Asset Management



2021/22 - 2031/32 Hunter's Hill Council



MAY 2021



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1. Current State of Council's Assets





BACKGROUND

The purpose of this Asset Management Plan (AMP) is to support the long-term sustainable management of Council's asset portfolio in providing acceptable levels of service to the community.

This Plan defines the current state of our assets, together with an analysis of alternative renewal investment strategies and the predicted consequent impact on maintenance costs, carrying backlog, net strategy cost and asset condition over a 10-year planning period (commencing 21/22FY).

There are 8 asset classes covered by this AMP, these are:

- Buildings
- Kerb
- Marine Structures
- Open Space
- Paths
- Roads
- Stormwater Pipes
- Stormwater Pits

What are the 4 key factors?

1

Utilize the AMP to guide the LTFP for Council.

2

Optimise lifecycle, risk & performance of assets.

3 Review the AMP annually to reflect & respond to change over time.

4 Use the AMP to improve asset performance so that services are not unexpectedly impacted by failures.

Where does the Asset Management Plan fit in IP&R?



Key Indicators

Table 1 below provides an overview of the value of the assets covered by this AMP as at 2020/21FY.

Asset Class	Replacement Value \$	Predicted Annual Depreciation \$	Accumulated Depreciation \$	Written Down Value \$
Buildings	25,904,575	555.582	12,195,889	13,708,686
Kerb	18,625,345	232,816	5,590,240	13,035,104
Marine Structures	6,574,496	82,511	3.334.439	3,240,057
Open Space	9,396,623	778,054	3,204,520	6,192,103
Paths	13,243,540	183,099	4.359.554	8,883,986
Roads	66,005,633	1,149,066	18,983,752	47,021,881
Stormwater Pipes	17,776,119	177,784	6,134,239	11,641,880
Stormwater Pits	5,553,260	55,532	1,963,187	3,590,073
Total	163,079,590	3,214,442	55.765,820	107,313,770

Replacement Value

Refers to the amount required to pay to replace an asset at the present time, according to its current worth.

Depreciation

Is the systematic allocation of the depreciable amount of an asset over its useful life. Depreciation is the measure of 'wear and tear' or consumption of the asset, in providing that asset to the community and is measured on an annual basis.

Accumulated depreciation

Is the cumulative depreciation of an asset up to a single point in its life.

Written-down value

Is a method used to determine a previously purchased asset's current worth and is calculated by subtracting accumulated depreciation from the asset's original value. Asset Condition is reported on a 0 to 6 scale, with 0 being "As New" and 6 being "End of Life", as per the general definitions in Table 2 below.

Condition Score	Condition Description
0 - As New	Brand new asset or recently rehabilitated to as new condition. Only cyclical routine maintenance is required.
1 - Very Good	Asset is in very good overall condition, with only minor evidence of ageing and very limited surperficial defects.
2 - Good	Superficial defects may be present requiring minor maintenance, in addition to cyclical routine maintenance. Only cyclical routine maintenance is required.
3 - Fair	Moderate deterioration. More frequent maintenance is required in addition to cyclical routine maintenance, in order to maintain adequate serviceability.
4 - Poor	High deterioration is evident. Maintenance costs rising in order to maintain serviceability. The asset is at the point where it can be considered for renewal.
5 - Very Poor	Evidence of high level of deterioration affecting serviceability. Maintenance cost is high. The asset is now nearing the end of its useful life and should be considered for renewal.
6 - End of Life	Asset is no longer serviceable and should not remain in service.

Figure 1 Provides a high-level snapshot of the current state of Council's combined asset portfolio, comprising all asset classes covered by this AMP. As can be seen in Figure 1, the majority of assets (94.9%) are in condition 3 (fair condition) or better, with only 5.1% of assets in condition 4 (4.4%) or 5 (0.7%).



Figure 1

Backlog represents those assets that are due for renewal in accordance with current service levels but not yet funded for renewal. Current backlog is calculated to be \$4.66M.

A more detailed overview of current condition distribution by asset class and asset type is provided in Figures 2 to 10 below.













2. Levels of Service



STRATEGIC AND CORPORATE GOALS ALIGNMENT

Our Asset Management framework consists of the Asset Management Policy, Asset Management Strategy and Digital Asset Management Plan. This framework is used to guide decisions around how we manage infrastructure assets sustainably to achieve the objectives of the Community Strategic Plan 2018-2028.

LEGISLATIVE REQUIREMENTS AND GUIDELINES

The Local Government Amendment (Planning and Reporting) Act 2009 requires Council to have a Community Strategic Plan that identifies the main objectives for the future of Hunters Hill over a period of 10 years. The Plan is supported by a Resource Strategy that includes a Long-Term Financial Plan, Workforce Management Plan and Asset Management Plan. In addition, Council has included a Digital Customer Information Strategy given the critical role that information technology plays in the delivery of Council services.

LEVELS OF SERVICE

COMMUNITY LEVELS OF SERVICE

The AMP defines and measures community levels of service (i.e. how the community receives the service) in the following terms:

- Quality How good is the service... what is the condition or quality of the service?
- Function Is it suitable for its intended purpose... is it the right service?
- Capacity Is the service over or under utilised... do we need more or less of these assets?



TECHNICAL LEVELS OF SERVICE

Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities to best achieve the desired community outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- Operations the regular activities to provide services (e.g. opening hours, cleansing, mowing grass, energy, inspections, etc.)
- Maintenance the activities necessary to retain an asset as near as practicable to an appropriate service condition. These activities enable an asset to provide service for its planned life (e.g. pipe cleaning, road patching, building and structure repairs)
- Renewal the activities that return the service capability of an asset up to that which it had originally (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement)
- Upgrade/New the activities to provide a higher level of service (e.g. widening a road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library)

Council is currently in the process of developing a service levels framework that will include formalised customer and technical levels of service. The AMP will be updated in future revisions to include these when finalized.

3. Future Demand



DEMAND DRIVERS

Drivers affecting demand can include population and demographic change, technological changes, environmental awareness and changes in behavioural patterns.

DEMAND FORECASTS

There is an increasing demand for;

- playing field assets due to continued growth in sports participation
- Smart assets eg Wifi, charging stations
- Accessible amenoties and playgrounds
- Increased Street sweeping and drainage pit cleaning
- Environmentally friendly assets eg LED streetlighting



CHANGES IN TECHNOLOGY

We are continuously monitoring new asset treatments that may be available to increase the life of its assets or costeffectiveness of related treatments. These technological factors need to be assessed in determining the scoping requirements for maintenance works, renewal, upgrade and new asset projects. There will likely be future changes to asset management technology, in particular the monitoring and data collection roles. These upgrades in technology may require consideration of modifications to service levels as, and when, appropriate.

DEMAND MANAGEMENT PLAN

Demand for new services will be managed through a combination of managing existing assets, upgrades and providing new assets to meet demand. Demand management practices include non-asset solutions, insuring against risks and managing failures.

Any specific demand management opportunities will be identified and included in future revisions of the AMP.

4. Risk Management Planning



RISK MANAGEMENT PLAN

Our Risk Management Policy sets the overall framework for addressing risk within the guidelines of ISO31000-2018. The elements of this framework are described in Figure 11.

- Risk Management Context: Establishes the objectives, stakeholders, key issues and criteria against which risks will be evaluated
- Identify the Risk: Identifies what risk events are likely to impact on assets and services
- Analyze the Risk: Reviews the existing controls and then analyses the likelihood of an event occurring and the consequence of the event to determine the level of risk
- Assess the Risk: Assesses and ranks the identified risks in a Risk Register
- Treat the Risks: Identifies actions to reduce/control the risk



RISK ASSESSMENT

A robust risk identification and management approach has the following anticipated benefits:

- A reduction in risk related events
- Improved asset knowledge
- Better understanding and managment of risk. That is, risk is articulated and the relationship of risk and an individual's accountabilities and responsibilities are more clearly understood
- Improved asset performance so that services are not unexpectedly impacted by component failure resulting in uncontrolled reactive maintenance works
- Assets remain in a fair condition for a longer period of time extending their economic life.
- Improved compliance levels
- Improved financial and environmental sustainability via more strategic investment in asset management

The risk assessment process identifies credible risks, the likelihood of the risk event occurring and the consequences should the risk event occur.

Specific asset portfolio risks will be identified and included in future revisions of the AMP.









5. Asset Funding Levels

FORECAST 10-YEAR FUNDING ESTIMATES

Lifecycle modelling has been undertaken to determine the predicted impact on asset condition and required funding under four alternative renewal investment strategies that are linked to LTFP. As outlined below, noting that 10 year totals include an annual inflation factor of 2.5% year-on-year.

- Scenario 1 A base case scenario which allows the current special variations to expire and not be renewed. Total rate income would fall by approximately \$405,000, \$547,000 and \$435,000 in 2022-23, 2023-24 and 2029-30 respectively. Spending on asset renewal would decrease correspondingly, resulting in a decline in asset condition and an increase in renewal backlog works from the current \$4.7M to \$18.9M (current dollars) in 2030-31.
- Scenario 2 The income from expiring special variations continues permanently, requiring IPART approval, and is directed to asset renewal in accordance with DAMP recommendations. Total rate income would increase by the 2% IPART rate peg. Asset condition declines and renewal backlog increases to \$12.0M
- Scenario 3 The income from expiring special variations continues permanently and is directed, together with an additional average \$915,000 per annum, to asset renewal in accordance with DAMP recommendations. Total rate income increases by the 2% rate peg plus an additional \$830,000 (9.3%) in 2022/23. This results in improvements in the condition of some asset classes, particularly roads, and an asset renewal backlog of \$5.5M
- Scenario 4 The income from expiring special variations continues permanently and is redirected, together with an additional average \$1,480,000 per annum, to asset renewal in accordance with DAMP recommendations. Total rate income increases by the 2% rate peg plus an additional \$1,330,000 (15.0%). This results in improvements in the condition of some asset classes, particularly roads, and elimination of asset renewal backlog by 2030-31. The additional income results in projected operating surpluses when capital income (e.g., grants and developer contributions) are excluded.

For each of the scenarios, a summary of renewal investment and the consequent predicted impact on maintenance costs, carrying backlog, net strategy cost and asset condition is presented in Table 3 below.

The key points to note from Table 3 are as follows:

Scenario 1 and 2 both result in a significant carrying backlog, a deterioration in network condition, consequent increases in maintenance costs and the highest overall net strategy costs.

Scenario 3 results in a much smaller carrying backlog with only a minor increase (\$2.17M or \$808K in NPV) over the 10 years, and a much better outcome in terms of maintenance costs, network condition and net strategy cost when compared to Options 1 and 2.

Scenario 4 results in no carrying backlog, slightly lower maintenance costs when compared to Scenario 3, a stable network condition and the lowest net strategy cost.

Detailed summaries by asset class are provided in the Appendix.

Scenarios	Total Renewal \$	Total Maintenance \$	Total Cost \$	Backlog Closing \$	Backlog Change \$	Net Strategy \$	Avg Condition Opening \$	Avg Condition Closing \$
Scenario 1	7,241,850	21,034,192	28,276,042	23,636,813	18,980,863	47,256,905	2.59	3.45
Scenario 2	15,780,711	19,963,270	35,743,981	14,951,561	10,295,611	46,039,592	2.59	3.37
Scenario 3	24,016,065	16,739,771	40,755,836	6,824,245	2,168,295	42,924,131	2.59	3.02
Scenario 4	29,157,847	15,411,197	44,569,044	0	-4,655,950	39,913,094	2.59	2.65

Table 3 – Summary of Investment Scenarios Analysis

FUNDING STRATEGY

It is anticipated that, subject to the adoption of the Long Term Financial Plan (LTFP), annual renewal investment will be in the range identified in Scenarios 3 and 4, being between \$24.02M and \$29.16M over 10 years (or \$2.13M and \$2.57M annual average renewal in NPV).

This investment is expected to be funded from Council's operating and capital budgets, loans, reserves and / or government grants, as detailed in Council's LTFP. In the case of scenarios 2,3 and 4, special variation.

The LTFP is a dynamic document, in that it is reviewed and refined on a continual basis, to reflect as accurately as possible changes in financial circumstances.

The key assumptions made in presenting the information within the AMP and in preparing the associated funding forecasts are outlined below. They are presented to enable readers to gain an understanding of the levels of confidence in the underlying data.

Key assumptions made are:

- Current levels of service will remain constant over the life of the AMP
- All expenditure forecasts are based on current rates adjusted by a 2.5% inflation factor year-on-year
- Continued use of current construction techniques and materials in alignment with current standards
- Existing maintenance funding levels are meeting current service level requirements
- Asset renewal is generally 'like for like' however mandated improvements may be required at the time of construction / installation





6. Plan Improvement and Monitoring





This section outlines how asset management performance can be monitored and enhanced over time. The identified action items will enable Council to improve its asset management capability, enhance asset value and sustainably deliver required service levels while balancing cost, risk and performance.

IMPROVEMENT PLAN

The Asset Management Improvement Plan which is set out in Table 4 details the key improvement tasks identified to date.

Table 4

1 Develop a service level framework including community and technical levels of service

2 Identify demand management opportunities

3 Identify asset portfolio risks







MONITORING AND REVIEW PROCEDURES

The Asset Management Plan is a dynamic document, reflecting and responding to change over time.

Ongoing monitoring is required to:

• Ensure compliance with the proposed improvement program milestones.

Ensure compliance with adopted standards, procedures and service levels relating to asset performance

This AMP will be reviewed during annual budget preparation and amended (where necessary) to recognize any changes in service levels and / or resources available to provide those services.

It is further recommended that a full review and update be conducted every 5 years, following the full condition assessment of the asset portfolio.

PERFORMANCE MEASURES

The effectiveness of this AMP will be measured and monitored on the basis of annual strategic indicators as follows:

- The degree to which required cash flows identified in the AMP are incorporated into Council's long-term financial and works planning processes
- The degree to which detailed works programs, budgets, business plans and organisational structures take into account the forecasts and trends provided by the AMP
- Actual performance relative to the Levels of Service documented in the AMP (i.e. actual vs target performance)
- The level of execution of the identified improvement actions in the AMP

Other Asset Management documents that further support the Asset Management Plan

ASSET MANAGEMENT POLICY & STRATEGY

DIGITAL ASSET MANAGEMENT <u>PLAN</u> DIGITAL ASSET MANAGEMENT PLAN 101



Appendix

Table 5- Scenario 1 - Total 10 Years 7.24M (NPV 671K Avg Annual)

Assest Class	Total Renewal \$	Total Maintenance \$	Total Cost \$	Backlog Opening \$	Backlog Closing \$	Net Strategy Cost \$	Avg Condition Opening \$	Avg Condition Closing \$
Buildings	2,557,771	8,895,748	11,453,519	611,367	2,948,919	13,791,071	2.60	3.15
Kerb	243,815	206,885	450,700	315,378	1,600,505	1,735,827	2.62	2.93
Marine Structures	108,896	135,638	244,534	274,058	908,434	878,910	3.02	3.25
Open Space	169,794	3,773,027	3,942,821	142,390	6,456,615	10,257,046	2.55	4.38
Paths	970,668	3,177,411	4,148,079	0	2,790	4,150,869	2.50	3.14
Roads	3,173,368	2,825,939	5,999,307	3,258,914	11,673,851	14,414,244	2.67	3.10
Stormwater Pipes*	0	2,019,544	2,019,544	0	0	2,019,544	2.69	2.69
Stormwater Pits*	17,538	0	17,538	53,843	45,699	9.394	2.70	2.70
Total	7,241,850	21,034,192	28,276,042	4,655,950	23,636,813	47,256,905		



Figure 12 – Scenario 1 Costs by Asset Class

Table 6 – Scenario 2 – Total 10 Years 15.78M (NPV 1.41M Avg Annual)

Assest Class	Total Renewal \$	Total Maintenance \$	Total Cost \$	Backlog Opening \$	Backlog Closing \$	Net Strategy Cost \$	Avg Condition Opening \$	Avg Condition Closing \$
Buildings	2,935,227	8,823,853	11,759,080	611,367	2,566,804	13,714,517	2.60	3.11
Kerb	1,617,781	201,079	1,818,860	315,378	751,477	2,254,959	2.62	2.81
Marine Structures	345,173	111,773	456,946	274,058	602,171	785,059	3.02	2.99
Open Space	710,007	3,382,411	4,092,419	142,390	6,271,892	10,221,921	2.55	4.20
Paths	1,727,568	3,079,606	4,807,173	0	0	4,807,173	2.50	2.90
Roads	8,386,766	2,345,004	10,731,770	3,258,914	4,759,217	12,232,073	2.67	2.67
Stormwater Pipes*	0	2,019,544	2,019,544	0	0	2,019,544	2.69	2.69
Stormwater Pits*	58,189	0	58,189	53,843	0	4,346	2.70	2.68
Total	15,780,711	19,963,270	35,743,981	4,655,950	14,951,561	46,039,592		



Figure 13 – Scenario 2 Costs by Asset Class

Table 7 – Scenario 3 – Total 10 Years 24.02M (NPV 2.13M Avg Annual)

Assest Class	Total Renewal \$	Total Maintenance \$	Total Cost \$	Backlog Opening \$	Backlog Closing \$	Net Strategy Cost \$	Avg Condition Opening \$	Avg Condition Closing \$
Buildings	4,795,612	7,812,294	12,607,906	611,367	259,692	12,256,231	2.60	2.90
Kerb	2,330,844	200,253	2,531,097	315,378	0	2,215,719	2.62	2.79
Marine Structures	905,010	100,995	1,006,005	274,058	0	731,947	3.02	2.68
Open Space	2,953,151	1,514,249	4,467,401	142,390	3,946,865	8,271,876	2.55	3.40
Paths	2,672,511	2,926,353	5,598,864	0	0	5,598,864	2.50	2.64
Roads	10,300,748	2,166,082	12,466,830	3,258,914	2,617,688	11,825,604	2.67	2.53
Stormwater Pipes*	0	2,019,544	2,019,544	0	0	2,019,544	2.69	2.69
Stormwater Pits*	58,189	0	58,189	53,843	0	4,346	2.70	2.68
Total	24,016,065	16,739,771	40,755,836	4,655,950	6,824,245			



Figure 14 – Scenario 3 Costs by Asset Class

Table 8 – Scenario 4 – Total 10 Years 29.16M (NPV 2.57M Avg Annual

Assest Class	Total Renewal \$	Total Maintenance \$	Total Cost \$	Backlog Opening \$	Backlog Closing \$	Net Strategy Cost \$	Avg Condition Opening \$	Avg Condition Closing \$
Buildings	4,962,622	7,618,920	12,581,542	611,367	0	11,970,175	2.60	2.88
Kerb	2,330,844	200,253	2,531,097	315,378	0	2,215,719	2.62	2.79
Marine Structures	905,010	100,995	1,006,005	274,058	0	731,947	3.02	2.68
Open Space	6,833,784	664,922	7,498,705	142,390	0	7,356,315	2.55	1.97
Paths	2,672,511	2,926,353	5,598,864	0	0	5,598,864	2.50	2.64
Roads	11,394,888	1,880,209	13,275,097	3,258,914	0	10,016,183	2.67	2.43
Stormwater Pipes*	0	2,019,544	2,019,544	0	0	2,019,544	2.69	2.69
Stormwater Pits*	58,189	0	58,189	53.843	0	4,346	2.70	2.68
Total	29,157,847		44,569,044	4,655,950		39,913,094		



Figure 15 – Scenario 4 Costs by Asset Class