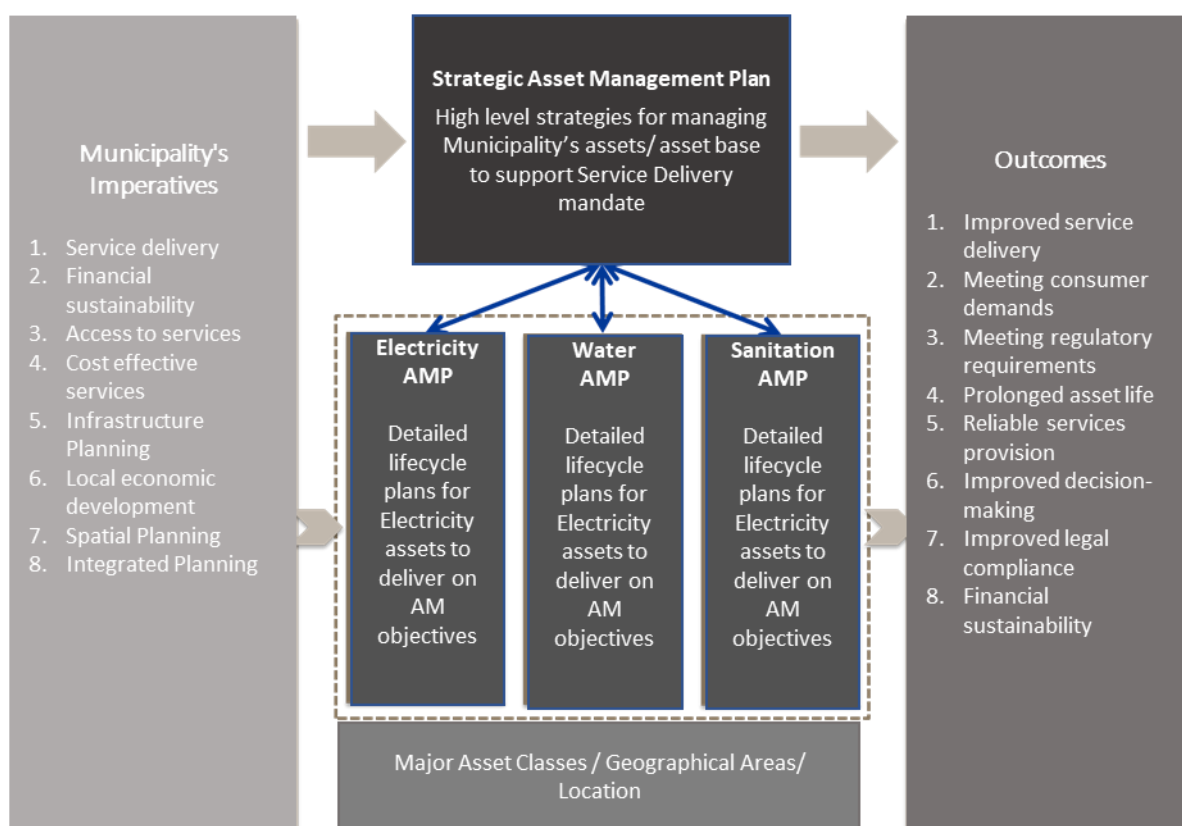
#### 10.1. Development Process for Asset Management Plans

AMPs provide for related planning decisions for the Municipality's assets. Given the AM strategy and objectives, the Municipality needs to determine what it needs to do and when do to do it in order to optimise the performance and utilisation assets as to reach the AM

objectives and targets. Planning needs to include consideration for solutions that do not require additional assets in order to achieve the service delivery objectives.

The majority of asset management activities are managed at an operational level; therefore, AMPs will not be developed on a Municipal level, but on the basis of a class of assets or services, i.e., Electricity, Water and Sanitation as indicated in the diagram below. The AMS develops the initial AMPs by utilising and leveraging existing information from the IDP, procedures and processes, Operational Plans, Functional Policies, etc. Ultimately, each discipline will develop, optimise and prioritise their plans in conjunction with other functions, taking into account overall benefits, resource requirements, interdependencies, risks and performance impact.

AMP's will be documented in one or many documents separate from the IDP. The alignment of the AMS and AMPs is depicted below.



**Figure 9.1: Aligning the AM strategy with the functional AMPs**

The AMPs will be developed to appropriate time horizons to meet the needs of the Municipality and take account of the period of responsibility and the life of its assets. The complexity of the AMPs will be determined by the size of its asset portfolio and the degree of sophistication in its asset management approach. Each discipline will develop a set of asset management objectives and performance levels for its asset management activities and asset portfolio's that are derived from and consistent with the asset management objectives and other requirements specific to that of the Municipality.

Asset life cycle planning drives the overall asset management functions from a whole-of-life management perspective. Founded on the AMS, the Municipality's asset management is designed to ensure efficient management of assets to deliver reliable services to the communities over the whole life cycle.

In accordance with the asset life cycle management approach, disciplines/functions will consider the following asset life cycle activities when developing their plans:

- Plan for assets
- Design or Select assets
- Procure assets
- Construct assets
- Commission assets
- Operate and Maintain assets
- Dispose of assets

The Thembisile Hani LocalMunicipality approach to Risk Management will be followed when identifying, analysing and evaluating risks. The focus should be on the assets involved, including the management and control activities that may affect the asset's performance. The Functional disciplines will create and demonstrate a link between the actions that addresses the risks and the Thembisile Hani LocalMunicipality approach to risk management and business continuity planning. The AMPs will include the specific tasks required, the designated responsibility as well as the time scale, as to effectively execute it. AMPs capture the current performance, future requirements and performance, the actions in the form of plans to address the gaps, challenges, constraints and risks identified.

[The suite of plans may consist of the following:

- Operation and maintenance plans.
- Financial plans.
- Refurbishment / Outage plans.
- Asset management activity type plans (e.g., work management as part of maintenance delivery, operator instructions as part of asset operations, etc.).
- Risk and opportunities management plan, including contingencies.
- Resourcing plans.

Further to the content as described above, each discipline can identify additional inputs and outputs specific to their asset management activities and asset portfolios, e.g., Life of Plant Plans, Technical Plans, etc. that are critical for the effective management of their assets.

## 10.2. Implementation Processes for Asset Management Plans

For the implementation, Disciplines will establish planning and control processes in order to support the effective delivery of the activities/actions contained in the AMPs. Processes will include who is responsible for the defined activities/actions, including how risk arising from the execution will be managed and controlled. Infrastructure Division will commit resources that are identified in the AMPs as being necessary, in order to achieve its planned objectives. The

AMPs will be communicated to all relevant stakeholders at a level of detail appropriate to their participants or business interest.

### 10.3. Monitoring Processes for Asset Management Plans

AMPs will include evaluation mechanisms to measure their effectiveness against the targets and outcomes of the AMS and the asset management objectives.

### 10.4. Review of Asset Management Plans

AMPs will be reviewed on a regular basis to ensure continual alignment with the asset management objectives and changing environment. Disciplines will assess the ability of their AMPs to support the achievement of the asset management objectives.

## 11. PERFORMANCE EVALUATION AND IMPROVEMENT

This section outlines performance monitoring and the necessary mechanisms for optimising or improving Thembisile Hani LocalMunicipality's asset management system.

### 11.1. Performance Monitoring

Monitoring the performance of the asset management system is an ongoing process. Thembisile Hani LocalMunicipality will develop processes for evaluating the performance of the asset management system.

The results obtained from evaluating the performance of the asset management system will be used to identify patterns and obtain information regarding its performance to enable Thembisile Hani LocalMunicipality to evaluate whether the policy and asset management objectives are being achieved and to identify corrective actions and areas for improvement. Recommendations will be collated and suggested ameTHLMents prioritised.

### 11.2. Assessments

Assessment will be conducted regularly in order to determine that the asset management system conforms to Thembisile Hani LocalMunicipality's requirements and is effectively implemented and maintained.

Thembisile Hani LocalMunicipality will define the assessment criteria and scope for each assessment, select objective and impartial assessors, ensure that the results of the assessments are reported to relevant stakeholders and retain documented information on the assessments.

### 11.3. Management Review

A management review team (or secOTHLMents from the Asset Management Steering Committee) will review the Thembisile Hani LocalMunicipality's asset management system annually to ensure its continued suitability, adequacy and effectiveness.

The outputs from the management review will be documented and available for communication and consultation and will typically include any decisions, actions, responsible parties and schedules related to:

- Improvement of the asset management system and its processes.
- Improvements to the asset management policy, objectives and KPIs.
- Preventive actions to be taken.
- Resource needs.

Documented information will be retained as evidence of the results of management reviews.

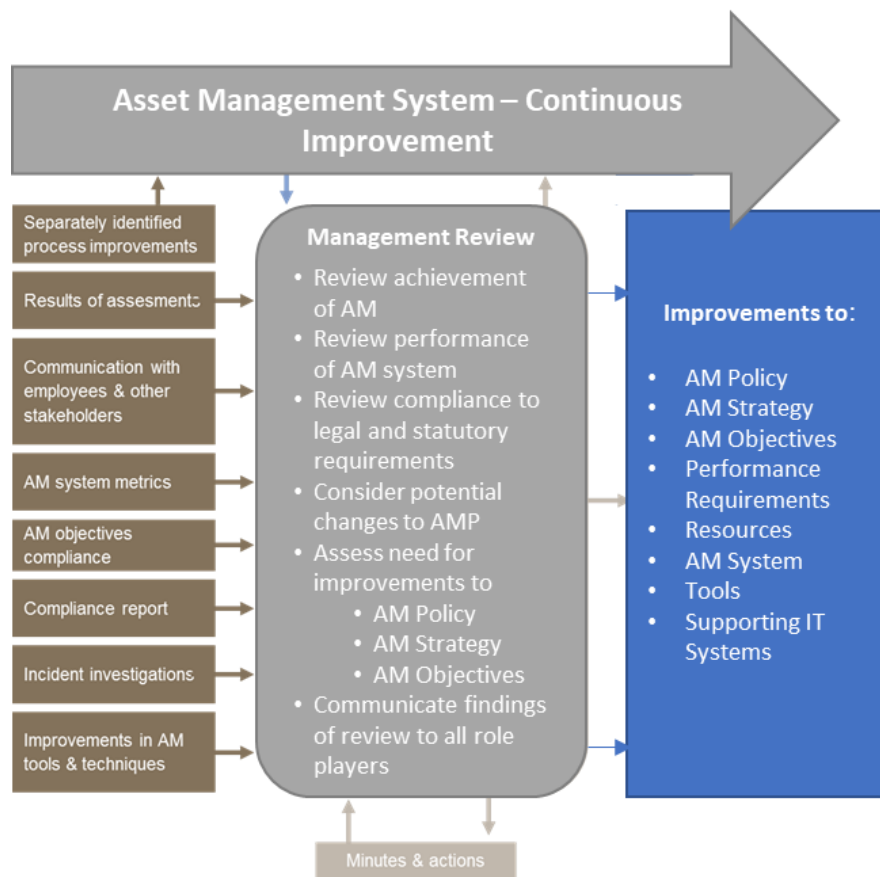


Figure 10.1: Management Review Process

### 11.4. Non-conformance and Corrective Action

When a nonconformity occurs on the asset management system, the Municipality will:

- Take action to control and correct it and deal with the consequences.

- Evaluate the need for action to eliminate the root causes.
- Implement any action needed.
- Review the effectiveness of any corrective action taken.
- If necessary, make changes to the asset management system.

Thembisile Hani LocalMunicipality will retain documented information as evidence of the nature of the non-conformities and any subsequent actions taken and the results of any corrective action.

#### 11.5. Preventive Action

Thembisile Hani LocalMunicipality will establish processes to proactively identify potential failures in the asset management system. When a potential failure is identified, the requirements of the established non-conformity and corrective action process will be followed.

#### 11.6. Continual Improvement

Continual improvement is regarded as an ongoing iterative activity, with the aim of delivering on the Municipality's asset management objectives. New asset management related practices will continually be identified and evaluated to establish their potential benefit and be incorporated into the asset management system as appropriate.