

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

#1 Road Furniture Portfolio Asset Management Plan



Moreton Bay Regional Council

Road Furniture Portfolio Asset Management Plan

November 2021

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Road Furniture Portfolio Asset Management Plan

Document Reference	
Document title	Road Furniture Asset Management Plan
ECM Reference	61972063
Date prepared	November 2021
Adopted Date	19 January 2022
Prepared by	Asset Management

Version Control				
Version	Date	Revision details	Author/s	Reviewed by
Draft V1	August 2021	Initial draft	Deanna Webb	O Avinashum / A Evans / W Field
Draft V2	November 2021	Minor amendments	W Field	T Martini
1.0	19 January 2022	Version 1.0 adopted by Council	J Frost	A Martini

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Road Furniture Portfolio Asset Management Plan

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Road Furniture Portfolio Asset Management Plan

Definitions for Abbreviations

Term	Definition
AADT	Annual Average Daily Traffic
ACR	Asset Consumption Ratio
AI	Action Item
AM	Asset Maintenance
AMP	Asset Maintenance Plan
AMT	Asset Management Team (section within PAS)
ARI	Average Recurrence Interval
ASR	Asset Sustainability Ratio
CSR	Customer Service Request
DDA	Disability Discrimination Act 1992
DTMR	Department of Transport and Main Roads
ECM	Enterprise Content Management (component of Technology One)
Embarc	Moreton Bay Regional Council Intranet
ePID	Electronic Project Identification Document for project prioritisation/ approval
GIS	Geographical Information System
HPV	High Productivity Vehicles
IIMM	International Infrastructure Management Manual
IP	Infrastructure Planning
IPWEA	Institute of Public Works Engineering Australasia
ITP&D	Integrated Transport Planning & Design, within IP
LGA	Local Government Area
LGIP	Local Government Infrastructure Plan
LTFF	Long term financial forecast
MBRC	Moreton Bay Regional Council
P&ED	Planning and Economic Development
PAMP	Portfolio Asset Management Plan
PAS	Projects and Asset Services
PM	Preventative Maintenance
RACI	Responsible Accountable Consulted Informed
RFPAMP	Road Furniture Portfolio Asset Management Plan
RUL	Remaining Useful Life
SAMP	Strategic Asset Management Plan
TMR	Transport and Main Road (short form of DTMR)
TOMAS	MBRC's Asset Management System (based on Technology One platform)
TRV	Total Replacement Value
WDV	Written Down Value (same as Net Value)

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Road Furniture Portfolio Asset Management Plan

Executive Summary

The Road Furniture Portfolio Asset Management Plan (RFPAMP) outlines Moreton Bay Regional Council's (MBRC's) approach to the management of the road furniture assets located throughout the MBRC region.

The industry adopted term "road furniture" encompasses all roadside objects used for safety and control of traffic in addition to those assisting the driver. In MBRC road furniture asset portfolio also includes assets that support the use of public transport.

Road furniture assets include bus stops, subsoil drainage, flush points, guardrails, kerb and channel, on-road cycleways, signage, traffic islands and traffic signals.

Collectively the entire road furniture assets portfolio has a total estimated value of \$436.1M, which includes \$4.9M of non-financial assets.



Figure 1 Typical road furniture including traffic islands, signals, cycleways, kerb and channel, guardrails and signage (Russet Burbank Pde, Warner)

Information on the various asset types included in this RFPAMP are presented in Table 0.1. This table also indicates the expected life of each asset type and the age range for the assets that currently make up the portfolio. Kerb and channel assets make up 57% of the total portfolio value, traffic islands make up 23%, and combined they represent 80% of the portfolio's total replacement cost. Low value assets are not financially recognised. Signage is split into financial and non-financial assets with the financial assets mainly being electronic signs. Flush points, sub-soil drainage and cycleway symbols all fall below the financial recognition threshold and are therefore included as non-financial assets.

Table 0.1 - Road Furniture Summary

Asset Type Description	Number of Assets	Length (km)	Expected Useful Life (Years)	Current Average Age (Years)	Current Replacement Cost
Financial Assets					
Bus Stop	1,463	-	25	16.4	\$25.8M
Guardrail	1,076	58	40	22.5	\$17.6M
Kerb and Channel	41,211	4,765	70	24.5	\$254.5M
Signage	41	-	20	2	\$1.1M
Traffic Island	9,867	-	50-70	18.9	\$100.5M
Traffic Signal	150	-	20	4.0	\$31.7M
Subtotal for Financial Assets					\$431.2M
Non-Financial Assets					
On-road Cycleways	5,390	-	7	3.9	\$0.8M
Flush Point	138	-	50	2.6	\$22.5K
Sub Soil Drainage	2,223	162	50	2.6	\$2.9M

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Road Furniture Portfolio Asset Management Plan

Asset Type Description	Number of Assets	Length (km)	Expected Useful Life (Years)	Current Average Age (Years)	Current Replacement Cost
Signage	2430	-	20	4	\$1.15M
Subtotal for Non-Financial Assets					\$4.9M
Total (combined financial + non-financial assets)					\$436.1M

Figures 2-8 are examples of asset types within MBRC's road furniture portfolio.



Figure 2 - Traffic Signal (Discovery Dr and Memorial Dr intersection, Northlakes)



Figure 3 - Traffic Island (Discovery Dr and Memorial Dr intersection, Northlakes)

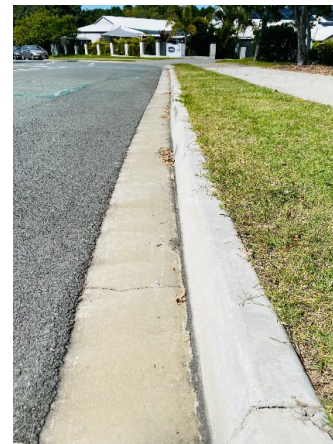


Figure 4 - Kerb and Channel (Foundation St, Northlakes)



Figure 5 - Road Signage (Camelia Avenue, Everton Hills)



Figure 6 - Example of DDA compliant bus shelter (Bounty Blv, Northlakes)



Figure 7 - Example of cycleway (Discovery Drive, Northlakes)



Figure 8 - Example of guardrail (Discovery Drive, Northlakes)

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Road Furniture Portfolio Asset Management Plan

Figure 9 below shows the age profile for MBRC’s road furniture assets, which indicates the number of assets and their total current replacement cost within each age band. As age reflects the year in which in the assets were built, the profile also indicates the pattern in which they were acquired over time. There has been steady growth in the number of road furniture assets over the last 35 years with an average of around \$10.5M of new assets being acquired every year. This is reflective of the growth of the road network throughout the Moreton Bay Region as it continues to grow and expand in parallel with the population increase.

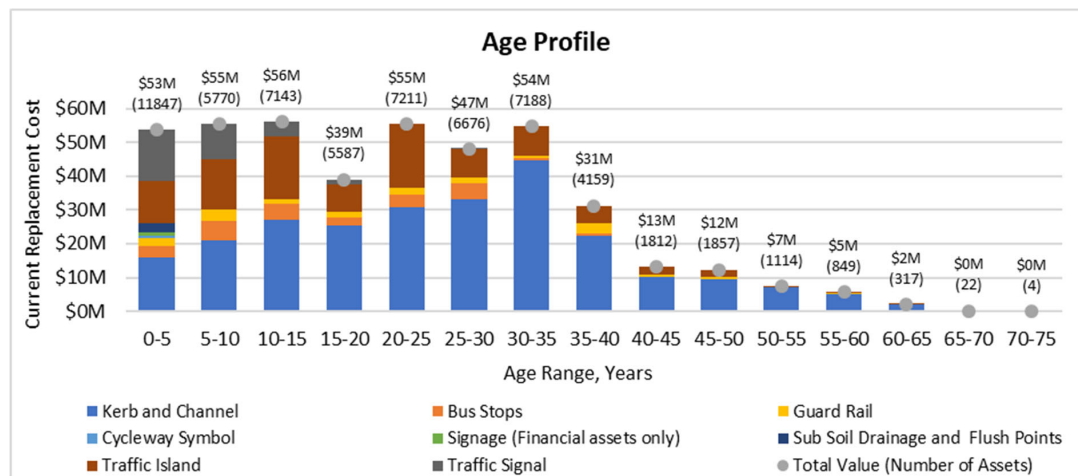


Figure 9 - Age profile of Road Furniture Assets

Figure 10 indicates the condition profile for road furniture assets. Most of the road furniture assets are in good condition with over 67% of assets being in good or very good condition. This represents over 99% of the assets that currently have a recorded condition score.

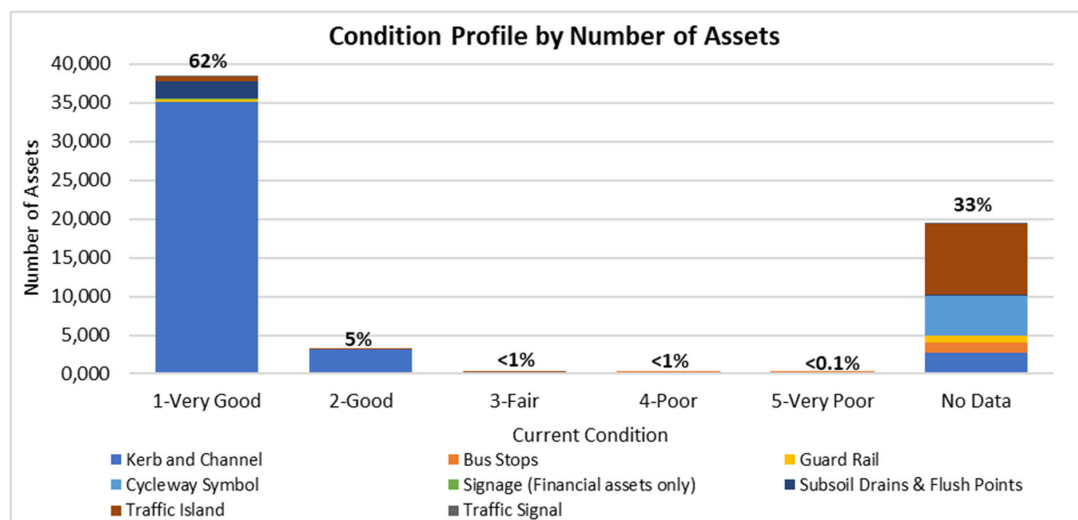


Figure 10 - Condition profile by number of assets

Although as-needed inspections are carried out across all assets, approximately 33% of the road furniture assets do not have a current condition score. It is intended that in the future this will be improved so that condition data is available for all assets. The recent development and

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Road Furniture Portfolio Asset Management Plan

implementation of Artificial Intelligence (AI) technology by MBRC, is creating opportunities to provide more regular, efficient and consistent collection of condition data for Moreton Bay’s road furniture assets. The data collected through AI is expected to be included in subsequent revisions of the RFPAMP.

A lifecycle assessment was carried out to determine the future capital cost requirements for maintaining the road furniture asset portfolio. The lifecycle model was extended out for a period of 50 years. The lifecycle analysis identified a strong need to gradually increase the capital renewal/replacement funding to keep pace with aging of the assets. Around 10% of the road furniture assets (circa 7,000) are estimated to be within 10 years of their expected useful life. This portion of assets represents approximately \$15 million of the portfolio value and is likely to drive the need for increased renewal spending over that period.

The current annual levels of funding for road furniture are:

- \$655K for specific planned and reactive road furniture maintenance programs, except for FY2023, 2025 and 2026 when this increases to \$805K to allow for additional signs maintenance.
- Between \$1.2M to 1.4M annually, for combined spending on new, upgrade and renewal capital projects.

Through the current ePIDs it has been identified that on average around \$250K per annum is spent on road furniture asset renewals as a part of other capital projects eg. intersection upgrades, road reconstruction, new streetscapes etc. The additional investment in renewals through these projects has been recognised and incorporated into the modelling.

Figure 11 and Figure 12 summarise the results from the lifecycle modelling for the level of capital expenditure projected to be required over the next 50 years. The long-term average funding required for renewal and replacement of road furniture assets is \$6.4M per year. This is well above the current average annual capital renewal funding of \$1.2M to \$1.4M per year and will require ongoing review as the portfolio ages and new condition data is captured.

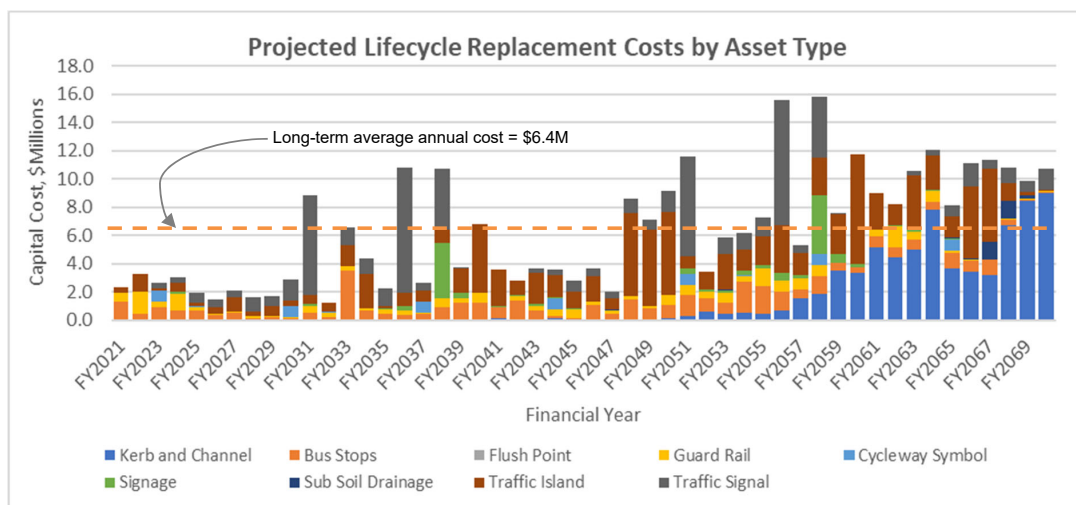


Figure 11 - Projected Lifecycle Replacement Costs by Asset Type

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Road Furniture Portfolio Asset Management Plan

Figure 12 illustrates that traffic islands, guard rails, kerb and channel, bus stops and traffic signals will need the most funding over the next 10 years. Collectively, capital expenditure on these road furniture types represent over 70% of the estimated capital cost for that period.

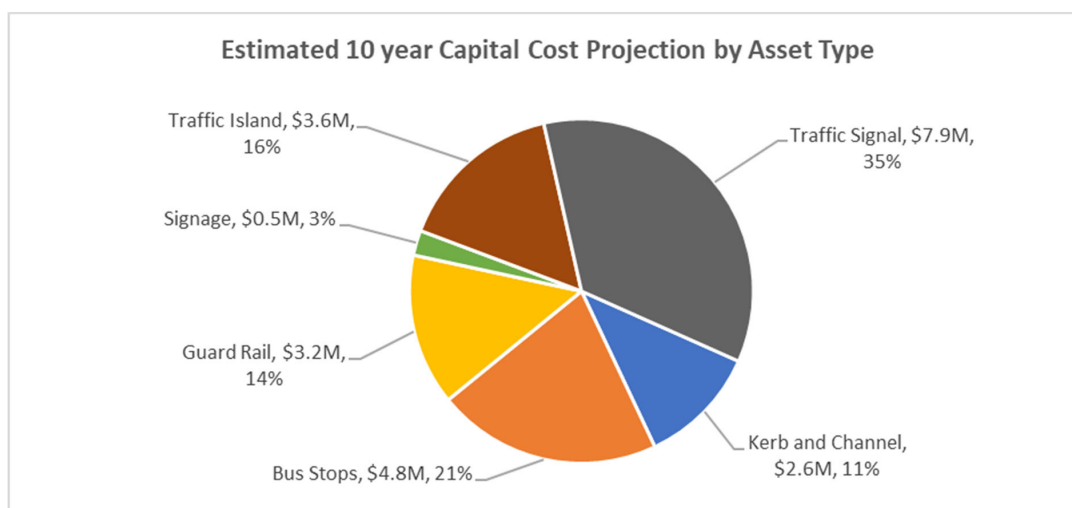


Figure 12 - 10 year estimated capital cost split by asset types

Table 0.2 shows a breakdown and comparison of the current and recommended budgets for each asset type.

Table 0.2 Current Vs Recommended Budgets

Asset Type	Expenditure Type	Current Budget	Recommended Budget
Bus Stop	Maintenance and operations:	\$45K per annum	No change
	New assets / upgrades and renewals:	FY2022 - \$426K and then \$400K onwards comprising \$100k pa on average for new/upgrade and balance (\$300K pa) for renewals	Increase budget by \$50K pa from FY2023 over 5 years then increase to \$900K from FY2033 onwards. i.e. FY2023 - \$450K, FY2024 - \$500K, FY2027 to FY2032 - \$650K, FY2033 onwards - \$850K
Guardrail	Maintenance and operations:	See note below*	No change
	New assets / upgrades and renewals:	\$100K pa total split on average \$20K new/upgrade and \$80K renew.	Increase by an additional \$100K per annum over 3 years from FY2023 to \$400K per annum from FY2025 and onwards (i.e. \$200K in FY2023, \$300K in FY2024 and \$400K from FY2025)
Kerb and Channel	Maintenance and operations:	See note below*	No change
	New assets / upgrades and renewals:	\$250K per annum, increasing to \$500K from FY2026 onwards.	No change to current, but from FY2048 increase by \$150K pa over 18 years to \$3M, i.e. FY2048 \$450K, FY2049 \$600K, FY2064 \$2.85M, FY2065 \$3.00M
Signage	Maintenance and operations:	\$75k per annum except in FY2022, 2024 and 2025 where it is increased to \$225k per annum.	No change

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Asset Type	Expenditure Type	Current Budget	Recommended Budget
	New assets / upgrades and renewals:	Varies between \$100K and \$350K per annum.	No change.
Traffic Island	Maintenance and operations:	See note below*	No Change
	New assets / upgrades and renewals:	No new/upgrade Renewal (and total) budget: FY2022 to FY2023 - \$150K pa FY2024 onwards - \$200K pa	From FY2024 increase current budget by \$50K over 6 years to \$500K pa. i.e. FY2024 - \$250K, FY2025 - \$300K, FY2029 - \$500K. Then increase to \$1.5M in FY2034 and to \$2.0M in FY2045
Traffic Signal	Maintenance and operations:	\$535k per annum	No change
	New assets / upgrades and renewals:	No new/upgrade Renewal (and total) budget: FY2022 - \$280K pa FY2023 onwards - \$100K pa	Increase renewals by \$150K pa over 9 years from FY2023. i.e. FY2023 - \$250K, FY2024 - \$400K, FY2030 - \$1.30M, FY2031 and onwards \$1.45M.
Cycleway Symbols	Maintenance and operations:	See note below*	Add new budget of \$110k per annum.
Subsoil Drainage and Flush Points	Maintenance and operations:	See note below*	No change.

* NOTE: The current maintenance budget allocations require ongoing detailed assessment to determine all sources of funding for road furniture maintenance, especially where road furniture maintenance and repairs are carried out and funded as part of other general road maintenance activities.

To sustain the existing road furniture asset portfolio, and provide the expected community and technical levels of service described in this asset management plan, **the recommended budget allocations are summarised below:**

- **Maintain the current operations and maintenance budgets** of \$655K per annum except for FY2023, 2025 and 2026 when this increases to \$805K to allow for additional signs maintenance.
- **Add new operational cost budget of \$110K per annum for cycleway symbol replacement from FY2024 onwards.**
- **Retain current forecast capital budget for kerb and channel**, being \$250K per annum, increasing by \$150K per annum from FY2048 onwards.
- **Increase the existing \$400K per annum capital budget for bus stops by an additional \$50K per annum over 5 years from FY2023** (ie \$450K in FY2023, \$500K in FY2024, \$550k in FY2025, \$600K in FY2026 and \$650K from FY2027) **and then to \$900K per annum from FY2033 onwards.**
- **Increase the existing \$100K per annum capital budget for guardrails by an additional \$100K per annum over 3 years from FY2023 to \$400K per annum from FY2025 and onwards** (ie \$200K in FY2023, \$300K in FY2024 and \$400K from FY2025).

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- **Retain the current capital program for new and replacement signs** (varies between \$100K to \$350K with an average of \$150K per annum).
- **Increase the existing \$200K per annum capital budget for traffic islands by \$50k per annum from FY2024 over 6 years** (ie \$250K in FY2024, \$300K in FY2025... \$500K in FY2029 onwards) and then **increase to \$1.5M from 2034 onwards and to \$2.0M from FY2045 onwards.**
- **Increase the existing \$100K capital budget for traffic signals by an additional \$150K per annum over 9 years from FY2023 to \$1.45M per annum in FY2031 onwards** (i.e. \$250K in FY2023, \$400K in FY2024... \$1.45M in FY2031 onwards).

When compared to the current budgets, the above budget recommendations for renewal and replacements would represent an average increase to the total road furniture budget by \$275K per year over a 5-year period. Over the longer term (10 years plus), the renewal and replacement budget would need to increase by an average of around \$330K every year to maintain pace with ageing of the asset portfolio. The increased budget is expected to be sufficient to replace the \$15M worth of assets that are currently estimated to be within 10 years of their remaining expected life.

Figure 13 and Table 0.3 and Table 0.4 summarise the recommended budget requirements for the next 25 years.

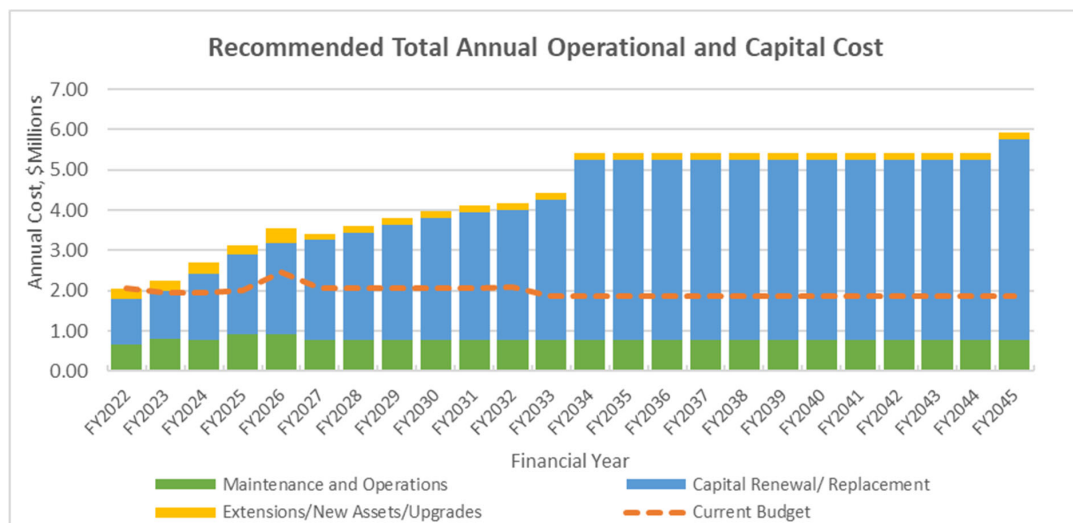


Figure 13 - Recommended total annual operational and capital budgets

Table 0.3 - Recommended annual operational and capital budgets; FY2022-FY2033

Cost Type	Estimated Annual Cost, \$000's											
	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033
Maintenance	655	805	765	915	915	765	765	765	765	765	765	765
New/Upgrades	277	255	285	206	383	140	168	170	170	170	170	170
Renewal/Replacement	1,129	1,195	1,665	1,994	2,267	2,510	2,682	2,880	3,030	3,180	3,230	3,480
TOTAL	2,061	2,255	2,715	3,115	3,565	3,415	3,615	3,815	3,965	4,115	4,165	4,415

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Table 0.4 - Recommended annual operational and capital budgets; FY2034-FY2045

Cost Type	Estimated Annual Cost, \$000's											
	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	FY2043	FY2044	FY2045
Maintenance	765	765	765	765	765	765	765	765	765	765	765	765
New/Upgrades	170	170	170	170	170	170	170	170	170	170	170	170
Renewal/ Replacement	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,980
TOTAL	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,915

As part of the justification for maintaining the current maintenance budget and increasing the capital budget spend, an analysis was carried out to determine the future condition of the road furniture portfolio with the recommended budget and if the current budget was maintained.

Figure 14 illustrates that with the current funding the condition of the assets will decline. Eventually this will lead to the portfolio as a whole failing to meet the required standard by 2058. With the recommended funding the overall portfolio will continue to meet service level and strategic objectives over the life of the assets. It should be noted that this chart represents the portfolio average condition and it does not mean that individual assets would not drop below the fair condition level, as better explained by the heat maps in Figure 15 below.

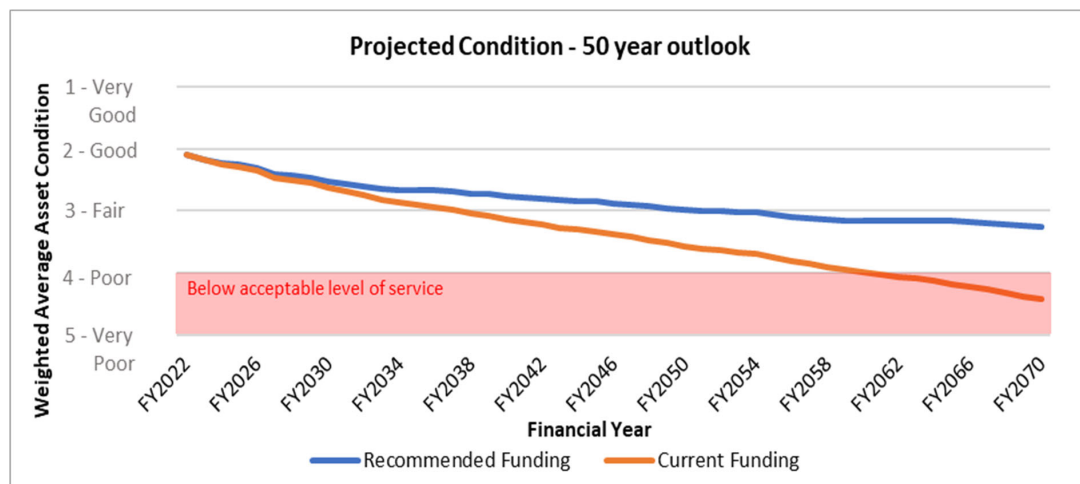


Figure 14 - Projected condition of road furniture assets over 50 years

In Figure 15 the left heatmap illustrates that the current funding will be insufficient to sustain the condition of the assets over time and there will be a significant increase in poor and very poor condition assets. The right heatmap illustrates that with the recommended funding there is likely to be a more acceptable level of poor or very poor assets. There is still room for fine tuning and optimising asset maintenance and management strategies to further reduce very poor assets but it should also be recognised that very poor condition assets are not necessarily unserviceable and can have up to 6% (typically up to 3-4 years) remaining life.

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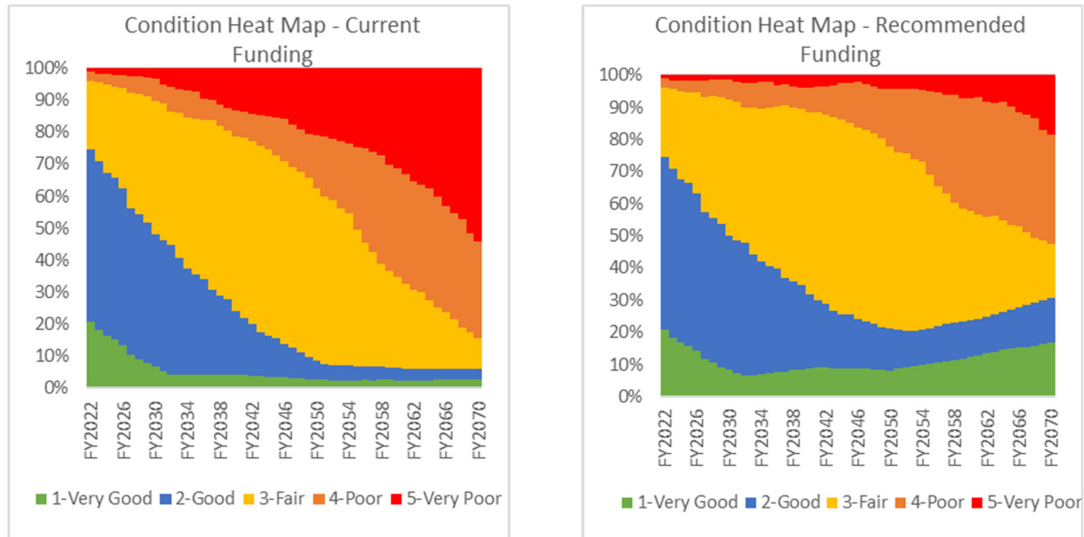


Figure 15 - Heatmaps for projected condition with current (left) and recommended (right) funding

The sustaining principles behind the recommended budgets are also illustrated through the following financial sustainability indicators:

- Asset sustainability ratio
- Asset consumption ratio

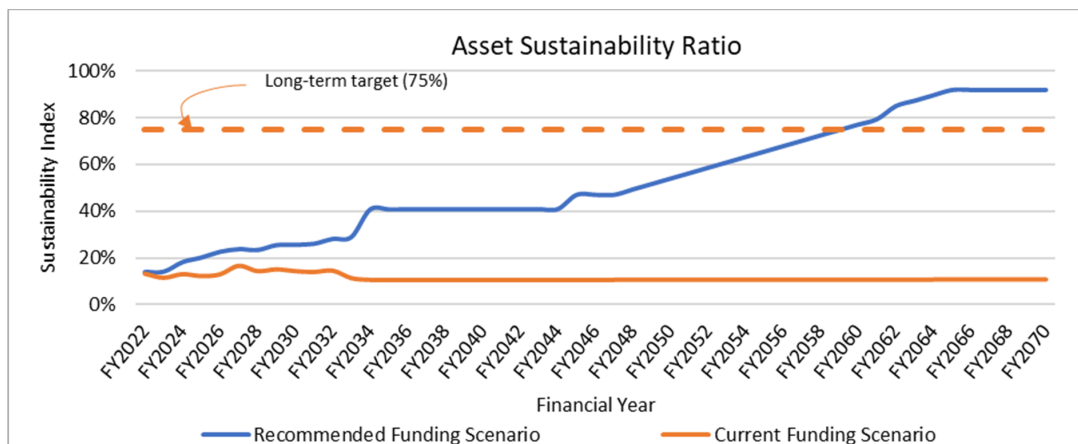


Figure 16 - Projected sustainability ratio based on current and recommended funding scenarios

Figure 16 shows the asset sustainability ratio which measures renewal and replacement capital expenditure against depreciation of the asset. The intent is for capital investment to offset depreciation in order to maintain the value of the portfolio, and inherently demonstrate maintaining the portfolio itself. While not particularly relevant for new asset portfolios whereby little capital expenditure is required early in the life of the asset, it demonstrates that the recommended funding will lead towards achieving long term sustainability.

The Asset Consumption Ratio is the net (depreciated) value of the infrastructure assets divided by their gross current replacement cost as illustrated in Figure 17. Council’s desired range is an ACR value of between 40% to 80%.

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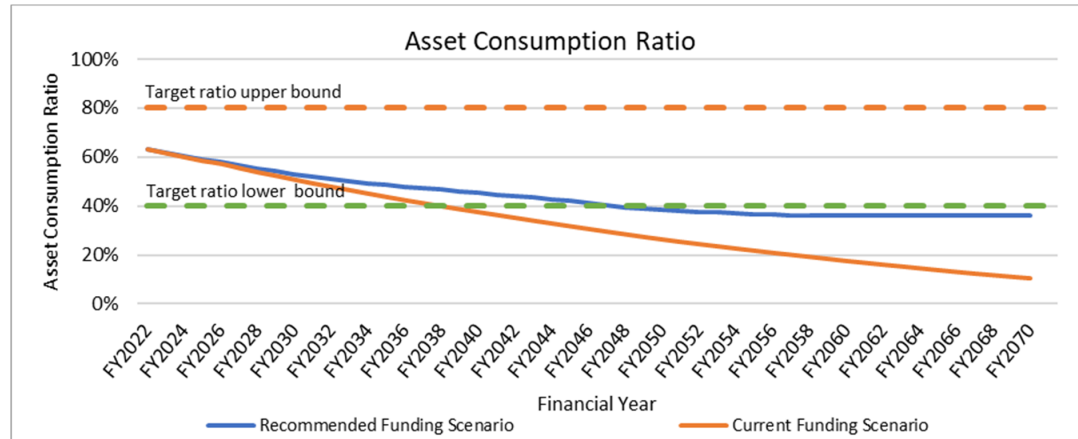


Figure 17 - Projected asset consumption ratio based on current and recommended funding scenarios

If the current funding was to continue it would result in the asset portfolio deteriorating to below the desired range in around FY2038, whereas the recommended funding will help maintain the portfolio within or close to the expected target range.

Key Issues

Below is a summary of key issues identified through this plan. Action items have been developed to address identified issues and are listed in Section 8.

- Currently maintenance is undertaken reactively. By implementing planned maintenance activities and expanding AI inspections this will help reduce the amount of reactive maintenance.
- The maintenance budget allocations require further detailed assessment so that the total annual expenditure and budget can be identified for each asset type. Whilst there are specific maintenance and operational budgets for some road furniture types, the majority of the road furniture maintenance allocation comes from the roads portfolio budget pool.
- The defect management process needs to be refined so that defects are logged against the correct asset types. This will aid in being able to track accurate statistics on road furniture defect close out.
- Assets such as guardrails are showing compliance issues due to the age of the asset. A review of road furniture assets, which are bound by legislation to comply to industry standards, is needed to identify required renewals and develop an upgrade program.
- With 33% of assets within the road furniture portfolio not having condition data, additional condition surveys are needed. This will be partially resolved by the expansion of AI inspections to help capture those assets missing condition data. Currently AI is being used to lodge defects, but it is projected that AI will also be able to be used for the capture of condition data. Using AI to more thoroughly analyse asset performance will allow MBRC to optimise the life of assets while minimizing costs.
- The aging asset portfolio is a key issue with many assets now exceeding 50 years of age and around 10% of the asset portfolio having an estimated remaining useful life of less than 10 years. This needs to be accounted for in the future renewals budget as captured by the lifecycle modelling in this plan.

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- Currently not all signs are captured on the MBRC register and defects are logged against the road asset instead of a sign asset. This will need to be reviewed to ensure signs that are of significant risk to council are identified in the asset management system.

As per Council's strategic asset management framework, it is imperative that Council adopts a proactive approach to managing road furniture assets including planned preventative and routine maintenance, and condition capture.

The recommended funding adjustments will allow Council to achieve its strategic asset management objectives including:

- Organisational commitment to effective asset management
- Managing risk appropriately
- Delivery of services to agreed standards
- Optimise asset performance
- Minimise asset failure through earlier intervention

Additional condition inspections will need to be undertaken to provide a full capture of the asset condition profile and performance of the assets; from this the budget estimates will be reviewed accordingly. There is also significant benefit to be realised through data captured and analysed through the current and emerging Artificial Intelligence (AI) innovation initiatives. These initiatives are expected improve knowledge of condition and performance of the assets and allow implementation of strategies that could further extend the life of the assets. Future iterations of the RFPAMP are expected to make more use of this information and any major revisions to the renewal and maintenance budget will be presented to Council for further consideration.

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Road Furniture Portfolio Asset Management Plan

1 Purpose

The purpose of the Moreton Bay Regional Council (MBRC) Road Furniture Portfolio Asset Management Plan (RFPAMP) is to outline MBRC's approach to the management and maintenance of road furniture assets with the MBRC road infrastructure network. In accordance with MBRC's Infrastructure Asset Management Policy¹ and Strategic Asset Management Plan, the RFPAMP serves to:

- Demonstrate organisational commitment to responsible, effective and sustainable management of the assets.
- Demonstrate informed decision making and management of risk.
- Communicate and justify funding requirements
- Document service standards
- Ensure compliance with regulatory requirements
- Demonstrate continuous review and improvement of asset management processes, systems, data and technology
- Provide a high level of assurance to executive management, Councillors and the community regarding MBRC's asset management systems, processes, practices and outcomes.

This RFPAMP will be reviewed and updated on an annual basis. MBRC's approach to asset management has been aligned to the ISO 55000 series of standards for infrastructure asset management, as outlined in Council's Strategic Asset Management Plan (SAMP).

Road furniture asset types included in this portfolio are listed below:

- Bus Stops
- Guardrails
- Kerb and Channel
- On Road Cycleways
- Signage
- Sub Soil Drainage and Flush Points
- Traffic Islands
- Traffic Signals

There are some limitations to the signage assets as not all signs have been captured and there is currently no capture of noise barrier assets as well. These items are to be captured in future revisions of the RFPAMP.

2 Asset Information

This RFPAMP outlines Moreton Bay Regional Council's (MBRC's) approach to the management of road furniture assets located throughout the MBRC region.

The assets covered by this AMP include bus stops, kerb and channel, signage, traffic islands, traffic signals, cycleway symbols, sub soil drainage and guardrails.

¹ Policy No.: 2150-043

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This includes assets adjacent to; MBRC sealed roads, TMR owned road where MBRC is responsible for the kerb, channel, guard rail etc. and adjacent to carparks both on road and within MBRC owned complexes.

The primary functions of the road furniture assets, or service that they provide include;

- Delineation, guidance and safety of the roadway or all users including motorist, cyclists and pedestrians
- Providing efficient and effective intersection control (traffic signals)
- Channel stormwater runoff to the storm water drainage network
- Facilitate and support the use of public transport including provision for persons with disabilities, elderly and families (e.g. tactile surfaces, seating, shade or shelter and pram crossings)

2.1 Asset Types and Hierarchy

The RFPAMP has a total estimated value of \$436.1M with financial assets making up 99% of the portfolio and non-financial assets contributing to the remaining 1%. Table 2.1 provides a summary of the different types of assets that make up the road furniture portfolio including quantity, expected life, current average age and replacement cost. 80% of the portfolio replacement cost is constituted of Kerb and Channel (57%) and Traffic Islands (23%).

Table 2.1 - Road Furniture Summary

Asset Type Description	Number of Assets	Length (km)	Expected Useful Life (Years)	Current Average Age (Years)	Current Replacement Cost
Financial Assets					
Bus Stops	1,463	-	25	16.4	\$25.8M
Guardrail	1,076	58	40	22.5	\$17.6M
Kerb and Channel	41,211	4,765	70	24.5	\$254.5M
Signage (financial)	41	-	20	2	\$1.1M
Traffic Island	9,867	-	50-70	18.9	\$100.5M
Traffic Signal	150	-	20	4.0	\$31.7M
Financial assets sub total					\$431.2M
Non-Financial Assets					
On-road Cycleways	5,390	-	7	3.9	\$0.8M
Flush Points	138	-	50	2.6	\$22.5K
Sub Soil Drainage	2,223	162	50	2.6	\$2.9M
Signage (non-financial)	2430	-	20	4	\$1.15M
Non-financial sub total					\$4.9M
Total (combined financial + non-financial assets)					\$436.1M

Multiple asset types makeup the road furniture portfolio, and as a result, there are multiple asset owners. The manager of Integrated Transport Planning Department (ITPD) is the nominated asset owner for bus stops and traffic signals, traffic islands and on-road cycleways while the manager of Asset Maintenance (AM) is the nominated asset owner for signage, kerb and channel, guardrail and sub soil drainage.

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

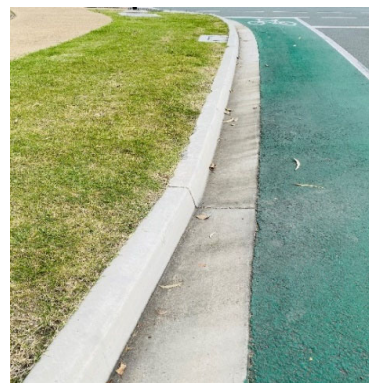
The asset owners are responsible for making strategic decisions during the asset life cycle in relation to:

- Design
- Procurement (new assets)
- Operation
- Maintenance (including inspections and condition assessment)
- Renewal/Replacement
- Upgrades
- Decommissioning or disposal

The departments or positions that are accountable for key roles associated with the custodianship, management, operation and maintenance of road furniture assets are listed in the RACI matrix in Appendix A.

Kerb and Channel

Kerb and channel assets run adjacent to most roads and provide drainage to stormwater assets and also provide a road edging. They maintain a safe operating environment (e.g. prevent ponding of water resulting in aquaplaning) by channelling the water towards stormwater inlets for appropriate collection and treatment. Preventing the ingress of water into the road pavement layers helps maintain the condition of the roads, as water ingress can be detrimental to the strength of the pavement, resulting in pavement reduced service life, defects and failure.



*Figure 18 - Kerb and Channel
(Foundation Drive Northlakes)*

Signage

Signage assets consist of financial and non-financial assets. Only signs that are considered financial assets are included in the capital replacement lifecycle modelling. Non-financial signage assets are replaced under maintenance and operating budgets and are included in all other statistics. Non-financial assets are generally made of up small signs such as street signs, speed limit signs, road signals signs etc. Financially recognised signs consist of large wayfinding signs, electronic signage and school zones signs etc.

Traffic signs are used to inform the drivers about the road, including speed limits, zones, road rules, wayfinding, lanes etc. Signs are an important component of road furniture as the information they provides to drivers and road users is vital for traffic conditions and traffic safety.

Not all signage assets are currently captured in the asset register. Further action is needed to decide how all signs will be captured, including road edge guide posts.



*Figure 19 - Electronic Road Signage
(Camelia Avenue, Everton Hills)*

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Traffic Islands

Traffic islands provide road delineation, separation and pedestrian refuge. They often act as a section of road on which traffic signals or road signage is located.



Figure 20 - Traffic Island (Memorial Drive and Discovery Drive Intersection).

Traffic Signals

Traffic signals are imperative for controlling the flow of traffic at busy intersections, or to provide safe crossing for pedestrians. All traffic signal assets are maintained under a maintenance contract with an external contractor. The traffic signals are managed through an automated computer system called STREAMS. STREAMS is solely managed by TMR who then notify MBRC if there is an issue or fault with one of the traffic signals. MBRC then engages its external contractor to attend the issue to rectify the problem.



Figure 22 - Traffic Signal (Memorial Drive, Northlakes)

Subsoil Drainage and Flush Points

Subsoil drainage is not a visible asset and is installed underground to expel excess water from the surrounding ground. Flush points are visible from the surface of the ground and usually capped. They provide a cleanout point so that the subsoil drainage piping can be flushed out if required.

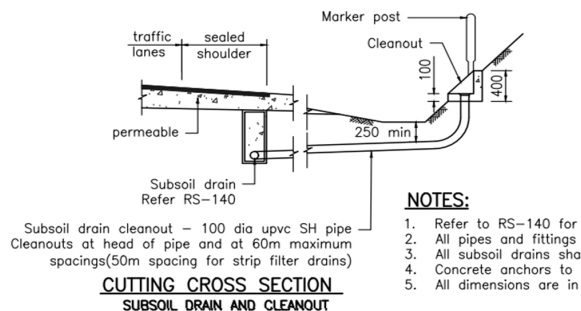


Figure 21 - Typical Detail of Flush Point. Photo sourced from MBRC planning scheme STD DWG RS-142



Figure 23 - Example of subsoil drainage being installed

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Bus Stops



Figure 24 - Example of DDA compliant bus shelter (Bounty Blv, Northlakes)

Bus shelters are installed at bus stop locations to provide shelter and access for public transport passengers. The locations of the bus stops are determined by Translink and it is up to ITPD to integrate these into their planning schemes. An inspection regime was carried out by ITPD over the last year to inspect all bus shelters and determine which ones require modification in order for them to be Disability Discrimination Act (DDA) compliant. It is expected that all bus shelters will be DDA compliant by the end of 2021.

On Road Cycleway Symbols

On road cycleway symbol or cycle lane markings delineate where the bicycle lanes are within the carriageway. There is continual maintenance costs associated with these where line marking touch up is carried out on as-needed basis.



Figure 25 - Example of cycleway (Discovery Drive, Northlakes)



Figure 26 - Example of guardrail (Discovery Drive, Northlakes)

Guardrails

Guardrails are installed as a safety barrier in areas where there is risk of impact to infrastructure, pedestrians or risk of vehicles being able to go off the side of the road adjacent to an edge or steep drop. The standard for guardrails is set by AS3845 Road Safety Barrier Systems.

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

AI-RF1	Assign asset classification to road furniture assets not within or adjacent to MBRC owned and operated roads including car parks.
AI-RF2	Add asset type “noise walls” to future iterations of the RFPAMP.
AI-RF3	Review capture process for road edge guide posts and road marking.
AI-RF4	Review AI process for asset capture of signs. Review how non-financial assets are created by AI to establish whether sign assets can be created and managed using AI going forward.
AI-RF5	Review asset classification and naming for guardrails to confirm it is inclusive of other types of road barrier systems.

2.2 Asset Prioritisation

Road furniture assets are classified into a priority/importance hierarchy based on an assessment of consequences of failure, location and importance to the community. The relative importance of assets is summarised in Table 2.2 which shows the number of assets catalogued under each star rating for each asset type.

Table 2.2 Asset prioritisation by count of assets for each asset type

Importance	Star Rating	Kerb and Channel	Bus Stops	Traffic Signals	Traffic Islands	Signage	Sub soil drainage and flush points	Guard Rail	On Road Cycleways
Very High	5	0	0	0	0	0	0	0	0
High	4	3032	2	1	29	144	4	10	19
Medium	3	5516	1	0	33	214	29	0	41
Low	2	3965	4	0	65	272	1	1	6
Very Low	1	28730	0	0	3	4	0	5	3
TBC	-	114	1071	164	9819	1665	119	1062	5350
Total		41357	1078	165	9949	2299	153	1078	5419

AI-RF6	Investigate and implement a process for automating the prioritisation of new road furniture assets in TOMAS
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2.3 Asset Relationships

Asset relationships can be formed between physical assets (and/or their asset components) or associated to a site within the corporate asset register (TOMAS).

Assets within the road furniture portfolio fall under the roads asset group which resides within the transport asset class. By establishing the asset in the road furniture portfolio as children of the parent road group category, linking road furniture assets back to the road which they are a part of enables road furniture assets to acquire the same level of importance as the parent road asset.

The configuration of asset relationships will improve the financial and operational management of road furniture assets. Further asset componentisation and associated asset relationship links will be addressed as part of the RFPAMP improvement plan.

AI-RF7	Investigate the development of asset relationships that link “parent” and “child” asset components within TOMAS.
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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

2.4 Asset Attributes

Asset attributes provide unique information regarding the characteristics, type and status of an asset. Asset attribute details are listed for road assets in Appendix B.

AI-RF8	Review & update existing road furniture asset attributes with asset stakeholders.
AI-RF9	Capture missing asset attributes on all road furniture assets in TOMAS.

3 Levels of Service

The following subsections summarise the community and technical levels of services for the road furniture asset portfolio, including current and expected long term performance.

Customer Service Request (CSR) data is used to assist in planning upgrades and improvements to the services provided by road furniture assets. To support this, analysis was undertaken on the CSR data from 2020.

3.1 Community Levels of Service

Community levels of service determine how the service is received by the community and whether the service is providing value to the community in terms of quality, safety, function, and utilisation.

Community surveys have not been carried out specifically to determine the extent to which MBRC’s road furniture portfolio satisfies community expectation. However, community feedback and opinion is monitored and measured daily through Council’s customer service requests (CSRs). The figure below shows the number of CSRs received for each asset type in the 2020 calendar year. The total number of CSRs received in 2020 that were in relation to road furniture assets was 726.

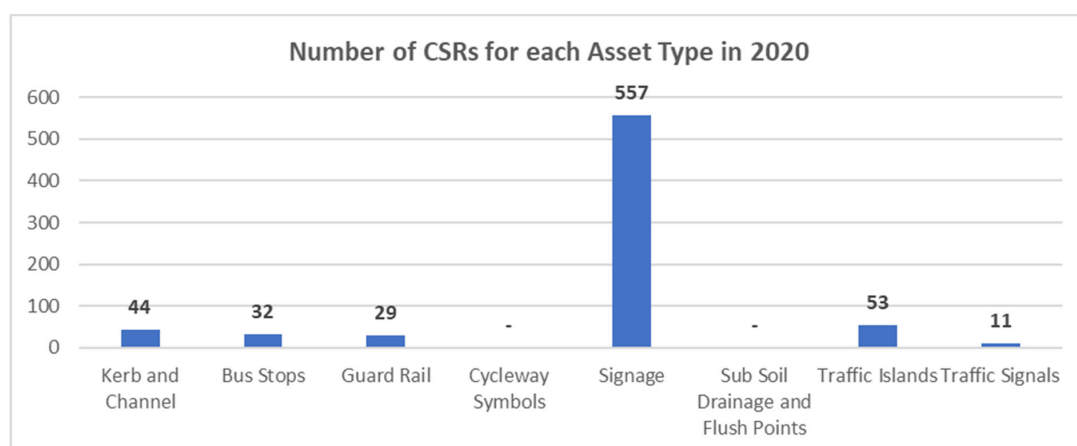


Figure 27 - The number of CSRs received in 2020 which were in relation to road furniture assets.

Analysis of CSR data indicates 77% of requests were signage related with the other road furniture categories making up the remaining 23%. Signage issues largely included requests for road signage where there was no current signage and replacements of signs that were either missing or damaged.

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

There were 41 CSRs that were open at the time of preparing the RFPAMP. The average time to close out a CSR was 35 days in 2020.

The table below summaries community levels of service, performance measures and current performance with respect to MBRC's road furniture assets.

Table 3.1 - Community Levels of Service

Service attribute	Service objective	Performance measure process	Current Performance	Expected performance in 10 years (LTFF)
Quality	The road furniture assets are in condition rating 4 or above, and are maintained to an acceptable level.	Number of CSR complaints relating to the quality or appearance of road furniture assets.	No current CSRs relating to quality or appearance. The average time to close out a CSR for the calendar year 2020 was 35 days. Workorders that are created from a CSR and prioritised as high are closed out within 7 days all other CSR's are assessed on a case by case basis.	Workorders that are created from a CSR and prioritised as high are closed out within 7 days. All other CSR's are assessed on a case by case basis.
Function	All road furniture assets provide the required function for which they were designed and constructed	Number of defects open against road furniture assets	Current open defects amount to 4588. Average time to close out a defect in the year 2020 was 71 days.	Defects are assessed on a case by case basis dependant on the asset classification and the type of defect, e.g. if the defect is an AI defect or not.
Capacity/ Utilisation	Road furniture assets additionally supplement transport network growth. These assets support the road network by providing delineation of roads, directing water runoff to appropriate drainage and providing wayfinding and signalling	Adequate number of road furniture assets constructed in line with transport development.	Current performance is adequate for transport development, new road furniture assets are constructed as new developments and roads are constructed.	No issues perceived with reduced levels of service relating to capacity or utilisation issues with sufficient allocated funding for road furniture construction and renewals in the next 10-year period with consideration for regional growth.

3.2 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 that the organization undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Table 3.2 Technical service levels

Service attribute	Purpose of Activity	Activity Measure Process	Current Performance*	Recommended optimum position	Agreed Sustainable Position
Condition Assessments	Scheduled inspections are performed to identify defects & assess asset condition	No. of assets with up to date condition scores. Assets inspected at the recommended frequencies outlines in 3.3.4.	67% of assets have condition scores. 33% of assets do not have condition scores.	100% of assets have condition scores, all condition inspections are completed in line with frequencies recommended in 3.3.4.	100% of assets have condition scores, all condition inspections are completed in line with frequencies recommended in 3.3.4
Safety	To provide road furniture assets that allow the road network to be safely used by motorists, pedestrians and public transport customers.	Number of CSRs open regarding safety concerns.	Number of CSRs open in regard to safety concerns: 29	No CSRs being filed against road furniture assets.	Workorders that are created from a CSR and prioritised as high are closed out within 7 days all other CSR's are assessed on a case by case basis.
	Ensure safe, suitable work procedures	Incident reports	Zero recorded work-related injuries	Zero work related injuries per year. Internal operational cost only	Zero work related injuries per year. Internal operational cost only
Planned Maintenance (PM)	Road furniture assets are proactively maintained to reduce the likelihood of defects and failures occurring	Planned maintenance as per schedules in TOMAS.	0% planned maintenance Currently no schedules for maintenance for road furniture assets.	≥ 20% planned maintenance Budget allocation target for Planned Maintenance to be decided after review of existing allocations and discussion with Asset Maintenance	≥ 20% planned maintenance Budget allocation target for Planned Maintenance to be decided after review of existing allocations and discussion with Asset Maintenance
Reactive Maintenance (RM)	Road furniture defects are identified and repaired to ensure safety and maximise the asset's economic life	Defects are rectified and closed.	Current defect process is that defects are assessed and closed according to classification, defect type and defect prioritisation. Currently 4588 open defects.	Defects are rectified and closed once assessed and prioritised on their classification, the type of defect and the prioritisation of the defect.	Defects are assessed on a case by case basis dependant on the asset classification and the type of defect and the prioritisation of the defect. Remaining defects in the system are assessed and a

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Road Furniture Portfolio Asset Management Plan

Service attribute	Purpose of Activity	Activity Measure Process	Current Performance*	Recommended optimum position	Agreed Sustainable Position
			Average time to close out a defect in the year 2020 was 71 days.		repair strategy is implemented to resolve outstanding defects.
	Road furniture assets receive routine maintenance to address defects	Reactive maintenance WO's in TOMAS.	100% reactive maintenance. Traffic Signal: \$535,000 Bus stops: \$45,000 Signage: \$75,000 Costs for Kerb and channel, Guardrail, Traffic Islands, Sub soil drainage and On-road Cycleways are allocated within the road maintenance budget.	≤ 80% reactive maintenance Traffic Signal: \$535,000 Bus stops: \$45,000 Signage: \$75,000 Budget allocation targets for Kerb and channel, Guardrail, Traffic Islands, Sub soil drainage and On-road Cycleways are to be determined after review of existing allocations and discussion with Asset Maintenance	≤ 80% reactive maintenance Traffic Signal: \$535,000 Bus stops: \$45,000 Signage: \$75,000 Budget allocation targets for Kerb and channel, Guardrail, Traffic Islands, Sub soil drainage and On-road Cycleways are to be determined after review of existing allocations and discussion with Asset Maintenance
Capital Programming – New and Upgrades	New road furniture assets are created in conjunction with road improvement and capacity upgrade projects.	New projects are completed within their scheduled time frames and within approved budgets.	New acquisitions currently meet expectations.	No change	No change
	Ensure donated assets are captured in Council's asset register (TOMAS), financial register and GIS.	All new assets are recorded in Council's registers within a timely manner.	Currently all financial assets are captured in the asset register in alignment with capitalisation on the financial register. Acquisitions budget is captured within the renewals budget.	No change Acquisitions budget is captured within the renewals budget.	No change Acquisitions budget is captured within the renewals budget.

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Service attribute	Purpose of Activity	Activity Measure Process	Current Performance*	Recommended optimum position	Agreed Sustainable Position
Capital Programming - Replacements	Road furniture assets are renewed or replaced when they reach end of their serviceable life.	Prepare rolling 10-year renewal program based on condition and performance of the asset.	Some road furniture renewals are currently scheduled and integrated as part of road rehabilitation and improvement projects or carried out as part of maintenance (e.g. traffic island infills). Bus stop renewals/upgrades were determined by ITPD from their compliance inspections carried out. All other road furniture assets are replaced on a reactive basis	All assets in 'Condition 5', or otherwise not meeting functional or regulatory requirements are included in the renewals plan. Kerb and channel: \$250K per annum, increasing by \$150K per annum from FY2048 onwards Guardrails: Increase the existing \$100K per annum capital budget for guardrails by an additional \$100K per annum over 3 years from FY2023 to \$400K per annum from FY2025 and onwards Traffic Islands: From FY2024 increase current budget by \$50K over 6 years to \$500K pa. Then increase to \$1.5M in FY2034 and to \$2.0M in FY2045 Traffic Signal: Increase renewals by \$150K pa over 9 years from FY2023 Bus stops: Increase renewal budget by \$50K pa from FY2023 over 5 years then increase to	All assets in 'Condition 5', or otherwise not meeting functional or regulatory requirements are included in the renewals plan. Kerb and channel: \$250K per annum, increasing by \$150K per annum from FY2048 onwards Guardrails: Increase the existing \$100K per annum capital budget for guardrails by an additional \$100K per annum over 3 years from FY2023 to \$400K per annum from FY2025 and onwards Traffic Islands: From FY2024 increase current budget by \$50K over 6 years to \$500K pa. Then increase to \$1.5M in FY2034 and to \$2.0M in FY2045 Traffic Signal: Increase renewals by \$150K pa over 9 years from FY2023 Bus stops: Increase renewal budget by \$50K pa from FY2023 over 5 years then increase to

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Service attribute	Purpose of Activity	Activity Measure Process	Current Performance*	Recommended optimum position	Agreed Sustainable Position
				\$900K from FY2033 onwards Signage: Varies between \$150K - \$350K	\$900K from FY2033 onwards Signage: Varies between \$150K - \$350K

It is important to monitor the service levels regularly as circumstances can and do change. Current performance is based on existing resource provision and work efficiencies. It is acknowledged changing circumstances such as technology and customer priorities will change over time.

AI-RF10	Review current performance requirements for signs and marking and compliance with standards (wind/structural loading, reflectivity etc.).
AI-RF11	Improve CSR logging by assigning road furniture CSR's to an asset type and asset number.
AI-RF12	Workshop close-out timeframes for defects and CSR's with asset maintenance dependant on the asset classification, defect type and defect priority.

3.3 Condition & Profile

3.3.1 Age Profile

The asset age profile illustrated in Figure 28 shows a broad range of asset ages, with the oldest assets being around 70-75 years old. There has been steady growth in the asset portfolio from the early 1960's to present day and a similar level of growth is expected to continue in the Moreton Bay Region for at least the next 20 years. Based on the average growth in the value of the portfolio over the last 10 years, as also evidenced by the age profile, the portfolio is expected to grow by around 3.8% per annum.

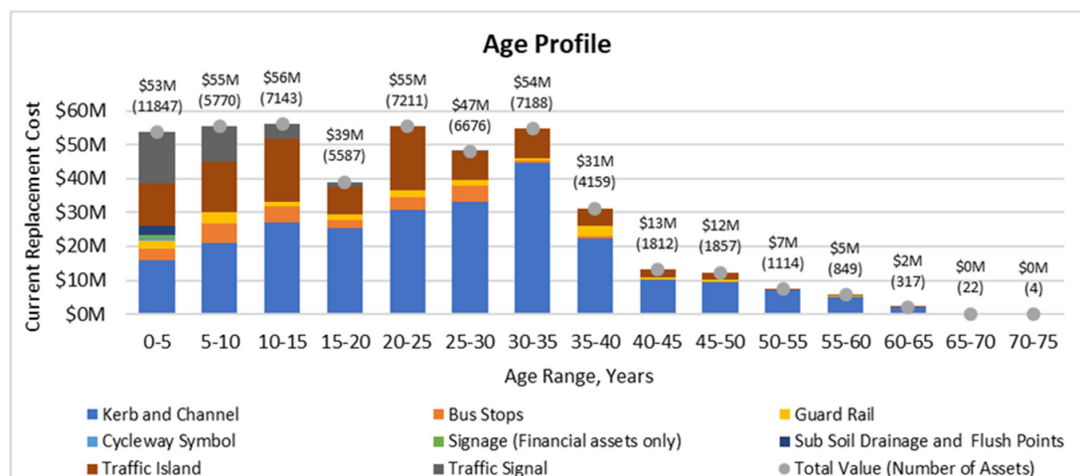


Figure 28 - Asset Age Profile

The oldest assets are mainly kerb and channel. Considering that the kerb and channel has an expected life of around 70 years, most assets still have significant life left before reaching their

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

expected end of useful life. The condition profile in Section 3.3.2 also supports this observation. Appendix G provides a separate age profile for each road furniture asset type.

3.3.2 Asset Condition

The goal is to have a long-term program for capturing the condition of all assets as it is recognised that up to date condition data is important for asset management as well as maintenance and management decision-making. This includes significant investment of resources and effort into exploring new technologies to make it quicker and more efficient to collect condition data.

The condition of road furniture assets is currently monitored at different frequencies depending on the asset type. Currently there is a low level of scheduled routine condition inspections for most asset types and condition ratings are carried out predominantly on an as-needed basis. MBRC is aiming to use AI and other new technology to improve the collection of condition data as also discussed below.

For kerb and channel, which makes up a major portion of the road furniture portfolio, condition was assessed by desktop exercise and based on imagery dated December 2017 in accordance with IPWEA Practice Note 2 Kerb and Channel v2 2014.

Condition is measured using a 1 – 5 grading system² as detailed in Table 3.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM Plan results are translated to a 1 – 5 grading scale for ease of communication.

Table 3.3 - MBRC condition classification and TMR condition state guide

Condition Score	MBRC Classification	TMR Subjective rating	Description
1	Very Good ('as new')	Good; 90-100% Remaining Useful Life	Free of defects with little or no deterioration evident
2	Good	Fair; 56-90% Remaining Useful Life	Free of defects affecting structural performance, integrity and durability Deterioration of a minor nature in the protective coating and/or parent material is evident
3	Fair	Poor; 25-56% Remaining Useful Life	Defects affecting the durability/serviceability which may require monitoring and/or remedial action or inspection by a structural engineer Component or element shows marked and advancing deterioration including loss of protective coating and minor loss of section from the parent material is evident Intervention is normally required
4	Poor	Very Poor; 6-25% Remaining Useful Life	Defects affecting the performance and structural integrity which require immediate intervention including an inspection by a structural engineer, if principal components are affected

² IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.

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Road Furniture Portfolio Asset Management Plan

Condition Score	MBRC Classification	TMR Subjective rating	Description
			Component or element shows advanced deterioration, loss of section from the parent material, signs of overstressing or evidence that it is acting differently to its intended design mode or function
5	Very Poor	Unsafe; 0-6% Remaining Useful Life	Structural integrity is severely compromised, and the structure must be taken out of service until a structural engineer has inspected the structure and recommended the required remedial action

Source: TMR Structures Inspection Manual, Table 3.8.3

Figure 29 below shows that 67% of assets are rated as condition 2 (good) or better and less than 0.01% are in condition 4 or 5 (poor or very poor). The assets in good and very good condition, whilst only accounting for around 68% of the assets, represents over 99% of the assets that currently have a condition score which is an extraordinarily good result and likely to be influenced by the relatively young age of the portfolio overall. 33% of assets have no condition score and this is something that MBRC intends to improve on through the use of AI condition and defect capture.

AI is currently being used to capture defects for kerb and channels, road signs and guard rails. The use of AI is expected to be expanded to also capture defects for traffic islands and on-road cycleway symbols. It is also expected that its capabilities will be developed so that it may be able to assess an assets condition score based on the defects observed. Some assets will still need to be inspected in person for condition rating, but low risk assets such as kerb and channel, signage and cycle way symbols would benefit greatly from being able to have a condition score assigned by AI. These particular assets are numerous and small, and inspection such a large number of assets in person on a regular basis is often not cost effective or practical.

Appendix G provides a separate condition profile for each road furniture asset type.

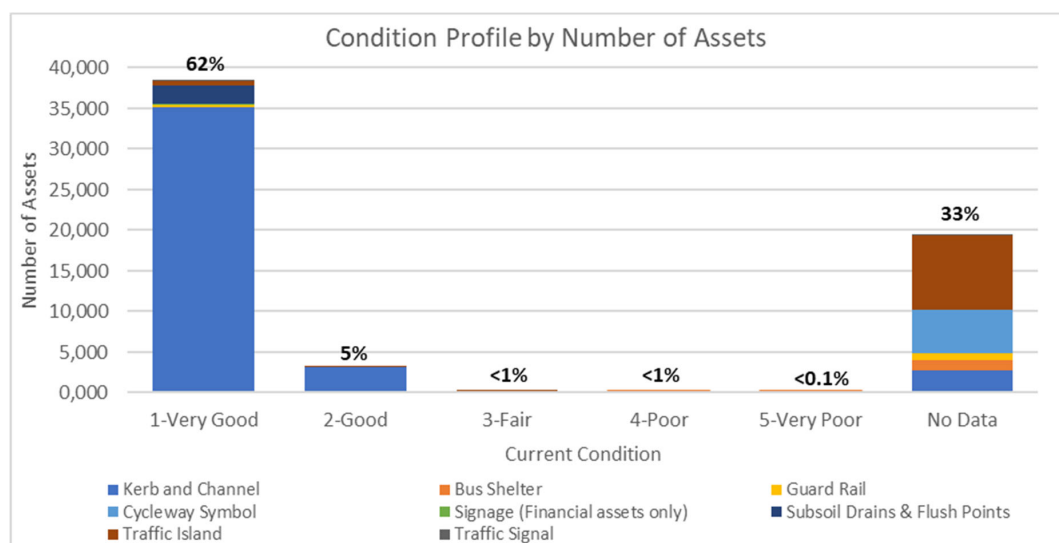


Figure 29 - Asset Condition Profile

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

3.3.3 Current Condition Inspection Plan

Currently there are no routine condition inspection plans for road furniture assets. The kerb and channel assessments were done on an as-needed basis for most of the MBRC network and used video footage which was then assessed by an inspector to determine defects and condition scores. Guardrails are normally inspected as a result of known damage or CSR. There is also a team of road inspectors that carry out inspections throughout the region in relation to road and road furniture assets that have defects or CSRs lodged against them.

Bus stops have had compliance inspections undertaken in the two last years, but no condition score was assessed. Many condition scores are acquired through inspections on an as-needed basis.

3.3.4 Recommended Condition Inspection Plan

Keeping in line with industry best practise it is recommended to implement a routine condition inspection plan for road furniture assets. The recommended inspection frequencies are outlined in Table 3.4. The condition inspection plan will ensure all missing condition data is captured for road furniture assets.

Table 3.4 Recommended condition inspection plan

Asset Type	Inspection Type	Frequency	Resource
Kerb and Channel	Visual inspection for condition rating and defects	5 years	AI currently picks up defects. Expand AI capabilities to also condition rate kerb and channel.
Guard Rail	Visual inspection for condition rating and defects	5 years	AI currently picks up defects. An in person inspection is needed for condition rating. In person inspection to be done internally or subcontracted out to a consultant.
Traffic Signal	Visual inspection for condition rating and defects	2 years	Expand current subcontract with external contractor to include condition rating.
Traffic Island	AI inspection for condition rating and defects	5 years	AI inspections for traffic islands and expand AI capabilities to also gather condition rating.
Signage	Both in person inspections and AI inspections for condition rating and defects	5 years	In person condition inspections to be done on financial signage assets only. All other roads signs are to have defect and condition assessment by AI. AI currently picks up defects, expand AI capabilities to also give a condition rating.
Flush points and sub soil drainage	Inspection or testing to be conducted if and when pavement drainage issues exist	Ad- Hoc	Internal on an as-needed basis.
Bus Stop	Visual inspection for condition rating and defects	2 years	Expand AI capabilities to pick up defects. In person condition assessments are to be done internally or subcontracted out to a consultant.
On-road cycle way symbols	AI inspection for condition rating and defects	5 years	Expand AI capabilities to pick up defects. In person condition assessments are to be done internally or subcontracted out to a consultant.

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

AI-RF13	Undertake condition assessment for the remaining 33% of assets with no current condition score.
AI-RF14	An additional extensive investigation is to be carried out to assess condition inspection frequencies for each asset type.
AI-RF15	Expand AI capabilities to include condition scoring for assets where practical.

4 Future Demand

Moreton Bay Region is one of Australia’s fastest growing regions. Its regional population is forecast to grow by a further 50% to approximately 690,000³ by 2041. That means an additional 240,000 residents over the next 25 years. In accordance with the State Government’s South East Queensland Regional Plan 2017, Moreton Bay Region is also expected to deliver an additional 88,300 dwellings by this time.

Growth management is identified as a key issue in Council’s Corporate Plan, and well-planned growth is emphasised in the Community Plan.

MBRC’s Community Plan has a goal to increase the number of residents working within the region by 70% by 2031. To achieve this, existing businesses will need to grow while new diversified businesses are encouraged to establish in the Moreton Bay Region. To facilitate this, council will need to deliver high quality transport infrastructure to the employment areas including access for high productivity vehicles (HPV) from the industrial areas to the major highways.

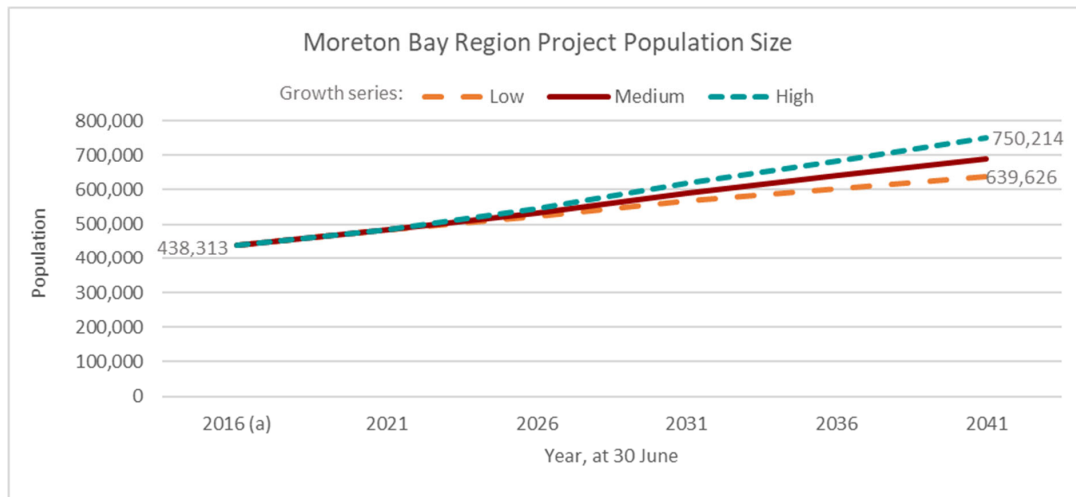


Figure 30 - Moreton Bay Region project population growth, Source: Queensland Government

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management.

³ Medium growth series

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Road Furniture Portfolio Asset Management Plan

With a high rate of population growth (around 3% per annum) and high rate of land development resulting in a constantly expanding road network, there is more demand on roads (higher wear and tear) and drives the need to expand or upgrade the network including road furniture relating to public transport (e.g. bus stops).

Population growth and greater demand for public transport options will drive the need for more bus stops across the expanding Moreton Bay Region. The service will need to expand to match demand but planning also needs to be integrated with State-wide Public Transport Network Service Plans and initiatives.

Future road asset infrastructure will be progressively delivered to service future demand within the region as determined through integrated transport and planning analysis, consultation with stakeholders such as Translink, and customer service requests.

The full list of new ePID Capital Program Projects and associated costs are provided in Appendix H.

5 Asset Lifecycle Management

5.1 Asset Capacity and Performance

The road furniture portfolio must be effectively managed to ensure a satisfactory service standard is maintained over the entire life of the assets.

The performance goal of the road furniture assets is to provide the required levels of service previously mentioned in order to maintain a safe and functional road network.

As specification and regulations change over time, assets can become non-compliant, due to specification or regulation change. This is an ongoing assessment in council of discovering what assets may not be compliant, what is required to bring them up to compliance standards and the development of an upgrade program.

Best practice asset management requires the consideration of all whole of life phases with activities which are timely and cost effective, to ensure consistent service standards as well as longevity from the asset.

The lifecycle management plan details how the MBRC plans to manage and operate the assets at the agreed levels of service while managing life cycle costs.

AI-RF16 Create a new defect code to capture assets that are non-compliant with current standards or legislation.
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5.2 Defect Management

Defects are raised for any issues that represent a safety or operational issue which is managed through routine and planned maintenance or bundled up for repairs. Defects are captured through the condition inspection program or by AI.

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Road Furniture Portfolio Asset Management Plan

Defects may be raised for items relating to:

- Health and Safety - Is there potentially a health and/or safety risk? In the event of immediate safety concern, the issue is addressed or cordoned off immediately rather than raising a defect.
- Security - Is there a security risk?
- Operation or Functionality - Does it operate or function satisfactorily?
- Amenity - Is the level of amenity acceptable?
- Appearance - Is appearance acceptable?
- Damage - Is any isolated damage apparent (vandalism, wear and tear, rust, etc.)?

Repair of defects is managed through a risk-based approach based on defect severity and asset priority. Defects that exceed a specified acceptable level of risk should be bundled into work packages and actioned through programmed maintenance.

5.2.1 Current Defect Management Plan

Currently defects are captured through in-person asset condition inspections or customer service requests. Once defects are identified and created in the TechOne system work orders are issued for the maintenance team to carry out the works.

Defects for road furniture assets are currently managed and prioritised according to risk. A breakdown of open defects is presented in Table 5.1 highlight currently 5899 open defects. An analysis undertaken on the open defects suggests that there are a large number of defects which have become stagnant due to defect quantity and prioritisation. A cleanse of the open defects should be carried out so that any defects which have become redundant can be closed out.

Table 5.1 Current defect types

Asset Type	Defect Type	Defect Description	Number of Defects	Number of Defects per Asset Type
Kerb and Channel	Damage	Assets that have damage due to impact, vandalism, wear and tear etc. and require rectification or repair.	92	1297
	2019 Survey	Defects recorded from a 2019 condition survey.	1205	
Guardrails	Damage	Assets that have damage due to impact, vandalism, wear and tear etc. and require rectification or repair.	70	74
	Cleaning	Assets that need cleaning most commonly due to graffiti.	1	
	Renewal	Assets which are in poor condition due to weathering, old age or wear and tear and require replacement.	3	
Traffic Signals	NA	NA	0	0
Traffic Islands	Damage	Assets that have damage due to impact, vandalism, wear and tear etc. and require rectification or repair.	31	92
	Unspecified	No defect issue specified.	3	

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Road Furniture Portfolio Asset Management Plan

Asset Type	Defect Type	Defect Description	Number of Defects	Number of Defects per Asset Type
	Renewal	Assets which are in poor condition due to weathering, old age or wear and tear and require replacement.	22	
	Cleaning	Assets that need cleaning most commonly due to traffic pollution.	32	
	Vegetation	Asset requires the removal of vegetation	4	
Signage	Black paint	Back of signs and posts that are missing black paint.	475	4319
	Cleaning	Assets that need cleaning most commonly due to graffiti.	321	
	Damage	Assets that have damage due to impact, vandalism, wear and tear etc. and require rectification or repair.	931	
	Missing	Signs that are reported as missing	377	
	Non-compliant	Signage that is non-compliant usually due to its age.	107	
	Old logo	Signs which have old logos before the council merge into Moreton Bay Regional Council	1073	
	Renewal	Assets which are in poor condition due to weathering, old age or wear and tear and require replacement.	775	
	To be removed	Signs which have been identified as not being required.	71	
	Unspecified	No defect issue specified.	189	
Bus Stops	Renewal	Assets which are in poor condition due to weathering, old age or wear and tear.	8	117
	Unspecified	No defect issue specified.	1	
	Cleaning	Assets that need cleaning most commonly due to graffiti.	34	
	Damage	Assets that have damage due to impact, vandalism, wear and tear etc. and require rectification or repair.	74	
Cycleway Symbols	NA	NA	0	0
Flush Points and Subsoil Drainage	NA	NA	0	0
Total				5899

Figure 31 and Figure 32 show examples of road furniture defects. Figure 31 shows a kerb and channel with structural damage. This would be considered to be in condition 4. Figure 32 shows a graffiti defect which is a common defect for signs.

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan



Figure 31 - Example of kerb and channel defect (Anzac Ave, Kallangur)



Figure 32 - Example of signage defect (Todds Rd, Lawton)

Table 5.2 shows the defect selection types that currently exist for each asset type. For a description of each defect type refer to Appendix C.

Table 5.2 - Defect selection types

Asset Classification	Asset Type	Defect Description	Defect Code	Status
Transport\Roads\Pavement	Guardrail	Guardrail Damage	AI.RDS.GUARDRAILDAMAGE	Active
Transport\Roads\Pavement	Kerb and channel	Kerb and Channel Damage	AI.RDS.KERBCHANNEL	Active
Transport\Roads\Pavement	Signage	Signage	AI.RDS.SIGNAGE	Active
Transport\Roads\Kerb and Channel	Kerb and channel	Structural damage	KC001	Active
Transport\Roads\Kerb and Channel	Kerb and channel	Water ponding	KC002	Active
Transport\Roads\Kerb and Channel	Kerb and channel	Blockage	KC003	Active
Transport\Roads\Kerb and Channel	Kerb and channel	Defects derived from Condition 4 and 5 Sections of Kerb and Channel identified in 2019 Survey.	KERBCHANNEL	Active
Transport\Roads\Bus Stop	Bus Stop	Bus Stops	RAD028	Active
Transport\Roads\Bus Stop	Bus Stop	Work Request Defect Bus Stops	WR.BUSSTOPS	Active
Transport\Roads\Signage	Signage	Sign plate missing	SN001	Active
Transport\Roads\Signage	Signage	Post and plate missing	SN002	Active
Transport\Roads\Signage	Signage	Sign plate realignment	SN003	Active
Transport\Roads\Signage	Signage	Sign plate damaged/bent	SN004	Active
Transport\Roads\Signage	Signage	Sign plate graffiti	SN005	Active
Transport\Roads\Signage	Signage	Sign plate cleaning	SN006	Active

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset Classification	Asset Type	Defect Description	Defect Code	Status
Transport\Roads\Signage	Signage	Sign plate faded	SN007	Active
Transport\Roads\Signage	Signage	Post damaged/bent	SN008	Active
Transport\Roads\Signage	Signage	Work Request Defect Signage	WR.SIGNS	Active
Transport\Roads\Traffic Island	Traffic Island	Work Request Defect Traffic Islands	WR.TRAFFISLANDS	Active

There are no defect codes for the flush points, sub soil drainage and traffic signals. Also, many of the defects are assigned to the classification of transport/roads/pavement instead of their corresponding asset type classification. All asset types should have their own defect codes assigned under their asset classification unless it is a defect that is common amongst the asset types. This is something that will need to be revised for future revisions of the AMP.

AI-RF17	Reassign AI defect types to road furniture asset classification instead of the road's pavement classification.
AI-RF18	Assess current defect codes in use to see which ones are redundant.
AI-RF19	Conduct cleanse of open defects to close any redundant or completed defects and ensure defects are raised against the correct asset.

5.2.2 Recommended Defect Management Plan

Defects are detected by inspections, CSR's or by AI and each defect should be lodged against the correct asset number. Each asset type is to have its own set of defect codes which are unique to that asset type.

Currently the capture and closure of defects is mostly carried out through in-person inspections. This can be a slow process which utilises a lot of resources. There is no formal agreement on the time frame for closing out a defect and this is something that should be workshopped with the relevant stakeholders in order to come up with an agreed rectification timeframe depending on the asset type and defect code. Defects are to be assessed on a case by case basis dependant on the asset classification, the type of defect and the prioritisation of the defect.

For future defect management, MBRC intends to utilise the AI defect system, which is currently used to capture defects against road pavement assets. MBRC is looking at expanding the capabilities of this technology so that it is able to assess road infrastructure assets and capture defects. Using AI for defect capture across the multiple asset types will allow defect to be captured and processed automatically in council systems without using up additional resources. It is also envisioned that AI will be able to condition rate assets with further improvement and expansion of the AI process. Regular defect and condition data will allow rectification of defects in a timely manner which will lead to an improved overall condition state of the assets, accepted levels of service and reduced potential risk for council and the community.

AI-RF20	Establish agreed rectification times and appropriate defect completion tracking with the relevant stakeholders as part of drafting the defect management plan
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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

5.3 Risk Management Plan

Risks for MBRC assets are assessed using Council's Enterprise Risk Management (ERM) framework to identify and evaluate the risk. This includes assessment of the likelihood and consequence of the risk and process to eliminate or mitigate the risk.

Risks considered during the development of this plan have highlighted matters that should be considered as part of an ongoing risk management process for road furniture assets. The risk management plan for road furniture was developed in consultation with Asset Maintenance, Asset Management and ITPD. The risk management assessment for road furniture assets is provided in Appendix D.

5.4 Maintenance

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Examples of typical maintenance activities include crack repairs, concrete patching, and missing sign replacement.

Maintenance is performed under two categories for road furniture assets;

- **Planned Maintenance** - Maintenance that is planned to occur based on asset type and priority with the purpose of maintaining ongoing serviceability and extending service life. Planned maintenance involves both routine maintenance activities that are performed on regular schedules and programmed maintenance activities including the actioning of defects in a cost-effective and efficient manner.
- **Reactive Maintenance** - Maintenance carried out to restore partial asset failures and is typically in response to customer service requests (CSR's) or reported defects.

5.4.1 Current Maintenance Plan

Maintenance works are currently carried out on an as-needed basis resulting in majority of maintenance being reactive rather than planned maintenance as highlighted in Table 5.3. Assessment and completion of reactive maintenance is undertaken by council staff using their experience, judgement and compliance to industry standards and guidelines.

As the majority of these assets are not large structural assets routine inspections are not prioritised when compared to other critical works conducted by Asset Maintenance. However, a routine inspection schedule would help in filling the gaps for condition data, enable a better forecast of renewals and allow for a better planned maintenance schedule. This is something that is potentially achievable by expanding the current AI inspection program. At present the AI inspection program is used to capture defects for some road assets and road furniture assets via cameras on garbage trucks. Using the current AI inspections to pick up more of the road furniture assets will enable regular inspections to be conducted on road furniture assets without using up council resources.

The maintenance budget for road furniture is currently considered to be adequate, however, the allocations within this overall budget will need to be reviewed. The current maintenance budget does not provide enough clarity in accounting for the maintenance of flush points, guard rails, kerb and channel, cycleway symbols, traffic islands or sub soil drainage. This suggests that these items are being maintained through reactive maintenance activities

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Road Furniture Portfolio Asset Management Plan

utilising the roads portfolio budget. Current condition data shows that the majority of assets are in good condition. Invariably, this illustrates that maintenance funding levels may be appropriate; however this cannot be confirmed as the budget breakdown is not known. It is therefore recommended that an assessment be done on the road furniture budget allocations to provide more transparency on what is allocated versus spent on each asset type within road furniture portfolio.

Table 5.3 - Current maintenance plan and budget allocations

Asset Type	Activities	Type	Frequency	Annual Budget
Bus stops	No planned maintenance activities. Reactive maintenance and repairs of defects or CSRs only.	Reactive	NA	\$45K
Cycleway symbols	No planned maintenance activities. Reactive maintenance and repairs of defects or CSRs only.	Reactive	NA	Current maintenance spend comes out of the road maintenance budget and a separate budget allocation for road furniture types has not been assigned as yet
Flush points and sub soil drainage	No planned maintenance activities. Reactive maintenance and repairs of defects or CSRs only.	Reactive	NA	Current maintenance spend comes out of the road maintenance budget and a separate budget allocation for road furniture types has not been assigned as yet
Guardrail	No planned maintenance activities. Reactive maintenance and repairs of defects or CSRs only.	Reactive	NA	Current maintenance spend comes out of the road maintenance budget and a separate budget allocation for road furniture types has not been assigned as yet
Kerb and channel	No planned maintenance activities. Reactive maintenance and repairs of defects or CSRs only.	Reactive	NA	Current maintenance spend comes out of the road maintenance budget and a separate budget allocation for road furniture types has not been assigned as yet
Signage	No planned maintenance activities. Reactive maintenance and repairs of defects or CSRs only.	Reactive	NA	\$75K with \$150K additional funding in FY2023, FY2025 and FY2026 to replace old signs
Traffic Island	No planned maintenance activities. Reactive maintenance and repairs of defects or CSRs only.	Reactive	NA	Current maintenance spend comes out of the road maintenance budget and a separate budget allocation for road furniture types has not been assigned as yet
Traffic Signals	Traffic signal external maintenance contract.	Reactive	NA	\$535K

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

5.4.2 Recommended Maintenance Plan

Development of a maintenance plan for road furniture assets is recommended to address existing deficiencies and provide a mechanism for transitioning from a purely reactive to a partially planned maintenance approach. The aim is to achieve a balance of 80/20 where 80% is planned and 20% being reactive maintenance. The current operations and maintenance budget will need to be reviewed to achieve the “recommended” items as included in technical levels of service, Table 3.2. The maintenance plan will incorporate the recommended maintenance activities outlined in Table 5.4 and document the following key requirements for maintenance of road furniture assets;

- Routine inspections and scheduled frequencies based on asset priority required for all road furniture asset types.
- Programmed maintenance activities required for road furniture assets including defect management procedures.
- Workload measurement techniques to determine adequacy levels of resources required to perform planned and reactive work. Reactive work should diminish with time as planned maintenance work increases and therefore, re-allocation of resources is essential.

In the proposed transition from reactive maintenance to a more planned maintenance regime it will be necessary to carry out any routine maintenance or inspections based on asset priority. The road furniture asset priority should be aligned with the road network hierarchy, this is an action item to be completed for the road furniture portfolio in the next revision.

The proposed maintenance plan is subject to ongoing review and consultation between Asset Management, the Asset Custodians and Asset Maintenance.

The existing road furniture budget does not include budget allocation for all road furniture asset types which makes it difficult to reasonably compare the existing budget with the recommended budget. It is proposed as an action item that future budget allocations should delineate between roads and road furniture asset, as outlined in Table 5.4, to assist with ongoing performance measurement and assessment of the adequacy of maintenance and operational budgets.

Table 5.4 Recommended maintenance plan

Asset Type	Activities	Type	Frequency	Annual Budget	Total
Kerb and channel	AI condition and defect inspections	Routine	5 yearly	Funded by AI program	Budget allocation to be decided after review of existing allocations and after discussion with Asset Maintenance
	Repairs	Reactive	As generated by CSRs or through inspection	Review existing maintenance spend with AM and Finance	
Signs	AI condition and defect inspections	Routine	5 yearly	Funded by AI program	\$75K with \$150K additional funding in FY2023, FY2025 and FY2026 to replace old signs
	Repairs	Reactive	As generated by CSRs or through inspection	\$75k	

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Road Furniture Portfolio Asset Management Plan

Asset Type	Activities	Type	Frequency	Annual Budget	Total
Guard rail	In person condition inspections. AI defect inspections.	Routine	5 yearly	Funded by Asset Management and AI program	Budget allocation to be decided after review of existing allocations and after discussion with Asset Maintenance
	Repairs	Reactive	As generated by CSRs or through inspection	Review existing maintenance spend with AM and Finance	
Cycle way symbols	AI condition and defect inspection	Routine	3 years	Funded by AI program	Budget allocation to be decided after review of existing allocations and after discussion with Asset Maintenance
	Repairs	Reactive	As generated by CSRs or through inspection	Review existing maintenance spend with AM and Finance	
Bus Stops	Condition and defect inspection	Routine	2 yearly	Funded by Asset Management	\$45K
	Repairs	Reactive	As generated by CSRs or through inspection	\$45K	
Traffic Island	AI Condition and defect inspection	Routine	5 yearly	Funded by AI program	Budget allocation to be decided after review of existing allocations and after discussion with Asset Maintenance
	Clean up schedule - removal of weeds and general clean	Routine	2 yearly	Review existing maintenance spend with AM and Finance	
	Repairs	Reactive	As generated by CSRs or through inspection		
Traffic Signals	Condition and defect inspection. Expand current maintenance contract from reactive maintenance to include preventative checks.	Routine	2 yearly	Contract amount \$405K	\$535K
	Repairs	Reactive	As generated by TMR's STREAMS system		
	Review of traffic signals for safety, operational efficiency and compliance with	Planned	As per ITPD traffic planning.	\$50,000	

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset Type	Activities	Type	Frequency	Annual Budget	Total
	current standards.				
	Traffic signal phasing and operations	Planned	As per ITPD traffic planning.	\$80,000	
Flush points and sub soil drainage	Flush out flush points.	Routine	5 yearly	Review existing maintenance spend with AM and Finance	Budget allocation to be decided after review of existing allocations and after discussion with Asset Maintenance
	Repairs	Reactive	As generated by CSRs or through inspection		

AI-RF21	Review budget allocations so that they reflect each asset type and associated maintenance costs.
AI-RF22	Formalise maintenance plan with Asset Owners and Asset Maintenance.
AI-RF23	Prioritise assets based on asset risk and align with road assets hierarchy.
AI-RF24	Review the existing traffic signal contract to investigate if it should include routine maintenance, testing, and cleaning to extend life of the assets.

5.5 Resource Plan

Council utilises internal crews to perform “non-specialist” maintenance tasks and defect repairs for all asset types. In FY20/21 additional funding allowed temporary crews to be employed to facilitate a clean-up schedule for all the traffic islands and repair of sign defects.

5.5.1 Current Resource Plan

The current resource plan includes both specialist and non-specialist tasks/jobs that are performed by internal staff and contractors as summarised in Table 5.5 below.

Table 5.5 - Current resource plan

Activity	Traffic Signals	Traffic Islands	Bus Stops	Kerb / Channel	Guard Rails	Cycle-way Symbols	Signs	Flush Points and Sub Soil Drainage
Compliance inspections	N/A	None	Internal (ITPD)	N/A	Internal (AM)	N/A	None	N/A
Reactive Maintenance	External contract		Internal (AM)			None		
Planned maintenance (routine & programmed)	None							
Level 1 / Condition inspections	None							

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Road Furniture Portfolio Asset Management Plan

Activity	Traffic Signals	Traffic Islands	Bus Stops	Kerb / Channel	Guard Rails	Cycle-way Symbols	Signs	Flush Points and Sub Soil Drainage
Reviewing Condition & Programming Renewals	Internal (AMT and ITPD)							
Reviewing & Programming Defects	Internal (AM and Asset Maintenance)							

5.5.2 Recommended Resource Plan

It is anticipated that utilisation of AI technology will allow for the majority of condition and defect capture to be completed across all asset types with the exception being sub soil drainage and flush point asset types. There is the option of using current internal staff for non-specialised tasks on a proactive maintenance schedule.

This would be organised internally between asset management and asset maintenance.

The recommended resource plan should enable Council to perform non-specialist tasks/jobs while a Contractor performs specialist tasks or jobs as highlighted by Table 5.6 below.

Table 5.6 - Recommended Resource Plan

Activity	Traffic Signals	Traffic Islands	Bus Stops	Kerb and Channel	Guard Rails	Cycle-way Symbols	Signs	Flush Points and Sub Soil Drainage
Level 1 / Compliance inspection / condition inspection	NA	Internal or external (sub-contract). 1 FTE	Internal 0.2 FTE	Inspections internal (AI).	Internal or external (sub-contract). 0.1 FTE	NA	Inspections internal (AI).	NA
Reactive Maintenance	External	Internal (AM) 0.1 FTE	Internal (AM) 0.2 FTE	Internal (AM) 0.2 FTE	Internal (AM) 0.1 FTE	Internal (AM) 0.1 FTE	Internal (AM) 0.1 FTE	Internal (AM) 0.1 FTE
Planned maintenance (routine & programmed)	External contract		Internal (AM). 0.5 FTE		No routine maintenance needed.		Internal (AM) 0.1 FTE	
Defect Capture	NA			Internal (AI)		Internal (AM)		
Reviewing & Programming Defects	Internal - AM - 1 x Tech Officer							
Reviewing Condition & Programming Renewals	Internal (AMT and ITPD) 1 x Tech Officer							

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Road Furniture Portfolio Asset Management Plan

5.6 Renewal Plan

Renewal is major capital work which does not significantly alter the original service provided by the asset, but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is considered to be an acquisition resulting in additional future operations and maintenance costs.

The purpose of developing a renewal plan is to identify assets that need to be replaced to maintain the current level of service and to avoid asset failure due to deterioration.

In preparing this asset management plan, a condition-based model was prepared to determine the base annual renewal costs associated with the road furniture facilities asset portfolio. The model developed for the RFPAMP has a 50-year planning horizon to capture the full lifecycle of most assets. A longer-term model was not possible due to the significant number of assets (over 60,000). The deterioration curve used in the asset lifecycle model

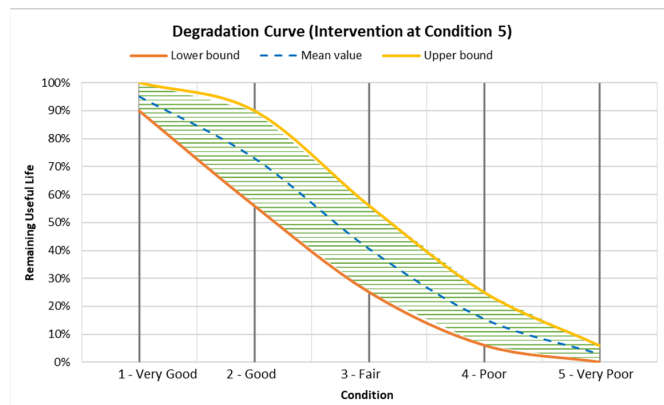


Figure 33 - Asset deterioration curve

uses a parabolic deterioration scale and is based on the IPWEA asset deterioration profile as illustrated by Figure 33. For example, assets in condition 1 (very good or 'as-new' condition) are expected to have a remaining useful life of 90-100% of their expected life. Assets in condition 2 (good condition) are expected to have a remaining useful life of 56-90% of their expected life. If a condition 2 asset has a 60-year life, its remaining life is estimated to be between 34 (56% x 60) and 54 (90% x 60) years.

For lifecycle modelling of MBRC's road furniture assets the trigger for replacement was when the asset reaches condition 5 (very poor condition). This intervention level may be reviewed in future revisions of the asset management plan or, varied across different asset types to reflect the criticality and different levels of service provided by the assets.

An overview of the modelling process is provided by Figure 34 below. The model was used to project the future net value and condition of the asset portfolio for both the current funding level and recommended budget amount. Appendix F and Appendix G demonstrate the predicted condition of the assets based on current and recommended renewal funding.

5.6.1 Current Renewal Plan

Current renewals which take place are linked in with planned intersection and road upgrades. ITPD identify which roads and intersections are in need of upgrading and in doing so all associated road furniture within the project are also upgraded.

Also covered under ITPD is the bus stop upgrade program, by which all bus stop have been inspected for DDA compliance and are expected to be finished by the end of FY2022.

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Road Furniture Portfolio Asset Management Plan

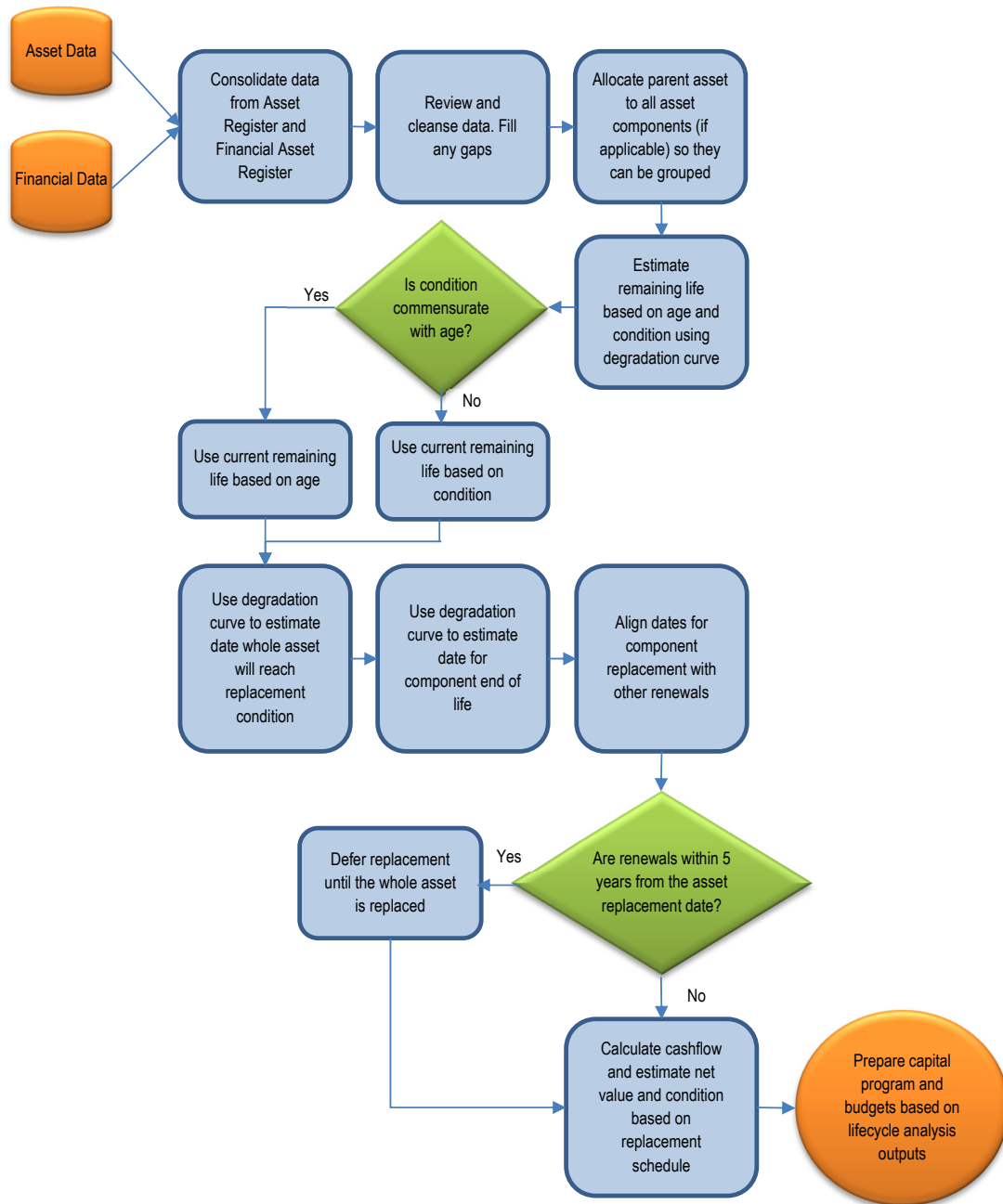


Figure 34 - Flow chart for determining lifecycle capital costs and program

There is, however, still a vast amount of maintenance and renewals carried out reactively on an as-needed basis. Going forward a renewal plan incorporating the strategy mentioned above should be utilised across all road furniture asset types to ensure assets in poor condition or nearing their end of life, or those that are no longer compliant, are renewed in a timely manner and not just when they are reported via CSR's or by field inspections.

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Road Furniture Portfolio Asset Management Plan



Figure 35 - Examples of Recently Renewed Guardrails

5.6.2 Recommended Renewal Plan

A recommended renewal plan has been identified through lifecycle modelling using the methodology described in the preceding sections and illustrated above. The renewal plan is based on current condition data and the recommended budget.

The renewal costs are projected to increase substantially over the next 20 years which aligns with the portfolio age profile and aging of the asset base. The expected average annual cost for renewals over the next 50 years is \$6.4M per annum. By comparison, the current average annual renewal budget over the same period is \$1.35M which is approximately one fifth (20%) of the long term estimated long-term budget requirement.

The following chart summarises the results of the lifecycle modelling and cost of renewals expected to be required over the next 50 years before undertaking any cashflow smoothing.

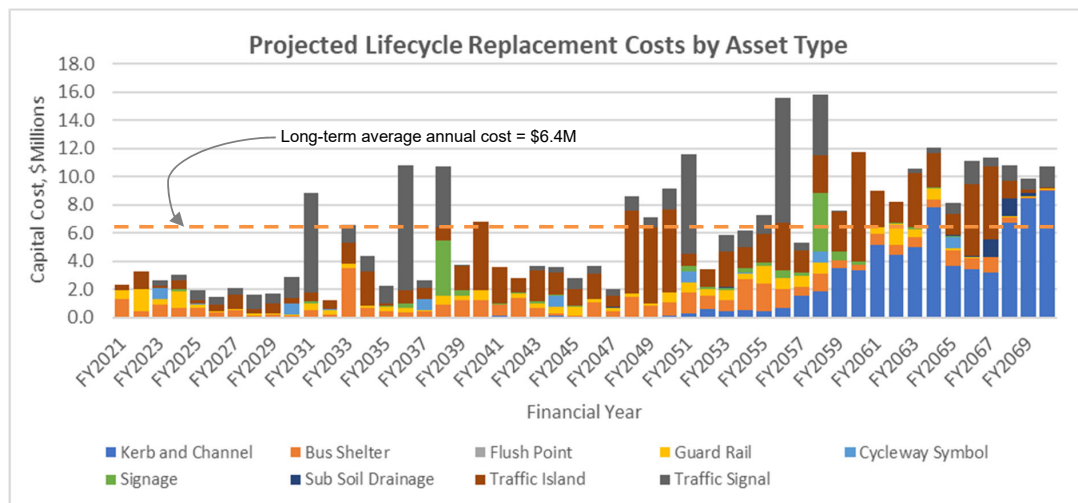


Figure 36 - Projected Lifecycle Replacement Costs by Asset Type

Figure 37 illustrates that traffic signals, bus stops, traffic islands, guard rails, and to a lesser extent kerb and channel, will need the most attention over the next 10 years.

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Road Furniture Portfolio Asset Management Plan

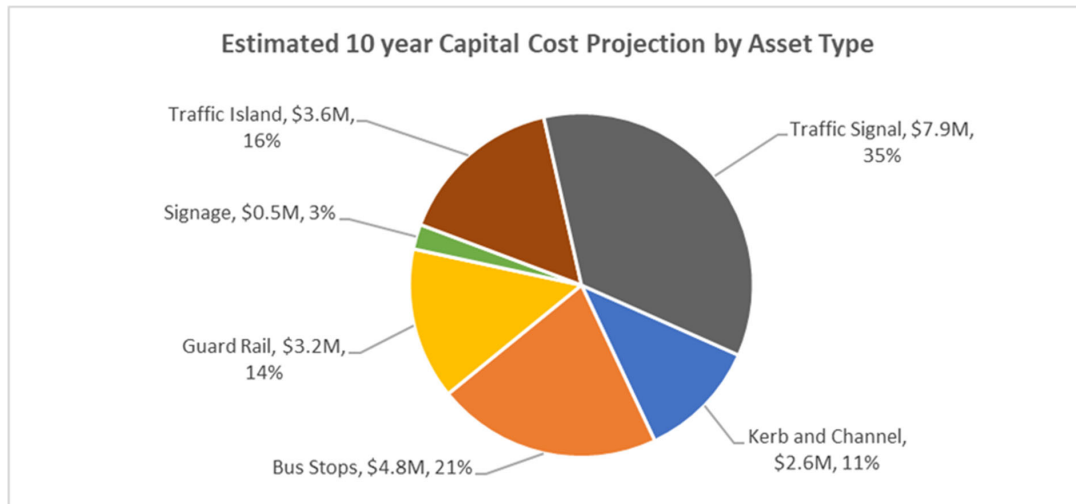


Figure 37 - 10 year estimated capital cost split by asset types

The lifecycle model identified a need to adjust the current and future capital renewal and replacement budgets if the current level of service provided by MBRC's road furniture assets was to be maintained.

It was determined that the current long-term capital budget would need to be incrementally increase from \$1.4M in FY2022 to \$4.6M by 2034 to then further increase to \$5.1M from 2045 onwards. The projected costs from the lifecycle model shows peaks and troughs in estimated capital cost year on year. In the short-term, it is expected that renewal and replacement of road furniture assets can be scheduled to provide a smooth annual cashflow. However, in the long term, as the portfolio ages and the need arises to replace an increased amount of assets due to donated asset or new asset acquired in the short term, it may be necessary to increase funding in some years.

Figure 38 below illustrates how the recommended capital budget (blue) is intended to meet the cumulative capital funding needs identified through the lifecycle modelling (orange) to help explain the ramping up of capital funding. The light blue includes renewal and replacement of road furniture assets funded from other programs. The lifecycle model outputs and recommended funding amounts have been used to develop the indicative capital works program in Appendix H. As part of the justification for the increase maintenance spend and adjustment to the long-term capital spend, an analysis was carried out to determine the future condition of the road furniture portfolio with the current budget and proposed budget profile. If the above renewal plan is adopted, it will allow for a more sustainable funding model for and a significantly improved state of condition for the road furniture assets within MBRC's road network.

The recommended renewal plan funding will allow Council to achieve its strategic asset management objectives including:

- Organisational commitment to effective asset management
- Managing risk appropriately by earlier intervention and renewal strategy
- Delivery of services to agreed standards

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

- Optimise asset performance
- Minimise asset failure by intervening prior to Condition 5

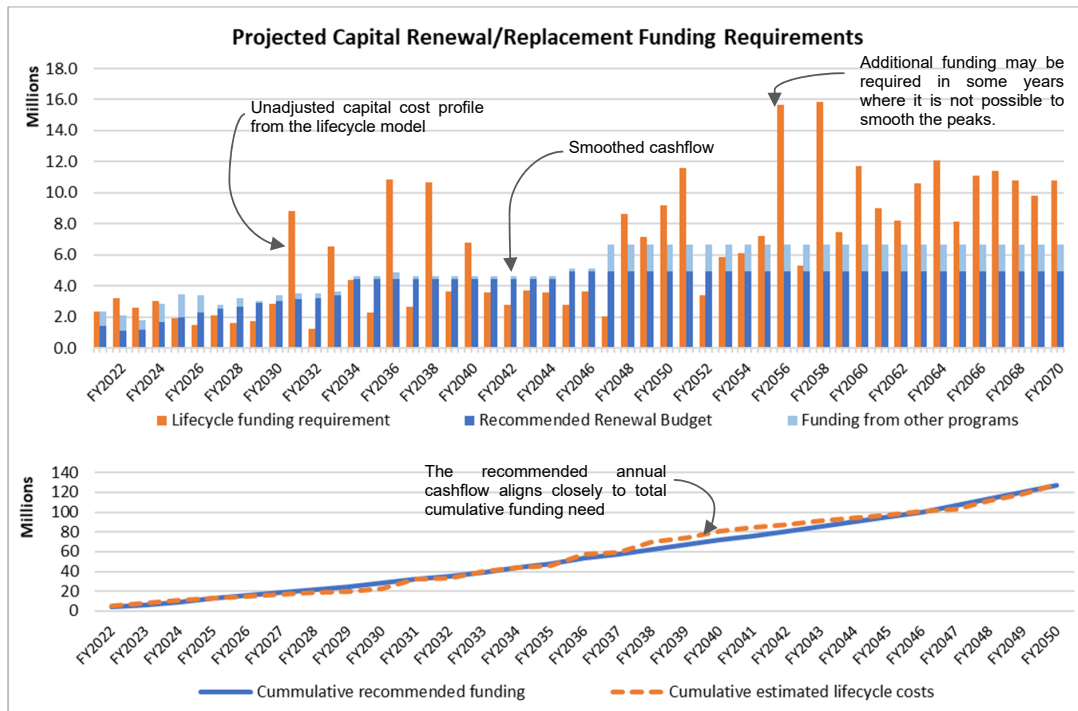


Figure 38 - Capital renewal estimated lifecycle costs and recommended funding

6 Systems

The asset management processes within MBRC are supported by a number of corporate management information systems. The corporate systems that support asset management activities are described in detail in the SAMP in Table 6.1 in Appendix B. The systems include:

- Financial management system (Technology One)
- Asset management system (TOMAS/Technology One)
- Performance planning and monitoring system (built on Technology One)
- Corporate electronic document system (ECM/Technology One)
- Geographical Information System (ArcGIS) and Geoportal (corporate spatial system)

MBRC does not use a dedicated proprietary system for lifecycle management of its road furniture assets. Lifecycle modelling carried out for this asset management plan was modelled using Excel.

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Road Furniture Portfolio Asset Management Plan

7 Financial Summary

7.1 Useful Life and Valuation Methodology

When assets are initially recognised, each asset is recorded with an estimated useful life which is used as a basis for determining depreciation. Table 7.1 below outlines the estimated useful life for road furniture assets and their valuation methodology⁴.

Table 7.1 - Road Furniture Useful Lives

Asset Type	Estimated Useful Life	Valuation Methodology
Bus stops, shelter and seating	40 (shelters) 25 (bus stops and seating)	Fair value
Guard rails	40	Fair value
Kerb & channel	70	Fair value
On-road cycleway road markings	7	Not applicable - non-financial asset
Signs (direction, guide, information, speed, hazard, naming, wildlife and regulatory)	20	Fair value for financial assets. Not applicable for non-financial assets
Sub soil drainage and flush points	50	Not applicable - non-financial asset
Traffic Islands and median strips	50-70	Fair value
Traffic signals	20	Fair value

AI-RF25 Ensure reconciliation between the revised asset lives used in the asset management plan and renewal model against the lives used in the financial register.

7.2 Financial Statements and Ratios

7.2.1 Valuations & Depreciation

The estimated total replacement value (TRV) for all financial road furniture assets is \$431.2M and the total portfolio value is \$436.1M if non-financial assets are included. Figure 39 shows kerb and channel assets make up 57% of the total portfolio value, traffic islands make up 23%, and combined they represent 80% of the portfolio's total replacement cost.

⁴ Refer also to MBRC's Non-current Asset Accounting Policy

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Road Furniture Portfolio Asset Management Plan

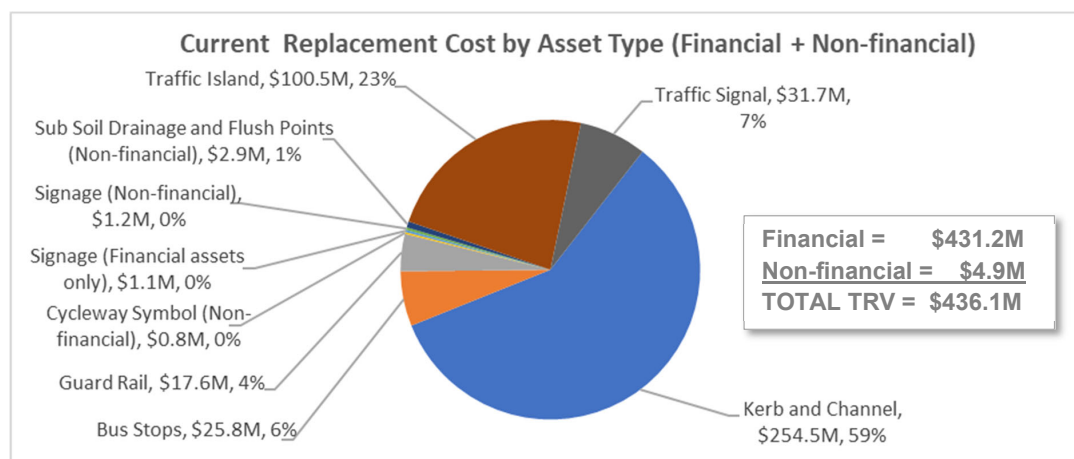


Figure 39 - Current (FY2021) replacement cost by asset component group (includes financial and non-financial assets)

The projected TRV for financial assets is summarised in Table 7.2 and Table 7.3 and illustrated by Figure 40 below. It assumes that no disposals will take place over that period, all existing assets will be replaced at end of life, and that all scheduled new and improvement projects will be built by their scheduled dates.

Table 7.2 - Projected TRV, net value and depreciation, FINANCIAL ASSETS ONLY (\$M) FY2022-FY2033

Description	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033
Current Portfolio TRV	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3
New Assets/Upgrades	0.8	1.1	1.2	1.5	1.8	2.1	2.4	2.8	3.1	3.5	3.5	3.5
Projected TRV	432.1	432.3	432.5	432.8	433.1	433.4	433.7	434.1	434.4	434.8	434.8	434.8
Projected Total Net Value	275.4	268.8	262.6	257.0	253.1	247.0	241.2	236.5	231.4	226.8	222.6	218.6
Projected Annual Depreciation	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

Table 7.3 - Projected TRV, net value and depreciation, FINANCIAL ASSETS ONLY (\$M) FY2034-FY2045

Description	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	FY2043	FY2044	FY2045
Current Portfolio TRV	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3	431.3
New Assets/Upgrades	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Projected TRV	434.8	434.8	434.8	434.8	434.8	434.8	434.8	434.8	434.8	434.8	434.8	434.8
Projected Total Net Value	215.3	212.2	209.0	206.2	203.2	200.4	197.5	194.6	191.6	188.5	185.4	182.6
Projected Annual Depreciation	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

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Road Furniture Portfolio Asset Management Plan

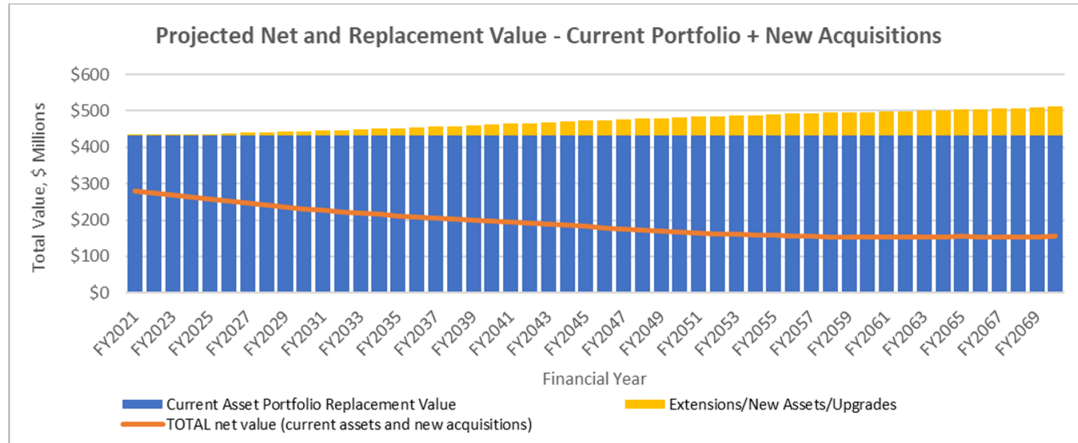


Figure 40 - Projected replacement and net value, FINANCIAL ASSETS ONLY

As part of the lifecycle modelling, a projection was made of the future net value of the road furniture portfolio based on the current budget and recommended funding levels.

The projected net values demonstrate that the proposed renewal funding is inadequate, and the current budget is not expected to provide a long-term sustainable outcome. The sustainability indicators in Section 7.6.2 provide further comparison of the outcomes from the two funding scenarios.

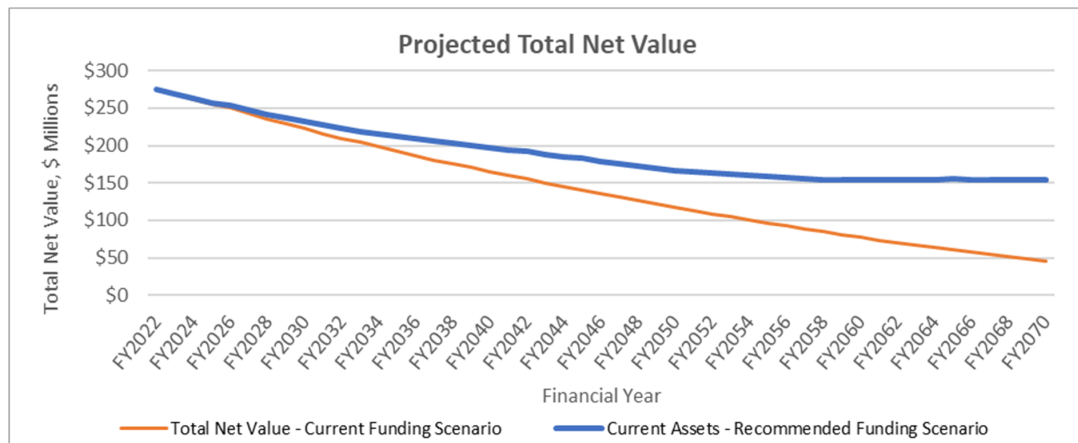


Figure 41 - Projected net asset value based on current and recommended funding scenarios

7.2.2 Financial Sustainability Ratios

There are two key indicators of sustainable service delivery that are considered in the Asset Management Plan for this service area. The two indicators are the:

- Asset Sustainability Ratio (ASR)
- Asset Consumption Ratio (ACR)

The ASR demonstrates the extent to which the infrastructure assets managed by Council are being replaced as they reach the end of their useful lives. This ratio measures how much capital expenditure goes toward replacing existing assets each year relative to depreciation expense. The typical target range is approximately 90% to 110%. Being a high growth Council,

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Road Furniture Portfolio Asset Management Plan

Council’s target range is approximately 75% which allows for balancing capital expenditure on existing assets with building of new infrastructure due to population growth.

Figure 42 shows the ASR for MBRC’s road furniture asset portfolio. The intent is for capital investment to offset depreciation to maintain the value of the portfolio, and inherently demonstrate maintaining the portfolio itself. While not particularly relevant for new asset portfolios whereby minimal capital expenditure is required early in the life of the asset, it demonstrates that the recommended funding will lead towards achieving long term sustainability. Conversely, the current capital funding (orange solid line) is not sustainable.

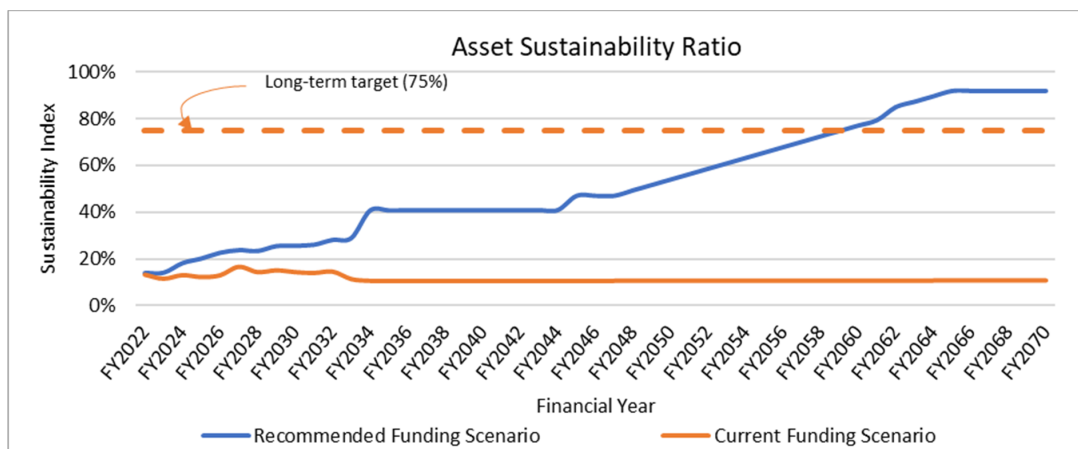


Figure 42 - Projected sustainability ratio based on current and recommended funding scenarios

The Asset Consumption Ratio (ACR) is the value of infrastructure assets divided by the gross current replacement cost of infrastructure assets. This ratio seeks to highlight the aged condition of the stock of physical assets. Council’s desired range is between 40% to 80%.

This ACR seeks to demonstrate that the asset portfolio is being maintenance within a sustainable and economic range. Figure 43 shows that if the current funding was maintained it would result in the asset portfolio deteriorating to an unacceptable level by 2038, whereas the recommended funding maintains the portfolio closer to the target range.

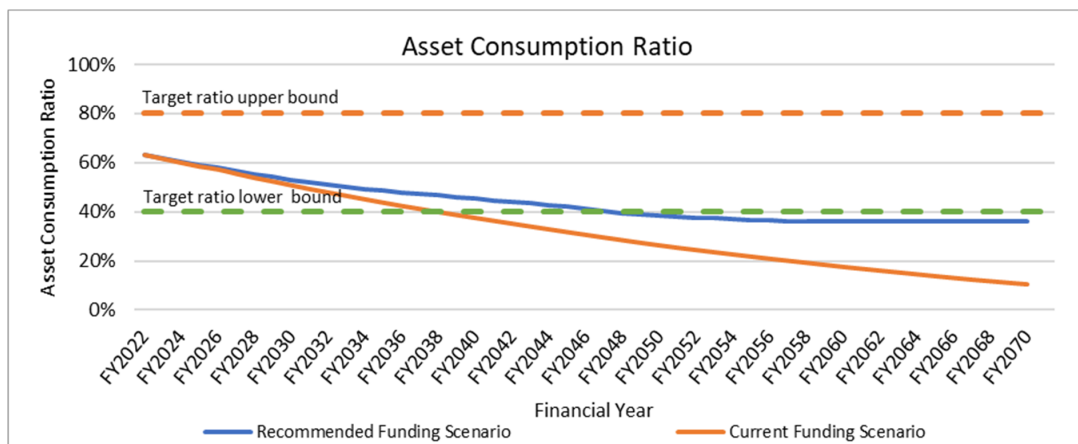


Figure 43 - Projected asset consumption ratio based on current and recommended funding scenarios

For a breakdown of the ASR and ACR by individual asset types refer to Appendix G.

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Road Furniture Portfolio Asset Management Plan

7.3 Forecast Costs

To sustain the existing road furniture portfolio, and provide the expected community and technical levels of service described in this asset management plan, the recommended budget allocations are outlined below:

- **Maintain the current operations and maintenance budgets** of \$655K per annum except for FY2023, 2025 and 2026 when this increases to \$805K to allow for additional signs maintenance.
- **Add new operational cost budget of \$110K per annum for cycleway symbol replacement from FY2024 onwards.**
- **Retain current forecast capital budget for kerb and channel**, being \$250K per annum, increasing by \$150K per annum from FY2048 onwards.
- **Increase the existing \$400K per annum capital budget for bus stops by an additional \$50K per annum over 5 years from FY2023** (ie \$450K in FY2023, \$500K in FY2024 , \$550k in FY2025, \$600K in FY2026 and \$650K from FY2027) **and then to \$900K per annum from FY2033 onwards.**
- **Increase the existing \$100K per annum capital budget for guardrails by an additional \$100K per annum over 3 years from FY2023 to \$400K per annum from FY2025 and onwards** (ie \$200K in FY2023, \$300K in FY2024 and \$400K from FY2025).
- **Retain the current capital program for new and replacement signs** (varies between \$100K to \$350K with an average of \$150K per annum).
- **Increase the existing \$200K per annum capital budget for traffic islands by \$50k per annum from FY2024 over 6 years** (ie \$250K in FY2024, \$300K in FY2025... \$500K in FY2029 onwards) and then **increase to \$1.5M from 2034 onwards and to \$2.0M from FY2045 onwards.**
- **Increase the existing \$100K capital budget for traffic signals by an additional \$150K per annum over 9 years from FY2023 to \$1.45M per annum in FY2031 onwards** (i.e. \$250K in FY2023, \$400K in FY2024... \$1.45M in FY2031 onwards).

The following chart and tables summarise the recommended funding needed. The amounts shown for capital renewals and replacements align to the amounts shown in the indicative capital works plan in Appendix H.

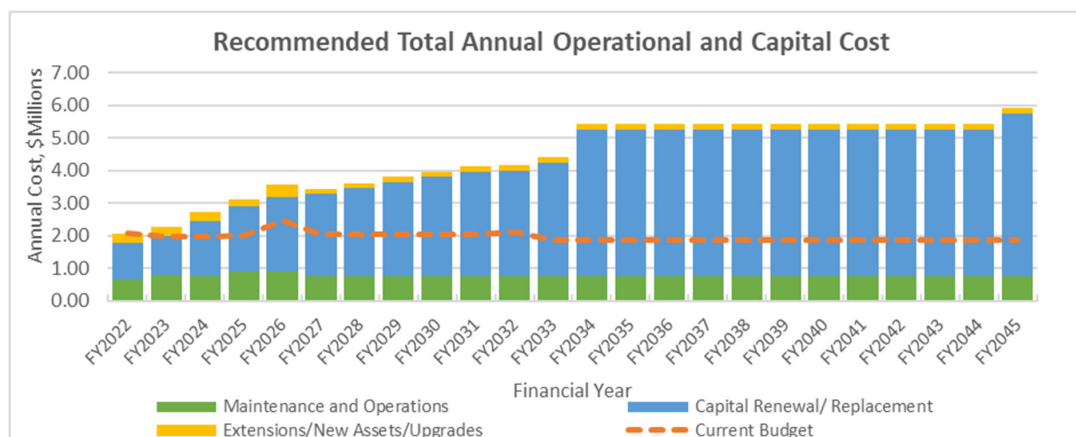


Figure 44 - Recommended total annual operational and capital budget

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Road Furniture Portfolio Asset Management Plan

Table 7.4 - Recommended annual operational and capital budgets; FY2022-FY2033

Cost Type	Estimated Annual Cost, \$000's											
	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033
Maintenance and Operations:												
<i>Current Maintenance Budgets</i>	655	805	655	805	805	655	655	655	655	655	655	655
<i>Cycleway Symbol</i>	-	-	110	110	110	110	110	110	110	110	110	110
Subtotal for Maintenance and Operations	655	805	765	915	915	765	765	765	765	765	765	765
Capital New/Upgrade/Renewal:												
<i>Kerb and Channel</i>	300	250	250	250	250	250	250	250	250	250	250	250
<i>Bus Stops</i>	426	450	500	550	600	650	650	650	650	650	650	900
<i>Guard Rail</i>	100	200	300	400	400	400	400	400	400	400	400	400
<i>Signage</i>	150	150	250	150	350	100	100	100	100	100	150	150
<i>Traffic Island</i>	150	150	250	300	350	400	450	500	500	500	500	500
<i>Traffic Signal</i>	280	250	400	550	700	850	1,000	1,150	1,300	1,450	1,450	1,450
Subtotal for Capital New/ Upgrade/ Renewal	1,406	1,450	1,950	2,200	2,650	2,650	2,850	3,050	3,200	3,350	3,400	3,650
TOTAL	2,061	2,255	2,715	3,115	3,565	3,415	3,615	3,815	3,965	4,115	4,165	4,415

Table 7.5 - Recommended annual operational and capital budgets; FY2034-FY2045

Cost Type	Estimated Annual Cost, \$000's											
	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	FY2043	FY2044	FY2045
Maintenance and Operations:												
<i>Current Maintenance Budgets</i>	655	655	655	805	805	655	655	655	655	655	655	655
<i>Cycleway Symbol</i>	110	110	110	110	110	110	110	110	110	110	110	110
Subtotal for Maintenance and Operations	765	765	765	915	915	765	765	765	765	765	765	765
Capital New/Upgrade/Renewal:												
<i>Kerb and Channel</i>	250	250	250	250	250	250	250	250	250	250	250	250
<i>Bus Stops</i>	900	900	900	900	900	900	900	900	900	900	900	900
<i>Guard Rail</i>	400	400	400	400	400	400	400	400	400	400	400	400
<i>Signage</i>	150	150	150	150	150	150	150	150	150	150	150	150
<i>Traffic Island</i>	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	2,000
<i>Traffic Signal</i>	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450
Subtotal for Capital New/ Upgrade/ Renewal	4,650	4,650	4,650	4,650	4,650	4,650	4,650	4,650	4,650	4,650	4,650	5,150
TOTAL	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,415	5,915

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Road Furniture Portfolio Asset Management Plan

8 PLAN IMPROVEMENT AND MONITORING

8.1 Improvement Plan

It is important that an entity recognise areas of their AM Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this AM Plan is shown in Table 8.1.

Table 8.1 - RFPAMP Action Items

Action No.	Detail	Responsibility	Timeline
AI-RF1	Assign asset classification to road furniture assets not within or adjacent to MBRC owned and operated roads including car parks.	Asset Management	Q3 22/23
AI-RF2	Add asset type "noise walls" to future iterations of the RFPAMP.	Asset Management	Q3 22/23
AI-RF3	Review capture process for road edge guide posts and road marking.	Asset Management	Q3 22/23
AI-RF4	Review AI process for asset capture of signs. Review how non-financial assets are created by AI to establish whether sign assets can be created and managed using AI going forward.	Asset Management	Q3 22/23
AI-RF5	Review asset classification and naming for guardrails to confirm it is inclusive of other types of road barrier systems.	Asset Management	Q3 22/23
AI-RF6	Investigate and implement a process for automating the prioritisation of new road furniture assets in TOMAS	Asset Management	Q4 22/23
AI-RF7	Investigate the development of asset relationships that link "parent" and "child" asset components within TOMAS.	Asset Management.	Q3 22/23
AI-RF8	Review & update existing road furniture asset attributes with asset stakeholders.	Asset Management	Q1 23/24
AI-RF9	Capture missing asset attributes on all road furniture assets in TOMAS.	Asset Management	Q4 22/23
AI-RF10	Review current performance requirements for signs and marking and compliance with standards (wind/structural loading, reflectivity etc.).	Asset Management / ITPD	Q4 23/24
AI-RF11	Improve CSR logging by assigning road furniture CSR's to an asset type and asset number.	Asset Management	Q4 22/23
AI-RF12	Workshop close-out timeframes for defects and CSR's with asset maintenance dependant on the asset classification, defect type and defect priority.	Asset Management / Asset Maintenance	Q1 23/24
AI-RF13	Undertake condition assessment for the remaining 33% of assets with no current condition score.	Asset Management	Q1 23/24
AI-RF14	An additional extensive investigation is to be carried out to assess condition inspection frequencies for each asset type.	Asset Management / Asset Maintenance	Q1 23/24
AI-RF15	Expand AI capabilities to include condition scoring for assets where practical.	Asset Management	Q2 23/24
AI-RF16	Create a new defect code to capture assets that are non-compliant with current standards or legislation.	Asset Management	Q2 23/24

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Road Furniture Portfolio Asset Management Plan

Action No.	Detail	Responsibility	Timeline
AI-RF17	Reassign AI defect types to road furniture asset classification instead of the roads pavement classification.	Asset Management	Q2 22/23
AI-RF18	Assess current defect codes in use to see which ones are redundant.	Asset Management	Q4 22/23
AI-RF19	Conduct cleanse of open defects to close any redundant or completed defects and ensure defects are raised against the correct asset.	Asset Management / Asset Maintenance	Q4 22/23
AI-RF20	Establish agreed rectification times and appropriate defect completion tracking with the relevant stakeholders as part of drafting the defect management plan	Asset Management / Asset Maintenance	Q4 22/23
AI-RF21	Review budget allocations so that they reflect each asset type and associated maintenance costs.	Asset Management / Finance / Asset Maintenance	Q3 22/23
AI-RF22	Formalise maintenance plan with Asset Owners and Asset Maintenance.	Asset Management / Asset Maintenance / ITPD	Q3 22/23
AI-RF23	Prioritise assets based on asset risk and align with road assets hierarchy.	Asset Management	Q4 22/23
AI-RF24	Review the existing traffic signal contract to investigate if it should include routine maintenance, testing, and cleaning to extend life of the assets.	Asset Management / ITPD	Q2 23/24
AI-RF25	Ensure reconciliation between the revised asset lives used in the asset management plan and renewal model against the lives used in the financial register.	Asset Management / Finance	Q3 22/23

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Road Furniture Portfolio Asset Management Plan

9 Appendices

Table 9.1 - Appendices

Appendix.	Title	Referenced Section
Appendix A	Road Furniture Asset RACI Matrix	2.1
Appendix B	Road Furniture Asset Attributes	2.4
Appendix C	Description of Current Defect Types	5.3.1
Appendix D	Risk Matrix Table	5.4
Appendix E	Overall Asset Type Replacement / Renewal Graphs	5.8
Appendix F	Projected Condition - Overall	5.8
Appendix G	Asset Summary by Asset Type Including Projected Condition	5.8
Appendix H	Indicative 10-year Capital New/Upgrade and Renewal Plan	5.8.3
Appendix I	References	-

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Road Furniture Portfolio Asset Management Plan

Appendix A - Road Furniture Asset RACI Matrix Report

by Selected Asset

Asset selection:		Definitions:
Asset Class	Transport	<ul style="list-style-type: none"> • Responsible parties are those who do the work to complete the task. • Accountable individuals or groups ultimately must answer for the completion of the deliverable or task. • Consulted parties are involved in making the decision or completing the task (e.g., Subject Matter Experts) • Informed individuals are kept up to date on progress (e.g., copied on email), often only on completion of the activity or decision
Asset Group/s	Roads	
Asset Type/s	Bus Stop, Flush Point, Guardrail, Kerb & Channel, On-Road Cycleways, Signage, Sub-soil Drainage, Traffic Islands, Traffic Signals	

System Requirement	Activity Group	Activity	Sub-activity	Department or Role			
				Responsible	Accountable	Consult	Inform
Governance, Policy and Strategy	Leadership Governance	Provide leadership, direction and commitment to asset management		AMSC	CEO	SLT	IP_ITP, ECM_AMTC, IP_AMGT
		Determine organisational context for services delivered by assets		IP_ITP	CEO	COMM, ECM_AMTC	IP_AMGT
		Develop understanding of the needs and expectations of stakeholders		IP_ITP	ECM	COMM	ELCO
		Determine organisation roles, responsibilities and authorities		SLT	CEO	IP_ITP, ECM_AMTC, IP_AMGT	ELCO
		Management reviews		SLT	CEO	IP_ITP, ECM_AMTC, IP_AMGT	ELCO
	Asset Management Policy	AM Policy preparation and revision		IP_AMGT	AMSC	SLT	IP_ITP, ECM_AMTC
		AM Policy endorsement		ELCO	CEO	IP_AMGT, AMSC, SLT	FCS_G&ES
	Strategic planning	Develop MBRC consolidated Strategic Asset Management Plan		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC, FCS_ACC	AMSC, SLT
		Strategic Asset Management Plan endorsement		ELCO	CEO	IP_AMGT, AMSC, SLT	FCS_G&ES
	Communications and engagement	Develop service/network strategy and/or master plans		IP_ITP	ECM	COMM_PL_SP&P, ECM_AMTC	IP_AMGT, FCS_ACC
Promote awareness of asset management policies and documentation			IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC	AMSC	

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Road Furniture Portfolio Asset Management Plan

System Requirement	Activity Group	Activity	Sub-activity	Department or Role				
				Responsible	Accountable	Consult	Inform	
	Change management	Promote awareness of asset management activities and engage with stakeholders		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC, FCS_ACC	AMSC	
		Assessment of impact of change and develop change management plan		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC, FCS_ACC	AMSC, SLT	
		Endorsement of proposed changes and change management plan		SLT	ECM	IP_AMGT	IP_ITP, ECM_AMTC, FCS_ACC	
AM Resource Capacity and Capability	Asset Management Competence	Asset Management competence assessment		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC	AMSC, SLT	
		Asset management training		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC	AMSC, SLT	
	Resources	Internal resource capability and capacity assessment		IP_ITP, ECM_AMTC	ECM	IP_AMGT	AMSC, SLT	
		Assess resource gaps and addition requirements		IP_ITP, ECM_AMTC	ECM	IP_AMGT	AMSC, SLT	
Asset Management Systems and Data Management	Asset Management System	Outsourcing procurement and management		IP_ITP, ECM_AMTC	ECM	IP_AMGT	AMSC, SLT	
		Develop asset management systems requirements		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC, FCS_ICT	AMSC, SLT	
		Systems management		FCS_ICT	F&CS	IP_AMGT, IP_ITP, ECM_AMTC	AMSC, SLT	
		Information standards and requirements documentation		IP_AMGT	ECM	IP_ITP, ECM_AMTC	FCS_ICT, PL_SP&P	
	Non-financial asset data capture and maintenance	Data review and cleansing		IP_AMGT	ECM	IP_ITP, ECM_AMTC	FCS_ACC	
		ADAC checks		IP_AMGT	ECM_IP	PL_SP&P	PL_SP&P	
		Spatial Data	Asset data capture		IP_AMGT	ECM_IP	PL_SP&P	IP_ITP, ECM_AMTC, FCS_ACC
		Missing asset investigations and data capture		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC	FCS_ACC	
		Asset data capture		IP_AMGT	ECM_IP	IP_ITP, ECM_PM	ECM_AMTC, FCS_ACC	
	Proprietary software management	Non-spatial Data	Missing asset investigations and data capture		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC	FCS_ACC
		Software acquisitions		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC, FCS_ICT	AMSC	
	Software management		FCS_ICT	F&CS	IP_AMGT	IP_ITP, ECM_AMTC		

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Road Furniture Portfolio Asset Management Plan

System Requirement	Activity Group	Activity	Sub-activity	Department or Role				
				Responsible	Accountable	Consult	Inform	
		Operation of software and management of outputs		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC	AMSC	
Asset Management and Planning	Asset Management Plans	Prepare asset management plans		IP_AMGT	ECM	IP_ITP, ECM_AMTC, FCS_ACC	AMSC	
		Asset management plan endorsement		ELCON	CEO	IP_AMGT	AMSC	
	Levels of Service	Develop customer levels of service		IP_ITP	ECM	IP_AMGT, ECM_AMTC	FCS_CE	
		Develop technical levels of service		IP_ITP	ECM	IP_AMGT, ECM_AMTC, PL_SP&P	ECM_PM	
		Develop and review/improve technical design standards		IP_ITP	ECM	IP_AMGT, ECM_AMTC, PL_SP&P	ECM_PM	
	Condition/Defect Monitoring	Level 1 Condition Assessment	Scheduling		ECM_AMTC	ECM	IP_ITP	IP_AMGT
			Assessment and reporting		ECM_AMTC	ECM	IP_ITP	IP_AMGT
		Level 2/3 Condition Assessment	Upload condition data to relevant AM systems		ECM_AMTC	ECM	IP_ITP, FCS_ICT	IP_AMGT
			Scheduling		IP_AMGT	ECM	IP_ITP	AMSC
	Defects Identification	Assessment and reporting		EXCON	IP_AMGT	IP_ITP	ECM_AMTC	
		Upload condition data to relevant AM systems		IP_AMGT	ECM	IP_ITP, FCS_ICT	ECM_AMTC	
		Upload defects data to relevant AM systems		ECM_AMTC, EXCON	ECM	IP_ITP, IP_AMGT	ECM_AMTC	
	Lifecycle modelling	Assess asset condition and performance and review useful lives		ECM_AMTC, IP_AMGT	ECM	IP_ITP, FCS_ICT	ECM_AMTC	
		Develop models and determine lifecycle costs		IP_AMGT	ECM	IP_ITP, ECM_AMTC	FCS_ACC	
		Project asset values and determine financial benchmarks		IP_AMGT	ECM	IP_ITP, ECM_AMTC	FCS_ACC	
Project and assess asset performance and condition under different funding scenarios			IP_AMGT	ECM	IP_ITP	AMSC		
Undertake industry benchmarking			IP_AMGT	ECM	IP_ITP	AMSC		
Financial management, data capture and reporting	Financial Register	Initial financial recognition		FCS_ACC	F&CS	IP_AMGT	IP_ITP	
		Maintain financial asset register		FCS_ACC	F&CS	IP_AMGT	IP_AMGT	
	Asset Valuations	Revaluation of financial assets		FCS_ACC	F&CS	IP_AMGT	IP_ITP	
		Valuation of non-financial assets		IP_AMGT	ECM	IP_ITP	FCS_ACC	
		Develop and maintain a schedule of asset replacement cost unit rates		FCS_ACC	F&CS	IP_ITP	IP_AMGT	
	Budgets/ePIDS	Raise ePIDS		IP_ITP, ECM_AMTC	ECM	IP_AMGT	FCS_ACC	

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

System Requirement	Activity Group	Activity	Sub-activity	Department or Role			
				Responsible	Accountable	Consult	Inform
	Financial reporting	Annual budget submissions		IP_ITP, ECM_AMTC	ECM	IP_AMGT	FCS_ACC
		Financial management of approved budgets		FCS_ACC	F&CS	IP_ITP, ECM_AMTC	IP_AMGT
		Dashboarding and reporting of financial performance		IP_AMGT	ECM	FCS_ACC	IP_ITP, ECM_AMTC
Asset creation	New capital works	Design and specifications		IP_ITP, ECM_AMTC	ECM	IP_AMGT, PL_SP&P	EXCON
		Procurement and project management		ECM_PM	ECM	IP_ITP	IP_ITP, ECM_AMTC
		Delivery, testing and commissioning		EXCON	ECM	ECM_PM	IP_ITP, ECM_AMTC, IP_AMGT
	Asset replacement	Design and specifications		IP_ITP, ECM_AMTC	ECM	IP_AMGT, PL_SP&P	EXCON
		Procurement and project management		ECM_PM	ECM	IP_ITP	IP_ITP, ECM_AMTC
		Delivery, testing and commissioning		EXCON	ECM	ECM_PM	IP_ITP, ECM_AMTC, IP_AMGT
	Donated assets	Design and specifications		DEV	DEV	PL_SP&P	IP_AMGT
		Procurement and project management		DEV	DEV	PL_SP&P	IP_AMGT
		Delivery, testing and commissioning		DEV	DEV	PL_SP&P	IP_ITP, ECM_AMTC, IP_AMGT
Asset Operation and Maintenance	Asset Maintenance	Asset/facilities maintenance		ECM_AMTC	ECM	IP_ITP	IP_AMGT
		Develop asset/facilities maintenance plans		ECM_AMTC	ECM	IP_ITP	IP_AMGT
		Work order management		ECM_AMTC	ECM	IP_ITP	IP_AMGT
	Operational service delivery	Operational planning and management		ECM_AMTC	ECM	IP_ITP	IP_AMGT
		Equipment management		ECM_AMTC	ECM	IP_ITP	IP_AMGT
	Customer service requests	Monitoring and response to customer service requests		ECM_AMTC	ECM	IP_ITP	IP_AMGT
	Leasing	Procurement and management of leases		CES_PS	C&ES	IP_ITP	IP_AMGT
Risk Management	Risk management	Review, update corporate risk management plan		IP_AMGT	ECM	IP_ITP, ECM_AMTC	FCS_G&ES
		Implement risk management recommendations		IP_ITP, ECM_AMTC	ECM	IP_AMGT	FCS_G&ES
Asset Performance and Utilisation	Utilisation	Assess asset/facility utilisation		IP_ITP	ECM	ECM_AMTC	IP_AMGT
	Capacity	Assess asset/facility capacity		IP_ITP	ECM	ECM_AMTC	IP_AMGT
	Dependability	Assess asset/facility availability, reliability, criticality etc.		IP_ITP	ECM	ECM_AMTC	IP_AMGT
	Performance	Monitor, analyse and evaluate asset performance		IP_ITP	ECM	ECM_AMTC	IP_AMGT

Moreton Bay Regional Council

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

System Requirement	Activity Group	Activity	Sub-activity	Department or Role			
				Responsible	Accountable	Consult	Inform
	Non-conformance	Identify nonconformity and undertake corrective action		IP_ITP	ECM	IP_AMGT	IP_AMGT
	Optimisation	Assess network/service configuration for optimisation and value management		IP_ITP	ECM	IP_AMGT	IP_AMGT
Environment and Sustainability	Environment and Sustainability	and Environmental management		IP_ITP	ECM	IP_AMGT, PL_EP&P, CES_ES	IP_AMGT
		Energy management		IP_ITP	ECM	IP_AMGT, CES_ES	IP_AMGT
		Sustainability monitoring and assessment		IP_ITP	ECM	IP_AMGT, CES_ES	IP_AMGT
		Assess impact of climate change and appropriate actions		IP_ITP	ECM	IP_AMGT, CES_ES	IP_AMGT
Asset End of Life	Asset Disposals	Disposal planning		IP_ITP	ECM_IP	PL_SP&P	ECM_AMTC, IP_AMGT, FCS_ACC
		Design and specifications		IP_ITP	ECM	PL_SP&P	ECM_AMTC
		Disposal and site remediation		ECM_PM	ECM	ECM_AMTC, PL_SP&P	IP_AMGT, FCS_ACC
		Financial de-recognition		FCS_ACC	F&CS	IP_ITP	IP_AMGT
Review and Audit	Asset Management Review and Audit	Internal audit		INAUDT	CEO	IP_ITP, IP_AMGT, FCS_ACC	CEO, SLT
		External audit		EXAUDT	F&CS	IP_ITP, IP_AMGT, FCS_ACC	CEO, ELCO
		Asset management maturity assessment		EXCON	IP_AMGT	IP_ITP, IP_AMGT, FCS_ACC	AMSC
Innovation and improvement	Innovation	Explore and implement innovation improvements		INNO	ECM	IP_ITP, ECM_AMTC	SLT, ELCO
	Continual improvement	Planning, management and implementation of asset management improvements		IP_AMGT	ECM_IP	IP_ITP, ECM_AMTC, FCS_ACC	AMSC

Department/Role Abbreviation Descriptions:

Abbrev.	Definition
AMSC	AM Steering Committee
C&ES	Community and Environmental Services
CEO	Chief Executive Officer
CES_CR	Customer Responses
CES_CS	Cultural Services
CES_CSS&R	Community Service, Sport and Recreation
CES_ES	Environmental Services

Abbrev.	Definition
ECM_DM	Disaster Management
ECM_IP	Infrastructure Planning
ECM_MILL	The Mill
ECM_OPS	Operations
ECM_PM	Project Management
ECM_WS	Waste Services
ECODEV	Economic Development
ELCO	Elected Council
EXAUDT	External Audit

Abbrev.	Definition
INAUDT	Internal Audit
INNO	Innovation Team
IP_AMGT	Asset Management
IP_B&FP	Building and Facilities Planning
IP_COMM	Communications
IP_DWCPC	Drainage, Waterways and Coastal Planning
IP_ITP	Integrated Transport Planning
IP_PRP	Parks & Recreation Planning

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Abbrev.	Definition
CES_OPS	Operations
CES_PS	Property Services
COMM	Community
DEVL	Developers
ECM	Engineering, Construction and Maintenance
ECM_AMTC	Asset Maintenance
ECM_DEV	Development

Abbrev.	Definition
EXCON	External contractor/consultant
F&CS	Finance and Corporate Services
FCS_ACC	Accounting Services
FCS_CE	Community Engagement
FCS_G&ES	Governance and Executive Services
FCS_ICT	Information and Communications Technology
FCS_PCS	People, Culture and Safety

Abbrev.	Definition
IP_SIP	Strategic Infrastructure Planning
LEGAL	Legal Services
PL	Planning
PL_DS	Development Services
PL_EP&P	Environmental Planning and Policy
PL_SP&P	Strategic Planning and Placemaking
S&E	Strategy and Engagement
SLT	Senior Leadership Team

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Appendix B - Road Furniture Asset Attributes

Asset Group/Type	Asset Attribute
All (Asset Register)	<ul style="list-style-type: none"> Description/Details: (kerb and channel, guardrail, subsoil drainage, flush point, traffic signal, traffic island, signage, bus stop, on road cycleway symbol) Location (GIS) Street Address Install Date Commission Date Last Inspected Date Owner (MBRC, DTMR) Asset Star Rating (1, 2, 3, 4 or 5) Condition
Roads/Signage	<ul style="list-style-type: none"> Material Type - Warning MUTCAD Sign Code Sign Text Last Replaced Date Manufactured Date *Other Identification
Roads/Bus Stop	<ul style="list-style-type: none"> Shelter Material Bus Stop Type Length (m) Height (m) Width (m) HASTUS Number Trankslink Number
Roads/Guardrail	<ul style="list-style-type: none"> Upright Material Link Material Approach Type Departure Type Length (m) Height (m) Upright Number
Roads/Kerb and Channel	<ul style="list-style-type: none"> Type Hierarchy Length (m)
Roads/Subsoil Drainage	<ul style="list-style-type: none"> Use Type Length (m)
Roads/Flush Point	<ul style="list-style-type: none"> Function
Roads/On Road Cycleway/Cycleway Symbol	<ul style="list-style-type: none"> Cycleway type Last replaced date

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset Group/Type	Asset Attribute
Roads/Traffic Island	<ul style="list-style-type: none"> • Type • Kerb type • Kerb length • Percent AC • Percent concrete • Percent grass • Area (m2) • Percent gravel • Percent landscape • Percent pavers • Percent synth grass • Percent other material
Roads/Traffic Signal	NO ATTRIBUTES

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Appendix C - Description of Current Defects Types

Defect Type	Description
Guardrail damage	Any physical damage on the structure caused by vandalism, impacts, or other causes.
Kerb and channel damage	Any physical damage on the structure caused by vandalism, impacts, or other causes.
Signage damage	Any physical damage on the structure caused by vandalism, impacts, or other causes.
Kerb and channel structural damage	Physical damage which impedes the effectiveness of the structure.
Kerb and channel water ponding	Water ponding where there appears to be inadequate drainage due to blockage, design fault or structural damage.
Kerb and channel blockage	Blockage of drain way causing inadequate drainage
Kerb and channel 2019 survey	Survey done in 2019 where defects were created as a way of recording the sections of kerb that were condition 4 or 5.
Bus shelter damage	Any physical damage on the structure caused by vandalism, impacts, or other causes.
Bus shelter work request	Defects that are identified as a result of a CSR.
Signage plate missing	Sign plate missing and needs replacement.
Signage post and plate missing	Sign plate and post missing and need replacement.
Signage plate bent/damaged	Sign plate bent or damaged.
Sign plate realignment	Sign plates that have become misaligned due to weather or damage.
Signage graffiti	Sign plate has graffiti on it.
Signage cleaning	Sign plate is not clearly visible and needs cleaning.
Signage fading	Sign plate has faded to the point that it is not clearly visible.
Signage post damaged/bent	Sign post is damaged or bent.
Signage (AI)	Any sign defect picked up by AI inspections.
Traffic Island work request	Defects identified through work requests for traffic islands.

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Appendix D - Risk Matrix Table

Risk Category	Risk Type	Causation	Consequences	Existing Control Measures	Likelihood	Consequence	Residual Risk Rating
Operational	Service Delivery	Defective kerb and channel	Can allow water ingress into the pavement causing failure and trip hazards to pedestrians. Reduced public confidence in Council's management of the road network.	Kerb and channel condition assessment and defect identification and rectification.	High	Low	Low
Operational	Service Delivery	Ineffective or inadequate inspection and maintenance regime of road signs.	Unsafe traffic conditions, poor wayfinding, and customer complaints.	Increased inspection regime through the use of AI to include inspection of road signs and markings, identification of missing signs and prioritised reporting of defects.	Very High	Moderate	Medium
Strategic	External Regulatory and Legal	Bus stops not brought up to standard with the current DDA regulations.	Failure to meet legislative requirements DDA compliance resulting in reduced level of service and customer complaints.	Identification of non-compliant bus stops and scheduling of works to modify existing stops in order to bring them up to compliance standard. 100% compliance is expected by Dec 2021.	Low	Low	Low
Strategic	Public Safety	Poorly located bus stops.	Complaints from nearby residents, reduced visibility of passengers or buses	Undertake community consultation when locating bus stops and ensure they comply with	Moderate	Moderate	Low

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Supporting Information

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Risk Category	Risk Type	Causation	Consequences	Existing Control Measures	Likelihood	Consequence	Residual Risk Rating
			(missed services), obstruction of safe sight distances and/or other unsafe traffic conditions.	industry standards and local engineering and planning requirements. Bus stop locations are pre-determined by translink in accordance with Australian Standards and the MUTCD (Manual of uniform traffic control devices).			
Operational	Service Delivery	Defects such as structural faults, uneven surfaces and poor condition seats for bus stops.	Significant injury to users and poor public perception of Council.	No specific defect or condition assessments are currently carried out for bus stops. Implement regular or annual inspection regimes for condition assessment. Expand AI inspections to capture bus stop defects.	High	Major	Moderate
Operational	Service Delivery	Ineffective or inadequate inspection and maintenance regime of traffic islands.	Unsafe pedestrian access, unaesthetically pleasing and customer complaints.	Expand current inspection program through the use of AI to aid in scheduling maintenance activities where needed.	High	Moderate	Low

Moreton Bay Regional Council

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Risk Category	Risk Type	Causation	Consequences	Existing Control Measures	Likelihood	Consequence	Residual Risk Rating
Strategic	Public Safety	Insufficient or impractical connectivity between footpaths and bus stops. Inadequate access or connectivity due to surrounding landscape or street scape or poor planning of connectivity between assets.	Unsafe access to and from bus stops could lead to injury or reduced public use of bus stops and poor public perception of council.	Renewals or new construction works are assessed for connectivity and access. Implement assessment of existing assets to pick up connectivity and access issues.	High	Moderate	Low
Strategic	Public Safety	Inadequate access to and from traffic islands that are pedestrian refuges. Traffic islands not up current standards.	Unsafe access to and from traffic islands could lead to injury or poor public perception of council.	Renewals or new construction works are assessed for connectivity and access. Implement assessment of existing assets to pick up connectivity and access issues.	High	Moderate	Low
Operational	Service Delivery	Ineffective or inadequate inspection and maintenance regime of traffic signals.	Deterioration of traffic signals could lead to malfunction of traffic signals and unsafe traffic conditions.	Any faults in traffic lights are automatically reported to the main roads traffic system which then notifies MBRC to carry out repairs or maintenance as required. Inspections/audits are done by MBRC but only 4 sites per year are audited.	Moderate	High	Low
Operational	Service Delivery	Sub soil drainage and flush points	Increased roads safety risk due to water	Currently no inspection or maintenance regime.	Low	Low	Low

Moreton Bay Regional Council

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Risk Category	Risk Type	Causation	Consequences	Existing Control Measures	Likelihood	Consequence	Residual Risk Rating
			ponding if there is a blockage.	Implement maintenance schedule for regular clean out of flush points.			
Strategic	Regulatory and Legal	Insufficient upgrading to guard rails to ensure that all guard rail are compliant to AS1657.	Decreased road safety to public and failure to meet legislative requirements for road safety and therefore potential exposure to legal action.	Currently no inspections for compliance done on guard rails. Implement identification of non-compliant guardrails and scheduling of works to modify existing guardrails in order to bring them up to compliance standard.	High	High	High
Operation	Public Safety	Defects such as structural faults, due to long term deterioration or to sudden impact damage of guardrails.	Increased risk of guardrail not being up to perform as it should. Possible failure to comply with legislative or design requirements. Increased safety risk to the public.	Defects are picked up through AI inspections. No condition assessments are currently done. Implement regular scheduled condition assessment and defect identification and rectification.	High	High	Low
Strategic	External Regulatory and Legal	Lack of condition inspections or routine maintenance for Cycleway symbols.	Road markings that are not up to standard in accordance with MBRC Standard drawing MBRC-7001.	Implement maintenance regime so that all cycleway line marking is maintained according to MBRC7001.	High	Moderate	Low

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Appendix E - Overall Asset Type Replacement / Renewal Graphs

Lifecycle modelling has been conducted at the asset type level to determine the future costs and timing for renewal and replacement of road furniture assets.

The following graphs illustrate the results of the lifecycle modelling.

This appendix should also be read in conjunction with Appendices F and G , that illustrate the impact of current and recommended funding on the condition of the overall portfolio as well as by asset type , having being derived from the same models.

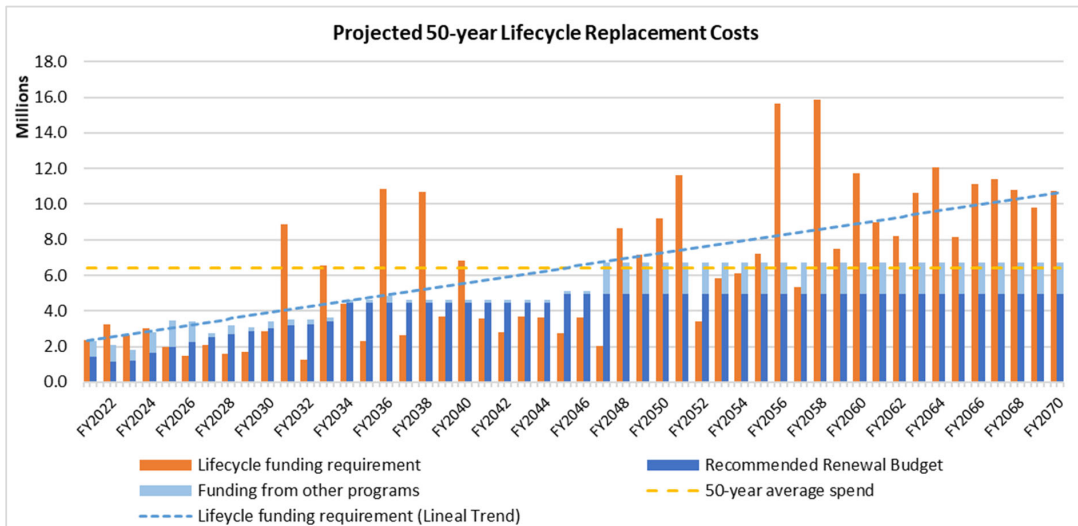


Figure 45 - Projected 50 year lifecycle capital renewal and replacement costs

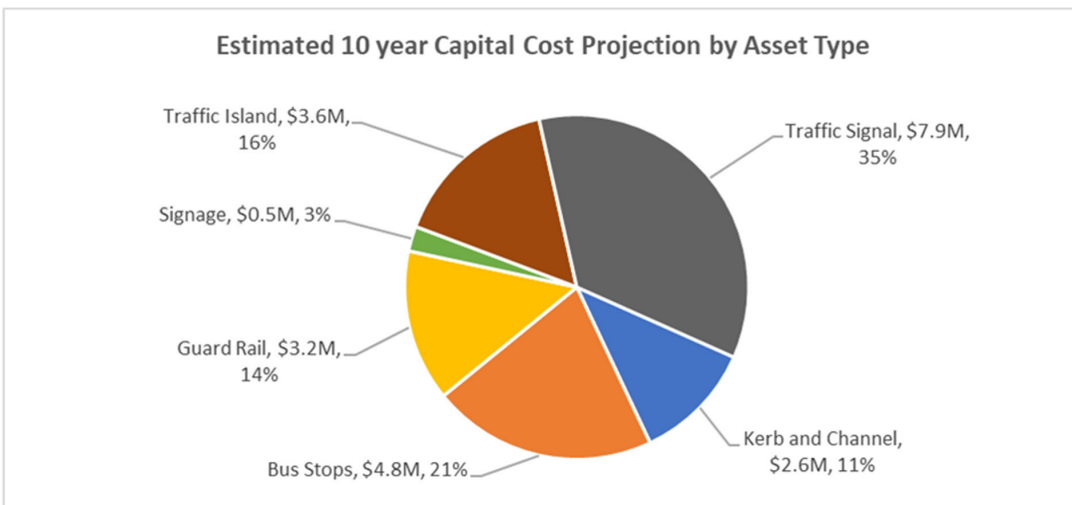


Figure 46 - Estimated 10 year capital cost by asset type

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

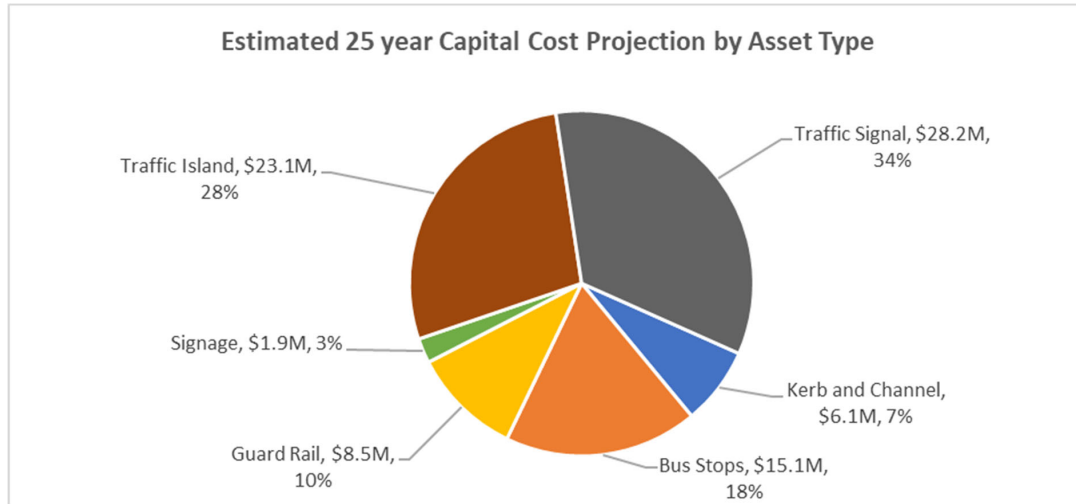


Figure 47 - Estimated 25 year capital cost by asset type

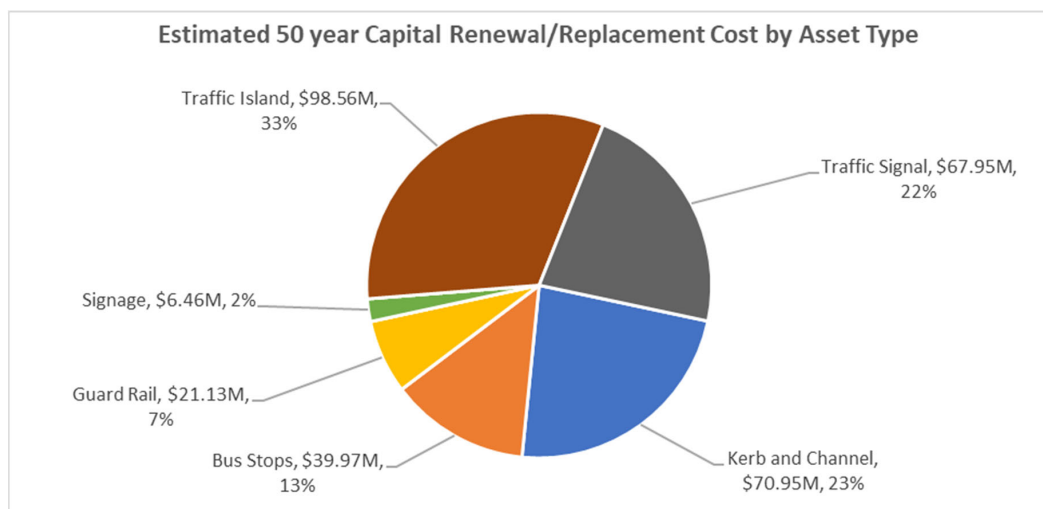


Figure 48 - Estimated 50 year capital cost by asset type

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Appendix F - Projected Condition - Overall

The projected condition of MBRC's road furniture assets has been determined as part of the lifecycle modelling at an asset type level for two different scenarios. The following charts illustrate the projected condition for all assets over a 50-year period. Below condition 4 is considered an unacceptable level of service.

All Road Furniture Assets

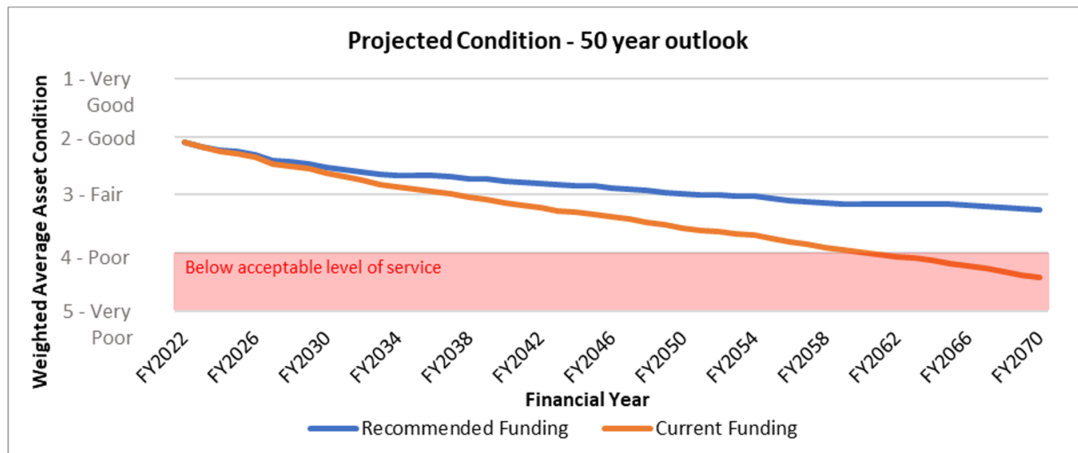
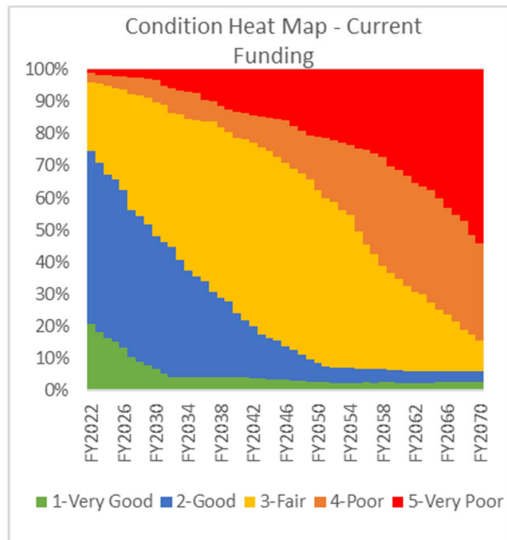


Figure 49 - Projected condition for all asset types

Current Funding:



Recommended Funding:

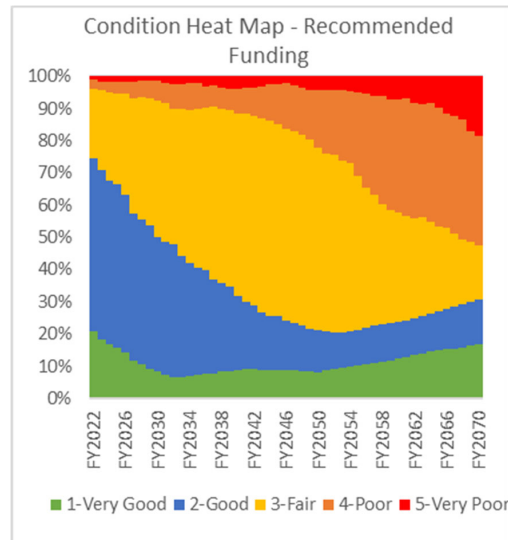


Figure 50 - Condition heat maps for all assets

Road Furniture Portfolio Asset Management Plan

Appendix G - Asset Summary by Asset Type Including Projected Condition

The projected condition of MBRC's road furniture assets has been determined as part of the lifecycle modelling for two different scenarios. The following charts illustrate the projected condition for each asset type over a 50-year period. Below condition 4 is considered to be an unacceptable level of service.

The charts below also show the age profile of each asset type as well as the asset consumption ratio and asset sustainability ratio for financial assets.

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Bus Stops

Age Profile:

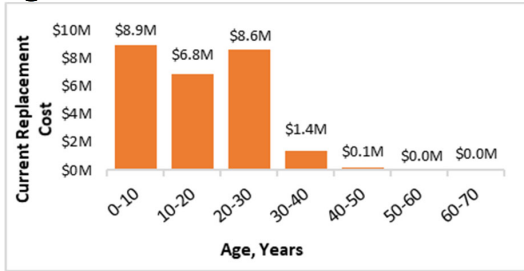


Figure 51 - Age profile for bus stops

Condition Profile:

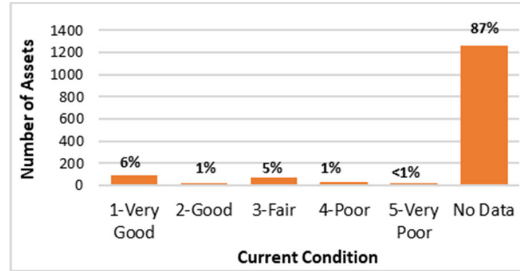
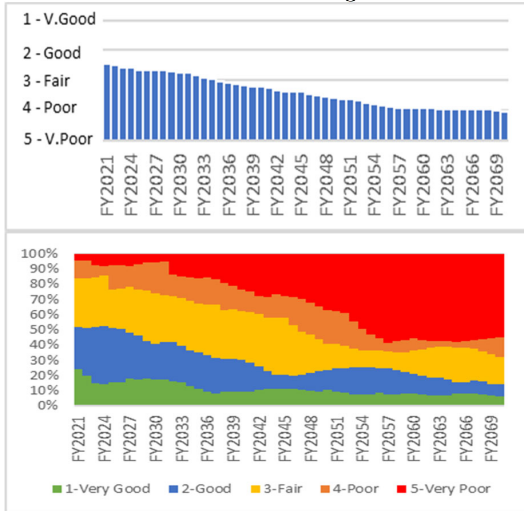


Figure 52 - Condition profiles for bus stops

Projected Condition:

Current Funding



Recommended Funding

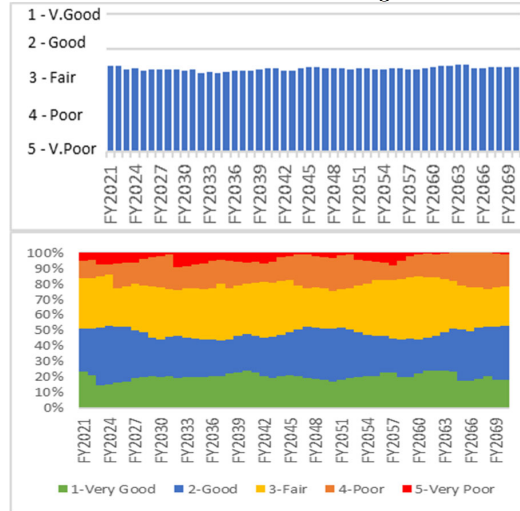


Figure 53 - Condition profiles and heat maps for current and recommended funding scenarios

Asset Consumption Ratio

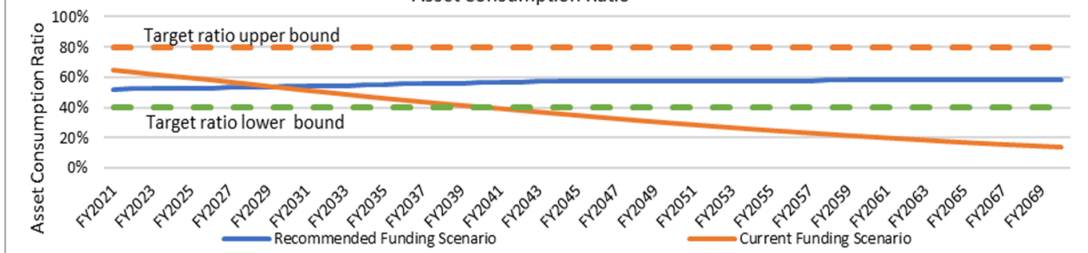


Figure 54 - Projected Asset Consumption Ratio for bus stops

Asset Sustainability Ratio

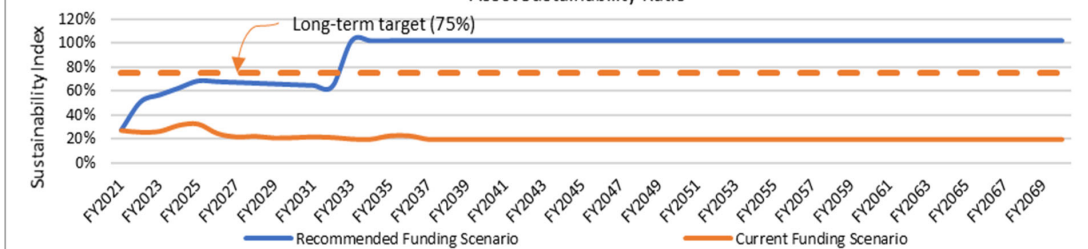


Figure 55 - Projected Asset Sustainability Ratio for bus stops

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Cycleway Symbols (non-financial asset)

Age Profile:

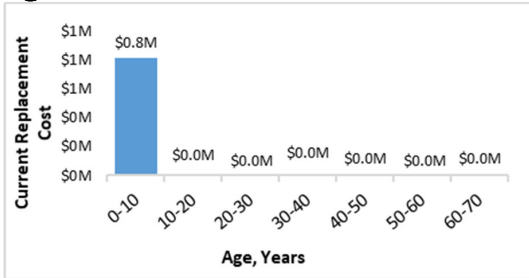


Figure 56 - Age profile for cycleway symbols

Condition Profile:



Figure 57 - Condition profiles for cycleway symbols

Projected Condition:

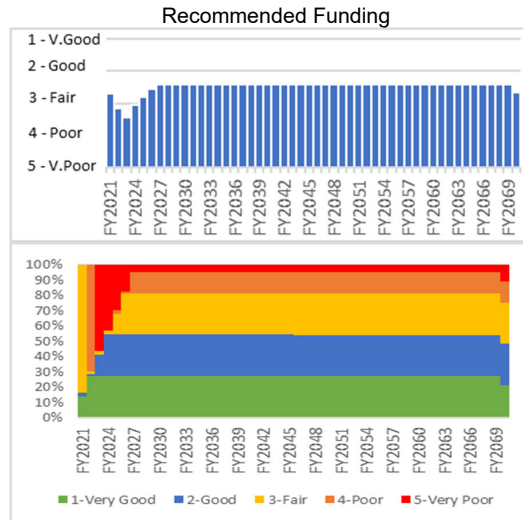
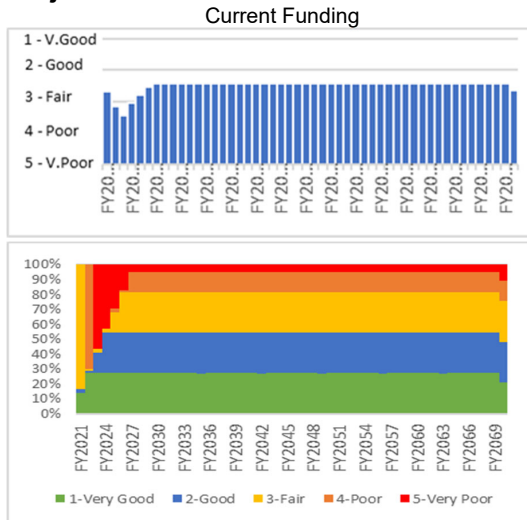


Figure 58 - Condition profiles and heat maps for current and recommended funding scenarios

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Guardrails

Age Profile:

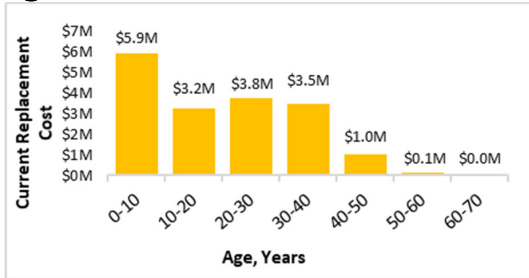


Figure 59 - Age profile for guardrails

Condition Profile:

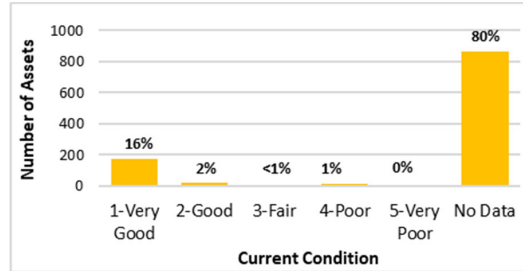
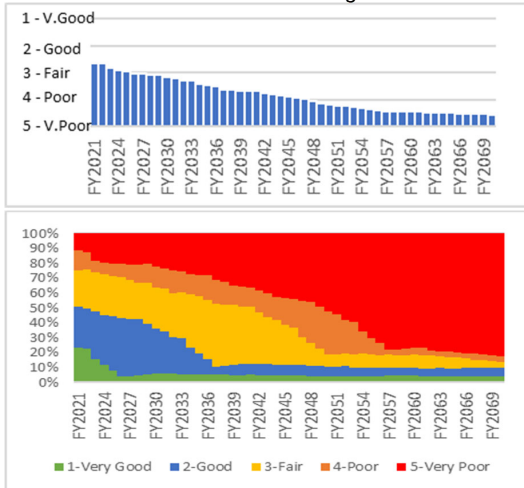


Figure 60 - Condition profiles for guardrails

Projected Condition:

Current Funding



Recommended Funding

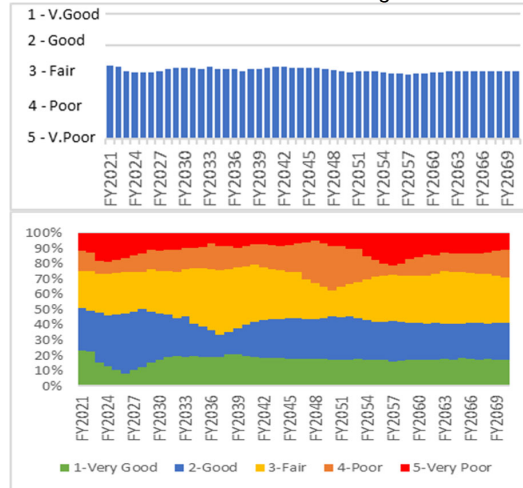


Figure 61 - Condition profiles and heat maps for current and recommended funding scenarios

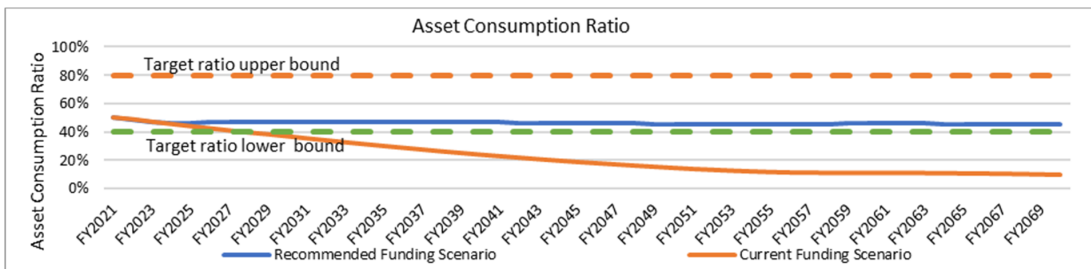


Figure 62 - Projected Asset Consumption Ratio for guardrails

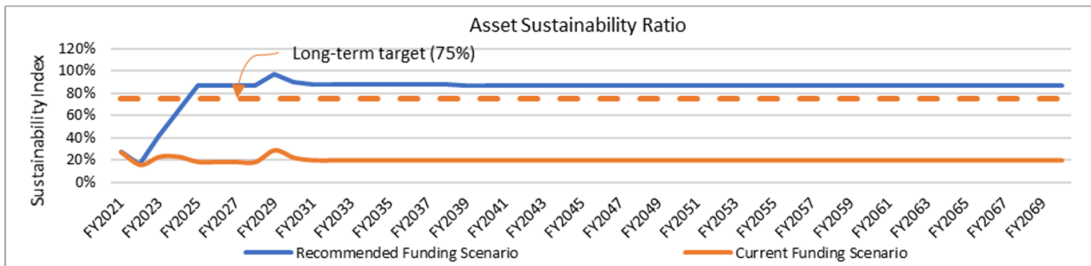


Figure 63 - Projected Asset Sustainability Ratio for guardrails

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Kerb and Channel

Age Profile:

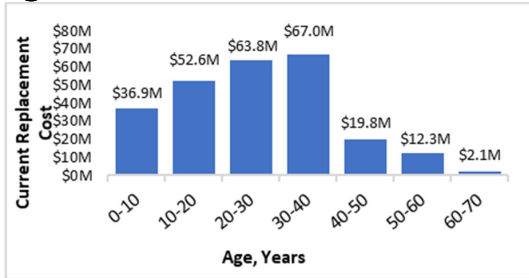


Figure 64 - Age profile for kerb and channel

Condition Profile:

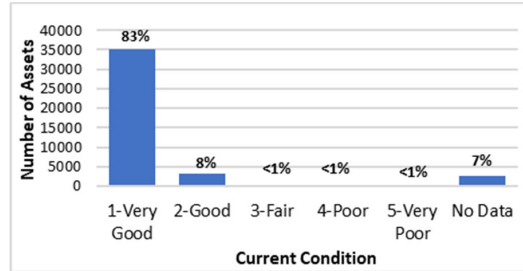


Figure 65 - Condition profiles for kerb and channel

Projected Condition:

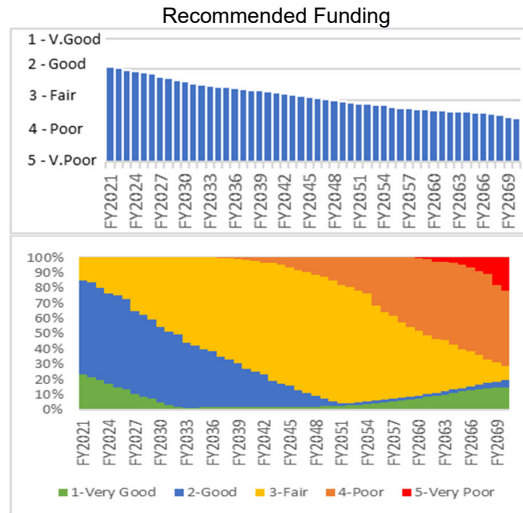
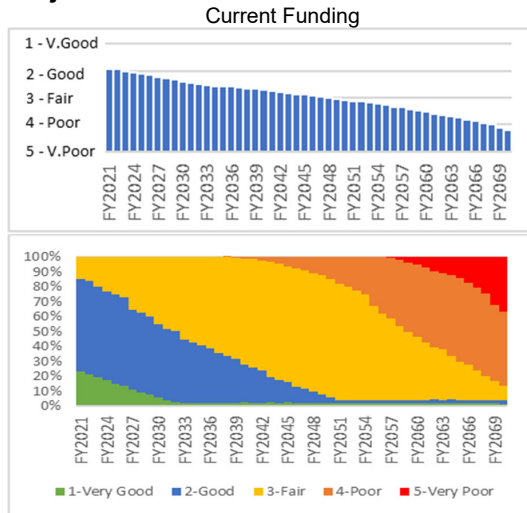


Figure 66 - Condition profiles and heat maps for current and recommended funding scenarios

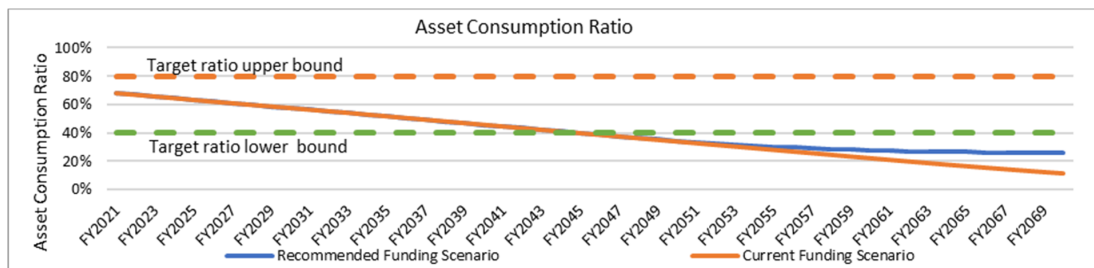


Figure 67 - Projected Asset Consumption Ratio for kerb and channel

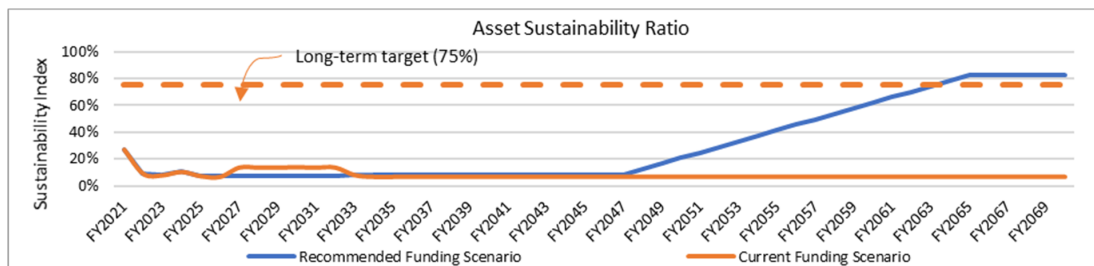


Figure 68 - Projected Asset Sustainability Ratio for kerb and channel

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Signage (financial assets only)

Age Profile:

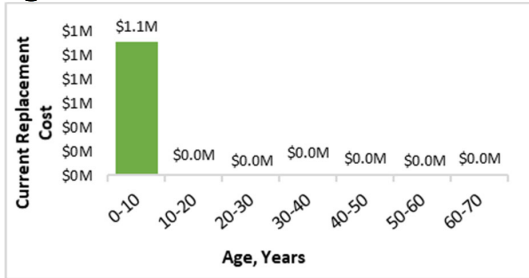


Figure 69 - Age profile for signage

Condition Profile:

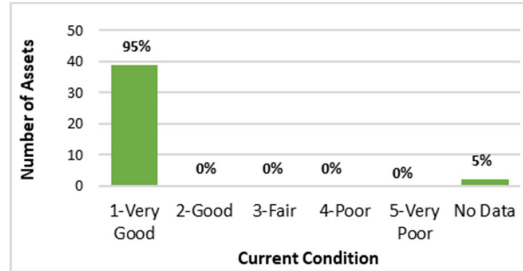


Figure 70 - Condition profiles for signage

Projected Condition:

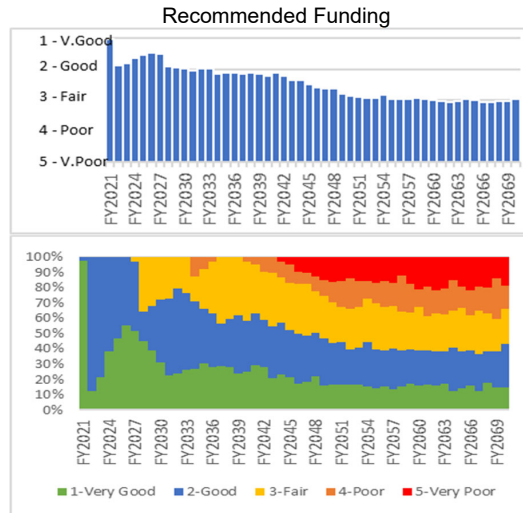
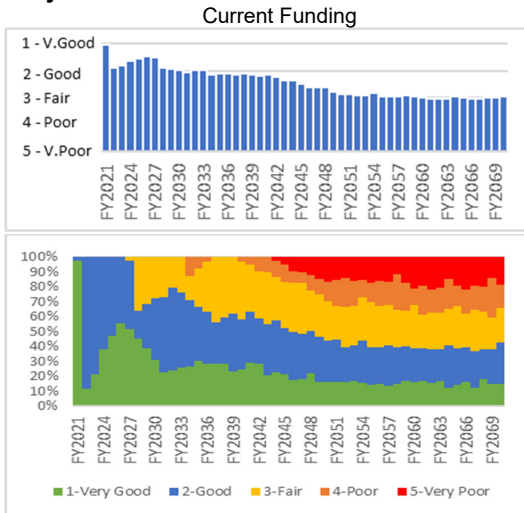


Figure 71 - Condition profiles and heat maps for current and recommended funding scenarios

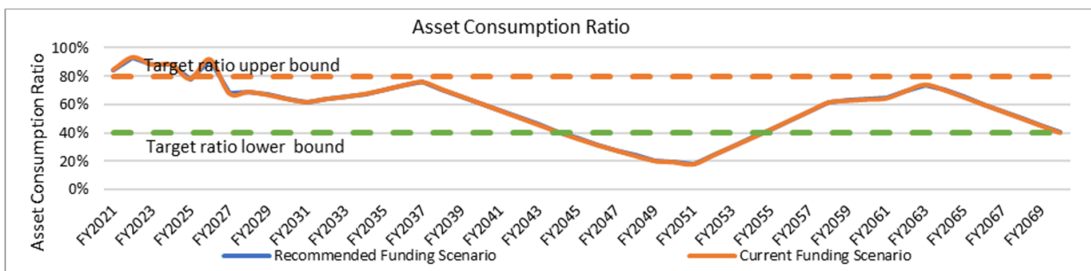


Figure 72 - Projected Asset Consumption Ratio for signage

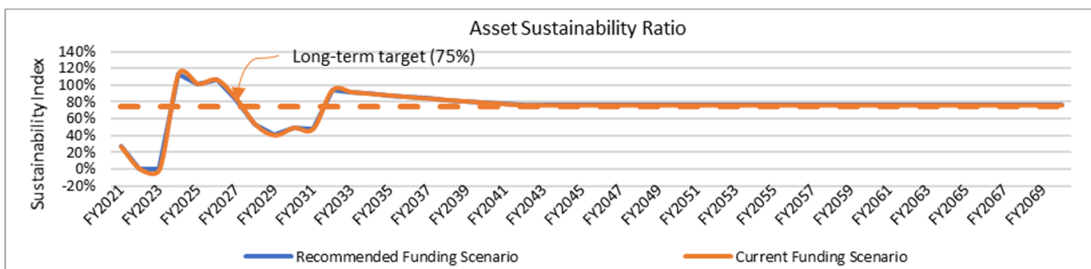


Figure 73 - Projected Asset Sustainability Ratio for signage

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Sub Soil Drainage and Flush Points (non-financial assets)

Age Profile:

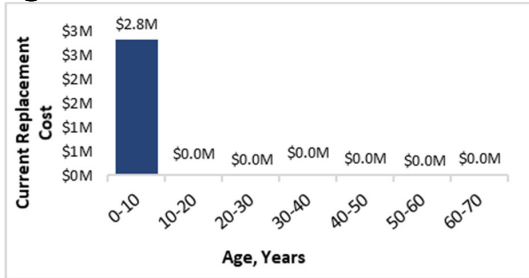


Figure 74 - Age profile for subsoil drainage

Condition Profile:

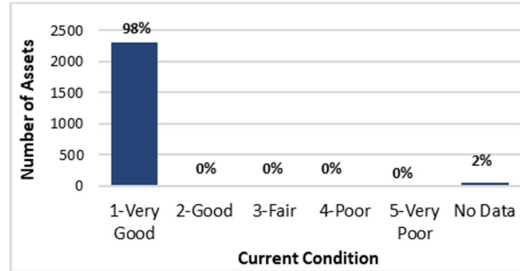


Figure 75 - Condition profiles for subsoil drainage

Projected Condition:

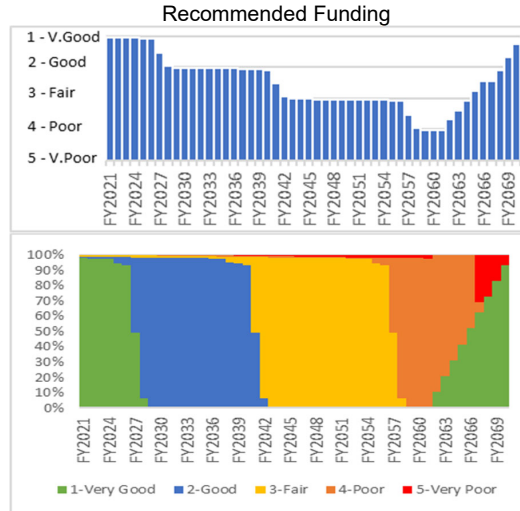
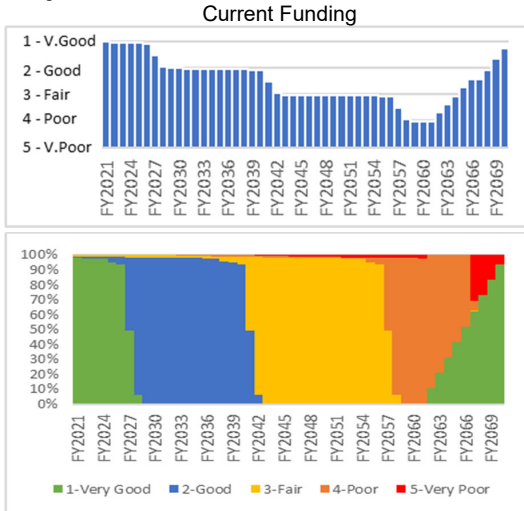


Figure 76 - Condition profiles and heat maps for current and recommended funding scenarios

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Traffic Signals

Age Profile:

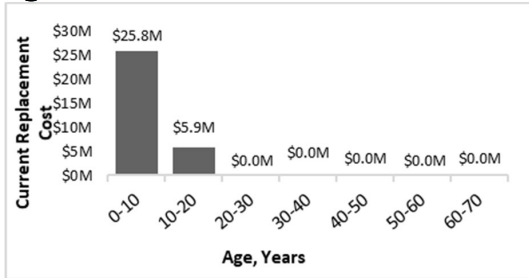


Figure 77 - Age profile for traffic signals

Condition Profile:

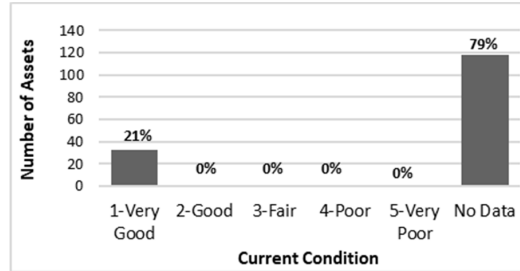


Figure 78 - Condition profiles for traffic signals

Projected Condition:

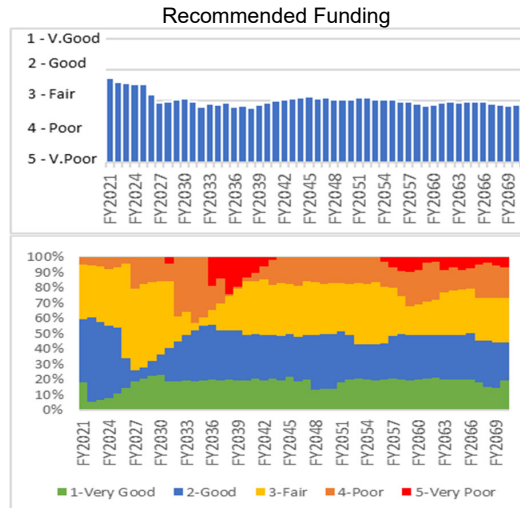
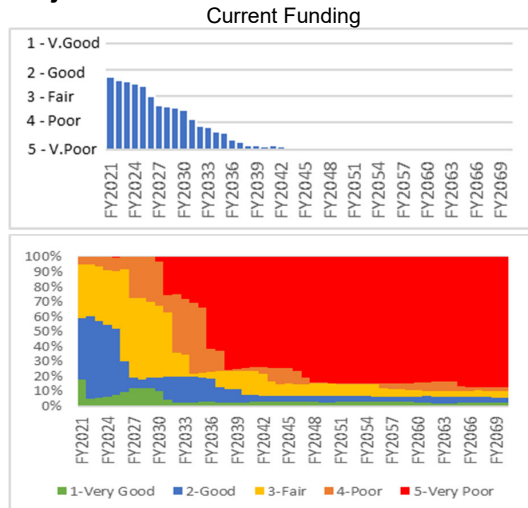


Figure 79 - Condition profiles and heat maps for current and recommended funding scenarios

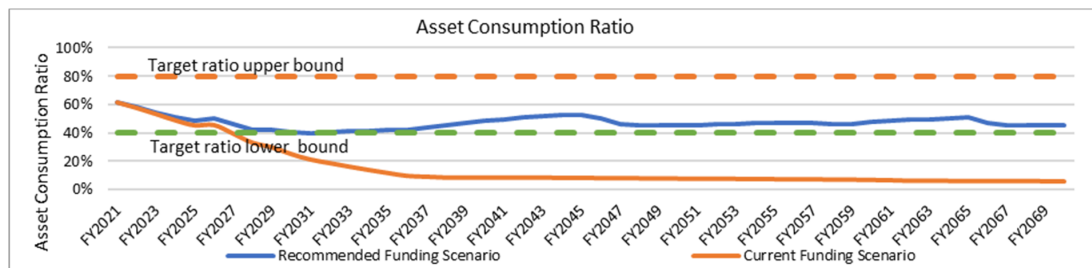


Figure 80 - Projected Asset Consumption Ratio for traffic signals

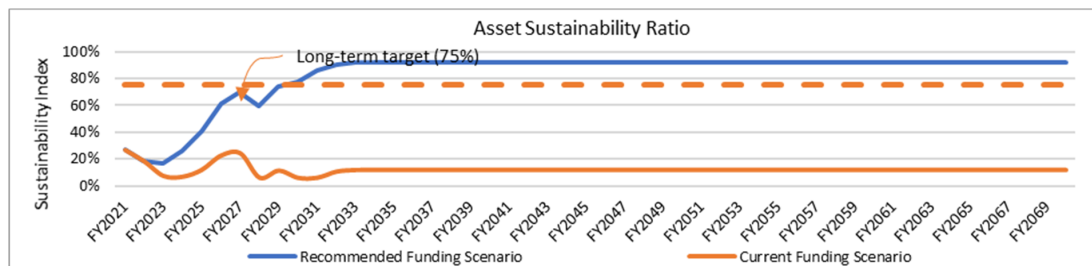


Figure 81 - Projected Asset Sustainability Ratio for traffic signals

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Traffic Islands

Age Profile:

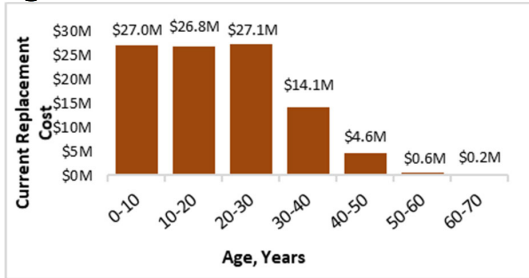


Figure 82 - Age profile for traffic islands

Condition Profile:

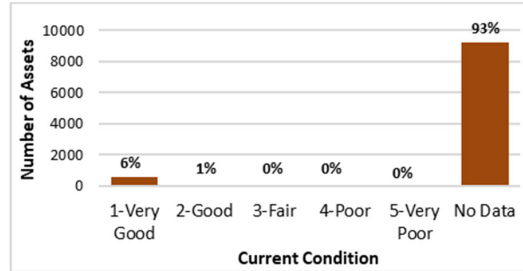
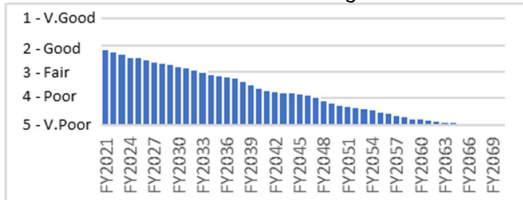


Figure 83 - Condition profiles for traffic islands

Projected Condition:

Current Funding



Recommended Funding

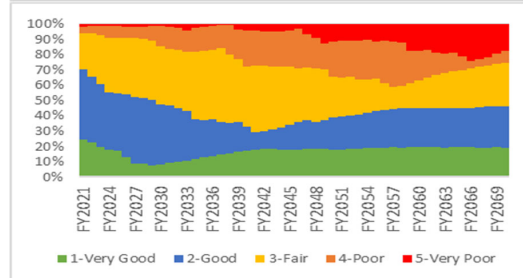
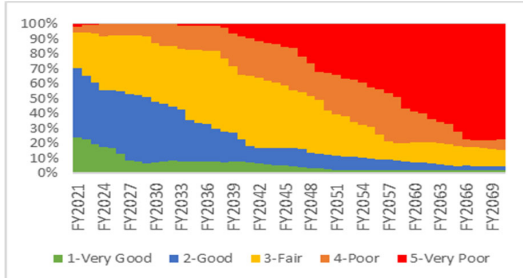
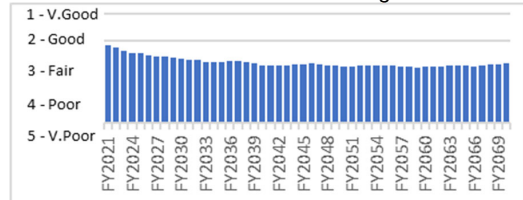


Figure 84 - Condition profiles and heat maps for current and recommended funding scenarios

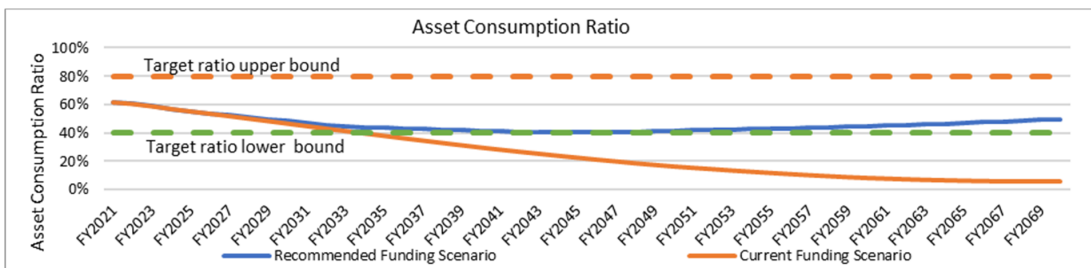


Figure 85 - Projected Asset Consumption Ratio for traffic islands

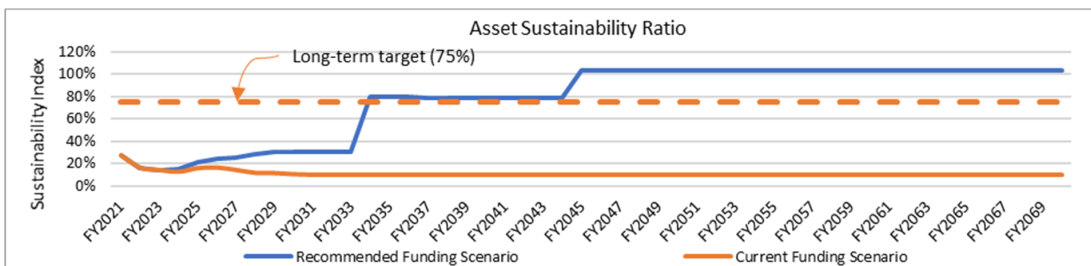


Figure 86 - Projected Asset Sustainability Ratio for traffic islands

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Appendix H - Indicative 10-year Capital New/Upgrade and Renewal Plan

The table below represents an indicative capital works plan, derived from undertaking lifecycle cost modelling based on current condition and asset data. All costs are in 2021 dollar terms and do not include allowance for escalation, inflation or GST. The program of works is subject to review and change as further condition data becomes available.

Bus Stops Capital New/Upgrade/Renewal Program

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
Capital renewal/replacement program for FY2022				
A00595779	Caboolture South - Grant Road - New Bus Stop Infrastructure - H311741 (ePid 111285)	Bus Shelter/Stop	Replace and upgrade	3,000
A00162128	Clontarf - Maine Road - New Bus Stop Infrastructure - H310411 (ePid 111301)	Bus Shelter/Stop	Renew/replace	3,000
A00783269	Murrumba Downs - Castle Hill Drive - New Bus Stop Infrastructure - H312679 (ePid 111309)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783768	Albany Creek - Thiess Drive - New Bus Stop Shelter (H014083) (ePid 109275)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783147	Banksia Beach - Avon Avenue - New Bus Stop Shelter (H311337) (ePid 108993)	Bus Shelter/Stop	Replace and upgrade	22,000
A00783383	Bongaree - First Avenue - New Bus Stop Shelter (H311535) (ePid 109837)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783565	Burpengary - Morayfield Road - New Bus Stop Shelter (H318153) (ePid 109205)	Bus Shelter/Stop	Replace and upgrade	25,000
A00783533	Caboolture - Male Road - New Bus Stop Shelter (H319332) (ePid 109007)	Bus Shelter/Stop	Replace and upgrade	22,000
A00420518	Deception Bay - Ewart Street - New Bus Stop Infrastructure - H312053 (ePid 111287)	Bus Shelter/Stop	Replace and upgrade	3,000
A00668673	Griffin - Brays Road - New Bus Stop Shelter (H312260) (ePid 109004)	Bus Shelter/Stop	Replace and upgrade	24,000
A00783545	Kallangur - Marsden Road - New Bus Stop Shelter (H312378) (ePid 109272)	Bus Shelter/Stop	Replace and upgrade	25,000
A00783209	Kippa-Ring - Boardman Road - New Bus Stop Shelter (H312446) (ePid 109270)	Bus Shelter/Stop	Replace and upgrade	25,000
Multiple	MBRC - Bus Stops - DDA Minor Improvements Capitalisation (ePid 108803)	Bus Shelter/Stop	Replace and upgrade	124,000
A00612860	Narangba - Forest Ridge Drive - New Bus Stop Infrastructure - H312703 (ePid 111329)	Bus Shelter/Stop	Replace and upgrade	3,000
A00612835	Narangba - Forest Ridge Drive - New Bus Stop Shelter (H312704) (ePid 108997)	Bus Shelter/Stop	Replace and upgrade	29,000
A00783634	Upper Caboolture - Parkridge Avenue - New Bus Stop Shelter (H313492) (ePid 108986)	Bus Shelter/Stop	Replace and upgrade	22,000
A00783239	Warner - Brisbane Road - New Bus Stop Shelter (H317952) (ePid 109012)	Bus Shelter/Stop	Replace and upgrade	26,000
A00783614	Warner - Old North Road - New Bus Stop Shelter (H311626) (ePid 109232)	Bus Shelter/Stop	Replace and upgrade	3,000
A00470383	Woody Point - Oxley Avenue - New Bus Stop Shelter (H311228) (ePid 109000)	Bus Shelter/Stop	Replace and upgrade	32,000
			Subtotal for FY2022	400,000
Capital renewal/replacement program for FY2023				
A00783165	Bellmere - Belle Air Drive - New Bus Stop Infrastructure - H311457 (ePid 111333)	Bus Shelter/Stop	Replace and upgrade	3,000

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00595779	Caboolture South - Grant Road - New Bus Stop Infrastructure - H311741 (ePid 111285)	Bus Shelter/Stop	Replace and upgrade	23,100
A00162128	Clontarf - Maine Road - New Bus Stop Infrastructure - H310411 (ePid 111301)	Bus Shelter/Stop	Renew/replace	24,500
A00783515	Deception Bay - Lipscombe Road - New Bus Shelter Infrastructure - H318400 (ePid 111288)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783536	Margate - Margate Parade - New Bus Stop Infrastructure - H319687 (ePid 111303)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783269	Murrumba Downs - Castle Hill Drive - New Bus Stop Infrastructure - H312679 (ePid 111309)	Bus Shelter/Stop	Replace and upgrade	24,600
A00783655	Murrumba Downs - Pine River Drive - New Bus Stop Infrastructure - H319337 (ePid 111311)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783607	Narangba - Oakey Flat Road - New Bus Stop Infrastructure - H312720 (ePid 111330)	Bus Shelter/Stop	Replace and upgrade	3,000
A00914452	Albany Creek - Flamingo Drive - New Bus Stop Infrastructure - H014077 (ePid 111323)	Bus Shelter/Stop	Renew/replace	3,000
A00783768	Albany Creek - Thiess Drive - New Bus Stop Shelter (H014083) (ePid 109275)	Bus Shelter/Stop	Replace and upgrade	23,500
A00783383	Bongaree - First Avenue - New Bus Stop Shelter (H311535) (ePid 109837)	Bus Shelter/Stop	Replace and upgrade	26,500
A00783564	Burpengary - Morayfield Road - New Bus Stop Shelter (H318152) (ePid 108113)	Bus Shelter/Stop	Replace and upgrade	23,000
A00015598	Caboolture - Summerfields Drive - New Bus Stop Shelter (H311732) (ePid 109015)	Bus Shelter/Stop	Replace and upgrade	3,000
A00319335	Clontarf - Elizabeth Avenue - New Bus Stop Infrastructure - H311977 (ePid 111308)	Bus Shelter/Stop	Replace and upgrade	3,000
A00420518	Deception Bay - Ewart Street - New Bus Stop Infrastructure - H312053 (ePid 111287)	Bus Shelter/Stop	Replace and upgrade	23,500
A00783486	Ferny Hills - Kolora Crescent - New Bus Stop Infrastructure - H011303 (ePid 111325)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783763	Ferny Hills - Tarnook Drive - New Bus Stop Shelter H002649 (ePid 109276)	Bus Shelter/Stop	Renew/replace	3,000
Multiple	MBRC - Bus Stops - DDA Minor Improvements Capitalisation (ePid 108803)	Bus Shelter/Stop	Replace and upgrade	100,000
A00783416	Morayfield - Graham Road - New Bus Stop Infrastructure - H310774 (ePid 111280)	Bus Shelter/Stop	Replace and upgrade	3,000
A00612860	Narangba - Forest Ridge Drive - New Bus Stop Infrastructure - H312703 (ePid 111329)	Bus Shelter/Stop	Replace and upgrade	25,500
A00419757	North Lakes - Bounty Boulevard - New Bus Stop Shelter (H317655) (ePid 109011)	Bus Shelter/Stop	Replace and upgrade	3,000
A00369522	North Lakes - Bounty Boulevard - New Bus Stop Shelter (H317671) (ePid 108998)	Bus Shelter/Stop	Replace and upgrade	23,500
A00783419	Strathpine - Grahams Road - New Bus Stop Infrastructure - H319390 (ePid 111320)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783833	Strathpine - Windrest Street - New Bus Stop Shelter H316972 (ePid 109273)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783635	Upper Caboolture - Parkridge Avenue - New Bus Stop Shelter (H313493) (ePid 108987)	Bus Shelter/Stop	Replace and upgrade	21,000
A00783238	Warner - Brisbane Road - New Bus Stop Shelter (H317947) (ePid 109016)	Bus Shelter/Stop	Replace and upgrade	26,000
A00783614	Warner - Old North Road - New Bus Stop Shelter (H311626) (ePid 109232)	Bus Shelter/Stop	Replace and upgrade	25,000
A00782919	Woorim - First Avenue - New Bus Stop Infrastructure - H311239 (ePid 111271)	Bus Shelter/Stop	Renew/replace	3,000
A00782886	Bus Stop - Bunya Road	Bus Shelter	Renew/replace	6,480
A00783682	Bus Stop - Queen Elizabeth Dr	Bus Shelter	Renew/replace	8,820
			Subtotal for FY2023	450,000
Capital renewal/replacement program for FY2024				
A00783165	Bellmere - Belle Air Drive - New Bus Stop Infrastructure - H311457 (ePid 111333)	Bus Shelter/Stop	Replace and upgrade	25,500
A00319058	Clontarf - Elizabeth Avenue - New Bus Stop Infrastructure - H311970 (ePid 111306)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783515	Deception Bay - Lipscombe Road - New Bus Shelter Infrastructure - H318400 (ePid 111288)	Bus Shelter/Stop	Replace and upgrade	24,600

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00066137	Deception Bay - Warroo Drive - New Bus Stop Infrastructure - H312074 (ePid 111282)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783536	Margate - Margate Parade - New Bus Stop Infrastructure - H319687 (ePid 111303)	Bus Shelter/Stop	Replace and upgrade	28,000
A00783655	Murrumba Downs - Pine River Drive - New Bus Stop Infrastructure - H319337 (ePid 111311)	Bus Shelter/Stop	Replace and upgrade	22,000
A00783605	Narangba - Oakey Flat Road - New Bus Stop Infrastructure - H312715 (ePid 111331)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783607	Narangba - Oakey Flat Road - New Bus Stop Infrastructure - H312720 (ePid 111330)	Bus Shelter/Stop	Replace and upgrade	27,000
A00914452	Albany Creek - Flamingo Drive - New Bus Stop Infrastructure - H014077 (ePid 111323)	Bus Shelter/Stop	Renew/replace	23,500
A00783369	Bellara - Eucalypt Street - New Bus Stop Infrastructure - H311421 (ePid 111277)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783649	Bellmere - Piggott Road - New Bus Stop Infrastructure - H311462 (ePid 111286)	Bus Shelter/Stop	Replace and upgrade	3,000
A00015598	Caboolture - Summerfields Drive - New Bus Stop Shelter (H311732) (ePid 109015)	Bus Shelter/Stop	Replace and upgrade	24,000
A00319335	Clontarf - Elizabeth Avenue - New Bus Stop Infrastructure - H311977 (ePid 111308)	Bus Shelter/Stop	Replace and upgrade	21,000
A00633746	Clontarf - Maine Road - New Bus Stop Infrastructure - H310409 (ePid 111305)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783699	Eatons Hill - Saraband Drive - New Bus Stop Shelter - H011173 (ePid 109274)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783486	Ferny Hills - Kolora Crescent - New Bus Stop Infrastructure - H011303 (ePid 111325)	Bus Shelter/Stop	Replace and upgrade	28,000
A00783763	Ferny Hills - Tarnook Drive - New Bus Stop Shelter H002649 (ePid 109276)	Bus Shelter/Stop	Renew/replace	24,000
A00783503	Griffin - Lavender Drive - New Bus Stop Shelter (H317974) (ePid 109006)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783416	Morayfield - Graham Road - New Bus Stop Infrastructure - H310774 (ePid 111280)	Bus Shelter/Stop	Replace and upgrade	15,500
A00419757	North Lakes - Bounty Boulevard - New Bus Stop Shelter (H317655) (ePid 109011)	Bus Shelter/Stop	Replace and upgrade	23,500
A00319132	North Lakes - Endeavour Boulevard - New Bus Stop Shelter (H317660) (ePid 106848)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783110	Petrie - Affleck Avenue - New Bus Stop Infrastructure - H316635 (ePid 111312)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783419	Strathpine - Grahams Road - New Bus Stop Infrastructure - H319390 (ePid 111320)	Bus Shelter/Stop	Replace and upgrade	27,400
A00783833	Strathpine - Windrest Street - New Bus Stop Shelter H316972 (ePid 109273)	Bus Shelter/Stop	Replace and upgrade	25,000
A00783636	Upper Caboolture - Parkridge Avenue - New Bus Stop Infrastructure - H313491 (ePid 111334)	Bus Shelter/Stop	Replace and upgrade	3,000
A00782919	Woorim - First Avenue - New Bus Stop Infrastructure - H311239 (ePid 111271)	Bus Shelter/Stop	Renew/replace	23,500
A00015325	Bus Shelter - Eatons Crossing Road	Bus Shelter	Renew/replace	30,000
A00319019	Bus Shelter - Bunya Road	Bus Shelter	Renew/replace	8,820
A00782886	Bus Stop - Bunya Road	Bus Shelter	Renew/replace	2,340
A00783519	Bus Stop - Lynfield Dr	Bus Shelter	Renew/replace	1,600
A00783756	Bus Stop - Sylvester drive	Bus Shelter	Renew/replace	8,820
A00783758	Bus Stop - Tarandi St	Bus Shelter	Renew/replace	8,820
A00783759	Bus Stop - Tarandi St	Bus Shelter	Renew/replace	8,820
A00783760	Bus Stop - Tarandi St	Bus Shelter	Renew/replace	8,820
A00783761	Bus Stop - Tarandi St	Bus Shelter	Renew/replace	8,820
A00783790	Bus Stop - Ulster Dr	Bus Shelter	Renew/replace	8,820
A00783791	Bus Stop - Ulster Dr	Bus Shelter	Renew/replace	8,820
Subtotal for FY2024				500,000
Capital renewal/replacement program for FY2025				
A00319058	Clontarf - Elizabeth Avenue - New Bus Stop Infrastructure - H311970 (ePid 111306)	Bus Shelter/Stop	Replace and upgrade	27,400
A00066137	Deception Bay - Warroo Drive - New Bus Stop Infrastructure - H312074 (ePid 111282)	Bus Shelter/Stop	Replace and upgrade	27,000

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00783605	Narangba - Oakey Flat Road - New Bus Stop Infrastructure - H312715 (ePid 111331)	Bus Shelter/Stop	Replace and upgrade	30,100
A00783369	Bellara - Eucalypt Street - New Bus Stop Infrastructure - H311421 (ePid 111277)	Bus Shelter/Stop	Replace and upgrade	25,000
A00783649	Bellmere - Piggott Road - New Bus Stop Infrastructure - H311462 (ePid 111286)	Bus Shelter/Stop	Replace and upgrade	24,600
A00633746	Clontarf - Maine Road - New Bus Stop Infrastructure - H310409 (ePid 111305)	Bus Shelter/Stop	Replace and upgrade	25,000
A00783699	Eatons Hill - Saraband Drive - New Bus Stop Shelter - H011173 (ePid 109274)	Bus Shelter/Stop	Replace and upgrade	29,000
A00783314	Griffin - Dandelion Street - New Bus Stop Shelter (H319760) (ePid 109013)	Bus Shelter/Stop	Replace and upgrade	3,000
A00783503	Griffin - Lavender Drive - New Bus Stop Shelter (H317974) (ePid 109006)	Bus Shelter/Stop	Replace and upgrade	24,000
A00117326	North Lakes - Bounty Boulevard - New Bus Stop Shelter H317668 (ePid 109014)	Bus Shelter/Stop	Replace and upgrade	3,000
A00319132	North Lakes - Endeavour Boulevard - New Bus Stop Shelter (H317660) (ePid 106848)	Bus Shelter/Stop	Replace and upgrade	19,000
A00783110	Petrie - Affleck Avenue - New Bus Stop Infrastructure - H316635 (ePid 111312)	Bus Shelter/Stop	Replace and upgrade	23,100
A00783636	Upper Caboolture - Parkridge Avenue - New Bus Stop Infrastructure - H313491 (ePid 111334)	Bus Shelter/Stop	Replace and upgrade	25,500
A00783242	Bus Stop - Bryant St	Bus Shelter	Renew/replace	8,820
A00783342	Bus Stop - Dwyer St	Bus Shelter	Renew/replace	8,820
A00783362	Bus Stop - Endeavour Dr	Bus Shelter	Renew/replace	1,300
A00783363	Bus Stop - Endeavour Dr	Bus Shelter	Renew/replace	8,820
A00783364	Bus Stop - Endeavour Dr	Bus Shelter	Renew/replace	8,820
A00783436	Bus Stop - Hasking St	Bus Shelter	Renew/replace	8,820
A00783449	Bus Stop - Jabiru St	Bus Shelter	Renew/replace	8,820
A00783450	Bus Stop - Jabiru St	Bus Shelter	Renew/replace	8,820
A00783516	Bus Stop - Lynfield Dr	Bus Shelter	Renew/replace	8,820
A00783517	Bus Stop - Lynfield Dr	Bus Shelter	Renew/replace	8,820
A00783518	Bus Stop - Lynfield Dr	Bus Shelter	Renew/replace	8,820
A00783519	Bus Stop - Lynfield Dr	Bus Shelter	Renew/replace	7,220
A00783559	Bus Stop - Mingaye St	Bus Shelter	Renew/replace	8,820
A00783598	Bus Stop - Nightingale Dr	Bus Shelter	Renew/replace	8,820
A00783599	Bus Stop - Nightingale Dr	Bus Shelter	Renew/replace	8,820
A00783600	Bus Stop - Nightingale Dr	Bus Shelter	Renew/replace	8,820
A00783668	Bus Stop - Potassium St	Bus Shelter	Renew/replace	8,820
A00783669	Bus Stop - Potassium St	Bus Shelter	Renew/replace	8,820
A00783670	Bus Stop - Potassium St	Bus Shelter	Renew/replace	8,820
A00783671	Bus Stop - Potassium St	Bus Shelter	Renew/replace	8,820
A00783672	Bus Stop - Potassium St	Bus Shelter	Renew/replace	8,820
A00783710	Bus Stop - School St	Bus Shelter	Renew/replace	8,820
A00783715	Bus Stop - Sheaves Rd	Bus Shelter	Renew/replace	8,820
A00783716	Bus Stop - Sheaves Rd	Bus Shelter	Renew/replace	8,820
A00783718	Bus Stop - Sixth Ave	Bus Shelter	Renew/replace	8,820
A00783719	Bus Stop - Sixth Ave	Bus Shelter	Renew/replace	8,820
A00783720	Bus Stop - Slater Ave	Bus Shelter	Renew/replace	8,820
A00783740	Bus Stop - Spencer St	Bus Shelter	Renew/replace	8,820

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00783741	Bus Stop - Spencer St	Bus Shelter	Renew/replace	8,820
A00783742	Bus Stop - Spowers St	Bus Shelter	Renew/replace	8,820
A00783789	Bus Stop - Tulip St	Bus Shelter	Renew/replace	8,820
Subtotal for FY2025				550,000
Capital renewal/replacement program for FY2026				
A00218346	Griffin - Brays Road - New Bus Stop Shelter - H319759 (ePid 109229)	Bus Shelter/Stop	Renew/replace	3,000
A00783314	Griffin - Dandelion Street - New Bus Stop Shelter (H319760) (ePid 109013)	Bus Shelter/Stop	Replace and upgrade	24,000
Multiple	MBRC - Bus Shelter Panel Replacement - Bus Shelter Renewal (ePid 106599)	Bus Shelter/Stop	Renew/replace	50,000
Multiple	MBRC - Bus Stop Seat Replacement - Bus Stop Renewal (ePid 106645)	Bus Shelter/Stop	Renew/replace	50,000
A00117326	North Lakes - Bounty Boulevard - New Bus Stop Shelter H317668 (ePid 109014)	Bus Shelter/Stop	Replace and upgrade	25,000
NEW	Regionwide provision for future new bus shelters and upgrades (ePid 101711)	Bus Shelter/Stop	New	82,430
A00782974	Bus Shelter - Kurwongbah Dr	Bus Shelter	Renew/replace	28,755
A00783135	Bus Stop - Arcadia Ave	Bus Shelter	Renew/replace	8,820
A00783136	Bus Stop - Arcadia Ave	Bus Shelter	Renew/replace	8,820
A00783137	Bus Stop - Arcadia Ave	Bus Shelter	Renew/replace	8,820
A00783153	Bus Stop - Beachmere Rd	Bus Shelter	Renew/replace	8,820
A00783154	Bus Stop - Beachmere Rd	Bus Shelter	Renew/replace	8,820
A00783155	Bus Stop - Beachmere Rd	Bus Shelter	Renew/replace	8,820
A00783279	Bus Stop - Cowie St	Bus Shelter	Renew/replace	8,820
A00783317	Bus Stop - Dean St	Bus Shelter	Renew/replace	8,820
A00783343	Bus Stop - Eighth Ave	Bus Shelter	Renew/replace	8,820
A00783344	Bus Stop - Eighth Ave	Bus Shelter	Renew/replace	8,820
A00783362	Bus Stop - Endeavour Dr	Bus Shelter	Renew/replace	7,520
A00783400	Bus Stop - George St	Bus Shelter	Renew/replace	2,955
A00783402	Bus Stop - George St	Bus Shelter	Renew/replace	8,820
A00783403	Bus Stop - George St	Bus Shelter	Renew/replace	8,820
A00783419	Bus Stop - Grahams Rd	Bus Shelter	Renew/replace	8,820
A00783420	Bus Stop - Grahams Rd	Bus Shelter	Renew/replace	8,820
A00783434	Bus Stop - Hargrave St	Bus Shelter	Renew/replace	8,820
A00783435	Bus Stop - Hargrave St	Bus Shelter	Renew/replace	8,820
A00783437	Bus Stop - Henderson Rd	Bus Shelter	Renew/replace	8,820
A00783438	Bus Stop - Henderson Rd	Bus Shelter	Renew/replace	8,820
A00783439	Bus Stop - Henderson Rd	Bus Shelter	Renew/replace	8,820
A00783440	Bus Stop - Henderson Rd	Bus Shelter	Renew/replace	8,820
A00783452	Bus Stop - Jasmin Dr	Bus Shelter	Renew/replace	8,820
A00783453	Bus Stop - Jasmin Dr	Bus Shelter	Renew/replace	8,820
A00783454	Bus Stop - Jasmin Dr	Bus Shelter	Renew/replace	8,820
A00783463	Bus Stop - Kate Ave	Bus Shelter	Renew/replace	8,820
A00783464	Bus Stop - Kate Ave	Bus Shelter	Renew/replace	8,820
A00783493	Bus Stop - Kunde St	Bus Shelter	Renew/replace	8,820

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00783497	Bus Stop - Lachlan Cr	Bus Shelter	Renew/replace	8,820
A00783498	Bus Stop - Lachlan Cr	Bus Shelter	Renew/replace	8,820
A00783547	Bus Stop - Matthew Flinders Dr	Bus Shelter	Renew/replace	8,820
A00783548	Bus Stop - Matthew Flinders Dr	Bus Shelter	Renew/replace	8,820
A00783549	Bus Stop - Matthew Flinders Dr	Bus Shelter	Renew/replace	8,820
A00783550	Bus Stop - Matthew Flinders Dr	Bus Shelter	Renew/replace	8,820
A00783558	Bus Stop - Miles St	Bus Shelter	Renew/replace	8,820
A00783589	Bus Stop - Mt O'Reilly Rd	Bus Shelter	Renew/replace	8,820
A00783590	Bus Stop - Mt O'Reilly Rd	Bus Shelter	Renew/replace	8,820
A00783806	Bus Stop - Viscount St	Bus Shelter	Renew/replace	8,820
A00783807	Bus Stop - Viscount St	Bus Shelter	Renew/replace	8,820
			Subtotal for FY2026	600,000
Capital renewal/replacement program for FY2027				
A00218346	Griffin - Brays Road - New Bus Stop Shelter - H319759 (ePid 109229)	Bus Shelter/Stop	Renew/replace	24,000
Multiple	MBRC - Bus Shelter Panel Replacement - Bus Shelter Renewal (ePid 106599)	Bus Shelter/Stop	Renew/replace	50,000
A00369520	North Lakes - Endeavour Boulevard - New Bus Stop Shelter - H317667 (ePid 109230)	Bus Shelter	Replace and upgrade	3,000
		/Stop		
NEW	Regionwide provision for future new bus shelters and upgrades (ePid 101711)	Bus Shelter/Stop	New Bus Shelters	98,997
A00363779	Bus Stop - South Pine Road	Bus Shelter	Renew/replace	18,318
A00782873	Bus Stop - AVEO Albany Creek	Bus Shelter	Renew/replace	8,820
A00783108	Bus Stop - Aaron St	Bus Shelter	Renew/replace	8,820
A00783109	Bus Stop - Affleck Av	Bus Shelter	Renew/replace	8,820
A00783110	Bus Stop - Affleck avenue	Bus Shelter	Renew/replace	8,820
A00783121	Bus Stop - Ann street	Bus Shelter	Renew/replace	8,820
A00783169	Bus Stop - Bellmere Rd	Bus Shelter	Renew/replace	8,820
A00783180	Bus Stop - Bermuda Ave	Bus Shelter	Renew/replace	8,820
A00783181	Bus Stop - Bermuda Ave	Bus Shelter	Renew/replace	8,820
A00783182	Bus Stop - Bestman Rd East	Bus Shelter	Renew/replace	8,820
A00783199	Bus Stop - Bestmann Rd East	Bus Shelter	Renew/replace	8,820
A00783200	Bus Stop - Bestmann Rd East	Bus Shelter	Renew/replace	8,820
A00783201	Bus Stop - Bestmann Rd East	Bus Shelter	Renew/replace	8,820
A00783202	Bus Stop - Bestmann Rd East	Bus Shelter	Renew/replace	8,820
A00783226	Bus Stop - Brendale St	Bus Shelter	Renew/replace	8,820
A00783227	Bus Stop - Brendale St	Bus Shelter	Renew/replace	8,820
A00783228	Bus Stop - Brendale St	Bus Shelter	Renew/replace	8,820
A00783248	Bus Stop - Bunya Road	Bus Shelter	Renew/replace	8,820
A00783265	Bus Stop - Carpenter Way	Bus Shelter	Renew/replace	8,820
A00783266	Bus Stop - Carpenter Way	Bus Shelter	Renew/replace	8,820
A00783267	Bus Stop - Carpenter Way	Bus Shelter	Renew/replace	8,820
A00783268	Bus Stop - Carpenter Way	Bus Shelter	Renew/replace	8,820

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00783269	Bus Stop - Castle Hill Dr	Bus Shelter	Renew/replace	8,820
A00783270	Bus Stop - Castle Hill Dr	Bus Shelter	Renew/replace	8,820
A00783271	Bus Stop - Castle Hill Dr	Bus Shelter	Renew/replace	8,820
A00783277	Bus Stop - Cotterill Av	Bus Shelter	Renew/replace	8,820
A00783278	Bus Stop - Cotterill Av	Bus Shelter	Renew/replace	8,820
A00783350	Bus Stop - Elkhorn Ave	Bus Shelter	Renew/replace	8,820
A00783351	Bus Stop - Elkhorn Ave	Bus Shelter	Renew/replace	8,820
A00783399	Bus Stop - George St	Bus Shelter	Renew/replace	8,820
A00783400	Bus Stop - George St	Bus Shelter	Renew/replace	5,865
A00783460	Bus Stop - Karena St	Bus Shelter	Renew/replace	8,820
A00783461	Bus Stop - Karena St	Bus Shelter	Renew/replace	8,820
A00783462	Bus Stop - Karena St	Bus Shelter	Renew/replace	8,820
A00783467	Bus Stop - Kent St	Bus Shelter	Renew/replace	8,820
A00783528	Bus Stop - Main St	Bus Shelter	Renew/replace	8,820
A00783582	Bus Stop - Mount Glorious Rd	Bus Shelter	Renew/replace	8,820
A00783583	Bus Stop - Mt Glorious Rd	Bus Shelter	Renew/replace	8,820
A00783584	Bus Stop - Mt Glorious Rd	Bus Shelter	Renew/replace	8,820
A00783585	Bus Stop - Mt Glorious Rd	Bus Shelter	Renew/replace	8,820
A00783586	Bus Stop - Mt Glorious Rd	Bus Shelter	Renew/replace	8,820
A00783587	Bus Stop - Mt Glorious Rd	Bus Shelter	Renew/replace	8,820
A00783588	Bus Stop - Mt Glorious Rd	Bus Shelter	Renew/replace	8,820
A00783649	Bus Stop - Piggott Rd	Bus Shelter	Renew/replace	8,820
A00783650	Bus Stop - Piggott Rd	Bus Shelter	Renew/replace	8,820
A00783655	Bus Stop - Pine River Dr	Bus Shelter	Renew/replace	8,820
A00783656	Bus Stop - Pine River Dr	Bus Shelter	Renew/replace	8,820
A00783706	Bus Stop - School Rd	Bus Shelter	Renew/replace	8,820
A00783708	Bus Stop - School Rd	Bus Shelter	Renew/replace	8,820
A00783709	Bus Stop - School Rd	Bus Shelter	Renew/replace	8,820
A00783717	Bus Stop - Showgrounds Dr	Bus Shelter	Renew/replace	8,820
A00783829	Bus Stop - Will St	Bus Shelter	Renew/replace	8,820
A00783830	Bus Stop - Will St	Bus Shelter	Renew/replace	8,820
Subtotal for FY2027				650,000
Capital renewal/replacement program for FY2028				
A00369520	North Lakes - Endeavour Boulevard - New Bus Stop Shelter - H317667 (ePid 109230)	Bus Shelter/Stop	Replace and upgrade	23,500
NEW	Regionwide provision for future new bus shelters and upgrades (ePid 101711)	Bus Shelter/Stop	New Bus Shelters	92,143
A00060605	Bus Stop - Bunya Road	Bus Shelter	Renew/replace	30,000
A00066293	Bus Stop - Wruck Crescent	Bus Shelter	Renew/replace	30,000
A00066309	Bus Seating - Anzac Avenue	Bus Shelter	Renew/replace	8,820
A00066488	Bus Seating - Elizabeth Avenue	Bus Shelter	Renew/replace	8,820
A00117193	Bus Stop (Seat and Sign) - Thompson Street	Bus Shelter	Renew/replace	8,820

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00167932	Bus Shelter - Somers Street	Bus Shelter	Renew/replace	30,000
A00167938	Bus Shelter - Todds Road	Bus Shelter	Renew/replace	30,000
A00217771	Bus Stop (Seat and Sign) - King Street	Bus Shelter	Renew/replace	8,820
A00363779	Bus Stop - South Pine Road	Bus Shelter	Renew/replace	11,682
A00369283	Bus Shelter - Samsonvale Road	Bus Shelter	Renew/replace	30,000
A00419357	Bus Shelter - Ferny Way	Bus Shelter	Renew/replace	30,000
A00419490	Bus Shelter - Youngs Crossing Road	Bus Shelter	Renew/replace	18,075
A00419496	Bus Shelter - Samsonvale Road	Bus Shelter	Renew/replace	30,000
A00420114	Bus Stop (Seat and Sign) - Moreton Terrace	Bus Shelter	Renew/replace	8,820
A00470194	Bus Stop - Patricks Road	Bus Shelter	Renew/replace	30,000
A00783148	Bus Stop - Baker St	Bus Shelter	Renew/replace	8,820
A00783149	Bus Stop - Baker St	Bus Shelter	Renew/replace	8,820
A00783254	Bus Stop - Burrumbeet Street	Bus Shelter	Renew/replace	8,820
A00783358	Bus Stop - Embassy St	Bus Shelter	Renew/replace	8,820
A00783359	Bus Stop - Embassy street	Bus Shelter	Renew/replace	8,820
A00783372	Bus Stop - Eveshan Rd	Bus Shelter	Renew/replace	8,820
A00783408	Bus Stop - Goodfellows Rd	Bus Shelter	Renew/replace	8,820
A00783409	Bus Stop - Goodfellows Rd	Bus Shelter	Renew/replace	8,820
A00783410	Bus Stop - GOODFELLOWS ROAD	Bus Shelter	Renew/replace	8,820
A00783422	Bus Stop - Grice St	Bus Shelter	Renew/replace	8,820
A00783456	Bus Stop - Joalah Cr	Bus Shelter	Renew/replace	8,820
A00783466	Bus Stop - Kensington Way	Bus Shelter	Renew/replace	8,820
A00783494	Bus Stop - Kurrajong Dr	Bus Shelter	Renew/replace	8,820
A00783495	Bus Stop - Kurrajong Dr	Bus Shelter	Renew/replace	8,820
A00783496	Bus Stop - Kurrajong Dr	Bus Shelter	Renew/replace	8,820
A00783501	Bus Stop - Lavarack Rd	Bus Shelter	Renew/replace	8,820
A00783502	Bus Stop - Lavarack Rd	Bus Shelter	Renew/replace	8,820
A00783527	Bus Stop - Macquarie Dr	Bus Shelter	Renew/replace	8,820
A00783561	Bus Stop - Mitze St	Bus Shelter	Renew/replace	8,820
A00783575	Bus Stop - Morningview Dr	Bus Shelter	Renew/replace	8,820
A00783683	Bus Stop - Queen Elizabeth Dr	Bus Shelter	Renew/replace	8,820
A00783687	Bus Stop - Rifle Range Rd	Bus Shelter	Renew/replace	8,820
A00783748	Bus Stop - Station St	Bus Shelter	Renew/replace	8,820
A00783808	Bus Stop - Warner St	Bus Shelter	Renew/replace	8,820
A00783834	Bus Stop - Woonara Dr	Bus Shelter	Renew/replace	8,820
Subtotal for FY2028				650,000
Capital renewal/replacement program for FY2029				
A00066137	Bus Stop (Seat and Sign) - Warroo Drive	Bus Shelter	Renew/replace	8,820
A00066620	Bus Shelter - Main Street	Bus Shelter	Renew/replace	30,000
A00116450	Bus Stop (Seat and Sign) - Matthew Terrace	Bus Shelter	Renew/replace	8,820

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00217841	Bus Stop (Seat and Sign) - Beachmere Road	Bus Shelter	Renew/replace	8,820
A00263350	Bus Stop - Nathan Road	Bus Shelter	Renew/replace	30,000
A00269162	Bus Stop (Seat and Sign) - King Street	Bus Shelter	Renew/replace	8,820
A00269164	Bus Stop (Seat and Sign) - King Street	Bus Shelter	Renew/replace	8,820
A00419490	Bus Shelter - Youngs Crossing Road	Bus Shelter	Renew/replace	11,925
A00420518	Bus Stop (Seat and Sign) - Ewart Street	Bus Shelter	Renew/replace	8,820
A00471033	Bus Stop (Seat and Sign) - Parsons Boulevard	Bus Shelter	Renew/replace	8,820
A00783196	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	1,795
A00783197	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783198	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783253	Bus Stop - South Pine Road	Bus Shelter	Renew/replace	8,820
A00783275	Bus Stop - Collins Road	Bus Shelter	Renew/replace	8,820
A00783276	Bus Stop - Collins Road	Bus Shelter	Renew/replace	8,820
A00783334	Bus Stop - Duffield Rd	Bus Shelter	Renew/replace	8,820
A00783335	Bus Stop - Duffield Rd	Bus Shelter	Renew/replace	8,820
A00783336	Bus Stop - Duffield Rd	Bus Shelter	Renew/replace	8,820
A00783337	Bus Stop - Duffield Rd	Bus Shelter	Renew/replace	8,820
A00783338	Bus Stop - Duffield Rd	Bus Shelter	Renew/replace	8,820
A00783340	Bus Stop - Duffield Rd	Bus Shelter	Renew/replace	8,820
A00783373	Bus Stop - Faheys Road East	Bus Shelter	Renew/replace	8,820
A00783374	Bus Stop - Faheys Road East	Bus Shelter	Renew/replace	8,820
A00783375	Bus Stop - Faheys Road West	Bus Shelter	Renew/replace	8,820
A00783428	Bus Stop - Guards St	Bus Shelter	Renew/replace	8,820
A00783468	Bus Stop - Keong Road	Bus Shelter	Renew/replace	8,820
A00783471	Bus Stop - Keong Road	Bus Shelter	Renew/replace	8,820
A00783472	Bus Stop - Keong Road	Bus Shelter	Renew/replace	8,820
A00783473	Bus Stop - Keong Road	Bus Shelter	Renew/replace	8,820
A00783626	Bus Stop - Old Northern Road	Bus Shelter	Renew/replace	8,820
A00783634	Bus Stop - Parkridge Ave	Bus Shelter	Renew/replace	8,820
A00783635	Bus Stop - Parkridge Ave	Bus Shelter	Renew/replace	8,820
A00783636	Bus Stop - Parkridge Ave	Bus Shelter	Renew/replace	8,820
A00783640	Bus Stop - Patricks Road	Bus Shelter	Renew/replace	8,820
A00783641	Bus Stop - Patricks Road	Bus Shelter	Renew/replace	8,820
A00783665	Bus Stop - Plucks Road	Bus Shelter	Renew/replace	8,820
A00783666	Bus Stop - Plucks Road	Bus Shelter	Renew/replace	8,820
A00783667	Bus Stop - Plucks Road	Bus Shelter	Renew/replace	8,820
A00783675	Bus Stop - Protea Dr	Bus Shelter	Renew/replace	8,820
A00783676	Bus Stop - Protea Dr	Bus Shelter	Renew/replace	8,820
A00783729	Bus Stop - South Pine Road	Bus Shelter	Renew/replace	8,820
A00783730	Bus Stop - South Pine Road	Bus Shelter	Renew/replace	8,820

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00783753	Bus Stop - Sussex Drive	Bus Shelter	Renew/replace	8,820
A00783754	Bus Stop - Sussex Drive	Bus Shelter	Renew/replace	8,820
A00783767	Bus Stop - Thiess Drive	Bus Shelter	Renew/replace	8,820
A00783768	Bus Stop - Thiess Drive	Bus Shelter	Renew/replace	8,820
A00783769	Bus Stop - Thiess Drive	Bus Shelter	Renew/replace	8,820
A00783772	Bus Stop - Todds Rd	Bus Shelter	Renew/replace	8,820
A00783773	Bus Stop - Todds Rd	Bus Shelter	Renew/replace	8,820
A00783774	Bus Stop - Todds Rd	Bus Shelter	Renew/replace	8,820
A00783775	Bus Stop - Todds Rd	Bus Shelter	Renew/replace	8,820
A00783778	Bus Stop - Todds Rd	Bus Shelter	Renew/replace	8,820
A00783779	Bus Stop - Toorbul St	Bus Shelter	Renew/replace	8,820
A00783780	Bus Stop - Toorbul St	Bus Shelter	Renew/replace	8,820
A00783781	Bus Stop - Toorbul St	Bus Shelter	Renew/replace	8,820
A00783805	Bus Stop - View Crescent	Bus Shelter	Renew/replace	8,820
A00912773	Bus Stop - Albany Creek Road	Bus Shelter	Renew/replace	8,820
NEW	Regionwide provision for future new bus shelters and upgrades (ePid 101711)	Bus Shelter/Stop	New Bus Shelter	100,000
Subtotal for FY2029				650,000
Capital renewal/replacement program for FY2030				
A00117099	Bus Stop - View Crescent	Bus Shelter	Renew/replace	365
A00541035	Bus Stop - Gympie Road	Bus Shelter	Renew/replace	8,820
A00612849	Bus Stop - Lesley Avenue	Bus Shelter	Renew/replace	8,820
A00634740	Bus Stop - South Pine Road	Bus Shelter	Renew/replace	8,820
A00634741	Bus Stop - Stanley Street	Bus Shelter	Renew/replace	8,820
A00640656	Bus Stop - Rifle Range Road	Bus Shelter	Renew/replace	8,820
A00782849	Bus Stop - Albany Creek Road	Bus Shelter	Renew/replace	8,820
A00782917	Bus Shelter - Endeavour Dr	Bus Shelter	Renew/replace	28,755
A00782956	Bus Stop - Jinker Track	Bus Shelter	Renew/replace	8,820
A00782957	Bus Stop - Jinker Track	Bus Shelter	Renew/replace	8,820
A00783081	Bus Stop - Thiess Drive	Bus Shelter	Renew/replace	8,820
A00783082	Bus Stop - Thiess Drive	Bus Shelter	Renew/replace	8,820
A00783102	Bus Shelter - Wallace St North	Bus Shelter	Renew/replace	28,755
A00783112	Bus Stop - Albany Creek Road	Bus Shelter	Renew/replace	8,820
A00783115	Bus Stop - Albany Forest Drive	Bus Shelter	Renew/replace	8,820
A00783151	Bus Stop - Bancroft Ter	Bus Shelter	Renew/replace	8,820
A00783183	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783184	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783185	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783186	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783187	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783188	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00783189	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783190	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783191	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783192	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783193	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783194	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783195	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	8,820
A00783196	Bus Stop - Bestmann Rd	Bus Shelter	Renew/replace	7,025
A00783322	Bus Stop - Dinterra Ave	Bus Shelter	Renew/replace	8,820
A00783323	Bus Stop - Dinterra Ave	Bus Shelter	Renew/replace	8,820
A00783324	Bus Stop - Dinterra Ave	Bus Shelter	Renew/replace	8,820
A00783341	Bus Stop - Dunbil Ave	Bus Shelter	Renew/replace	8,820
A00783376	Bus Stop - Ferny Way	Bus Shelter	Renew/replace	8,820
A00783377	Bus Stop - Ferny Way	Bus Shelter	Renew/replace	8,820
A00783378	Bus Stop - Ferny Way	Bus Shelter	Renew/replace	8,820
A00783398	Bus Stop - Gayundah Esp	Bus Shelter	Renew/replace	8,820
A00783442	Bus Stop - Hickory Dr	Bus Shelter	Renew/replace	8,820
A00783457	Bus Stop - Kaldo Gr	Bus Shelter	Renew/replace	8,820
A00783486	Bus Stop - Kolora Cr	Bus Shelter	Renew/replace	8,820
A00783487	Bus Stop - Kolora Cr	Bus Shelter	Renew/replace	8,820
A00783488	Bus Stop - Kolora Cr	Bus Shelter	Renew/replace	8,820
A00783491	Bus Stop - Kumbari St	Bus Shelter	Renew/replace	8,820
A00783492	Bus Stop - Kumbari St	Bus Shelter	Renew/replace	8,820
A00783523	Bus Stop - Mackie Rd	Bus Shelter	Renew/replace	8,820
A00783524	Bus Stop - Mackie Rd	Bus Shelter	Renew/replace	8,820
A00783525	Bus Stop - Mackie Rd	Bus Shelter	Renew/replace	8,820
A00783526	Bus Stop - Mackie Rd	Bus Shelter	Renew/replace	8,820
A00783571	Bus Stop - Moreton Downs Dr	Bus Shelter	Renew/replace	8,820
A00783572	Bus Stop - Moreton Downs Dr	Bus Shelter	Renew/replace	8,820
A00783757	Bus Stop - Tallon St	Bus Shelter	Renew/replace	8,820
A00783762	Bus Stop - Tarnook Dr	Bus Shelter	Renew/replace	8,820
A00783764	Bus Stop - Tarnook Dr	Bus Shelter	Renew/replace	8,820
A00783765	Bus Stop - Tarnook Dt	Bus Shelter	Renew/replace	8,820
A00783766	Bus Stop - Tarnook St	Bus Shelter	Renew/replace	8,820
A00783822	Bus Stop - Westwood Dr	Bus Shelter	Renew/replace	8,820
A00783823	Bus Stop - Westwood Dr	Bus Shelter	Renew/replace	8,820
A00783824	Bus Stop - Westwood Dr	Bus Shelter	Renew/replace	8,820
NEW	Regionwide provision for future new bus shelters and upgrades (ePid 101711)	Bus Shelter/Stop	New Bus Shelter	100,000
			Subtotal for FY2030	650,000
Capital renewal/replacement program for FY2031				

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00015331	Bus Stop - Albany Forest Drive	Bus Shelter	Renew/replace	30,000
A00015396	Bus Stop - Albany Creek Road	Bus Shelter	Renew/replace	30,000
A00015486	Bus Stop - Keong Road	Bus Shelter	Renew/replace	8,820
A00056845	Bus Stop - Keong Road	Bus Shelter	Renew/replace	30,000
A00116300	Bus Stop - Keong Road	Bus Shelter	Renew/replace	30,000
A00117099	Bus Stop - View Crescent	Bus Shelter	Renew/replace	29,635
A00167659	Bus Stop - Albany Creek Road	Bus Shelter	Renew/replace	8,820
A00259680	Bus Stop - Albany Forest Drive	Bus Shelter	Renew/replace	30,377
A00319924	Bus Stop - Old Northern Road	Bus Shelter	Renew/replace	8,820
A00369692	Bus Stop - Old Northern Road	Bus Shelter	Renew/replace	8,820
A00409745	Bus Stop - Old Northern Road	Bus Shelter	Renew/replace	8,820
A00420439	Bus Stop - South Pine Road	Bus Shelter	Renew/replace	8,820
A00420440	Bus Stop - Old Northern Road	Bus Shelter	Renew/replace	8,820
A00470012	Bus Shelter - Hidden Valley Drive	Bus Shelter	Renew/replace	22,468
A00470017	Bus Stop - Old Northern Road	Bus Shelter	Renew/replace	8,820
A00470187	Bus Stop - Old Northern Road	Bus Shelter	Renew/replace	30,000
A00470464	Bus Stop - Keong Road	Bus Shelter	Renew/replace	8,820
A00471031	Bus Stop - King Street	Bus Shelter	Renew/replace	8,820
A00783111	Bus Stop - Alana Street	Bus Shelter	Renew/replace	8,820
A00783119	Bus Stop - ANDREW PETRIE DRIVE	Bus Shelter	Renew/replace	8,820
A00783170	Bus Stop - Bells Pocket Rd	Bus Shelter	Renew/replace	8,820
A00783171	Bus Stop - Bells Pocket Rd	Bus Shelter	Renew/replace	8,820
A00783172	Bus Stop - Bells Pocket Rd	Bus Shelter	Renew/replace	8,820
A00783173	Bus Stop - Bells Pocket Rd	Bus Shelter	Renew/replace	8,820
A00783174	Bus Stop - Bells Pocket Rd	Bus Shelter	Renew/replace	8,820
A00783175	Bus Stop - Bells Pocket Rd	Bus Shelter	Renew/replace	8,820
A00783204	Bus Stop - Biggs Ave	Bus Shelter	Renew/replace	8,820
A00783595	Bus Stop - Navua St	Bus Shelter	Renew/replace	8,820
A00783596	Bus Stop - Navua St	Bus Shelter	Renew/replace	8,820
A00783692	Bus Stop - Samsonvale Rd	Bus Shelter	Renew/replace	8,820
A00783693	Bus Stop - Samsonvale Rd	Bus Shelter	Renew/replace	8,820
A00783694	Bus Stop - Samsonvale Rd	Bus Shelter	Renew/replace	8,820
A00783695	Bus Stop - Samsonvale Rd	Bus Shelter	Renew/replace	8,820
A00783697	Bus Stop - Samsonvale Rd	Bus Shelter	Renew/replace	8,820
A00783698	Bus Stop - Samsonvale Rd	Bus Shelter	Renew/replace	8,820
A00783782	Bus Stop - Torrens Rd	Bus Shelter	Renew/replace	8,820
A00783783	Bus Stop - Torrens Rd	Bus Shelter	Renew/replace	8,820
A00783784	Bus Stop - Torrens Rd	Bus Shelter	Renew/replace	8,820
A00783801	Bus Stop - Victory Rd	Bus Shelter	Renew/replace	8,820
A00783825	Bus Stop - Whitehorse Rd	Bus Shelter	Renew/replace	8,820

Moreton Bay Regional Council

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00783826	Bus Stop - Whitehorse Rd	Bus Shelter	Renew/replace	8,820
A00783831	Bus Stop - Wimbledon Dr	Bus Shelter	Renew/replace	8,820
A00783832	Bus Stop - Windrest St	Bus Shelter	Renew/replace	8,820
A00783833	Bus Stop - Windrest St	Bus Shelter	Renew/replace	8,820
NEW	Regionwide provision for future new bus shelters and upgrades (ePid 101711)	Bus Shelter/Stop	New Bus Shelter	100,000
Subtotal for FY2031				650,000

Guardrails Capital Renewal/Replacement Program

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
Capital renewal/replacement program for FY2022				
A00896061	Kurwongbah - Boundary Road Rail Overpass - Guardrail Renewal (ePID 109521)	Guard Rail	Renew/replace	50,000
New	Wamuran - R Williams Road - New Guardrail Installation (ePID 111147)	Guard Rail	New	20,000
New	Woodford - Ironbark Drive - Guardrail Installation (ePID 111156)	Guard Rail	New	30,000
Subtotal for FY2022				100,000
Capital renewal/replacement program for FY2023				
A00006580, A00167923, A00419352, A00465742	Mount Nebo - Mount Nebo Road - Guardrail Renewal (ePID 109518)	Guard Rail	Renew/replace	55,000
A00016625, A00067020, A00107182, A00459290	Bongaree - Goodwin Drive Bridge - Guardrail Renewal (ePID 109522)	Guard Rail	Renew/replace	45,000
A00258066	Guard Rail - Laceys Creek Road	Guard Rail	Renew/replace	22,742
A00268854	Guard Rail - Kremzow Road	Guard Rail	Renew/replace	565
A00269136	Guard Rail - Kremzow Road	Guard Rail	Renew/replace	16,988
A00320147	Guard Rail - Kremzow Road	Guard Rail	Renew/replace	17,262
A00470645	Guard Rail - Bellthorpe Range Road	Guard Rail	Renew/replace	42,443
Subtotal for FY2023				200,000
Capital renewal/replacement program for FY2024				
A00016678, A00470818	Morayfield - Buchanan Road - Guardrail Renewal (ePID 109520)	Guard Rail	Renew/replace	26,000
A00016617, A00066355	Wamuran - Old North Road - Guardrail Renewal (ePID 109543)	Guard Rail	Renew/replace	45,000

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00015179	Cashmere - Winn Road - Guardrail Renewal (ePID 109544)	Guard Rail	Renew/replace	29,000
A00218548	Guard Rail - Kremzow Road	Guard Rail	Renew/replace	9,042
A00262765	Guard Rail - Kremzow Road	Guard Rail	Renew/replace	17,536
A00268854	Guard Rail - Kremzow Road	Guard Rail	Renew/replace	17,793
A00269265	Guard Rail - View Crescent	Guard Rail	Renew/replace	5,754
A00308264	Guard Rail - Frenchs Road	Guard Rail	Renew/replace	1,370
A00314174	Guard Rail - View Crescent	Guard Rail	Renew/replace	3,562
A00369408	Guard Rail - Mount Brisbane Road	Guard Rail	Renew/replace	3,552
A00369542	Guard Rail - Branch Creek Road	Guard Rail	Renew/replace	8,494
A00370393	Guard Rail - Camp Mountain Road	Guard Rail	Renew/replace	3,014
A00413756	Guard Rail - Jagora Drive	Guard Rail	Renew/replace	11,782
A00419627	Guard Rail - Mount Brisbane Road	Guard Rail	Renew/replace	15,900
A00419681	Guard Rail - Patman Road	Guard Rail	Renew/replace	7,946
A00420177	Guard Rail - Boland Court	Guard Rail	Renew/replace	21,920
A00420310	Guard Rail - Branch Creek Road	Guard Rail	Renew/replace	16,440
A00420527	Guard Rail - Leitchs Road South	Guard Rail	Renew/replace	2,466
A00420535	Guard Rail - Ocean View Road	Guard Rail	Renew/replace	14,522
A00465743	Guard Rail - Camp Mountain Road	Guard Rail	Renew/replace	2,740
A00469959	Guard Rail - Garrawin Court	Guard Rail	Renew/replace	4,658
A00469960	Guard Rail - Branch Creek Road	Guard Rail	Renew/replace	20,550
A00470008	Guard Rail - Boland Court	Guard Rail	Renew/replace	8,768
A00470719	Guard Rail - Sutton Court	Guard Rail	Renew/replace	2,192
Subtotal for FY2024				300,000
Capital renewal/replacement program for FY2025				
A00015177	Guard Rail - Garrawin Court	Guard Rail	Renew/replace	11,234
A00016169	Guard Rail - Camp Mountain Road	Guard Rail	Renew/replace	3,836
A00016186	Guard Rail - Boland Court	Guard Rail	Renew/replace	15,892
A00060727	Guard Rail - Rowley Road	Guard Rail	Renew/replace	6,850
A00067026	Guard Rail - Boland Court	Guard Rail	Renew/replace	3,288
A00067272	Guard Rail - Old Northern Road	Guard Rail	Renew/replace	1,370
A00107183	Guard Rail - Westbourne Drive	Guard Rail	Renew/replace	3,288
A00107662	Guard Rail - Wruck Crescent	Guard Rail	Renew/replace	1,370
A00117360	Guard Rail - Leitchs Road	Guard Rail	Renew/replace	9,042
A00117783	Guard Rail - Rowley Road	Guard Rail	Renew/replace	5,480
A00117787	Guard Rail - Samsonvale Road	Guard Rail	Renew/replace	1,096
A00118274	Guard Rail - Campbells Pocket Road	Guard Rail	Renew/replace	16,988
A00118549	Guard Rail - Fortune Street	Guard Rail	Renew/replace	16,988
A00158026	Guard Rail - Camelia Avenue	Guard Rail	Renew/replace	2,110
A00158301	Guard Rail - Forbes Road	Guard Rail	Renew/replace	4,384
A00158337	Guard Rail - Camp Mountain Road	Guard Rail	Renew/replace	2,192

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00168696	Guard Rail - Rowley Road	Guard Rail	Renew/replace	7,124
A00168697	Guard Rail - Grady Court	Guard Rail	Renew/replace	2,192
A00169259	Guard Rail - Samsonvale Road	Guard Rail	Renew/replace	10,960
A00207549	Guard Rail - Forbes Road	Guard Rail	Renew/replace	2,192
A00207625	Guard Rail - Edward Street	Guard Rail	Renew/replace	2,740
A00212210	Guard Rail - Rowley Road	Guard Rail	Renew/replace	6,028
A00217917	Guard Rail - Fifth Avenue	Guard Rail	Renew/replace	6,028
A00224767	Guard Rail - Chinook Street	Guard Rail	Renew/replace	7,946
A00258155	Guard Rail - Westbourne Drive	Guard Rail	Renew/replace	3,288
A00268314	Guard Rail - Forbes Road	Guard Rail	Renew/replace	1,370
A00268656	Guard Rail - Hyde Road	Guard Rail	Renew/replace	12,330
A00268797	Guard Rail - Camp Mountain Road	Guard Rail	Renew/replace	6,028
A00268815	Guard Rail - Grady Court	Guard Rail	Renew/replace	4,658
A00268830	Guard Rail - Mount Brisbane Road	Guard Rail	Renew/replace	20,784
A00309056	Guard Rail - Forbes Road	Guard Rail	Renew/replace	2,192
A00319341	Guard Rail - Mount Brisbane Road	Guard Rail	Renew/replace	16,894
A00319514	Guard Rail - Old Collins Road	Guard Rail	Renew/replace	9,042
A00319736	Guard Rail - Camp Mountain Road	Guard Rail	Renew/replace	6,302
A00320443	Guard Rail - Hyde Road	Guard Rail	Renew/replace	12,056
A00359643	Guard Rail - Browns Road	Guard Rail	Renew/replace	6,576
A00364787	Guard Rail - Ocean View Road	Guard Rail	Renew/replace	18,358
A00369408	Guard Rail - Mount Brisbane Road	Guard Rail	Renew/replace	13,996
A00470845	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	42,626
A00470928	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	17,536
A00470929	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	26,578
A00470955	Guard Rail - Seaview Court	Guard Rail	Renew/replace	8,768
New	New/upgrade program	Guard Rail	New	20,000
			Subtotal for FY2025	400,000
Capital renewal/replacement program for FY2026				
A00167323	Guard Rail - Chinook Street	Guard Rail	Renew/replace	16,440
A00258693	Guard Rail - Lily Street	Guard Rail	Renew/replace	2,192
A00320453	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	24,504
A00358901	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	21,920
A00359704	Guard Rail - Lakeside Road	Guard Rail	Renew/replace	14,248
A00369179	Guard Rail - Eden Drive	Guard Rail	Renew/replace	2,192
A00369946	Guard Rail - Mount Pleasant Road	Guard Rail	Renew/replace	14,248
A00369948	Guard Rail - Duffield Road	Guard Rail	Renew/replace	3,562
A00370156	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	19,454
A00370157	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	16,714
A00370158	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	23,016

Moreton Bay Regional Council

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00370345	Guard Rail - Moorina Road	Guard Rail	Renew/replace	13,426
A00370575	Guard Rail - Smiths Road	Guard Rail	Renew/replace	16,440
A00408943	Guard Rail - Smiths Road	Guard Rail	Renew/replace	16,988
A00408997	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	28,222
A00419646	Guard Rail - Ocean View Road	Guard Rail	Renew/replace	9,590
A00420176	Guard Rail - Milford Court	Guard Rail	Renew/replace	2,466
A00420328	Guard Rail - Eden Drive	Guard Rail	Renew/replace	2,192
A00420812	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	11,234
A00420813	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	25,208
A00420866	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	15,344
A00459292	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	24,934
A00459315	Guard Rail - Marsden Road	Guard Rail	Renew/replace	9,042
A00469877	Guard Rail - Milford Court	Guard Rail	Renew/replace	2,192
A00469900	Guard Rail - Mount Pleasant Road	Guard Rail	Renew/replace	11,508
A00470654	Guard Rail - Smiths Road	Guard Rail	Renew/replace	16,166
A00470845	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	16,558
New	New/upgrade program	Guard Rail	New	20,000
Subtotal for FY2026				400,000
Capital renewal/replacement program for FY2027				
A00258694	Guard Rail - Moorina Road	Guard Rail	Renew/replace	12,136
A00259679	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	47,950
A00269075	Guard Rail - Eden Drive	Guard Rail	Renew/replace	2,740
A00269222	Guard Rail - Postmans Track	Guard Rail	Renew/replace	38,086
A00269223	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	28,496
A00269227	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	18,906
A00309830	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	39,730
A00319419	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	25,208
A00319550	Guard Rail - Eden Drive	Guard Rail	Renew/replace	2,466
A00319692	Guard Rail - Mount Pleasant Road	Guard Rail	Renew/replace	5,480
A00320442	Guard Rail - Oatlands Court	Guard Rail	Renew/replace	4,110
A00320448	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	37,264
A00320449	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	103,298
A00320453	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	14,130
New	New/upgrade program	Guard Rail	New	20,000
Subtotal for FY2027				400,000
Capital renewal/replacement program for FY2028				
A00066670	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	27,834
A00066675	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	26,030
A00067007	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	21,098

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00116227	Guard Rail - Narangba Road	Guard Rail	Renew/replace	4,110
A00116349	Guard Rail - Adams Road	Guard Rail	Renew/replace	7,124
A00116479	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	61,650
A00116481	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	52,334
A00116532	Guard Rail - O'Loan Street	Guard Rail	Renew/replace	1,096
A00116844	Guard Rail - Mount Pleasant Road	Guard Rail	Renew/replace	3,288
A00167320	Guard Rail - Narangba Road	Guard Rail	Renew/replace	9,590
A00167324	Guard Rail - Eden Drive	Guard Rail	Renew/replace	3,288
A00167830	Guard Rail - Mount Pleasant Road	Guard Rail	Renew/replace	3,288
A00167954	Guard Rail - Adams Road	Guard Rail	Renew/replace	7,946
A00168521	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	34,250
A00168522	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	9,590
A00168705	Guard Rail - Days Road	Guard Rail	Renew/replace	2,192
A00168785	Guard Rail - Eden Drive	Guard Rail	Renew/replace	2,192
A00169262	Guard Rail - Mount Pleasant Road	Guard Rail	Renew/replace	3,836
A00207264	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	4,658
A00207548	Guard Rail - Narangba Road	Guard Rail	Renew/replace	9,864
A00217916	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	9,590
A00217920	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	9,316
A00218255	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	26,186
A00218544	Guard Rail - Days Road	Guard Rail	Renew/replace	2,192
A00218649	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	14,248
A00225655	Guard Rail - Eden Drive	Guard Rail	Renew/replace	4,384
A00258694	Guard Rail - Moorina Road	Guard Rail	Renew/replace	1,290
A00420178	Guard Rail - Kelly Street	Guard Rail	Renew/replace	14,796
A00421394	Guard Rail - Kahala Road	Guard Rail	Renew/replace	2,740
New	New/upgrade program	Guard Rail	New	20,000
Subtotal for FY2028				400,000
Capital renewal/replacement program for FY2029				
A00007313	Guard Rail - Rodgers Lane	Guard Rail	Renew/replace	1,370
A00007323	Guard Rail - Seaview Court	Guard Rail	Renew/replace	4,384
A00015176	Guard Rail - Sarah Court	Guard Rail	Renew/replace	1,918
A00015906	Guard Rail - Railway Avenue	Guard Rail	Renew/replace	6,576
A00016336	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	8,768
A00016337	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	21,098
A00016338	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	26,421
A00016483	Guard Rail - Smiths Road	Guard Rail	Renew/replace	16,166
A00057273	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	21,920
A00057451	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	27,126
A00060612	Guard Rail - Bateson Road	Guard Rail	Renew/replace	5,754

Moreton Bay Regional Council

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00065939	Guard Rail - Sarah Court	Guard Rail	Renew/replace	2,192
A00066668	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	61,650
A00066669	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	19,728
A00066670	Guard Rail - Mount Samson Road	Guard Rail	Renew/replace	8,882
A00117487	Guard Rail - Samsonvale Road	Guard Rail	Renew/replace	4,658
A00420109	Guard Rail - Old Mount Samson Road	Guard Rail	Renew/replace	41,105
A00420179	Guard Rail - Clear Mountain Road	Guard Rail	Renew/replace	10,960
A00420653	Guard Rail - Baker Street	Guard Rail	Renew/replace	3,836
A00420809	Guard Rail - Rossleigh Court	Guard Rail	Renew/replace	17,536
A00469899	Guard Rail - Old Mount Samson Road	Guard Rail	Renew/replace	34,798
A00470011	Guard Rail - Cedar Creek Road	Guard Rail	Renew/replace	1,096
A00470712	Guard Rail - Youngs Crossing Road	Guard Rail	Renew/replace	6,850
A00470901	Guard Rail - Rossleigh Court	Guard Rail	Renew/replace	17,536
A00470951	Guard Rail - Sunset Grove	Guard Rail	Renew/replace	7,672
New	New/upgrade program	Guard Rail	New	20,000
Subtotal for FY2029				400,000
Capital renewal/replacement program for FY2030				
A00010792	Guardrail - Mount Nebo Road	Guard Rail	Renew/replace	18,387
A00015389	Guard Rail - Cedar Creek Road	Guard Rail	Renew/replace	1,370
A00016472	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	11,508
A00060604	Guard Rail - Albany Creek Service Road	Guard Rail	Renew/replace	13,426
A00065941	Guard Rail - Cedar Creek Road	Guard Rail	Renew/replace	1,370
A00067194	Guard Rail - Frawley Avenue	Guard Rail	Renew/replace	9,864
A00067202	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	6,850
A00116232	Guard Rail - Cedar Creek Road	Guard Rail	Renew/replace	1,370
A00116477	Guard Rail - Old North Road	Guard Rail	Renew/replace	16,166
A00116930	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	27,948
A00162131	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	4,384
A00167931	Guard Rail - Cedar Creek Road	Guard Rail	Renew/replace	27,126
A00169002	Guard Rail - Dayboro Service Road	Guard Rail	Renew/replace	9,316
A00207546	Guard Rail - Cedar Creek Road	Guard Rail	Renew/replace	3,288
A00212069	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	21,372
A00212070	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	10,412
A00218582	Guard Rail - First Avenue	Guard Rail	Renew/replace	47,128
A00313353	Guard Rail - Fahey's Road West	Guard Rail	Renew/replace	12,878
A00314171	Guard Rail - Frawley Avenue	Guard Rail	Renew/replace	10,412
A00318943	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	36,625
A00320220	Guard Rail - Youngs Crossing Road	Guard Rail	Renew/replace	5,754
A00320472	Guard Rail - Baker Street	Guard Rail	Renew/replace	1,370
A00364792	Guard Rail - Old Gympie Road	Guard Rail	Renew/replace	1,370

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00365072	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	15,647
A00369215	Guard Rail - Clear Mountain Road	Guard Rail	Renew/replace	13,700
A00370120	Guard Rail - Cedardell Court	Guard Rail	Renew/replace	12,330
A00370152	Guard Rail - Vores Road	Guard Rail	Renew/replace	5,480
A00370332	Guard Rail - Baker Street	Guard Rail	Renew/replace	4,384
A00370579	Guard Rail - Cedar Creek Road	Guard Rail	Renew/replace	1,370
A00419830	Guard Rail - Vores Road	Guard Rail	Renew/replace	4,384
A00420098	Guard Rail - Youngs Crossing Road	Guard Rail	Renew/replace	5,480
A00420109	Guard Rail - Old Mount Samson Road	Guard Rail	Renew/replace	3,831
A00464959	Guard Rail - Mount Nebo Road	Guard Rail	Renew/replace	13,700
New	New/upgrade program	Guard Rail	New	20,000
Subtotal for FY2030				400,000
Capital renewal/replacement program for FY2031				
A00010792	Guardrail - Mount Nebo Road	Guard Rail	Renew/replace	93,900
A00369820	Guard Rail - Forgan Road	Guard Rail	Renew/replace	44,158
A00370217	Guard Rail - Winn Road	Guard Rail	Renew/replace	31,784
A00419354	Guard Rail - Fitzgerald Court	Guard Rail	Renew/replace	9,864
A00420104	Guard Rail - Winn Road	Guard Rail	Renew/replace	24,112
A00420486	Guard Rail - Winn Road	Guard Rail	Renew/replace	30,414
A00420487	Guard Rail - Winn Road	Guard Rail	Renew/replace	33,702
A00420537	Guard Rail - Winn Road	Guard Rail	Renew/replace	32,332
A00469962	Guard Rail - Winn Road	Guard Rail	Renew/replace	31,784
A00470477	Guard Rail - Winn Road	Guard Rail	Renew/replace	13,152
A00470478	Guard Rail - Winn Road	Guard Rail	Renew/replace	34,798
New	New/upgrade program	Guard Rail	New	20,000
Subtotal for FY2031				400,000

Kerb and Channel Capital Renewal/Replacement Program

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
Capital renewal/replacement program for FY2022				
A00868336	Banksia Beach - Marina Boulevard - Kerb and Channel Renewal (ePID109632)	Kerb and Channel	Renew/replace	55,000
A00880253	Brendale - Griffin Crescent - Kerb and Channel Renewal (ePID111362)	Kerb and Channel	Renew/replace	10,000

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00876218, A00876252, A00885225, A00876217, A00876253, A00876225	Burpengary - Hauton Road - Kerb and Channel Renewal (ePID111364)	Kerb and Channel	Renew/replace	45,000
A00870528, A00870529	Caboolture - Roseby Court - Kerb and Channel Renewal (ePID110087)	Kerb and Channel	Renew/replace	70,000
A00874977, A00874976	Caboolture - Topaz Street - Kerb and Channel Renewal (ePID111365)	Kerb and Channel	Renew/replace	25,000
A00498773	Kallangur - Anzac Avenue - Kerb and Channel Renewal (ePID111363)	Kerb and Channel	Renew/replace	20,000
A00857832, A00857833	Kallangur - Wattle Street - Kerb and Channel Renewal (ePID111366)	Kerb and Channel	Renew/replace	55,000
A00874862, A00874861	Morayfield - Cresta Court - Kerb and Channel Renewal (ePID109631)	Kerb and Channel	Renew/replace	20,000
Subtotal for FY2022				300,000
Capital renewal/replacement program for FY2023				
A00005386	Kerb - Pettigrew Street - Lhs Kbch	Kerb and Channel	Renew/replace	667
A00006201	Kerb - Kremzow Road	Kerb and Channel	Renew/replace	9,625
A00009374	Kerb - Narangba Road Kurwongbah	Kerb and Channel	Renew/replace	3,384
A00026585	Kerb - Station Street	Kerb and Channel	Renew/replace	1,683
A00085177	Kerb - Viney Avenue Kallangur	Kerb and Channel	Renew/replace	931
A00134624	Kerb - Wirraway Street	Kerb and Channel	Renew/replace	1,828
A00148149	Kerb - Illawarra Street Everton Hills	Kerb and Channel	Renew/replace	11,542
A00175207	Kerb - Lawnton Cemetery	Kerb and Channel	Renew/replace	7,250
A00183650	Kerb - Lorraine Court Lawnton	Kerb and Channel	Renew/replace	4,233
A00195982	Kerb - Dayboro Road Petrie	Kerb and Channel	Renew/replace	3,770
A00200878	Kerb - Station Street	Kerb and Channel	Renew/replace	1,552
A00202528	Kerb - Illawarra Street Everton Hills	Kerb and Channel	Renew/replace	5,856
A00204972	Kerb - Lawnton Cemetery	Kerb and Channel	Renew/replace	6,059
A00211847	Kerb - Ferny Way	Kerb and Channel	Renew/replace	6,017
A00211848	Kerb - Gordon Road	Kerb and Channel	Renew/replace	6,709
A00224783	Kerb - Lorraine Court Lawnton	Kerb and Channel	Renew/replace	4,443
A00226680	Kerb - Dayboro Road	Kerb and Channel	Renew/replace	17,208
A00226839	Kerb - Todds Road Lawnton	Kerb and Channel	Renew/replace	1,637
A00228929	Kerb - Mundin Street	Kerb and Channel	Renew/replace	836
A00250845	Kerb - Macs Lane Kallangur	Kerb and Channel	Renew/replace	2,545
A00262254	Kerb - Ferny Way Ferny Hills	Kerb and Channel	Renew/replace	3,534
A00275178	Kerb - Lorraine Court Lawnton	Kerb and Channel	Renew/replace	9,212
A00277210	Kerb - Todds Road Lawnton	Kerb and Channel	Renew/replace	1,645

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00290717	Kerb and Channel - Mundin Street	Kerb and Channel	Renew/replace	1,760
A00290921	Kerb - Morayfield Service Road - Rhs Kbch	Kerb and Channel	Renew/replace	635
A00299877	Kerb - Bradley Street Dayboro	Kerb and Channel	Renew/replace	2,128
A00301732	Kerb - Gordon Road Ferny Hills	Kerb and Channel	Renew/replace	5,032
A00302547	Kerb and Channel - Alice Street, Donnybrook	Kerb and Channel	Renew/replace	769
A00302959	Kerb - Mundin Street	Kerb and Channel	Renew/replace	690
A00306213	Kerb - Lorraine Court Lawnton	Kerb and Channel	Renew/replace	10,540
A00352931	Kerb - Illawarra Street Everton Hills	Kerb and Channel	Renew/replace	7,923
A00353136	Kerb - Wilder Avenue Kallangur	Kerb and Channel	Renew/replace	2,194
A00354457	Kerb - Lawnton Pocket Road Lawnton	Kerb and Channel	Renew/replace	1,691
A00402693	Kerb - Tandoor Drive	Kerb and Channel	Renew/replace	3,812
A00403589	Kerb - Wilder Avenue Kallangur	Kerb and Channel	Renew/replace	2,237
A00404826	Kerb and Channel - Mundin Street	Kerb and Channel	Renew/replace	734
A00423774	Kerb - Kremzow Road	Kerb and Channel	Renew/replace	1,298
A00433873	Kerb - Baker Street Bray Park1	Kerb and Channel	Renew/replace	2,779
A00435005	Kerb - Lawnton Pocket Road Lawnton	Kerb and Channel	Renew/replace	1,116
A00448320	Kerb - Old Gympie Road	Kerb and Channel	Renew/replace	2,669
A00459231	Kerb - Pettigrew Street - Rhs Kbch	Kerb and Channel	Renew/replace	667
A00485179	Kerb - Ferguson Street	Kerb and Channel	Renew/replace	1,613
A00495541	Kerb - Connors Street Petrie	Kerb and Channel	Renew/replace	3,367
A00497700	Kerb - Old Gympie	Kerb and Channel	Renew/replace	968
A00502474	Kerb - Narangba Road Kurwongbah	Kerb and Channel	Renew/replace	4,175
A00541057	Kerb and Channel - Jabiru Lane, Bellara	Kerb and Channel	Renew/replace	506
A00541142	Kerb - Lower King Street	Kerb and Channel	Renew/replace	3,664
A00541143	Kerb - Lower King Street	Kerb and Channel	Renew/replace	5,335
A00843851	Kerb and Channel - Jackson Road	Kerb and Channel	Renew/replace	1,347
A00851360	Kerb and Channel - Tombondan Crescent	Kerb and Channel	Renew/replace	5,191
A00854929	Kerb and Channel - Larue Court	Kerb and Channel	Renew/replace	5,296
A00855349	Kerb and Channel - Bodiam Court	Kerb and Channel	Renew/replace	1,849
A00867060	Kerb and Channel - Rickman Parade	Kerb and Channel	Renew/replace	621
A00867508	Kerb and Channel - First Avenue	Kerb and Channel	Renew/replace	916
A00867509	Kerb and Channel - First Avenue	Kerb and Channel	Renew/replace	868
A00867580	Kerb and Channel - Foster Street	Kerb and Channel	Renew/replace	619
A00867582	Kerb and Channel - Bonham Street	Kerb and Channel	Renew/replace	489
A00867584	Kerb and Channel - Bonham Street	Kerb and Channel	Renew/replace	681
A00867982	Kerb and Channel - Mountain View Court	Kerb and Channel	Renew/replace	1,581
A00870553	Kerb and Channel - Blue Pacific Road	Kerb and Channel	Renew/replace	1,393
A00870648	Kerb and Channel - Margaret Street	Kerb and Channel	Renew/replace	547
A00870694	Kerb and Channel - Currant Road	Kerb and Channel	Renew/replace	1,656
A00870983	Kerb and Channel - Old Toorbul Point Road	Kerb and Channel	Renew/replace	1,421

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00870984	Kerb and Channel - Old Toorbul Point Road	Kerb and Channel	Renew/replace	1,288
A00871570	Kerb and Channel - Robinson Road	Kerb and Channel	Renew/replace	1,139
A00871600	Kerb and Channel - Mount Pleasant Road	Kerb and Channel	Renew/replace	554
A00875739	Kerb and Channel - Campbells Pocket Road	Kerb and Channel	Renew/replace	1,574
A00876646	Kerb and Channel - Beerburum Road	Kerb and Channel	Renew/replace	1,900
A00877242	Kerb and Channel - Mumford Road	Kerb and Channel	Renew/replace	700
A00877591	Kerb and Channel - Keliher Road	Kerb and Channel	Renew/replace	796
A00877592	Kerb and Channel - Keliher Road	Kerb and Channel	Renew/replace	732
A00877613	Kerb and Channel - Bleakley Road	Kerb and Channel	Renew/replace	1,498
A00877740	Kerb and Channel - Bloodwood Court	Kerb and Channel	Renew/replace	785
A00878421	Kerb and Channel - Peterson Road	Kerb and Channel	Renew/replace	2,792
A00878425	Kerb and Channel - Langer Street	Kerb and Channel	Renew/replace	1,002
A00878430	Kerb and Channel - Langer Street	Kerb and Channel	Renew/replace	721
A00878848	Kerb and Channel - Woodlands Drive	Kerb and Channel	Renew/replace	1,067
A00879399	Kerb and Channel - Unnamed Lane, Albany Creek	Kerb and Channel	Renew/replace	6,067
A00882395	Kerb and Channel - Church Road	Kerb and Channel	Renew/replace	1,110
A00882396	Kerb and Channel - Church Road	Kerb and Channel	Renew/replace	716
A00886232	Kerb and Channel - Donald Street	Kerb and Channel	Renew/replace	4,394
A00886393	Kerb and Channel - Gayundah Esplanade	Kerb and Channel	Renew/replace	6,545
A00889283	Kerb - Armstrong Street	Kerb and Channel	Renew/replace	3,510
A00896368	Kerb and Channel - Learmonth Street	Kerb and Channel	Renew/replace	3,187
A00904936	Kerb and Channel - Peter Street	Kerb and Channel	Renew/replace	1,387
A00904937	Kerb and Channel - Peter Street	Kerb and Channel	Renew/replace	1,589
			Subtotal for FY2023	250,000
Capital renewal/replacement program for FY2024				
A00039436	Kerb - Jackson Street Kallangur	Kerb and Channel	Renew/replace	2,280
A00096599	Kerb - Duffield Road	Kerb and Channel	Renew/replace	2,280
A00104216	Kerb - Bridge Street Kallangur	Kerb and Channel	Renew/replace	1,989
A00105904	Kerb - Normanhurst Court Petrie	Kerb and Channel	Renew/replace	3,802
A00151232	Kerb - Oscar Crescent	Kerb and Channel	Renew/replace	3,056
A00151767	Kerb - Lower King Street	Kerb and Channel	Renew/replace	15,545
A00156822	Kerb - Normanhurst Court Petrie	Kerb and Channel	Renew/replace	3,473
A00163591	Kerb - Beachmere Road	Kerb and Channel	Renew/replace	12,892
A00173701	Kerb and Channel - Albany Creek Community Centre	Kerb and Channel	Renew/replace	1,630
A00185749	Kerb and Channel - Lower King Street, Caboolture	Kerb and Channel	Renew/replace	14,299
A00202414	Kerb - Albany Creek Community Centre	Kerb and Channel	Renew/replace	4,411
A00221515	Kerb - Albany Creek Community Centre	Kerb and Channel	Renew/replace	1,106
A00238990	Kerb - Dux Street - Rhs Kbch	Kerb and Channel	Renew/replace	8,120
A00251509	Kerb - Lower King Street	Kerb and Channel	Renew/replace	13,715
A00285220	Kerb - Dux Street - Lhs Kbch	Kerb and Channel	Renew/replace	8,001

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00352771	Kerb - Lower King Street	Kerb and Channel	Renew/replace	2,775
A00352772	Kerb - Lower King Street	Kerb and Channel	Renew/replace	19,474
A00357634	Kerb - Alzino Court - Rhs Kbch	Kerb and Channel	Renew/replace	773
A00373635	Kerb - Kurwongbah Drive	Kerb and Channel	Renew/replace	2,659
A00386593	Kerb - Library Arana Hills	Kerb and Channel	Renew/replace	19,698
A00391674	Kerb - Beachmere Road	Kerb and Channel	Renew/replace	13,201
A00491350	Kerb and Channel - Lower King Street, Caboolture	Kerb and Channel	Renew/replace	6,048
A00541136	Kerb - King Street	Kerb and Channel	Renew/replace	2,473
A00541137	Kerb - King Street	Kerb and Channel	Renew/replace	2,160
A00541138	Kerb and Channel - King Street	Kerb and Channel	Renew/replace	4,513
A00541139	Kerb and Channel - King Street	Kerb and Channel	Renew/replace	732
A00541140	Kerb and Channel - King Street	Kerb and Channel	Renew/replace	2,184
A00541141	Kerb - King Street	Kerb and Channel	Renew/replace	11,502
A00541142	Kerb - Lower King Street	Kerb and Channel	Renew/replace	15,500
A00541186	Kerb - Bridge Street East	Kerb and Channel	Renew/replace	1,201
A00569204	Kerb - Main Street	Kerb and Channel	Renew/replace	1,615
A00824812	Guard Rail - Caboolture Waste Facility - 2-98 McNaught Road, Caboolture	Kerb and Channel	Renew/replace	3,578
A00854916	Kerb and Channel - Paisley Drive	Kerb and Channel	Renew/replace	13,372
A00854920	Kerb and Channel - Paisley Drive	Kerb and Channel	Renew/replace	4,247
A00854921	Kerb and Channel - Paisley Drive	Kerb and Channel	Renew/replace	5,387
A00854922	Kerb and Channel - Paisley Drive	Kerb and Channel	Renew/replace	7,018
A00854931	Kerb and Channel - Jacque Court	Kerb and Channel	Renew/replace	6,268
A00870913	Kerb and Channel - Nolan Drive	Kerb and Channel	Renew/replace	764
A00876256	Kerb and Channel - Mavis Road	Kerb and Channel	Renew/replace	1,049
A00879421	Kerb and Channel - Gympie Road	Kerb and Channel	Renew/replace	1,838
A00907777	Kerb and Channel - Thurecht Parade	Kerb and Channel	Renew/replace	3,372
			Subtotal for FY2024	250,000
Capital renewal/replacement program for FY2025				
A00010594	Kerb - Mary Street	Kerb and Channel	Renew/replace	1,797
A00026061	Kerb and Channel - Caboolture River Road, Upper Caboolture	Kerb and Channel	Renew/replace	4,356
A00033242	Kerb and Channel - Dux Street, Caboolture	Kerb and Channel	Renew/replace	2,656
A00059707	Kerb and Channel - Mary Street, Woodford	Kerb and Channel	Renew/replace	1,811
A00080145	Kerb - Dux Street - Lhs Kbch	Kerb and Channel	Renew/replace	6,922
A00089576	Kerb - Caboolture River Road - Lhs Kbch	Kerb and Channel	Renew/replace	14,076
A00097246	Kerb and Channel - New Settlement Road, Burpengary	Kerb and Channel	Renew/replace	3,825
A00097251	Kerb and Channel - New Settlement Road	Kerb and Channel	Renew/replace	17,842
A00108569	Kerb - Queens Road Everton Hills	Kerb and Channel	Renew/replace	7,466
A00110788	Kerb - Caboolture River Road - Lhs Kbch	Kerb and Channel	Renew/replace	338
A00133883	Kerb - Lilley Road Warner	Kerb and Channel	Renew/replace	3,661

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00134511	Kerb - Main Street	Kerb and Channel	Renew/replace	3,970
A00155248	Kerb and Channel - Alcock Road	Kerb and Channel	Renew/replace	7,745
A00157188	Kerb - Mott Street Strathpine	Kerb and Channel	Renew/replace	1,987
A00159970	Kerb - South Pine Road Everton Hills	Kerb and Channel	Renew/replace	8,743
A00163685	Kerb and Channel - Caboolture River Road, Morayfield	Kerb and Channel	Renew/replace	4,449
A00183819	Kerb - Vores Road Whiteside	Kerb and Channel	Renew/replace	567
A00185350	Kerb - Main Street	Kerb and Channel	Renew/replace	3,575
A00207338	Kerb - South Pine Road	Kerb and Channel	Renew/replace	7,714
A00221273	Kerb - Young Street Petrie	Kerb and Channel	Renew/replace	956
A00231149	Kerb - South Pine Road	Kerb and Channel	Renew/replace	2,263
A00241570	Kerb - Vores Road Whiteside	Kerb and Channel	Renew/replace	349
A00244276	Kerb - Mott Street Strathpine	Kerb and Channel	Renew/replace	1,387
A00245007	Kerb - Miller Road Everton Hills	Kerb and Channel	Renew/replace	1,468
A00253315	Kerb - Main Street	Kerb and Channel	Renew/replace	11,491
A00256918	Kerb - South Pine Road Everton Hills	Kerb and Channel	Renew/replace	1,480
A00262118	Kerb - England Road Ferny Hills	Kerb and Channel	Renew/replace	1,057
A00281489	Kerb - South Pine Road	Kerb and Channel	Renew/replace	9,544
A00288898	Kerb - Main Street	Kerb and Channel	Renew/replace	4,470
A00303746	Kerb - Main Street	Kerb and Channel	Renew/replace	11,366
A00323775	Kerb - Mount Nebo	Kerb and Channel	Renew/replace	1,677
A00324286	Kerb - Main Street Samford Village	Kerb and Channel	Renew/replace	10,685
A00326041	Kerb - South Pine	Kerb and Channel	Renew/replace	7,315
A00337098	Kerb - Brushbox Close Mt Nebo	Kerb and Channel	Renew/replace	858
A00348327	Kerb - Samsonvale Road Strathpine	Kerb and Channel	Renew/replace	305
A00381457	Kerb - Mount Nebo Road	Kerb and Channel	Renew/replace	983
A00398568	Kerb - Samsonvale Road Strathpine	Kerb and Channel	Renew/replace	778
A00401821	Kerb - Queens Road Everton Hills	Kerb and Channel	Renew/replace	10,770
A00423637	Kerb - Queens Road Everton Hills	Kerb and Channel	Renew/replace	3,530
A00430138	Kerb - Samsonvale Road Bray Park1	Kerb and Channel	Renew/replace	2,064
A00482970	Kerb - Samsonvale Road Bray Park1	Kerb and Channel	Renew/replace	1,797
A00506229	Kerb and Channel - Dux Street, Caboolture	Kerb and Channel	Renew/replace	3,379
A00541204	Kerb and Channel - Ben Street, Morayfield	Kerb and Channel	Renew/replace	514
A00541205	Kerb and Channel - Ben Street, Morayfield	Kerb and Channel	Renew/replace	622
A00569204	Kerb - Main Street	Kerb and Channel	Renew/replace	938
A00824811	Guard Rail - Caboolture Waste Facility - 2-98 McNaught Road, Caboolture	Kerb and Channel	Renew/replace	3,621
A00824813	Guard Rail - Caboolture Waste Facility - 2-98 McNaught Road, Caboolture	Kerb and Channel	Renew/replace	3,664
A00824814	Guard Rail - Caboolture Waste Facility - 2-98 McNaught Road, Caboolture	Kerb and Channel	Renew/replace	575

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00857180	Kerb and Channel - Young Street	Kerb and Channel	Renew/replace	4,371
A00857198	Kerb and Channel - Patterson Street	Kerb and Channel	Renew/replace	7,545
A00857199	Kerb and Channel - Patterson Street	Kerb and Channel	Renew/replace	7,555
A00859124	Kerb and Channel - McBain Street	Kerb and Channel	Renew/replace	4,208
A00865953	Kerb and Channel - George Street	Kerb and Channel	Renew/replace	6,748
A00867641	Kerb and Channel - Campbell Street	Kerb and Channel	Renew/replace	8,596
A00870554	Kerb and Channel - Blue Pacific Road	Kerb and Channel	Renew/replace	1,072
A00876215	Kerb and Channel - Blewers Road	Kerb and Channel	Renew/replace	527
A00876216	Kerb and Channel - Blewers Road	Kerb and Channel	Renew/replace	596
A00884035	Kerb and Channel - Foster Street	Kerb and Channel	Renew/replace	1,041
A00884036	Kerb and Channel - Foster Street	Kerb and Channel	Renew/replace	1,041
A00884037	Kerb and Channel - Foster Street	Kerb and Channel	Renew/replace	1,355
A00885554	Kerb and Channel - Newlands Road	Kerb and Channel	Renew/replace	1,352
A00909857	Kerb and Channel - Goodfellows Road	Kerb and Channel	Renew/replace	587
Subtotal for FY2025				250,000
Capital renewal/replacement program for FY2026				
A00003754	Kerb - Wights Mountain Road	Kerb and Channel	Renew/replace	6,454
A00028677	Kerb and Channel - Bubke Crescent, Caboolture	Kerb and Channel	Renew/replace	988
A00039289	Kerb - Grady Court - Rhs Kbch	Kerb and Channel	Renew/replace	4,020
A00039389	Kerb and Channel - Mcdonald Street, Bongaree	Kerb and Channel	Renew/replace	2,592
A00092864	Kerb - Marine Parade - Lhs Kbch	Kerb and Channel	Renew/replace	617
A00137152	Kerb - Pumicestone Road - Rhs Kbch	Kerb and Channel	Renew/replace	8,006
A00171671	Kerb - Jarvis Court Joyner	Kerb and Channel	Renew/replace	1,707
A00194697	Kerb - Brittainy Street Petrie	Kerb and Channel	Renew/replace	2,167
A00234788	Kerb - Jarvis Court Joyner	Kerb and Channel	Renew/replace	1,965
A00290930	Kerb - Cumberland Road Wights Mountain	Kerb and Channel	Renew/replace	1,111
A00333374	Kerb - Boundary Road	Kerb and Channel	Renew/replace	1,356
A00333674	Kerb - Cumberland Road Wights Mountain	Kerb and Channel	Renew/replace	4,818
A00352015	Kerb - Melaleuca Drive	Kerb and Channel	Renew/replace	2,448
A00352701	Kerb - Westbourne Drive	Kerb and Channel	Renew/replace	779
A00363097	Kerb - Westbourne Drive	Kerb and Channel	Renew/replace	11,779
A00383968	Kerb - Westbourne Drive Wights Mountain	Kerb and Channel	Renew/replace	7,798
A00384213	Kerb - Boundary Road Dakabin	Kerb and Channel	Renew/replace	1,471
A00408091	Kerb - Westbourne Drive	Kerb and Channel	Renew/replace	6,038
A00432512	Kerb - William Road - Lhs Kbch	Kerb and Channel	Renew/replace	7,936
A00438198	Kerb - Eacham Street	Kerb and Channel	Renew/replace	5,772
A00445952	Kerb - Marine Parade - Rhs Kbch	Kerb and Channel	Renew/replace	494
A00446057	Kerb - Young Street	Kerb and Channel	Renew/replace	1,046
A00448317	Kerb - South Pine	Kerb and Channel	Renew/replace	14,375
A00459734	Kerb - Bubke Crescent - Lhs Kbch	Kerb and Channel	Renew/replace	1,033

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00463737	Kerb - Francis Road Lawnton	Kerb and Channel	Renew/replace	7,781
A00491900	Kerb - Camp Mountain Road	Kerb and Channel	Renew/replace	2,586
A00495769	Kerb - Young Street	Kerb and Channel	Renew/replace	925
A00497703	Kerb - South Pine Road	Kerb and Channel	Renew/replace	12,017
A00503915	Kerb - Vonne Court Camp Mountain1	Kerb and Channel	Renew/replace	1,604
A00527804	Kerb - Dohles Rocks Road Murrumba Downs	Kerb and Channel	Renew/replace	2,736
A00527806	Kerb - Dohles Rocks Road Murrumba Downs	Kerb and Channel	Renew/replace	1,205
A00541073	Kerb - Riverwood Drive	Kerb and Channel	Renew/replace	1,961
A00851314	Kerb and Channel - Dorset Court	Kerb and Channel	Renew/replace	1,552
A00851462	Kerb and Channel - Oolong Grove	Kerb and Channel	Renew/replace	6,305
A00851545	Kerb and Channel - Bunora Avenue	Kerb and Channel	Renew/replace	4,404
A00851579	Kerb and Channel - Carawatha Avenue	Kerb and Channel	Renew/replace	3,054
A00853883	Kerb and Channel - Mackie Way	Kerb and Channel	Renew/replace	8,200
A00855767	Kerb and Channel - Samsonvale Road	Kerb and Channel	Renew/replace	9,476
A00856075	Kerb and Channel - Butcher Avenue	Kerb and Channel	Renew/replace	11,371
A00856672	Kerb and Channel - Neilson Street	Kerb and Channel	Renew/replace	8,717
A00856673	Kerb and Channel - Herman Street	Kerb and Channel	Renew/replace	8,406
A00865950	Kerb and Channel - Kindy Lane	Kerb and Channel	Renew/replace	1,443
A00865953	Kerb and Channel - George Street	Kerb and Channel	Renew/replace	3,029
A00867258	Kerb and Channel - Samsonvale Road	Kerb and Channel	Renew/replace	1,959
A00867300	Kerb and Channel - Penambul Crescent	Kerb and Channel	Renew/replace	4,131
A00868063	Kerb and Channel - Hogan Court	Kerb and Channel	Renew/replace	2,566
A00872032	Kerb and Channel - Alfred Street	Kerb and Channel	Renew/replace	3,406
A00876218E	Kerb and Channel - Hauton Road	Kerb and Channel	Renew/replace	0
A00876731	Kerb and Channel - Bradley Street	Kerb and Channel	Renew/replace	8,977
A00876823	Kerb and Channel - Bradley Street	Kerb and Channel	Renew/replace	7,547
A00876825	Kerb and Channel - Bradley Street	Kerb and Channel	Renew/replace	8,882
A00878459	Kerb and Channel - Elizabeth Street	Kerb and Channel	Renew/replace	8,489
A00886215	Kerb and Channel - Victoria Avenue	Kerb and Channel	Renew/replace	4,239
A00886238	Kerb and Channel - Donald Street	Kerb and Channel	Renew/replace	6,265
Subtotal for FY2026				250,000
Capital renewal/replacement program for FY2027				
A00032316	Kerb - Francis Road Lawnton	Kerb and Channel	Renew/replace	8,093
A00041380	Kerb - Vonne Court Camp Mountain1	Kerb and Channel	Renew/replace	1,637
A00057226	Kerb - Boundary Ro	Kerb and Channel	Renew/replace	962
A00088284	Kerb - Nullamanna Road Camp Mountain1	Kerb and Channel	Renew/replace	8,131
A00092096	Kerb - Warrandyte Court Camp Mountain1	Kerb and Channel	Renew/replace	1,503
A00142298	Kerb - Mckean Street - Rhs Kbch	Kerb and Channel	Renew/replace	3,497
A00148447	Kerb - Nullamanna Road Camp Mountain1	Kerb and Channel	Renew/replace	2,242
A00150337	Kerb - Wights Mountain Road	Kerb and Channel	Renew/replace	4,995

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00151119	Kerb - Warrandyte Court Camp Mountain1	Kerb and Channel	Renew/replace	1,401
A00201875	Kerb - Nullamanna Road Camp Mountain1	Kerb and Channel	Renew/replace	4,872
A00209745	Kerb and Channel - Devit Road, Wamuran	Kerb and Channel	Renew/replace	916
A00231706	Kerb - Albany Creek Community Centre	Kerb and Channel	Renew/replace	4,155
A00250271	Kerb - Nullamanna Road Camp Mountain1	Kerb and Channel	Renew/replace	5,382
A00253317	Kerb - Albany Creek Road	Kerb and Channel	Renew/replace	28,429
A00288897	Kerb - Albany Creek Road	Kerb and Channel	Renew/replace	8,314
A00290930	Kerb - Cumberland Road Wights Mountain	Kerb and Channel	Renew/replace	3,087
A00851248	Kerb and Channel - Myles Street	Kerb and Channel	Renew/replace	4,779
A00851600	Kerb and Channel - Wanawong Court	Kerb and Channel	Renew/replace	5,776
A00851634	Kerb and Channel - Joalah Crescent	Kerb and Channel	Renew/replace	4,028
A00851639	Kerb and Channel - Joalah Crescent	Kerb and Channel	Renew/replace	7,074
A00851644	Kerb and Channel - Joalah Crescent	Kerb and Channel	Renew/replace	4,426
A00851645	Kerb and Channel - Joalah Crescent	Kerb and Channel	Renew/replace	5,488
A00851647	Kerb and Channel - Joalah Crescent	Kerb and Channel	Renew/replace	5,340
A00852512	Kerb and Channel - Levant Street	Kerb and Channel	Renew/replace	3,775
A00854646	Kerb and Channel - Jockers Street	Kerb and Channel	Renew/replace	9,300
A00854687	Kerb and Channel - Harvey Street	Kerb and Channel	Renew/replace	12,645
A00854691	Kerb and Channel - Harvey Street	Kerb and Channel	Renew/replace	7,928
A00867983	Kerb and Channel - Mountain View Court	Kerb and Channel	Renew/replace	1,147
A00870988	Kerb and Channel - Leahy Road	Kerb and Channel	Renew/replace	911
A00876472	Kerb and Channel - Oakey Flat Road	Kerb and Channel	Renew/replace	1,842
A00876806	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	3,048
A00879003	Kerb and Channel - Aberfeldy Road	Kerb and Channel	Renew/replace	1,350
A00882142	Kerb and Channel - Amaroo Avenue	Kerb and Channel	Renew/replace	1,068
A00882143	Kerb and Channel - Amaroo Avenue	Kerb and Channel	Renew/replace	2,506
A00882164	Kerb and Channel - Dinterra Avenue	Kerb and Channel	Renew/replace	1,529
A00882165	Kerb and Channel - Dinterra Avenue	Kerb and Channel	Renew/replace	2,296
A00882168	Kerb and Channel - Dinterra Avenue	Kerb and Channel	Renew/replace	855
A00882169	Kerb and Channel - Dinterra Avenue	Kerb and Channel	Renew/replace	3,131
A00884082	Kerb and Channel - Sanderling Lane	Kerb and Channel	Renew/replace	4,441
A00884083	Kerb and Channel - Sanderling Lane	Kerb and Channel	Renew/replace	408
A00885586	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	8,815
A00885587	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	2,515
A00885588	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	6,129
A00885589	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	1,949
A00885593	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	1,256
A00885594	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	6,957
A00885595	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	10,935
A00885596	Kerb and Channel - Mount Samson Road	Kerb and Channel	Renew/replace	6,289

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00886158	Kerb and Channel - Arthur Street	Kerb and Channel	Renew/replace	10,345
A00886339	Kerb and Channel - Arthur Street	Kerb and Channel	Renew/replace	12,105
Subtotal for FY2027				250,000
Capital renewal/replacement program for FY2028				
A00229304	Kerb - Seaview Court Ocean View	Kerb and Channel	Renew/replace	1,621
A00230146	Kerb - Postmans Track Samsonvale	Kerb and Channel	Renew/replace	9,793
A00238904	Kerb - Terben Street Warner	Kerb and Channel	Renew/replace	6,721
A00244783	Kerb - Leahy Road - Rhs Kbch	Kerb and Channel	Renew/replace	305
A00256924	Kerb - Captain Cook Parade - Lhs Kbch	Kerb and Channel	Renew/replace	2,291
A00257040	Kerb - Gladioli Court - Rhs Kbch	Kerb and Channel	Renew/replace	24,050
A00280209	Kerb - Seaview Court Ocean View	Kerb and Channel	Renew/replace	11,715
A00301000	Kerb - Bridge Street East	Kerb and Channel	Renew/replace	2,444
A00305979	Kerb - Blazey Street Kallangur	Kerb and Channel	Renew/replace	2,431
A00308211	Kerb - Petrel Court - Lhs Kbch	Kerb and Channel	Renew/replace	270
A00337068	Kerb - Kangaroo Avenue - Rhs Kbch	Kerb and Channel	Renew/replace	10,934
A00347985	Kerb - Seaview Court Ocean View	Kerb and Channel	Renew/replace	9,880
A00385291	Kerb - Mount Samson Road	Kerb and Channel	Renew/replace	6,873
A00391675	Kerb and Channel - Wise Street, Wamuran	Kerb and Channel	Renew/replace	4,197
A00398394	Kerb - Seaview Court Ocean View	Kerb and Channel	Renew/replace	9,945
A00404965	Kerb - Kangaroo Avenue - Rhs Kbch	Kerb and Channel	Renew/replace	10,948
A00424222	Kerb - Lucas Court Kallangur	Kerb and Channel	Renew/replace	3,818
A00448315	Kerb - Mount Sams	Kerb and Channel	Renew/replace	11,558
A00476652	Kerb - Lucas Court Kallangur	Kerb and Channel	Renew/replace	4,184
A00487395	Kerb - Captain Cook Parade - Lhs Kbch	Kerb and Channel	Renew/replace	1,519
A00498361	Kerb - Highcrest Street Ocean View	Kerb and Channel	Renew/replace	5,126
A00499083	Kerb and Channel - Boden Road, Caboolture	Kerb and Channel	Renew/replace	13,093
A00618472	Kerb - Kangaroo Avenue	Kerb and Channel	Renew/replace	1,397
A00756642	Kerb - Elizabeth Street	Kerb and Channel	Renew/replace	1,871
A00756643	Kerb and Channel - Elizabeth Street	Kerb and Channel	Renew/replace	2,479
A00844070	Kerb and Channel - Colburn Way	Kerb and Channel	Renew/replace	4,811
A00853663	Kerb and Channel - Sally Court	Kerb and Channel	Renew/replace	1,730
A00854767	Kerb and Channel - Shelley Street	Kerb and Channel	Renew/replace	4,051
A00854837	Kerb and Channel - Peter Street	Kerb and Channel	Renew/replace	9,398
A00854854	Kerb and Channel - Patmar Street	Kerb and Channel	Renew/replace	2,489
A00854864	Kerb and Channel - Ancona Street	Kerb and Channel	Renew/replace	4,885
A00855011	Kerb and Channel - Hedge Street	Kerb and Channel	Renew/replace	4,157
A00855261	Kerb and Channel - Yenara Street	Kerb and Channel	Renew/replace	4,641
A00855370	Kerb and Channel - Leone Street	Kerb and Channel	Renew/replace	4,507
A00855371	Kerb and Channel - Leone Street	Kerb and Channel	Renew/replace	5,707
A00855531	Kerb and Channel - Highview Street	Kerb and Channel	Renew/replace	5,132

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00857252	Kerb and Channel - Petrie Street	Kerb and Channel	Renew/replace	2,079
A00857256	Kerb and Channel - Petrie Street	Kerb and Channel	Renew/replace	10,559
A00866176	Kerb and Channel - Redbank Road	Kerb and Channel	Renew/replace	5,107
A00867051	Kerb and Channel - Clement Street	Kerb and Channel	Renew/replace	3,723
A00867094	Kerb and Channel - Loombah Crescent	Kerb and Channel	Renew/replace	8,154
A00867592	Kerb and Channel - Toorbul Street	Kerb and Channel	Renew/replace	4,406
A00867669	Kerb and Channel - Welsby Parade	Kerb and Channel	Renew/replace	4,440
A00867983	Kerb and Channel - Mountain View Court	Kerb and Channel	Renew/replace	559
Subtotal for FY2028				250,000
Capital renewal/replacement program for FY2029				
A00001501	Kerb - Macadamia	Kerb and Channel	Renew/replace	1,370
A00005406	Kerb - Gaffield Street - Rhs Kbch	Kerb and Channel	Renew/replace	7,330
A00033425	Kerb - Highcrest Street Ocean View	Kerb and Channel	Renew/replace	9,783
A00056731	Kerb - Gaffield Street - Lhs Kbch	Kerb and Channel	Renew/replace	6,381
A00072837	Kerb - Macadamia Drive	Kerb and Channel	Renew/replace	1,296
A00084539	Kerb - Highcrest Street Ocean View	Kerb and Channel	Renew/replace	37,053
A00094645	Kerb - Greygum Street	Kerb and Channel	Renew/replace	871
A00106360	Kerb - Petrel Court - Rhs Kbch	Kerb and Channel	Renew/replace	431
A00127759	Kerb - Robinson Road Ocean View	Kerb and Channel	Renew/replace	3,852
A00134500	Kerb - Lagoon Court Samford Valley	Kerb and Channel	Renew/replace	1,652
A00183818	Kerb - Terben Street Warner	Kerb and Channel	Renew/replace	7,668
A00185333	Kerb - Lagoon Court Samford Valley	Kerb and Channel	Renew/replace	1,724
A00200827	Kerb and Channel - Wise Street, Wamuran	Kerb and Channel	Renew/replace	4,197
A00207668	Kerb - Gladioli Court - Lhs Kbch	Kerb and Channel	Renew/replace	23,505
A00219588	Kerb and Channel - Smiths Road, Caboolture	Kerb and Channel	Renew/replace	1,665
A00219591	Kerb and Channel - Smiths Road, Caboolture	Kerb and Channel	Renew/replace	1,836
A00229304	Kerb - Seaview Court Ocean View	Kerb and Channel	Renew/replace	9,961
A00850790	Kerb and Channel - Kaldo Grove	Kerb and Channel	Renew/replace	5,934
A00850794	Kerb and Channel - Kylie Avenue	Kerb and Channel	Renew/replace	3,610
A00850801	Kerb and Channel - Illuta Avenue	Kerb and Channel	Renew/replace	3,262
A00850816	Kerb and Channel - Langura Crescent	Kerb and Channel	Renew/replace	10,315
A00850823	Kerb and Channel - Leawarra Crescent	Kerb and Channel	Renew/replace	9,021
A00851513	Kerb and Channel - Monaro Crescent	Kerb and Channel	Renew/replace	8,065
A00851514	Kerb and Channel - Monaro Crescent	Kerb and Channel	Renew/replace	8,460
A00851542	Kerb and Channel - Alkoomi Avenue	Kerb and Channel	Renew/replace	6,174
A00851594	Kerb and Channel - Wallaroy Court	Kerb and Channel	Renew/replace	8,098
A00851595	Kerb and Channel - Wallaroy Court	Kerb and Channel	Renew/replace	7,378
A00851615	Kerb and Channel - Dinterra Avenue	Kerb and Channel	Renew/replace	6,914
A00851622	Kerb and Channel - Kylie Avenue	Kerb and Channel	Renew/replace	1,331
A00851623	Kerb and Channel - Kylie Avenue	Kerb and Channel	Renew/replace	2,977

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00851641	Kerb and Channel - Leura Grove	Kerb and Channel	Renew/replace	4,846
A00851649	Kerb and Channel - Inbandi Grove	Kerb and Channel	Renew/replace	4,234
A00851650	Kerb and Channel - Kolora Crescent	Kerb and Channel	Renew/replace	7,365
A00851654	Kerb and Channel - Kolora Crescent	Kerb and Channel	Renew/replace	16,062
A00851655	Kerb and Channel - Kolora Crescent	Kerb and Channel	Renew/replace	15,150
A00885345	Kerb and Channel - Delaney Creek School Road	Kerb and Channel	Renew/replace	230
Subtotal for FY2029				250,000
Capital renewal/replacement program for FY2030				
A00252758	Kerb - Coorparoo	Kerb and Channel	Renew/replace	1,102
A00260033	Kerb - Samsonvale	Kerb and Channel	Renew/replace	6,056
A00290933	Kerb - Burton Lane Samford Valley	Kerb and Channel	Renew/replace	31,074
A00299872	Kerb - Clear Mountain Road Clear Mountain1	Kerb and Channel	Renew/replace	5,472
A00301657	Kerb - Youngs Crossing Road Joyner	Kerb and Channel	Renew/replace	13,014
A00303771	Kerb - Admin Centre	Kerb and Channel	Renew/replace	1,667
A00312253	Kerb - Station Street	Kerb and Channel	Renew/replace	753
A00333677	Kerb - Burton Lane Samford Valley	Kerb and Channel	Renew/replace	17,829
A00346870	Kerb - Ira Buckby Road	Kerb and Channel	Renew/replace	3,503
A00346879	Kerb - Station Street	Kerb and Channel	Renew/replace	542
A00356659	Kerb - Old Gympie Road Kallangur	Kerb and Channel	Renew/replace	1,566
A00380805	Kerb - South Pine Road	Kerb and Channel	Renew/replace	734
A00384021	Kerb - Bunya Road	Kerb and Channel	Renew/replace	2,985
A00386250	Kerb - Samsonvale Road	Kerb and Channel	Renew/replace	6,483
A00398465	Kerb - Station Street	Kerb and Channel	Renew/replace	1,552
A00403175	Kerb - Kobbie Creek Road	Kerb and Channel	Renew/replace	5,547
A00403830	Kerb - Torrens Road	Kerb and Channel	Renew/replace	935
A00425848	Kerb - Pumicestone Road	Kerb and Channel	Renew/replace	3,425
A00429689	Kerb - Albany Creek Service Road Albany Creek1	Kerb and Channel	Renew/replace	4,033
A00444867	Kerb - Old Mount Samson Road Closeburn	Kerb and Channel	Renew/replace	2,956
A00448424	Kerb - South Pine Road	Kerb and Channel	Renew/replace	6,252
A00467521	Kerb - Burpengary Road	Kerb and Channel	Renew/replace	830
A00482044	Kerb - Carpark Admin Centre	Kerb and Channel	Renew/replace	8,382
A00486699	Kerb - Station Street	Kerb and Channel	Renew/replace	2,618
A00487688	Kerb - Cedar Creek Road Cedar Creek1	Kerb and Channel	Renew/replace	2,082
A00498331	Kerb - Old Mount Samson Road Closeburn	Kerb and Channel	Renew/replace	2,740
A00498775	Kerb - South Pine Road	Kerb and Channel	Renew/replace	3,137
A00853798	Kerb and Channel - Brendale Street	Kerb and Channel	Renew/replace	3,139
A00853877	Kerb and Channel - Leonard Crescent	Kerb and Channel	Renew/replace	11,573
A00853878	Kerb and Channel - Leonard Crescent	Kerb and Channel	Renew/replace	11,763
A00855170	Kerb and Channel - Centre Street	Kerb and Channel	Renew/replace	9,031
A00855302	Kerb and Channel - Sparkes Road	Kerb and Channel	Renew/replace	11,519

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00855303	Kerb and Channel - Sparkes Road	Kerb and Channel	Renew/replace	11,481
A00855511	Kerb and Channel - Francis Road	Kerb and Channel	Renew/replace	5,117
A00856654	Kerb and Channel - Heatherlea Street	Kerb and Channel	Renew/replace	6,232
A00857063	Kerb and Channel - Dohles Rocks Road	Kerb and Channel	Renew/replace	4,905
A00857216	Kerb and Channel - Joorra Avenue	Kerb and Channel	Renew/replace	4,987
A00869467	Kerb and Channel - Bestmann Road East	Kerb and Channel	Renew/replace	1,791
A00876679	Kerb and Channel - Turner Court	Kerb and Channel	Renew/replace	691
A00877587	Kerb and Channel - Chappel Road	Kerb and Channel	Renew/replace	818
A00878849	Kerb and Channel - Lyons Road	Kerb and Channel	Renew/replace	5,157
A00878850	Kerb and Channel - Lyons Road	Kerb and Channel	Renew/replace	4,536
A00879066	Kerb and Channel - Alice Street	Kerb and Channel	Renew/replace	2,110
A00882178	Kerb and Channel - Kootangal Crescent	Kerb and Channel	Renew/replace	4,025
A00882179	Kerb and Channel - Kootangal Crescent	Kerb and Channel	Renew/replace	1,110
A00882180	Kerb and Channel - Kootangal Crescent	Kerb and Channel	Renew/replace	3,331
A00882229	Kerb and Channel - Keong Road	Kerb and Channel	Renew/replace	2,990
A00882249	Kerb and Channel - Devoran Street	Kerb and Channel	Renew/replace	1,110
A00882250	Kerb and Channel - Devoran Street	Kerb and Channel	Renew/replace	1,110
A00882251	Kerb and Channel - Devoran Street	Kerb and Channel	Renew/replace	2,672
A00885344	Kerb and Channel - Delaney Creek School Road	Kerb and Channel	Renew/replace	893
A00885345	Kerb and Channel - Delaney Creek School Road	Kerb and Channel	Renew/replace	638
Subtotal for FY2030				250,000
Capital renewal/replacement program for FY2031				
A00003937	Kerb - Station Street	Kerb and Channel	Renew/replace	552
A00024006	Kerb - Cutten Street	Kerb and Channel	Renew/replace	1,808
A00027034	Kerb - South Pine	Kerb and Channel	Renew/replace	8,980
A00031175	Kerb and Channel - Station Street, STRATHPINE	Kerb and Channel	Renew/replace	621
A00038151	Kerb - Pumicestone Road - Lhs Kbch	Kerb and Channel	Renew/replace	648
A00041866	Kerb - Mckean Street - RhS Kbch	Kerb and Channel	Renew/replace	4,440
A00050502	Kerb - South Pine Road	Kerb and Channel	Renew/replace	31,033
A00080566	Kerb and Channel - Neurum Road, Woodford	Kerb and Channel	Renew/replace	6,678
A00083085	Kerb - South Pine	Kerb and Channel	Renew/replace	7,047
A00094647	Kerb - Rosella Co	Kerb and Channel	Renew/replace	6,592
A00098947	Kerb - Markwell Road - RhS Kbch	Kerb and Channel	Renew/replace	2,624
A00101070	Kerb - South Pine Road	Kerb and Channel	Renew/replace	36,184
A00130188	Kerb and Channel - Neurum Road, Woodford	Kerb and Channel	Renew/replace	6,670
A00139741	Kerb - Rosella Court	Kerb and Channel	Renew/replace	6,188
A00144924	Kerb - South Pine Road	Kerb and Channel	Renew/replace	37,068
A00195983	Kerb - South Pine Road	Kerb and Channel	Renew/replace	6,876
A00196125	Kerb - Coorparoo Road	Kerb and Channel	Renew/replace	1,287
A00209030	Kerb - Admin Centrentre	Kerb and Channel	Renew/replace	3,240

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00226780	Kerb - South Pine Road	Kerb and Channel	Renew/replace	4,308
A00252758	Kerb - Coorparoo	Kerb and Channel	Renew/replace	123
A00851658	Kerb and Channel - Kootangal Crescent	Kerb and Channel	Renew/replace	8,053
A00852366	Kerb and Channel - Keong Road	Kerb and Channel	Renew/replace	2,985
A00852486	Kerb and Channel - Devoran Street	Kerb and Channel	Renew/replace	5,756
A00852489	Kerb and Channel - Devoran Street	Kerb and Channel	Renew/replace	4,329
A00852490	Kerb and Channel - Devoran Street	Kerb and Channel	Renew/replace	3,141
A00852499	Kerb and Channel - Seligan Street	Kerb and Channel	Renew/replace	13,003
A00867725	Kerb and Channel - Fourth Avenue	Kerb and Channel	Renew/replace	850
A00867766	Kerb and Channel - Bestman Avenue	Kerb and Channel	Renew/replace	5,722
A00870602	Kerb and Channel - Reynolds Court	Kerb and Channel	Renew/replace	14,754
A00874030	Kerb and Channel - Battersby Street	Kerb and Channel	Renew/replace	5,721
A00875907	Kerb and Channel - Coronation Drive	Kerb and Channel	Renew/replace	331
A00878428	Kerb and Channel - Nicklaus Street	Kerb and Channel	Renew/replace	1,175
A00882497	Kerb and Channel - Flynn Lane	Kerb and Channel	Renew/replace	8,074
A00882498	Kerb and Channel - Flynn Lane	Kerb and Channel	Renew/replace	1,608
A00884071	Kerb and Channel - Queen Street	Kerb and Channel	Renew/replace	725
A00884075	Kerb and Channel - Queen Street	Kerb and Channel	Renew/replace	266
A00889279	Right Hand Invert - Burpengary Road, Narangba	Kerb and Channel	Renew/replace	539
Subtotal for FY2031				250,000

Signage (Financial) Capital Renewal/Replacement Program

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
Capital renewal/replacement program for FY2022				
New	Bongaree - Wayfinding Signage Installation (ePID108739)	Signage	New/Upgrade	70,000
New	Eatons Hill - South Pine Sporting Complex - Wayfinding Signage Implementation Plan (ePID109510)	Signage	New/Upgrade	80,000
Subtotal for FY2022				150,000
Capital renewal/replacement program for FY2023				
New	MBRC - Dohles Rocks Road/Bruce Highway Interchange - Wayfinding Signage (ePID108092)	Signage	New/Upgrade	50,000
New	Caboolture South - Wayfinding Signage Installation (ePID108734)	Signage	New/Upgrade	70,000

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
New	MBRC - Caboolture to Wamuran Rail Trail - Cultural Wayfinding Signage Installation (ePID109461)	Signage	New/Upgrade	20,000
New	Strathpine - Gympie Road - Wayfinding Signage Installation (ePID109066)	Signage	New/Upgrade	10,000
Subtotal for FY2023				150,000
Capital renewal/replacement program for FY2024				
New	MBRC - Caboolture to Wamuran Rail Trail - Cultural Wayfinding Signage Installation (ePID109461)	Signage	New/Upgrade	80,000
New	Strathpine - Gympie Road - Wayfinding Signage Installation (ePID109066)	Signage	New/Upgrade	90,000
A00806581	Electric Sign - Camelia Avenue	Signage	Renew/replace	12,722
A00806583	Electric Sign - Camelia Avenue	Signage	Renew/replace	12,722
A00913115	Information Sign - Oxley Avenue	Signage	Renew/replace	6,332
A00913116	Information Sign - Oxley Avenue	Signage	Renew/replace	26,162
A00913117	Information Sign - Oxley Avenue	Signage	Renew/replace	22,063
Subtotal for FY2024				250,000
Capital renewal/replacement program for FY2025				
New	Region wide - Wayfinding Signage Installation (ePID105013)	Signage	New/Upgrade	70,000
A00913114	Electric Sign - Baynes Street	Signage	Renew/replace	29,765
A00913115	Information Sign - Oxley Avenue	Signage	Renew/replace	50,235
Subtotal for FY2025				150,000
Capital renewal/replacement program for FY2026				
New	Redcliffe - CBD - Wayfinding Signage Installation (ePID108084)	Signage	New/Upgrade	262,500
New	Redcliffe - CBD - Wayfinding Signage Installation (ePID108084)	Signage	Renew/replace	87,500
Subtotal for FY2026				350,000
Capital renewal/replacement program for FY2027				
New	Wamuran - Wamuran Township Centre - Wayfinding Signage Installation (ePID109506)	Signage	New/Upgrade	3,750
New	Region wide - Wayfinding Signage Installation (ePID105013)	Signage	New/Upgrade	16,250
A00761195	Wamuran - Wamuran Township Centre - Wayfinding Signage Installation (ePID109506)	Signage	Renew/replace	1,250
A00910489	Wildlife Sign - The Jinker Track	Signage	Renew/replace	268
A00910490	Wildlife Sign - The Jinker Track	Signage	Renew/replace	7,653
A00913114	Electric Sign - Baynes Street	Signage	Renew/replace	70,829
Subtotal for FY2027				100,000
Capital renewal/replacement program for FY2028				
New	Wamuran - Wamuran Township Centre - Wayfinding Signage Installation (ePID109506)	Signage	New/Upgrade	48,750
A00761195	Wamuran - Wamuran Township Centre - Wayfinding Signage Installation (ePID109506)	Signage	Renew/replace	16,250
A00906516	Electronic Sign - Endeavour Boulevard	Signage	Renew/replace	12,311

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00910487	Wildlife Sign - The Jinker Track	Signage	Renew/replace	7,653
A00910488	Wildlife Sign - The Jinker Track	Signage	Renew/replace	7,653
A00910489	Wildlife Sign - The Jinker Track	Signage	Renew/replace	7,384
Subtotal for FY2028				100,000
Capital renewal/replacement program for FY2029				
New	Region wide - Wayfinding Signage Installation (ePID105013)	Signage	New/Upgrade	50,000
A00906516	Electronic Sign - Endeavour Boulevard	Signage	Renew/replace	50,000
Subtotal for FY2029				100,000
Capital renewal/replacement program for FY2030				
New	Region wide - Wayfinding Signage Installation (ePID105013)	Signage	New/Upgrade	50,000
A00906514	Electronic Sign - Endeavour Boulevard	Signage	Renew/replace	35,801
A00906516	Electronic Sign - Endeavour Boulevard	Signage	Renew/replace	14,199
Subtotal for FY2030				100,000
Capital renewal/replacement program for FY2031				
New	Region wide - Wayfinding Signage Installation (ePID105013)	Signage	New/Upgrade	50,000
A00906512	Electronic Sign - Endeavour Boulevard	Signage	Renew/replace	19,291
A00906514	Electronic Sign - Endeavour Boulevard	Signage	Renew/replace	30,709
Subtotal for FY2031				100,000

Traffic Island Capital Renewal/Replacement Program

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
Capital renewal/replacement program for FY2022				
A00543540,A00543541	Griffin - Rainbow Court - Traffic Island Renewal (ePID111369)	Traffic Island	Renew/replace	10,000
A00799525	Arana Hills - Dawson Parade - Traffic Island Renewal (ePID111370)	Traffic Island	Renew/replace	10,000
A00542547	Brendale - Bult Drive - Traffic Island Renewal (ePID111373)	Traffic Island	Renew/replace	75,000
A00542028	Albany Creek - Willow Street - Traffic Island Renewal (ePID111374)	Traffic Island	Renew/replace	27,000
A00799147,A00799148	Albany Creek - Albany Forest Drive - Traffic Island Renewal (ePID111375)	Traffic Island	Renew/replace	28,000
Subtotal for FY2022				150,000
Capital renewal/replacement program for FY2023				
A00010139	Arana Hills - Patricks Road - Traffic Island Renewal (ePID111377)	Traffic Island	Renew/replace	5,000

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00575117,A00575150,A00575151	Narangba - New Settlement Road - Traffic Island Renewal (ePID111378)	Traffic Island	Renew/replace	35,000
A00212588	Lawnton - Jacque Court - Traffic Island Renewal (ePID111380)	Traffic Island	Renew/replace	75,000
A00543376	Eatons Hill - Queen Elizabeth Drive - Traffic Island Renewal (ePID111381)	Traffic Island	Renew/replace	30,000
A00545448,A00545449	Warner - Kurrajong Drive - Traffic Island Renewal (ePID111382)	Traffic Island	Renew/replace	5,000
Subtotal for FY2023				150,000
Capital renewal/replacement program for FY2024				
A00342707	Deception Bay - Lipscombe Road - Traffic Island Renewal 2 (ePID111371)	Traffic Island	Renew/replace	120,000
A00397633	Deception Bay - Lipscombe Road - Traffic Island Renewal 1 (ePID111372)	Traffic Island	Renew/replace	80,000
A00541574	Pedestrian Refuge - Linkwood Drive	Traffic Island	Renew/replace	373
A00541575	Pedestrian Refuge - Linkwood Drive	Traffic Island	Renew/replace	396
A00541945	Speed Hump - Albany Creek Swimming Pool - 34 Explorer Drive, Albany Creek	Traffic Island	Renew/replace	1,919
A00543501	Median - Patricks Road	Traffic Island	Renew/replace	17,959
A00543504	Traffic Island - Patricks Road	Traffic Island	Renew/replace	1,530
A00543505	Traffic Island - Patricks Road	Traffic Island	Renew/replace	827
A00544136	Traffic Island - Forestry Road	Traffic Island	Renew/replace	4,421
A00544137	Traffic Island - Mount Nebo Road	Traffic Island	Renew/replace	4,009
A00544138	Traffic Island - Mount Nebo Road	Traffic Island	Renew/replace	4,718
A00544835	Median - Frenchs Road	Traffic Island	Renew/replace	3,911
A00544836	Median - Frenchs Road	Traffic Island	Renew/replace	2,657
A00544838	Traffic Island - Frenchs Road	Traffic Island	Renew/replace	2,996
A00544841	Traffic Island - Frenchs Road	Traffic Island	Renew/replace	1,309
A00544842	Traffic Island - Frenchs Road	Traffic Island	Renew/replace	1,090
A00545374	Pedestrian Refuge - Samsonvale Road	Traffic Island	Renew/replace	915
A00545375	Pedestrian Refuge - Samsonvale Road	Traffic Island	Renew/replace	971
Subtotal for FY2024				250,000
Capital renewal/replacement program for FY2025				
A00015895	Traffic Island - Cheltenham Street	Traffic Island	Renew/replace	574
A00016082	Traffic Island - Camelia Avenue	Traffic Island	Renew/replace	4,638
A00066502	Traffic Island - Marquis Street	Traffic Island	Renew/replace	837
A00117827	Traffic Island - Pimelea Street	Traffic Island	Renew/replace	2,975
A00168505	Traffic Island - Ann Street	Traffic Island	Renew/replace	2,453
A00168928	Median - Pimelea Street	Traffic Island	Renew/replace	19,203
A00265422	Traffic Island - Sylvan Beach Esplanade	Traffic Island	Renew/replace	3,677
A00332035	Traffic Island - Sylvan Beach Esplanade	Traffic Island	Renew/replace	4,216
A00420802	Median - Queens Road	Traffic Island	Renew/replace	8,516
A00466720	Median - Frawley Avenue	Traffic Island	Renew/replace	15,149
A00470394	Traffic Island - Dawson Parade	Traffic Island	Renew/replace	3,822

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00470766	Median - Queens Road	Traffic Island	Renew/replace	47,092
A00497201	Median - Frawley Avenue	Traffic Island	Renew/replace	3,302
A00542083	Traffic Island - Pimelea Street	Traffic Island	Renew/replace	509
A00542084	Traffic Island - Pimelea Street	Traffic Island	Renew/replace	975
A00542168	Median - Hodges Court	Traffic Island	Renew/replace	11,918
A00542255	Traffic Island - Sylvan Beach Esplanade	Traffic Island	Renew/replace	1,857
A00542431	Traffic Island - Webster Street	Traffic Island	Renew/replace	2,441
A00542467	Pedestrian Refuge - Francis Road	Traffic Island	Renew/replace	7,063
A00542471	Traffic Island - Francis Road	Traffic Island	Renew/replace	1,166
A00542695	Median - New Settlement Road	Traffic Island	Renew/replace	17,176
A00542696	Traffic Island - New Settlement Road	Traffic Island	Renew/replace	441
A00542697	Traffic Island - New Settlement Road	Traffic Island	Renew/replace	6,118
A00542713	Pedestrian Refuge - Pitt Road	Traffic Island	Renew/replace	1,285
A00542714	Pedestrian Refuge - Pitt Road	Traffic Island	Renew/replace	1,258
A00542733	Traffic Island - Frank Street	Traffic Island	Renew/replace	614
A00543420	Traffic Island - Miller Parade	Traffic Island	Renew/replace	8,908
A00543426	Traffic Island - Timms Road	Traffic Island	Renew/replace	340
A00543452	Traffic Island - Pettys Road	Traffic Island	Renew/replace	1,546
A00543453	Traffic Island - Pettys Road	Traffic Island	Renew/replace	887
A00543478	Traffic Island - England Road	Traffic Island	Renew/replace	2,373
A00543500	Median - Patricks Road	Traffic Island	Renew/replace	14,224
A00543501	Median - Patricks Road	Traffic Island	Renew/replace	954
A00543627	Pedestrian Refuge - Marsden Road	Traffic Island	Renew/replace	893
A00543628	Pedestrian Refuge - Marsden Road	Traffic Island	Renew/replace	991
A00543630	Traffic Island - Mcbain Street	Traffic Island	Renew/replace	3,701
A00543631	Traffic Island - Mcbain Street	Traffic Island	Renew/replace	3,942
A00543632	Traffic Island - Mcneill Road	Traffic Island	Renew/replace	1,859
A00543633	Traffic Island - Mcneill Road	Traffic Island	Renew/replace	1,082
A00543816	Traffic Island - Norfolk Avenue	Traffic Island	Renew/replace	334
A00543817	Traffic Island - Norfolk Avenue	Traffic Island	Renew/replace	277
A00544832	Traffic Island - Eucumbene Drive	Traffic Island	Renew/replace	3,166
A00544844	Traffic Island - Joorra Avenue	Traffic Island	Renew/replace	1,937
A00545336	Traffic Island - Bells Pocket Road	Traffic Island	Renew/replace	467
A00545360	Traffic Island - Kremzow Road	Traffic Island	Renew/replace	74,876
A00545580	Traffic Island - Welsby Parade - Carpark	Traffic Island	Renew/replace	520
A00545581	Traffic Island - Welsby Parade - Carpark	Traffic Island	Renew/replace	2,722
A00545582	Traffic Island - Tintookie Park Carpark	Traffic Island	Renew/replace	701
A00545583	Traffic Island - Welsby Parade - Carpark	Traffic Island	Renew/replace	2,171
A00545584	Traffic Island - First Avenue	Traffic Island	Renew/replace	661
A00545585	Traffic Island - First Avenue	Traffic Island	Renew/replace	728

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00545586	Traffic Island - Welsby Parade - Carpark	Traffic Island	Renew/replace	469
			Subtotal for FY2025	300,000
Capital renewal/replacement program for FY2026				
A00318935	Pedestrian Refuge - Cowrie Parade	Traffic Island	Renew/replace	1,624
A00466720	Median - Frawley Avenue	Traffic Island	Renew/replace	31,688
A00477969	Median - Endeavour Drive	Traffic Island	Renew/replace	153,713
A00497945	Median - Endeavour Drive	Traffic Island	Renew/replace	122,592
A00541544	Traffic Island - Nanbaree Drive	Traffic Island	Renew/replace	348
A00541966	Pedestrian Refuge - Keong Road	Traffic Island	Renew/replace	574
A00541967	Pedestrian Refuge - Keong Road	Traffic Island	Renew/replace	623
A00541969	Pedestrian Refuge - Keong Road	Traffic Island	Renew/replace	563
A00541970	Pedestrian Refuge - Keong Road	Traffic Island	Renew/replace	603
A00542517	Traffic Island - Nanbaree Drive	Traffic Island	Renew/replace	91
A00542518	Traffic Island - Nanbaree Drive	Traffic Island	Renew/replace	627
A00542721	Pedestrian Refuge - Rowley Road	Traffic Island	Renew/replace	1,059
A00542878	Pedestrian Refuge - Pumicestone Road	Traffic Island	Renew/replace	664
A00542879	Pedestrian Refuge - Pumicestone Road	Traffic Island	Renew/replace	757
A00543425	Traffic Island - Lily Street	Traffic Island	Renew/replace	180
A00543454	Roundabout - South Pine Road	Traffic Island	Renew/replace	15,005
A00543456	Traffic Island - South Pine Road	Traffic Island	Renew/replace	3,649
A00543459	Traffic Island - South Pine Road	Traffic Island	Renew/replace	9,989
A00543464	Traffic Island - Balfour Street	Traffic Island	Renew/replace	224
A00543619	Pedestrian Refuge - Goodfellows Road	Traffic Island	Renew/replace	602
A00543620	Pedestrian Refuge - Goodfellows Road	Traffic Island	Renew/replace	663
A00543621	Traffic Island - Goodfellows Road	Traffic Island	Renew/replace	607
A00543696	Traffic Island - Dalton Street	Traffic Island	Renew/replace	474
A00543697	Traffic Island - Dalton Street	Traffic Island	Renew/replace	340
A00543778	Traffic Island - Oleander Street	Traffic Island	Renew/replace	883
A00543779	Traffic Island - Oleander Street	Traffic Island	Renew/replace	621
A00544213	Pedestrian Refuge - Mcclintock Drive	Traffic Island	Renew/replace	625
A00544214	Pedestrian Refuge - Mcclintock Drive	Traffic Island	Renew/replace	613
			Subtotal for FY2026	350,000
Capital renewal/replacement program for FY2027				
A00066383	Pedestrian Refuge - Woodtop Court	Traffic Island	Renew/replace	1,444
A00116067	Pedestrian Refuge - Woodtop Court	Traffic Island	Renew/replace	928
A00447983	Median - Endeavour Drive	Traffic Island	Renew/replace	258,202
A00469727	Roundabout - Endeavour Drive	Traffic Island	Renew/replace	33,144
A00470876	Median - Young Street	Traffic Island	Renew/replace	3,178
A00477969	Median - Endeavour Drive	Traffic Island	Renew/replace	1,105

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Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00479912	Traffic Island - Park Road	Traffic Island	Renew/replace	8,073
A00542076	Traffic Island - Hutton Road	Traffic Island	Renew/replace	1,948
A00542212	Median - Solander Esplanade	Traffic Island	Renew/replace	22,595
A00542213	Median - Solander Esplanade	Traffic Island	Renew/replace	6,432
A00542244	Traffic Island - White Patch Esplanade	Traffic Island	Renew/replace	1,167
A00542245	Traffic Island - White Patch Esplanade	Traffic Island	Renew/replace	1,241
A00542844	Pedestrian Refuge - Mckean Street	Traffic Island	Renew/replace	600
A00542845	Pedestrian Refuge - Mckean Street	Traffic Island	Renew/replace	593
A00543105	Traffic Island - Bisschop Street	Traffic Island	Renew/replace	2,051
A00543179	Traffic Island - Fredan Road	Traffic Island	Renew/replace	1,195
A00543241	Traffic Island - Nowak Court	Traffic Island	Renew/replace	228
A00543811	Traffic Island - Leis Parade	Traffic Island	Renew/replace	10,308
A00544196	Traffic Island - Goodfellows Road	Traffic Island	Renew/replace	1,453
A00544868	Traffic Island - Young Street	Traffic Island	Renew/replace	1,278
A00545329	Traffic Island - Dixon Street	Traffic Island	Renew/replace	856
A00545338	Median - Dixon Street	Traffic Island	Renew/replace	1,052
A00545339	Median - Dixon Street	Traffic Island	Renew/replace	4,642
A00545340	Median - Dixon Street	Traffic Island	Renew/replace	5,338
A00545341	Median - Dixon Street	Traffic Island	Renew/replace	1,999
A00545342	Pedestrian Refuge - Dixon Street	Traffic Island	Renew/replace	1,090
A00545343	Pedestrian Refuge - Dixon Street	Traffic Island	Renew/replace	789
A00545344	Pedestrian Refuge - Dixon Street	Traffic Island	Renew/replace	730
A00545345	Pedestrian Refuge - Dixon Street	Traffic Island	Renew/replace	305
A00545346	Roundabout - Dixon Street	Traffic Island	Renew/replace	20,887
A00545348	Traffic Island - Dixon Street	Traffic Island	Renew/replace	3,259
A00545376	Pedestrian Refuge - Samsonvale Road	Traffic Island	Renew/replace	952
A00545377	Pedestrian Refuge - Samsonvale Road	Traffic Island	Renew/replace	942
			Subtotal for FY2027	400,000
Capital renewal/replacement program for FY2028				
A00015609	Median - Brooks Road	Traffic Island	Renew/replace	6,836
A00060603	Median - Stanley Street	Traffic Island	Renew/replace	4,769
A00065913	Median - Keong Road	Traffic Island	Renew/replace	51,171
A00117410	Traffic Island - Stanley Street	Traffic Island	Renew/replace	3,251
A00150550	Median - Caboolture River Road	Traffic Island	Renew/replace	20,921
A00167607	Pedestrian Refuge - Collins Road	Traffic Island	Renew/replace	6,433
A00168531	Median - Stanley Street	Traffic Island	Renew/replace	11,807
A00212590	Pedestrian Refuge - Collins Road	Traffic Island	Renew/replace	2,315
A00214073	Traffic Island - Caboolture River Road	Traffic Island	Renew/replace	6,428
A00247007	Traffic Island - Jensen Road	Traffic Island	Renew/replace	1,587
A00254068	Pedestrian Refuge - Harris Avenue	Traffic Island	Renew/replace	1,216

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00262804	Traffic Island - South Pine Road	Traffic Island	Renew/replace	6,587
A00268483	Traffic Island - Riverside Circuit	Traffic Island	Renew/replace	466
A00268847	Pedestrian Refuge - Collins Road	Traffic Island	Renew/replace	1,280
A00302703	Pedestrian Refuge - Caboolture River Road	Traffic Island	Renew/replace	691
A00309044	Traffic Island - Caboolture River Road	Traffic Island	Renew/replace	534
A00313690	Traffic Island - Lancewood Drive	Traffic Island	Renew/replace	1,621
A00319573	Traffic Island - South Pine Road	Traffic Island	Renew/replace	1,529
A00352408	Pedestrian Refuge - Caboolture River Road	Traffic Island	Renew/replace	646
A00369637	Traffic Island - Patricks Road	Traffic Island	Renew/replace	10,358
A00369793	Median - Lavarack Road	Traffic Island	Renew/replace	13,031
A00369794	Traffic Island - South Pine Road	Traffic Island	Renew/replace	18,894
A00370222	Pedestrian Refuge - Macdonnell Road	Traffic Island	Renew/replace	1,929
A00396452	Traffic Island - Belvista Court	Traffic Island	Renew/replace	567
A00413753	Traffic Island - Lavarack Road	Traffic Island	Renew/replace	10,208
A00419370	Pedestrian Refuge - Klingner Road	Traffic Island	Renew/replace	474
A00419685	Pedestrian Refuge - Macdonnell Road	Traffic Island	Renew/replace	1,204
A00447456	Median - Endeavour Drive	Traffic Island	Renew/replace	100,749
A00447983	Median - Endeavour Drive	Traffic Island	Renew/replace	11,494
A00464886	Median - Stanley Street	Traffic Island	Renew/replace	3,005
A00470133	Pedestrian Refuge - Klingner Road	Traffic Island	Renew/replace	1,281
A00541522	Traffic Island - South Pine Road	Traffic Island	Renew/replace	557
A00542284	Pedestrian Refuge - Bellmere Road	Traffic Island	Renew/replace	1,148
A00542286	Pedestrian Refuge - Bellmere Road	Traffic Island	Renew/replace	1,361
A00542321	Traffic Island - Parkwood Place	Traffic Island	Renew/replace	8,371
A00542332	Traffic Island - Riverwood Drive	Traffic Island	Renew/replace	585
A00542398	Pedestrian Refuge - Goodwin Drive	Traffic Island	Renew/replace	1,122
A00542399	Pedestrian Refuge - Goodwin Drive	Traffic Island	Renew/replace	1,367
A00542446	Traffic Island - Brooks Road	Traffic Island	Renew/replace	201
A00542472	Traffic Island - Francis Road	Traffic Island	Renew/replace	1,283
A00542746	Traffic Island - Matthew Flinders Drive	Traffic Island	Renew/replace	17,265
A00543600	Traffic Island - Cecily Street	Traffic Island	Renew/replace	1,129
A00543659	Traffic Island - Orchid Avenue	Traffic Island	Renew/replace	126
A00543800	Median - Francis Road	Traffic Island	Renew/replace	54,359
A00543805	Traffic Island - Francis Road	Traffic Island	Renew/replace	10,192
A00543950	Pedestrian Refuge - Caboolture River Road	Traffic Island	Renew/replace	684
A00543951	Pedestrian Refuge - Caboolture River Road	Traffic Island	Renew/replace	593
A00544290	Pedestrian Refuge - Harris Avenue	Traffic Island	Renew/replace	1,216
A00544418	Median - Tibrogargan Drive	Traffic Island	Renew/replace	926
A00544878	Pedestrian Refuge - Ashmole Road	Traffic Island	Renew/replace	698
A00544919	Median - John Street	Traffic Island	Renew/replace	25,713

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00545350	Traffic Island - Pine Rivers Park	Traffic Island	Renew/replace	5,929
A00545354	Traffic Island - Pine Rivers Park	Traffic Island	Renew/replace	2,300
A00584100	Speed Hump - James Drysdale Reserve	Traffic Island	Renew/replace	1,919
A00618488	Speed Hump - Patmar Street	Traffic Island	Renew/replace	1,919
A00618489	Speed Hump - Patmar Street	Traffic Island	Renew/replace	1,919
A00628782	Speed Hump - Farrow Street	Traffic Island	Renew/replace	1,919
A00628783	Speed Hump - Hedge Street	Traffic Island	Renew/replace	1,919
			Subtotal for FY2028	450,000
Capital renewal/replacement program for FY2029				
A00217328	Pedestrian Refuge - Bunya Road	Traffic Island	Renew/replace	961
A00243386	Median - Eagle Court	Traffic Island	Renew/replace	94,653
A00268335	Speed Cushion - Sutton	Traffic Island	Renew/replace	2,175
A00268353	Pedestrian Refuge - Bunya Road	Traffic Island	Renew/replace	764
A00268789	Median - Leitchs Road	Traffic Island	Renew/replace	4,413
A00294580	Traffic Island - Stardust Court	Traffic Island	Renew/replace	977
A00319557	Pedestrian Refuge - Faheys Road East	Traffic Island	Renew/replace	677
A00348466	Traffic Island - Stardust Court	Traffic Island	Renew/replace	901
A00369943	Pedestrian Refuge - Faheys Road East	Traffic Island	Renew/replace	726
A00370070	Traffic Island - Macquarie Drive	Traffic Island	Renew/replace	907
A00411325	Median - Walker Court	Traffic Island	Renew/replace	133,099
A00419859	Traffic Island - Zinnia Street	Traffic Island	Renew/replace	1,988
A00420105	Pedestrian Refuge - Faheys Road East	Traffic Island	Renew/replace	650
A00447456	Median - Endeavour Drive	Traffic Island	Renew/replace	183,843
A00470296	Traffic Island - Almond Way	Traffic Island	Renew/replace	824
A00470475	Traffic Island - Zinnia Street	Traffic Island	Renew/replace	539
A00541509	Pedestrian Refuge - Jagora Drive	Traffic Island	Renew/replace	684
A00541510	Pedestrian Refuge - Jagora Drive	Traffic Island	Renew/replace	856
A00541515	Pedestrian Refuge - Wruck Crescent	Traffic Island	Renew/replace	809
A00541516	Pedestrian Refuge - Wruck Crescent	Traffic Island	Renew/replace	849
A00541589	Pedestrian Refuge - Duffield Road	Traffic Island	Renew/replace	954
A00541590	Pedestrian Refuge - Duffield Road	Traffic Island	Renew/replace	472
A00542566	Traffic Island - Leitchs Road	Traffic Island	Renew/replace	4,268
A00542671	Traffic Island - Henderson Road	Traffic Island	Renew/replace	1,134
A00542672	Traffic Island - Henderson Road	Traffic Island	Renew/replace	1,134
A00542673	Traffic Island - Henderson Road	Traffic Island	Renew/replace	1,134
A00543182	Pedestrian Refuge - George Street	Traffic Island	Renew/replace	1,446
A00543183	Pedestrian Refuge - George Street	Traffic Island	Renew/replace	1,050
A00543184	Pedestrian Refuge - George Street	Traffic Island	Renew/replace	1,628
A00543185	Pedestrian Refuge - George Street	Traffic Island	Renew/replace	991
A00543442	Traffic Island - Camelia Avenue	Traffic Island	Renew/replace	532

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Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00543444	Traffic Island - Camelia Avenue	Traffic Island	Renew/replace	644
A00544156	Pedestrian Refuge - Brays Road	Traffic Island	Renew/replace	1,227
A00544157	Pedestrian Refuge - Brays Road	Traffic Island	Renew/replace	744
A00545065	Roundabout - Finnegan Street	Traffic Island	Renew/replace	14,071
A00545066	Traffic Island - Finnegan Street	Traffic Island	Renew/replace	1,148
A00545068	Traffic Island - Finnegan Street	Traffic Island	Renew/replace	1,169
A00545069	Traffic Island - Finnegan Street	Traffic Island	Renew/replace	976
A00545070	Traffic Island - Finnegan Street	Traffic Island	Renew/replace	621
A00545071	Traffic Island - Finnegan Street	Traffic Island	Renew/replace	2,787
A00545106	Traffic Island - Parsons Street	Traffic Island	Renew/replace	1,426
A00545131	Median - Wights Mountain Road	Traffic Island	Renew/replace	19,535
A00545132	Traffic Island - Wights Mountain Road	Traffic Island	Renew/replace	9,179
A00545370	Traffic Island - Melaleuca Drive	Traffic Island	Renew/replace	837
Subtotal for FY2029				500,000
Capital renewal/replacement program for FY2030				
A00015497	Traffic Island - Sheaves Road	Traffic Island	Renew/replace	1,344
A00055273	Median - Whitby Court	Traffic Island	Renew/replace	26,865
A00066305	Traffic Island - Hutton Road	Traffic Island	Renew/replace	3,712
A00066306	Traffic Island - Macquarie Drive	Traffic Island	Renew/replace	1,337
A00075784	Traffic Island - Bibimulya Street	Traffic Island	Renew/replace	1,671
A00092234	Traffic Island (Precast) - Gracemere Street	Traffic Island	Renew/replace	590
A00109624	Traffic Island - Gracemere Street	Traffic Island	Renew/replace	480
A00112072	Traffic Island - Macquarie Drive	Traffic Island	Renew/replace	1,362
A00117834	Median - Johnstone Road	Traffic Island	Renew/replace	3,015
A00125710	Median - Christine Street	Traffic Island	Renew/replace	6,097
A00142015	Median - Elizabeth Batts Court	Traffic Island	Renew/replace	112,760
A00167947	Traffic Island - Dohles Rocks Road	Traffic Island	Renew/replace	731
A00168934	Traffic Island - Macquarie Drive	Traffic Island	Renew/replace	1,358
A00177805	Traffic Island - Rossini Street	Traffic Island	Renew/replace	1,509
A00203063	Pedestrian Refuge - Golden Wattle Drive	Traffic Island	Renew/replace	1,132
A00207551	Traffic Island - Avery Court	Traffic Island	Renew/replace	3,417
A00243386	Median - Eagle Court	Traffic Island	Renew/replace	12,656
A00263126	Traffic Island - Macquarie Drive	Traffic Island	Renew/replace	1,097
A00294997	Median - Buchanan Road	Traffic Island	Renew/replace	42,326
A00318765	Roundabout - Mingaye Street	Traffic Island	Renew/replace	10,841
A00319934	Traffic Island - Macquarie Drive	Traffic Island	Renew/replace	1,218
A00346371	Median - Verdoni Street	Traffic Island	Renew/replace	160,379
A00350997	Traffic Island - Tradewinds Drive	Traffic Island	Renew/replace	3,095
A00369945	Traffic Island - Macquarie Drive	Traffic Island	Renew/replace	1,078
A00420108	Traffic Island - Sheaves Road	Traffic Island	Renew/replace	3,197

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00466719	Median - Island Parade	Traffic Island	Renew/replace	3,340
A00470474	Traffic Island - Sheaves Road	Traffic Island	Renew/replace	3,148
A00541504	Pedestrian Refuge - Explorer Drive	Traffic Island	Renew/replace	901
A00541505	Pedestrian Refuge - Explorer Drive	Traffic Island	Renew/replace	851
A00541606	Pedestrian Refuge - Francis Road	Traffic Island	Renew/replace	1,548
A00541607	Pedestrian Refuge - Francis Road	Traffic Island	Renew/replace	1,126
A00542205	Traffic Island - Seabreeze Avenue	Traffic Island	Renew/replace	586
A00542206	Traffic Island - Seabreeze Avenue	Traffic Island	Renew/replace	401
A00542221	Traffic Island - Cosmos Park Sports Complex	Traffic Island	Renew/replace	1,132
A00542222	Traffic Island - Cosmos Park Sports Complex	Traffic Island	Renew/replace	2,867
A00542223	Traffic Island - Cosmos Park Sports Complex	Traffic Island	Renew/replace	14,902
A00542730	Traffic Island - Church Street	Traffic Island	Renew/replace	2,028
A00542747	Traffic Island - Mingaye Street	Traffic Island	Renew/replace	686
A00542749	Traffic Island - Mingaye Street	Traffic Island	Renew/replace	1,993
A00542755	Pedestrian Refuge - Torrens Road	Traffic Island	Renew/replace	1,099
A00542756	Pedestrian Refuge - Torrens Road	Traffic Island	Renew/replace	1,055
A00543031	Pedestrian Refuge - Macdonnell Road	Traffic Island	Renew/replace	917
A00543032	Pedestrian Refuge - Macdonnell Road	Traffic Island	Renew/replace	912
A00543666	Traffic Island - Sheaves Road	Traffic Island	Renew/replace	847
A00543807	Traffic Island - Isis Road	Traffic Island	Renew/replace	4,389
A00543808	Traffic Island - Isis Road	Traffic Island	Renew/replace	502
A00543998	Median - Graham Road	Traffic Island	Renew/replace	28,022
A00544004	Traffic Island - Graham Road	Traffic Island	Renew/replace	90
A00544850	Traffic Island - Newlands Avenue	Traffic Island	Renew/replace	1,199
A00545321	Traffic Island - Scarborough Road	Traffic Island	Renew/replace	8,069
A00545362	Traffic Island - Livingstone Street	Traffic Island	Renew/replace	5,057
A00570281	Pedestrian Refuge - Duffield Road	Traffic Island	Renew/replace	2,851
A00570282	Pedestrian Refuge - Duffield Road	Traffic Island	Renew/replace	5,392
A00570293	Pedestrian Refuge - High Street	Traffic Island	Renew/replace	366
A00570294	Pedestrian Refuge - High Street	Traffic Island	Renew/replace	455
			Subtotal for FY2030	500,000
Capital renewal/replacement program for FY2031				
A00015184	Pedestrian Refuge - Bunya Road	Traffic Island	Renew/replace	1,041
A00055273	Median - Whitby Court	Traffic Island	Renew/replace	89,041
A00060829	Traffic Island - Railway Avenue	Traffic Island	Renew/replace	33,747
A00066307	Median - Dawson Parade	Traffic Island	Renew/replace	51,474
A00066903	Pedestrian Refuge - Bunya Road	Traffic Island	Renew/replace	796
A00115822	Traffic Island - Barber Road	Traffic Island	Renew/replace	505
A00162286	Median - Dawson Parade	Traffic Island	Renew/replace	15,759
A00167190	Traffic Island - Barber Road	Traffic Island	Renew/replace	330

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00184445	Traffic Island - Norfolk Esplanade	Traffic Island	Renew/replace	8,059
A00216862	Traffic Island - Belrose Avenue	Traffic Island	Renew/replace	898
A00216863	Traffic Island - Laceys Creek Road	Traffic Island	Renew/replace	1,442
A00225217	Traffic Island - Camp Mountain Road	Traffic Island	Renew/replace	2,979
A00243566	Median - Matthew Flinders Drive	Traffic Island	Renew/replace	21,239
A00258682	Median - Sylvan Beach Esplanade	Traffic Island	Renew/replace	22,492
A00265248	Median - Matthew Flinders Drive	Traffic Island	Renew/replace	15,638
A00269152	Traffic Island - Laceys Creek Road	Traffic Island	Renew/replace	5,143
A00273130	Traffic Island - Duncombe Road	Traffic Island	Renew/replace	1,456
A00284450	Pedestrian Refuge - Golden Wattle Drive	Traffic Island	Renew/replace	1,096
A00314202	Median - Laceys Creek Road	Traffic Island	Renew/replace	8,152
A00314211	Traffic Island - Nullamanna Road	Traffic Island	Renew/replace	7,893
A00326586	Median - Matthew Flinders Drive	Traffic Island	Renew/replace	53,157
A00363967	Traffic Island - Jagora Drive	Traffic Island	Renew/replace	453
A00366012	Traffic Island - Bilkurra Road	Traffic Island	Renew/replace	5,511
A00370610	Traffic Island - Herron Road	Traffic Island	Renew/replace	5,208
A00370611	Traffic Island - Nightingale Drive	Traffic Island	Renew/replace	1,839
A00413929	Traffic Island - Jagora Drive	Traffic Island	Renew/replace	203
A00465027	Traffic Island - Jagora Drive	Traffic Island	Renew/replace	525
A00469884	Traffic Island - Boundary Road	Traffic Island	Renew/replace	3,686
A00470244	Median - Matthew Flinders Drive	Traffic Island	Renew/replace	17,943
A00496977	Traffic Island - Parragilga Lane	Traffic Island	Renew/replace	1,425
A00527666	Traffic Island - Barber Road	Traffic Island	Renew/replace	1,216
A00541554	Traffic Island - Nullamanna Road	Traffic Island	Renew/replace	704
A00541555	Traffic Island - Nullamanna Road	Traffic Island	Renew/replace	3,239
A00541961	Roundabout - Jagora Drive	Traffic Island	Renew/replace	11,937
A00541962	Traffic Island - Jagora Drive	Traffic Island	Renew/replace	2,084
A00542001	Traffic Island - Woolworths Albany Creek	Traffic Island	Renew/replace	1,263
A00542564	Median - Leitchs Road	Traffic Island	Renew/replace	4,487
A00542731	Traffic Island (Precast) - Cook Avenue	Traffic Island	Renew/replace	786
A00542732	Traffic Island (Precast) - Fowler Drive	Traffic Island	Renew/replace	663
A00542735	Traffic Island (Precast) - Grant Road	Traffic Island	Renew/replace	301
A00542955	Traffic Island - Nullamanna Road	Traffic Island	Renew/replace	5,077
A00543306	Traffic Island - Delaney Creek School Road	Traffic Island	Renew/replace	17,227
A00543465	Traffic Island - Barber Road	Traffic Island	Renew/replace	433
A00543580	Roundabout - Ann Street	Traffic Island	Renew/replace	15,646
A00543581	Traffic Island - Ann Street	Traffic Island	Renew/replace	1,177
A00543584	Traffic Island - Azalea Court	Traffic Island	Renew/replace	1,126
A00543585	Traffic Island - Azalea Court	Traffic Island	Renew/replace	1,339
A00543640	Traffic Island - Oakview Court	Traffic Island	Renew/replace	914

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00543677	Pedestrian Refuge - Whitehorse Road	Traffic Island	Renew/replace	1,129
A00543678	Pedestrian Refuge - Whitehorse Road	Traffic Island	Renew/replace	1,239
A00543681	Traffic Island - Mount Pleasant Road	Traffic Island	Renew/replace	581
A00543815	Traffic Island - Nightingale Drive	Traffic Island	Renew/replace	706
A00544280	Traffic Island - Duncombe Road	Traffic Island	Renew/replace	12,143
A00544375	Traffic Island - Oakey Flat Road	Traffic Island	Renew/replace	5,597
A00544828	Traffic Island - Belrose Avenue	Traffic Island	Renew/replace	510
A00544855	Traffic Island - Relesah Drive	Traffic Island	Renew/replace	8,143
A00545347	Traffic Island - Dixon Street	Traffic Island	Renew/replace	16,960
A00545371	Traffic Island - Railway Avenue	Traffic Island	Renew/replace	4,249
Subtotal for FY2031				500,000

Traffic Signals Capital Renewal/Replacement Program

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
Capital renewal/replacement program for FY2022				
A00805352	Burpengary - Station Road & North Shore Drive - Intersection Upgrade (ePID108108)	Traffic Signal	Renew/replace	39,600
A00113384	Morayfield - Walkers Road & Petersen Road - Intersection Upgrade (ePID108110)	Traffic Signal	Renew/replace	73,800
A00402599	Murrumba Downs - Dohles Rocks Road and Ogg Road - Intersection Upgrade (ePID108106)	Traffic Signal	Renew/replace	38,300
A00443303	North Lakes - North Lakes Drive & Mason Street - Intersection Upgrade (ePID108115)	Traffic Signal	Renew/replace	128,300
Subtotal for FY2022				280,000
Capital renewal/replacement program for FY2023				
A00036623	Traffic Signal - Youngs Crossing Road Francis Road	Traffic Signal	Renew/replace	60,000
A00087515	Traffic Signal - Samsonvale Road	Traffic Signal	Renew/replace	190,000
Subtotal for FY2023				250,000
Capital renewal/replacement program for FY2024				
A00036623	Traffic Signal - Youngs Crossing Road Francis Road	Traffic Signal	Renew/replace	130,000
A00087514	Traffic Signal - Eversleigh Intersection, Scarborough Road	Traffic Signal	Renew/replace	80,000
A00443304	Traffic Signal - Keong Road - Pedestrian Crossing	Traffic Signal	Renew/replace	190,000
Subtotal for FY2024				400,000

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
Capital renewal/replacement program for FY2025				
A00087514	Traffic Signal - Eversleigh Intersection, Scarborough Road	Traffic Signal	Renew/replace	120,000
A00150462	Traffic Signal - Samsonvale Road and Symphony Avenue	Traffic Signal	Renew/replace	50,000
A00403310	Traffic Signal - Pedestrian Crossing - Todds Road	Traffic Signal	Renew/replace	190,000
A00403311	Traffic Signal - Pedestrian Crossing - Patricks Road	Traffic Signal	Renew/replace	190,000
Subtotal for FY2025				550,000
Capital renewal/replacement program for FY2026				
A00049204	Traffic Signal - Oxley Ave and Eversleigh Rd Intersection, Scarborough	Traffic Signal	Renew/replace	180,000
A00150462	Traffic Signal - Samsonvale Road and Symphony Avenue	Traffic Signal	Renew/replace	140,000
A00351791	Traffic Signal - Patricks Road and Ferny Way	Traffic Signal	Renew/replace	190,000
A00393494	Traffic Signal - South Pine Road	Traffic Signal	Renew/replace	190,000
Subtotal for FY2026				700,000
Capital renewal/replacement program for FY2027				
A00049204	Traffic Signal - Oxley Ave and Eversleigh Rd Intersection, Scarborough	Traffic Signal	Renew/replace	20,000
A00099528	Traffic Signal - Pedestrian Crossing - Old Gympie Road	Traffic Signal	Renew/replace	190,000
A00100075	Traffic Signal - Pedestrian Crossing - Ferny Way	Traffic Signal	Renew/replace	190,000
A00503808	Traffic Signal - Smiths Road and Lynfield Drive Intersection, Caboolture	Traffic Signal	Renew/replace	5,213
A00887058	Traffic Signal - Halpine Drive	Traffic Signal	Renew/replace	190,000
A00887084	Traffic Signal - Benabrow Avenue	Traffic Signal	Renew/replace	254,787
Subtotal for FY2027				850,000
Capital renewal/replacement program for FY2028				
A00099527	Traffic Signal - Frenchs Road and Eacham Street Crossing	Traffic Signal	Renew/replace	171,748
A00113384	Traffic Signal - Petersen and Walkers Road Intersection, Morayfield	Traffic Signal	Renew/replace	0
A00149650	Traffic Signal - Kensington Way and Sovereign Avenue	Traffic Signal	Renew/replace	190,000
A00250687	Traffic Signal - Lipscombe Road and Mariner Blvd Intersection, Deception Bay	Traffic Signal	Renew/replace	243,465
A00303975	Traffic Signal - Station Road and O'Brien Road Intersection, Burpengary	Traffic Signal	Renew/replace	200,000
A00503808	Traffic Signal - Smiths Road and Lynfield Drive Intersection, Caboolture	Traffic Signal	Renew/replace	194,787
Subtotal for FY2028				1,000,000
Capital renewal/replacement program for FY2029				
A00049203	Traffic Signal - Laverack Road and Old North Road, Brendale	Traffic Signal	Renew/replace	190,000
A00087513	Traffic Signal - Visentin Road and Station Road Morayfield	Traffic Signal	Renew/replace	181,748
A00099527	Traffic Signal - Frenchs Road and Eacham Street Crossing	Traffic Signal	Renew/replace	18,252
A00186596	Traffic Signal - Uhlmann Road and Buckley Road Intersection	Traffic Signal	Renew/replace	190,000
A00351790	Traffic Signal - Sparkes Road Pedestrian Crossing Bray Park	Traffic Signal	Renew/replace	190,000
A00503805	Traffic Signal - Caboolture River Road and Grant Road, Morayfield	Traffic Signal	Renew/replace	0
A00503806	Traffic Signal - Northlakes Drive and Mason Street - Northlakes	Traffic Signal	Renew/replace	190,000
A00503807	Traffic Signal - Discovery Drive and Endeavour Boulevard	Traffic Signal	Renew/replace	190,000
Subtotal for FY2029				1,150,000
Capital renewal/replacement program for FY2030				

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ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Asset ID	Description	Asset Type	Treatment	Cost ex GST, \$
A00049205	Traffic Signal - Dawson Parade and Glenlee Street	Traffic Signal	Renew/replace	190,000
A00087513	Traffic Signal - Visentin Road and Station Road Morayfield	Traffic Signal	Renew/replace	8,252
A00402599	Traffic Signal - Dohles Rocks road and Ogg road	Traffic Signal	Renew/replace	0
A00443303	Traffic Signal - Endeavour Boulevard and Mason Street - Northlakes	Traffic Signal	Renew/replace	0
A00887096	Traffic Signal - South Pine Road	Traffic Signal	Renew/replace	151,748
A00887097	Traffic Signal - South Pine Road	Traffic Signal	Renew/replace	190,000
A00887098	Traffic Signal - Station Road	Traffic Signal	Renew/replace	190,000
A00887099	Traffic Signal - Station Road	Traffic Signal	Renew/replace	190,000
A00887100	Traffic Signal - Youngs Crossing Road	Traffic Signal	Renew/replace	190,000
A00887102	Traffic Signal - School Road	Traffic Signal	Renew/replace	190,000
Subtotal for FY2030				1,300,000
Capital renewal/replacement program for FY2031				
A00887083	Traffic Signal - Benabrow Avenue	Traffic Signal	Renew/replace	81,748
A00887085	Traffic Signal - Dawson Parade	Traffic Signal	Renew/replace	190,000
A00887086	Traffic Signal - Leitchs Road	Traffic Signal	Renew/replace	190,000
A00887087	Traffic Signal - Lipscombe Road	Traffic Signal	Renew/replace	190,000
A00887089	Traffic Signal - McKean Street	Traffic Signal	Renew/replace	190,000
A00887090	Traffic Signal - Old North Road	Traffic Signal	Renew/replace	190,000
A00887092	Traffic Signal - Samsonvale Road	Traffic Signal	Renew/replace	190,000
A00887094	Traffic Signal - Samsonvale Road	Traffic Signal	Renew/replace	190,000
A00887096	Traffic Signal - South Pine Road	Traffic Signal	Renew/replace	38,252
Subtotal for FY2031				1,450,000

ITEM 4.1 - ROAD FURNITURE PORTFOLIO ASSET MANAGEMENT PLAN (Cont.)

Road Furniture Portfolio Asset Management Plan

Appendix I - References

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ISO, 2018, ISO 31000:2018, Risk management – Guidelines

MBRC Annual Plan and Budget

MBRC Infrastructure Asset Management Policy (Policy No: 2150-043)

MBRC Strategic Asset Management Plan 2017

MBRC Corporate Plan 2017-2022

MBRC Active Transport Strategy 2012-2031

MBRC Public Transport Strategy 2012-2031

MBRC Integrated Local Transport Strategy 2012-2031

MBRC Transport Asset Management Plan 2017