



## Site Asset Management Plan

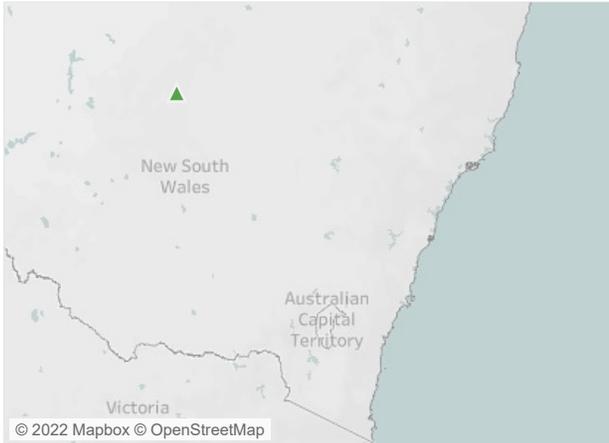
### Cobar CSA 132 Zone Substation

Louth Road, Cobar, Cobar, NSW, 2835, Australia

16 November 2022

# State Portfolio Overview

Region: All      Suburb: All      Facility Type: All      Facility ID: COBA1149      Facility Name: All



## Overall Condition Rating

Facility Type	Facility Name	Rating
Zone Substation	Cobar csa 132 zone subst..	3.61

Total Renewal Cost over 10yrs  
\$419,018

Total Maintenance Cost  
\$3,500

Total Compliance Cost  
\$32,000

## Building Register

Facility ID	Facility Na..	Building Name	Audit Finish D..	Access comment
COBA1149	Cobar csa 132 zone substation	Building 1	12/02/2021	Null
		Building 2	12/02/2021	Null
		Site	12/02/2021	Null

## Defects Summary

Facility Na..	Building Na..	Defects
Cobar csa 132 zone substation	Building 1	2
	Building 2	1
	Site	2

## Remaining Useful Life (Yrs)

Facility Na..	Element Group	Yrs
Cobar csa 132 zone substation	Building Structure	53
	External Fabric	19
	Internal Fabric	21
	Services - Electrical	13
	Services - Fire	11
	Services - Hydraulic	14
	Services - Mechanical	10
	Services - Plumbing	12
	Site	37
	Statutory Equipment	24



## Future Works Plan: Analysis Renewal Detail Summary



Facility ID All	Facility Cobar csa 132 zone subs..	Facility Type All	Region All	Component All	Component Type All	Condition Description All	EE Site Criticality All	Criticality All	Asset Condition Index 2 to 25
--------------------	---------------------------------------	----------------------	---------------	------------------	-----------------------	------------------------------	----------------------------	--------------------	----------------------------------

Facility Details	10 Year Renewal by Component	10 Year Renewal by Building
------------------	------------------------------	-----------------------------

<p><b>Substation</b>                      <b>\$419,481</b></p> <hr/> <p style="text-align: center;"><b>Condition Profile</b></p> <p>3 - Fair (3)                      \$406,964</p> <p>4 - Good (2)                      \$12,517</p> <hr/> <p style="text-align: center;"><b>Estimated Renewal by Year</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">FY22</td><td style="width: 80%;"></td><td style="width: 10%;"></td></tr> <tr><td>FY23</td><td></td><td></td></tr> <tr><td>FY24</td><td></td><td></td></tr> <tr><td>FY25</td><td></td><td style="text-align: right;">\$195,966</td></tr> <tr><td>FY26</td><td></td><td></td></tr> <tr><td>FY27</td><td></td><td></td></tr> <tr><td>FY28</td><td></td><td></td></tr> <tr><td>FY29</td><td style="text-align: right;">\$15,032</td><td></td></tr> <tr><td>FY30</td><td></td><td style="text-align: right;">\$195,966</td></tr> <tr><td>FY31</td><td style="text-align: right;">\$12,517</td><td></td></tr> </table>	FY22			FY23			FY24			FY25		\$195,966	FY26			FY27			FY28			FY29	\$15,032		FY30		\$195,966	FY31	\$12,517		<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;"><b>Building Structure</b></td><td style="width: 60%;">Floor Structure</td><td style="width: 20%; text-align: right;">\$0</td></tr> <tr><td></td><td>Foundation</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Roof Structure</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Stairs</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Structural Beams</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Structural Columns</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Wall Structure</td><td style="text-align: right;">\$0</td></tr> <tr><td><b>Ext. Fabric, Furniture &amp; Fittings</b></td><td>Doors</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Downpipes</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Fascia</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Guttering</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Handrails, Balustrade &amp; Ramps</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Roof Access</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Roof Cladding</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Soffits &amp; Gable Ends</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Wall Cladding</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Windows</td><td style="text-align: right;">\$0</td></tr> <tr><td><b>Int. Fabric, Finishes, Furniture &amp; Fittings</b></td><td>Ceiling</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Floor Covering</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Wall Cladding</td><td style="text-align: right;">\$0</td></tr> <tr><td><b>Services - Electrical &amp; Utility</b></td><td>External Lighting</td><td style="text-align: right;">\$0</td></tr> <tr><td></td><td>Internal Lighting</td><td style="text-align: right;">\$0</td></tr> <tr><td><b>Services - Fire</b></td><td>ESM</td><td style="text-align: right;">\$4,309</td></tr> </table>	<b>Building Structure</b>	Floor Structure	\$0		Foundation	\$0		Roof Structure	\$0		Stairs	\$0		Structural Beams	\$0		Structural Columns	\$0		Wall Structure	\$0	<b>Ext. Fabric, Furniture &amp; Fittings</b>	Doors	\$0		Downpipes	\$0		Fascia	\$0		Guttering	\$0		Handrails, Balustrade & Ramps	\$0		Roof Access	\$0		Roof Cladding	\$0		Soffits & Gable Ends	\$0		Wall Cladding	\$0		Windows	\$0	<b>Int. Fabric, Finishes, Furniture &amp; Fittings</b>	Ceiling	\$0		Floor Covering	\$0		Wall Cladding	\$0	<b>Services - Electrical &amp; Utility</b>	External Lighting	\$0		Internal Lighting	\$0	<b>Services - Fire</b>	ESM	\$4,309	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">COBA1149_Site</td><td style="width: 60%;">Cobar csa 132 zone substati..</td><td style="width: 20%; text-align: right;">\$394,446</td></tr> <tr><td>COBA1149_Building 2</td><td>Cobar csa 132 zone substati..</td><td style="text-align: right;">\$16,262</td></tr> <tr><td>COBA1149_Building 1</td><td>Cobar csa 132 zone substati..</td><td style="text-align: right;">\$8,773</td></tr> </table>	COBA1149_Site	Cobar csa 132 zone substati..	\$394,446	COBA1149_Building 2	Cobar csa 132 zone substati..	\$16,262	COBA1149_Building 1	Cobar csa 132 zone substati..	\$8,773
FY22																																																																																																														
FY23																																																																																																														
FY24																																																																																																														
FY25		\$195,966																																																																																																												
FY26																																																																																																														
FY27																																																																																																														
FY28																																																																																																														
FY29	\$15,032																																																																																																													
FY30		\$195,966																																																																																																												
FY31	\$12,517																																																																																																													
<b>Building Structure</b>	Floor Structure	\$0																																																																																																												
	Foundation	\$0																																																																																																												
	Roof Structure	\$0																																																																																																												
	Stairs	\$0																																																																																																												
	Structural Beams	\$0																																																																																																												
	Structural Columns	\$0																																																																																																												
	Wall Structure	\$0																																																																																																												
<b>Ext. Fabric, Furniture &amp; Fittings</b>	Doors	\$0																																																																																																												
	Downpipes	\$0																																																																																																												
	Fascia	\$0																																																																																																												
	Guttering	\$0																																																																																																												
	Handrails, Balustrade & Ramps	\$0																																																																																																												
	Roof Access	\$0																																																																																																												
	Roof Cladding	\$0																																																																																																												
	Soffits & Gable Ends	\$0																																																																																																												
	Wall Cladding	\$0																																																																																																												
	Windows	\$0																																																																																																												
<b>Int. Fabric, Finishes, Furniture &amp; Fittings</b>	Ceiling	\$0																																																																																																												
	Floor Covering	\$0																																																																																																												
	Wall Cladding	\$0																																																																																																												
<b>Services - Electrical &amp; Utility</b>	External Lighting	\$0																																																																																																												
	Internal Lighting	\$0																																																																																																												
<b>Services - Fire</b>	ESM	\$4,309																																																																																																												
COBA1149_Site	Cobar csa 132 zone substati..	\$394,446																																																																																																												
COBA1149_Building 2	Cobar csa 132 zone substati..	\$16,262																																																																																																												
COBA1149_Building 1	Cobar csa 132 zone substati..	\$8,773																																																																																																												



## **Building 1 Asset Management Plan**

### **Cobar csa 132 zone substation - Building 1**

Louth Road, Cobar, Cobar, NSW, 2835, Australia

16 November 2022

## Macutex Quality Assurance Auditing

<b>Prepared for:</b>	Essential Energy 2021
<b>Contact:</b>	Macutex
<b>Prepared by:</b>	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
<b>Site Address:</b>	Louth Road, Cobar, Cobar, NSW, 2835, Australia
<b>Audit Date:</b>	08/02/2021
<b>Report Status:</b>	Approved
<b>Date Issued:</b>	16/11/2022

## Table of Contents

1. Introduction	4
2. Scope	5
3. Condition Assessment	6
Building Structure	8
External Fabric	10
Internal Fabric	12
Services - Electrical	14
Services - Fire	15
Services - Hydraulic	17
Services - Mechanical	18
Services - Plumbing	19
Site	20
Statutory Equipment	21
Appendix A - Maintenance Plan	22
Appendix B - Definitions	23
Appendix C - Condition & Criticality Assessment Guide	27
Appendix D - Key Notes	31

# 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.

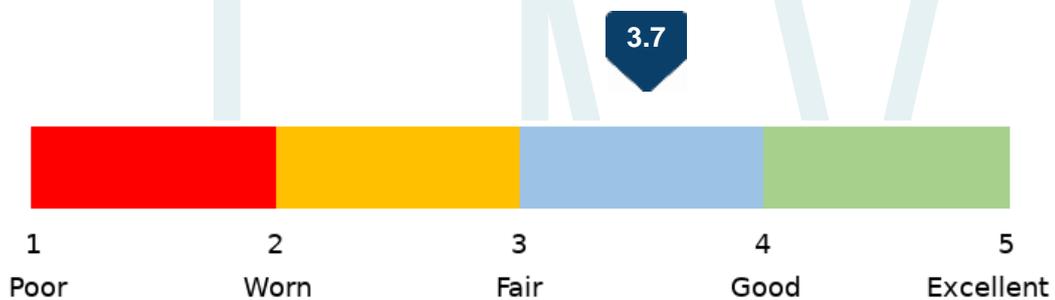


### 3. Condition Assessment

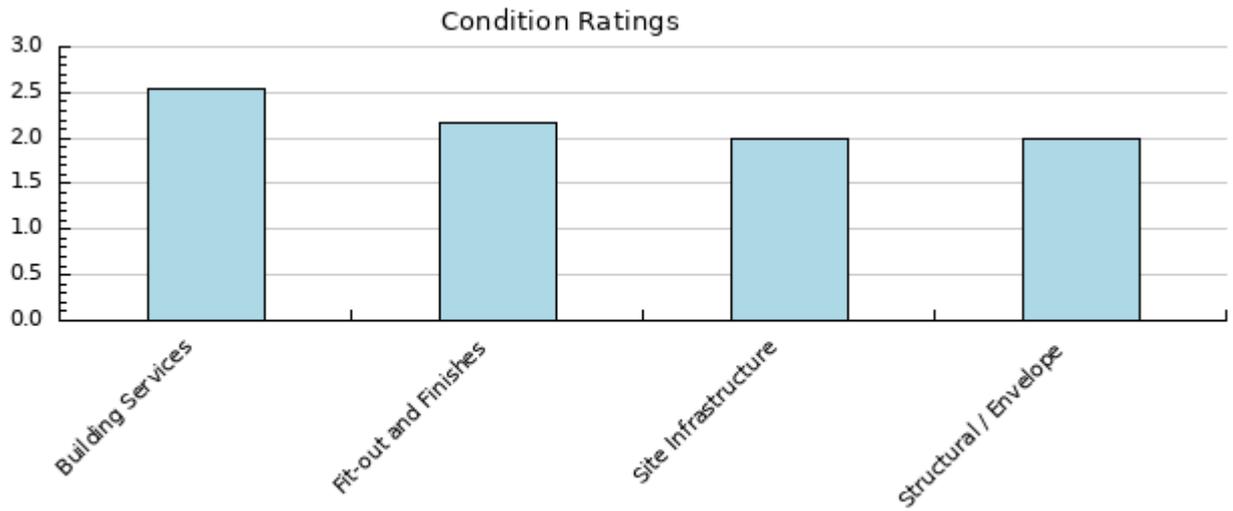
This audit has been rated on the following condition rating criteria:

Condition	Rating	Definition
Excellent	5	<ul style="list-style-type: none"> <li>No defects</li> <li>As new condition and appearance</li> <li>Only preventative maintenance required</li> </ul>
Good	4	<ul style="list-style-type: none"> <li>Superficial wear and tear</li> <li>Minor defects and some deterioration to surface finishes</li> <li>No major defects</li> <li>Major maintenance not required</li> <li>Minor maintenance only required</li> </ul>
Fair	3	<ul style="list-style-type: none"> <li>Average condition</li> <li>Deteriorated surfaces require attention</li> <li>Services are functional but require attention</li> <li>Deferred maintenance work exists</li> <li>Small number of defects identified</li> </ul>
Worn	2	<ul style="list-style-type: none"> <li>Badly deteriorated</li> <li>Structural problems</li> <li>General poor condition and with eroded protective coatings</li> <li>Elements are broken and services are not performing</li> <li>Significant number of major defects</li> <li>Major repairs required</li> </ul>
Poor	1	<ul style="list-style-type: none"> <li>Not operational</li> <li>Unfit for occupancy or normal use</li> <li>Building has failed</li> <li>Complete replacement required</li> </ul>

Building 1 was assessed on 08/02/2021. 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_Wk22ADZ-401	External - External
Structural Beams	Metal/Steel	25	LM	ESEN_Wk22ADZ-402	External - External
Wall Structure	Metal/Steel Frame	105	SQM	ESEN_Wk22ADZ-403	External - External
Sub-Structure	Metal/Steel	44	SQM	ESEN_Wk22ADZ-404	External - External
Roof Structure	Metal/Steel - Frame	54	SQM	ESEN_Wk22ADZ-405	External - External
Stairs	Concrete	3	SQM	ESEN_Wk22ADZ-406	External - External

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Foundation	Concrete slab	ESEN_Wk22ADZ-401	80	77
Structural Beams	Metal/Steel	ESEN_Wk22ADZ-402	50	48
Wall Structure	Metal/Steel Frame	ESEN_Wk22ADZ-403	50	48
Sub-Structure	Metal/Steel	ESEN_Wk22ADZ-404	50	48
Roof Structure	Metal/Steel - Frame	ESEN_Wk22ADZ-405	50	48
Stairs	Concrete	ESEN_Wk22ADZ-406	80	77

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Foundation	Concrete slab	ESEN_Wk22ADZ-401	2	4 - Good
Structural Beams	Metal/Steel	ESEN_Wk22ADZ-402	2	4 - Good
Wall Structure	Metal/Steel Frame	ESEN_Wk22ADZ-403	2	4 - Good
Sub-Structure	Metal/Steel	ESEN_Wk22ADZ-404	2	4 - Good
Roof Structure	Metal/Steel - Frame	ESEN_Wk22ADZ-405	2	4 - Good
Stairs	Concrete	ESEN_Wk22ADZ-406	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 Access	Anchor Points	6	ITEM	ESEN_Wk22ADZ-399	External - External
Downpipes	PVC	15	LM	ESEN_Wk22ADZ-400	External - External
Roof Cladding	Pitched - Colorbond	54	SQM	ESEN_Wk22ADZ-407	External - External
Soffits & Gable Ends	Colorbond	10	SQM	ESEN_Wk22ADZ-408	External - External
Guttering	Fascia Gutter - Colorbond	25	LM	ESEN_Wk22ADZ-409	External - External
Fascia	Colorbond	35	LM	ESEN_Wk22ADZ-410	External - External
Wall Cladding	Colorbond	85	SQM	ESEN_Wk22ADZ-411	External - External
Windows	Aluminium Framed	1	SQM	ESEN_Wk22ADZ-412	External - External
Doors	Swing - Steel	4	ITEM	ESEN_Wk22ADZ-413	External - External

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Roof Access	Anchor Points	ESEN_Wk22ADZ-399	30	23
Downpipes	PVC	ESEN_Wk22ADZ-400	20	15
Roof Cladding	Pitched - Colorbond	ESEN_Wk22ADZ-407	25	24
Soffits & Gable Ends	Colorbond	ESEN_Wk22ADZ-408	25	24
Guttering	Fascia Gutter - Colorbond	ESEN_Wk22ADZ-409	15	14
Fascia	Colorbond	ESEN_Wk22ADZ-410	20	19
Wall Cladding	Colorbond	ESEN_Wk22ADZ-411	25	19
Windows	Aluminium Framed	ESEN_Wk22ADZ-412	30	29
Doors	Swing - Steel	ESEN_Wk22ADZ-413	20	19

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Roof Access	Anchor Points	ESEN_Wk22ADZ-399	3	3 - Fair
Downpipes	PVC	ESEN_Wk22ADZ-400	3	3 - Fair

Roof Cladding	Pitched - Colorbond	ESEN_Wk22ADZ-407	2	4 - Good
Soffits & Gable Ends	Colorbond	ESEN_Wk22ADZ-408	2	4 - Good
Guttering	Fascia Gutter - Colorbond	ESEN_Wk22ADZ-409	2	4 - Good
Fascia	Colorbond	ESEN_Wk22ADZ-410	2	4 - Good
Wall Cladding	Colorbond	ESEN_Wk22ADZ-411	3	3 - Fair
Windows	Aluminium Framed	ESEN_Wk22ADZ-412	2	4 - Good
Doors	Swing - Steel	ESEN_Wk22ADZ-413	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	Perforated Metal Sheet	33	SQM	ESEN_Wk22ADZ-420	G - Control
Floor Covering	Vinyl	33	SQM	ESEN_Wk22ADZ-422	G - Control
Wall Cladding	Colorbond	50	SQM	ESEN_Wk22ADZ-421	G - Control
Ceiling	Perforated Metal Sheet	9	SQM	ESEN_Wk22ADZ-427	G - Battery room
Floor Covering	Vinyl	9	SQM	ESEN_Wk22ADZ-429	G - Battery room
Wall Cladding	Colorbond	20	SQM	ESEN_Wk22ADZ-428	G - Battery room
Floor Covering	Tiles - Ceramic	3	SQM	ESEN_Wk22ADZ-442	G - Toilet
Wall Cladding	Colorbond	15	SQM	ESEN_Wk22ADZ-443	G - Toilet
Ceiling	Perforated Metal Sheet	3	SQM	ESEN_Wk22ADZ-444	G - Toilet

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Ceiling	Perforated Metal Sheet	ESEN_Wk22ADZ-420	25	24
Floor Covering	Vinyl	ESEN_Wk22ADZ-422	15	14
Wall Cladding	Colorbond	ESEN_Wk22ADZ-421	25	24
Ceiling	Perforated Metal Sheet	ESEN_Wk22ADZ-427	25	24
Floor Covering	Vinyl	ESEN_Wk22ADZ-429	15	14
Wall Cladding	Colorbond	ESEN_Wk22ADZ-428	25	24
Floor Covering	Tiles - Ceramic	ESEN_Wk22ADZ-442	20	19
Wall Cladding	Colorbond	ESEN_Wk22ADZ-443	25	24
Ceiling	Perforated Metal Sheet	ESEN_Wk22ADZ-444	25	24

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Ceiling	Perforated Metal Sheet	ESEN_Wk22ADZ-420	2	4 - Good
Floor Covering	Vinyl	ESEN_Wk22ADZ-422	2	4 - Good

Wall Cladding	Colorbond	ESEN_Wk22ADZ-421	2	4 - Good
Ceiling	Perforated Metal Sheet	ESEN_Wk22ADZ-427	2	4 - Good
Floor Covering	Vinyl	ESEN_Wk22ADZ-429	2	4 - Good
Wall Cladding	Colorbond	ESEN_Wk22ADZ-428	2	4 - Good
Floor Covering	Tiles - Ceramic	ESEN_Wk22ADZ-442	2	4 - Good
Wall Cladding	Colorbond	ESEN_Wk22ADZ-443	2	4 - Good
Ceiling	Perforated Metal Sheet	ESEN_Wk22ADZ-444	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	2	ITEM	ESEN_Wk22ADZ-414	External - External
Internal Lighting	Fluorescent - Tube - Mounted	4	ITEM	ESEN_Wk22ADZ-423	G - Control
Internal Lighting	Fluorescent - Tube - Mounted	1	ITEM	ESEN_Wk22ADZ-430	G - Battery room
Internal Lighting	Fluorescent - Compact (CFL)	1	ITEM	ESEN_Wk22ADZ-441	G - Toilet

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
External Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-414	15	14
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-423	15	14
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-430	15	14
Internal Lighting	Fluorescent - Compact (CFL)	ESEN_Wk22ADZ-441	15	12

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
External Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-414	2	4 - Good
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-423	2	4 - Good
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-430	2	4 - Good
Internal Lighting	Fluorescent - Compact (CFL)	ESEN_Wk22ADZ-441	3	3 - Fair

### 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	1	ITEM	ESEN_Wk22ADZ-419	G - Control
ESM	Smoke Detection/Alarm System	3	ITEM	ESEN_Wk22ADZ-425	G - Control
ESM	Fire Indicator Panel	1	ITEM	ESEN_Wk22ADZ-424	G - Control
ESM	Portable Fire Extinguishers - CO2	1	ITEM	ESEN_Wk22ADZ-426	G - Control
ESM	Smoke Detection/Alarm System	2	ITEM	ESEN_Wk22ADZ-431	G - Battery room
ESM	Exit Signs	1	ITEM	ESEN_Wk22ADZ-432	G - Battery room
ESM	Portable Fire Extinguishers - Dry Chemical	1	ITEM	ESEN_Wk22ADZ-433	G - Battery room
ESM	Smoke Detection/Alarm System	1	ITEM	ESEN_Wk22ADZ-439	G - Toilet
ESM	Exit Signs	1	ITEM	ESEN_Wk22ADZ-440	G - Toilet

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
ESM	Exit Signs	ESEN_Wk22ADZ-419	15	12
ESM	Smoke Detection/Alarm System	ESEN_Wk22ADZ-425	15	14
ESM	Fire Indicator Panel	ESEN_Wk22ADZ-424	12	12
ESM	Portable Fire Extinguishers - CO2	ESEN_Wk22ADZ-426	10	10
ESM	Smoke Detection/Alarm System	ESEN_Wk22ADZ-431	15	14
ESM	Exit Signs	ESEN_Wk22ADZ-432	15	12
ESM	Portable Fire Extinguishers - Dry Chemical	ESEN_Wk22ADZ-433	10	10
ESM	Smoke Detection/Alarm System	ESEN_Wk22ADZ-439	15	12
ESM	Exit Signs	ESEN_Wk22ADZ-440	15	12

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
ESM	Exit Signs	ESEN_Wk22ADZ-419	3	3 - Fair
ESM	Smoke Detection/Alarm System	ESEN_Wk22ADZ-425	2	4 - Good

ESM	Fire Indicator Panel	ESEN_Wk22ADZ-424	2	4 - Good
ESM	Portable Fire Extinguishers - CO2	ESEN_Wk22ADZ-426	2	4 - Good
ESM	Smoke Detection/Alarm System	ESEN_Wk22ADZ-431	2	4 - Good
ESM	Exit Signs	ESEN_Wk22ADZ-432	3	3 - Fair
ESM	Portable Fire Extinguishers - Dry Chemical	ESEN_Wk22ADZ-433	2	4 - Good
ESM	Smoke Detection/Alarm System	ESEN_Wk22ADZ-439	3	3 - Fair
ESM	Exit Signs	ESEN_Wk22ADZ-440	3	3 - Fair

## Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
-------	------	------	------	------	------	------	------	------	------	------

## Services - Hydraulic

### Asset Function and Details

Services - Hydraulic comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Instantaneous	Electric	1	ITEM	ESEN_Wk22ADZ-434	G - Toilet

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Instantaneous	Electric	ESEN_Wk22ADZ-434	18	14

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Instantaneous	Electric	ESEN_Wk22ADZ-434	3	3 - Fair

### 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	1	ITEM	ESEN_Wk22ADZ-398	External - External
Split Systems	High Wall A/C	1	ITEM	ESEN_Wk22ADZ-417	G - Control
Fans	Exhaust Fan - Ceiling / Wall / Window (Domestic)	1	ITEM	ESEN_Wk22ADZ-438	G - Toilet

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Split Systems	Condenser - Small	ESEN_Wk22ADZ-398	10	8
Split Systems	High Wall A/C	ESEN_Wk22ADZ-417	10	10
Fans	Exhaust Fan - Ceiling / Wall / Window (Domestic)	ESEN_Wk22ADZ-438	15	12

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Split Systems	Condenser - Small	ESEN_Wk22ADZ-398	3	3 - Fair
Split Systems	High Wall A/C	ESEN_Wk22ADZ-417	2	4 - Good
Fans	Exhaust Fan - Ceiling / Wall / Window (Domestic)	ESEN_Wk22ADZ-438	3	3 - Fair

### Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

## 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_Wk22ADZ-415	External - External
Shower	Aluminium / Glass	1	ITEM	ESEN_Wk22ADZ-1417	External - External
Sinks	Hand Basin - Porcelain	1	ITEM	ESEN_Wk22ADZ-437	G - Toilet
Toilets	Cistern - Porcelain	1	ITEM	ESEN_Wk22ADZ-435	G - Toilet
Toilets	Pan - Porcelain	1	ITEM	ESEN_Wk22ADZ-436	G - Toilet

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Shower	Aluminium / Glass	ESEN_Wk22ADZ-415	15	12
Shower	Aluminium / Glass	ESEN_Wk22ADZ-1417		NA
Sinks	Hand Basin - Porcelain	ESEN_Wk22ADZ-437	15	12
Toilets	Cistern - Porcelain	ESEN_Wk22ADZ-435	15	12
Toilets	Pan - Porcelain	ESEN_Wk22ADZ-436	15	12

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Shower	Aluminium / Glass	ESEN_Wk22ADZ-415	3	3 - Fair
Shower	Aluminium / Glass	ESEN_Wk22ADZ-1417		
Sinks	Hand Basin - Porcelain	ESEN_Wk22ADZ-437	3	3 - Fair
Toilets	Cistern - Porcelain	ESEN_Wk22ADZ-435	3	3 - Fair
Toilets	Pan - Porcelain	ESEN_Wk22ADZ-436	3	3 - Fair

### Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

## Site

### Asset Function and Details

Site comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Retaining Walls	Concrete	25	SQM	ESEN_Wk22ADZ-416	External - External

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Retaining Walls	Concrete	ESEN_Wk22ADZ-416	80	77

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Retaining Walls	Concrete	ESEN_Wk22ADZ-416	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	Main control board	1	ITEM	ESEN_Wk22ADZ-1418	G - Control
Switchboards	Main control board	1	ITEM	ESEN_Wk22ADZ-418	G - Control

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Switchboards	Main control board	ESEN_Wk22ADZ-1418		NA
Switchboards	Main control board	ESEN_Wk22ADZ-418	25	24

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Switchboards	Main control board	ESEN_Wk22ADZ-1418		
Switchboards	Main control board	ESEN_Wk22ADZ-418	2	4 - Good

### Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

# Appendix A - Maintenance Plan

## Corrective Maintenance

Services - Plumbing	Asset Type	UID	Issue Description/Action Required	Action Timing	Cost
Shower	Aluminium / Glass	ESEN_Wk22ADZ-1417	Eyewash Shower - Not tested Test and Tag Element	Within 1-3 months	\$50

Statutory Equipment	Asset Type	UID	Issue Description/Action Required	Action Timing	Cost
Switchboards	Main control board	ESEN_Wk22ADZ-1418	Switchboard - RCDs not tested Test and Tag Element	Within 1-3 months	\$50



## 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 financial 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 of 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, maintenance 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 its 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 preventive 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 the 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 rental 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.

### Relative condition index

	5 Excellent	4 Good	3 Fair	2 Worn	1 Poor
<b>Structure</b>	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
<b>Internal and External Fabrics</b>	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
<b>Services</b>	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
<b>Fittings</b>	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
<b>Maintenance</b>	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.





## **Building 2 Asset Management Plan**

### **Cobar csa 132 zone substation - Building 2**

Louth Road, Cobar, Cobar, NSW, 2835, Australia

16 November 2022

## Macutex Quality Assurance Auditing

<b>Prepared for:</b>	Essential Energy 2021
<b>Contact:</b>	Macutex
<b>Prepared by:</b>	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
<b>Site Address:</b>	Louth Road, Cobar, Cobar, NSW, 2835, Australia
<b>Audit Date:</b>	08/02/2021
<b>Report Status:</b>	Approved
<b>Date Issued:</b>	16/11/2022

## Table of Contents

1. Introduction	4
2. Scope	5
3. Condition Assessment	6
Building Structure	8
External Fabric	10
Internal Fabric	12
Services - Electrical	13
Services - Fire	14
Services - Mechanical	16
Site	17
Statutory Equipment	18
Appendix A - Maintenance Plan	19
Appendix B - Definitions	20
Appendix C - Condition & Criticality Assessment Guide	24
Appendix D - Key Notes	28

# 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 2 and its asset base.

The building is located within Cobar csa 132 zone substation site at Louth Road, Cobar, Cobar, NSW, 2835, Australia.

Data in this report was acquired during an audit conducted 08/02/2021.

Building 2



Building 2 is approximately 54 sqms

The site asset base was audited where applicable as follows:

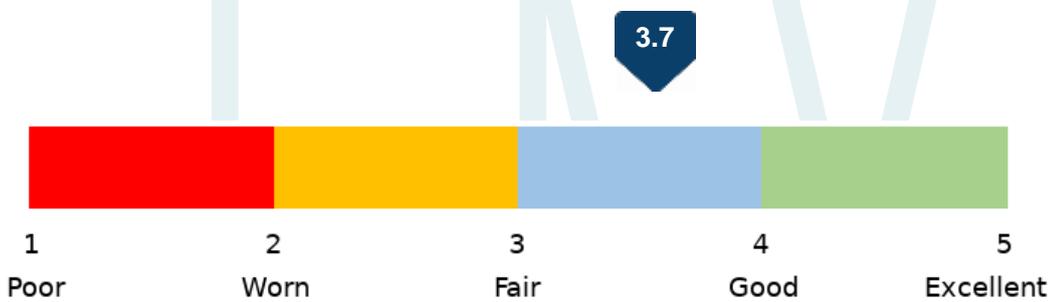
- Buildings assets including building structure, external fabric, internal fabric, foundations and structural components.
- Services - Mechanical including split system AC units and exhaust fans.
- Statutory Equipment including switchboards.
- Services - Electrical including internal lighting, external 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

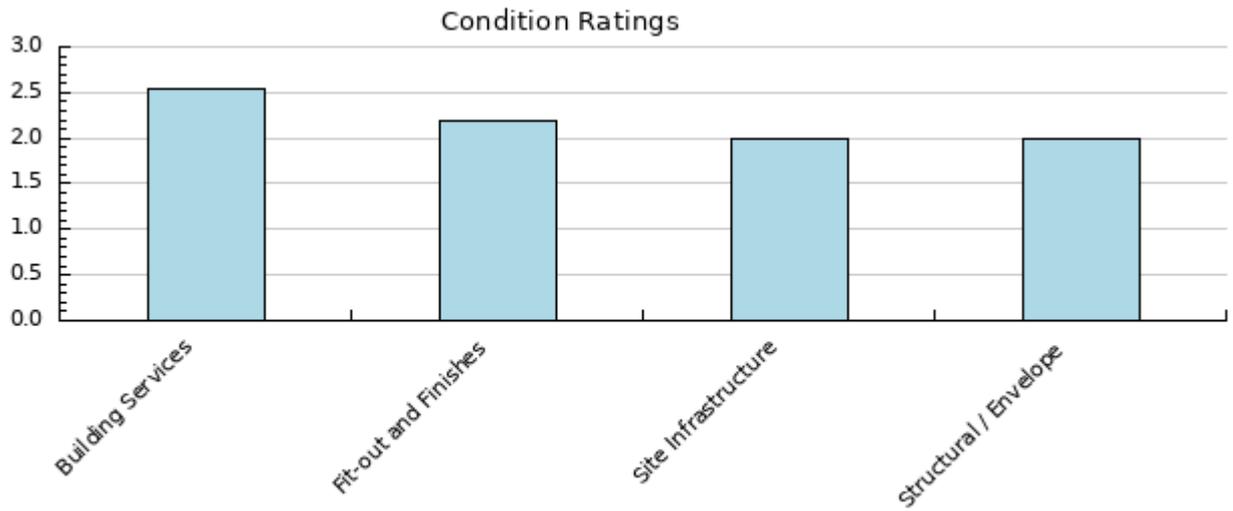
This audit has been rated on the following condition rating criteria:

Condition	Rating	Definition
Excellent	5	<ul style="list-style-type: none"> <li>No defects</li> <li>As new condition and appearance</li> <li>Only preventative maintenance required</li> </ul>
Good	4	<ul style="list-style-type: none"> <li>Superficial wear and tear</li> <li>Minor defects and some deterioration to surface finishes</li> <li>No major defects</li> <li>Major maintenance not required</li> <li>Minor maintenance only required</li> </ul>
Fair	3	<ul style="list-style-type: none"> <li>Average condition</li> <li>Deteriorated surfaces require attention</li> <li>Services are functional but require attention</li> <li>Deferred maintenance work exists</li> <li>Small number of defects identified</li> </ul>
Worn	2	<ul style="list-style-type: none"> <li>Badly deteriorated</li> <li>Structural problems</li> <li>General poor condition and with eroded protective coatings</li> <li>Elements are broken and services are not performing</li> <li>Significant number of major defects</li> <li>Major repairs required</li> </ul>
Poor	1	<ul style="list-style-type: none"> <li>Not operational</li> <li>Unfit for occupancy or normal use</li> <li>Building has failed</li> <li>Complete replacement required</li> </ul>

Building 2 was assessed on 08/02/2021. 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	54	SQM	ESEN_Wk22ADZ-446	External - External
Structural Beams	Metal/Steel	55	LM	ESEN_Wk22ADZ-447	External - External
Wall Structure	Metal/Steel Frame	90	SQM	ESEN_Wk22ADZ-448	External - External
Sub-Structure	Metal/Steel	54	SQM	ESEN_Wk22ADZ-449	External - External
Foundation	Metal/Steel Stumps	54	SQM	ESEN_Wk22ADZ-450	External - External
Structural Columns	Metal/Steel	15	LM	ESEN_Wk22ADZ-451	External - External
Roof Structure	Metal/Steel - Frame	54	SQM	ESEN_Wk22ADZ-454	External - External
Stairs	Metal/Steel	20	SQM	ESEN_Wk22ADZ-462	External - External

## Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Foundation	Concrete slab	ESEN_Wk22ADZ-446	80	77
Structural Beams	Metal/Steel	ESEN_Wk22ADZ-447	50	48
Wall Structure	Metal/Steel Frame	ESEN_Wk22ADZ-448	50	48
Sub-Structure	Metal/Steel	ESEN_Wk22ADZ-449	50	48
Foundation	Metal/Steel Stumps	ESEN_Wk22ADZ-450	50	48
Structural Columns	Metal/Steel	ESEN_Wk22ADZ-451	50	48
Roof Structure	Metal/Steel - Frame	ESEN_Wk22ADZ-454	50	48
Stairs	Metal/Steel	ESEN_Wk22ADZ-462	25	24

## Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Foundation	Concrete slab	ESEN_Wk22ADZ-446	2	4 - Good
Structural Beams	Metal/Steel	ESEN_Wk22ADZ-447	2	4 - Good
Wall Structure	Metal/Steel Frame	ESEN_Wk22ADZ-448	2	4 - Good
Sub-Structure	Metal/Steel	ESEN_Wk22ADZ-449	2	4 - Good

Foundation	Metal/Steel Stumps	ESEN_Wk22ADZ-450	2	4 - Good
Structural Columns	Metal/Steel	ESEN_Wk22ADZ-451	2	4 - Good
Roof Structure	Metal/Steel - Frame	ESEN_Wk22ADZ-454	2	4 - Good
Stairs	Metal/Steel	ESEN_Wk22ADZ-462	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
Downpipes	PVC	5	LM	ESEN_Wk22ADZ-453	External - External
Roof Cladding	Pitched - Colorbond	54	SQM	ESEN_Wk22ADZ-455	External - External
Downpipes	Colorbond	20	LM	ESEN_Wk22ADZ-456	External - External
Guttering	Fascia Gutter - Colorbond	25	LM	ESEN_Wk22ADZ-457	External - External
Wall Cladding	Colorbond	85	SQM	ESEN_Wk22ADZ-458	External - External
Doors	Swing - Steel	3	ITEM	ESEN_Wk22ADZ-459	External - External
Handrails, Balustrade & Ramps	Handrails - Galvanised	20	LM	ESEN_Wk22ADZ-463	External - External

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Downpipes	PVC	ESEN_Wk22ADZ-453	20	15
Roof Cladding	Pitched - Colorbond	ESEN_Wk22ADZ-455	25	24
Downpipes	Colorbond	ESEN_Wk22ADZ-456	15	14
Guttering	Fascia Gutter - Colorbond	ESEN_Wk22ADZ-457	15	14
Wall Cladding	Colorbond	ESEN_Wk22ADZ-458	25	19
Doors	Swing - Steel	ESEN_Wk22ADZ-459	20	19
Handrails, Balustrade & Ramps	Handrails - Galvanised	ESEN_Wk22ADZ-463	15	14

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Downpipes	PVC	ESEN_Wk22ADZ-453	3	3 - Fair
Roof Cladding	Pitched - Colorbond	ESEN_Wk22ADZ-455	2	4 - Good
Downpipes	Colorbond	ESEN_Wk22ADZ-456	2	4 - Good
Guttering	Fascia Gutter - Colorbond	ESEN_Wk22ADZ-457	2	4 - Good
Wall Cladding	Colorbond	ESEN_Wk22ADZ-458	3	3 - Fair
Doors	Swing - Steel	ESEN_Wk22ADZ-459	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	Perforated Metal Sheet	53	SQM	ESEN_Wk22ADZ-466	G - Switch
Wall Cladding	Colorbond	85	SQM	ESEN_Wk22ADZ-467	G - Switch
Floor Covering	Vinyl	53	SQM	ESEN_Wk22ADZ-468	G - Switch

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Ceiling	Perforated Metal Sheet	ESEN_Wk22ADZ-466	25	24
Wall Cladding	Colorbond	ESEN_Wk22ADZ-467	25	24
Floor Covering	Vinyl	ESEN_Wk22ADZ-468	15	14

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Ceiling	Perforated Metal Sheet	ESEN_Wk22ADZ-466	2	4 - Good
Wall Cladding	Colorbond	ESEN_Wk22ADZ-467	2	4 - Good
Floor Covering	Vinyl	ESEN_Wk22ADZ-468	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	2	ITEM	ESEN_Wk22ADZ-460	External - External
Internal Lighting	Fluorescent - Tube - Mounted	12	ITEM	ESEN_Wk22ADZ-469	G - Switch

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
External Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-460	15	12
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-469	15	12

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
External Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-460	3	3 - Fair
Internal Lighting	Fluorescent - Tube - Mounted	ESEN_Wk22ADZ-469	3	3 - Fair

### 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	Portable Fire Extinguishers - Dry Chemical	1	ITEM	ESEN_Wk22ADZ-452	External - External
ESM	Fire Indicator Panel	1	ITEM	ESEN_Wk22ADZ-470	G - Switch
ESM	Smoke Detection/Alarm System	4	ITEM	ESEN_Wk22ADZ-471	G - Switch
ESM	Portable Fire Extinguishers - CO2	2	ITEM	ESEN_Wk22ADZ-472	G - Switch
ESM	Exit Signs	2	ITEM	ESEN_Wk22ADZ-473	G - Switch
ESM	Emergency Lighting - Fluorescent tube	2	ITEM	ESEN_Wk22ADZ-474	G - Switch

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
ESM	Portable Fire Extinguishers - Dry Chemical	ESEN_Wk22ADZ-452	10	8
ESM	Fire Indicator Panel	ESEN_Wk22ADZ-470	12	12
ESM	Smoke Detection/Alarm System	ESEN_Wk22ADZ-471	15	12
ESM	Portable Fire Extinguishers - CO2	ESEN_Wk22ADZ-472	10	10
ESM	Exit Signs	ESEN_Wk22ADZ-473	15	12
ESM	Emergency Lighting - Fluorescent tube	ESEN_Wk22ADZ-474	15	14

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
ESM	Portable Fire Extinguishers - Dry Chemical	ESEN_Wk22ADZ-452	3	3 - Fair
ESM	Fire Indicator Panel	ESEN_Wk22ADZ-470	2	4 - Good
ESM	Smoke Detection/Alarm System	ESEN_Wk22ADZ-471	3	3 - Fair
ESM	Portable Fire Extinguishers - CO2	ESEN_Wk22ADZ-472	2	4 - Good
ESM	Exit Signs	ESEN_Wk22ADZ-473	3	3 - Fair
ESM	Emergency Lighting - Fluorescent tube	ESEN_Wk22ADZ-474	2	4 - Good

### 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_Wk22ADZ-445	External - External
Split Systems	High Wall A/C	2	ITEM	ESEN_Wk22ADZ-464	G - Switch

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Split Systems	Condenser - Small	ESEN_Wk22ADZ-445	10	8
Split Systems	High Wall A/C	ESEN_Wk22ADZ-464	10	10

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Split Systems	Condenser - Small	ESEN_Wk22ADZ-445	3	3 - Fair
Split Systems	High Wall A/C	ESEN_Wk22ADZ-464	2	4 - Good

### Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Split Systems										\$7,38

## Site

### Asset Function and Details

Site comprises the following asset groups:

Element Group	Element Type	Qty	Unit of Measure	UID	Location
Retaining Walls	Concrete	25	SQM	ESEN_Wk22ADZ-461	External - External

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Retaining Walls	Concrete	ESEN_Wk22ADZ-461	80	77

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Retaining Walls	Concrete	ESEN_Wk22ADZ-461	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	Main control board	1	ITEM	ESEN_Wk22ADZ-465	G - Switch
Switchboards	Main control board	1	ITEM	ESEN_Wk22ADZ-1419	G - Switch

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Switchboards	Main control board	ESEN_Wk22ADZ-465	25	24
Switchboards	Main control board	ESEN_Wk22ADZ-1419		NA

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Switchboards	Main control board	ESEN_Wk22ADZ-465	2	4 - Good
Switchboards	Main control board	ESEN_Wk22ADZ-1419		

### Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

# Appendix A - Maintenance Plan

## Corrective Maintenance

Statutory Equipment	Asset Type	UID	Issue Description/Action Required	Action Timing	Cost
Switchboards	Main control board	ESEN_Wk22ADZ-1419	Switchboard - RCDs not tested Test and Tag Element	Within 1-3 months	\$50



## 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 financial 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 of 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, maintenance 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 its 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 preventive 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 the 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 rental 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.

**Relative condition index**

	5 Excellent	4 Good	3 Fair	2 Worn	1 Poor
<b>Structure</b>	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
<b>Internal and External Fabrics</b>	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
<b>Services</b>	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
<b>Fittings</b>	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
<b>Maintenance</b>	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

### **Cobar csa 132 zone substation - Site**

Louth Road, Cobar, Cobar, NSW, 2835, Australia

16 November 2022

## Macutex Quality Assurance Auditing

<b>Prepared for:</b>	Essential Energy 2021
<b>Contact:</b>	Macutex
<b>Prepared by:</b>	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
<b>Site Address:</b>	Louth Road, Cobar, Cobar, NSW, 2835, Australia
<b>Audit Date:</b>	08/02/2021
<b>Report Status:</b>	Approved
<b>Date Issued:</b>	16/11/2022

## Table of Contents

1. Introduction	4
2. Scope	5
3. Condition Assessment	8
Services - Electrical	10
Services - Fire	11
Site	12
Appendix A - Maintenance Plan	14
Appendix B - Definitions	15
Appendix C - Condition & Criticality Assessment Guide	19
Appendix D - Key Notes	23

# 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.

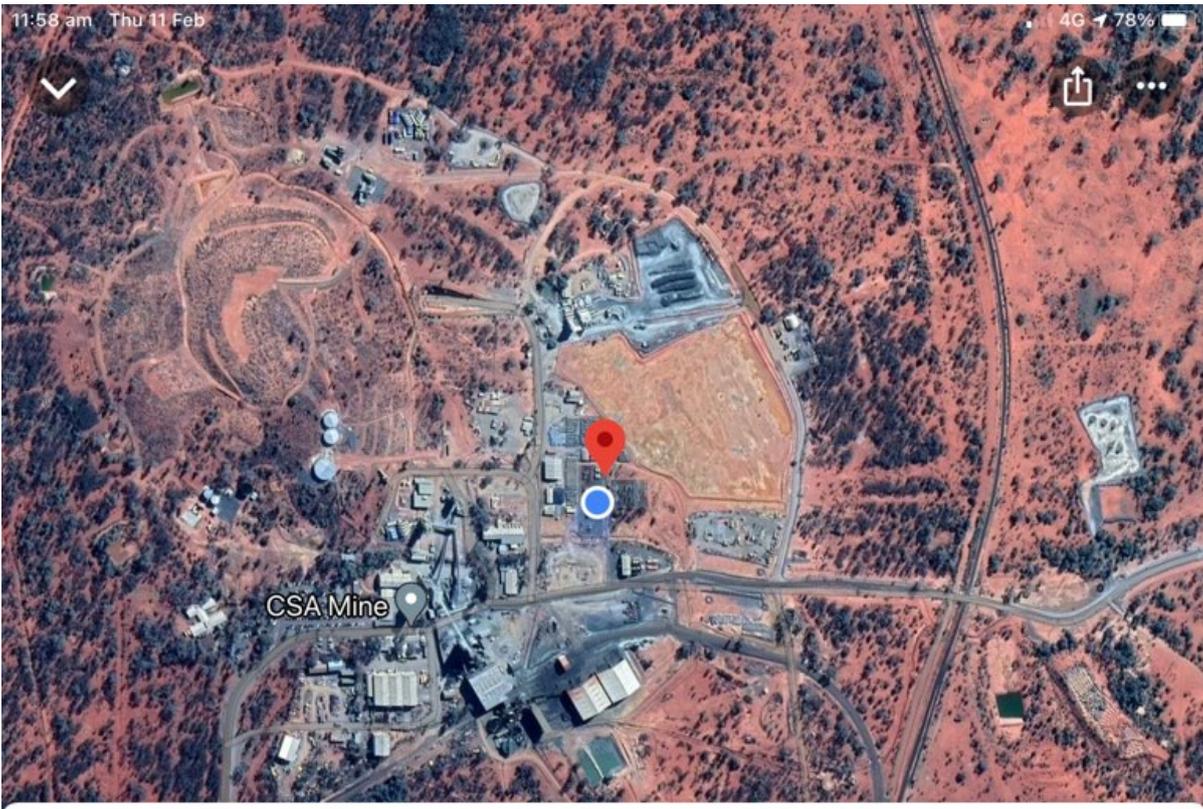
## 2. Scope

This AMP covers the Site and its asset base.

The building is located within Cobar csa 132 zone substation site at Louth Road, Cobar, Cobar, NSW, 2835, Australia.

Data in this report was acquired during an audit conducted 08/02/2021.

Site



**Dropped pin**

Near Cobar NSW 2835

1 min

-  DIRECTIONS
-  START
-  SAVED
-  LABEL

 Saved in Essential Energy  
Cobar csa mine zone sub 

 Measure distance

 4RW7HRV3+22   
(-31.4074238, 145.8025116)

 Add a missing place

Site is approximately 5594 sqms

The site asset base was audited where applicable as follows:

- Buildings assets including building structure, external fabric, internal fabric, foundations and structural components.

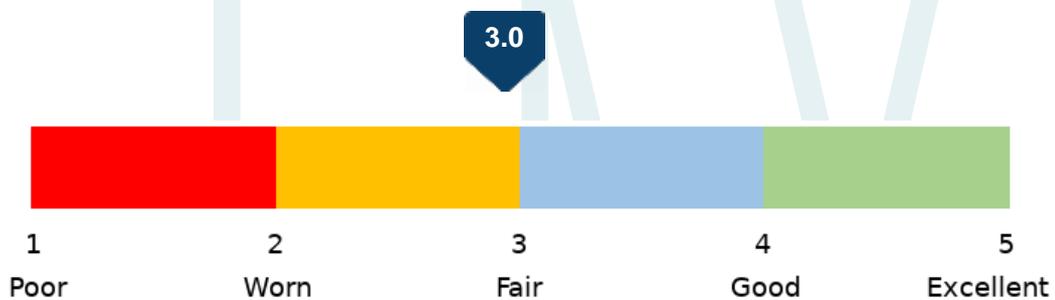
- Services - Mechanical including split system AC units and exhaust fans.
- Statutory Equipment including switchboards.
- Services - Electrical including internal lighting, external lighting and security measures such as CCTV.
- Site assets including boundary walls, fencing and gates, landscaping, rainwater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

### 3. Condition Assessment

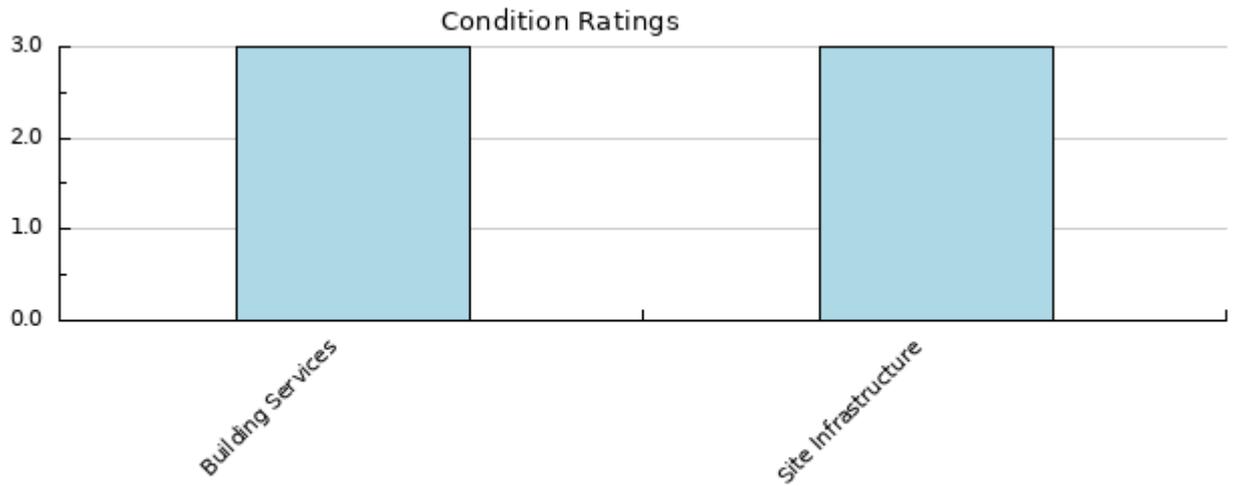
This audit has been rated on the following condition rating criteria:

Condition	Rating	Definition
Excellent	5	<ul style="list-style-type: none"> <li>No defects</li> <li>As new condition and appearance</li> <li>Only preventative maintenance required</li> </ul>
Good	4	<ul style="list-style-type: none"> <li>Superficial wear and tear</li> <li>Minor defects and some deterioration to surface finishes</li> <li>No major defects</li> <li>Major maintenance not required</li> <li>Minor maintenance only required</li> </ul>
Fair	3	<ul style="list-style-type: none"> <li>Average condition</li> <li>Deteriorated surfaces require attention</li> <li>Services are functional but require attention</li> <li>Deferred maintenance work exists</li> <li>Small number of defects identified</li> </ul>
Worn	2	<ul style="list-style-type: none"> <li>Badly deteriorated</li> <li>Structural problems</li> <li>General poor condition and with eroded protective coatings</li> <li>Elements are broken and services are not performing</li> <li>Significant number of major defects</li> <li>Major repairs required</li> </ul>
Poor	1	<ul style="list-style-type: none"> <li>Not operational</li> <li>Unfit for occupancy or normal use</li> <li>Building has failed</li> <li>Complete replacement required</li> </ul>

Site was assessed on 08/02/2021. 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.

## 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	Flood	12	ITEM	ESEN_Wk22ADZ-486	Site - Site

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
External Lighting	Flood	ESEN_Wk22ADZ-486	15	12

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
External Lighting	Flood	ESEN_Wk22ADZ-486	3	3 - Fair

### 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	Portable Fire Extinguishers - Foam	2	ITEM	ESEN_Wk22ADZ-484	Site - Site
ESM	Portable Fire Extinguishers - Dry Chemical	5	ITEM	ESEN_Wk22ADZ-485	Site - Site

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
ESM	Portable Fire Extinguishers - Foam	ESEN_Wk22ADZ-484	10	8
ESM	Portable Fire Extinguishers - Dry Chemical	ESEN_Wk22ADZ-485	10	8

### Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
ESM	Portable Fire Extinguishers - Foam	ESEN_Wk22ADZ-484	3	3 - Fair
ESM	Portable Fire Extinguishers - Dry Chemical	ESEN_Wk22ADZ-485	3	3 - Fair

### Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
ESM								\$1,796		

## 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	Concrete Walls (>2m)	20	LM	ESEN_Wk22ADZ-475	Site - Site
Stormwater & Drainage	Open Spoon Drains - Concrete (3m wide)	340	LM	ESEN_Wk22ADZ-476	Site - Site
Roads & Carparks	Roads - Unsealed	800	SQM	ESEN_Wk22ADZ-477	Site - Site
Retaining Walls	Masonry	45	SQM	ESEN_Wk22ADZ-478	Site - Site
Retaining Walls	Concrete	45	SQM	ESEN_Wk22ADZ-479	Site - Site
Landscaping	Gravel	5300	SQM	ESEN_Wk22ADZ-480	Site - Site
Landscaping	Concrete - Poured	140	SQM	ESEN_Wk22ADZ-481	Site - Site
Boundary Walls, Fencing and Gates	Chain Link Fencing (>2m)	370	LM	ESEN_Wk22ADZ-482	Site - Site
Boundary Walls, Fencing and Gates	Chain Link Gates (>2m)	6	ITEM	ESEN_Wk22ADZ-483	Site - Site
Landscaping	Vegetation - Trees - Large Mature	1	ITEM	ESEN_Wk22ADZ-1420	Site - Site
Landscaping	Vegetation - Trees - Large Mature	1	ITEM	ESEN_Wk22ADZ-1421	Site - Site

### Asset Lifecycle

Element Group	Element Type	UID	Expected Life	Remaining Useful Life
Boundary Walls, Fencing and Gates	Concrete Walls (>2m)	ESEN_Wk22ADZ-475	40	31
Stormwater & Drainage	Open Spoon Drains - Concrete (3m wide)	ESEN_Wk22ADZ-476	20	15
Roads & Carparks	Roads - Unsealed	ESEN_Wk22ADZ-477	5	4
Retaining Walls	Masonry	ESEN_Wk22ADZ-478	50	39
Retaining Walls	Concrete	ESEN_Wk22ADZ-479	80	62
Landscaping	Gravel	ESEN_Wk22ADZ-480	5	4
Landscaping	Concrete - Poured	ESEN_Wk22ADZ-481	80	62
Boundary Walls, Fencing and Gates	Chain Link Fencing (>2m)	ESEN_Wk22ADZ-482	22	17
Boundary Walls, Fencing and Gates	Chain Link Gates (>2m)	ESEN_Wk22ADZ-483	22	17
Landscaping	Vegetation - Trees - Large Mature	ESEN_Wk22ADZ-1420		NA
Landscaping	Vegetation - Trees - Large Mature	ESEN_Wk22ADZ-1421		NA

## Asset Condition

Element Group	Element Type	UID	Condition Rating	Condition Definition
Boundary Walls, Fencing and Gates	Concrete Walls (>2m)	ESEN_Wk22ADZ-475	3	3 - Fair
Stormwater & Drainage	Open Spoon Drains - Concrete (3m wide)	ESEN_Wk22ADZ-476	3	3 - Fair
Roads & Carparks	Roads - Unsealed	ESEN_Wk22ADZ-477	3	3 - Fair
Retaining Walls	Masonry	ESEN_Wk22ADZ-478	3	3 - Fair
Retaining Walls	Concrete	ESEN_Wk22ADZ-479	3	3 - Fair
Landscaping	Gravel	ESEN_Wk22ADZ-480	3	3 - Fair
Landscaping	Concrete - Poured	ESEN_Wk22ADZ-481	3	3 - Fair
Boundary Walls, Fencing and Gates	Chain Link Fencing (>2m)	ESEN_Wk22ADZ-482	3	3 - Fair
Boundary Walls, Fencing and Gates	Chain Link Gates (>2m)	ESEN_Wk22ADZ-483	3	3 - Fair
Landscaping	Vegetation - Trees - Large Mature	ESEN_Wk22ADZ-1420		
Landscaping	Vegetation - Trees - Large Mature	ESEN_Wk22ADZ-1421		

## Major Repairs and Upgrade Expenditure

Works	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
-------	------	------	------	------	------	------	------	------	------	------

# Appendix A - Maintenance Plan

## Corrective Maintenance

Site	Asset Type	UID	Issue Description/Action Required	Action Timing	Cost
Landscaping	Vegetation - Trees - Large Mature	ESEN_Wk22ADZ-1420	Overhanging tree - risk to asset Maintain by trimming back from fence	Within 12 months	\$1,000
Landscaping	Vegetation - Trees - Large Mature	ESEN_Wk22ADZ-1421	Overhanging tree - risk to asset Remove vegetation	Within 12 months	\$1,000



## 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 financial 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 of 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, maintenance 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 its 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 preventive 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 the 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 rental 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.

### Relative condition index

	5 Excellent	4 Good	3 Fair	2 Worn	1 Poor
<b>Structure</b>	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
<b>Internal and External Fabrics</b>	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
<b>Services</b>	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
<b>Fittings</b>	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
<b>Maintenance</b>	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.