MACUPORT

Site Asset Management Plan

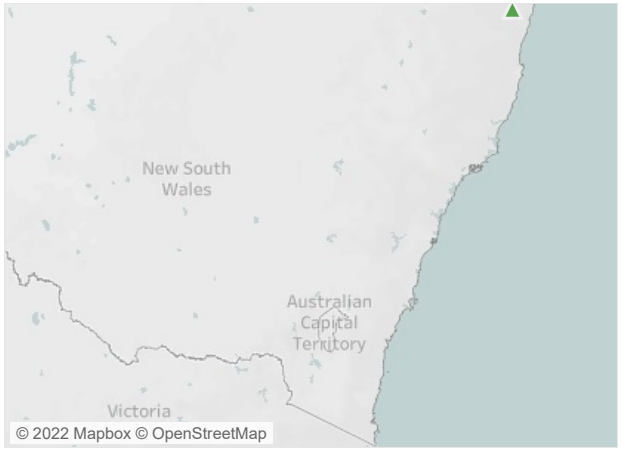
BLAX2533 Shannons Creek Zone Substation

2315 Armidale Road, Blaxlands creek, Blaxlands Creek, NSW, 2460, Australia

16 November 2022

State Portfolio Overview

Region	Suburb	Facility Type	Facility ID	Facility Name
All	All	All	BLAX2533	All



Overall Condition Rating

Facility Type	Facility Name	
Zone Substation	Shannons creek zone subs..	4.26

Total Renewal Cost over 10yrs

$199,352

Total Maintenance Cost

Total Compliance Cost

$0

Building Register

Facility ID	Facility Na..	Building Name	Audit Finish D..	Access comment
BLAX2533	Shannons creek zone substation	Building 1	17/08/2020	Null
		Site	17/08/2020	Null

Defects Summary

Remaining Useful Life (Yrs)

Facility Na..	Element Group	
Shannons creek zone substation	Building Structure	58
	External Fabric	19
	Int. Furniture & Fittings	12
	Internal Fabric	24
	Services - Electrical	14
	Services - Fire	12
	Services - Mechanical	10
	Services - Plumbing	14
	Site	30
	Statutory Equipment	25

Future Works Plan: Analysis
Renewal Detail Summary

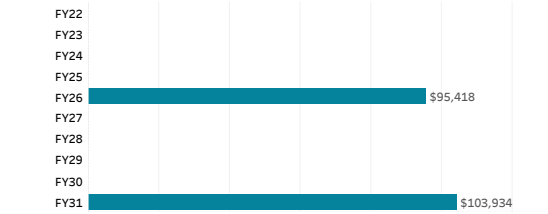
Facility ID	Facility	Facility Type	Region	Component	Component Type	Condition Description	EE Site Criticality	Criticality	Asset Condition Index
All	Shannons creek zone su..	All	All	All	All	All	All	All	2 to 25

Facility Details

Substation $199,352

Condition Profile

Estimated Renewal by Year



10 Year Renewal by Component

Building Structure	Foundation	$0
	Roof Structure	$0
	Wall Structure	$0
Ext. Fabric, Furniture & Fittings	Doors	$0
	Downpipes	$0
	Guttering	$0
	Roof Cladding	$0
	Wall Cladding	$0
Int. Fabric, Finishes, Furniture & Fittings	Ceiling	$0
	Vanity Unit	$0
	Wall Cladding	$0
Services - Electrical & Utility	External Lighting	$0
	Internal Lighting	$0
Services - Fire	ESM	$718
Services - Hydraulics & Plumbing	Shower	$0
	Sinks	$0
	Toilets	$0
Services - Mechanical	Split Systems	$7,798
Site	Boundary Walls, Fencing and Gates	$0
	Landscaping	$190,836
	Rainwater Tanks	$0
	Stormwater & Drainage	$0
Statutory Equipment	Switchboards	$0

10 Year Renewal by Building

BLAX2533_Site	Shannons creek zone substa..	$190,836
BLAX2533_Building 1	Shannons creek zone substa..	$8,516

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Building 1 Asset Management Plan

Shannons creek zone substation - Building 1

2315 Armidale Road, Blaxlands creek, Blaxlands Creek, NSW, 2460, Australia

16 November 2022

Macutex Quality Assurance Auditing

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Site Address:	2315 Armidale Road, Blaxlands creek, Blaxlands Creek, NSW, 2460, Australia
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1. Introduction

1.1 Background

Essential Energy, as a state-owned corporation, builds, operates and maintains the electricity network across 95% of New South Wales and parts of southern Queensland. The organisation has undertaken a 5-year transformation program to improve operations and profitability. This asset management initiative embarked on by the Property Division will support the transformation initiative by delivering improved property management processes.

The asset management project will facilitate the shift in organisational asset management capability, allowing for alignment to ISO 55001 and principles of The Asset Management Policy for the NSW Public Sector.

This Asset Management Plan (AMP) is directly related and refers to Essential Energy's over-arching Asset Management Framework (AMF) and other relevant documents/legislation as set out within the AMF.

2. Scope

This AMP covers the Building 1 and its asset base.

The building is located within Shannons creek zone substation site at 2315 Armidale Road, Blaxlands creek, Blaxlands Creek, NSW, 2460, Australia.

Data in this report was acquired during an audit conducted 17/08/2020.

Building 1

Building 1 is approximately 60 sqms

The site asset base was audited where applicable as follows:

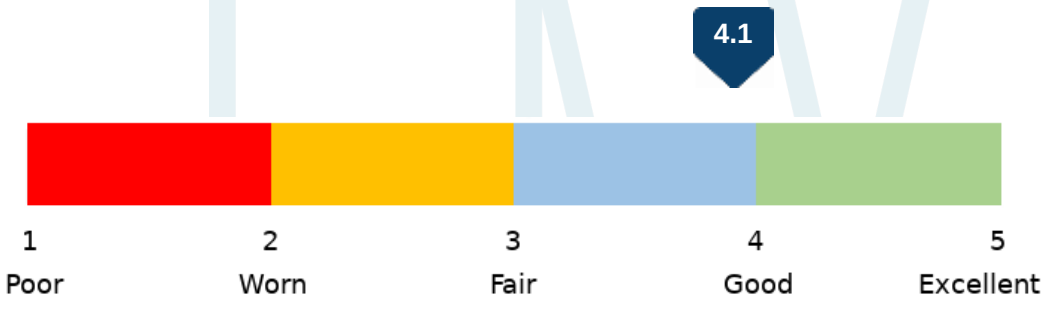
- Buildings assets including building structure, external fabric, internal fabric, foundations and structural components.
- Services - Mechanical including split system AC units and exhaust fans.
- Statutory Equipment including switchboards.
- Services - Electrical including internal lighting, external lighting and security measures such as CCTV.
- Site assets including boundary walls, fencing and gates, landscaping, rainwater tanks and retaining walls.
- Services - Plumbing including sinks and toilets.

3. Condition Assessment

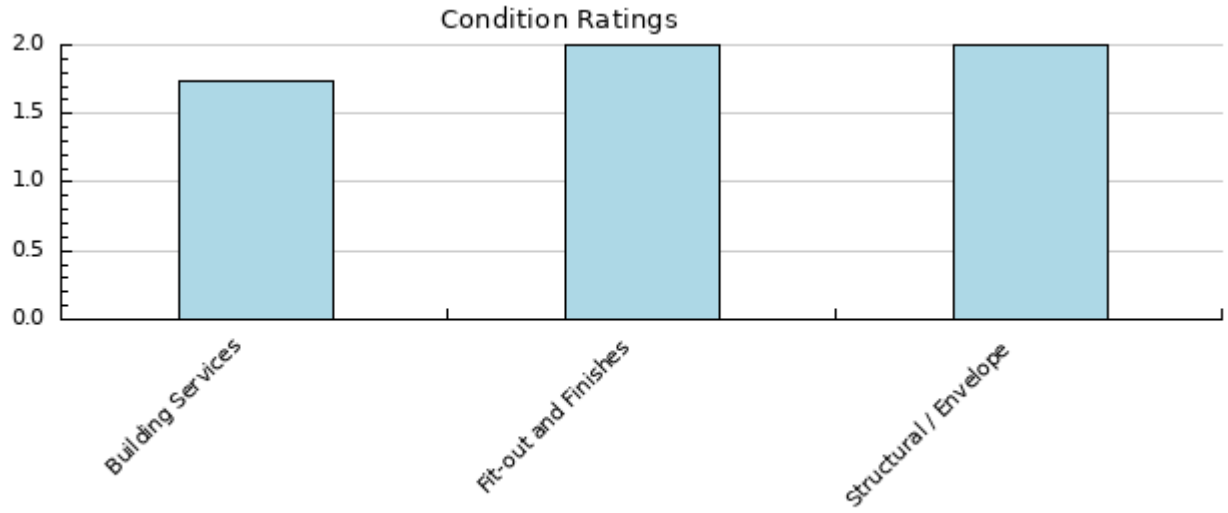
This audit has been rated on the following condition rating criteria:

Condition	Rating	Definition
Excellent	5	• No defects • As new condition and appearance • Only preventative maintenance required
Good	4	• Superficial wear and tear • Minor defects and some deterioration to surface finishes • No major defects • Major maintenance not required • Minor maintenance only required
Fair	3	• Average condition • Deteriorated surfaces require attention • Services are functional but require attention • Deferred maintenance work exists • Small number of defects identified
Worn	2	• Badly deteriorated • Structural problems • General poor condition and with eroded protective coatings • Elements are broken and services are not performing • Significant number of major defects • Major repairs required
Poor	1	• Not operational • Unfit for occupancy or normal use • Building has failed • Complete replacement required

Building 1 was assessed on 17/08/2020. The resulting site average condition rating per the table below is:



The Elements Group condition assessment rating is per the following chart:



Further detail is provided in subsequent sections of this AMP and the online Site Condition Report.

Building Structure

Asset Function and Details

Building Structure comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Foundation	Concrete slab	64	SQM	ESEN_Wk3AZS-2	External - External
Wall Structure	Metal/Steel Frame	112	SQM	ESEN_Wk3AZS-3	External - External
Roof Structure	Metal/Timber - Frame	60	SQM	ESEN_Wk3AZS-4	External - External

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Foundation	Concrete slab	ESEN_Wk3AZS-2	80	77
Wall Structure	Metal/Steel Frame	ESEN_Wk3AZS-3	50	48
Roof Structure	Metal/Timber - Frame	ESEN_Wk3AZS-4	50	48

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Foundation	Concrete slab	ESEN_Wk3AZS-2	2	4 - Good
Wall Structure	Metal/Steel Frame	ESEN_Wk3AZS-3	2	4 - Good
Roof Structure	Metal/Timber - Frame	ESEN_Wk3AZS-4	2	4 - Good

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

External Fabric

Asset Function and Details

External Fabric comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Roof Cladding	Pitched - Colorbond	60	SQM	ESEN_Wk3AZS-5	External - External
Downpipes	Zinc - Alum	7	LM	ESEN_Wk3AZS-6	External - External
Guttering	Fascia Gutter - Zinc - Alum	14	LM	ESEN_Wk3AZS-7	External - External
Wall Cladding	Colorbond	112	SQM	ESEN_Wk3AZS-8	External - External
Doors	Swing - Solid Timber	4	ITEM	ESEN_Wk3AZS-9	External - External

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Roof Cladding	Pitched - Colorbond	ESEN_Wk3AZS-5	25	24
Downpipes	Zinc - Alum	ESEN_Wk3AZS-6	20	19
Guttering	Fascia Gutter - Zinc - Alum	ESEN_Wk3AZS-7	15	14
Wall Cladding	Colorbond	ESEN_Wk3AZS-8	25	24
Doors	Swing - Solid Timber	ESEN_Wk3AZS-9	15	14

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Roof Cladding	Pitched - Colorbond	ESEN_Wk3AZS-5	2	4 - Good
Downpipes	Zinc - Alum	ESEN_Wk3AZS-6	2	4 - Good
Guttering	Fascia Gutter - Zinc - Alum	ESEN_Wk3AZS-7	2	4 - Good
Wall Cladding	Colorbond	ESEN_Wk3AZS-8	2	4 - Good
Doors	Swing - Solid Timber	ESEN_Wk3AZS-9	2	4 - Good

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Int. Furniture & Fittings

Asset Function and Details

Int. Furniture & Fittings comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Vanity Unit	Porcelain	1	ITEM	ESEN_Wk3AZS-28	G - Toilet

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Vanity Unit	Porcelain	ESEN_Wk3AZS-28	12	12

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Vanity Unit	Porcelain	ESEN_Wk3AZS-28	2	4 - Good

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Internal Fabric

Asset Function and Details

Internal Fabric comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Ceiling	Pressed Metal Sheet	3	SQM	ESEN_Wk3AZS-12	G - Battery room 1
Wall Cladding	Metal Sheeting	21	SQM	ESEN_Wk3AZS-13	G - Battery room 1
Ceiling	Pressed Metal Sheet	3	SQM	ESEN_Wk3AZS-15	G - Battery room 2
Wall Cladding	Metal Sheeting	21	SQM	ESEN_Wk3AZS-16	G - Battery room 2
Ceiling	Pressed Metal Sheet	36	SQM	ESEN_Wk3AZS-21	G - Control room
Wall Cladding	Metal Sheeting	77	SQM	ESEN_Wk3AZS-22	G - Control room
Ceiling	Pressed Metal Sheet	3	SQM	ESEN_Wk3AZS-26	G - Toilet
Wall Cladding	Metal Sheeting	9	SQM	ESEN_Wk3AZS-27	G - Toilet

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Ceiling	Pressed Metal Sheet	ESEN_Wk3AZS-12	25	24
Wall Cladding	Metal Sheeting	ESEN_Wk3AZS-13	25	24
Ceiling	Pressed Metal Sheet	ESEN_Wk3AZS-15	25	24
Wall Cladding	Metal Sheeting	ESEN_Wk3AZS-16	25	24
Ceiling	Pressed Metal Sheet	ESEN_Wk3AZS-21	25	24
Wall Cladding	Metal Sheeting	ESEN_Wk3AZS-22	25	24
Ceiling	Pressed Metal Sheet	ESEN_Wk3AZS-26	25	24
Wall Cladding	Metal Sheeting	ESEN_Wk3AZS-27	25	24

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Ceiling	Pressed Metal Sheet	ESEN_Wk3AZS-12	2	4 - Good
Wall Cladding	Metal Sheeting	ESEN_Wk3AZS-13	2	4 - Good
Ceiling	Pressed Metal Sheet	ESEN_Wk3AZS-15	2	4 - Good
Wall Cladding	Metal Sheeting	ESEN_Wk3AZS-16	2	4 - Good

Ceiling	Pressed Metal Sheet	ESEN_Wk3AZS-21	2	4 - Good
Wall Cladding	Metal Sheeting	ESEN_Wk3AZS-22	2	4 - Good
Ceiling	Pressed Metal Sheet	ESEN_Wk3AZS-26	2	4 - Good
Wall Cladding	Metal Sheeting	ESEN_Wk3AZS-27	2	4 - Good

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Services - Electrical

Asset Function and Details

Services - Electrical comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
External Lighting	Fluorescent - Tube - Mounted	4	ITEM	ESEN_Wk3AZS-10	External - External
Internal Lighting	Fluorescent - Tube - Mounted	1	ITEM	ESEN_Wk3AZS-14	G - Battery room 1
Internal Lighting	Fluorescent - Tube - Mounted	1	ITEM	ESEN_Wk3AZS-17	G - Battery room 2
Internal Lighting	Fluorescent - Tube - Mounted	6	ITEM	ESEN_Wk3AZS-23	G - Control room
Internal Lighting	Fluorescent - Globe	1	ITEM	ESEN_Wk3AZS-32	G - Toilet

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
External Lighting	Fluorescent - Tube - Mounted	ESEN_Wk3AZS-10	15	14
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk3AZS-14	15	14
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk3AZS-17	15	14
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk3AZS-23	15	15
Internal Lighting	Fluorescent - Globe	ESEN_Wk3AZS-32	15	14

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
External Lighting	Fluorescent - Tube - Mounted	ESEN_Wk3AZS-10	2	4 - Good
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk3AZS-14	2	4 - Good
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk3AZS-17	2	4 - Good
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk3AZS-23	1	5 - Excellent
Internal Lighting	Fluorescent - Globe	ESEN_Wk3AZS-32	2	4 - Good

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Services - Fire

Asset Function and Details

Services - Fire comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
ESM	Exit Signs	2	ITEM	ESEN_Wk3AZS-18	G - Battery room 2
ESM	Portable Fire Extinguishers - CO2	1	ITEM	ESEN_Wk3AZS-19	G - Battery room 2
ESM	Portable Fire Extinguishers - CO2	1	ITEM	ESEN_Wk3AZS-24	G - Control room
ESM	Smoke Detection/Alarm System	3	ITEM	ESEN_Wk3AZS-25	G - Control room

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
ESM	Exit Signs	ESEN_Wk3AZS-18	15	14
ESM	Portable Fire Extinguishers - CO2	ESEN_Wk3AZS-19	10	10
ESM	Portable Fire Extinguishers - CO2	ESEN_Wk3AZS-24	10	10
ESM	Smoke Detection/Alarm System	ESEN_Wk3AZS-25	15	15

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
ESM	Exit Signs	ESEN_Wk3AZS-18	2	4 - Good
ESM	Portable Fire Extinguishers - CO2	ESEN_Wk3AZS-19	1	5 - Excellent
ESM	Portable Fire Extinguishers - CO2	ESEN_Wk3AZS-24	2	4 - Good
ESM	Smoke Detection/Alarm System	ESEN_Wk3AZS-25	1	5 - Excellent

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Services - Mechanical

Asset Function and Details

Services - Mechanical comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Split Systems	Condenser - Small	2	ITEM	ESEN_Wk3AZS-1	External - External

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Split Systems	Condenser - Small	ESEN_Wk3AZS-1	10	10

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Split Systems	Condenser - Small	ESEN_Wk3AZS-1	2	4 - Good

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Split Systems										$7,79

Services - Plumbing

Asset Function and Details

Services - Plumbing comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Shower	Aluminium / Glass	1	ITEM	ESEN_Wk3AZS-11	External - External
Sinks	Hand Basin - Porcelain	1	ITEM	ESEN_Wk3AZS-29	G - Toilet
Toilets	Cistern - Plastic	1	ITEM	ESEN_Wk3AZS-30	G - Toilet
Toilets	Pan - Porcelain	1	ITEM	ESEN_Wk3AZS-31	G - Toilet

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Shower	Aluminium / Glass	ESEN_Wk3AZS-11	15	14
Sinks	Hand Basin - Porcelain	ESEN_Wk3AZS-29	15	14
Toilets	Cistern - Plastic	ESEN_Wk3AZS-30	15	14
Toilets	Pan - Porcelain	ESEN_Wk3AZS-31	15	14

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Shower	Aluminium / Glass	ESEN_Wk3AZS-11	2	4 - Good
Sinks	Hand Basin - Porcelain	ESEN_Wk3AZS-29	2	4 - Good
Toilets	Cistern - Plastic	ESEN_Wk3AZS-30	2	4 - Good
Toilets	Pan - Porcelain	ESEN_Wk3AZS-31	2	4 - Good

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Statutory Equipment

Asset Function and Details

Statutory Equipment comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Switchboards	Sub-board	1	ITEM	ESEN_Wk3AZS-20	G - Control room

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Switchboards	Sub-board	ESEN_Wk3AZS-20	25	25

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Switchboards	Sub-board	ESEN_Wk3AZS-20	1	5 - Excellent

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Appendix A - Maintenance Plan

Corrective Maintenance

Appendix B - Definitions

Term	Explanation
Asset management (AM)	Systematic and coordinated activities and practices through which an organization optimally and sustainably manages its assets and asset systems, their associated performance, risks and expenditures over their life cycles for the purpose of achieving its organizational strategic plan
Asset management information	Meaningful data relating to assets and asset management Examples of asset management information include asset registers, drawings, contracts, licences, legal, regulatory and statutory documents, policies, standards guidance notes, technical instructions, procedures, operating criteria, asset performance and condition data, or all asset management records.
Asset management information system (AMIS)	System for the storage, processing and transmission of asset management information The storage or transmission of asset information can be achieved via multiple types of media
Asset management objective(s)	a) specific and measurable outcome or achievement required of the asset system(s) in order to implement the asset management policy and asset management strategy; and/or b) detailed and measurable level of performance or condition required of the assets; and/or c) specific and measurable outcome or achievement required of the asset management system
Asset management performance	Measurable results of an organization's management of its assets and/or asset system(s) Results are normally measured against the organization's Strategic Plan, Asset Management Policy, Asset Management Strategy, asset management objectives and/or other asset management performance requirements Asset management performance may include the effectiveness of expenditures, the reliability, efficiency, quality, sustainability and value of the assets and their utilization, and/or the impact of assets and asset management upon the organization's financial performance, health and safety performance, environmental performance, compliance and reputation Asset management performance measurement includes measuring the effectiveness of the organization's asset management system
Asset Management Plan	Document specifying activities and resources, responsibilities and timescales for implementing the asset management strategy and delivering the asset management objectives
Asset Management Policy	Principles and mandated requirements derived from, and consistent with, the organizational Strategic Plan, providing a framework for the development and implementation of the Asset Management Strategy and the setting of the asset management objectives
Asset Management Strategy (AMS)	Long-term optimized approach to management of the assets, derived from, and consistent with, the organizational strategic plan and the asset management policy The Asset Management Strategy converts the objectives of the organizational strategic plan and the asset management policy into a high-level, long-term action plan for the assets and/or asset system(s), the asset portfolios and/or the asset management system The high-level, long-term action plans for the assets and the asset management objectives are normally the outputs of the asset management strategy. These elements together form the basis for developing more specific and detailed asset management plan(s).
Asset management system	Organization's asset management policy, Asset Management Strategy, asset management objectives, Asset Management Plan(s) and the activities, processes and organizational structures necessary for their development, implementation and continual improvement A management system is a set of interrelated elements used to establish policy, strategy and objectives and to achieve those objectives through the implementation of plans A management system includes organizational structure, roles and responsibilities, planning activities, standards, information systems, practices, processes, procedures and resources.
Asset portfolio	Complete range of assets and asset systems owned by an organization Assets and asset systems may either be highly integrated and interdependent or deliver more independent and parallel contributions to an organization's total performance. In the latter case, opportunities may exist to manage and optimize assets or asset systems differently across the Portfolio
Asset recognition	An asset is recognised in the balance sheet when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably.
Asset Register (AM)	A record of all asset information considered worthy of separate identification including inventory, historical, financial, condition, construction, technical and financ information about each.
Asset Register (Financial)	A record of assets, including financial information about each, that will be beneficial for the cost planning and cost management of the assets
Asset renewal	The process of improving the service potential an asset delivers through such methods as replacement, rehabilitation or reconstruction.
Asset system	Set of assets that interact and/or are interrelated so as to deliver a required business function or service

Asset threshold	The minimum gross value for the recognition of an asset or collection of assets
Asset values	A determination of the value of the asset which depends on the purpose for which it is required
Audit	Systematic, independent process for obtaining evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled
Australian Standards	Documents published in Australia by Standards Australia that set out specifications and procedures designed to ensure products, services and systems are safe reliable and consistently perform the way they were intended to.
Business Plan	A plan produced by an organisation which translates the objectives contained in the Annual Plan into detailed work plans for a particular or range of business activities.
Capital works	The planning and procurement of works applied to existing or new assets, resulting in an increase to the capital value of the assets. This includes the creation o new assets, as well as the renewal and replacement of existing assets.
Capital expenditure (CAPEX)	Expenditure used to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential.
Components	Specific parts of an asset having independent physical or functional identify and having specific attributes such as different life expectancy, maintenance regimes risk or criticality
Contracted service providers	Individual(s) not directly employed by the organization including contractors, subcontractors, service providers, consultants, agency staff and casual workers
Condition monitoring	Continuous or period inspection, assessment, measurement and interpretation of the resultant data, to indicate the condition of a specific component used to determine the need for preventive or remedial action
Cost	Cost is the amount of cash or cash equivalents paid to acquire an asset at the time of its acquisition or the costs associated with the construction of a new asset. Alternatively, cost can represent the fair value of other consideration given to the acquisition at the time of its acquisition or transfer to an organisation or, where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other Australian Accounting Standards
Critical assets/asset systems	Assets and/or asset systems that are identified as having the greatest potential to impact on the achievement of the organizational Strategic Plan The assets can be safety-critical, environment-critical and/or performance-critical, and can relate to legal, regulatory and/or statutory requirements
Demand management	The active intervention in the market to influence demand for services and assets with forecast consequences, usually to avoid or defer Capex expenditure. Demand management is based on the notion that as needs are satisfied, expectations automatically rise and almost every action taken to satisfy demand will continue to stimulate further demand
Depreciation	The wearing out, consumption or other loss of value of an asset whether arising from use, passing of time or obsolescence and through both technological and market changes. Depreciation is accounted for by the allocation of the cost of the asset less its residual value over its useful life.
Deterioration rate	The rate at which an asset approaches failure
Design life	The proposed life of the asset determined as part of the design process
Disposal	A process whereby an asset is disposed of, sold or decommissioned
Economic life	The period from acquisition of the asset to the time when the asset, while physically able to provide a service, ceases to be the lowest cost alternative to satisfy a particular need
Effectiveness	Relates to how well outcomes meet objectives. It concerns the immediate characteristics of an entity's outputs and the degree to which an asset contributes to achieving specified outcomes. Entities should ensure that an asset suits the nature of their business and supports the delivery of budget funded entity outcomes Extent to which planned activities are realized and planned results achieved
Enablers (asset management)	Supportive systems, procedures, processes, activities and resources that enable an organization to operate its asset management system efficiently and effectively
Functional policy	Specified approach, rules and boundaries set out by an organization, that provide direction and the framework for the control of specific asset-related processes and activities Functional policies, strategies and objectives relate to asset management activities or processes, such as capital investment, construction methods, maintenanc and purchasing. These should not be confused with the asset management policies, Asset Management Strategy or asset management objectives as these are cross-functional and consider the life-cycle optimization of all relevant activities
Functionality	Functionality is 'fitness for purpose'. It describes how well a current asset matches the activities it supports

International Infrastructure Management Manual (IIMM)	International Infrastructure Management Manual, 2011 Ed
Key performance indicators (KPIs)	A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target.
Level of service	A relevant measurable standard or target that reflects the required performance to meet agreed expectations in relation to the type, quality and quantity of services delivered
Life	A measure of anticipated life of an asset or component such as time, number of cycles, distance intervals etc.
Life-cycle	The time period commencing with the identification of the need for an asset and terminating with the decommissioning of the asset or any associated liabilities The principal stages of an asset's life-cycle can include: create/acquire, utilize, maintain and renew/dispose
Life-cycle cost	Total expenditure required throughout the life of an asset in order to fund the creation, design, construction, operation, maintenance, renewal and disposal enabling the asset to deliver the desired service level over its life
Maintenance	All actions necessary for retaining an asset as near as practical to its original condition excluding rehabilitation. The work needed to maintain an asset in a condition that enables it to reach its service potential and may expand the assets service life. Note maintenance does not include modification of an asset from i original design.
Maintenance Plan	Collated information, policies and procedures for the optimum maintenance of an asset, or group of assets.
Maintenance standards	The standards set for the maintenance and/or service of an asset in accordance with maintenance quality objectives. Information is usually contained in preventi maintenance schedules and is derived from operation and maintenance manuals, codes of practice, estimating criteria, statutory regulations and mandatory requirements
Operations	Building or asset operation is the active process of running or operating that asset. Operations will consume a variety of resources including human, energy, chemicals and materials and the costs associated with continuing operations are included as part of overall life-cycle cost of an asset.
Original Equipment Manufacturer (OEM)	The original manufacture of the asset, part or component.
Operational Expenditure (OPEX)	The money a company spends on an ongoing, day-to-day basis in order to run a business or system.
Optimize	Achieve by a quantitative or qualitative method, as appropriate, the best value compromise between conflicting factors such as performance, costs and retained risk within any non-negotiable constraints
Performance monitoring	Continuous or period quantitative and qualitative assessments of actual performance compared with specific objectives targets or standards
Plant and equipment	The physical resources of an asset with their own useful life of more than one year and which are not held for sale purposes e.g. vehicles etc
Procedure	Specified way of carrying out an activity or a process Procedure(s) can be either documented or theoretical
Process	Set of interrelated or interacting activities which transforms inputs into outputs Processes may be classified in a number of different ways. A distinction is sometimes made between operational processes which are directly concerned with the planned outputs of the organization, and management processes which provide the framework enabling the operational processes to take place
Program Delivery	Program delivery is the set of activities that agencies are expected to undertake to meet its Targets and Outcomes.
Renewal	Works carried out to upgrade, refurbish or replace existing facilities with newer facilities of equivalent capacity or performance capability
Remaining economic life	The time remaining until an asset ceases to provide the required service level or economic usefulness
Repair	Action to restore an item to its previous condition after failure or damage
Replacement	The complete replacement of an asset that has reached the end of its life. Replacement should provide a similar or agreed alternative or level of service
Replacement value	The cost of replacing the service potential of an existing asset (by reference to a some measure of capacity) with an appropriate modern facility
Risk management	Risk management involves the systematic identification, analysis, treatment and allocation of all risks associated with any business or project. The extent of the risk management practices required will vary depending on the potential impact of the risks (ANAO) Coordinated activities to direct and control an organization with regard to risk

Stakeholder	Person or group having an interest in the organization's performance, success and/or the impact of its activities Examples may include employees, customers, shareholders, financiers, regulators, statutory bodies, contractors, suppliers, unions, or society
Strategic Plan	A plan containing the long term goals and strategies of an organisation. Strategic plans have a strong external focus, cover major portions of an organisation's functions and identify its key targets, actions and resource allocations which specifically relate to the long term survival, value and growth of that organisation
Sub class of asset	A further dissection of a class of assets containing similar properties, nature or functions. This grouping provides better reporting information, enhanced benchmarking and assist long-term portfolio planning
Sustainable	Achieving or retaining an optimum compromise between performance, costs and risks over the asset's life-cycle, whilst avoiding adverse long-term impacts to th organization from short-term decisions The related noun "sustainability" relates to the quality of being sustainable
Sustainable development	An enduring balanced approach to economic activity, environmental responsibility and social progress
Tenant	A person or entity paying rent in exchange for the occupancy of a building also referred to as Lessee.
Useful life	Useful life is the period over which an asset is expected to be available for use by an entity for the same it was acquired. The useful life of an asset may be different to the period of its physical and economic life.
Use	An assessment of how intensively an asset is used based upon its design specifications. Use may be classified as expected, excessive or under-utilised.
Valuation	A periodical assessment of the value of an asset dependent upon the purpose for which the valuation is required. Valuations can be conducted to determine replacement value (for determining maintenance levels or insurance levels), market value for life cycle costing purposes, optimal deprival value for tariff setting and renal value to ensure an asset meets its required rate of return
Whole-of-life costing	An estimate of all expected costs over the lifetime of the relevant asset, including the costs of acquisition, operation and maintenance and disposal.
Business continuity	The ability of an organization to quickly resume core functions following a serious interruption of business activities.
Property	Land or Buildings

Appendix C - Condition & Criticality Assessment Guide

1. Condition and Criticality Matrix

Condition and criticality are defined based on a ranking system of ‘1’ to ‘5’. A score of ‘1’ represents “excellent condition” or lowest “no impact”, while a score of ‘5’ represents a failed condition or the highest “catastrophic impact”. Prioritisation for response or action are found by cross-referencing the condition and criticality. The following table, illustrates how these rankings result in ratings for the relevant buildings, rooms or assets and as a consequence a prioritisation for fault response or works.

	Criticality				
	1	2	3	4	5
Condition	**No Impact**	**Low Impact**	**Medium Impact**	**High Impact**	**Catastrophic Impact**
1 Poor	**M**	**S**	**H**	**VH**	**VH**
2 Worn	**M**	**S**	**S**	**H**	**VH**
3 Fair	**L**	**M**	**S**	**H**	**VH**
4 Good	**L**	**L**	**M**	**S**	**H**
5 Excellent	**L**	**L**	**M**	**S**	**S**

Fault response and works response for assets are based on their fault criticality or operational criticality respectively in relation to condition. These priorities are:

Priority	**Rating**	**Fault Response Time**	**Works Response Time**
Priority 1	Very High (VH)	2 Hours	Immediate
Priority 2	High (H)	4 Hours	12 Months
Priority 3	Significant (S)	24 Hours	2 Years
Priority 4	Medium (M)	3 Days	3 - 4 Years

Priority 5	Low (L)	5 Days	4 Years +

Prioritisation of faults – Fault Response Time

The suggested fault response times is the period an appropriately qualified resource must arrive on site to address the fault and “make safe”. As the fault is likely to have a reduced rating because of the resource’s response, it should have an amended priority and then be rectified within the amended time or as agreed with site management.

Prioritisation of works – Works Response Time

Prioritisation of works based on operational criticality are generally deferred maintenance or project works and are prioritised based on available budget at the discretion of site management. These priorities are:

- Priority 1 – urgent work that will prevent immediate closure of premises and address a catastrophic risk to site security, occupants, breaches of legislation, and the government
- Priority 2 – essential work required within twelve months that will prevent serious deterioration of the asset, address risks to security and occupants, and remedy breaches of legislation
- Priority 3 – essential work required within two years that will prevent deterioration, address medium risks to security and occupants, and remedy breaches of legislation
- Priority 4 – work required within three to five years that will prevent deterioration, remedy breaches to legislation, and reduce overall risks
- Priority 5 – work required in five or more years to prevent deterioration or maintain services. These will where possible form part of an upgrade or replacement program.

Criticality

Criticality relates to the impact of the condition of the component-type on the functionality of the space or area.

Determining Criticality

The criticality rating is based on the risk to the Department. There are three risk factors to be considered:

1. Risk to the organisation
2. Risk to the site
3. Risk to the provision of services

The following table details the criticality ranking based on these risk factors.

Table Criticality ranking

Criticality ranking	**Impact** Organisation	Site	Loss of Service
5	Widespread media coverage Potentially damaging to Organisation, Litigation	Widespread media coverage Potentially damaging to Organisation, Litigation	Service cannot be provided Alternate facilities required
4	Widespread media coverage Increase in costs Litigation	High risk of injury to staff, or members of the public Excessive damage to site	Service cannot be provided Alternate facilities required

3	Some media coverage No risk of litigation	Medium risk of injury. Marginal damage to site	Service impact localised
2		Minimal damage, minimal risk of injury	Minimal impact to service
1	No impact	No damage, no risk of injury	No impact

Criticality is primarily assessed on the component from a normal operational perspective, this is referred to as the Operational Criticality.

If a component is noted as having a fault the Fault Criticality is also to be determined. This is because the nature of the fault may introduce risks in excess of what may normally be expected from an operational perspective.

In determining Fault Criticality to undertake remedial action to the asset, the Assessor must take into account:

- Overt safety issues, eg, structural stability, slipping/tripping hazards, compromised fire safety, broken or insecure fixing of glazing
- Compromise to the Functionality, the usability of the space, eg, uneven floors not suited to room activities
- Potential consequential damage to other component-types, eg, a leaking roof may damage ceilings, paint work, etc, a leaking down pipe may undermine the footings and produce slippery surfaces
- Aesthetics. Because an item may appear unsightly does not mean it should automatically be given a high criticality. However, damaged surfaces at the main site entry represents a high use area and may warrant a slightly higher criticality than similar damage in less visible/used areas. Worn surfaces in passive activity areas will have less impact than equivalent level of wear in active areas. Aesthetics on their own should not warrant a high priority.

Each fault must be assessed and reviewed individually. Assessors should not attempt to include associated activities in any fault determination or criticality. Eg., large sections of putty on an external window is missing and the painting is cracked and peeling. Re-fixing the putty/glazing must be assessed separately to the painting.

Determining Condition:

This audit takes into account:

- visible damage,
- wear and tear,
- unusual noise,
- unusual vibration,
- any other abnormal operating condition

Functionality

For this assessment, maintenance priorities are directed to ensuring Functionality is maintained. This means that the condition of a component-type/component should be such that the Site, Room, Building or Asset can be reasonably and safely used for its originally intended purpose, without unreasonable compromise.

In addition, the condition should not unduly compromise Amenity and Public Image

Eg:

- No heating – functionality/usage of the room could be severely compromised in winter. This depends on the room usage as heating.
- Poor heating – still operational but may limit the functionality of the space under certain conditions. Normally on cold days the heaters may need to operate longer to reach an appropriate temperature. In alpine areas this may still warrant a high priority but not in other climate zones.

The following table shows the relative condition index descriptors.

MACUPORT

Relative condition index

	5 Excellent	4 Good	3 Fair	2 Worn	1 Poor
Structure	Sound structure	Functionally sound structure	Adequate structure, some evidence of foundation movement, minor cracking	Structure functioning but with problems due foundation movement, Some significant cracking	Structure has serious problems and concern is held for the integrity of the structure
Internal and External Fabrics	Fabric constructed with sound materials, true to line and level No evidence of deterioration or discolouration	Showing minor wear and tear and minor deterioration of surfaces	Appearance affected by minor cracking, staining, or minor leakage Indications of breaches of weatherproofing Minor damage to coatings	Fabric damaged, weakened or displaced Appearance affected by cracking, staining, overflows, or breakages. Breaches of weatherproofing evident. Coatings in need of heavy maintenance or renewal	Fabric is badly damaged or weakened Appearance affected by cracking, staining, overflows, leakage, or wilful damage Breaches of waterproofing Coatings badly damaged or non-existent
Services	All components operable and well maintained	All components operable	Occasional outages, breakdowns or blockages. Increased maintenance required	Failures of plumbing electrical and mechanical components common place	Plumbing, electrical and mechanical components are unsafe or inoperable
Fittings	Well secured and operational, sound of function and appearance	Operational and functional, minor wear and tear	Generally operational. Minor breakage	Fittings of poor quality and appearance, often inoperable and damaged.	Most are inoperable or damaged
Maintenance	Well maintained and clean	Increased maintenance inspection required	Regular and programmed maintenance inspections essential	Frequent maintenance inspections essential. Short-term element replacement rehabilitation	Minimum life expectancy, requiring urgent rehabilitation or replacement

Appendix D - Key Notes

The Appendix is an area for the recording of key notes and information in relation to this asset. As an example this section could be utilised to record budget proposal approval/declines, the effect the declined budget has on the asset, notes for future proposals and demand related issues. In essence this section can be used to record all noteworthy information.

Site Asset Management Plan

Shannons creek zone substation - Site

2315 Armidale Road, Blaxlands creek, Blaxlands Creek, NSW, 2460, Australia

16 November 2022

Macutex Quality Assurance Auditing

Prepared for:	Essential Energy 2021
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Prepared by:	Macutex Pty Ltd ABN: 56 588 969 728 Address: Level 18, 114 William Street, Melbourne VIC 3000 Phone: +61 (03) 9670 9464 Email: info@macutex.com Website: www.macutex.com
Site Address:	2315 Armidale Road, Blaxlands creek, Blaxlands Creek, NSW, 2460, Australia
Audit Date:	17/08/2020
Report Status:	Approved
Date Issued:	16/11/2022

Table of Contents

1. Introduction

1.1 Background

Essential Energy, as a state-owned corporation, builds, operates and maintains the electricity network across 95% of New South Wales and parts of southern Queensland. The organisation has undertaken a 5-year transformation program to improve operations and profitability. This asset management initiative embarked on by the Property Division will support the transformation initiative by delivering improved property management processes.

The asset management project will facilitate the shift in organisational asset management capability, allowing for alignment to ISO 55001 and principles of The Asset Management Policy for the NSW Public Sector.

This Asset Management Plan (AMP) is directly related and refers to Essential Energy's over-arching Asset Management Framework (AMF) and other relevant documents/legislation as set out within the AMF.

2. Scope

This AMP covers the Site and its asset base.

The building is located within Shannons creek zone substation site at 2315 Armidale Road, Blaxlands creek, Blaxlands Creek, NSW, 2460, Australia.

Data in this report was acquired during an audit conducted 17/08/2020.

Site

Site is approximately 3400 sqms

The site asset base was audited where applicable as follows:

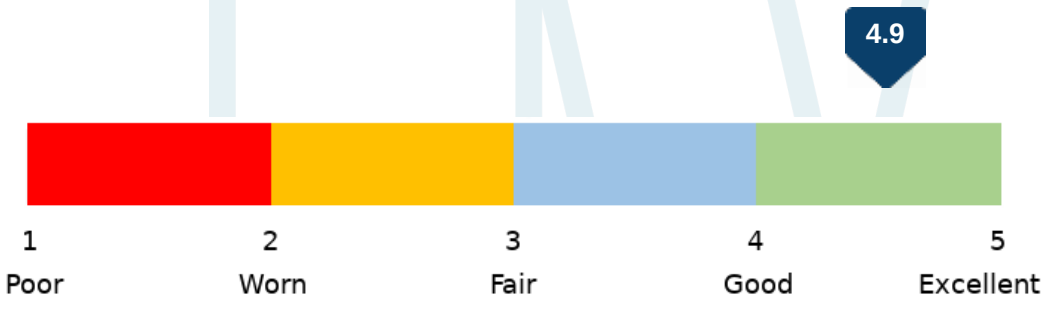
- Buildings assets including building structure, external fabric, internal fabric, foundations and structural components.
- Services - Mechanical including split system AC units and exhaust fans.
- Statutory Equipment including switchboards.
- Services - Electrical including internal lighting, external lighting and security measures such as CCTV.
- Site assets including boundary walls, fencing and gates, landscaping, rainwater tanks and retaining walls.
- Services - Plumbing including sinks and toilets.

3. Condition Assessment

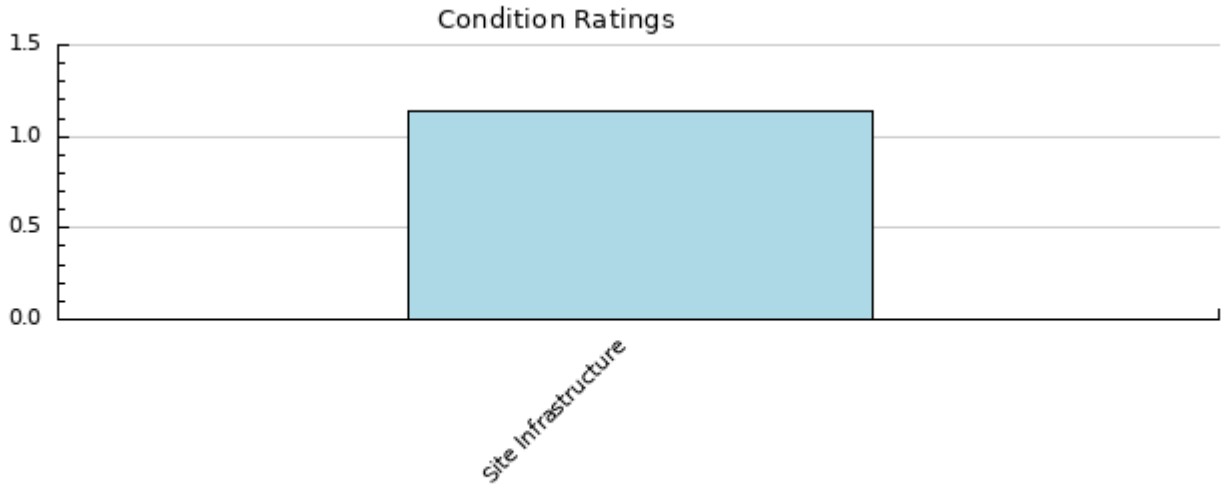
This audit has been rated on the following condition rating criteria:

Condition	Rating	Definition
Excellent	5	• No defects • As new condition and appearance • Only preventative maintenance required
Good	4	• Superficial wear and tear • Minor defects and some deterioration to surface finishes • No major defects • Major maintenance not required • Minor maintenance only required
Fair	3	• Average condition • Deteriorated surfaces require attention • Services are functional but require attention • Deferred maintenance work exists • Small number of defects identified
Worn	2	• Badly deteriorated • Structural problems • General poor condition and with eroded protective coatings • Elements are broken and services are not performing • Significant number of major defects • Major repairs required
Poor	1	• Not operational • Unfit for occupancy or normal use • Building has failed • Complete replacement required

Site was assessed on 17/08/2020. The resulting site average condition rating per the table below is:



The Elements Group condition assessment rating is per the following chart:



Further detail is provided in subsequent sections of this AMP and the online Site Condition Report.

Site

Asset Function and Details

Site comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Boundary Walls, Fencing and Gates	Chain Link Fencing (>2m)	222	LM	ESEN_Wk3AZS-33	Site - Site
Boundary Walls, Fencing and Gates	Chain Link Gates (>2m)	2	ITEM	ESEN_Wk3AZS-34	Site - Site
Landscaping	Concrete - Poured	70	SQM	ESEN_Wk3AZS-35	Site - Site
Landscaping	Gravel	3100	SQM	ESEN_Wk3AZS-36	Site - Site
Rainwater Tanks	Water Tank - Between 1000 and 10000L (4,000L)	1	ITEM	ESEN_Wk3AZS-37	Site - Site
Stormwater & Drainage	Kerb and Channel - Concrete	40	LM	ESEN_Wk3AZS-38	Site - Site
Stormwater & Drainage	Open Spoon Drains - Concrete (3m wide)	35	LM	ESEN_Wk3AZS-39	Site - Site

Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Boundary Walls, Fencing and Gates	Chain Link Fencing (>2m)	ESEN_Wk3AZS-33	22	22
Boundary Walls, Fencing and Gates	Chain Link Gates (>2m)	ESEN_Wk3AZS-34	22	22
Landscaping	Concrete - Poured	ESEN_Wk3AZS-35	80	79
Landscaping	Gravel	ESEN_Wk3AZS-36	5	5
Rainwater Tanks	Water Tank - Between 1000 and 10000L (4,000L)	ESEN_Wk3AZS-37	20	19
Stormwater & Drainage	Kerb and Channel - Concrete	ESEN_Wk3AZS-38	40	40
Stormwater & Drainage	Open Spoon Drains - Concrete (3m wide)	ESEN_Wk3AZS-39	20	20

Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Boundary Walls, Fencing and Gates	Chain Link Fencing (>2m)	ESEN_Wk3AZS-33	1	5 - Excellent
Boundary Walls, Fencing and Gates	Chain Link Gates (>2m)	ESEN_Wk3AZS-34	1	5 - Excellent
Landscaping	Concrete - Poured	ESEN_Wk3AZS-35	1	5 - Excellent
Landscaping	Gravel	ESEN_Wk3AZS-36	1	5 - Excellent
Rainwater Tanks	Water Tank - Between 1000 and 10000L (4,000L)	ESEN_Wk3AZS-37	2	4 - Good
Stormwater & Drainage	Kerb and Channel - Concrete	ESEN_Wk3AZS-38	1	5 - Excellent

Stormwater & Drainage	Open Spoon Drains - Concrete (3m wide)	ESEN_Wk3AZS-39	1	5 - Excellent

Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Appendix A - Maintenance Plan

Corrective Maintenance

Appendix B - Definitions

Term	Explanation
Asset management (AM)	Systematic and coordinated activities and practices through which an organization optimally and sustainably manages its assets and asset systems, their associated performance, risks and expenditures over their life cycles for the purpose of achieving its organizational strategic plan
Asset management information	Meaningful data relating to assets and asset management Examples of asset management information include asset registers, drawings, contracts, licences, legal, regulatory and statutory documents, policies, standards guidance notes, technical instructions, procedures, operating criteria, asset performance and condition data, or all asset management records.
Asset management information system (AMIS)	System for the storage, processing and transmission of asset management information The storage or transmission of asset information can be achieved via multiple types of media
Asset management objective(s)	a) specific and measurable outcome or achievement required of the asset system(s) in order to implement the asset management policy and asset management strategy; and/or b) detailed and measurable level of performance or condition required of the assets; and/or c) specific and measurable outcome or achievement required of the asset management system
Asset management performance	Measurable results of an organization's management of its assets and/or asset system(s) Results are normally measured against the organization's Strategic Plan, Asset Management Policy, Asset Management Strategy, asset management objectives and/or other asset management performance requirements Asset management performance may include the effectiveness of expenditures, the reliability, efficiency, quality, sustainability and value of the assets and their utilization, and/or the impact of assets and asset management upon the organization's financial performance, health and safety performance, environmental performance, compliance and reputation Asset management performance measurement includes measuring the effectiveness of the organization's asset management system
Asset Management Plan	Document specifying activities and resources, responsibilities and timescales for implementing the asset management strategy and delivering the asset management objectives
Asset Management Policy	Principles and mandated requirements derived from, and consistent with, the organizational Strategic Plan, providing a framework for the development and implementation of the Asset Management Strategy and the setting of the asset management objectives
Asset Management Strategy (AMS)	Long-term optimized approach to management of the assets, derived from, and consistent with, the organizational strategic plan and the asset management policy The Asset Management Strategy converts the objectives of the organizational strategic plan and the asset management policy into a high-level, long-term action plan for the assets and/or asset system(s), the asset portfolios and/or the asset management system The high-level, long-term action plans for the assets and the asset management objectives are normally the outputs of the asset management strategy. These elements together form the basis for developing more specific and detailed asset management plan(s).
Asset management system	Organization's asset management policy, Asset Management Strategy, asset management objectives, Asset Management Plan(s) and the activities, processes and organizational structures necessary for their development, implementation and continual improvement A management system is a set of interrelated elements used to establish policy, strategy and objectives and to achieve those objectives through the implementation of plans A management system includes organizational structure, roles and responsibilities, planning activities, standards, information systems, practices, processes, procedures and resources.
Asset portfolio	Complete range of assets and asset systems owned by an organization Assets and asset systems may either be highly integrated and interdependent or deliver more independent and parallel contributions to an organization's total performance. In the latter case, opportunities may exist to manage and optimize assets or asset systems differently across the Portfolio
Asset recognition	An asset is recognised in the balance sheet when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably.
Asset Register (AM)	A record of all asset information considered worthy of separate identification including inventory, historical, financial, condition, construction, technical and financ information about each.
Asset Register (Financial)	A record of assets, including financial information about each, that will be beneficial for the cost planning and cost management of the assets
Asset renewal	The process of improving the service potential an asset delivers through such methods as replacement, rehabilitation or reconstruction.
Asset system	Set of assets that interact and/or are interrelated so as to deliver a required business function or service

Asset threshold	The minimum gross value for the recognition of an asset or collection of assets
Asset values	A determination of the value of the asset which depends on the purpose for which it is required
Audit	Systematic, independent process for obtaining evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled
Australian Standards	Documents published in Australia by Standards Australia that set out specifications and procedures designed to ensure products, services and systems are safe reliable and consistently perform the way they were intended to.
Business Plan	A plan produced by an organisation which translates the objectives contained in the Annual Plan into detailed work plans for a particular or range of business activities.
Capital works	The planning and procurement of works applied to existing or new assets, resulting in an increase to the capital value of the assets. This includes the creation o new assets, as well as the renewal and replacement of existing assets.
Capital expenditure (CAPEX)	Expenditure used to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential.
Components	Specific parts of an asset having independent physical or functional identify and having specific attributes such as different life expectancy, maintenance regimes risk or criticality
Contracted service providers	Individual(s) not directly employed by the organization including contractors, subcontractors, service providers, consultants, agency staff and casual workers
Condition monitoring	Continuous or period inspection, assessment, measurement and interpretation of the resultant data, to indicate the condition of a specific component used to determine the need for preventive or remedial action
Cost	Cost is the amount of cash or cash equivalents paid to acquire an asset at the time of its acquisition or the costs associated with the construction of a new asset. Alternatively, cost can represent the fair value of other consideration given to the acquisition at the time of its acquisition or transfer to an organisation or, where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other Australian Accounting Standards
Critical assets/asset systems	Assets and/or asset systems that are identified as having the greatest potential to impact on the achievement of the organizational Strategic Plan The assets can be safety-critical, environment-critical and/or performance-critical, and can relate to legal, regulatory and/or statutory requirements
Demand management	The active intervention in the market to influence demand for services and assets with forecast consequences, usually to avoid or defer Capex expenditure. Demand management is based on the notion that as needs are satisfied, expectations automatically rise and almost every action taken to satisfy demand will continue to stimulate further demand
Depreciation	The wearing out, consumption or other loss of value of an asset whether arising from use, passing of time or obsolescence and through both technological and market changes. Depreciation is accounted for by the allocation of the cost of the asset less its residual value over its useful life.
Deterioration rate	The rate at which an asset approaches failure
Design life	The proposed life of the asset determined as part of the design process
Disposal	A process whereby an asset is disposed of, sold or decommissioned
Economic life	The period from acquisition of the asset to the time when the asset, while physically able to provide a service, ceases to be the lowest cost alternative to satisfy a particular need
Effectiveness	Relates to how well outcomes meet objectives. It concerns the immediate characteristics of an entity's outputs and the degree to which an asset contributes to achieving specified outcomes. Entities should ensure that an asset suits the nature of their business and supports the delivery of budget funded entity outcomes Extent to which planned activities are realized and planned results achieved
Enablers (asset management)	Supportive systems, procedures, processes, activities and resources that enable an organization to operate its asset management system efficiently and effectively
Functional policy	Specified approach, rules and boundaries set out by an organization, that provide direction and the framework for the control of specific asset-related processes and activities Functional policies, strategies and objectives relate to asset management activities or processes, such as capital investment, construction methods, maintenanc and purchasing. These should not be confused with the asset management policies, Asset Management Strategy or asset management objectives as these are cross-functional and consider the life-cycle optimization of all relevant activities
Functionality	Functionality is 'fitness for purpose'. It describes how well a current asset matches the activities it supports

International Infrastructure Management Manual (IIMM)	International Infrastructure Management Manual, 2011 Ed
Key performance indicators (KPIs)	A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target.
Level of service	A relevant measurable standard or target that reflects the required performance to meet agreed expectations in relation to the type, quality and quantity of services delivered
Life	A measure of anticipated life of an asset or component such as time, number of cycles, distance intervals etc.
Life-cycle	The time period commencing with the identification of the need for an asset and terminating with the decommissioning of the asset or any associated liabilities The principal stages of an asset's life-cycle can include: create/acquire, utilize, maintain and renew/dispose
Life-cycle cost	Total expenditure required throughout the life of an asset in order to fund the creation, design, construction, operation, maintenance, renewal and disposal enabling the asset to deliver the desired service level over its life
Maintenance	All actions necessary for retaining an asset as near as practical to its original condition excluding rehabilitation. The work needed to maintain an asset in a condition that enables it to reach its service potential and may expand the assets service life. Note maintenance does not include modification of an asset from i original design.
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Stakeholder	Person or group having an interest in the organization's performance, success and/or the impact of its activities Examples may include employees, customers, shareholders, financiers, regulators, statutory bodies, contractors, suppliers, unions, or society
Strategic Plan	A plan containing the long term goals and strategies of an organisation. Strategic plans have a strong external focus, cover major portions of an organisation's functions and identify its key targets, actions and resource allocations which specifically relate to the long term survival, value and growth of that organisation
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Sustainable	Achieving or retaining an optimum compromise between performance, costs and risks over the asset's life-cycle, whilst avoiding adverse long-term impacts to th organization from short-term decisions The related noun "sustainability" relates to the quality of being sustainable
Sustainable development	An enduring balanced approach to economic activity, environmental responsibility and social progress
Tenant	A person or entity paying rent in exchange for the occupancy of a building also referred to as Lessee.
Useful life	Useful life is the period over which an asset is expected to be available for use by an entity for the same it was acquired. The useful life of an asset may be different to the period of its physical and economic life.
Use	An assessment of how intensively an asset is used based upon its design specifications. Use may be classified as expected, excessive or under-utilised.
Valuation	A periodical assessment of the value of an asset dependent upon the purpose for which the valuation is required. Valuations can be conducted to determine replacement value (for determining maintenance levels or insurance levels), market value for life cycle costing purposes, optimal deprival value for tariff setting and renal value to ensure an asset meets its required rate of return
Whole-of-life costing	An estimate of all expected costs over the lifetime of the relevant asset, including the costs of acquisition, operation and maintenance and disposal.
Business continuity	The ability of an organization to quickly resume core functions following a serious interruption of business activities.
Property	Land or Buildings

Appendix C - Condition & Criticality Assessment Guide

1. Condition and Criticality Matrix

Condition and criticality are defined based on a ranking system of ‘1’ to ‘5’. A score of ‘1’ represents “excellent condition” or lowest “no impact”, while a score of ‘5’ represents a failed condition or the highest “catastrophic impact”. Prioritisation for response or action are found by cross-referencing the condition and criticality. The following table, illustrates how these rankings result in ratings for the relevant buildings, rooms or assets and as a consequence a prioritisation for fault response or works.

	Criticality				
	1	2	3	4	5
Condition	**No Impact**	**Low Impact**	**Medium Impact**	**High Impact**	**Catastrophic Impact**
1 Poor	**M**	**S**	**H**	**VH**	**VH**
2 Worn	**M**	**S**	**S**	**H**	**VH**
3 Fair	**L**	**M**	**S**	**H**	**VH**
4 Good	**L**	**L**	**M**	**S**	**H**
5 Excellent	**L**	**L**	**M**	**S**	**S**

Fault response and works response for assets are based on their fault criticality or operational criticality respectively in relation to condition. These priorities are:

Priority	**Rating**	**Fault Response Time**	**Works Response Time**
Priority 1	Very High (VH)	2 Hours	Immediate
Priority 2	High (H)	4 Hours	12 Months
Priority 3	Significant (S)	24 Hours	2 Years
Priority 4	Medium (M)	3 Days	3 - 4 Years

Priority 5	Low (L)	5 Days	4 Years +

Prioritisation of faults – Fault Response Time

The suggested fault response times is the period an appropriately qualified resource must arrive on site to address the fault and “make safe”. As the fault is likely to have a reduced rating because of the resource’s response, it should have an amended priority and then be rectified within the amended time or as agreed with site management.

Prioritisation of works – Works Response Time

Prioritisation of works based on operational criticality are generally deferred maintenance or project works and are prioritised based on available budget at the discretion of site management. These priorities are:

- Priority 1 – urgent work that will prevent immediate closure of premises and address a catastrophic risk to site security, occupants, breaches of legislation, and the government
- Priority 2 – essential work required within twelve months that will prevent serious deterioration of the asset, address risks to security and occupants, and remedy breaches of legislation
- Priority 3 – essential work required within two years that will prevent deterioration, address medium risks to security and occupants, and remedy breaches of legislation
- Priority 4 – work required within three to five years that will prevent deterioration, remedy breaches to legislation, and reduce overall risks
- Priority 5 – work required in five or more years to prevent deterioration or maintain services. These will where possible form part of an upgrade or replacement program.

Criticality

Criticality relates to the impact of the condition of the component-type on the functionality of the space or area.

Determining Criticality

The criticality rating is based on the risk to the Department. There are three risk factors to be considered:

1. Risk to the organisation
2. Risk to the site
3. Risk to the provision of services

The following table details the criticality ranking based on these risk factors.

Table Criticality ranking

Criticality ranking	**Impact** Organisation	Site	Loss of Service
5	Widespread media coverage Potentially damaging to Organisation, Litigation	Widespread media coverage Potentially damaging to Organisation, Litigation	Service cannot be provided Alternate facilities required
4	Widespread media coverage Increase in costs Litigation	High risk of injury to staff, or members of the public Excessive damage to site	Service cannot be provided Alternate facilities required

3	Some media coverage No risk of litigation	Medium risk of injury. Marginal damage to site	Service impact localised
2		Minimal damage, minimal risk of injury	Minimal impact to service
1	No impact	No damage, no risk of injury	No impact

Criticality is primarily assessed on the component from a normal operational perspective, this is referred to as the Operational Criticality.

If a component is noted as having a fault the Fault Criticality is also to be determined. This is because the nature of the fault may introduce risks in excess of what may normally be expected from an operational perspective.

In determining Fault Criticality to undertake remedial action to the asset, the Assessor must take into account:

- Overt safety issues, eg, structural stability, slipping/tripping hazards, compromised fire safety, broken or insecure fixing of glazing
- Compromise to the Functionality, the usability of the space, eg, uneven floors not suited to room activities
- Potential consequential damage to other component-types, eg, a leaking roof may damage ceilings, paint work, etc, a leaking down pipe may undermine the footings and produce slippery surfaces
- Aesthetics. Because an item may appear unsightly does not mean it should automatically be given a high criticality. However, damaged surfaces at the main site entry represents a high use area and may warrant a slightly higher criticality than similar damage in less visible/used areas. Worn surfaces in passive activity areas will have less impact than equivalent level of wear in active areas. Aesthetics on their own should not warrant a high priority.

Each fault must be assessed and reviewed individually. Assessors should not attempt to include associated activities in any fault determination or criticality. Eg., large sections of putty on an external window is missing and the painting is cracked and peeling. Re-fixing the putty/glazing must be assessed separately to the painting.

Determining Condition:

This audit takes into account:

- visible damage,
- wear and tear,
- unusual noise,
- unusual vibration,
- any other abnormal operating condition

Functionality

For this assessment, maintenance priorities are directed to ensuring Functionality is maintained. This means that the condition of a component-type/component should be such that the Site, Room, Building or Asset can be reasonably and safely used for its originally intended purpose, without unreasonable compromise.

In addition, the condition should not unduly compromise Amenity and Public Image

Eg:

- No heating – functionality/usage of the room could be severely compromised in winter. This depends on the room usage as heating.
- Poor heating – still operational but may limit the functionality of the space under certain conditions. Normally on cold days the heaters may need to operate longer to reach an appropriate temperature. In alpine areas this may still warrant a high priority but not in other climate zones.

The following table shows the relative condition index descriptors.

MACUPORT

Relative condition index

	5 Excellent	4 Good	3 Fair	2 Worn	1 Poor
Structure	Sound structure	Functionally sound structure	Adequate structure, some evidence of foundation movement, minor cracking	Structure functioning but with problems due foundation movement, Some significant cracking	Structure has serious problems and concern is held for the integrity of the structure
Internal and External Fabrics	Fabric constructed with sound materials, true to line and level No evidence of deterioration or discolouration	Showing minor wear and tear and minor deterioration of surfaces	Appearance affected by minor cracking, staining, or minor leakage Indications of breaches of weatherproofing Minor damage to coatings	Fabric damaged, weakened or displaced Appearance affected by cracking, staining, overflows, or breakages. Breaches of weatherproofing evident. Coatings in need of heavy maintenance or renewal	Fabric is badly damaged or weakened Appearance affected by cracking, staining, overflows, leakage, or wilful damage Breaches of waterproofing Coatings badly damaged or non-existent
Services	All components operable and well maintained	All components operable	Occasional outages, breakdowns or blockages. Increased maintenance required	Failures of plumbing electrical and mechanical components common place	Plumbing, electrical and mechanical components are unsafe or inoperable
Fittings	Well secured and operational, sound of function and appearance	Operational and functional, minor wear and tear	Generally operational. Minor breakage	Fittings of poor quality and appearance, often inoperable and damaged.	Most are inoperable or damaged
Maintenance	Well maintained and clean	Increased maintenance inspection required	Regular and programmed maintenance inspections essential	Frequent maintenance inspections essential. Short-term element replacement rehabilitation	Minimum life expectancy, requiring urgent rehabilitation or replacement

Appendix D - Key Notes

The Appendix is an area for the recording of key notes and information in relation to this asset. As an example this section could be utilised to record budget proposal approval/declines, the effect the declined budget has on the asset, notes for future proposals and demand related issues. In essence this section can be used to record all noteworthy information.