



Shire of Serpentine Jarrahdale
Serpentine Jarrahdale Community Recreation
Centre
Building Condition Audit & Life Cycle Costing

12 February 2021

Shire of Serpentine Jarrahdale
 Serpentine Jarrahdale Community Recreation Centre
 Building Condition Audit & Life Cycle Costing



HFM ASSET MANAGEMENT PTY LTD

HFM is a building efficiency company based in Sydney, Melbourne, Brisbane and Perth. Our mission is to transform properties into efficient, economic and compliant assets for our clients.

Email info@hfmassets.com.au

Web www.hfmassets.com.au

Head Office Mezzanine Level,
 15-17 William Street
 Perth WA 6000

PO Box 5746
 St Georges Terrace Perth WA 6831

Telephone 1300 021 420

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Table 17. Capital Works

1. INTRODUCTION

1.1. PURPOSE

The purpose of the Building Condition Audit is to provide/assist Shire of Serpentine Jarrahdale (the Shire) with information required to make decisions regarding future capital and operational investment into the Serpentine Jarrahdale Community Recreation Centre to assist with the Shire's Asset Management Policy objectives. A Shire Asset Management Policy key objective (Shire Council Policy 2.01) being to:

'ensure that services delivered by the Shire of Serpentine Jarrahdale continue to be sustainably delivered. This will be achieved by ensuring that the Infrastructure Assets used to support the service delivery continue to function to the level of service determined by Council'

The information from the audit will assist Shire of Serpentine Jarrahdale to proactively plan maintenance and repair activities to ensure its facilities meet key objectives including the provision of a safe, compliant, cost effective, effectively operated and maintained building.

1.2. SCOPE

The proposed scope of services is as follows:

1. Review the existing site "As Constructed" documentation.
2. Conduct a site inspection.
3. Provide a Report outlining the findings complete with Lifecycle Costing

The following table provides a summary of the scope items. Key non-compliance items or works required under the Building Condition Audit were costed and included within the Building Lifecycle Costing.

Table 1: Scope Items

Service	Delivered By
Building Structure	HFM
Building Fabric <ul style="list-style-type: none"> ■ Roof ■ Eaves ■ Gutters and down pipes ■ Windows ■ Doors 	HFM
Building Finishes <ul style="list-style-type: none"> ■ Ceilings ■ Floor coverings ■ Walls 	HFM
Civil <ul style="list-style-type: none"> ■ Carpark(s) 	HFM

Service	Delivered By
<ul style="list-style-type: none"> Footpath(s) 	
Building Engineering Services <ul style="list-style-type: none"> Mechanical Electrical Fire Protection and Detection Hydraulics Security Emergency and exit lighting 	HFM
Specialist Equipment <ul style="list-style-type: none"> Climbing Wall Sporting Infrastructure Assets 	HFM

1.3. SITE INSPECTIONS AND INVESTIGATIONS

In performing this project, the following personnel are noted as undertaking visual inspections of the site:

Table 2. HFM Site Inspection Personnel

Date	Purpose of Inspection	Attending Parties	Company
30/11/2020	Building Condition Inspection	John Wilson	HFM
17/12/2020	Building Condition Inspection	John Wilson/Adam Riley	HFM
03/12/2020	Roof Inspections – Licensed Drone Pilot	Gary Rentenaar	Next Frame

1.4. REFERENCE DOCUMENTS

This report has been prepared based on the following reference documents:

- HFM Fee Proposal “HFMPop(Opp.6728) dated 19/11/20;
- Shire of Serpentine Jarrahdale Asset Management Strategy 2020 – 2024;
- The Serpentine Jarrahdale Recreation Centre building information provided by email;
- ISO 55001 Asset Management;
- AS ISO 41001:2019 Facility management - Management systems - Requirements with guidance for use;
- International Infrastructure Management Manual (IIMM);
- IPWEA NAMS.AU Condition Assessment and Asset Performance Guidelines (Preamble Document);
- AS/NZ 4536:1999 Life Cycle Cost - Application Guide;
- Rawlinson Australian Construction Handbook 2020;

- Building Construction Code Volume 1 - Commercial Buildings (Class 2-9 Buildings)
- AS/NZS 3666 Air-handling and water systems of buildings - Microbial control - Operation and maintenance;
- AS/NZS 3666.2 Standard operational and maintenance systems to manage the risk of Legionella growth;
- AS/NZS 1851 Maintenance of fire protection systems and equipment;
- AS 3000 Wiring Rules;
- AS 1668: 1991 The use of mechanical ventilation and air conditioning in buildings;
- AS 4032.3-2004 Water supply - Valves for the control of hot water supply temperatures Requirements for field testing, maintenance or replacement of thermostatic mixing valves, tempering valves and end of line temperature control devices;
- AS 2316.1-2009 Australian Standard; Artificial Climbing Structures and Challenge Courses. Part1: Fixed and Mobile artificial climbing and abseiling walls;
- AS/NZS 5601 Set: 2013 Gas installations Set;
- FIBA Guide to Basketball Facilities (2018); and
- DA19 AIRAH HVAC&R Maintenance.

1.5. ACKNOWLEDGEMENTS

The scope of this project requires the contribution of a number people and sources. HFM Asset Management acknowledges the contribution by:

Table 3. Acknowledgements

Name	Position/Organisation
Rebecca Steinki	Manager Community Activation - Shire of Serpentine Jarrahdale
Nicole Little	Centre Manager – Y WA

1.6. ASSUMPTION, LIMITATIONS AND QUALIFICATIONS

The following Assumptions, Limitations and Qualifications are observed in the preparation of this report.

- This document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.
- Condition assessments were determined on a visual inspection of the building and infrastructure assets only and did not include for the dismantling of any equipment. There were no observations made at Serpentine Jarrahdale Community Recreation Centre where this was considered necessary.



- The opinions, views, conclusions and any recommendations in this report are based solely upon visual inspection of the building during the site inspections and information reviewed at the date of preparation of the report. HFM has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.
- All reporting is based on HFM visual assessments. HFM is not liable for any incidents or future defects that transpire that were not readily observable due to being hidden or obscured by objects. This includes but is not limited to submerged pipework, ground structure, surfaces and structures under parked cars or other effects.
- Design capacities have not been checked nor have performance measurements been taken.
- All costs referenced in this report exclude GST unless otherwise indicated. All costs are probable order of costs. Costs are obtained through publications including Rawlinson's Australian Construction Handbook, available quotations, from previous bills and from HFM experience. The annual costs in this report are as per June 2020. A forecast Consumer Price Index (CPI) of 1.9% has been applied in line with projections of the Reserve Bank of Australia for the next 2 years¹. Should a more accurate estimate be required it is recommended that either quotes are sought for the individual works or a Quantity Surveyor is engaged.
- HFM otherwise disclaims responsibility to any person other than the Shire of Serpentine Jarrahdale arising in connection with this Report. HFM also excludes implied warranties and conditions, to the extent legally permissible;
- Site conditions (including the presence of hazardous substances and/or site contamination) may change after the date of this Report. HFM disclaims responsibility arising from, or in connection with, any change to the site conditions. HFM is also not responsible for updating this report if the site conditions change; and
- Visual examination of representative building fabric surfaces and asset elements was utilised to form the observations detailed in this report and LCC. It was not possible to inspect the entirety of surfaces for defects. For example, car spaces hidden by vehicles could not be examined. HFM does not accept liability in connection with defects not listed in this report, which may have been concealed at the time of inspection or arisen at a later date.

¹ <https://www.rba.gov.au/publications/smp/2019/nov/forecasts.html>

2. ASSET DESCRIPTION

2.1. ASSET DESCRIPTION

The Serpentine Jarrahdale Community Recreation Centre, located at 38 Mead Street, Byford is a multipurpose community recreation facility, in ownership of the Shire of Serpentine Jarrahdale, and managed by Y WA. The building was constructed circa 2004 and consists of a Sports Courts, an Extreme Sports Court, Group Fitness Studio, Café, Creche, Multipurpose Rooms, Toilets and Changing Rooms and administration and office support areas.

The building is a single storey concrete and structural steel construction with a metal profile roof covering. The walls are a combination of finishes concrete tilt panel and metal profile sheet. The building is illustrated in Figure 1 below.



Figure 1. Serpentine Jarrahdale Community Recreation Centre Site Aerial View

3. METHODOLOGY

The following section provides a summarised overview and explanations of HFM's methodology in preparing this report.

3.1. DEFINITIONS

- Cost element – A cost element is created from the collection of costs incurred. The cost elements expressed in this document are:
 - Renewal Works – Replacement of building elements at end of life.
 - Planned Preventative Maintenance – Routine maintenance and service contract investment.
 - Repair Works – Unplanned expense due to deterioration or failure of an asset.
 - Capital or Optional Works – Planned investment for either a refurbishment or improvement of a major asset.
- Life Cycle Costing – The process of establishing costs during a certain phase of the life span of a specific asset.
- Nominal Cost – The generated cost that will be incurred over a period that includes the component of inflation. This provides an owner the capability for short, medium & long-term planning and budgeting of capital and operating costs.

3.2. LIFECYCLE MODEL DESCRIPTION

The HFM Asset Management Life Cycle Model is based on AS/NZ 4536:1999 Life Cycle Cost - Application Guide.

This model is simplistic but comprehensive in detail to highlight significant factors to assist in the decision-making process.

3.3. METHODS OF COST ESTIMATION

There is a level of uncertainty regarding the forecasted nominal costs allocated in the estimate of costs. Costs of products, material, service or the changing economy will impact on these costs at any given time.

Cost estimation is based on experience with the same or similar assets, systems or technology and collating of information directly from subject matter experts and recognised publications including Rawlinson's.

3.4. ANALYSIS ELEMENTS

The analysis process is driven by the following elements:

- Current Condition – Is reflected how an asset is being maintained and the load this asset is placed under daily.

- Current Age – This factor provides guidance to the expected performance and deterioration rate of an asset.
- Current Operational Performance – Meeting the operational requirement of a property and meeting the expectation of the asset’s occupants or users.
- Expected Life Span - A recognised life span of a particular asset, considering a number of these elements.

The condition of the shire assets was measured utilising a 1 to 5 grading system as defined in the Shire’s Asset Management Strategy document and outlined in Table 4. Condition Grading below. The condition grading being employed to formulate a proposed time frame and justifying status criteria towards a renewal works plan. The overall outcome is the future expense allocation as required in the supporting “Estimation Worksheet”.

Table 4. Condition Grading

Rating	Status	Definition of Rating/Condition
1	Very Good	A new asset or an asset in overall very good condition with only a slight condition decline and planned maintenance required.
2	Good	An asset in an overall good condition but with minor signs of deterioration evident, serviceability may be slightly impaired. Minor maintenance is required plus planned maintenance.
3	Average	An asset with obvious signs of deterioration. Significant maintenance is required.
4	Poor	An asset in a poor condition. Condition deterioration is severe, and serviceability is becoming limited. Significant renewal or upgrade is required.
5	Very Poor	An asset that has failed and is no longer serviceable. There would be a risk in leaving the asset in service. Replacement is required.

4. SITE DOCUMENTATION

The following table summarises the available site documentation.

Table 5. Documentation availability

Item	Availability	Comments / Notes
Building Fabric and Structure		
Manuals	×	Original manuals not available
Drawings	✓	Architectural drawings available
Electrical & Communications		
Manuals	×	Not Available
Drawings	×	
Warranty Details	×	Not Applicable
Service records / Logbooks	✓	Emergency Lighting Service and Location Report to AS.2993 dated 30/6/2020 viewed. No RCD Testing Logbook was viewed.
Certification	×	Original Certification not sited
Fire Detection		
Manuals	×	Not Available
Drawings	×	Not Available
Warranty Details	×	Not Applicable
Service records / Logbooks	✓	Portable and Fixed Firefighting Equipment Location and Status Report to AS.1851-2015 dated 30/6/2020 viewed.
Certification	×	Not Available
Fire Protection		
Manuals	×	Not Available
Drawings	×	Not Available
Warranty Details	N/A	Not Applicable
Service records / Logbooks	✓	Fire pump logbooks available within the Fire Pump House. Portable and Fixed Firefighting Equipment Location and Status Report to AS.1851-2015 dated 30/6/2020 viewed. Test tags visible.
Certification	×	
Hydraulics		
Manuals	×	Not Available
Drawings	×	
Warranty Details	N/A	Not Applicable
Service records / Logbooks	×	Not Available



Item	Availability	Comments / Notes
Certification	×	Original Certification not sited
Mechanical		
Manuals	×	Not Available
Drawings	×	Not Available
Warranty Details	×	Not Available
Service records / Logbooks	×	Not Available
Specialist Equipment		
Climbing Wall		
Manuals	×	
Drawings	×	
Warranty Details	×	
Inspection records / Logbooks	✓	Plaque mounted on the wall indicating last inspection in 2017

5. BUILDING CONDITION ASSESSMENT

5.1. BUILDING FABRIC AND STRUCTURE

The Serpentine Jarrahdale Community Recreation Centre structure is primarily steel portal frame and concrete tilt panel type structure supported on concrete slab foundations. The walls are the concrete panels with metal profile type covering on the upper sides of the Sports Court sections of the building.

The Serpentine Jarrahdale Community Recreation Centre is in average to good condition. The individual elements are expanded in the following sections by building discipline and area.

5.1.1. Roofs

The Recreation Centre consists of five main roofs with adjoining sections. The five sections summarised as follows:

- Sports Court Roof
- Extreme Sports Court Roof
- Multipurpose Rooms Roof
- Gymnasium Roof
- Administration and Café Roof

The roofs are a metal profile type galvanised steel roof construction supported on the steel roof structure.

The Sports Court, Extreme Sports and Multipurpose roofs are in good condition. There was a minor defect to the Sports Court roof with a section of the mesh type flashing missing. The Sports Court and Extreme Sports roofs also have fibreglass skylights installed. The skylights in the Extreme Sports Court are in poor condition with deterioration and dirt evident to the fibreglass external surface.

The Gymnasium and Administration roofs are in average condition with deterioration evident to the surface treatments. The Gymnasium roof particularly around the Solar Collectors is badly stained and corroded. Additionally, it was observed that there was water staining to the ceiling tiles in the Gymnasium, Café and Multipurpose areas suggesting that the roofs are leaking in areas.

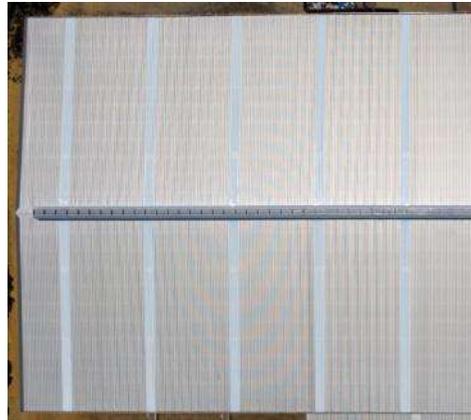
There is no Safe Roof Access systems provided to access the roof and roof mounted equipment safely. It is recommended that a roof access system is installed designed in accordance with AS1657.

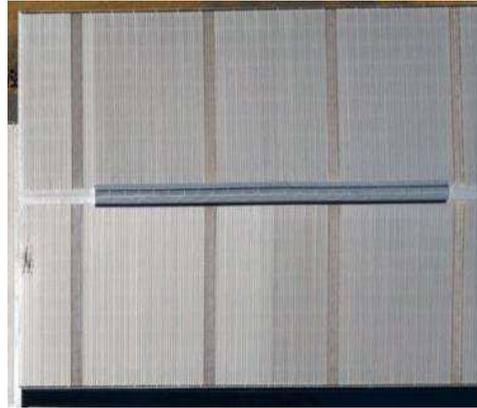
Additionally, there has been reported ongoing problems with intruders accessing the roof particularly around the Fitness Room roof where intruders are reportedly climbing the Air Conditioning Compound fence towards accessing the Fitness Room roof. It is recommended that a review is undertaken to assess prevention methodologies including possible barriers to prevention of access.



The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

Table 6. Rooftop Areas – Site Inspection Summary

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
B001	Sports Court	Observation	The Sports Court roof is in overall good condition.		N/A	N/A
B002	Sports Court	Repair	There is a section of mesh flashing missing.		\$1,612	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
B003	Extreme Sports Court - Roof	Renewal	<p>The Extreme Sports Court roof is in good condition overall. Though with deterioration evident to the fibreglass roofing sections (See below).</p> <p>Cost given is for replacement of fibreglass sections as part of renewals.</p>		\$8,070	2022
			<p>Deterioration to fibreglass roofing sections. Cost for replacement as part of renewal works.</p>			

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
B004	Multipurpose Rooms - Roof	Observation	The Multipurpose rooms roof is in good condition. There is minor water staining to ceiling tiles evident possibly because of leakage from the roof.		N/A	N/A
B005	Multipurpose Rooms - Roof	Repair	Minor water staining to ceiling in Multipurpose room either a result of leakage from the roof or the mechanical system ductwork. Cost is to investigate source of water staining to ceiling tiles.		\$250	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
B006	Multipurpose Rooms - Roof	Repair	Deterioration to Bird Spikes leading to increased presence of birds.		\$900	2021
B007	Gymnasium - Roof	Renewal /Repair	<p>The Gymnasium Roof is in overall average condition. The surface has deteriorated and exhibits some surface discolouration and corrosion. The external exposed structure including beams and trusses are corroded.</p> <p>Note cost is for renewal of roof covering at end of life. It may be possible to extend the life of this roof through cleaning, minor repairs and removal of redundant equipment.</p>		\$61,031	2029

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
			Additional photograph highlighting surface deterioration including discolouration and corrosion.		See above	See above
B008	Gymnasium	Renewal	Deterioration including corrosion evident on exposed beams and trusses.		\$3,422	2028

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
B009	Administration and Cafe	Observation	The Administration and Café roof is in average condition though with some internal leakage visible in the skylight structure and within the Café area.		N/A	N/A
B0010	Administration and Cafe	Repair	Minor water staining evident internally within the skylight. Cost is to investigate source of water staining to ceiling tiles.		\$2,400	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
B011	Administration and Cafe	Repair	Water staining to ceiling tiles in Café and entrance location. Cost is to investigate source of water staining to ceiling tiles (included above)		\$200	2021

5.1.2. External Walls and Fabric

The external walls are a combination of painted concrete tilt panels and powder coated metal profile sheeting. The building overall structurally is in good condition. There are defects evident including some minor cracking to concrete, bolts missing and displacement of base plates at the Sports and Extreme Sports Courts that require investigation. Generally, the external wall painted surfaces have deteriorated to the detriment of the overall building appearance. This is particularly evident in the Multipurpose, Gymnasium and Administration Buildings.

There are metal framed windows installed throughout the building. The windows are in good condition.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

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Table 7. External Fabric – Site Inspection Summary

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW001	Sports Court – External Walls	Renewal	The Sports Court external walls are in overall good condition though with defects as follows.		\$16,373	2027
EW002	Sports Court – External Walls	Repair	Minor deterioration to tilt panel joints.		Repair as part of renewal painting works	2027

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW003	Sports Court – External Walls	Repair	Localised cracking evident to the east wall concrete panel. Recommend inspection and monitoring.		An allowance has been made overall of \$3,500 for structural inspection (See EW005)	2021
EW004	Sports Court – External Walls	Repair	Corrosion to mesh and steel structure at panel and metal cladding interface.		\$1,200	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW005	Sports Court – External Walls	Repair	Loose and missing bolts and displacement of tilt panel base plates. It is recommended that a Structural Engineer carry out an inspection.		\$3,500 (Probable order of cost for Structural Engineer)	2021
EW006	Extreme Sports Court – External Walls	Renewal	The Extreme Sports Court external walls are in overall good condition though with defects as follows. Allowance in renewal plan made for painting.		\$15,114	2027

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW007	Extreme Sports Court – External Walls	Repair	Discolouration to wall slab edge possibly due to leaking gutter. Some imperfections visible on the concrete surface.		\$640	2021
EW008	Extreme Sports Court – External Walls	Repair	Cracking evident propagating from the top edge of the fire exit door.		An allowance has been made overall of \$3,500 for structural inspection (See EW005)	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW009	Extreme Sports Court – External Walls	Repair	Cracking adjacent to the roller shutter door.		An allowance has been made overall of \$3,500 for structural inspection (See EW005)	2021
EW010	Extreme Sports Court – External Walls		Loose and missing bolts and displacement of tilt panel base plates.		An allowance has been made overall of \$3,500 for structural inspection (See EW005)	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW011	Extreme Sports Court – External Walls	Repair	Minor deterioration to slab joints.		An allowance has been made overall of \$3,500 for structural inspection (See EW005)	2021
EW012	Gymnasium Area – External Walls	Renewal	External wall finishes are badly deteriorated. Cost is for preparation and renewal of exterior paintwork.		\$6,300	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW013	Gymnasium Area – External Walls	Renewal	<p>The metal cladding has localised corrosion including corrosion to the tek screws. Additionally, the cladding is very dirty which can escalate overall deterioration.</p> <p>Cost given is for renewal though in the short term it is recommended that the wall coverings are thoroughly cleaned, and any localised corrosion suitably treated which could extend the life of the element.</p>	 	\$3,422	2028

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Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW014	Creche Area – External Walls	Repair	Minor corrosion at base of metal wall cladding.		\$200	2021
EW015	Administration/Cafe Area – External Walls Administration/Cafe Area – External Walls	Renewal	Deterioration and minor damage to external painted surfaces. Cost is for preparation and renewal of exterior paintwork.		\$2,250	2021

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Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW016		Repair	Water staining originating likely from leaking guttering.		\$300	2021
EW017	Administration/Cafe Area – External Walls	Repair	Deteriorated paintwork and deterioration to joint seal at Administration/Café and Extreme Sports interface.		\$200	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW018	Multipurpose Area – External Walls	Renewal	The wall surface treatments are in very poor condition. The painted surfaces are badly deteriorated and retic. stained.	 	\$14,963	2021

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Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
		Renewal	Further photograph illustrating deterioration highlighted above		As above	As above
EW019	Multipurpose Area – External Walls	Repair	Minor deterioration to joint seal. Recommend repairs are undertaken as part of the paintwork renewal exercise.		Repair as part of renewals works above	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
EW020	Multipurpose Area – Widows	Repair	Minor deterioration and retic staining to windows.		Cleaning as part of operational works	2021

5.1.3. Interior Fabric and Fixings

The internal building fabric varies in type and condition across the facility. The building fabric was rated in average condition overall. The following sections summarise the internal fabric on a room basis.

Sports Court

The Sports Court internal fabric and fixtures consist of the following:

- Floors – The Sports Court has a polyurethane sports floor covering (Aura 2000 Pulastic type). The flooring including line markings is in good condition.
- Walls – The walls are part painted concrete and metal foil backed insulation. The painted surfaces are in average condition. There was some cracking evident at the ventilation louvers in the spectator stand areas. The metal foil insulation is damaged and in poor condition due to ball strikes.
- Ceilings – There is no ceiling. The underside of the roof structure and insulation being visible. These elements are in good condition.

Extreme Sports Court

The Extreme Sports Court internal fabric and fixtures consist of the following:



- Floors – The Extreme Sports Court has a sealed concrete floor. There is some minor cracking evident but overall, the floor is in good condition.
- Walls – The walls are part painted concrete and metal foil backed insulation. The painted surfaces are in average condition. The insulation is damaged and in poor condition due to ball strikes.
- Ceilings – There is no ceiling. The underside of the roof structure and insulation being visible. These elements are in good condition.
- Windows and Doors – The Extreme Sports Court has internal metal framed glazed window and doors. The glazed windows and doors are in good condition. The fire exit door is timber painted and is in poor condition externally.

Multipurpose Rooms

The Multipurpose Rooms internal fabric and fixtures consist of the following:

- Floors – The Multipurpose Rooms have carpet tiles installed throughout. The carpet tiles are in good condition. Multipurpose Room 1 and the Stage have polished timber flooring though in good overall condition require a sand and polish. The Stage timber flooring has some termite damage that has been subject to recent treatment.
- Walls – The walls are generally painted render on concrete or painted plasterboard. The painted surfaces are in average condition.
- Ceilings – The ceilings are generally suspended ceiling tile types. The ceiling tiles are in average condition. A number of the ceiling tiles have minor water staining and damage.
- Windows and Doors – The Multipurpose Room 1 has internal metal framed glazed window and doors. The glazed windows and doors are in good condition. The remaining doors are timber painted and are generally in good condition.

Gymnasium

The Gymnasium internal fabric and fixtures consist of the following:

- Floors – The Gymnasium has a polyurethane sports floor covering (Aura 2000 Pulastic type) and a partial rubber fall-safe type flooring. The flooring is in good condition.
- Walls – The walls are generally painted render or painted plasterboard. The painted surfaces are in average condition.



- Ceilings – The ceilings are suspended ceiling tile types. The ceiling tiles are in average condition. A number of the ceiling tiles have minor water staining and damage.

Windows and Doors – The Gymnasium has internal metal framed glazed window and doors. The glazed windows and doors are in good condition.

Fitness Room

The Fitness Room internal fabric and fixtures consist of the following:

- Floors – The Fitness Room has a polyurethane sports floor covering. The flooring is in good condition.
- Walls – The walls are painted, or graphic vinyl covered plasterboard. The painted and graphic surface treatments are in average condition.
- Ceilings – The ceilings are suspended ceiling tile types. The ceiling tiles are in average condition. A number of the ceiling tiles have minor water staining and damage.

RPM Room

The RPM Room internal fabric and fixtures consist of the following:

- Floors – The RPM room has linoleum floor covering. The floor covering is in poor condition. There is possible termite damage to the rear of the RPM room
- Walls – The walls are painted, or graphic vinyl covered plasterboard. The painted and graphic surface treatments are in average condition.
- Ceilings – The ceilings are generally suspended ceiling tile types. The ceiling tiles are in average condition. A number of the ceiling tiles have minor water staining and damage.

Administration, Café and Reception

The Administration and Cafe internal fabric and fixtures consist of the following:

- Floors – The Administration Room has carpet tiles installed. The carpet tiles are in average condition. The Café and reception area have vinyl floor covering that has been recently installed and is in good condition. The entrance externally has a remnant of the original linoleum that is in very poor condition and requires replacement. The café kitchen floor tiles are in good condition though with some minor deterioration to the tile grout at the café servery.



- Walls – The walls are generally painted render on concrete or painted plasterboard. The painted surfaces are in average to good condition.
- Ceilings – The ceilings are generally suspended ceiling tile types. The ceiling tiles are in average condition. A number of the ceiling tiles have minor water staining and damage.

Toilets and Changing Rooms

The Main Toilets and Changing Rooms internal fabric and fixtures consist of the following:

- Floors – The Toilet and Changing Rooms have ceramic tile floor covering. The floor covering is good condition though with some minor deterioration and discolouration to the tile grout.
- Walls – The walls are generally ceramic tile throughout. The tiles are in good condition though the tile grout is dirty and presents poorly.
- Ceilings – The ceilings are suspended painted plasterboard type. The ceilings are generally in good condition.

Multipurpose Toilets

The Main Toilets and Changing Rooms internal fabric and fixtures consist of the following:

- Floors – The Toilet and Changing Rooms have ceramic tile floor covering. The floor covering is good condition though with some minor deterioration and discolouration to the tile grout.
- Walls – The walls are generally ceramic tile throughout. The tiles are in good condition though the tile grout is dirty and presents poorly.
- Ceilings – The ceilings are suspended painted plasterboard type. The ceilings are generally in good condition.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

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Table 8. Interior Fabric & Fixings – Site Inspection Summary

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I001	Sports Court - Walls	Observation	The Sports Court is in average condition overall. There is deterioration and damage evident to the walls evident. The sports surface appears in good condition.		N/A	N/A
I002	Sports Court - Walls	Renewal	Deterioration evident to painted surfaces.		\$4,680	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I003	Sports Court - Walls	Renewal	Damage to paintwork at spectator seating.		Repair as part of Painting Renewal	2021
I004	Sports Court - Walls	Repair	Cracking evident on south wall adjacent to external louver.		An allowance has been made overall of \$3,500 for structural inspection (See EW005) Repair as part of Painting Renewal	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
		Repair	Cracking evident on south wall adjacent to external louver (lower edge).		Repair as part of Painting Renewal	2021
I005	Sports Court - Walls	Repair	Movement visible between concrete panel and spectator seating/stair. Recommend that this is monitored as part of overall Structural Inspection.		An allowance has been made overall of \$3,500 for structural inspection (See EW005)	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I006	Sports Court - Walls	Capital	<p>Damage to internal wall insulation due to ball strikes.</p> <p>Note the cost is for installation of wall coverings for both the Sports and Extreme Sports Courts.</p>		\$9,834	2021
I007	Sports Court - Doors	Repair	<p>Door handle to Store Room is loose and requires resecuring. Additional minor damage to door.</p>		\$200	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
1008	Extreme Sports Court - Walls	Renewal	<p>Damage to internal wall insulation due to ball strikes.</p> <p>Note cost is estimated based on renewal however it is recommended that the wall has an internal plywood (or similarly robust) material cladding installed.</p>		\$9,800	2021
1009	Extreme Sports Court – Walls	Renewal	<p>Cracking visible internally adjacent to the fire exit door.</p> <p>Cost given is for renewal of paintwork throughout. Recommend repairs carried out as part of renewal works though including crack monitoring in the future.</p>		<p>\$3,466</p> <p>An allowance also has been made overall of \$3,500 for structural inspection (See EW005)</p>	2024

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I010	Extreme Sports Court – Roof (internal)	Observation	Poor appearance due to deterioration and dirt on the fibreglass roof skylights.		Cost included in roof section of report	N/A
I011	Extreme Sports Court – Doors	Renewal	Fire exit door is damaged. Cost is for renewal of door.		\$800	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I012	RPM Room - Flooring	Repair / Renewal	Water damage at rear of RPM Room		\$850 (Repair) \$3,809 (Renewal)	2021 2024
I013	Multipurpose Rooms Store - Flooring	Renewal	Store area Linoleum in poor condition.		\$6,349	2024

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I014	Toilets Corridor - Flooring	Repair	Small number of cracked floor tiles and deteriorated tile grout at entrance to corridor from the ramp.		\$300	2021
I015	Toilets Corridor - Walls	Renewal	Crack in wall adjacent to electrical cupboard. Cost is for painting of the Corridor area including preparation and repair.		\$566	2022

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I016	Toilets (Throughout)	Repair	<p>The wall tiles throughout are in good condition though there are localised areas of grout deterioration. The grout is generally dirty throughout and presents poorly.</p> <p>Costs are given for an industrial steam clean of tiles and re-grout as required for all the toilets, changing rooms (including Multipurpose toilets and creche)</p>		\$14,400	2021
I017	Toilets (Throughout)	Repair	<p>Example where the grout between worktop surface and tiles has deteriorated.</p>		Cost included in above.	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
1018	Multipurpose Rooms Store - Flooring	Renewal	Localised termite damage to Stage Flooring. The flooring has been treated. It is recommended that as part of overall sand and polish that this area is suitably addressed aesthetically. Cost given for sand and polish.		\$4,840	2022
1019	Multipurpose Rooms - Flooring	Renewal	Timber floor is in good overall condition though the surface treatment has deteriorated. Recommended that sanding and polishing is undertaken to improve finish and longevity of floor. Cost given for sand and polish as part of renewals.		\$2,955	2022

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
						
I020	Multipurpose Rooms Green Room - Ceiling	Repair	Bowed ceiling tile		\$120	2021

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I021	Entrance - Flooring	Repair	The linoleum at the entrance is lifting and presents very poorly.		\$500	2021
I022	Entrance - Autodoor	Renewal	Internal auto door actuator is leaking and noisy in operation.		\$3,000	2021

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I023	Fitness Room - Walls	Renewal	Minor hairline cracking and deterioration to painted surfaces.		\$1,937	2022
See above	See above	See above	See above		See above	See above

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
						
I024	Fitness Room - Ceiling	Repair	Minor water staining to ceiling tiles.		\$200	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I025	Gymnasium - Flooring	Repair	Tactile flooring has been crudely secured by tape.		\$120	2021
I026	Gymnasium - Ceiling	Renewal	There are a number of ceiling tiles that are water stained.		\$200	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I027	Gymnasium - Walls	Renewal	Walls are in average condition though with some deterioration evident to painted surfaces.		\$3,095	2024
I028	Creche - Ceiling	Repair	Minor water staining to ceiling tiles.		\$100	2021

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
1029	Creche - Walls	Renewal	Minor cracking and deterioration to painted surfaces. Costs are for renewal of paint throughout.		\$1,114	2024
1030	Creche - Walls	Repair	Discolouration to tiling grout.		Costs included in 1016	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
I031	Fitness Room	Renewal	The window roller blinds are in average condition. An allowance has been made in renewals for replacement in 2025		\$2,588	2025
I032	Creche - Flooring	Renewal	The Creche linoleum floor covering is in average condition though exhibits wear and tear and presents poorly.		\$7,724	2024

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Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
						

5.2. ELECTRICAL SERVICES

The electrical services onsite include the site main switchboard located in the carpark, the building main switchboard, distribution boards, lighting and small power throughout. The electrical services are generally in good condition.

Lighting throughout the building is in good condition except for the High Bay lighting within the Sport Court area. The lighting is approaching end of life and reports on site have stated failures are common including one occurrence of a unit going on fire.

Emergency and Exit Lighting was assessed to be present and in good condition. No maintenance logbook was sighted during inspection and subsequently it was not clear whether the lights were maintained to standard.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

Table 9. Electrical Services – Site Inspection Summary

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
E001	Light and Power	Observation / Repair	<p>Electrical distribution Boards throughout are in good condition.</p> <p>The Building Main Switchboard has in place two Out of Service tags.</p> <p>Recommend inspection to confirm suitable isolation/disconnection.</p> <p>There is installed a sump pump and small associated pit within the Switchboard cupboard due to building ground water/drainage problems.</p>		\$220	2021



Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
E002	Sports Court – Light and Power	Renewal	<p>The High Bay Discharge lighting is approaching end of life and is recommended for planning for renewal.</p> <p>It is recommended that they are replaced with LED type fittings.</p>		\$27,819	2022
E003	Extreme Sports Court – Light and Power	Renewal	<p>The lighting directly above the beach volleyball has been replaced with LED type High Bay fittings. The remainder are the original light fittings.</p> <p>The original High Bay Discharge lighting is approaching end of life and is recommended for planning for renewal.</p>		\$6,624	2022

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
E004	Toilets and Changing Rooms – Light and Power	Renewal	HPM handryers throughout the toilets and changing rooms are either Out of Service or ineffective in operation. Note cost is for replacement with Dyson type or similar.		\$6,000	2021
E005	Throughout	Renewal	The emergency lighting including exit signs are in good condition. An allowance, based on industry serviceable life expectancy, has been made for renewal in 2028.		\$17,512	2028



5.3. MECHANICAL SERVICES

The mechanical services consist of Package and Split Air Conditioning Units, Evaporative Air Conditioning Units, Kitchen and Toilet Exhausts.

The Temperzone Package Air Conditioning units were installed in 2004 and are approaching end of life. Visually the units in the south enclosure are in average condition where the north enclosure are rated as in poor condition. The units are R22 refrigerant charged, an ozone depleting hydrochlorofluorocarbons (HCFCs) substance, that is being phased out of production.

The cafe kitchen commercial exhaust and associated exhaust fans serving the Kitchens are in average condition. There is some minor deterioration evident to the fan housing located on the roof. The Multipurpose kitchens commercial exhaust and associated exhaust fans are in good condition.

The toilet and changing area exhaust is in average condition though it was observed that the flexible ducting had detached in the roof space allowing contaminated air to discharge into the ceiling space. The multipurpose rooms kitchens exhaust fans are in good condition.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.



Table 10. Mechanical Services – Site Inspection Summary

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
M001	Packaged Air Conditioning Units	Renewal	<p>The Packages Air Conditioning Units throughout are old (circa)2004 and are effectively at/or approaching end of life. The units are R22 Refrigerant charged. The units in the South Enclosure visually are in poor condition. The units in the North Enclosure are in average condition.</p> <p>The Split Air Conditioning Units are in average condition but again are old and approaching end of life.</p>	 	<p>\$106,995 (South Enclosure 3xLarge Packaged 41kW Units)</p> <p>\$15,236 (South 3xSplit Units)</p> <p>\$74,066 (North Enclosure 2xLarge Packaged 41kW Units)</p> <p>\$10,158 (Roof above Café 2xSplit Units)</p>	<p>2022</p> <p>2024</p> <p>2024</p> <p>2024</p>

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
M002	Evaporative Coolers	Renewals	There are two evaporative coolers installed. The units are in average condition though are old in appearance with deteriorated housings.		\$9,704	2025
M003	Toilet Exhaust	Repair	Flexible duct has become detached discharging toilet exhaust into common roof space.		\$110	2021

Reference No	Location / Element	Works Type	Description	Photographs	Cost Est.	Year
M004	External Sports and Extreme Sports Courts – Fresh Air Louvers	Repair	<p>External fresh air louvers are corroded.</p> <p>Recommend that they have corrosion treatment and also lubrication/maintenance to ensure operation.</p> <p>Note that a PPM task has been included for future annual inspection to include verifying operation, cleaning and lubrication.</p>		\$1,540	2021
M005	Kitchen – Supply Louver	Repair	Supply air grille has become detached from the ceiling.		\$120	2021

5.4. FIRE SERVICES

The fire services across the site include twin headed hydrants, fire hose reels, extinguishers and fire blankets in kitchen areas. Fire hydrants and hose reels are served by the fire pump and tanks located adjacent to the carpark. All fire services are in good condition and inspected up to date. There were no defects observed.

There is no fire detection system installed. Building evacuation being achieved manually through the PA System Redback Alert/Evac Controller. A Recreation Centre is defined as a Class 9b Building under the National Construction Code - Building Codes Australia. NCC states 'Sporting complexes (including sports halls, gymnasiums, swimming pools, ice and roller rinks, and the like) other than an indoor sports stadium with a total spectator seating for more than 1000' are exempt from the requirements to have a Fire Detection System. However, from a building risk perspective it is possibly a Shire consideration in the future.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

Table 11. Fire Services – Site Inspection Summary

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
F001	Throughout – Fire Evacuation Plans	Renewal	Evacuation plans are due for renewal in 2021.		\$2,500 \$2,747	2021 2026

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Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
F002	Throughout – Fire Protection	Renewal	An allowance has been made in the renewal plan for replacement extinguishers and fire blankets.		\$2,053	2028
F003	External - Fire Tank	Repair	Minor corrosion at base of tank cladding.		\$200	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
F004	Administration Office – Alert/Evacuation Controller	Capital - Optional	Though, as stated, not a National Construction Code - Building Codes Australia requirement should consideration be given to installation of a fire detection system an optional cost has been included within Capital Costs section.		\$87,292	2024



5.5. HYDRAULIC SERVICES

The hydraulic services consist of cold and hot water services, sanitary plumbing, wastewater, storm water drainage and garden reticulation.

The hot water services consist of gas hot water boilers, pipework and fittings. A gas boiler has been installed, serving the Toilets and Changing Room and Café kitchen areas, possibly in lieu of the original gas boilers and solar system. The new system appears undersized for the potential hot water duty required. The original solar system is in place but in very poor condition and out of commission.

The cold-water system, consisting of mains water supply, a water meter and associated pipework, is in average condition.

Sanitary plumbing consists of WCs, urinals, basins and sinks. The sanitary provision is in average to good condition. The basins including tapware are exhibiting wear and tear and have been assessed as in average condition. The WCs in the multipurpose room toilets are overflowing when flushing.

It is assumed that the wastewater is now a connection to the town main wastewater system as there is a BioMax type system installed that was taken out of service in 2016. There is a grease trap installed and visually, externally, it is in good condition.

Stormwater drainage is comprised of metal box gutters with primarily metal downpipes leading to stormwater drains. All gutters and downpipes are generally in good condition. The gutters and downpipes, primarily in the Café and Gymnasium areas are leaking causing staining to the pipework and nearby walls.

The garden reticulation consists of a reticulation controller and sprinklers located throughout the gardens. The reticulation system is in average condition.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

Table 12. Hydraulic Services – Site Inspection Summary

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
H001	Hot water systems	Observation	A domestic type Gas Boiler was installed circa 2010 and is in good condition. However, the Boiler appears undersized for the potential hot water duty required. There are no reported problems or complaints regarding the hot water provision. There is however no capacity for future growth or development.		N/A	N/A
H002	Hot water systems	Renewals	Original Edward Boilers. Boilers appear decommissioned as part of the overall Solar Hot Water System. Note cost for renewal/recommission including replacement of Solar Collectors.		\$51,900	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
H003	Hot water systems	Renewals	<p>Original Solar Hot Water Collectors are out of service and are in very poor condition having been subject to vandalism.</p> <p>Cost, as stated, has been included for renewal/recommission of the system. This should include as previously discussed provision of security to prevent intruder access to the roof.</p> <p>If renewal is not desired the old Hot Water Collectors should be removed and the roof made good.</p>		Cost included above as part of renewals	2021
H004	Creche - Hot water systems	Repair	Hot water at time of inspection was not available.		\$200	2021

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Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
H005	External – Water Treatment Plant	Observation	The BioMax type water treatment plant is out of service. It is assumed that the equipment is redundant. Possibly connection to recently installed town wastewater system? To be confirmed.		N/A	N/A
		Observation	Isolation point for BioMax at Building Main Switchboard.		Cost included in E001	N/A

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
H006	Extreme Sports Court - Gutters	Repair	Signs of corrosion on the underside of the extreme sport court gutters and at joints on gutter downpipes.		\$4,000	2021
H007	Gymnasium - Stormwater	Repair	Stormwater down pipe is missing a small diversion piece. Water not fully to drain. Washing out between wall and drain.		\$120	2021

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
H008	Toilet (General)	Renewal	Toilet and changing room area basins throughout are in average condition. Components however are beginning to show signs of wear and tear including deterioration to chrome and ear to taps, etc. Allowance has been made for renewal of all hand basins in 2029.		\$9,219	2029
H009	Toilet (General) – Sanitary Plumbing	Repair	The WCs are visibly in good condition. The WCs in the multipurpose area are overflowing when flushing.		\$330	2021

5.6. SECURITY

The site security systems consist of an Intruder Detection System and CCTV System. The systems are in overall good condition.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

Table 13. Security – Site Inspection Summary

Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
S001	Administration – Security System	Renewal	There is an ICT Intruder Detection System installed. The system is in good operational condition. Due to the relatively low quoted life of a security system (quoted as 7 years) and allowance has been included for renewal.	 	\$3,500	2028

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Reference No	Location/Element	Works Type	Description	Photographs	Cost Est.	Year
S002	Administration – CCTV System	Renewal	<p>There is an CCTV System installed. The system is in good operational condition.</p> <p>An allowance has been made in renewals for replacement in 2025</p>	 	\$21,941	2025

5.7. EXTERNAL

External elements include road, carparking, fencing, gates and street lighting. The external elements of the facility are in average to good condition. The carpark and road surface is in average condition with some deterioration evident including potholes and cracking. The service road to the north is in poor condition overall. Line-marking of the carpark is currently in average condition though should be repainting on average every 7 years. The repainting is forecast for re-painting in 2024.

The pedestrian brick paving is in average condition. The paving leading to the entrance was in the process of being refurbished. The paving outside the Multipurpose area is in average condition with some deterioration evident including loose and displaced bricks.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

Table 14. External- Site Inspection Summary

Reference No	Element	Works Type	Description	Photographs	Cost Est.	Year
EX001	Accessible Car Parking	Renewal	The road line markings are in average condition. Accessible carparking bays have been provided. An allowance has been made in renewals for line marking.		\$1,746	2024

Reference No	Element	Works Type	Description	Photographs	Cost Est.	Year
EX002	Carpark	Renewal / Repair	Carpark road surface is in average condition. There is however surface deterioration and potholes present. An allowance for repair is included with a view to skim and renewal of top surface in 2030.		\$2,600 (Repair) \$81,737 (Renewal)	2021 2030
EX003	Roads – North Service Road	Renewal	Road surface is in poor condition with deterioration and potholes evident. Cost included in renewals for skim and resurface.		\$6,624	2022

Reference No	Element	Works Type	Description	Photographs	Cost Est.	Year
EX004	Paving	Repair	The brick paving adjacent to the Multipurpose Room 1 is loose and breaking away where it meets the road.		\$1,600	2021
EX005	Paving	Repair	The brick paving adjacent to the carpark is breaking away at its northern edge.		\$1,200	2021



5.8. OTHER

5.8.1. Climbing Wall

The Climbing Wall is in good condition though has been out of service for the past two to three years. Only minor deterioration was observed to the steel structure and component elements. However, to bring back into service the following is required:

- Pulleys will require servicing
- Ropes will require replacement
- Belay station slings require replacement
- Tube tape for vertical challenge activities require replacing
- Harnesses will replacing
- Helmets will require replacing

5.8.2. Basketball Backboard

There are four wall mounted basketball backboards installed. The backboards and support structure are in average condition. It is suspected however the backboards do not comply with International Basketball Federation (FIBA) requirements though this is subject to confirmation of the levels of competition.

The following table summarises key items identified with corresponding remediation methods and cost. For full detail on repair and renewal works refer to Appendix B – Asset list & Life Cycle Assessment and Appendix C– FULL DEFECTS LIST.

Table 15. Other- Site Inspection Summary

Reference No	Element	Works Type	Description	Photographs	Cost Est.	Year
OT001	Equipment – Climbing Wall	Planned Repair	<p>Climbing Wall is in good condition. The Climbing Wall structure appears in good condition with only minor deterioration observed to the surface coatings.</p> <p>To facilitate the use of this equipment, the Climbing Wall and associated hardware will require the Annual Audit to be reinstated as per AS 2316.1-2009 (Australian Standard; Artificial Climbing Structures and Challenge Courses. Part1: Fixed and Mobile artificial climbing and abseiling walls).</p> <p>The recommendations as per the previous Annual Audit additionally will require action. This is summarised as below.</p> <p>Pulleys: Service by manufacturer \$160 +GST per pulley Suitable technician to uninstall and then reinstall pulleys Budget \$500 +GST (2 x Site Visits)</p> <p>Rope replacing: Rope (360m) \$1500 +GST Measure, Cut, Tag, Enter into Log Book and install onsite Budget \$450 +GST</p> <p>Belay station slings replacing: Budget \$48.59 +GST Each</p> <p>Tube tape for vertical challenge activities require replacing:</p>	 	<p>Annual Audit Cost \$2,000 (Planned) Budget a further \$8,500 to bring back into service (Repair) Budget cost for training \$1,800 (Operational)</p>	2021

Shire of Serpentine Jarrahdale
Serpentine Jarrahdale Community Recreation Centre
Building Condition Audit & Life Cycle Costing



Reference No	Element	Works Type	Description	Photographs	Cost Est.	Year
			<p>8m @ \$24 +GST inc cutting and setting up</p> <p>Harnesses replacing: Ferno Gym Harness @ \$45.36 +GST ea = Total of 14 units Budget \$635.04 +GST</p> <p>Helmets replacing: 100 +GST ea = Total of 16 units \$1600 +GST</p> <p>In addition, staff Professional Development Training will be required.</p>			
OT002	Equipment – Climbing Wall	Repair	Corrosion evident at entrance hatch		\$200	2021

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 Serpentine Jarrahdale Community Recreation Centre
 Building Condition Audit & Life Cycle Costing



Reference No	Element	Works Type	Description	Photographs	Cost Est.	Year
OT003	Equipment – Basketball Backboard	Renewal	<p>The basketball back boards are in average condition though it is suspected they do not comply with FIBA Guide to Basketball Facilities (2018). Note that this is subject to confirmation of the level of competition undertaken.</p> <p>Additionally, the existing backboards are not height adjustable.</p> <p>An allowance has been included for replacement with floor mounted items that are to FIBA requirements.</p>		\$84,500	2021



5.9. ACCESS FOR MAINTENANCE

It was observed that access to the roof and the roof space area above the toilet (location of Domestic Hot Water System) is restrictive. It is recommended that roof access provision and access to the ceiling space are provided.

5.10. CONDITION ASSESSMENT SUMMARY

The following table outlines the Average Condition Ratings by each building element.

Table 16. Facility Condition Summary

Asset Class	Average Condition Rating	Average Condition
BUILDING FABRIC	2.4	Good
CIVIL	2.8	Average
COMMUNICATIONS	3.0	Average
ELECTRICAL	2.1	Good
EQUIPMENT	2.6	Average
FIRE	2.1	Good
HYDRAULIC	2.7	Average
MECHANICAL	3.0	Average
SECURITY	2.6	Average
STRUCTURAL	2.4	Good
Average Condition	2.57	Average

5.10.1. Assessment results

On average the asset elements across all the building disciplines are in good condition. The Asset Condition per discipline is outlined in the graph below (Range: 1 = Very Poor, 5 = Excellent).

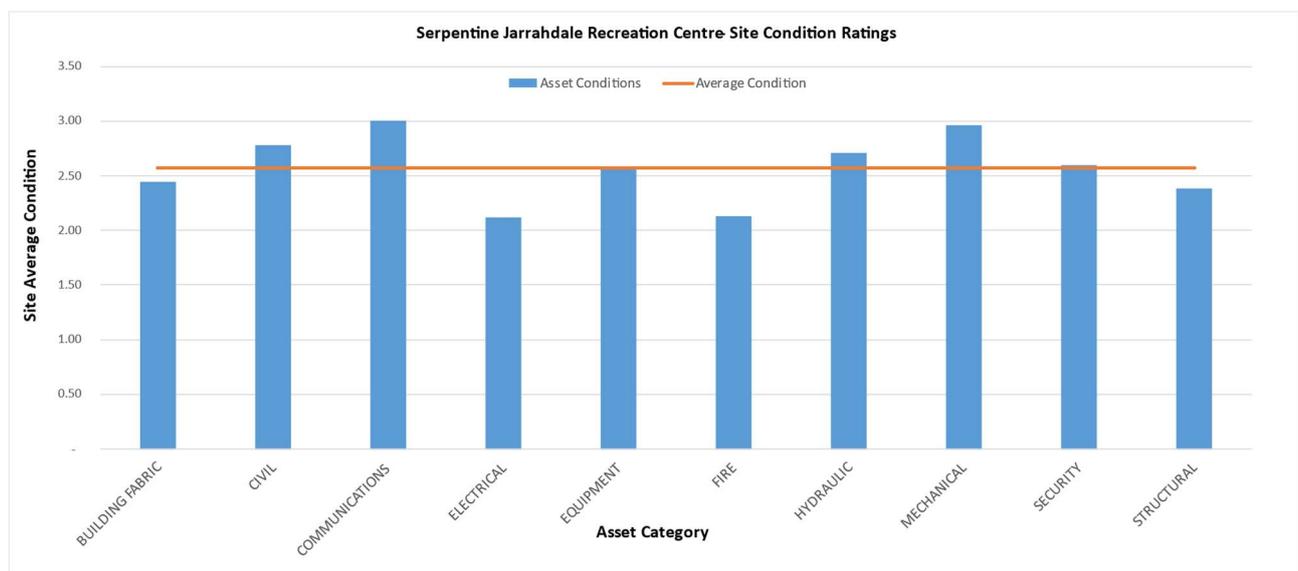


Figure 2. Serpentine Jarrahdale Community Recreation Centre Condition Summary

6. LIFE CYCLE COST ANALYSIS

6.1. METHODOLOGY

6.1.1. General

The Lifecycle Cost Analysis has been developed through the site condition assessment process. The analysis reviews building elements and rates the condition of each asset against the defined condition classification. Each asset is reviewed and allocated:

- A forecast end-of-life date and replacement cost based on the useful life of the asset and condition observed at the time of the inspection. This constitutes the **Renewals Plan**, and,
- Ongoing **Planned Preventative Maintenance** task(s) and cost(s).

Defects are also identified where applicable.

The Lifecycle Cost Analysis spreadsheet (LCC spreadsheet), which accompanies this report, outlines the Renewals Plan and recommended Planned Preventative Maintenance (PPM) tasks, with estimated costs. The ten-year life cycle cost is assumed to maintain the facility at the required condition and levels of service and to maintain key performance parameters.

Development of the model incorporates AS/NZ 4536.1999 Life Cycle Costing – An Application Guide, IPWEA NAMS.AU Guidelines and ISO 55001 principles.

6.1.2. Assessment process

The Assessment Process was in the form of a detailed visual inspection of the asset elements life cycle which focused on establishing the overall condition and remaining useful life of:

- Structures, including the integrity of the buildings and building elements, major structures and identification of structural defects;
- Buildings, including identifying areas of materials degradation and establishing the extent and cost of sampling and testing needed to establish remaining useful life with a reasonable degree of confidence;
- Building Services, including; electrical services (high and low voltage), fire services, hydraulic services, security systems and mechanical services and systems;
- Infrastructure Systems and Services, including; pavements, water supply, sewerage, drainage, landscaping and fencing; and

6.2. ASSET MANAGEMENT STRATEGIES

The analysis and resultant strategy is to ensure the sustainability of the building asset throughout its useful life. This is achieved through suitable investment in planned preventative maintenance and renewals (Renewals Plan), upgrades and new works to meet the needs and functional requirements of the building. This can be achieved through the following strategies:

- Scheduled Operation and Maintenance – Planned Preventative Maintenance;
- Renewals (Renewals Plan) - Condition Monitoring; and
- Capital Works and Optional Upgrades - Upgrades and New Works.

6.2.1. Planned Preventative Maintenance (PPM) Plan

Maintenance planning requires ongoing development and review based on the asset elements and requirements both from a statutory, operational and risk perspective.

The PPM plan supplied is an initial draft for comment. Historical information if available can be incorporated to further refine details including costs.

6.2.2. Renewals Plan

Renewals are determined through the identification of assets approaching the end of serviceable life and budgeted for in the Renewals Plan. Renewal is replacement of the asset to maintain original function or operation. Though consideration to improved operation such as energy efficiency, etc. should be a made. Furthermore, renewals planning should consider updated servicing and condition data and suitable planning, to implement the optimum renewal strategy for the site. This is a sustainability practice and accounts for assets which exceed their forecast serviceable life and continue to operate efficiently.

Due to the status of the facility approaching the end of its lifecycle, a focus has been made on recommendation to delay renewal of assets where possible, and operating equipment on a 'run-to-failure' model, with a focus on preventative maintenance.

6.2.3. Capital Works/Optional Upgrades

Capital Works and Optional Upgrades are new works through the identification of improvements or additions for increased functionality of the facility (Capital Investment).

7. FINANCIAL SUMMARY

7.1. INTRODUCTION

A long-term financial plan development is essential to ensure the sustainability of the building asset through the asset life cycle. As such a 10-year Life Cycle Cost Analysis (LCC) has been developed.

In accordance with the key assumptions described in Section 1.6, a Consumer Price Index (CPI) of 1.9% per annum has been applied. This is based on the Reserve Bank of Australia projection for the next 2 years².

The summary of the Life Cycle Costs is outlined in Figure 3 below showing combined annual costs over the ten-year period for both:

- Repairs
- Renewals
- Planned Preventative Maintenance; and
- Capital Costs (Optional Upgrades).

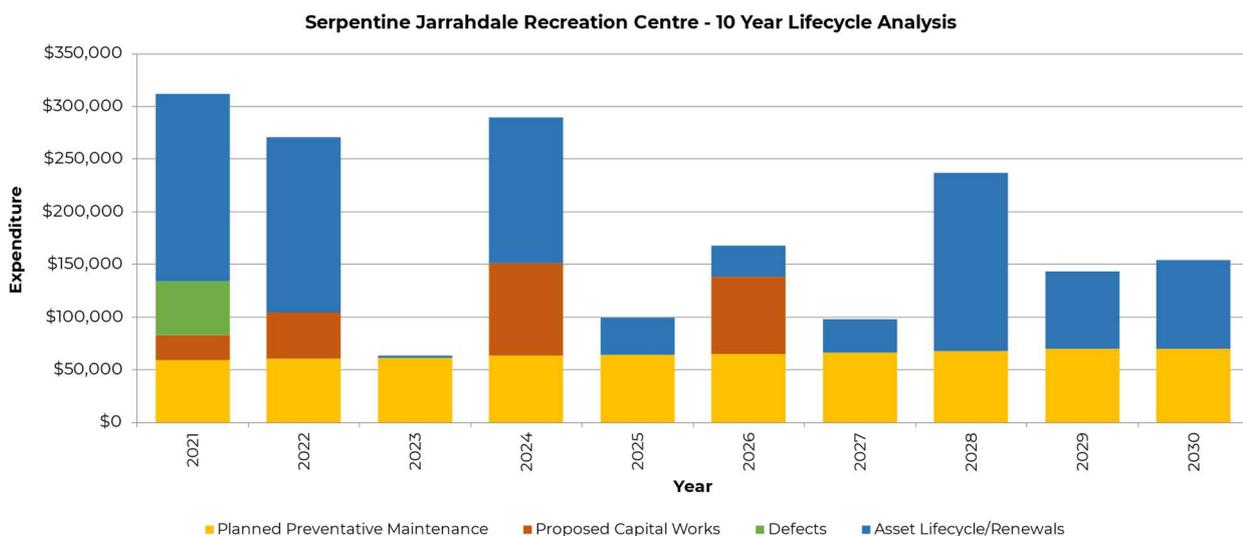


Figure 3. Life Cycle Cost Summary

7.2. PLANNED PREVENTATIVE MAINTENANCE EXPENDITURE

The Maintenance Expenditure is the costs associated with Maintenance throughout the life of the building. A list of recommended preventative maintenance tasks has been developed for the site with the full details available in Appendix A– Planned Preventative Maintenance.

The following graph summarises the maintenance expenditure across the sum of the asset categories.

² <https://www.rba.gov.au/publications/smp/2019/nov/forecasts.html>

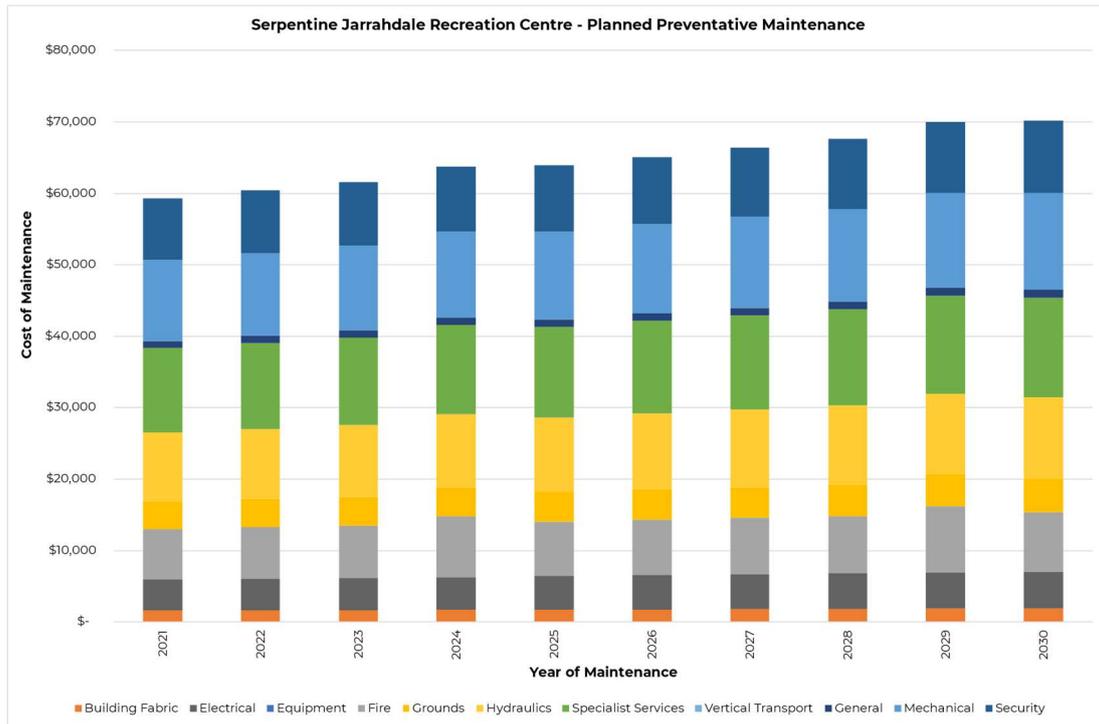


Figure 4. Planned Preventative Maintenance Costs

The maintenance costs are discipline related and encompass Statutory and Recommended maintenance tasks. The costs have been developed as recommendations and will require consideration and prioritisation with respect to existing budget constraints.

7.3. ASSET RENEWALS (RENEWALS PLAN)

The following graph summarises the Asset Renewal Expenditure across the sum of the asset categories. A detailed breakdown of the Renewals Plan by asset category is available separately. Refer to Excel Spreadsheet Serpentine Jarrahdale Recreation Centre 10YR LCC-VI.

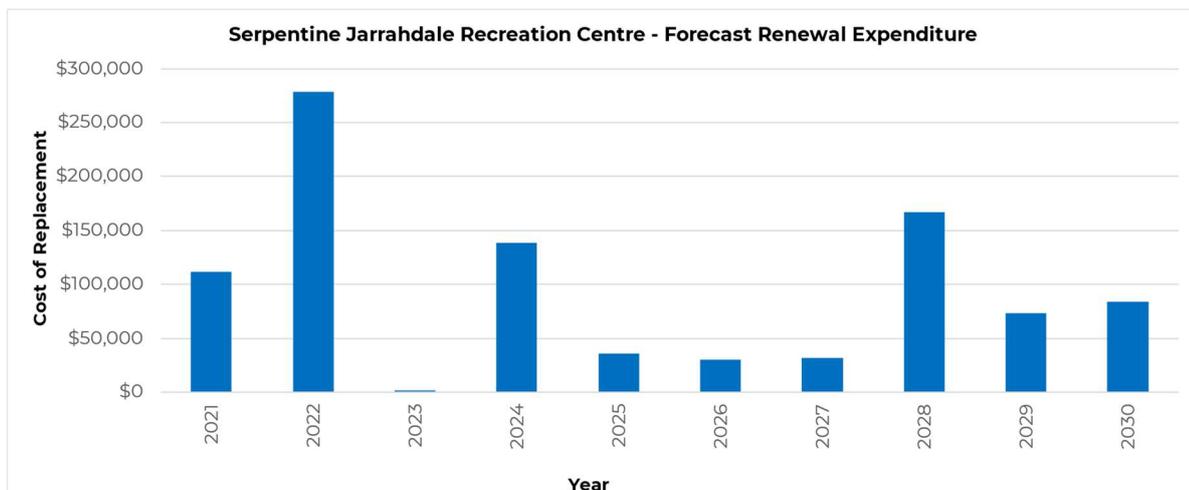


Figure 5. Renewals Costs

The Renewals costs are the costs associated with replacement of assets at the end of their serviceable life based on the assessed condition and industry recognised serviceable life.

The annual updated Renewals Plan should consider budget availability, updated servicing and condition data and suitable planning, to implement the optimum investment strategy for the site. This is a sustainability practice and accounts for assets which exceed their forecast serviceable life and continue to operate efficiently.

7.4. NEW WORKS AND UPGRADES (CAPITAL WORKS)

The Capital Work and Upgrade proposed is summarised in the following table:

Table 17. Capital Works

Capital (Optional) Works	Year	Cost (\$)
Installation of roof access including ladder hoops, gantry and fall arrest (Cost based on lower roof section and subject to survey)	2021	\$8,500.00
Exit Door works for NCC/BCA Compliance	2021	\$5,000.00
Installation of Basketball and Extreme Sports Courts Wall Coverings	2021	\$9,834.00
Sports Courts - Installation of two Scoreboards	2022	\$16,681.03
Court Floor - remove and re-line marking to regulations	2022	\$17,221.10
Removal of Redundant Septic Tank System	2022	\$10,190.00
Installation of a Fire Detection System Note probable order of cost is for centre wide detection system to replace existing manual alert system."	2024	\$87,292.41
Stage Refurbishment/Reconstruction	2026	\$39,926.00
Photovoltaic (PV) System (Cost based on 30kW System)	2026	\$32,960.38

7.5. ASSET DISPOSALS

A detailed Asset Disposal Strategy was not considered in the scope of this review.



APPENDIX A – PLANNED PREVENTATIVE MAINTENANCE



APPENDIX B – ASSET LIST & LIFE CYCLE ASSESSMENT

Refer to Excel Spreadsheet <Serpentine Jarrahdale Recreation Centre 10YR LCC-v1>



APPENDIX C – FULL DEFECTS LIST



APPENDIX D – PHOTOGRAPHS

<full set of survey photographs supplied separately>



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Planned Preventative Maintenance:

Serpentine Jarrahdale Recreation Centre

CPI Applied:	1.90%
20 Year Total:	\$648,163

Asset	Task Description	Frequency (per year)	Type	Cost	Yearly	Last Occurred	Base Cost	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Building Fabric																	
Roof	Pressure Wash/Cleaning Roof (12 Monthly)	1.0	Recommended	\$800.00	1	2019	\$800	\$ 800	\$ 815	\$ 831	\$ 846	\$ 863	\$ 879	\$ 896	\$ 913	\$ 930	\$ 948
Roller Doors	Maintenance as per Manufacturers Recommendations (12 Monthly)	1.0	Recommended	\$550.00	1	2019	\$550	\$ 550	\$ 560	\$ 571	\$ 582	\$ 593	\$ 604	\$ 616	\$ 627	\$ 639	\$ 652
Door Locks/Handles	Door Lock Maintenance (Yearly)	1.0	Recommended	\$250.00	1	2019	\$250	\$ 250	\$ 255	\$ 260	\$ 265	\$ 270	\$ 275	\$ 280	\$ 285	\$ 291	\$ 296
Communications																	
Electrical																	
Switchboards	Inspection and cleaning of distribution boards (12 Monthly)	1.0	Recommended	\$1,020.00	1	2019	\$1,020	\$ 1,020	\$ 1,039	\$ 1,059	\$ 1,079	\$ 1,100	\$ 1,121	\$ 1,142	\$ 1,164	\$ 1,186	\$ 1,208
Switchboards	Thermographic Testing (12 Monthly)	1.0	Recommended	\$1,020.00	1	2019	\$1,020	\$ 1,020	\$ 1,039	\$ 1,059	\$ 1,079	\$ 1,100	\$ 1,121	\$ 1,142	\$ 1,164	\$ 1,186	\$ 1,208
Emergency Lighting and Exit Sig	Inspection and testing of emergency lighting and exit signage (6 monthly)	2.0	Statutory	\$480.00	1	2019	\$960	\$ 960	\$ 978	\$ 997	\$ 1,016	\$ 1,035	\$ 1,055	\$ 1,075	\$ 1,095	\$ 1,116	\$ 1,137
Residual Current Devices (RCDs)	RCD testing (6 Monthly)	2.0	Statutory	\$500.00	1	2019	\$1,000	\$ 1,000	\$ 1,019	\$ 1,038	\$ 1,058	\$ 1,078	\$ 1,099	\$ 1,120	\$ 1,141	\$ 1,163	\$ 1,185
Electrical Testing and Tagging	Electrical Appliance Safety Testing (12 Monthly)	1.0	Recommended	\$360.00	1	2019	\$360	\$ 360	\$ 367	\$ 374	\$ 381	\$ 388	\$ 396	\$ 403	\$ 411	\$ 419	\$ 426
Equipment																	
Fire																	
Fire Protection	Testing and Inspection. Fire extinguishers as per AS 1851. (6 Monthly)	2.0	Statutory	\$210.00	1	2019	\$420	\$ 420	\$ 428	\$ 436	\$ 444	\$ 453	\$ 461	\$ 470	\$ 479	\$ 488	\$ 498
Fire Protection	Testing and Inspection of Fire Hydrants as per AS 1851. (6 Monthly)	2.0	Statutory	\$120.00	1	2019	\$240	\$ 240	\$ 245	\$ 249	\$ 254	\$ 259	\$ 264	\$ 269	\$ 274	\$ 279	\$ 284
Fire Protection	Testing and Inspection of Fire Hydrants as per AS 1851. (12 Monthly)	1.0	Statutory	\$240.00	1	2019	\$240	\$ 240	\$ 245	\$ 249	\$ 254	\$ 259	\$ 264	\$ 269	\$ 274	\$ 279	\$ 284
Fire Protection	Testing and Inspection of Fire Hydrants as per AS 1851. (5 Yearly)	0.2	Statutory	\$480.00	5	2019	\$480	\$ -	\$ -	\$ -	\$ 508	\$ -	\$ -	\$ -	\$ -	\$ 558	\$ -
Fire Protection	Testing and Inspection of Fire Pumps as per AS 1851. (Monthly)	12.0	Statutory	\$120.00	1	2019	\$1,440	\$ 1,440	\$ 1,467	\$ 1,495	\$ 1,524	\$ 1,553	\$ 1,582	\$ 1,612	\$ 1,643	\$ 1,674	\$ 1,706
Fire Protection	Testing and Inspection of Fire Pumps as per AS 1851. (3 Monthly)	4.0	Statutory	\$240.00	1	2019	\$960	\$ 960	\$ 978	\$ 997	\$ 1,016	\$ 1,035	\$ 1,055	\$ 1,075	\$ 1,095	\$ 1,116	\$ 1,137
Fire Protection	Testing and Inspection of Fire Pumps as per AS 1851. (12 Monthly)	1.0	Statutory	\$360.00	1	2019	\$360	\$ 360	\$ 367	\$ 374	\$ 381	\$ 388	\$ 396	\$ 403	\$ 411	\$ 419	\$ 426
Fire Protection	Testing and Inspection of Fire Pumps as per AS 1851. (5 Yearly)	1.0	Statutory	\$480.00	1	2019	\$480	\$ 480	\$ 489	\$ 498	\$ 508	\$ 518	\$ 527	\$ 537	\$ 548	\$ 558	\$ 569
Fire Protection	Inspection and testing of Fire Tanks as per AS 1851. (Monthly)	12.0	Statutory	\$60.00	1	2019	\$720	\$ 720	\$ 734	\$ 748	\$ 762	\$ 776	\$ 791	\$ 806	\$ 821	\$ 837	\$ 853
Fire Protection	Inspection and testing of Fire Tanks as per AS 1851. (6 Monthly)	2.0	Statutory	\$120.00	1	2019	\$240	\$ 240	\$ 245	\$ 249	\$ 254	\$ 259	\$ 264	\$ 269	\$ 274	\$ 279	\$ 284
Fire Protection	Inspection and testing of Fire Tanks as per AS 1851. (1 Yearly)	1.0	Statutory	\$240.00	1	2019	\$240	\$ 240	\$ 245	\$ 249	\$ 254	\$ 259	\$ 264	\$ 269	\$ 274	\$ 279	\$ 284
Fire Protection	Inspection and testing of Fire Tanks as per AS 1851. (5 Yearly)	0.2	Statutory	\$480.00	5	2019	\$480	\$ -	\$ -	\$ -	\$ 508	\$ -	\$ -	\$ -	\$ -	\$ 558	\$ -
Fire Protection	FESA Monitoring	1.0	Statutory	\$1,700.00	1	2019	\$1,700	\$ 1,700	\$ 1,732	\$ 1,765	\$ 1,799	\$ 1,833	\$ 1,868	\$ 1,903	\$ 1,939	\$ 1,976	\$ 2,014
Grounds																	
Landscaping	Landscaping Maintenance (8 Weekly)	6.5	Recommended	\$240.00	1	2019	\$1,560	\$ 1,560	\$ 1,590	\$ 1,620	\$ 1,651	\$ 1,682	\$ 1,714	\$ 1,747	\$ 1,780	\$ 1,814	\$ 1,848
Landscaping	Landscaping Maintenance (6 Monthly)	2.0	Recommended	\$460.00	1	2019	\$920	\$ 920	\$ 937	\$ 955	\$ 973	\$ 992	\$ 1,011	\$ 1,030	\$ 1,050	\$ 1,070	\$ 1,090
Irrigation	Carry out general inspection and maintenance of systems and fittings (6 Monthly)	2.0	Recommended	\$400.00	1	2019	\$800	\$ 800	\$ 815	\$ 831	\$ 846	\$ 863	\$ 879	\$ 896	\$ 913	\$ 930	\$ 948
Pest Control	Pest Control (6 Monthly)	2.0	Essential	\$300.00	1	2019	\$600	\$ 600	\$ 611	\$ 623	\$ 635	\$ 647	\$ 659	\$ 672	\$ 684	\$ 698	\$ 711
Hydraulics																	
Grease Trap	Pump out and cleaning	2.0	Recommended	\$900.00	1	2019	\$1,800	\$ 1,800	\$ 1,834	\$ 1,869	\$ 1,905	\$ 1,941	\$ 1,978	\$ 2,015	\$ 2,053	\$ 2,093	\$ 2,132
Backflow Prevention Devices	Test and Inspection (12 Monthly)	1.0	Statutory	\$660.00	1	2019	\$660	\$ 660	\$ 673	\$ 685	\$ 698	\$ 712	\$ 725	\$ 739	\$ 753	\$ 767	\$ 782
Boilers - Gas Fired	Inspection. Maintenance as per Manufacturer's recommendations (6 monthly)	2.0	Essential	\$720.00	1	2019	\$1,440	\$ 1,440	\$ 1,467	\$ 1,495	\$ 1,524	\$ 1,553	\$ 1,582	\$ 1,612	\$ 1,643	\$ 1,674	\$ 1,706
Boilers - Gas Fired	Inspection. Maintenance as per Manufacturer's recommendations (Yearly)	1.0	Essential	\$960.00	1	2019	\$960	\$ 960	\$ 978	\$ 997	\$ 1,016	\$ 1,035	\$ 1,055	\$ 1,075	\$ 1,095	\$ 1,116	\$ 1,137
Stormwater Drainage	Inspection and Cleaning including gutter cleaning. (6 Monthly)	2.0	Recommended	\$1,920.00	1	2019	\$3,840	\$ 3,840	\$ 3,913	\$ 3,987	\$ 4,063	\$ 4,140	\$ 4,219	\$ 4,299	\$ 4,381	\$ 4,464	\$ 4,549
Sanitary Fixtures	Inspection for defects and rectification (3 Monthly)	4.0	Recommended	\$120.00	1	2019	\$480	\$ 480	\$ 489	\$ 498	\$ 508	\$ 518	\$ 527	\$ 537	\$ 548	\$ 558	\$ 569
Gas Service	Gas Services and Meters Maintenance. (12 Monthly)	1.0	Recommended	\$480.00	1	2019	\$480	\$ 480	\$ 489	\$ 498	\$ 508	\$ 518	\$ 527	\$ 537	\$ 548	\$ 558	\$ 569
Mechanical																	
Fan Coil Units/Splits	Inspection and Maintenance as per DA19 (3 monthly)	4.0	Essential	\$1,320.00	1	2019	\$5,280	\$ 5,280	\$ 5,380	\$ 5,483	\$ 5,587	\$ 5,693	\$ 5,801	\$ 5,911	\$ 6,024	\$ 6,138	\$ 6,255
Toilet Exhaust Fans	Inspection. Maintenance as per DA19 (3 monthly)	4.0	Essential	\$660.00	1	2019	\$2,640	\$ 2,640	\$ 2,690	\$ 2,741	\$ 2,793	\$ 2,846	\$ 2,901	\$ 2,956	\$ 3,012	\$ 3,069	\$ 3,127
Kitchen Exhaust Fans	Inspection. Maintenance as per DA19 (3 monthly)	4.0	Essential	\$660.00	1	2019	\$2,640	\$ 2,640	\$ 2,690	\$ 2,741	\$ 2,793	\$ 2,846	\$ 2,901	\$ 2,956	\$ 3,012	\$ 3,069	\$ 3,127
Mechanical Services Switchboard	Inspection, cleaning, thermographic testing (12 Monthly)	1.0	Essential	\$400.00	1	2020	\$400	\$ 400	\$ 408	\$ 415	\$ 423	\$ 431	\$ 439	\$ 448	\$ 456	\$ 465	\$ 474
Fresh Air Wall Louvres	Check operation, clean and lubricate (12 Monthly)	1.0	Essential	\$440.00	1	2020	\$440	\$ 440	\$ 448	\$ 457	\$ 466	\$ 474	\$ 483	\$ 493	\$ 502	\$ 512	\$ 521
Security																	
Security System	Security System Maintenance as per Manufacturers Recommendations (3 Monthly)	4.0	Essential	\$440.00	1	2019	\$1,760	\$ 1,760	\$ 1,793	\$ 1,828	\$ 1,862	\$ 1,898	\$ 1,934	\$ 1,970	\$ 2,008	\$ 2,046	\$ 2,085
CCTV System	Maintenance as per Manufacturers Recommendations (3 Monthly)	4.0	Essential	\$440.00	1	2019	\$1,760	\$ 1,760	\$ 1,793	\$ 1,828	\$ 1,862	\$ 1,898	\$ 1,934	\$ 1,970	\$ 2,008	\$ 2,046	\$ 2,085
Access Control System	Maintenance as per Manufacturers Recommendations (3 Monthly)	4.0	Essential	\$440.00	1	2019	\$1,760	\$ 1,760	\$ 1,793	\$ 1,828	\$ 1,862	\$ 1,898	\$ 1,934	\$ 1,970	\$ 2,008	\$ 2,046	\$ 2,085
Intercom System	Maintenance as per Manufacturers Recommendations (3 Monthly)	4.0	Essential	\$825.00	1	2019	\$3,300	\$ 3,300	\$ 3,363	\$ 3,427	\$ 3,492	\$ 3,558	\$ 3,626	\$ 3,695	\$ 3,765	\$ 3,836	\$ 3,909
Specialist Services																	
Height Safety Equipment	Height Safety Inspection - anchor bolts & static lines (6 Monthly)	4.0	Essential	\$660.00	1	2019	\$2,640	\$ 2,640	\$ 2,690	\$ 2,741	\$ 2,793	\$ 2,846	\$ 2,901	\$ 2,956	\$ 3,012	\$ 3,069	\$ 3,127
Climbing Wall	Annual Safety Audit	1.0	Essential	\$2,000.00	1	2019	\$2,000	\$ 2,000	\$ 2,038	\$ 2,077	\$ 2,116	\$ 2,156	\$ 2,197	\$ 2,239	\$ 2,282	\$ 2,325	\$ 2,369
Climbing Wall	Climbing Wall and High Ropes Equipment Maintenance	4.0	Essential	\$500.00	1	2019	\$2,000	\$ 2,000	\$ 2,038	\$ 2,077	\$ 2,116	\$ 2,156	\$ 2,197	\$ 2,239	\$ 2,282	\$ 2,325	\$ 2,369
Beach Volleyball nets	Retensioning including repairs as required (12 Monthly)	1.0	Essential	\$3,500.00	1	2019	\$3,500	\$ 3,500	\$ 3,567	\$ 3,634	\$ 3,703	\$ 3,774	\$ 3,845	\$ 3,918	\$ 3,993	\$ 4,069	\$ 4,146
Beach Volleyball Sand	Sand Cleaning	3.0	Essential	\$550.00	1	2019	\$1,650	\$ 1,650	\$ 1,681	\$ 1,713	\$ 1,746	\$ 1,779	\$ 1,813	\$ 1,847	\$ 1,882	\$ 1,918	\$ 1,955
Vertical Transport																	
General																	
Gym, BBQ, Mats	General Maintenance	12.0	Essential	\$80.00	1	2019	\$960	\$ 960	\$ 978	\$ 997	\$ 1,016	\$ 1,035	\$ 1,055	\$ 1,075	\$ 1,095	\$ 1,116	\$ 1,137
Access and Paths of Egress	Inspect corridors and egress paths, remove all obstructions and complete checklist of items (Monthly) - Assumed undertaken in-house	12.0	Essential		1	2019	\$0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Maintenance Expense								\$ 59,270	\$ 60,396	\$ 61,544	\$ 63,729	\$ 63,905	\$ 65,119	\$ 66,356	\$ 67,617	\$ 70,017	\$ 70,211

Defects

Serpentine Jarrahdale Recreation Centre 10YR LCC-v1

					Cost
Level	Location	Asset Function	Element	Repair Details	
Ground	External	ELECTRICAL	Light and Power_Site Main Switchboard	Out of service tags in place. Recommend check to ensure suitable isolation/disconnection.	\$220.00
Ground	External	CIVIL	Civil_Car Park and kerbs	Wear and multiple potholes	\$2,600.00
Ground	Corridor Electrical Cupboa	ELECTRICAL	Light and Power_Building Main Switchboard	Out of Service Tags in place	\$240.00
Ground	Courts	BUILDING FABRIC	Doors_Timber Painted	Door handle is loose and requires resealing.	\$200.00
Ground	Courts	BUILDING FABRIC	Walls_Insulation	Wall insulation badly damaged due to ball strikes Note cost included in Capital Works for wall coverings.	\$0.00
Ground	Courts	BUILDING FABRIC	External Walls_Metal Cladding	Corrosion to mesh and steel structure at panel and metal cladding interface.	\$1,200.00
Ground	Courts	MECHANICAL	HVAC_Fresh Air Wall Louver	Louvers are corroded. Recommend corrosion treatment and lubrication/maintenance.	\$880.00
Ground	Courts	STRUCTURAL	External Walls_Concrete Tilt Panels	Concrete tilt panel base locating plates are missing bolts and are dislodged in places.	\$3,500.00
Ground	Fitness Room	BUILDING FABRIC	Walls_Painted	Minor cracking and damage	\$200.00
Ground	Fitness Room	BUILDING FABRIC	Ceilings_Tile	Water damage to ceiling tiles.	\$200.00
Ground	Gymnasium	BUILDING FABRIC	Floor Coverings_Vinyl	Taped down tactile flooring requires tidying.	\$120.00
Ground	Gymnasium	BUILDING FABRIC	Ceilings_Tile	Water damage and staining	\$200.00
Ground	Extreme Sports	BUILDING FABRIC	Doors_Timber Painted	Door delaminating/damage externally (Cost include in Renewals)	
Ground	Extreme Sports	BUILDING FABRIC	Walls_Insulation	Wall insulation badly damaged due to ball strikes Note cost included in Capital Works for wall coverings.	
Ground	Extreme Sports	BUILDING FABRIC	External Walls_Painted Concrete	Discolouration to wall slab edge possibly due to leaking gutter.	\$640.00
Ground	Extreme Sports	EQUIPMENT	Specialist Services_Climbing Wall	Requires work to return to service (see report). Corrosion to steel at access hatch area. Requires corrosion treatment and paint.	\$8,500.00
Ground	Extreme Sports	MECHANICAL	HVAC_Fresh Air Wall Louver	Louvers are corroded. Recommend corrosion treatment and lubrication/maintenance.	\$660.00
Ground	Extreme Sports	STRUCTURAL	External Walls_Concrete Tilt Panels	Concrete tilt panel base locating plates are missing bolts and are dislodged in places.	\$2,500.00
Ground	Female Toilets/Change Roc	BUILDING FABRIC	Walls_Tiles	Minor defects to tiling ground throughout all toilets (Cost to steam clean and regrout as required all toilets).	\$14,400.00
Ground	Café	BUILDING FABRIC	Ceilings_Painted	Ceiling Louver is slightly detached from ceiling/Minor water staining.	\$120.00
Ground	Café	BUILDING FABRIC	Floor Coverings_Tiled	Minor deterioration to grout.	\$220.00
Ground	Café	MECHANICAL	HVAC_Exhaust Hood	Supply air grille has become detached from the ceiling.	\$120.00
Ground	Administration	BUILDING FABRIC	External Walls_Painted Concrete	Seal at joint between Admin and Extreme Sport has deteriorated and requires redoing.	\$200.00
Ground	Administration	STRUCTURAL	External Walls_Concrete Tilt Panels	Water staining originating likely from leaking guttering.	\$300.00
Ground	Massage/Lifecycle Room	BUILDING FABRIC	Floor Coverings_Linoleum	Damage to linoleum at rear of room due to adjacent water ingress.	\$850.00
Ground	Toilet Corridor	BUILDING FABRIC	Floor Coverings_Tiled	Damage to tiles/grout at entrance to corridor.	\$300.00
Ground	Reception/Café Seating	BUILDING FABRIC	Ceilings_Tile	Ceiling tiles water damage	\$200.00
Ground	Creche	BUILDING FABRIC	Doors_Timber Painted	Door grill requires resealing	\$100.00
Ground	Creche	BUILDING FABRIC	Ceilings_Tile	Ceiling tile is dislodged and bowed	\$100.00
Ground	Creche	BUILDING FABRIC	External Walls_Metal Cladding	Minor corrosion at base of metal wall cladding.	\$200.00
Ground	Creche	HYDRAULIC	Sanitary Plumbing_Basins	No hot water	\$200.00
Ground	Multi Purpose Room 2	BUILDING FABRIC	Ceilings_Tile	Bowed ceiling tile.	\$120.00
Ground	Multi Purpose Rooms - Fen	BUILDING FABRIC	Walls_Tiles	Tile grout discoloured	
Ground	Multi Purpose Rooms - Fen	HYDRAULIC	Sanitary Plumbing_WCs	WCs when flushing are overflowing.	\$330.00
Ground	Main Entry	BUILDING FABRIC	Floor Coverings_Linoleum	Linoleum Lifting at entrance threshold	\$500.00
Ground	Main Entry	BUILDING FABRIC	Doors_Autodoors - Swing Door Actuator Type	Noisy in operation and leaking (Cost included in renewals).	
Ground	Fire Pump Compound	FIRE	Fire_Hydrant Tank	Minor corrosion at base of tank cladding (RHS Tank from entrance)	\$200.00
Ground	Fitness Room/Gymnasium	HYDRAULIC	Storm Water Drainage_Downpipes	Small diversion pipe missing.	\$120.00
Ground	External - Multipurpose Ro	CIVIL	Civil_External Paving	Loose brick paving. Requires reset and resurfaced.	\$1,600.00
Ground	External - Multipurpose Ro	CIVIL	Civil_External Paving	Loose brick paving. Requires reset and resurfaced.	\$1,200.00
Roof	Roof	HYDRAULIC	Water Supply (Hot)_Solar Collector	Solar panels badly deteriorated and damaged	
Roof	Roof	MECHANICAL	HVAC_Toilet Exhaust	Within the internal roof space the flexible ductwork has become detached allowing the toilet exhaust to discharge into the ceiling space.	\$110.00
Roof	Courts	STRUCTURAL	Roof Covering_Metal	Section of roof mesh flashing missing	\$1,680.00
Roof	Extreme Sports	HYDRAULIC	Storm Water Drainage_Gutters	Signs of corrosion.	\$4,000.00
Roof	Entrance/Café/Office/Crech	STRUCTURAL	Roof Covering_Metal	Leakage through skylight tower	\$2,400.00
Grand Total					\$51,430.00