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Strategic Asset Management Plan 2022

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Acknowledgement

We acknowledge the traditional custodians of the lands and waterways upon which the University of Southern Queensland is located. In developing our Strategic Asset Management Plan 2022, we celebrate the continuous living cultures of First Australians and recognise and respect the wisdom and diversity of Aboriginal and Torres Strait Islander people as the keepers of ancient knowledge whose cultures and customs continue to nurture this land. We pay our respects to Elders - past, present, and future.

Executive Summary

This Strategic Asset Management Plan (SAMP) will contribute to the following mission; "*The University of Southern Queensland will be renowned for our innovation and excellence in education, student experience, research and engagement.*"

In alignment with its strategic objectives and best practice, the University of Southern Queensland has initiated a process of developing and implementing strategic asset management aligned with ISO 55000 and ISO 55001, which are the international standards for asset management. Strategic asset management is the holistic operation of an asset portfolio in support of organisational objectives, having regard to the needs and constraints of that organisation whilst acting as a strategic enabler.

Strategic asset management will enable the University to coordinate all activities associated with managing its assets in order to achieve specific asset management objectives to the benefit of the University. The SAMP will guide the development of the organisation's asset management system and activities. The SAMP is relevant to the current context of the University as well as the current asset management maturity of the University in dealing with its strategic challenges. The SAMP should be reviewed every five years with regular measurement of progress against the current plan.

The SAMP guides the facilities management team towards achievement of the University of Southern Queensland's Strategic Objectives:

1. **Our Impact** – *Build a better future with our communities*;

2. **Our Connections** – *Translate ideas and knowledge into opportunities*;

3. **Our People** – *Be innovative, enagaged and forward-thinking*; and

4. **Our Places** – *Create vibrant hubs of education and research*.

A Maturity Assessment was conducted by Aurecon, utilising the asset management framework defined by the Global Forum on Maintenance and Asset Management (GFMAM). The Maturity Assessment formed the basis for the identification of improvement projects to develop the University's asset management capability; it also formed the foundation of the SAMP by identifying the organisation's key priorities and goals for the asset management activities. The Maturity Assessment assessed the University as 'Developing' (overall score of 2.0 out of 5). Level 2 indicates the University is in a transition stage and evolving. The University has identified the means of systematically and consistently achieving the requirements of ISO 55000 and can demonstrate that these are being progressed with credible and resourced plans in place. Processes are planned, documented (where necessary), applied and controlled at a local level or within functional departments; often in a reactive mode but could achieve expected results on a repeatable basis. The processes are however insufficiently integrated, with limited consistency or coordination across the organisation. The AM maturity score is an evaluation against the ISO 55000 standards and not a reflection on the overall asset management capabilities and performance of Facilities Management. The identified improvement projects will be the catalyst for improving the AM System.

The focus improvement areas for the University are outlined below:

- Uplift knowledge and capability in the asset management system.

- Embed the University's Project Management Framework.

- Employ the facilities management information system requirements.

- Entrench the Asset Management Framework.

- Develop and implant asset management governance and stakeholder engagement processes.

Facilities Management is currently drafting a Total Asset Management Plan, which is documented information that specifies the acitviites, and resources required for the built assets to achieve the asset management objectives

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Terms and Abbreviations

Term	Description
AIM	Asset Information Model
AM	Asset Management
AMIS	Asset Management Information System
CAPEX	Capital Expenditure
CRC	Current Replacement Cost
DVCES	Deputy Vice Chancellor Enterprise Services
EDFM	Executive Director Facilities Management
FM	Facilities Management
IAM	Institute of Asset Management
IREA	Independent Reviewer and Environmental Auditor
IS	Infrastructure Sustainability
JAMS	Job and Asset Management Information System
KPI	Key Performance Indicator
MRG	Management Review Group
O&M	Operations and Maintenance
OPEX	Operational Expenditure
REF	Review of Environmental Factors
SAM	Strategic Asset Management
SAMF	Strategic Asset Management Framework
SAMP	Strategic Asset Management Plan
SDG	Sustainable Development Goals
TAMB	Tactical Asset Management Brief
TAMP	Total Asset Management Plan
USQ	University of Southern Queensland

1. Introduction

1.1. Document Purpose

The primary purpose of this SAMP is to align the strategic and operational goals of the University with the development and management of the University's asset portfolio.

This SAMP sets out the University of Southern Queensland's built asset management strategy: the long-term approach to management of its assets, which is both derived from and consistent with the University's Strategic Plan and the SAMP. It specifies the direction, objectives, and actions for the active management of the University assets, comprising:

- Asset management objectives and the path towards achieving them;

- Asset portfolio requirements and their role in supporting the University's strategic objectives; and

- The strategic asset management framework which governs the asset portfolio.

1.2. Document Scope

This SAMP applies to all University's owned infrastructure, in line with the University's Strategic Asset Management Framework. This includes, but not limited to:

- Infrastructure such as buildings, athletic and recreation facilities, plant and equipment, inground services, sanitation facilities, classrooms, laboratories, theatres, and study halls;

- Outdoor spaces such as roads, walkways, fountains, ovals, statues, signs, lighting, monuments and courtyards;

- Organisational units that are part of the University such as departments, colleges, centres, and institutes.

1.3. Document Context

The development and implementation of this SAMP has been guided by the Facilities Management's asset management objectives. These asset management objectives are 'what' the Facilities Management and University will do towards alignment and implementation of the University's Strategic Plan 2021 - 2025 from an asset perspective.

2. Organisation Overview

2.1. Business Overview

Established in 1967, the University of Southern Queensland is one of Queensland's most prominent regional universities, driven by three core values of Respect, Integrity and Excellence. From its origins as a single campus education institution, the University today operates over a four-campus model, Online, Toowoomba, Ipswich, and Springfield, each with its own unique characteristics and growth opportunities. Approximately 27,500 students are enrolled at the University, with more than 75% of students choosing to learn via the University's online education platform, UConnect.

The University and the broader higher education industry are subject to multiple macroscopic trends which guide the University's Campus Master Plan for the future of its facilities. Trends which have been identified are:

- **Students and educators as consumers**: The competitive frontier in education necessitates investment in an extraordinary student experience in terms of learning outcomes, engagement, support, and culture.

- **The end of face-to-face lectures**: A new norm for learning, with digital delivery now expected by default due to its flexibility and accessibility. Digital engagement and curriculum delivery optionality are vital areas of focus to meet student expectations.

- **Trans-disciplinary teaching, learning and research**: Crossing boundaries for critical thinking is vital as traditional silos in academia break down and it becomes more common for individuals to have multiple different careers. The University must build an innovation mindset with adaptable spaces and infrastructure that encourage trans-disciplinary engagement.

- **Strong industry partnerships**: Creating connections for advanced research and learning is paramount to enable improved flows of capital to researchers and student exposure to industry experience. The focus must be on industry outreach and internal governance and advisory services to drive these partnerships.

- **The campus experience**: Fun, growth, and safety in a unique place. An essential element of student experience is the peer-to-peer learning and engagement, through the creation of fun and safe spaces.

- **Competing globally**: A changing model of operation. The attraction of online international students through learning engagements, the attraction of on-campus international students requires high-quality accommodation, stable governance, and campus safety.

- **Academic workplace**: A key focus on university staff. Post pandemic there is a diminishing return of staff to the physical workplace, greater engagement within shared spaces, with an expansion towards cloud-based faculties and shared use of the campuses generally.

- **Sustainability**: Universities are leading the climate change debate by example. Universities are at the forefront of sustainability development by developing charters, aligning objectives with strategic plans, and creating targets towards carbon neutrality and net zero emissions.

- **Strengthening pathways**: By connecting with local schools to attract future students, the University will also create the next generation facilities for tertiary level science, technology, engineering, maths, and arts (STEAM).

- **Coming Together**: An engaging urban realm for the community, universities are increasingly providing retail, cultural and food and beverage options that support the region and local community.

2.2. Business Strategy and Objectives

The Strategic Asset Management Framework involves integrating this document (the SAMP) with the University Strategic Plan 2021-2025. The SAMP has been developed with due consideration of the following elements of the University's **Aspirations**, being the **Mission** and **Strategic Vision,** Six **Key Performance Measures, and the** Four strategic **Focus Areas.**

The **University Strategic Plan 2021 – 2025** are set out as follows:

University of Southern Queensland
STRATEGIC PLAN 2021–2025

OUR ASPIRATIONS

VISION

The University of Southern Queensland will be renowned for our innovation and excellence in education, student experience, research and engagement.

MISSION

Building on our strengths as Australia's leading regional university, we will realise our vision by creating and sharing knowledge, transforming lives and solving the problems that matter to our world.

VALUES

RESPECT

We respect each other and value diversity of people, culture and ideas within USQ's community.

INTEGRITY

In all we do, we apply and expect the highest personal, professional and ethical standards. Together we act with transparency, consistency and fairness.

EXCELLENCE

Through expertise, innovation and creativity, we work together to excel in all that we do as a University community.

OUR STRATEGIC PLAN

We acknowledge the traditional custodians of the lands and waterways upon which the University of Southern Queensland is located. In developing our Strategic Plan, we celebrate the continuous living cultures of First Australians and recognise and respect the wisdom and diversity of Aboriginal and Torres Strait Islander people as the keepers of ancient knowledge whose cultures and customs continue to nurture this land. We pay our respects to Elders past, present and future.

Our new Strategic Plan is being brought to life at a time of increasing disruption in our global community. Building upon our signature strength of flexible, innovative education, we will continue to focus on student success as we transform our teaching and research to grow our student population and research capacity. We will achieve national and international recognition for our flagship areas of agriculture, health, space and defence and regional development.

Our aspirations will be achieved by engaging locally and globally to translate ideas and knowledge for the benefit of our communities. Our work will have regional relevance, national significance and global impact.

The University will grow, be innovative, engaged and future-focused, embracing the opportunity to develop a culture of disruption. We will harness our reputation as Australia's leading regional university for the development and benefit of our stakeholders.

Over the coming decade, the University of Southern Queensland will embrace the opportunities of a fast changing world, building a university culture that values and rewards innovation and creativity, demonstrating always the value that an open and engaged university brings to its communities.

OUR PERFORMANCE

Our success will be evaluated by measuring our performance in the following areas:

- Growing our student population and broadening participation in higher education
- Being the University of choice across our regions (for staff and students)
- Delivering an outstanding student experience and outcomes
- Growing the quality and quantity of research outcomes
- Contributing to the sustainable development of our communities
- Maintaining our capacity for investment into our future

This plan will be brought to life through the University's Integrated Planning Framework as it is cascaded through a set of core business and enabling strategies. The University Council will monitor and evaluate progress regularly, through out the life of the plan.

BUILD A BETTER FUTURE WITH OUR COMMUNITIES — OUR IMPACT

Solving problems that matter starts with local solutions to global challenges.

The University of Southern Queensland will:

- Empower Aboriginal and Torres Strait Islander peoples to take their rightful place in our teaching, research and enterprise.
- Prioritise innovative educational offerings that are a catalyst for transforming the lives of students, their families and communities.
- Through our innovative research, develop new knowledge and new ways of looking at problems to deliver creative solutions to the challenges we face.
- Support our students to amplify their life and work experiences through life-long educational pathways as they become leaders in their chosen field.
- Partner with our communities as a responsible corporate citizen to achieve a better and sustainable future for all.

TRANSLATE IDEAS AND KNOWLEDGE INTO OPPORTUNITIES — OUR CONNECTIONS

Ideas and knowledge empower people, organisations and communities to change the world.

The University of Southern Queensland will:

- Extend the impact of our teaching and research in our flagship areas through active engagement and translation with industry and community.
- Create new sources of value by better leveraging international partnerships and alumni networks.
- Act as a catalyst for economic and community development by enabling new and emerging industries to be successful and sustainable.
- Build and strengthen shared purpose across our communities through engagement and philanthropy.

BE INNOVATIVE, ENGAGED AND FORWARD-THINKING — OUR PEOPLE

The new world of work requires organisations to embrace change and transform their practice.

The University of Southern Queensland will:

- Enable a learning, research and working culture that drives innovation and collaboration and focuses on the future.
- Evolve our education and research offerings to strengthen resilience and enterprise in our students, industries and communities.
- Foster a safe, diverse and inclusive university culture and environment that enables everyone to achieve their potential.
- Build our capability to drive insights and impact from our data.
- Maintain a strong financial position to enable us to seize opportunities and invest in the future.

CREATE VIBRANT HUBS OF EDUCATION AND RESEARCH — OUR PLACES

As an open and engaged university we will create places that inspire creativity and innovation.

The University of Southern Queensland will:

- Provide cutting-edge social-learning and collaborative experiences for students, staff and partners through our physical and virtual campuses.
- Support community-level innovation that brings new ideas, skills and technologies to life.
- Increase industry and community use of our campuses, creating opportunities for collaboration, innovation and a vibrant university experience.
- Drive the ongoing digital transformation of our operations.

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3. Asset Management Overview

3.1. Asset Management Concepts

Asset Management is the process of using assets to deliver value and achieve the organisation's business objectives. Asset Management can be defined concisely as:

"*The coordinated activities of an organization to realise value from its assets*," (ISO 55000, clause 3.3.1).

The key terms in this definition have the following meanings:

- Coordinated activities refers to all works undertaken on assets across the entirety of the asset lifecycle, from demand planning all the way through to decommissioning.

- Realising value refers to an organisation obtaining the desired levels of service from their assets, which can directly or indirectly contribute to the organisation's financial performance.

- Assets are defined as an "item, thing or entity that has potential or actual value to an organisation" (ISO 55000, clause 3.2.1). Whilst historically this has typically referred to physical assets such as buildings, plant and equipment, assets also encompass to an organisation's data, intellectual property, skills and capabilities (a.k.a. human capital), and more.

3.2. Asset Management Objectives

The University's Asset Management Objectives have been developed as a logical extension of the University's Strategic Objectives (see Section 2.2). The role of Asset Management is to support the achievement of the University's strategic goals, and the role of Asset Management Objectives is thus to provide the overarching impetus for Asset Management activities in support of these Strategic Objectives.

Nine (9) Asset Management Objectives have been developed from the main objectives within the University of Southern Queensland's Strategic Plan. These are aligned with both the principles of the Strategic Asset Management Framework (SAMF) and the objectives of the University's Campus Master Plan.

The following table contains the University of Southern Queensland's Asset Management Objectives:

Objective Summary	Asset Management Objective
1. **Clearly Defined Asset Levels of Service**	By defining clear and comprehensive asset levels of service through engagement and consultation, the asset management system will align stakeholder requirements and contribute to high-quality teaching and research, with a key focus on the University's flagship areas and enabling digital infrastructure. (Connections, Places, Impact)
2. **Comprehensive Asset Management Planning**	The asset management system guides and ensures comprehensive asset management planning based on a sound understanding of level of service requirements, predictive demand forecasts, asset lifecycle activities, risk, and finances. (Connections, People)
3. **Assets Deliver Service at Minimum Whole-Of-Life Cost**	Asset performance, condition and sustainability can deliver reliable levels of service, whilst being able to meet expected asset life at minimum whole-of-life cost. (People)
4. **Governance & Oversight of Asset Management Activities**	An asset management committee is established for ensuring the asset management system is fit for purpose, and that its performance is monitored, reviewed, and improved. Performance refers to how well asset management activities are complying with the Strategic Asset Management Framework, and how well the asset base is providing the services required. (People)
5. **Periodic Review and Improvement of Asset Management System**	With periodic reviews, the asset management system will continue to improve to accommodate novel asset technologies and their associated operational, maintenance and legislative requirements. (Connections, Impact)

6.	**Defined Staff Roles and Responsibilities**	The SAMP sets out clear staff roles and responsibilities, including reviews to ensure staff have capability to deliver and can respond to changes in the asset portfolio and level of service requirements. (People)
7.	**Integrated Support for Safety Requirements**	Safety standards and workplace, health, and safety reporting requirements are detailed within the asset management system across the whole asset lifecycle and include reviews of safety performance and regulatory requirements. (People)
8.	**Asset Information Management Standards**	By specifying asset information management requirements in line with the University's enterprise information policy suite, the asset management system enables asset data to be utilised effectively to optimise the asset portfolio. (People)
9.	**Asset Management System aligned to Industry Best Practice**	The asset management system aligns with industry best practice (e.g., ISO55001, International Asset Management guidelines, TEFMA guidelines) and is periodically reviewed to ensure alignment. (People)

Table 1: University of Southern Queensland Asset Management Objectives

The below figure provides a concise summary of the Asset Management Objectives:

Figure 1: University of Southern Queensland Asset Management Objectives Summary

3.2.1. Fit for Purpose Key Performance Measures

Asset requirements have been developed from the Key Performance Measures and focus areas comprising the University's Strategic Objectives. These requirements, which form the basis of the Asset Management Objectives, are documented below:

Key Performance Measure	What does the University require from its assets to achieve this?
Growing our student population and broadening participation in higher education	The asset portfolio provides levels of service which are attractive to prospective students, enabled by a comprehensive asset management system, which supports high-quality execution of teaching, research, and professional roles.
Being the University of choice across our regions (for staff and students)	Asset levels of service, enabled by a comprehensive asset management system, which support high-quality execution of teaching, research, and professional roles.
Delivering an outstanding student experience and outcomes	Asset levels of service contribute to safety, high-quality learning outcomes and excellent campus culture through enablement of social and co-curricular activities.
Growing the quality and quantity of research outcomes	An asset management system that ensures asset levels of service are sufficient to enable research goals.
Contributing to the sustainable development of our communities	An asset management system ensures the lifecycle of all assets is aligned with the University's sustainability goals and requirements. The asset management system provides asset levels of service which allows the University to effectively use teaching and research to advance sustainable development both locally and globally.
Maintaining our capacity for investment into our future	The asset management system incorporates comprehensive forecasting of asset demand and portfolio requirements. The asset management system specifies lifecycle planning for all assets to minimise total cost of ownership whilst maintaining required levels of service and business risk.

3.2.2. Focus Areas

Focus	Goal	the **How** University will achieve it	What does the University require from its assets to achieve this?
IMPACT	**BUILD A BETTER FUTURE WITH OUR COMMUNITIES** *Solving problems that matter starts with local solutions to global challenges.*	• Empower First Nations Peoples to take their rightful place in our teaching, research, and enterprise. • Prioritise innovative educational offerings that are a catalyst for transforming the lives of students, their families, and communities. • Through our innovative research, develop new knowledge and new ways of looking at problems to deliver creative solutions to the challenges we face. • Support our students to amplify their life and work experiences through life-long educational pathways as they become leaders in their chosen field. • Partner with our communities as a responsible corporate citizen to achieve a better and sustainable future for all.	• An asset portfolio which fully reflects the needs and desires of the University's stakeholders, including students, educators, researchers, professional staff and community. AM system is comprehensive enough to incorporate and reconcile all stakeholder interests. • Within our Asset Management Planning, create First Nations Peoples inclusive and culturally safe, sensitive environments.
CONNECTIONS	**TRANSLATE IDEAS AND KNOWLEDGE INTO OPPORTUNITIES** *Ideas and knowledge empower people, organisations, and communities to change the world.*	• Extend the impact of our teaching and research in our flagship areas through active engagement and translation with industry and community. • Create new sources of value by better leveraging international partnerships and alumni networks. • Act as a catalyst for economic and community development by enabling new and emerging industries to be successful and sustainable. • Build and strengthen shared purpose across our communities through engagement and philanthropy.	The asset management system: • ensures asset levels of service contribute to high-quality teaching and research in the University flagship areas, strengthening the University's reputation with alumni and the international university community. • incorporates frequently updated asset demand forecasts, enabling efficient planning, acquisition, and disposal to serve changing stakeholder needs. • is robust and flexible enough to accommodate novel assets, technologies, and their associated operational and maintenance requirements.

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PEOPLE	**BE INNOVATIVE, ENGAGED AND FORWARD-THINKING** *The new world of work requires organisations to embrace change and transform their practice.*	• Enable a learning, research and working culture that drives innovation and collaboration and focuses on the future. • Evolve our education and research offerings to strengthen resilience and enterprise in our students, industries, and communities. • Foster a safe, diverse, and inclusive university culture and environment that enables everyone to achieve their potential. • Build our capability to drive insights and impact from our data. • Maintain a strong financial position to enable us to seize opportunities and invest in the future.	The asset management system includes: • clear, efficient processes for asset acquisition and disposal, enabling agile changes to research and teaching/learning levels of service. • integrating asset safety standards and occupational health and safety reporting requirements, ensuring assets are safe by design to use and maintain. • specifying asset data management requirements in line with the University's enterprise information policy, enabling data analysis and insights. • regularly analysing and reviewing of asset portfolio costs to identify redundant capacity or operational and maintenance activities. • designing the asset management system to prioritise asset portfolio efficiency and effectiveness to minimise operational and maintenance costs, whilst maintaining required levels of service.
PLACES	**CREATE VIBRANT HUBS OF EDUCATION AND RESEARCH** *As an open and engaged university we will create places that inspire creativity and innovation.*	• Provide cutting-edge social-learning and collaborative experiences for students, staff, and partners through our physical and virtual campuses. • Support community-level innovation that brings new ideas, skills, and technologies to life. • Increase industry and community use of our campuses, creating opportunities for collaboration, innovation, and a vibrant university experience. • Drive the ongoing digital transformation of our operations.	• An asset portfolio which fully reflects the needs and desires of the University's stakeholders, including students, teachers, researchers, professional staff, and community. • The asset management system is comprehensive enough to incorporate and reconcile all stakeholder interests. • Assets include up-to-date classroom and digital infrastructure, enabling seamless collaborative learning for online and on-campus students, actively empowering creativity, and innovative thought.

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3.3. The University's Asset Management Roadmap

An Asset Management Maturity Assessment was conducted for the University of Southern Queensland by Aurecon in late 2021/early 2022. The output of this process was an Asset Management Improvement Plan, detailing the findings and results of the Maturity Assessment and detailing improvement recommendations for various aspects of Asset Management capability.

This Improvement Plan has been reviewed and endorsed by the University's FM leadership, and its recommendations developed into a list of projects which are planned to be implemented over the next 3 years. These projects are grouped into 5 major themes, as well as the indicative time horizon between 2022-2024. They are intended to realise the improvements recommended in the Improvement Plan and support the achievement of the University's Asset Management Objectives.

A summary graphic of these improvement project themes can be seen in the figure below, with the full table of improvement projects attached in Appendix B.

Figure 2: Asset Management Improvement Roadmap

4. Current Base

4.1. Asset Portfolio Summary

The University operates four main 'campuses', comprising the three physical campuses of Toowoomba, Ipswich, and Springfield as well as the University's online education presence. Satellite locations with assets under management include the Mount Kent Observatory, the Queensland College of Wine Tourism at Stanthorpe and the Ravensbourne Field Studies Centre.

A summary of the assets located at these campuses is as follows:

- Toowoomba Campus: 120 buildings, 10 ground zones

- Ipswich Campus: 30 buildings, 4 ground zones

- Springfield Campus: 7 buildings, 3 ground zones

- Mount Kent Observatory: 4 buildings and grounds

- Queensland College of Wine Tourism: 5 buildings and grounds

- The Ravensbourne Field Studies Centre: 3 Buildings and grounds

- 90,038 total components in the Asset Register

The breakdown of the University's Asset Portfolio as in the University's Asset Register is shown in Figure 3 below, categorised by asset type:
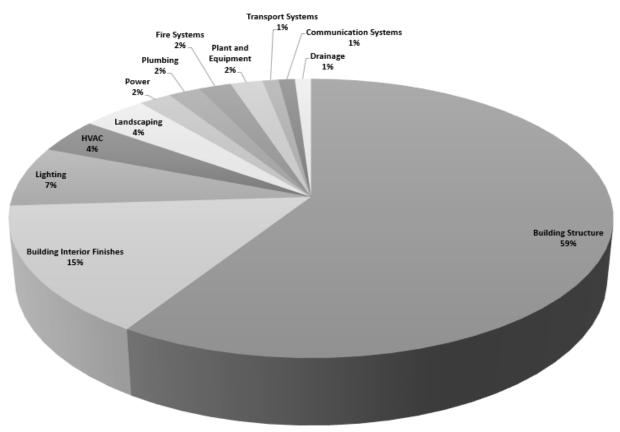

Figure 3: The University's Asset Portfolio Breakdown

5. Asset Management System

5.1. Asset Management System Requirements

5.1.1. Scope of Assets

The University's assets exist to enable the delivery of our teaching, research, engagement, and enterprise objectives in high-quality, safe, and cost-effective environments. The purpose of the University's Strategic Asset Management Framework is to outline the key elements for asset management policy and practice that the University should continue to develop and mature to ensure that its assets are aligned to current and future service delivery including meeting the required level of performance and reliability.

5.1.2. System Structure

The University of Southern Queensland's Asset Management System can be viewed through two different structures:

- The University's Strategic Asset Management Framework

- The Asset Management Documentation Hierarchy, shown in Section 5.8

The structure of the Asset Management System described in this SAMP expands upon the University of Southern Queensland's Strategic Asset Management Framework and is consistent with the University's Asset Management Objectives. The SAMF is based on the global best practice Institute of Asset Management's framework and is aligned to the principles of ISO 55001 Asset Management: Management Systems. The SAMF describes the key functional areas of asset management activity at the University and how these interact, as well as key principles for each function which underpin and expand upon these AM Objectives.

The following diagram outlines the SAMF, comprising the key asset management functions and how they interact with the broader University setting.
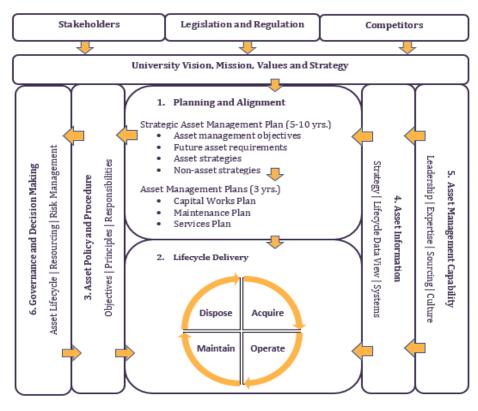

Figure 4: Strategic Asset Management Framework Diagram

As shown in the Framework diagram, the key Asset Management functions are:

1. Planning and Alignment

2. Lifecycle Delivery

3. Asset Policy and Procedure

4. Asset Information

5. Asset Management Capability

6. Governance and Decision-Making

These key functions are expanded upon in detail within this section of the SAMP, with the key elements within each function based on the IAM's Conceptual Asset Management Model.

5.2. Planning & Alignment

The role of the Planning and Alignment function is to ensure the University's asset management activities and resulting asset portfolio are aligned with the organisational objectives. This function comprises many of the documents and activities previously referred to in this Plan. These include:

- **Asset Management Policy:** The vision and intent for the University's asset management activities. The Strategic Asset Management Framework document is currently performing this function.

- **Asset Management Strategy and Objectives:** Defining the University's goals for asset management in support of the Policy/SAMF, and the high-level, long-term approach to asset management activities which will pursue these goals.

- **Demand Analysis**: Forecasting of future demand for asset services, and the requirements of this demand on the asset portfolio.

- **Strategic Asset Management Planning:** Portfolio planning for the asset base to meet forecast demand, and the processes for developing and updating the Policy/SAMF, strategy, and objectives.

- **Asset Management Planning:** Development of the subsidiary plans which govern individual assets or asset groups/classes. Specify the detailed activities, resources, risks, and costs associated with management of each asset, and the levels of service required from it to support the Objectives.

A significant amount of these Planning and Alignment functions have been considered in the University Campus Master Plan 2022.

5.3. Asset Management Decision-Making

AM decision-making refers to the processes and procedures associated with making *changes* to the asset portfolio and associated activities. These processes include:

- **Capital Investment Decision-Making:** Procedures for translating the demand and portfolio planning outcomes into investment decisions regarding asset acquisitions, upgrades, renewals, and disposals. Includes the parallel creation of asset portfolio CAPEX forecasts, which may be built up from subsidiary Asset Management Plan forecasts.

- **Operations & Maintenance Decision-Making:** Processes to set and review the operations and maintenance activities required for each asset so that it may meet its required levels of service.

- **Lifecycle Value Realisation:** Activities undertaken at a whole-of-portfolio level to maximise total benefit of asset ownership to the organisation, through minimisation of lifecycle costs whilst maintaining acceptable risk and

required levels of service. Involves considering the full lifecycle costs and benefits of each asset and evaluating different scenarios or lifecycle management strategies to determine the optimal approach.

- **Resourcing Strategy:** Processes and activities for acquiring the necessary people, equipment, and materials to manage the asset portfolio in support of the Asset Management Objectives. Includes not only what resources will be required and when, but the strategy for how this will be achieved – particularly decision-making around internal resourcing versus outsourcing.

5.4. Lifecycle Delivery

The Lifecycle Delivery function involves the activities to acquire, operate, maintain, and dispose of assets. Lifecycle delivery includes the day-to-day management of the asset portfolio; works which represent most of the asset-related expenditure as well as most of the time and effort in terms of asset management activities.

Lifecycle Delivery elements include:

- **Technical Standards and Legislation:** The development, updating and enforcement of internal policies which are compliant with relevant standards, legislation, and industry best practice.

- **Asset Creation and Acquisition:** The procedure to acquire new assets, primarily comprising construction, installation, and commissioning in the University context. Also includes supporting procedures such as project management, financing arrangements, stakeholder engagement, disruption/contingency planning, and asset handover.

- **Asset Decommissioning and Disposal:** Activities to plan and execute the disposal of assets whilst minimising costs (including any residual liabilities) and risks.

- **Asset Maintenance:** Planning and execution of preventive and corrective maintenance activities on the assets. Includes defining activities, procedures, schedules, maintenance data capture and contingency planning.

- **Asset Operations:** Planning and execution of operating procedures required by an asset to deliver services in support of the organisational objectives. Includes operating activities, procedures, contingency plans, and data capture/event monitoring processes.

- **Resource Management:** Closely related to Resourcing Strategy and involves the management of existing resources – including people, equipment, materials, and funding – to deliver required asset management activities. Includes resource allocation, forecasting and feedback to the Strategic Workforce Plan if resources are unable to meet requirements.

- **Shutdown and Outage Management:** Procedures for planning and executing outages in asset services for the purposes of maintenance or capital works. Includes work planning and procedures for mitigating the impacts upon levels of service to stakeholders.

- **Responses to Faults and Incidents:** Procedures for dealing with incidents regarding the assets, including unplanned outages, security incidents and safety incidents. Includes activities such as fault-finding, emergency/temporary repairs, procedures for escalating situations depending on severity, and plans for coordinating business areas to respond effectively.

5.5. Asset Information

Asset information refers to how the University will manage the data and information associated with the assets. This includes data generated by the assets during their operation and maintenance, as well as all documentation associated with asset management activities including plans, procedures, policies, work orders and incident reports. Asset information must have specified requirements, definitions, storage, and maintenance procedures and use cases.

Elements include:

■ **Asset Information Strategy:** The University's high-level approach to managing asset information to support its Asset Management and Strategic Objectives and includes the definition, collection, storage, maintenance and reporting of information.

■ **Asset Information Standards:** Specifications for asset data structures, requirements and procedures which implement the Asset Information Strategy in detail.

■ **Asset Information Systems:** Systems which collect, store, apply and report on asset information, as specified by the above standards and in alignment with the above Strategy.

5.6. Organisation & People

The Organisation & People function covers activities relating to the people who undertake asset management at the University. It encompasses the structure, roles, and characteristics which an organisation implements to deliver the asset management activities required to support the objectives. This function is particularly vital given the developing nature of asset management maturity at the University, which will involve significant long-term change to established ways of thinking and subsequent ways of working. The key elements of the function are:

■ **Asset Management Leadership:** The leadership of the asset management function within the University required to deliver on the asset management and organisational objectives.

■ **Organisational Structure:** The structure of the organisation to deliver asset management objectives in support of the organisational strategy. At the University this currently takes the form of the dedicated Facilities Management team, although it is an array of asset management roles embedded in various areas across the University.

■ **Organisational Culture:** The culture of an organisation in terms of its ability to deliver on the asset management objectives. How the organisation will build an 'asset management culture' and improve its asset management maturity, through providing education and promoting awareness of asset management best practice.

■ **Capability Management:** The processes used to acquire, develop, and maintain sufficient competent people within the University – specifically in the Facilities Management team – such that they can undertake asset management activities to the required standard and meet the AM Objectives, including capability at all levels, from asset management leadership through to maintenance execution.

■ **Procurement Management:** Processes for ensuring outsourced asset management capability and/or knowledge is monitored and being conducted in a way which is compliant with internal standards and supports the AM Objectives.

5.7. Risk & Review

The Risk and Review function describes supporting activities which underpin the asset management system at large. These activities include risk management of the asset portfolio and activities, asset performance monitoring and subsequent continuous improvement initiatives, and asset management governance. The University's chief priorities in this regard are extending organisation-wide procedures for risk management, sustainability, and change management into an asset management context.

■ **Risk Assessment and Management:** How the University identifies, quantifies, and mitigates against risks to the organisation from an asset perspective.

■ **Asset Performance and Health Monitoring:** Continuously monitoring the *asset portfolio* by measuring asset data against predetermined performance indicators to measure current asset performance and forecast future performance.

- **Asset Management System Monitoring:** Continuously monitoring the asset management system to ensure it remains fit for purpose. Involves periodic evaluation of the structure of the system to identify any gaps or redundancy and evaluating the effectiveness of asset management activities in supporting the objectives.

- **Sustainable Development:** Incorporating sustainability considerations into the asset lifecycle at all stages to ensure the asset portfolio and activities can deliver required levels of service and support the objectives in perpetuity. Includes all aspects of sustainability including environmental, financial/economic, social, and physical.

- **Asset Costing and Valuation:** Ensuring that asset costs are defined and captured accurately and that the assets are valued and depreciated in accordance with university policy. This ensures accurate, quality financial information is used for both asset financial and portfolio forecasting as well as for university-level financial reporting.

5.8. Asset Management Document Hierarchy

The documents, policies and procedures making up the SAMF, as well as the SAMF document itself, all fit within a hierarchy of Asset Management documentation. This hierarchy of documents serves to implement the capability areas outlined in the SAMF above and facilitate the interactions between these areas through clearly defined document scoping.

The hierarchy of AM documentation is detailed further below:

Level of Hierarchy	Description
Stakeholders & Organisational Context	The inputs to the Strategic Asset Management Framework. Stakeholders provide the level of service requirements which help define the Framework. It is further shaped and constrained by applicable legislation, geographic constraints, industry competition and macroeconomic factors.
Organisational Objectives	The objectives set by an organisation to pursue its strategic vision and mission. The University details objectives in its Strategic Plan.
Asset Management Objectives	Stipulate what the organisation requires from its assets to achieve its strategic objectives. Asset Management Objectives provide guidance for both the asset base and the enabling Strategic Asset Management Framework which governs them.
Strategic Asset Management Framework	Also called an Asset Management Policy, this document sets out the intent of asset management within an organisation and the principles by which this should be implemented. At the University of Southern Queensland, the SAMF also specifies the structure and relations between Asset Management functions.
Strategic Asset Management Plan (SAMP)	As described in Section 1.1, the SAMP provides the high-level, long-term description of how an organisation will manage its assets. The SAMP specifies the activities, documents and procedures required to ensure assets are providing sufficient levels of service, guiding the actions to allow the assets to meet the Asset Management Objectives and suborganisation's objectives.

	Plans for the Assets	Tactical and Operational Asset Management Plans provide the detailed lifecycle management plan for a specific asset, asset class or asset area. The AMPs detail the operations, maintenance, and renewal strategy for the asset(s) as well as the scope, level of service requirements, costs and risks associated with ownership.
	Plans for the Asset Management System	Plans which specify various portfolio-wide Asset Management activities that support the management of individual assets i.e., a Risk Management Plan, Information Management Plan, or a Sustainability Plan.
	Asset Base	The individual asset level, where services are provided to the requisite requirements and operations, maintenance and renewals activities are carried out – all in accordance with the plans above.
	Monitor, Review and Improve	Assets generate data which is stored and used to improve the asset itself and the wider Asset Management system. Processes are in place to capture this data and utilise it for continuous review and improvement of the documents above.

Table 2: Description of Asset Management Documentation Hierarchy

The following figure displays the position of the SAMP within the University's AM documentation hierarchy:
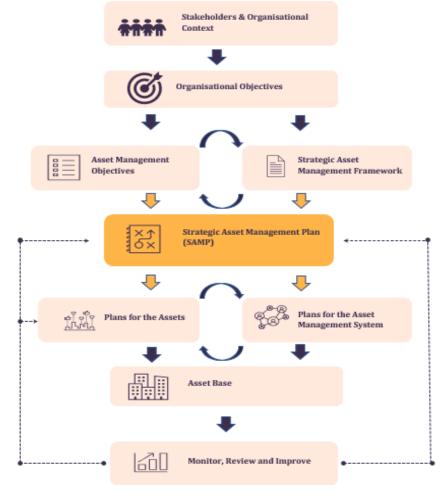

Figure 5: Asset Management Hierarchy of Documentation

6. Organisational Enablers

To undertake the areas of activity outlined in the Asset Management Framework, there must be support from all areas of the FM team and the University at large. This section provides more detail on the structures, activities and processes required to deliver the Asset Management Framework, whilst acknowledging that the detail of these activities will be left to subsidiary plans in accordance with the Framework and hierarchy of documentation.

6.1. Planning & Alignment

The University must develop an Estate Management Policy document to set the vision and mission statement for the asset management activities, framework and resulting asset portfolio. This document will act as the *"beacon on the hill"* for asset management at the University, providing orientation and intent to all subsidiary structures and activities to ensure they support the achievement of the University's strategic goals. This Policy document will replace the Strategic Asset Management Framework document, which is currently the highest-level document within the University's Asset Management Document Framework.

The University will incorporate the standalone SAMF document into this SAMP in future, given the SAMP outlines and expands upon the SAMF, as well as details the guiding Asset Management Objectives.

The University should develop a comprehensive Demand Forecast for the asset portfolio, which contains detailed forecasts of stakeholder requirements for asset levels of service over various time horizons. This Forecast will be largely informed by the Campus Master Plan 2022 and the analysis underpinning this demand forecast, and should include details such as:

- Population forecasts for students, faculty, and enterprise staff, both on campus and online
- Requirements for teaching and learning facilities space usage
- Research space and capability requirements
- Usage of resources such as power, water, and fuel

The logical antecedent of this demand forecast, and Master Plan will be a Total Asset Management Plan (TAMP), which forecasts what assets will be required to meet the forecast demand across various time horizons. This TAMP should include, asset renewals, asset upgrades and new asset acquisitions, all of which can be viewed as increasing degrees of complexity and capital expenditure intended to achieve correspondingly greater improvements in levels of service.

As detailed in the Strategic Asset Management Framework and Document Hierarchy, the University will undertake development of asset management plans (capital works and maintenance) for various assets and asset classes. The structure of these plans is yet to be determined, with a likely structure comprising campus-level plans which may cascade down to precinct-level or building-level plans. It is envisaged that the detailed outputs from these plans, being levels of service required and delivered, asset risks, lifecycle costs and lifecycle management strategies, will be aggregated to inform future demand forecasting and the TAMP.

6.2. Asset Management Decision-Making

The University will develop a CAPEX forecast. The CAPEX forecast will detail the University's capital expenditure on asset renewals, upgrades, and acquisitions, and be consistent with both the TAMP and the University's wider financial accounting standards. This Forecast should structure CAPEX items in a project-based fashion, allowing for

scaling levels of cost certainty and detail as projects advance in development – a necessity given near-term projects will have far greater definition than those planned for delivery in several years or decades time.

As a supporting function to the development of AMPs, the University should develop procedures and schedules for the periodic review of AMPs, particularly the operations & maintenance activities detailed in each AMP. Schedules should include a baseline review cycle and trigger events for immediate consideration, whilst review processes should include considerations such as stakeholder engagement, reviews of historical maintenance activities, costs and results, benchmarking against industry best practice, and performance of operations and maintenance activities against safety, sustainability, and compliance.

Finally, the University must implement a structured capital decision-making process for the allocation of spending on asset projects. This will likely take the form of the FM team integrating the University's existing Project Management Framework into asset planning and delivery, including stage-gate processes for triggering and undertaking decision-making. Considerations for this framework include:

- Clear governance structure which defines accountability of decision-makers

- Well-defined powers and responsibilities for decision-making staff to empower effective action and oversight

- Factors for consideration and questions to be asked during capital decisions, based on best practice and historical lessons learned.

6.3. Lifecycle Delivery

The University will develop procedures which govern activities at each stage of the asset lifecycle: Acquire, Operate, Maintain, and Dispose. These procedures will be closely informed by the AM Decision-Making and Asset Planning outputs, including the Campus Master Plan, CAPEX plan and budgets, and particularly AMPs. Key procedures will include:

- **Asset Commissioning**: How the asset will be tested for operational readiness and undergo handover from the project development staff to operations and maintenance staff

- **Asset Disposal**: How assets will be decommissioned and disposed of, including measures to mitigate disruptions to levels of service, mitigate risks and minimise the cost of disposal and any residual liabilities

- **Planned Outage and Disruption**: How works causing disruption to asset levels of service will be planned, scheduled, and executed. Includes considerations and stakeholder engagement requirements to mitigate service disruption, manage risk and minimise costs

- **Emergency procedures**: How the University and FM team will respond to unexpected outages, safety incidents, damage to assets or the environment. Procedures may vary based on asset scope and function and should include actions for escalating levels of consequence.

6.4. Asset Information

Asset data and information management is crucial to operating an evidence-based, data-driven asset management framework. Asset information will be treated as an asset in its own right**,** to be managed in an analogous manner to the University's assets as described in this SAMP**.** A such, the University will develop and maintain the necessary policies, procedures, and infrastructure to govern asset information and ensure it can be utilised effectively to support asset management activities.

The University will develop an Asset Information Strategy to govern asset information management activities. This Strategy must be aligned to broader University of Southern Queensland information management standards and systems, and should specify strategies for the following:

- **Computerised Maintenance Management System (CMMS)**: The system responsible for logging maintenance incidents, scheduling maintenance tasks, allocating resources, and recording all operational and maintenance work execution data. The University currently uses multiple systems which are not fit for purpose and are in the process of implementing a new CMMS system.

- **Contractor Management System**: Responsible for planning and recording work assigned to external contractors, including scopes of work, compliance, cost, time, and work outcomes

- **Asset Documentation Management System**: The system which stores and manages all documentation and other qualitative information associated with asset management.

- **Asset Hierarchy**: The structure of asset classification at the University, organised in a hierarchical manner which is logically consistent with the function of assets and their constituent components. Includes an asset taxonomy for classification of assets by type, function, location, or other attributes as required.

- **Asset Register**: The register of all assets owned by the University and their useful attributes, structured in accordance with the Asset Hierarchy.

- **Asset Information Quality Requirements**: Requirements for asset data quality to enable effective use in informing other asset management activities.

The University should develop the following standards and procedures to implement the Information Strategy aspects above:

- **Asset Information Quality Standard**: Describes what data attributes and metrics must be adhered to such that the quality requirements will be achieved.

- **Asset Information Management Procedures**: Processes for the capture, entry, modification, sharing and usage of asset information to ensure that all information systems in the Strategy function as intended. Procedures should cover all aspects of the asset lifecycle.

- **Asset Documentation Control Procedures**: Support the document management system by specifying processes for the creation, updating, sharing, and superseding of documentation, including document metadata requirements to ensure traceability and accountability.

6.5. Organisation & People

6.5.1. Leadership Structure

Within the asset management system development, there are four essential asset management functions which must be covered within an organisation: **Planning, Delivery, Operations & Maintenance,** and **Assurance**.

These four key functions all report to the Executive Director, Facilities Management (EDFM), who reports to the Deputy Vice-Chancellor, Enterprise Services (DVCES). The EDFM role has operational responsibility for the University's asset management functions, whilst the DVCES has ultimate accountability for asset management performance and manages the strategic direction of the asset management function. The following table describes the supporting roles which are subsidiary to the leaders of each key function.

To facilitate effective oversight and review of Asset Management activities, the University should establish an Asset Management Committee that could comprise of senior leadership including the EDFM. This Committee may be responsible for internal reviews of the asset management system, asset management objectives, and asset management portfolio compliance (as detailed in Section 6), sign-off of major capital expenditure, review, and approval of changes to key plans, and hiring of senior Asset Management roles.

6.5.2. Asset Management Functions

The structure of the University's Asset Management function need not precisely follow this structure of key and supporting asset management roles; however, it is important that all *capabilities* covered in the role descriptions below are represented within the organisational structure.

Function	Description	Responsible Role
Asset Planning	Responsible for creating detailed plans translating capability requirements into assets: what is required, where it will be located and when it will be needed. Draw on university-wide data including the Campus Master Plan, teaching and research requirements, business support needs etc. Responsible for the development and maintenance of asset management documentation including all asset management plans, in consultation with the operations team.	Director (Facilities Management & Operations)
Asset Delivery (New Build)	Responsible for the execution of new build capital projects, from pre-feasibility through to commissioning and handover. Work in with the Asset Planning team to obtain detailed asset requirements. Work extensively with contractors to deliver new assets whilst balancing the competing requirements of cost, risk, and quality.	Director (Capital Planning and Development)
Asset Delivery (Renewal)	Responsible for the execution of capital renewal projects, from pre-feasibility through to commissioning and handover. Work in concert with the Asset Planning team to obtain detailed asset requirements. Work extensively with Asset Delivery (New Build) team to execute the delivery of the renewal projects balancing the competing requirements of cost, risk, and quality.	Director (Facilities Management & Operations)
Asset Operations	Responsible for the operation and maintenance of the asset portfolio. Includes maintenance execution, provision of campus services, information management and ongoing development of asset management plans in collaboration with the Asset Planning team.	Director (Facilities Management & Operations)
Asset Assurance (Facilities)	Responsible for ensuring the above functions are compliant with the University's asset management system, and that the existing and planned asset portfolio meets compliance & organisational requirements such as sustainability, safety, information management and risk management. Responsible for ensuring sufficient capability exists within the asset management team to meet levels of service.	Director (Facilities Management & Operations)
Asset Assurance (University Wide)	Responsible for ensuring the University's frameworks support the organisational requirements for sustainability, safety, and risk management.	Director (Safety, Security and Sustainability)

6.5.3. Asset Management Roles (Examples)

The University's Asset Management functions need not follow this structure of key and supporting asset management roles; however, it is important that all capabilities covered in the role and responsibilities below are represented within the organisational structure. **This is an example only**.

Function	Role	Description
Planning	Director (Facilities Management and Operations)	■ Responsible for identifying and prioritising required asset portfolio works, to provide required levels of service and meet the goals of the University's Strategic Plan and Campus Master Plan. ■ Accountable for all forward asset portfolio planning, managing asset performance and condition aggregate risk to meet the required levels of service within organisational budget constraints. ■ Responsible for strategic level (e.g., SAMP and SAMF development) as well as lower level tactical and operational planning (e.g., campus or building asset management plans). ■ Work with the asset assurance team and executive team to update high-level asset management documentation such as the SAMP, SAMF and Campus Master Plan, in accordance with organisational strategy. ■ Work closely with the Asset Delivery team to prioritise and develop scopes of work for asset projects.
Planning	Maintenance Planner	■ Assist in the development of asset portfolio and demand forecasts. ■ Responsible for operational planning. ■ Develop detailed scopes of work and project definitions for asset projects, ensuring compliance with asset portfolio plans, level of service requirements and procedures for cost, quality, and risk. ■ Create and manage project tenders and subsequent contracts with successful bidders.
Delivery	Director (Capital Planning & Development)	■ Monitor, manage and direct asset portfolio projects including acquisitions, renewals, upgrades, and disposals, ensuring timely and on-budget delivery. ■ Work closely with Asset Planning team to capture comprehensive asset functional requirements and project definitions. ■ Coordinate delivery of all projects and ensure provision of sufficient resources, in concert with Project Managers. ■ Provide input into development of maintenance plans, works programs and manuals as developed by the Asset Operations team. ■ Periodic supervision and inspection of contractors carrying out works to ensure adherence to procedures and quality standards. ■ Periodic analysis and reporting of aggregate project delivery performance with reference to internal benchmarks and procedures.
Delivery	Project Managers	■ Plan and deliver asset projects according to the time, budget and quality constraints as defined in the project definition.

		▪ Work with the Director (Capital Planning & Development) to plan project pipeline and resource allocation. ▪ Manage the delivery and schedule of daily asset project work by project engineers and contractors. ▪ Develop and manage asset data in preparation for handover to Operations team.
Delivery	Consultant Engineers	▪ Assist the Project Managers to plan and execute Asset Delivery project work.
Operations	Director (Facilities Management & Operations)	▪ Responsible for the operational performance of the asset portfolio as measured against asset management and organisational strategic goals. ▪ Accountable for successful delivery of operational and maintenance works to maintain required levels of service. ▪ Own the development and updating of key asset management system planning documentation (strategic, tactical, operational) such as asset management plans, operational and maintenance procedures. ▪ Responsible for asset information and communications infrastructure. ▪ Manage ICT team to ensure operational and maintenance works are conducted in support of levels of service.
Operations	Manager / Supervisors	▪ Accountable for the delivery of routine and reactive maintenance works across the asset portfolio. ▪ Develop maintenance plans and provide input into asset management plans and operating procedures. ▪ Work with maintenance contractors to develop works programs, aggregating works where possible to minimise disruption and maximise resource utilisation. ▪ Manage Operations staff to deliver ongoing services required for the successful operation of assets to deliver their levels of service. ▪ Plan delivery and execution of operational services. ▪ Provide regular reporting on quality and cost of operations. ▪ Drive continuous review and improvement of operations practices to improve efficiency.
Operations	Maintenance Tradespeople (HVAC, Elec, Plumbing, Groundskeeping)	▪ Execute maintenance tasks under direction from management.
Operations	Operations & Services staff	▪ Provide day-to-day services for asset users, as directed by the Manager / Supervisors.
Operations	Asset Information Officer	▪ Frequently update and maintain asset information systems (e.g., CMMS, GIS). ▪ Drive continuous improvement of information management practices, including operational excellence within the team and improvement of documented procedures. ▪ Provide input into the development and review of asset information standards. ▪ Undertake maintenance of asset information systems and/or network infrastructure.

		▪ Liaise with and/or manage contractors to execute maintenance tasks.
Assurance	Director (Facilities Management and Operations)	▪ Provide leadership to the facilities management and operations team in their provision of safety, sustainability, and risk advice to the asset management business.
		▪ Set targets for safety, sustainability, and risk for the asset portfolio in alignment with organisational goals.
		▪ Lead the development and implementation of safety standards enforcement, monitoring and review.
		▪ Develop, implement, and monitor sustainability, safety, and risk management plans as part of the asset management framework.
		▪ Monitor and regularly report on asset portfolio compliance with the above standards and with asset management framework plans.
		▪ Drive regular review and continuous improvement of asset management framework design, specifications, and standards to improve asset performance.
Assurance	Compliance Coordinator	▪ Develop and maintain risk assessments and risk registers for the asset portfolio.
		▪ Advise the Planning, Project, and Operations teams to ensure effective risk management practices across the asset management function.
		▪ Undertake aggregate risk reporting to advise asset management team and Executive leadership.
		▪ Regularly review compliance of all asset management activities with the SAMP and subsidiary documentation and procedures, to ensure best practice execution of work across all asset management functions.
		▪ Drive continuous improvement of the asset management system, providing input into updates of the SAMP, SAMF and other documentation.
		▪ Monitor and report on the compliance of the asset portfolio with sustainability standards and processes.
Assurance	Director (Safety, Security and Sustainability)	▪ Provide leadership to the Asset Assurance team in their provision of safety, sustainability, and risk advice to the business.
		▪ Work with the Director (Facilities Management and Operations) to set targets for safety, sustainability, and risk for the asset portfolio in alignment with organisational goals.
		▪ Lead the development and implementation of safety standards enforcement, monitoring and review.
		▪ Develop, implement, and monitor sustainability, safety, and risk management plans as part of the University's framework.
		▪ Manage the security infrastructure, contractors, and staff.
		▪ Drive regular review and continuous improvement of University's safety, security and sustainability frameworks, and standards to improve performance.
Assurance	Sustainability Officer	▪ Support the Planning, Project, and Operations teams in achieving the University's sustainability objectives.
Assurance	Safety Team	▪ Lead and support the implementation of safety management systems, in compliance with legislative requirements and best practice.

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		■ Monitor and report on the compliance of the asset portfolio with safety management systems and processes.
Assurance	Security Staff	■ Provide operational security services on campus.

6.5.4. Capability Management

Maintaining sufficient staff capability to undertake AM activities is vital for ensuring the University's asset base provides the required levels of service. To achieve this in perpetuity, the University will undertake the following:

- Per the improvement projects, the University will develop a capability forecast and workforce plan for the FM team, corresponding to the asset demand and portfolio forecasts.

- Per the improvement projects, asset management training will be developed for current and new FM staff to improve AM awareness and capability.

- To manage the risk of losing organisational knowledge, the FM team will implement a talent management process to assess the potential, performance, capability, and aspirations of team members over time, which is aligned to the University's existing hiring processes.

6.5.5. Resourcing and Outsourcing

Facilities Management should develop a strategic workforce plan for the asset management function which specifies the University's approach to sourcing capability and personnel to deliver asset management activities, particularly decision-making regarding in-house capability versus outsourcing, as well as internal sourcing from other teams versus external. Key considerations for this strategy, which may be considered on a case-by-case basis, include:

- Depth of capability in the labour market

- Competitiveness of the contractor market, which informs quality, time, and cost of execution

- Scope of works intended to be conducted, and subsequently planned cost and time. Including:

  - Labour hours required – shorter duration projects may favour outsourcing, with longer projects favouring in-house roles

  - Complexity of asset works – works or projects with substantial future operational and maintenance requirements may favour in-house capability

  - Quantity and sensitivity of asset data – Significant amounts of useful asset data may lead to avoidance of contractors to maintain data sovereignty

- Amount of University knowledge required in role – internal processes and systems, higher education market factors

If the decision is made to outsource a scope of work, the following measures should be taken to manage the work to ensure the intended outcomes are achieved:

- Specify desired service levels at the conclusion of work, and obtain written agreement on scope, cost, and duration of work between the University and the contractor.

- Consider the criticality of the assets undergoing work, as well as the risks posed by the work.

- Establish and use Key Performance Indicators (KPIs) to manage outsourced contracts and monitor contractor/service provider performance.

- Define the scope and processes for sharing information and knowledge between the University and contractors.

6.5.6. Interaction with Other Business Functions

The Asset Management System described in this SAMP will govern the AM activities of the facilities management team at the University. Whilst the FM team will be the primary 'doers' of Asset Management, buy-in and support must be obtained University-wide to ensure the AM System is sustainable and effectively integrated across the organisation. Support structures should be established within the University to ensure that AM is acknowledged as

an organisational-wide function, with collaboration and alignment across business functions being the key drivers for achieving the University's Strategic Plan.

Support structures should be organisational resources required for the establishment, implementation, maintenance, and continual improvement of the Asset Management Framework. This typically includes functions which are undertaken at an enterprise level, but which must be reconsidered to ensure they are effective from an Asset Management perspective. These include:

- Finance and capital budgets

- Risk

- Resourcing, including both Human Resources (i.e., staff hiring) and OPEX budgets for equipment and consumables

- Campus Master Plan development and Strategy development

6.6. Risk & Review

6.6.1. Risk Management

Risk management is a key process within the asset management system, informing asset strategic planning, lifecycle decision-making and capability requirements. The Facilities Management team should implement risk assessment, risk management and monitoring activities for the asset portfolio and asset management system which are aligned to Risk Management framework(s) specified by the University at large.

These activities include:

- High-level asset Risk Assessments at the campus or precinct level, identifying key macro risks posed by or to the asset portfolio and mitigating controls to be applied

- Risk assessments at the asset (i.e., building) level, identifying risks posed in the operation and maintenance of specific assets. These asset risk assessments may feed into higher-level risk assessments and control measures

- Risk modelling of individual asset components, based on their condition (as informed by periodic inspections) and the criticality of their overarching asset

- Risk Registers to store, maintain and track changes in risk over time, at various levels of abstraction

7. Performance Monitoring and Improvement

7.1. Performance Monitoring and Measurement

To ensure that the Asset Management System and asset portfolio consistently support the Strategic Asset Management Objectives into the future, periodic performance monitoring and evaluation against benchmark standards is required.

Performance monitoring can be divided into three broad categories:

- Performance of the *asset portfolio* in terms of compliance to the *Strategic Asset Management Framework*
- Performance of the *Strategic Asset Management Framework* in supporting the *Asset Management Objectives*
- Performance of the *Asset Management Objectives* in supporting the University's strategic objectives

Performance measurement in these categories should then be evaluated and flow through to review functions and subsequent improvement actions to both the Framework and the assets themselves. The following process flow diagram displays how to utilise both leading and lagging performance indicators across these two categories to drive improvement:
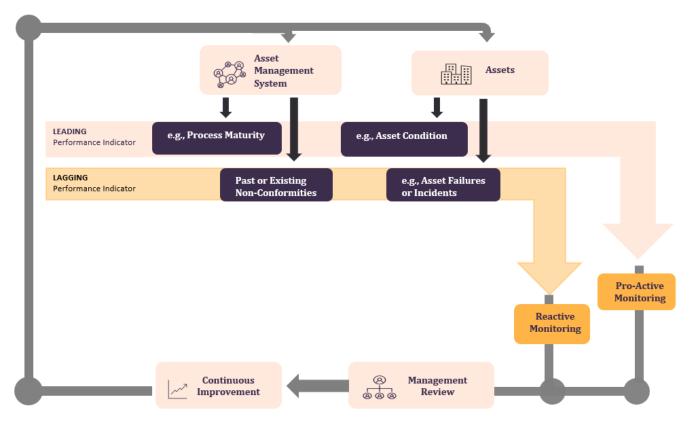

Figure 6: Performance Monitoring Framework for the Assets and Asset Management Framework

https://theiam.org/knowledge/asset-management-an-anatomy/ © *2019 The Institute of Asset Management*

Performance monitoring standards and procedures should be developed by the University, including a document for the Asset Management Framework and potentially multiple for various asset classes. Considerations for performance monitoring should include:

- Asset attributes to be monitored and measured

- Asset levels of service to be monitored and measured

- Methods for measurement, analysis, and evaluation of performance to ensure captured information is consistent, repeatable, and applicable.

- Frequency and methodology for monitoring, measuring and analysis of AM System performance with respect to the AM Objectives, and the AM Objectives in their alignment to the University's Strategic Plan.

- Review processes to assure quality design and execution monitoring, analysis, and evaluation activities.

- Review processes to incorporate lessons learned from historical performance monitoring and identify problem areas for greater focus.

These performance measures will need to be reviewed and updated as the asset portfolio, level of service requirements and Asset Management Maturity level of the University evolve over time.

7.2. Planning Review Cycles

All Plans, Forecasts and other documents specified in the Strategic Asset Management Framework should be subject to periodic review cycles, to ensure their fitness for purpose and update them to include the changing environment in which the University operates. Each document should include its own schedule and activities for these reviews, which should escalate into an overall plan for the document review cycle to ensure visibility. Plans which should be reviewed and updated periodically include:

Table 3: Asset Plans and Indicative Review Cycles

Document	Indicative Review Frequency
Asset Management Policy	5 years (once developed)
SAMF	5 years (if still a separate document)
SAMP	5 years
Asset Demand Forecast	1-2 years
Total Asset Management Plan	1 year
Capital Works Plan	1 year
Maintenance Plan	1-2 years

7.3. Internal Audit and Management Review

To support the monitoring, measurement and evaluation of asset performance, internal audits should be conducted periodically. This is to provide performance monitoring information – as described above – to assist the University in determining whether the Strategic Asset Management Framework and Objectives effectively support the University's Strategic Plan, as well as the requirements of ISO 55001:2014.

Considerations for Internal audits include:

- The criteria, scope, and frequency of audit activities

- The reporting and documenting of auditing activities within and across the organisation (i.e., to management bodies)

- Auditor selection, to ensure impartial and objectivity in assessment processes.

Alongside internal audits, periodic management reviews are recommended to ensure continuing suitability, adequacy, and effectiveness of the AM System. The intent of these reviews is to be less comprehensive but more frequent and agile than audits, enabling more rapid identification of performance deficiencies and implementation of improvements. Considerations for management reviews include:

- Changes to the external and internal factors that are relevant to the AM System

- Opportunities for continuous improvement

- Changes in risk and opportunity profile

- Asset performance information, with focus on monitoring and measuring of results, non-conformities, and any corrective actions

- Changes or additions to the asset portfolio.

7.4. Asset Management Maturity

Continual improvement of the AM System is required to ensure asset management practices remain fit for purpose and aligned with the University's Strategic Plan. Asset Management Maturity Assessments should be conducted at defined intervals as a means of measuring the University's AM maturity level against its desired state of AM maturity.

An AM Maturity Assessment of the University was conducted by Aurecon in 2021 and assessed the University as 'Developing' (overall score of 2.0 out of 5). Level 2 indicates the University is in a transition stage and evolving. The University has identified the means of systematically and consistently achieving the requirements of ISO 55000 and can demonstrate that these are being progressed with credible and resourced plans in place. Processes are planned, documented (where necessary), applied and controlled at a local level or within functional departments; often in a reactive mode but could achieve expected results on a repeatable basis. The processes are however insufficiently integrated, with limited consistency or coordination across the organisation.

The Improvement Projects as identified from the maturity assessment, with planned delivery across the next few years, will be the catalyst for improving the AM System. The Maturity Assessment Report should be used as a baseline against which the University measures asset management maturity in future, post the completion of the identified improvement projects.

7.5. Defining Asset Management Maturity

The AM maturity score is an evaluation against the ISO 55000 standards and not a reflection on the overall asset management capabilities and performance of the Facilities Management team.

It is important to understand the distinction between the Asset Management System and the discipline of Asset Management; notwithstanding any improvement in the AM System will translate to an improvement in the asset management teams performance through improved planning and governance.

8. Appendices

8.1. Appendix A: Asset Management Maturity Assessment

The initial phase of this SAMP development involved participation in an AM Maturity Assessment; the purpose of this Assessment was to evaluate the sophistication of the University's AM activities, and subsequently allow the recommendation of projects to improve AM practices within the Facilities Management Team.

The AM maturity of Facilities Management Team was assessed through:

■ Interviews with a wide range of staff members

■ Visits to operational areas

■ Review of documents

■ Observing asset management activities.

The overall AM Maturity rating is **2.0 out of 5**, which indicates a maturity of **DEVELOPING**. The following chart displays the ratings assigned to each subject group.
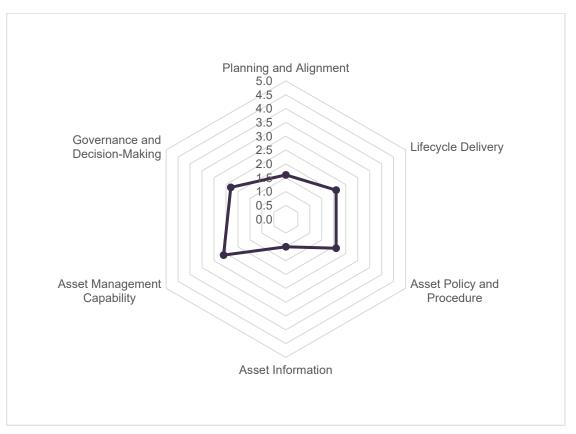
Figure 7: Overall Asset Management Maturity Breakdown Chart

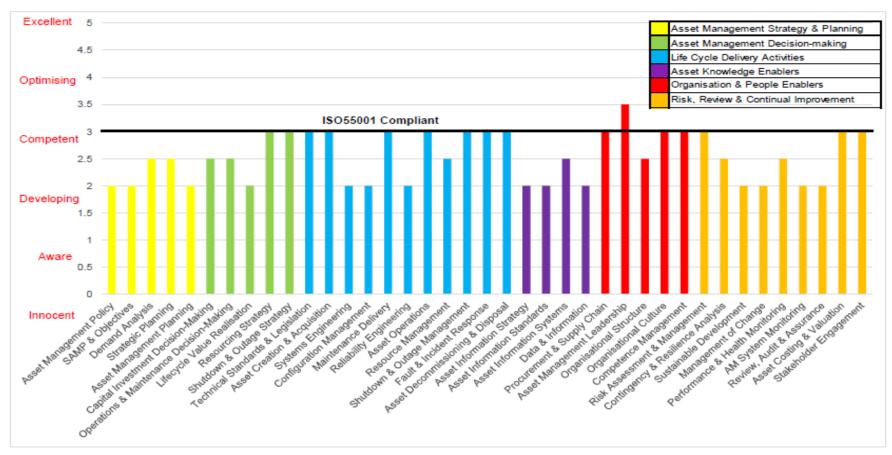**Figure 8: Overall Asset Management Maturity by Subject Area**

Figure 5-1 Maturity Rating per Subject

8.2. Appendix B: Asset Management Improvement Projects

The register of Improvement Projects is accessible as a separate file attached with this SAMP.

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