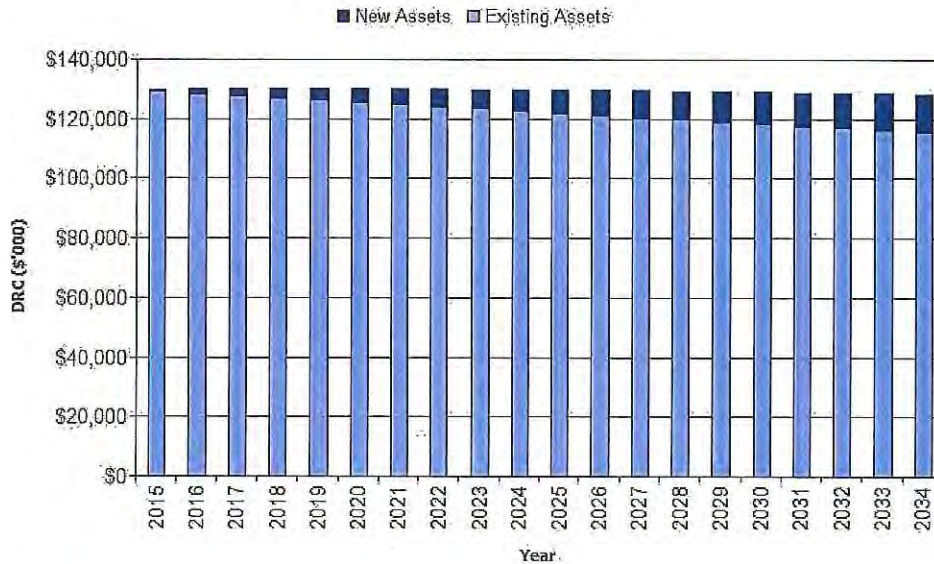


Figure 11 Projected Depreciated Replacement Cost

Northern Midlands - Projected Depreciated Replacement Cost (Transport_S1_V1)



6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
Average population growth over the planning period to be 0.5%	Higher population growth may lead to greater property subdivision activity resulting in higher future maintenance and renewal costs for Council
Population density to remain reasonably stable	Lower future population density could lead to greater property subdivision activity resulting in higher future maintenance and renewal costs for Council
Asset construction costs to remain stable in real (current dollar) terms	If asset construction costs rise faster than the general rate of inflation, then Council's projected future asset renewal costs will be higher than indicated by this plan.

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale¹⁰ in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate $\pm 2\%$
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate $\pm 10\%$
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy $\pm 40\%$
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	Reliable	
Growth projections	Reliable	
Operations expenditures	Reliable	Comparable to long term average actual costs, little variance except for added staff resources
Maintenance expenditures	Reliable	Comparable to long term average actual costs
Projected Renewal exps. - Asset values	Reliable	Standard unit costs based on current pricing and checked to recent capital projects
- Asset residual values	Reliable	Unit costs based on current pricing and compared by other councils by independent expert
- Asset useful lives	Reliable	
- Condition modelling	Reliable	Condition assessments by independent expert undertaken in 5 year intervals and trends compare with visual checking.
- Network renewals	Reliable	Based on condition assessments
- Defect repairs	Reliable	Inspection program assists to manage
Upgrade/New expenditures	Reliable	10 Year program based on condition assessment and visual checking of assessment
Disposal expenditures	Reliable	

Over all data sources the data confidence is assessed as reasonable confidence level for data used in the preparation of this AM Plan.

¹⁰ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

Northern Midlands Council currently has four software systems utilised for managing asset data. These are: Technology One 'ECM' Customer Request System; Open Office 'Community - Finesse' Financial System; Intramaps - Geographic Information System for electronic mapping; and 'Moloney Asset Management' System for data storage and asset registers. These four systems contribute to the overall management of the long term planning of its infrastructure assets in order to:

- Know what and where its assets are;
- Know their condition;
- Establish suitable operational, maintenance and renewal regimes to suit the assets and level of services required of them by present and future customers;
- Establish asset function and asset maintenance to meet the needs of the present and future customers;
- Review maintenance practices and optimising operational procedures;
- Implement management strategies for resources and work programs;
- Improve risk management techniques; and
- Identify the true cost of operations and maintenance and predict future capital investments and maintenance expenditure required to optimise the asset function and lifecycle.

The Moloney Asset Management System is not linked to the accounting system, however it is constantly reconciled to the Finesse system.

The ongoing responsibility of the Asset Management system is primarily that of the Asset Management Officer, including the annual valuation adjustments, upkeep of the existing and new/acquired assets, and depreciation calculations of the assets.

Accounting standards and regulations

Council is required to prepare its annual financial report in accordance with Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board and the Local Government Act 1993 (as amended).

AASB 116 Property, plant and equipment, AASB 136 Impairment of Assets, AASB 140 Investment Property and AASB 5 Non-current Assets held for Sale and Discontinued Operations are applied when preparing council's annual financial statements.

The cost method of accounting is used for the initial recording of all assets acquired. Cost is determined as the fair value of the assets given as consideration plus cost incidental to the acquisition including architects fees, engineering design fees, consulting fees, administration charges and all other costs incurred in getting the assets ready for use. In addition the cost of non-current assets constructed by Council, 'cost' includes all material used in construction, direct labour used on the project and an appropriate proportion of overheads.

Non-monetary assets received in the form of grants and donations are recognised as assets and revenues at their fair value at the date of receipt. Fair value means the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

Capital/maintenance threshold

Generally maintenance, repair costs and minor renewals are charged as expenditure when incurred unless the total value exceeds 10% of the assets written down value or increase the economic life by more than 10%. Road reseals, reconstructions, and resheeting are capitalised. Road shouldering, roadside drainage and hotmix patching are expensed.

Expenditure is capitalised when it provides a future economic benefits which extends beyond one year and can be measured reliably. The following limits apply to the recognition of the acquisition of new assets:

Table 7.1.1: Limits to the recognition of the acquisition of new assets

Asset Class	Capitalisation Threshold
Road Infrastructure	\$5,000
Bridges	\$5,000
Stormwater Infrastructure	\$5,000
Buildings	\$5,000
Heritage	\$1,000
Land	Nil
Land Under Roads	Nil
Flood Levee Infrastructure	\$5,000
Office Furniture and Equipment	\$1,000
Fleet	\$1,000
Minor Plant	\$1,000

7.1.2 Asset management system guidelines

The asset management policies and references used by Northern Midlands Council include:

- Northern Midlands Asset Management Policy – March 2016
- Northern Midlands Asset Management Strategy – March 2016
- International Infrastructure Management Manual, Association of Local Government
- Australian Infrastructure Financial Management Guidelines

Linkage from asset management to financial system

The key information flows into this asset management plan are:

- The asset register data on size, age, value, remaining life of the network;
- The unit rates for categories of work/material;
- The adopted service levels;
- Projections of various factors affecting future demand for services;
- Correlations between maintenance and renewal, including decay models;
- Data on new assets acquired by council.

The key information flows from this asset management plan are:

- The assumed Works Program and trends;
- The resulting budget, valuation and depreciation projections;
- The useful life analysis.

These will impact the Long Term Financial Plan, Strategic Plan, annual budget and departmental business plans and budgets.

One of the essential aspects of asset management is to maintain data records to ensure that they are up to date and accurate. Asset Managers are responsible for updating and maintaining the asset data to meet the organisations operational and financial requirements in delivering efficient and effective asset management.

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Review depreciable lives of asset categories for better understanding and confidence of intervention levels			
2	Review data collection and recording of street furniture asset class			
3	Review capital works priority assessment criteria			
4	Improve and automate the data collection process			
5	Undertake revaluation earlier in each financial period			
6				
7				
8				
9				
10				

7.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 12 months of each Council election.

7.4 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into Council's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 1.0.**

8. REFERENCES

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMG.

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

Sample Council, 'Strategic Plan 20XX – 20XX',

Sample Council, 'Annual Plan and Budget'.

9. APPENDICES

- Appendix A Projected 10 year Capital Renewal and Replacement Works Program
- Appendix B Projected 10 year Capital Upgrade/New Works Program
- Appendix C LTFP Budgeted Expenditures Accommodated in AM Plan
- Appendix D Planned Expenditure for LTFP – in old doc
- Appendix E Road Hierarchy and Target Design Standards
- Appendix F Inspection Requirements
- Appendix G Defect Tolerance levels
- Appendix H Risk Assessment
- Appendix I Projected Capital Works –
 - Road Pavement & Seal Improvement program (based on age, condition, & visual assessment)
 - Footpath Improvement Program
 - Bridge Improvement Program
- Appendix J Road Map
- Appendix K Road Project Business Case (Draft)
- Appendix L Abbreviations
- Appendix M Glossary

Appendix A Projected 10 year Capital Renewal and Replacement Works Program (based on age)

Appendix A Projected 10 year Capital Renewal and Replacement Works Program
Northern Midlands - Report 5 - Appendix B 10 year Renewal & Replacement Program (Transport - 31 - V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1573	Pavement	Gay St	Geoderich St	Howick St	-39	1976	\$26,928	90
1189	Pavement	Stony's Creek Rd	1987 Bridge Seal	Bridge - Stony's Ck Bridge	-35	1980	\$101,400	80
562.1	Kerb	High St/Ross	Church St	Bond St	-24	1991	\$6,600	80
923	Pavement	New St Campb. T	Midlands H'Way	Leake St	-21	1994	\$137,592	90
116	Pavement	Bellevue	00 Midlands Hwy	Seal Change	-12	2003	\$69,390	80
1.3	Footpath	Abel Tarmen Av.	Union St	Levey Bank	-11	2004	\$17,526	70
364	Pavement	Dalmon	00 Marquarie River Rd	Seal Change	-11	2004	\$161,160	80
774	Pavement	Macquarie River Rd	00 Poatina Hwy	Seal Change	-10	2005	\$153,675	70
5241	Bridge	Bridge Street	Un-named Creek	TC	-8	2007	\$58,500	30
2030	Bridge	Powanna Road	Marquarie River	T	-8	2007	\$1,850,000	30
3177	Bridge	Powanna Road	Marquarie River	TC	-8	2007	\$90,600	30
2150	Bridge	Snow Hill Road	Snow Creek	TC	-8	2007	\$36,000	30
160	Pavement	Bond St/Ross	High	Bridge	-8	2007	\$43,240	90
1218	Pavement	Toons Laka Rd	Seal Change	Seal Change	-8	2007	\$216,975	70
1219	Pavement	Toons Laka Rd	Seal Change	Seal Change	-8	2007	\$149,250	70
1400	Pavement	Willmores La	00 Creasy/Main Rd	Loading Ramp	-8	2007	\$251,100	70
1567	Unsealed Pavement	Clara St	Grant St	Railway X-ing	-7	2008	\$1,888	20
109	Pavement	Bedford St	Start of Seal	Franklin	-6	2009	\$8,664	90
307	Pavement	Conara Rd	Bend Right	Start K&C	-6	2009	\$145,200	90
1208	Pavement	The Stock Route	Saundridge St	Seal Change	-6	2009	\$20,740	90
1573	Seal	Gay St	Geoderich St	Howick St	-6	2009	\$1,331	16
1368	Pavement	West St Campb. T	Seal Change	Pedder St	-5	2010	\$15,600	90
1189	Seal	Stony's Creek Rd	1987 Bridge Seal	Bridge - Stony's Ck Bridge	-5	2010	\$16,224	18
676	Unsealed Pavement	Lakeview Rd	Yalcaona	Cont Into Forest	-5	2010	\$21,200	25
737	Unsealed Pavement	Long Mirrah	00 Lake Laake	11.8 Ewenville	-5	2010	\$13,350	25
802	Seal	Main St/Crassy	Stock Route	End RH K&C	-4	2011	\$2,674	18
1017	Seal	Ploughmans Crt	Stockmans Rd	End	-4	2011	\$10,566	30
1191	Seal	Stony's Creek Rd	21.9 Old Stony's Ck Rd	Rossarden Rd	-4	2011	\$20,160	18
1190	Seal	Stony's Creek Rd	Bridge - Stony's Ck Bridge	21.9 Old Stony's Ck Rd	-4	2011	\$41,880	18
112	Unsealed Pavement	Bedford St	End of Seal	End	-4	2011	\$3,955	20

Asset ID	Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
689	Unsealed Pavement	Lewis St West	Burghley St	Catherine St	4	2011	\$2,250	20
1026	Unsealed Pavement	Portugal St	Watford St	End of Pavement	4	2011	\$1,260	20
1284	Unsealed Pavement	Tunbridge Lane	Catie Grid	End	4	2011	\$91,350	20
1524	Unsealed Pavement	Wellington St Ross	End of Seal	Watford St	4	2011	\$2,976	20
361	Pavement	Dialmont	00 Maquarie River Rd	Seal Change	3	2012	\$113,025	80
421	Pavement	Eskley Perth Nursing Home Rd	Seal Change	Home Dr.	3	2012	\$124,080	80
1190	Pavement	Story's Creek Rd	Bridge - Storys Ck Bridge	219 Old Storys Ck Rd	3	2012	\$261,750	80
4	Seal	Adelaide St	Adelaide SBL	Seal Change	3	2012	\$768	18
180	Seal	Bridge St Campb T	Church	Midlands Hwy	3	2012	\$1,971	16
398	Seal	Elizabeth Crt	Midlands H/Way	Change	3	2012	\$11,201	30
91	Seal	Burclay St	Cambock East	Seal Change	2	2013	\$31,450	30
152	Seal	Blenham St	St Pauls P/ NBL	Falmouth	2	2013	\$5,376	18
1495	Seal	Bridge Access Rd	Seal Change	Bridge	2	2013	\$1,934	18
177	Seal	Bridge St Campb T	King	Queen	2	2013	\$10,881	20
634	Seal	Kalangardoo Rd	Lake Leake Rd	Ends at Lake	2	2013	\$19,459	18
923	Seal	New St Campb. T	Midlands H/Way	Leake St	2	2013	\$12,636	18
1058	Seal	Rodgers La	Mercantile	Russell	2	2013	\$1,509	20
1260	Seal	Tonlesse St	Midlands Hwy	Seal Change	2	2013	\$2,177	20
1364	Seal	West St Campb. T	Start of Seal	Midlands H/Way	2	2013	\$4,232	18
2324	Kerb	Burnett St	Putney St	Change	1	2014	\$7,130	100
2812	Kerb	Churchill St	St Pauls P/ NBL	Falmouth	1	2014	\$27,500	80
4424	Kerb	Falmouth St	Gray	EDL Churchill	1	2014	\$16,610	80
1069.3	Kerb	Rossarden Rd	00 Story Ck	Junction	1	2014	\$9,240	80
1598.1	Kerb	Russell St Extra Kerb	High St	Sahwell St	1	2014	\$4,400	80
1071	Pavement	Rossarden Rd	Pole No 161	Culvert	1	2014	\$267,300	80
182	Seal	Bridge St Campb T	Peddler St	Bond	1	2014	\$7,455	16
194	Seal	Bridge St South	Adelaide St	Broad St	1	2014	\$2,774	18
195	Seal	Bridge St South	Broad St	Seal Change	1	2014	\$1,640	18
198	Seal	Broad St	Bridge St South	End of Seal	1	2014	\$2,916	18
849	Seal	Marborough St Longford	00 William St	Chatsworth	1	2014	\$18,096	18
951	Seal	Nivelle St	Badajoz St Fence Line	End of Seal	1	2014	\$2,798	16
1095	Seal	Royal George	00 St Pauls SBL	Merrywood	1	2014	\$34,384	18
1205	Seal	The Boulevarde Pt 1	Chiswick Rd	Bond	1	2014	\$4,368	16
1529	Seal	U/N Rd Evandale	Logan Rd	End of Seal	1	2014	\$4,419	30
1368	Seal	West St Campb. T	Seal Change	Peddler St	1	2014	\$1,300	18
448	Unsealed Pavement	Forest Hill	00 Midlands Hwy	Old Data Segment Driveway	1	2014	\$16,450	25
653	Unsealed Pavement	Kingston Rd	00 Mile Rd		1	2014	\$8,000	25

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
675	Unsealed Pavement	Lakeview Rd	Gate	Yellowna	-1	2014	\$4,000	25
732	Unsealed Pavement	Long Marsh	00 Lake Loake	Pave Change	-1	2014	\$32,000	25
1203	Unsealed Pavement	Tasman St Pt 2	Waterloo St	Gate	-1	2014	\$4,020	20
1525	Unsealed Pavement	Waterloo St	Wellington St	Portugal St	-1	2014	\$3,990	20
310	Pavement	Conara Rd	Gate	End	0	2015	\$31,440	90
107	Seal	Beaufort St	Bridge St EOS	Bond St EOS	0	2015	\$4,512	18
110	Seal	Bedford St	Franklin	Pavement Change	0	2015	\$3,485	18
111	Seal	Bedford St	Montagu	End of Seal	0	2015	\$4,858	18
115	Seal	Bellevue	00 Midlands Hwy	Seal Change	0	2015	\$24,525	18
267	Seal	Christwick Rd Ross Access	00 Midlands Hwy	The Boulevards	0	2015	\$28,930	18
275	Seal	Church St Pt 2	Glenelg St	West St	0	2015	\$24,684	20
438	Seal	Falls Cr	Logan Rd	End	0	2015	\$4,752	30
492	Seal	Glenelg St	Redder St BOK	Church	0	2015	\$10,132	20
774	Seal	Macquarie River Rd	00 Paulina Hwy	Seal Change	0	2015	\$13,363	16
796	Seal	Macquarie St Crazy	Condition Change	Seal Change	0	2015	\$15,493	30
852	Seal	Masson St Campb T	Leake St	Midlands Hwy	0	2015	\$4,956	18
855	Seal	Marrywood	00 Royal George Rd	End of Seal	0	2015	\$4,770	18
879	Seal	Montague St	Midland Hwy	Forster	0	2015	\$6,080	20
1133	Seal	Shearers Cr	Stockmans Rd	End	0	2015	\$12,402	30
1134	Seal	Shepherds Cr	Stockmans Rd	End	0	2015	\$13,158	30
1169	Seal	Stockmans Rd	Logan Rd	End	0	2015	\$37,440	30
1366	Seal	West St Campb. T	Seal Change	Seal Change	0	2015	\$5,882	18
Subtotal							\$5,126,615	18
7350	Bridge	Macquarie Road	Lake River	T	1	2016	\$1,250,000	30
1130	Bridge	Woolmers Lane	Macquarie River	T	1	2016	\$1,500,000	30
2764	Footpath	Church St Ross	The Boulevards	Badgeros	1	2016	\$900	15
5624	Footpath	High St Ross	Church St	Bond St	1	2016	\$3,210	15
14273	Footpath	William St Extra F/P	Midlands HWay	East St	1	2016	\$928	15
522	Pavement	Green Bluses	4.79 Armstrongs	Maitland	1	2016	\$256,500	70
5	Seal	Adelaide St	Seal Change	End of Seal	1	2016	\$2,340	18
116	Seal	Bellevue	00 Midlands Hwy	Seal Change	1	2016	\$6,468	16
183	Seal	Bridge St Campb T	Bond	Clare	1	2016	\$7,600	16
181	Seal	Bridge St Campb T	Midlands Hwy	Redder St	1	2016	\$5,963	20
255	Seal	Chasworths La	00 Marlborough	Golf Club	1	2016	\$5,004	18
305	Seal	Corera Rd	Midland Hwy	Railway X-ing	1	2016	\$2,400	14
372	Seal	Drivers Cr	Stockmans Rd	End	1	2016	\$12,157	30

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
417	Seal	English Town Rd	00 Deadlington Road	end of seal	1	2016	\$4,776	20
433	Seal	Fairbairn St	Midlands Hwy	Elizabeth St	1	2016	\$7,409	16
449	Seal	Forster St	Franklin St	Seal Change	1	2016	\$8,052	16
450	Seal	Forster St	Seal Change	Montagu	1	2016	\$2,124	16
475	Seal	George St Perth	End Kerb	Gate	1	2018	\$4,149	20
493	Seal	Glenelg St	Church St	Queen	1	2016	\$12,620	20
514	Seal	Grant St	Bond St	End Seal	1	2016	\$3,858	16
543	Seal	High St Camp/T	Church	Cond Change	1	2016	\$1,839	18
545	Seal	High St Camp/T	Elizabeth	Queen	1	2016	\$11,794	18
615	Seal	Legs Rd	00 Macquarie River	Seal Change	1	2016	\$13,152	18
721	Seal	Logan Rd	00 Huxtable St Evendale	Seal Change	1	2016	\$3,276	18
1088	Seal	Royal George	00 St Pauls 58L	10.32 St Pauls Dome	1	2016	\$13,104	18
1206	Seal	The Boulevarde Pt 1	Bond	End Seal	1	2016	\$7,874	18
1233	Seal	Tooms Lake Rd	Seal Change	15.43 Cattle Gnd	1	2016	\$8,700	18
1265	Seal	Truelands Rd	East St	Seal Change	1	2016	\$497	18
1267	Seal	Truelands Rd	Seal Change	Seal Change	1	2016	\$17,127	18
1304	Seal	Union St	Seal Change	Wellington St	1	2016	\$4,828	18
1325	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	1	2016	\$19,380	18
1365	Seal	West St Campu. T	Midlands H/Way	Seal Change	1	2016	\$3,551	18
Subtotal							\$3,300,361	70
812	Pavement	Main St Perth	Clarence	Start RH K&C	2	2017	\$24,000	18
59	Seal	Auburn Rd	00 Midlands Hwy	Curvert	2	2017	\$7,020	18
89	Seal	Bardley St	High St NBL	Murray	2	2017	\$15,101	14
109	Seal	Bedford St	Start of Seal	Franklin	2	2017	\$547	18
113	Seal	Bellevue	00 Midlands Hwy.	Seal Change	2	2017	\$14,301	16
186	Seal	Bridge St Ross	West end of Bridge	Church St	2	2017	\$11,029	14
279	Seal	Church St Ross	Change	Divided Rd	2	2017	\$11,280	14
278	Seal	Church St Ross	High	Change	2	2017	\$24,998	14
495	Seal	George St Perth	Clarence St	End Kerb	2	2017	\$8,942	20
656	Seal	Glenesk Rd	00 Nile Rd	Seal Change	2	2017	\$23,222	18
717	Seal	Lake River Rd	00 Macquarie River	Seal Change	2	2017	\$19,976	18
755	Seal	Logan Rd	Seal Change	Seal Change	2	2017	\$20,558	30
851	Seal	Macquarie River Rd	Seal Change	11.29 Macquarie Settlement	2	2017	\$21,174	18
886	Seal	Mason St Campu T	Dawson St	Leake St	2	2017	\$4,469	18
941	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	2	2017	\$11,600	18
	Seal	Nile Rd	00 High St Evendale	Seal Change	2	2017	\$9,936	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
921	Seal	Panec St	Pave Change	Start K&C	2	2017	\$1,503	16
922	Seal	Panec St	Start K&C	Conara Rd	2	2017	\$2,880	16
1039	Seal	Purley St	Pakenham St	Catherine	2	2017	\$4,560	16
1064	Seal	Rossarden Rd	00 Story Cr	Culvert	2	2017	\$48,320	18
1084	Seal	Royal George	00 St Pauls Str	Bridge	2	2017	\$38,184	18
229	Unsealed Pavement	Burghley St Longford	Bulwer	Lewis	2	2017	\$2,800	20
337	Unsealed Pavement	Davidson St	Mason St	End of Loop	2	2017	\$1,440	20
442	Unsealed Pavement	Falmouth St	Gray	EBL Churchill	2	2017	\$2,490	10
445	Unsealed Pavement	Ferroy St	End of Seal	End of Road	2	2017	\$270	20
924	Unsealed Pavement	New St Campb, T	Leake St	Change	2	2017	\$663	20
1569	Unsealed Pavement	Portugal St (South)	Beaufort Rd	Female Factory Ent	2	2017	\$795	20
1063	Unsealed Pavement	Rossarden 101	Rossarden Rd Ch 3735	Rossarden 10	2	2017	\$3,810	20
1283	Unsealed Pavement	Tunbridge Lane	00 Tunbridge Tler	Cattle Grid	2	2017	\$28,050	20
Subtotal							\$38,916	20
2380	Bridge	Royal George Road	Lewis Hill Creek	TC	3	2018	\$78,276	30
81.4	Footpath	Badajos St	Church St	Seal Change	3	2018	\$450	15
82.4	Footpath	Badajos St	Seal Change	Bond St	3	2018	\$2,760	15
91.2	Footpath	Barclay St	Cambock East	Seal Change	3	2018	\$2,940	15
89.4	Footpath	Barclay St	High St NBL	Murray	3	2018	\$3,927	15
90.1	Footpath	Barclay St	Murray	Cambock East	3	2018	\$24,221	30
107.4	Footpath	Beaufort St	Bridge St EOS	Bond St EOS	3	2018	\$3,570	15
159.4	Footpath	Bond St Ross	Badajos St	High	3	2018	\$5,060	15
302.4	Footpath	Collins St Evendale	Huxtable WDL	High St	3	2018	\$6,510	15
320.2	Footpath	Cox St	Nile ETL	End	3	2018	\$2,682	15
552.2	Footpath	High St Evendale	Collins	Seal Change	3	2018	\$4,393	15
562.2	Footpath	High St Ross	Church St	Bond St	3	2018	\$3,210	15
795.3	Footpath	Main St Cressy	Seal Change	Saundridge	3	2018	\$10,974	30
805.3	Footpath	Main St Perth	Phillip	Railway X-ing	3	2018	\$6,438	30
347.2	Footpath	Nile Rd	Start Koch Left	Seal Change	3	2018	\$3,515	15
999.4	Footpath	Paton St	Burghley St	End of Seal	3	2018	\$600	15
1058.2	Footpath	Rodgers La	Macquarie	Russell	3	2018	\$885	15
1150.2	Footpath	Spenders Lane	Cressy Rd	Gatenby St	3	2018	\$1,640	15
1861.3	Footpath	West Cambok La	Main Rd NBL	Side Entry Pit	3	2018	\$852	15
1389.4	Footpath	William St Longford	George St	Burghley St	3	2018	\$8,074	30
1108	Pavement	Saundridge Rd	Change	Seal Change	3	2018	\$473,325	70
21	Seal	Armstrongs La	00 Bishopbourne	Green Rise	3	2018	\$21,492	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
20	Seal	Amstrongs La	00 Bishopbourne	Seal Change	3	2018	\$22,664	18
24	Seal	Arthur St	Seal Change	Falmouth	3	2018	\$2,052	18
43	Seal	Ashby Rd	00 Midlands Hwy	Seal Change	3	2018	\$10,735	18
72	Seal	Auburn Rd	00 Midlands Hwy	Gate RH5	3	2018	\$21,400	18
58	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	3	2018	\$22,746	18
60	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	3	2018	\$2,235	18
90	Seal	Bardley St	Murray	Cambock East	3	2018	\$18,595	14
102	Seal	Barton Rd	00 Midlands Hwy	Bridge	3	2018	\$8,352	18
139	Seal	Blackwood Creek Rd	00 Sandridge	Seal Change	3	2018	\$1,269	18
156	Seal	Bond St Camp, T	Midlands Hwy	Grant St	3	2018	\$7,333	18
197	Seal	Bridge St South	Monatgu	Mason	3	2018	\$5,165	18
235	Seal	Carins St	Ujahn St	End	3	2018	\$5,124	18
249	Seal	Catherine St	End Kerta	Cresy Rd	3	2018	\$16,845	18
1447	Seal	Chinmah Rd	Seal Change	Seal Change	3	2018	\$19,494	18
1446	Seal	Chinmah Rd	Seal Change	Seal Change	3	2018	\$20,292	18
277	Seal	Church St Ross	Badagos	High	3	2018	\$17,298	14
276	Seal	Church St Ross	The Boulevard	Badagos	3	2018	\$10,687	14
310	Seal	Conara Rd	Gate	End	3	2018	\$2,054	16
309	Seal	Conara Rd	Parne St	Gate	3	2018	\$5,666	16
320	Seal	Cox St	Nile ERL	End	3	2018	\$6,870	18
368	Seal	Devon Hills	00 Midlands Hwy	Christine	3	2018	\$21,155	18
387	Seal	East St	Padder St	Change	3	2018	\$11,437	18
441	Seal	Falmouth St	Arthur	Gray	3	2018	\$4,283	18
440	Seal	Falmouth St	Blenkin	Arthur	3	2018	\$4,677	18
452	Seal	Franklin St	Midlands H/Way	Forster	3	2018	\$2,863	16
511	Seal	Goderich St	Seal Change	Gay St	3	2018	\$3,281	18
507	Seal	Goderich St	William St	Archer St	3	2018	\$4,482	18
546	Seal	High St Camp/T	Queen	King	3	2018	\$9,995	18
720	Seal	Logan Rd	00 Hautabale St Ewendale	Seal Change	3	2018	\$27,132	18
785	Seal	Macquarie St Cressy	Gatenby St	Condition Change	3	2018	\$14,866	30
822	Seal	Malcombe St	Wellington St	Lynock	3	2018	\$3,373	18
846	Seal	Marlborough St Longford	00 William St	End of Seal	3	2018	\$24,416	18
999	Seal	Paton St	Burglvey St	End of Seal	3	2018	\$1,747	16
1037	Seal	Paltnay St	Wellington St	Marlborough St	3	2018	\$9,311	16
1065	Seal	Rossarden Rd	00 Story Ck	Seal Change	3	2018	\$32,160	18
1089	Seal	Royal George	00 St Pauls SRL	Seal Change	3	2018	\$21,412	18
1109	Seal	Saundridge Rd	Seal Change	Seal Change	3	2018	\$11,400	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1204	Seal	Tarnania St	Lewis St	Bulwer	3	2018	\$6,182	18
1241	Seal	Tooms Lake Rd	19,28 Cattie Grid	End Seal	3	2018	\$2,340	18
1218	Seal	Tooms Lake Rd	Seal Change	Seal Change	3	2018	\$28,167	18
1259	Seal	Tortoise St	Seal Change	Midlands Hwy	3	2018	\$1,368	18
1268	Seal	Truelands Rd	Seal Change	Seal Change	3	2018	\$13,910	18
1317	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	3	2018	\$30,674	18
1318	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	3	2018	\$16,064	18
1369	Seal	West St Campb. T	Padder St	Church	3	2018	\$5,800	18
1367	Seal	West St Campb. T	Seal Change	Seal Change	3	2018	\$1,656	18
1401	Seal	Willmores La	Loading Ramp	Seal Change	3	2018	\$38,055	18
1418	Seal	Woolmers La	00 Midlands Hwy	9,56 Brickendon	3	2018	\$27,610	12
199	Unsealed Pavement	Brookstone Rd	Bishopbourne	End	3	2018	\$18,375	25
202	Unsealed Pavement	Brumby St	00 Brickendon	Weston	3	2018	\$9,790	25
299	Unsealed Pavement	Cleveland Stat.	Modlands Hwy	End	3	2018	\$1,375	25
506	Unsealed Pavement	Freelands Rd	Creeasy Rd	End at Gate	3	2018	\$24,750	25
586	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	0,51 Cattle Grid	3	2018	\$26,600	25
595	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	Change	3	2018	\$38,850	25
594	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	Willeriness Tk	3	2018	\$52,850	25
734	Unsealed Pavement	Long Marsh	00 Lake Lake	Change	3	2018	\$40,000	25
733	Unsealed Pavement	Long Marsh	00 Lake Lake	Pave Change	3	2018	\$48,000	25
908	Unsealed Pavement	Murfest St	Change	Bend	3	2018	\$5,940	25
1077	Unsealed Pavement	Rothbury	00 Macararie River	End	3	2018	\$23,500	25
1160	Unsealed Pavement	St Pauls Dome	00 Royal George Rd	Bridge	3	2018	\$9,625	25
1162	Unsealed Pavement	St Pauls Dome	00 Royal George Rd	Gate	3	2018	\$6,575	25
1167	Unsealed Pavement	Stanhope Rd	00 Esk Hwy	Gate	3	2018	\$29,900	25
1166	Unsealed Pavement	Stanhope Rd	Creek Rd	Change	3	2018	\$37,500	25
1272	Unsealed Pavement	Truelands Rd	Start of Seal	End Seal	3	2018	\$3,125	25
1278	Unsealed Pavement	Tulbur Rd	00 Hop Valley	ends at gate	3	2018	\$10,290	25
1385	Unsealed Pavement	Willeriness Tk	00 Honeysuckle Rd	End	3	2018	\$47,513	25
1384	Unsealed Pavement	Willeriness Tk	00 Honeysuckle Rd	Gate	3	2018	\$13,988	25
1421	Unsealed Pavement	Woorrik	00 Midlands Hwy	Ends at Gate	3	2018	\$15,700	25
1422	Unsealed Pavement	Yalleena Rd	Lakeview	Kalangadoo	3	2018	\$9,275	25
Subtotal							\$1,751,036	
235	Pavement	Carins St	Union St	End	4	2019	\$76,225	70
34	Seal	Arthur St Perth	Seal Change	Seal Change	4	2019	\$859	16
57	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	4	2019	\$28,789	18

Asset ID	Sub Category	Asset Name	From	To	Rem. Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
56	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	4	2019	\$1,152	18
100	Seal	Baron Rd	00 Midlands Hwy	Pave Change	4	2019	\$44,746	20
99	Seal	Baron Rd	00 Midlands Hwy	Seal Change	4	2019	\$36,194	20
140	Seal	Blackwood Creek Rd	00 Saurnderidge	Seal Change	4	2019	\$13,406	16
153	Seal	Blenham St	Falnoath	Seal Change	4	2019	\$7,571	18
174	Seal	Brickendon St	00 Woodmiers Lane	Creezy	4	2019	\$15,680	18
196	Seal	Bridge St South	Seal Change	Montagu	4	2019	\$1,201	18
225	Seal	Burghley St Longford	High St	Putney St	4	2019	\$8,891	18
263	Seal	Chiniah Rd	00 Powaranna	Seal Change	4	2019	\$7,342	18
1445	Seal	Chiniah Rd	Seal Change	Seal Change	4	2019	\$8,436	18
295	Seal	Clarendon St/L	00 Mile Road	Seal Change	4	2019	\$39,672	18
371	Seal	Devon Hills	00 Midlands Hwy	Devon Hillie	4	2019	\$22,226	18
370	Seal	Devon Hills	00 Midlands Hwy	Seal Change	4	2019	\$26,420	18
381	Seal	Drummond St pt.2	Yauli Main Rd	End Seal	4	2019	\$2,133	20
384	Seal	East Cambok La	Barclay St	Change	4	2019	\$14,976	30
394	Seal	Edgar St	Forster St	Midlands Hwy	4	2019	\$3,143	16
422	Seal	Esplanade, Camp, T	Midlands Hwy	Change	4	2019	\$8,282	20
464	Seal	George St Longford	Packentham St	William St	4	2019	\$3,800	18
517	Seal	Goose Green Pl	Putney St	Change	4	2019	\$18,878	30
522	Seal	Green Biras	4,79,Artrstrongs	Mariland	4	2019	\$34,200	18
534	Seal	Hay St	Burghley St	Smith St	4	2019	\$9,464	18
555	Seal	High St Longford	Marlborough St	Packentham St	4	2019	\$6,257	18
579	Seal	Hobhouse St	Catharine St	Burghley St	4	2019	\$6,323	18
584	Seal	Honeystickle Gr	End Brick Pave	End	4	2019	\$12,204	30
701	Seal	Liffey Rd	Seal Change	Culvert	4	2019	\$36,500	18
722	Seal	Logan Rd	00 Huxtable St Everdale	Seal Change	4	2019	\$17,066	18
806	Seal	Main St Perth	Railway Xing	Mary	4	2019	\$4,582	20
823	Seal	Malcombe St	Lycok	Marlborough St	4	2019	\$12,160	18
834	Seal	Marlington	Hobarr Road	End	4	2019	\$800	18
907	Seal	Murlett St	Church St	End Seal	4	2019	\$2,601	16
1066	Seal	Rosserden Rd	00 Story Cr	Seal Change	4	2019	\$9,242	18
1087	Seal	Royal George	00 St Pauls SBL	Old Seal Change	4	2019	\$20,140	18
1081	Seal	Royal George	00 St Pauls SBL	Seal Change	4	2019	\$29,400	18
1174	Seal	Story's Creek Rd	00 Eek Hwy	Seal Change	4	2019	\$19,642	18
1202	Seal	Tasman St Pt. 1	Bond St	End of Seal	4	2019	\$1,726	16
1240	Seal	Tooms Lake Rd	End Floodway	19,28 Cattle Grid	4	2019	\$27,262	18
1240	Seal	Tooms Lake Rd	Seal Change	17,39 Honeystickle	4	2019	\$10,700	18

Asset ID	Sub Category	Asset Name	From	To	Rem	Planned	Renewal	Renewal	Useful
					Life	Year	Cost	Life	
					(Years)	Year	(\$)	(Years)	
1262	Seal	Torkese St	Change	Bedford St-Pt 2	4	2019	\$864	18	
1290	Seal	Tunbridge Tier Rd	00 Midlands Hwy	Seal Change	4	2019	\$6,612	18	
1328	Seal	Valleyfield Rd	00 Barton Rd	Macquarie	4	2019	\$20,700	18	
1329	Seal	Verwood Rd	00 Auburn Rd	2.49 Cattle Grid	4	2019	\$10,677	20	
1351	Seal	Wallington St Longford	Seal Change	Seal Change	4	2019	\$7,612	16	
1377	Seal	White Hills Rd	Barclay St at 100 kph Sign	Seal Change	4	2019	\$7,788	18	
1379	Seal	White Hills Rd	Seal Change	Dalmess	4	2019	\$21,760	18	
1394	Seal	William St Perth	Elizabeth St	End	4	2019	\$3,818	18	
1426	Seal	Youl Main Rd	No. 33	No 21	4	2019	\$2,492	20	
					Subtotal				
3767	Bridge	Royal George Road	Un-ramped Creek	TC	5	2020	\$72,000	30	
313	Footpath	Arthur St Ewand	Macquarie	Leopold	5	2020	\$460	15	
83.4	Footpath	Badajos St	Dand St	Park St	5	2020	\$1,416	15	
91.4	Footpath	Barclay St	Cambock East	Seal Change	5	2020	\$3,480	15	
89.1	Footpath	Barclay St	High St NBL	Murray	5	2020	\$595	15	
187.2	Footpath	Bridge St Ross	Church St	Seal Change	5	2020	\$1,026	15	
187.4	Footpath	Bridge St Ross	Church St	Seal Change	5	2020	\$484	15	
188.2	Footpath	Bridge St Ross	Seal Change	Beaufort	5	2020	\$1,012	15	
188.4	Footpath	Bridge St Ross	Seal Change	Beaufort	5	2020	\$660	15	
186.2	Footpath	Bridge St Ross	West end of Bridge	Church St	5	2020	\$270	15	
370.4	Footpath	Cox St	Nile EDE	End	5	2020	\$3,306	15	
423.2	Footpath	Esplanade Camp-T	Change	Bridge St	5	2020	\$414	15	
422.2	Footpath	Esplanade Camp-T	Midlands Hwy	Change	5	2020	\$2,646	15	
550.2	Footpath	High St Ewendale	Barclay	Russell	5	2020	\$9,856	15	
550.4	Footpath	High St Ewendale	Barclay	Russell	5	2020	\$15,322	15	
549.2	Footpath	High St Ewendale	Caribock Loz West	Barclay	5	2020	\$5,280	15	
548.2	Footpath	High St Ewendale	Leighlands + 12 m	Barclay	5	2020	\$627	15	
610.2	Footpath	Huxtable Lane	Russell St	Collins St	5	2020	\$1,680	15	
642.2	Footpath	King St Cressy	Bend	Archers St	5	2020	\$4,669	15	
641.2	Footpath	King St Cressy	King St Cressy	Bend	5	2020	\$1,886	15	
641.4	Footpath	King St Cressy	King St Cressy	Bend	5	2020	\$2,180	15	
687.4	Footpath	Leopold St	Change	Barclay St	5	2020	\$2,263	15	
789.4	Footpath	Macquarie St Ewand	Barclay St 58L	Arthur	5	2020	\$1,060	15	
909.4	Footpath	Murray St	Barclay St 58L	Arthur	5	2020	\$546	15	
1571.2	Footpath	Mile Rd	Seal Change	Bridge	5	2020	\$2,340	15	
922.2	Footpath	Parroc St	Start X&C	Conran Rd	5	2020	\$11,294	20	

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1354.4	Footpath	Wellington St Longford	Putney	Malcolm	5	2020	\$4,050	15
1351.2	Footpath	Wellington St Longford	Seal Change	Seal Change	5	2020	\$4,728	15
1352.2	Footpath	Wellington St Longford	Seal Change	Swan	5	2020	\$3,816	15
1342.2	Footpath	Wellington St S8 C/W	Railway X-ing	Start K&C	5	2020	\$256	15
1361.1	Footpath	West Cambok La	Main Rd NDL	Side Entry Pit	5	2020	\$30	15
1361.4	Footpath	West Cambok La	Main Rd NDL	Side Entry Pit	5	2020	\$868	15
1362.3	Footpath	West Cambok La	Side Entry Pit	Change	5	2020	\$1,560	15
1362.4	Footpath	West Cambok La	Side Entry Pit	Change	5	2020	\$4,960	15
919.4	Kerb	Neys St	EBL Rossarden Rd	End Seal	5	2020	\$2,727	15
1045.2	Kerb	Queen St	Gleng St	End	5	2020	\$513	15
103	Pavement	Barton Rd	00 Midlands Hwy	Seal Change	5	2020	\$395,175	60
9	Seal	Anstey St	Cracraft St	End K&C	5	2020	\$3,101	16
37	Seal	Arthur St Berth	Rail X	Clarence St	5	2020	\$9,308	18
73	Seal	Auburn Rd	00 Midlands Hwy	12.10 Verwood	5	2020	\$29,300	18
101	Seal	Barton Rd	00 Midlands Hwy	10.50 Bridge	5	2020	\$6,320	20
94	Seal	Barton Rd	00 Midlands Hwy	Old Seal Change	5	2020	\$20,800	18
93	Seal	Barton Rd	00 Midlands Hwy	Old Seal Change	5	2020	\$34,735	18
95	Seal	Barton Rd	00 Midlands Hwy	Seal Change	5	2020	\$19,864	18
119	Seal	Belvue	00 Midlands Hwy	Ends at Gate	5	2020	\$35,292	18
148	Seal	Blackwood Creek Rd	00 Sandaridge	11.89 Musk Valley	5	2020	\$46,800	18
145	Seal	Blackwood Creek Rd	00 Sandaridge	Change	5	2020	\$22,000	18
144	Seal	Blackwood Creek Rd	00 Sandaridge	Change	5	2020	\$21,000	18
146	Seal	Blackwood Creek Rd	00 Sandaridge	Hop Valley	5	2020	\$34,068	18
150	Seal	Blackwood Creek Rd	00 Sandaridge	Lifey	5	2020	\$30,360	18
141	Seal	Blackwood Creek Rd	00 Sandaridge	Seal Change	5	2020	\$16,127	18
160	Seal	Bond St Ross	High	Bridge	5	2020	\$1,343	18
179	Seal	Bridge St Campb T	Hamilton	Church	5	2020	\$9,181	18
178	Seal	Bridge St Campb T	Queen	Hamilton	5	2020	\$5,180	18
205	Seal	Burnby St	00 Brickenon	Hoslewood	5	2020	\$13,440	18
220	Seal	Burnby St	00 Brickenon	Burghley	5	2020	\$5,837	18
223	Seal	Burghley St	Start Seal	Grassy	5	2020	\$9,530	18
246	Seal	Burghley St Longford	William St	High St	5	2020	\$9,996	18
245	Seal	Catherina St	Bulwer St	Talbot	5	2020	\$11,632	18
248	Seal	Catherina St	Cracraft St	End Kerb	5	2020	\$5,859	20
247	Seal	Catherina St	Talbot	Cracraft St	5	2020	\$4,655	20
251	Seal	Chiniah Rd	00 Powaranna	Seal Change	5	2020	\$10,602	18
250	Seal	Chiniah Rd	00 Powaranna	Seal Joint	5	2020	\$27,960	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
288	Seal	Christine Av	Devon Hill Rd	End	5	2020	\$11,544	18
286	Seal	Clare St	Bridge St	End Seal	5	2020	\$5,244	18
302	Seal	Collins St Ewendale	Huxtable WBL	High St	5	2020	\$8,454	16
307	Seal	Conra Rd	Bend Right	Start K&C	5	2020	\$34,485	18
306	Seal	Conra Rd	Railway X-ing	Bend Right	5	2020	\$5,557	18
329	Seal	Cromwell St	End Left Kerb	Width Change	5	2020	\$3,529	18
355	Seal	Deddington	00 Nile Road	15.03 Bridge	5	2020	\$3,900	18
345	Seal	Deddington	00 Nile Road	9.09 Bryans	5	2020	\$27,450	18
353	Seal	Deddington	00 Nile Road	End of Seal	5	2020	\$4,840	18
344	Seal	Deddington	00 Nile Road	Seal Change	5	2020	\$50,720	18
369	Seal	Devon Hills	00 Midlands Hwy	Loop Rd	5	2020	\$26,668	18
400	Seal	Elizabeth St-pl-1	Clarence	End	5	2020	\$4,394	18
399	Seal	Elizabeth St-pl-1	William St	Clarence	5	2020	\$5,336	18
439	Seal	Falmouth St	E8L St-Pauls Pl	Blenheim	5	2020	\$2,322	18
444	Seal	Fitzroy St	Bridge St SBL	End of Seal	5	2020	\$3,318	18
446	Seal	Foro St	Frederick St	End	5	2020	\$4,259	18
465	Seal	George St Longford	William St	Archer St	5	2020	\$5,963	18
500	Seal	Gibusk Rd	00 Nile Rd	Seal Change	5	2020	\$23,920	18
508	Seal	Goderich St	Archer St	Smith St	5	2020	\$7,288	18
523	Seal	Green Rises	Marland	Change	5	2020	\$26,600	18
554	Seal	High St Longford	Wellington St	Marlbrough St	5	2020	\$9,537	18
570	Seal	Hobart Rd	1.70 Marchington	Seal Change	5	2020	\$53,025	18
577	Seal	Hobhouse St	Marlbrough St	Packeham St	5	2020	\$5,566	18
578	Seal	Hobhouse St	Packeham St	Catharine St	5	2020	\$7,222	18
585	Seal	Hongyarsuckle Gr.	Berley St NBL	Start Drick, Pavc	5	2020	\$4,662	30
608	Seal	Howick St	Park St	Width Change	5	2020	\$4,447	18
618	Seal	Ists Rd	00 Macquarie River	Seal Change	5	2020	\$16,271	18
707	Seal	Lifey Rd	00 Bishopbourne Rd	14.13 Brecknall	5	2020	\$1,056	18
749	Seal	Logan Rd	00 Huxtable St Ewendale	Gunn St	5	2020	\$7,344	18
869	Seal	Mona Vale Rd	00 Midlands Hwy	Seal Change	5	2020	\$4,680	14
902	Seal	Murden La	09 Cresay Rd	End Seal	5	2020	\$40,806	18
906	Seal	Murtek St	Change	Church St	5	2020	\$4,728	18
905	Seal	Murtek St	Saundridge St	Seal Change	5	2020	\$1,640	15
939	Seal	Nile Rd	00 High St Ewendale	11.80 Deddington	5	2020	\$19,477	18
933	Seal	Nile Rd	00 High St Ewendale	Bryants	5	2020	\$27,033	18
975	Seal	Pakenham St	Hortle	Malcanbe St	5	2020	\$3,128	18
974	Seal	Pakenham St	Putney St	Hortle	5	2020	\$4,582	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
972	Seal	Pakenham St	William St	High St	5	2020	\$14,008	18
993	Seal	Patena Rd	00 Hawarra Rd	2.65 Arrandale	5	2020	\$20,824	18
991	Seal	Patena Rd	00 Hawarra Rd	Seal Change	5	2020	\$29,600	18
992	Seal	Patena Rd	00 Hawarra Rd	Seal Change	5	2020	\$15,392	18
1035	Seal	Pitte Lane	00 B Bourne Rd	Boundary	5	2020	\$50,860	20
1033	Seal	Powanna Rd	00 Midlands Hwy	Pave Change	5	2020	\$24,240	18
1047	Seal	Range Rd	Perth Mill Road	End of Circuit	5	2020	\$25,010	18
1052	Seal	Ralbia Rd For Lower White Hills	Change	Boundary	5	2020	\$30,784	18
1051	Seal	Ralbia Rd For Lower White Hills	Change	Boundary	5	2020	\$15,732	18
1060	Seal	Ross St Access Rd	Midland Hwy	Seal Change	5	2020	\$2,100	18
1084	Seal	Royal George	00 St Pauls StL	Seal Change	5	2020	\$51,852	18
1085	Seal	Royal George	00 St Pauls StL	Seal Change	5	2020	\$20,384	18
1090	Seal	Royal George	00 St Pauls StL	Seal Change	5	2020	\$28,728	18
1111	Seal	Saundridge Rd	5.14 Eastfield	Seal Change	5	2020	\$25,605	18
1108	Seal	Saundridge Rd	Change	Seal Change	5	2020	\$68,110	18
1110	Seal	Saundridge Rd	Seal Change	5.14 Eastfield	5	2020	\$15,496	18
1115	Seal	Saundridge Rd	Seal Change	Blackwood Ck	5	2020	\$16,060	18
1112	Seal	Saundridge Rd	Seal Change	Seal Change	5	2020	\$38,535	18
1145	Seal	Saundridge Rd Smith St	Hay St	Gate	5	2020	\$4,315	18
1150	Seal	Spenners Lane	Crespy Rd	Garaby St	5	2020	\$4,717	18
1192	Seal	Summit Drive	00 Devon Hills Rd	End	5	2020	\$38,054	18
1208	Seal	The Stock Route	Saundridge St	Seal Change	5	2020	\$1,642	18
1211	Seal	Tooms Lake Rd	0.36 Railway X-ing	Seal Change	5	2020	\$32,176	18
1238	Seal	Tooms Lake Rd	17.39 Honeyuckle	Bridge	5	2020	\$2,294	18
1232	Seal	Tooms Lake Rd	Seal Change	Seal Change	5	2020	\$4,100	15
1239	Seal	Tooms Lake Rd	Seal Change	Seal Change	5	2020	\$19,601	18
1254	Seal	Tooms Lake Rd Top Rd	Seal Change	1.23 Smiths	5	2020	\$1,428	18
1270	Seal	Trielands Rd	00 Blackwood Ck	End of Seal	5	2020	\$6,426	18
1266	Seal	Trielands Rd	Seal Change	Seal Change	5	2020	\$30,873	18
1289	Seal	Trielands Rd	Seal Change	Seal Change	5	2020	\$18,900	18
1288	Seal	Turbidge Tier Rd	00 Midlands Hwy	Seal Change	5	2020	\$18,900	18
1319	Seal	Valleyfield Rd	00 Midlands Hwy	Seal Change	5	2020	\$7,318	18
1320	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	5	2020	\$39,000	18
1316	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	5	2020	\$15,900	18
1321	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	5	2020	\$61,450	20
1382	Seal	White hills Rd	Rebha	Seal Change	5	2020	\$37,059	18
1400	Seal	Wilmore La	00 Crespy/Main Rd	Loading Ramp	5	2020	\$32,810	20

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1416	Seal	Woolmers La	00 Midlands Hwy	Pave Change	5	2020	\$55,245	20
1417	Seal	Woolmers La	00 Midlands Hwy	Pave Change	5	2020	\$11,555	12
6	Unsealed Pavement	Alma St	Cracroft St	Talbot	5	2020	\$700	20
175	Unsealed Pavement	Brickendon St	00 Woolmers Lane	End	5	2020	\$3,300	20
193	Unsealed Pavement	Bridge St S/R	Change	end	5	2020	\$4,230	20
269	Unsealed Pavement	Church Lane	Nile Rd	End	5	2020	\$2,370	20
640	Unsealed Pavement	King St Camp/T	End Seal	End	5	2020	\$6,570	20
816	Unsealed Pavement	Maitland La	00 Green Risas	Bidge	5	2020	\$35,700	20
1146	Unsealed Pavement	Smiths Rd	Top Rd	Ends at Gate	5	2020	\$7,250	20
1207	Unsealed Pavement	The Boulevards Pt 1	End Seal	Gate	5	2020	\$1,519	20
Subtotal							\$1,901,698	
495	Pavement	Glencak Rd	00 Nile Rd	Seal Change	6	2021	\$174,600	70
849	Pavement	Mathborough St Longford	00 William St	Chatsworth	6	2021	\$140,400	80
1322	Pavement	Valleyfield Rd	00 Barton Rd	Seal Change	6	2021	\$285,750	70
38	Seal	Arthur St Perth	Clarence St	Seal Change	6	2021	\$2,682	16
64	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	6	2021	\$30,232	18
67	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	6	2021	\$35,555	18
68	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	6	2021	\$11,118	18
88	Seal	Banksla Gve.	Phillip St	End of Bowl	6	2021	\$9,410	18
118	Seal	Bellvue	00 Midlands Hwy	Seal Change	6	2021	\$14,432	18
132	Seal	Bishopbourne Rd	00 Ilwaxara	Seal Change	6	2021	\$26,564	18
149	Seal	Blackwood Creek Rd	00 Saunbridge	Seal Change	6	2021	\$23,980	18
176	Seal	Bridge St Camp T	Esplanade	Seal Change	6	2021	\$6,873	18
214	Seal	Bulwer St	Seal Change	Laycock	6	2021	\$7,029	18
243	Seal	Catherine St	Malcombe St	Hobhouse St	6	2021	\$8,989	18
242	Seal	Catherine St	Malcombe St	Malcombe St	6	2021	\$571	18
250	Seal	Cemetery Rd	Drummond St	End of Bowl	6	2021	\$3,485	16
1562	Seal	Chinrah Rd	Seal Change	Powaranna	6	2021	\$7,260	18
280	Seal	Church St Ross	Divided Rd	End Car Park	6	2021	\$6,266	18
289	Seal	Clarence St	Federick St	Elizabeth St	6	2021	\$12,318	18
287	Seal	Clarence St	Midlands Hwy	Elizabeth St	6	2021	\$9,196	18
327	Seal	Cracroft St	Horne	Talisker St	6	2021	\$7,996	18
331	Seal	Crornwell St	Edward St	Wallington	6	2021	\$3,838	16
359	Seal	Dalhont	00 Maquarie River Rd	Seal Change	6	2021	\$10,605	18
373	Seal	Drummond Cts.	Drummond St[E]	Seal Change	6	2021	\$11,564	18
379	Seal	Drummond St	Drummond	Charles	6	2021	\$11,564	18
				End K&C	6	2021	\$2,240	20

Asset ID	Sub Category	Asset Name	From	To	Rem	Planned	Renewal	Cost	Useful
					Life	Year	Year	(\$)	Life
					(Years)				(Years)
380	Seal	Drummond St	Drummond Cr	End K&C	5	2021	\$1,345		20
376	Seal	Drummond St	Midland Hwy	Width Change	6	2021	\$3,793		18
377	Seal	Drummond St	Width Change	Seone	6	2021	\$1,756		18
401	Seal	Elizabeth St pl.2	Midland Hwy	Fairlough	6	2021	\$9,364		18
454	Seal	Franklin St	Bedford	End Seal	6	2021	\$1,469		18
456	Seal	Frederick St	Charles St	Midlands Hwy	6	2021	\$18,882		18
455	Seal	Frederick St	Norfolk St	Charles St	6	2021	\$12,400		18
458	Seal	Frederick St	Seone St	Clarence St	6	2021	\$11,771		18
483	Seal	Glen Cornhill Rd	Change	End of Seal	6	2021	\$17,589		18
518	Seal	Green Bliza	Liffey Rd.	1.21 Elphinstone	6	2021	\$25,472		18
532	Seal	Haslewood St	00 Burnby	Marlborough	6	2021	\$25,990		18
533	Seal	Haslewood St	00 Murphys Cr	Cressy	6	2021	\$26,904		18
540	Seal	Hedberts Rd	Hobhouse St	Bulwer	6	2021	\$5,052		18
559	Seal	High St Longford	Burghley St	Seal Change	6	2021	\$1,376		18
558	Seal	High St Longford	Catherine St	Burghley St	6	2021	\$6,821		18
556	Seal	High St Longford	Padkenham St	Catherine St	6	2021	\$7,260		18
563	Seal	High St Ross	Padkenham St	Rail X	6	2021	\$1,465		18
569	Seal	Hobart Rd	Seal Change	1.20 Marchington	5	2021	\$63,441		18
571	Seal	Hobart Rd	Seal Change	Bridge	5	2021	\$29,106		18
568	Seal	Hobart Rd	Seal Change	Seal Change	6	2021	\$10,374		18
574	Seal	Hobhouse St	End Path	Laycock St	5	2021	\$2,176		18
573	Seal	Hobhouse St	Wellington St	End Path	6	2021	\$5,568		18
604	Seal	Hortia Cr.	Padkenham St	End of Bowl	6	2021	\$8,604		30
609	Seal	Howick St	Width Change	Gay St	6	2021	\$2,460		18
1454	Seal	Lists Rd	East End(Bowl)	End of Seal	6	2021	\$3,192		18
635	Seal	King St Camp/T	Main St	High	6	2021	\$7,690		18
713	Seal	Ltite M Gova St	Seal Change	End	6	2021	\$6,622		18
752	Seal	Macquarie River Rd	Seal Change	Seal Change	6	2021	\$25,152		18
787	Seal	Macquarie St Cressy	Burghley	End of Seal	6	2021	\$8,165		18
828	Seal	Malcombe St	Marlborough St	Gate	6	2021	\$3,606		18
824	Seal	Merrywood	00 Royal George Rd	Palckenham	6	2021	\$7,576		18
830	Seal	Merrywood	00 Midlands Hwy	End Bridge	6	2021	\$5,245		18
872	Seal	Mona Vale Rd	00 Midlands Hwy	Concrete Fence Post	6	2021	\$10,218		18
870	Seal	Mona Vale Rd	00 Midlands Hwy	Culvert	5	2021	\$11,128		18
873	Seal	Mona Vale Rd	00 Midlands Hwy	Fence Line	6	2021	\$15,496		18
876	Seal	Mona Vale Rd	00 Midlands Hwy	Prop Ent LHS	6	2021	\$18,156		18
880	Seal	Montague St	Bridge St 5th	Midlands Hwy	6	2021	\$8,136		18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1587	Seal	Mulgrave St	Seal Change	End of Bowl	6	2021	\$2,345	20
928	Seal	Mile Rd	00 High St Everdale	Seal Change	6	2021	\$28,560	18
929	Seal	Mile Rd	00 High St Everdale	Seal Change	6	2021	\$46,553	18
1572	Seal	Mile Rd	Start of Seal	End of Seal	6	2021	\$5,850	18
988	Seal	Park St Ross	Badojos St	New St	6	2021	\$7,540	18
990	Seal	Patcena Rd	00 Illawarra Rd	Seal Change	6	2021	\$3,552	18
1032	Seal	Pawramna Rd	00 Midlands Hwy	Seal Change	6	2021	\$18,054	18
1038	Seal	Putney St	Marborough St	Packerham St	6	2021	\$7,866	18
1043	Seal	Queen St	Seal Change	Bridge St	6	2021	\$9,652	18
1048	Seal	Raeburn Rd	Hobart Road	End	6	2021	\$14,880	18
1091	Seal	Royal George	00 St Pauls 5BL	12.97 Snow Hill Rd	6	2021	\$41,160	18
1096	Seal	Royal George	00 St Pauls 5BL	Lewis Hill Rd	6	2021	\$32,928	18
1082	Seal	Royal George	00 St Pauls 5BL	Seal Change	6	2021	\$28,688	18
1093	Seal	Royal George	00 St Pauls 5BL	Seal Change	6	2021	\$21,273	18
1092	Seal	Royal George	00 St Pauls 5BL	Seal Change	6	2021	\$51,979	18
1121	Seal	Saundridge St	Crosby Rd	Charles St	6	2021	\$8,961	18
1124	Seal	Saundridge St East	Main St	End K&C	6	2021	\$4,614	18
1129	Seal	Scorne St Perth	Frederick St	Midlands Hwy	6	2021	\$2,563	18
1130	Seal	Scorne St Perth	Midlands Hwy	Drummond St	6	2021	\$10,778	18
1108	Seal	Secombe St Pt 2	Mulgrave St	Milnera Dr	6	2021	\$16,248	20
1143	Seal	Smith St	Goderich St	Howick St	6	2021	\$4,915	18
1144	Seal	Smith St	Howick St	Hay St	6	2021	\$4,166	18
1140	Seal	Smith St	Wellington St	George St	6	2021	\$17,351	18
1155	Seal	Spent St	Wellington St	Lake Leake Hwy	6	2021	\$5,675	18
1168	Seal	Stocker St	Lewis St	Bulwer	6	2021	\$8,826	20
1175	Seal	Story's Creek Rd	00 Ek Hwy	End of Seal	6	2021	\$3,150	18
1181	Seal	Story's Creek Rd	Drain	Drain	6	2021	\$81,761	18
1188	Seal	Story's Creek Rd	Giggs Cr-12.56 Seal Change	Road UK	6	2021	\$52,352	18
1236	Seal	Tooms Lake Rd	16.57 Cattle Grid	Seal Change	6	2021	\$5,533	16
1210	Seal	Tooms Lake Rd	Bond St	0.36 Railway X-ing	6	2021	\$44,216	20
1224	Seal	Tooms Lake Rd	Bridge	Seal Change	6	2021	\$10,900	18
1226	Seal	Tooms Lake Rd	Seal Change	Seal Change	6	2021	\$5,800	18
1215	Seal	Tooms Lake Rd	Seal Change	Seal Change	6	2021	\$5,202	18
1269	Seal	Truelands Rd	Seal Change	Seal Change	6	2021	\$18,023	18
1293	Seal	Trubridge-Tier Rd	00 Midlands Hwy	5.02 Melrose	6	2021	\$22,992	18
1291	Seal	Trubridge-Tier Rd	00 Midlands Hwy	Seal Change	6	2021	\$11,172	18
1322	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	6	2021	\$38,100	18

Asset ID	Sub Category	Asset Name	From	To	Rem. Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1376	Seal	Western St	00 Drumby St	Cressy Rd	6	2021	\$7,600	18
122	Unsealed Pavement	Bennetts	Liffey Rd	End	6	2021	\$1,688	25
208	Unsealed Pavement	Bryants Lane	00 Daddington Rd	Stockyards RHS	6	2021	\$36,113	10
222	Unsealed Pavement	Burghley St	Wilmones	Start Seal	6	2021	\$7,650	25
317	Unsealed Pavement	Cotton St(East)	00 Cressy Main Rd	Marlbrough	6	2021	\$14,525	25
416	Unsealed Pavement	English Town Rd	00 Daddington Road	Start of Seal	6	2021	\$7,788	25
447	Unsealed Pavement	Forest Hill	00 Midlands Hwy	Locked Gate	6	2021	\$35,875	25
526	Unsealed Pavement	Grubbers Hill	Armstrongs Lane	Continues through a Gate	6	2021	\$3,948	25
591	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	9.25 Cattle Grid	6	2021	\$26,250	25
592	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	Cattle Grid	6	2021	\$37,975	25
593	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	Pave Change	6	2021	\$6,825	25
590	Unsealed Pavement	Honeysuckle Rd	00 Tooms Lake Rd	The Quoin	6	2021	\$18,000	25
652	Unsealed Pavement	Honeysuckle Rd	00 Nile Rd	Kingston Gate	6	2021	\$21,150	25
735	Unsealed Pavement	Kingston Rd	00 Lake Leake	Change	6	2021	\$10,000	25
730	Unsealed Pavement	Long Marsh	00 Lake Leake	Pave Change	6	2021	\$23,000	25
904	Unsealed Pavement	Murden La	00 Cressy Rd	Ends at Bridge	6	2021	\$22,313	25
911	Unsealed Pavement	Musk Valley	Blackwood Ck	End	6	2021	\$31,650	25
1132	Unsealed Pavement	Shack Rd	Tooms Lake Road	End	6	2021	\$5,400	25
Subtotal							\$320,731	
5477	Bridge	Ashby Road		Pipe	7	2022	\$23,312	70
3734	Bridge	Elphinstone Road		Box	7	2022	\$18,360	70
3735	Bridge	Elphinstone Road		Box	7	2022	\$15,984	70
2057	Bridge	Glops Creek Road	Un-named Creek	T	7	2022	\$58,800	30
9906	Bridge	Honeysuckle Road		Box	7	2022	\$10,714	70
9905	Bridge	Hop Valley Road		Box	7	2022	\$8,100	70
9900	Bridge	Liffey Road		Box	7	2022	\$15,984	70
9901	Bridge	Liffey Road		Box	7	2022	\$21,168	70
9903	Bridge	Liffey Road		Box	7	2022	\$15,984	70
3428	Bridge	Macquarie Road	Kingston Rivulet	Box	7	2022	\$23,546	70
4048	Bridge	Rotbury Road		Box	7	2022	\$31,535	70
9964	Bridge	Royal George Rd		Pipe	7	2022	\$48,808	70
1469	Bridge	Storeys Creek Road	Storeys Creek	TC	7	2022	\$155,460	30
4000	Bridge	Storeys Creek Road	Tasmania Creek	TC	7	2022	\$56,100	30
755	Pavement	Macquarie River Rd	Seal Change	11.25 Macquarie Settlement	7	2022	\$179,100	70
1006	Pavement	Parth Mill Rd	00 Evandale Rd	Range Rd	7	2022	\$98,800	60
1033	Pavement	Powanna Rd	00 Midlands Hwy	Pave Change	7	2022	\$181,800	60

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1138	Pavement	Saundridge Rd	Bridge	Bridge	7	2022	\$281,325	70
1401	Pavement	Wilmonas La	Loading Ramp	Seal Change	7	2022	\$286,200	70
1432	Pavement	Woolmers La	00 Midlands Hwy	5.35 Point Rd	7	2022	\$277,140	60
1411	Pavement	Woolmers La	00 Midlands Hwy	Property Ent	7	2022	\$422,220	60
10	Seal	Ausrey St	End K&L	Brykendon	7	2022	\$8,550	18
14	Seal	Archer St Longford	Goderich St	George St	7	2022	\$7,994	18
26	Seal	Arthur St, Avoca	Falmouth	Seal Change	7	2022	\$3,249	30
62	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	7	2022	\$6,840	18
66	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	7	2022	\$21,888	18
114	Seal	Bellvue	00 Illawarra	Seal Change	7	2022	\$7,908	18
133	Seal	Bishopsbourne Rd	00 Illawarra	9.08 Armstrongs	7	2022	\$8,752	18
131	Seal	Bishopsbourne Rd	00 Illawarra	Rail X	7	2022	\$51,408	18
129	Seal	Bishopsbourne Rd	00 Illawarra	Seal Change	7	2022	\$22,288	18
147	Seal	Blackwood Creek Rd	00 Saundridge	9.18 Hodgetts	7	2022	\$30,210	18
158	Seal	Bond St Ross	The Boulevards	Badajos St	7	2022	\$5,757	18
169	Seal	Bracknell Rd	Liffey Rd	Liffey River	7	2022	\$8,778	18
253	Seal	Charles St Cressy	Church St	End	7	2022	\$8,361	20
285	Seal	Chiswick Rd Ross Access	00 Midlands Hwy	Seal Change	7	2022	\$3,295	18
270	Seal	Church St Cressy	Main	Charles St	7	2022	\$10,613	18
288	Seal	Clarence St	Talsker St	Fredrick St	7	2022	\$8,810	18
296	Seal	Clarendon Stat.	00 Mile Road	Clarendon Lodge	7	2022	\$5,948	18
297	Seal	Clayfield Rd	00 Bishopbourne	Seal Change	7	2022	\$1,900	18
349	Seal	Deedington	00 Mile Road	End of Seal	7	2022	\$10,780	18
378	Seal	Drummond St	Scene	Drummond	7	2022	\$2,484	18
386	Seal	Edward St	Chornwell St	Youl Main Rd	7	2022	\$7,287	18
420	Seal	Esley Perth Nursing Home Rd	Midland Hwy	Seal Change	7	2022	\$5,106	18
453	Seal	Franklin St	Forster	Bedford	7	2022	\$6,498	18
457	Seal	Frederick St	Midlands Hwy	Scene St	7	2022	\$4,472	18
460	Seal	Gatenby St	Spencers Lane	Marquarie	7	2022	\$11,515	18
330	Seal	Hartnoll Pl	Seal Change	End of Court	7	2022	\$6,848	18
544	Seal	High St Camp/T	Cond Change	Elizabeth	7	2022	\$4,042	18
562	Seal	High St Ross	Church St	Bond St	7	2022	\$7,630	18
561	Seal	High St Ross	Esplanade	Church St	7	2022	\$2,704	18
566	Seal	High St Ross	Wakerloo St	End of Seal	7	2022	\$3,289	18
598	Seal	Hoop Valley	00 Blackwood Ck	End Seal	7	2022	\$16,472	18
658	Seal	Lake River Rd	00 Macquarie River	Seal Change	7	2022	\$18,100	18
680	Seal	Laycock St	Malcombe St	Pullney St	7	2022	\$6,912	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
695	Seal	Liffey Rd	00 Bishopbourne Rd	Seal Change	7	2022	\$1,414	18
703	Seal	Liffey Rd	00 Bishopbourne Rd	Seal Change	7	2022	\$20,300	18
708	Seal	Liffey Rd	00 Bishopbourne Rd	Seal Change	7	2022	\$6,640	18
1477	Seal	Longford Caravan park	Start of Loop	End of Loop	7	2022	\$3,600	18
745	Seal	Maquarie River Rd	00 Postna Hwy	Lake River	7	2022	\$50,744	18
772	Seal	Maquarie River Rd	00 Postna Hwy	Seal Change	7	2022	\$13,552	18
778	Seal	Maquarie River Rd	00 Postna Hwy	Seal Change	7	2022	\$35,280	18
746	Seal	Maquarie River Rd	Lake River	Seal Change	7	2022	\$18,676	18
789	Seal	Maquarie St Ewand	Barday St SBL	Arbur	7	2022	\$14,985	30
825	Seal	Malcombe St	Pakenham	Catharine	7	2022	\$7,216	18
862	Seal	Merywood	00 Royal George Rd	End of Seal	7	2022	\$5,709	20
877	Seal	Mona Vale Rd	00 Midlands Hwy	Railway Line	7	2022	\$12,328	18
896	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	7	2022	\$2,500	18
897	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	7	2022	\$6,580	16
940	Seal	Millie Rd	00 High St Ewendale	Seal Change	7	2022	\$25,880	18
955	Seal	Norfolk St	Frederick	Width Change	7	2022	\$693	18
984	Seal	Park St Longford	Howick St	Hay St	7	2022	\$2,232	18
1580	Seal	Patena Rd	00 Midlands Hwy	Mervich Rd	7	2022	\$35,021	20
1035	Seal	Powanna Rd	White Hills EBL	Seal Change	7	2022	\$4,800	18
1055	Seal	Ridgevale	00 St Pauls SBL	End of Seal	7	2022	\$5,292	18
1097	Seal	Royal George	00 St Pauls SBL	End of Seal	7	2022	\$36,288	18
1086	Seal	Royal George	Junction	Seal Change	7	2022	\$15,582	18
1101	Seal	Russell St	0.65 Elphinstone	Huxtable EOL	7	2022	\$16,272	30
1106	Seal	Saundridge Rd	Saundridge St Crossy(653m)	Seal Change	7	2022	\$13,440	18
1105	Seal	Saundridge Rd	Charles St	0.65 Elphinstone	7	2022	\$17,755	18
1122	Seal	Saundridge St	Charles St	Murratt St	7	2022	\$9,634	18
1142	Seal	Smith St	George	Goderich St	7	2022	\$7,574	18
1182	Seal	Story's Creek Rd	Drain	Gipps' Cr 12.56 Seal Change	7	2022	\$44,585	18
1180	Seal	Story's Creek Rd	Seal	Drain	7	2022	\$47,502	18
1193	Seal	Swan Av.	Wellington St	Gosling	7	2022	\$1,408	18
1201	Seal	Tannery La	00 Illawarra Rd	Illawarra	7	2022	\$28,762	18
1235	Seal	Tooms Lake Rd	Seal Change	16.57 Cattle Grid	7	2022	\$9,828	18
1236	Seal	Tooms Lake Rd	Seal Change	Seal Change	7	2022	\$2,592	18
1217	Seal	Tooms Lake Rd	Seal Change	Seal Change	7	2022	\$3,570	18
1228	Seal	Tooms Lake Rd	Seal Change	Seal Change	7	2022	\$21,269	18
1229	Seal	Tooms Lake Rd	Seal Change	Seal Change	7	2022	\$16,894	18
1230	Seal	Tooms Lake Rd	Seal Change	Seal Change	7	2022	\$9,274	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1361	Seal	Torpasse St	Seal Change	Forster St	7	2022	\$1,430	16
1380	Seal	White Hills Rd	Dalmess	3.11 Ewerton	7	2022	\$51,200	18
1389	Seal	William St Longford	George St	Burghley St	7	2022	\$14,661	18
1388	Seal	William St Longford	Marlborough St	George St	7	2022	\$12,428	18
1402	Seal	Wilmore La	DD Crossy Main Rd	Dishopsborne	7	2022	\$6,800	18
1419	Seal	Woolmers La	00 Midlands Hwy	Cracraft	7	2022	\$8,140	18
Subtotal \$347,997								
1830	Bridge	Brambletye Road	Horse Padlock Creek	TC	8	2023	\$52,480	30
4933	Bridge	Honeysuckle Road	Cap Gully Creek	TC	8	2023	\$43,840	30
4619	Bridge	Tooms Lake Road	Masquerie River	T	8	2023	\$142,968	30
314	Footpath	Arthur St Ewand	Macquarie	Leopold	8	2023	\$2,496	15
30,4	Footpath	Arthur St Ewand	Murray St EBL	Macquarie	8	2023	\$3,728	15
179,1	Footpath	Bridges St Campb T	Hamilton	Church	8	2023	\$3,770	30
279,4	Footpath	Church St Ross	Change	Divided Rd	8	2023	\$5,336	30
300,3	Footpath	Coachmans	Logan Rd	Seal Change	8	2023	\$2,761	30
302,1	Footpath	Collins St Ewendale	Huxtable WBL	High St	8	2023	\$5,026	15
302,2	Footpath	Collins St Ewendale	Huxtable WBL	High St	8	2023	\$3,100	20
308,3	Footpath	Conam Rd	Stant K&C	Panoc St	8	2023	\$7,047	30
1501,2	Footpath	Drydan Pl	Seal Change	End of Bowl	8	2023	\$809	30
383,2	Footpath	Drydan Pl	William St	Seal Change	8	2023	\$9,657	30
458,3	Footpath	Frederick St	Score St	Clarence St	8	2023	\$4,141	30
463,2	Footpath	George Hudson P	Wellington St	End of Bowl	8	2023	\$4,959	30
549,4	Footpath	High St Ewendale	Wellington St	End of Bowl	8	2023	\$7,920	15
548,3	Footpath	High St Ewendale	Cambock Loan West	Barclay	8	2023	\$2,516	15
548,4	Footpath	High St Ewendale	Leighlands + 12 m	Cambock Loan West	8	2023	\$3,600	15
635,3	Footpath	King St Camp/T	East End(Bowl)	High	8	2023	\$4,176	30
716,4	Footpath	Logan Rd	Stockmans	Seal Change	8	2023	\$2,244	15
797,2	Footpath	Main St Crossy	Church	King	8	2023	\$16,402	30
796,2	Footpath	Main St Crossy	Saundridge	Church	8	2023	\$26,013	30
796,3	Footpath	Main St Crossy	Saundridge	Church	8	2023	\$3,155	30
796,4	Footpath	Main St Crossy	Saundridge	Church	8	2023	\$20,950	30
795,2	Footpath	Main St Crossy	Seal Change	Church	8	2023	\$17,574	30
794,2	Footpath	Main St Crossy	Start RH K&C	Seal Change	8	2023	\$23,404	30
802,4	Footpath	Main St Crossy	Stock Route	End RH K&C	8	2023	\$8,926	30
801,4	Footpath	Main St Crossy	William	Stock Route	8	2023	\$7,830	30

Asset ID	Category	Asset Name	From	To	Rem	Planned	Renewal	Cost	Useful
					Life	Year	Year	(\$)	Life
					(Years)				(Years)
800.4	Footpath	Main St Crassey	Wilson	William	8	2023		\$13,259	30
810.4	Footpath	Main St Perth	Scorne	Talisker	8	2023		\$6,496	30
841.2	Footpath	Marlborough St Longford	Hobhouse	Buwer	8	2023		\$4,774	15
1472.3	Footpath	Marlborough St West Side	Malcombe	Hobhouse	8	2023		\$4,222	30
906.4	Footpath	Murlett St	Change	Church St	8	2023		\$22,504	30
982.3	Footpath	Park St Longford	George St	Goderfen St	8	2023		\$868	15
1043.2	Footpath	Queen St	Seal Change	Bridgce St	8	2023		\$12,389	30
1150.4	Footpath	Spencers Lane	Cresy Rd	Gatenby St	8	2023		\$1,075	15
1352.4	Footpath	Wellington St Longford	Seal Change	Swan	8	2023		\$17,313	30
1353.4	Footpath	Wellington St Longford	Swan	Pultney	8	2023		\$10,962	30
1389.1	Footpath	William St Longford	Seal Change	Burghley St	8	2023		\$10,968	30
87.4	Kerb	Baker St	EOS Rossarden Rd	End Seal	8	2023		\$2,133	15
180.4	Kerb	Bridgce St Campb T	Church	Midlands Hwy	8	2023		\$702	15
184.1	Kerb	Bridgce St Campb T	Clare	End of Seal	8	2023		\$648	15
574.4	Kerb	Hobhouse St	End Path	Laycock St	8	2023		\$585	15
634.4	Kerb	Kilangardoo Rd	Lake Leake Rd	Ends at Lake	8	2023		\$5,450	15
738.4	Kerb	Logan Rd	Seal Change	Last Gate	8	2023		\$1,656	15
853.4	Kerb	Watson St Campb T	Davidson St	Leake St	8	2023		\$747	15
987.4	Kerb	Park St Ross	High	Badgjos St	8	2023		\$1,296	15
1260.2	Kerb	Tortoise St	Midlands Hwy	Seal Change	8	2023		\$378	15
295	Pavement	Tortoise St	Seal Change	Forster St	8	2023		\$909	15
532	Pavement	Clarendon St	00 Nilie Road	Seal Change	8	2023		\$313,200	80
664	Pavement	Hastlewood St	00 Brunby	Marlborough	8	2023		\$185,640	80
665	Pavement	Lake River Rd	00 Macquarie River	Seal Change	8	2023		\$169,500	60
931	Pavement	Lake River Rd	00 Macquarie River	Seal Change	8	2023		\$115,380	60
951	Pavement	Nile Rd	00 High St Everdale	5:10 Clarendon L Rd	8	2023		\$175,440	60
1450	Pavement	Milville St	Badgjos St Fence Line	End of Seal	8	2023		\$48,392	90
8	Seal	Valleyfield Rd	Barton	Pave Change	8	2023		\$33,000	70
19	Seal	Anesty St	Lewis	Crocutt St	8	2023		\$7,205	18
18	Seal	Armstrongs La	00 Bishopbourne	3:69 Grubbers Hill	8	2023		\$39,700	18
33	Seal	Armstrongs La	00 Bishopbourne	Bridge	8	2023		\$33,072	18
41	Seal	Arthur St Perth	Midlands Hwy	Mulgrave St	8	2023		\$12,998	18
70	Seal	Asby Rd	00 Midlands Hwy	Seal Change	8	2023		\$4,626	18
137	Seal	Auburn Rd	00 Midlands Hwy	Seal Change	8	2023		\$7,700	18
124	Seal	Belvue	00 Midlands Hwy	Seal Change	8	2023		\$13,950	18
128	Seal	Berrisford Pl	Hartnoll Pl	End of Crt	8	2023		\$9,096	18
		Bishopbourne Rd	00 Jilawarra	2.48 Athborough	8	2023		\$22,736	18

Asset ID	Sub Category	Asset Name	From	To	Rem	Planned	Renewal	Renewal	Useful
					Life	Year	Cost	Life	
					(Years)	Year	(\$)	(Years)	
127	Seal	Bishopbourne Rd	00 Illawarra	Seal Change	8	2023	\$38,869	18	
130	Seal	Bishopbourne Rd	00 Illawarra	Wilmaras	8	2023	\$29,224	18	
159	Seal	Bond St Ross	Baddios St	High	8	2023	\$4,935	18	
184	Seal	Bridge St Campb T	Clare	End of Seal	8	2023	\$1,747	18	
189	Seal	Bridge St Ross	Beaufort	Parke	8	2023	\$6,909	18	
190	Seal	Bridge St Ross	Parke	Waterloo St	8	2023	\$4,919	18	
221	Seal	Bulwer St	Burghley	BRIDGE	8	2023	\$4,636	18	
235	Seal	Bulwer St	Laycock	Stocker	8	2023	\$1,092	18	
1513	Seal	Caladonia Dr	Rebia	End of bowl	8	2023	\$64,030	20	
272	Seal	Church St Nth C/W	Divided Rd	Width Change	8	2023	\$3,511	18	
273	Seal	Church St Nth C/W	Width Change	End Car Park	8	2023	\$1,848	18	
294	Seal	Clarendon Lodge	00 Nile Rd	End of Seal	8	2023	\$7,930	18	
308	Seal	Conara Rd	Start K&C	Parvce St	8	2023	\$13,338	18	
328	Seal	Cromwell St	Youl Main Rd	End Left Kerb	8	2023	\$2,654	18	
351	Seal	Daddington	00 Nile Road	End of Seal	8	2023	\$3,410	18	
375	Seal	Drummond Cfs.	Change	Drummond	8	2023	\$3,410	18	
374	Seal	Drummond Cfs.	Change	Start Kerb	8	2023	\$3,255	18	
386	Seal	East St	William St	Podder St	8	2023	\$6,838	18	
407	Seal	Eightstone Rd	00 Green Rises Rd	Bridge	8	2023	\$41,184	18	
406	Seal	Eightstone Rd	00 Green Rises Rd	Macraes Hill	8	2023	\$10,070	18	
424	Seal	Esplanade Ross	High St SBL	Caravan Park	8	2023	\$2,036	18	
1518	Seal	Glenesk Rd	Seal Change	Midlands Hwy	8	2023	\$2,873	18	
519	Seal	Green Rises	1.21 Eightstone	Seal Change	8	2023	\$24,500	18	
521	Seal	Green Rises	Seal Change	4.79 Armstrongs	8	2023	\$41,004	18	
536	Seal	Hay St	Park	Seal Change	8	2023	\$3,120	18	
537	Seal	Hay St	Seal Change	End	8	2023	\$1,178	16	
547	Seal	High St Camp/T	King	Red Bridge	8	2023	\$14,368	18	
560	Seal	High St Longford	Seal Change	End	8	2023	\$927	18	
572	Seal	Hobart Rd	Bridge	Assumed Boundary	8	2023	\$43,697	18	
630	Seal	Huxtable Lane	Russell St	Collins St	8	2023	\$1,942	18	
657	Seal	Lake River Rd	00 Macquarie River	Seal Change	8	2023	\$35,893	18	
712	Seal	Liffey Rd	00 Bishopbourne Rd	Liffey River	8	2023	\$28,600	18	
709	Seal	Liffey Rd	00 Bishopbourne Rd	Pave Change	8	2023	\$13,104	18	
702	Seal	Liffey Rd	00 Bishopbourne Rd	Seal Change	8	2023	\$16,422	18	
699	Seal	Liffey Rd	3.91 Green Rises	4.77 Bracknell	8	2023	\$29,494	18	
700	Seal	Liffey Rd	4.77 Bracknell	Seal Change	8	2023	\$25,090	18	
766	Seal	Macquarie River Rd	00 Poathia Hwy	Seal Change	8	2023	\$38,000	18	

Asset ID	Sub Category	Asset Name	From	To	From Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
771	Seal	Macquarie River Rd	00 Peatna Hwy	Seal Change	8	2023	\$17,284	18
779	Seal	Macquarie River Rd	00 Peatna Hwy	Seal Change	8	2023	\$45,725	18
758	Seal	Macquarie River Rd	13 70 Darlington Park	Culvert	8	2023	\$46,388	18
763	Seal	Macquarie River Rd	20 23 Barton	20.55 I/s	8	2023	\$21,137	18
759	Seal	Macquarie River Rd	Culvert	Pave Change	8	2023	\$12,897	18
760	Seal	Macquarie River Rd	Pave Change	Seal Change	8	2023	\$33,359	18
754	Seal	Macquarie River Rd	Seal Change	Seal Change	8	2023	\$23,199	18
784	Seal	Macquarie St Cressy	Cressy Rd	Guttenby St	8	2023	\$3,705	18
812	Seal	Main St Perth	Clarence	Start RH K&C	8	2023	\$1,331	18
807	Seal	Main St Perth	Mary	Kong	8	2023	\$2,705	18
813	Seal	Main St Perth	Start RH K&C	End RH K&C	8	2023	\$1,814	18
818	Seal	Mathland La	00 Green Ricea	End of Seal	8	2023	\$1,892	18
827	Seal	Malcombe St	Catherine	Burghley	8	2023	\$8,781	18
842	Seal	Marborough St Longford	Bulwer	Lewis	8	2023	\$1,880	16
881	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	8	2023	\$8,497	16
887	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	8	2023	\$28,900	18
885	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	8	2023	\$31,464	18
886	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	8	2023	\$14,435	18
884	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	8	2023	\$26,338	18
899	Seal	Mulgrove St	Phillip St	Arthur St	8	2023	\$8,576	18
953	Seal	Norfolk St	Dunmond St	Seal Change	8	2023	\$3,411	18
954	Seal	Norfolk St	Seal Change	Frederick	8	2023	\$4,031	18
956	Seal	Norfolk St	Width Change	End	8	2023	\$2,036	18
994	Seal	Pateena Rd	00 Illawarra Rd	Culvert	8	2023	\$47,988	18
1011	Seal	Phillip St	Cornwall St	Seal Change	8	2023	\$7,514	20
1014	Seal	Phillip St	Midlands Hwy	Mulgrove St	8	2023	\$7,858	18
1012	Seal	Phillip St	Midlands Hwy	Youl Main Rd	8	2023	\$2,568	18
1015	Seal	Pitez Lane	Lifey	Pave Change	8	2023	\$14,204	18
1029	Seal	Powanna Rd	00 Midlands Hwy	12.77 Bridge	8	2023	\$34,738	18
1034	Seal	Powanna Rd	00 Midlands Hwy	16.75 Barrington	8	2023	\$43,424	18
1027	Seal	Powanna Rd	00 Midlands Hwy	9.21 E Panstanger	8	2023	\$42,240	18
1028	Seal	Powanna Rd	00 Midlands Hwy	Seal Change	8	2023	\$29,382	18
1030	Seal	Powanna Rd	00 Midlands Hwy	Seal Change	8	2023	\$9,076	18
1504	Seal	Sassafras St	Seal Change	Seal Change	8	2023	\$4,014	18
1107	Seal	Saundridge Rd	Seal Change	Change	8	2023	\$11,938	18
1123	Seal	Saundridge St	Murrlet St	Last House	8	2023	\$7,354	18
1195	Seal	Talbot St	Catherine St	Cressy Rd	8	2023	\$12,250	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
1234	Seal	Tooms Lake Rd	15.43 Cattle Grid	Seal Change	8	2023	\$7,062	16
1214	Seal	Tooms Lake Rd	Seal Change	Seal Change	8	2023	\$7,280	18
1227	Seal	Tooms Lake Rd	Seal Change	Seal Change	8	2023	\$25,568	18
1231	Seal	Tooms Lake Rd	Seal Change	Seal Change	8	2023	\$4,896	18
1220	Seal	Tooms Lake Rd	Seal Change	Seal Change	8	2023	\$10,098	18
1225	Seal	Tooms Lake Rd	Seal Change	Seal Change	8	2023	\$3,876	18
1232	Seal	Tooms Lake Rd	Seal Change	Seal Change	8	2023	\$8,064	18
1537	Seal	Tarfassa St	Forster St	Pavement Change	8	2023	\$3,938	16
1315	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	8	2023	\$18,340	18
1323	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	8	2023	\$4,518	18
1324	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	8	2023	\$33,176	18
1327	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	8	2023	\$21,924	18
1450	Seal	Valleyfield Rd	Barton	Pave Change	8	2023	\$5,916	18
1358	Seal	Wollington St Langford	Lewis	Crackf. Cl	8	2023	\$7,985	16
1360	Seal	Wellington St Ross	Seal Change	End of Seal	8	2023	\$1,452	18
1359	Seal	Wellington St Ross	Tooms Lake Rd	Seal Change	8	2023	\$1,080	18
1361	Seal	West Cambok La	Main Rd NBL	Side Entry Pit	8	2023	\$11,268	30
1375	Seal	West Cambok La	Side Entry Pit	Change	8	2023	\$42,912	30
1386	Seal	Western St	00 Brunby St	Pave Change	8	2023	\$5,040	18
1387	Seal	William St Campb. T	Midlands H Way	East St	8	2023	\$5,867	18
1403	Seal	Wilson St	Archer St	Creasy Rd	8	2023	\$9,049	20
206	Unsealed Pavement	Bryants Lane	Creasy Rd	Archer St	8	2023	\$5,478	18
367	Unsealed Pavement	Delmont	00 Deadlington Rd	FenceLine	8	2023	\$40,000	10
1558	Unsealed Pavement	Fitzroy St Pt 2	00 Maquarie River Rd	Macquarie settlement	8	2023	\$39,350	20
564	Unsealed Pavement	High St Ross	Bridge St Ross	Gate	8	2023	\$1,575	20
817	Unsealed Pavement	Maitland La	Rail X	Park	8	2023	\$2,025	20
952	Unsealed Pavement	Nivelle St	00 Green Rises	Start of Seal	8	2023	\$19,000	20
1176	Unsealed Pavement	Stary's Creek Rd	End of Seal	End	8	2023	\$270	20
1177	Unsealed Pavement	Stary's Creek Rd	00 Esk Hwy	Change	8	2023	\$24,075	10
1331	Unsealed Pavement	Verwood Rd	00 Esk Hwy	Drain	8	2023	\$52,988	10
1332	Unsealed Pavement	Verwood Rd	00 Auburn Rd	Change	8	2023	\$15,300	20
1333	Unsealed Pavement	Verwood Rd	Bridge	Ends at Gate	8	2023	\$8,375	20
14383	Footpath	Church St Ross Ext F/P	High	Change	9	2024	\$2,484	70
119	Pavement	Belvue	00 Midlands Hwy	Ends at Gate	9	2024	\$264,690	80
341	Pavement	Deedington	00 Nile Road	Seal Change	9	2024	\$305,100	70

Subtotal \$3,389,901

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
340	Pavement	Daddington	.00 Nile Road	Seal Change	9	2024	\$331,550	70
369	Pavement	Devon Hills	00 Midlands Hwy	Loop Rd	9	2024	\$203,400	70
496	Pavement	Glensak Rd	00 Nile Rd	Seal Change	9	2024	\$256,575	70
525	Pavement	Green Rises	Change	Seal Change	9	2024	\$148,500	70
550	Pavement	High St Evendale	Barclay	Russell	9	2024	\$58,880	70
760	Pavement	Maquarie River Rd	Paye Change	Seal Change	9	2024	\$262,350	70
785	Pavement	Maquarie St. Cressy	Gatenby St	Condition Change	9	2024	\$38,172	90
979	Pavement	Parshanger Rd	00 Woolmers	Seal Change	9	2024	\$267,300	70
1087	Pavement	Royal George	00 St Pauls SBL	Old Seal Change	9	2024	\$156,750	70
1080	Pavement	Royal George	00 St Pauls SBL	Seal Change	9	2024	\$242,100	70
1086	Pavement	Royal George	00 St Pauls SBL	Seal Change	9	2024	\$115,500	70
1379	Pavement	White Hills Rd	Seal Change	Dalness	9	2024	\$178,500	70
71	Seal	Albourn Rd	00 Midlands Hwy	Boliree	9	2024	\$6,760	18
65	Seal	Albourn Rd	00 Midlands Hwy	Seal Change	9	2024	\$9,984	18
126	Seal	Bishopbourne Rd	00 Ilwarrna	Seal Change	9	2024	\$2,787	18
142	Seal	Blackwood Creek Rd	00 Saundridge	2.20 Stoneycroft	9	2024	\$17,940	18
192	Seal	Bridge St S/R	Church W/DL	Change	9	2024	\$9,152	14
201	Seal	Brandy St	00 Brenchendon	End of Seal	9	2024	\$1,949	18
251	Seal	Charles St Cressy	Saundridge St	Seal Change	9	2024	\$9,807	18
258	Seal	Church Rd	00 Pevarana	Change	9	2024	\$28,184	18
262	Seal	Church Rd	00 Pevarana	Spencer	9	2024	\$42,550	18
271	Seal	Church St Cressy	Charles St	Murrett	9	2024	\$13,348	20
333	Seal	Cornwell St	Nelson	Phillip St	9	2024	\$7,845	20
332	Seal	Cornwell St	Seal Change	Nelson	9	2024	\$4,136	20
404	Seal	Elphinstone Rd	00 Green Rises Rd	Seal Change	9	2024	\$17,368	18
405	Seal	Elphinstone Rd	00 Green Rises Rd	Seal Change	9	2024	\$16,920	18
403	Seal	Elphinstone Rd	Seal Change	Paye Change	9	2024	\$22,680	18
423	Seal	Esplanade Camp. T	Change	Bridge St	9	2024	\$585	18
451	Seal	Forster St	Montagu	Tortoise St	9	2024	\$9,926	18
462	Seal	Gemhu Crt	Malcombe St	End of Bowl	9	2024	\$18,992	30
520	Seal	Green Rises	Seal Change	Seal Change	9	2024	\$16,700	18
694	Seal	Lewis St	Change	Wallington St	9	2024	\$5,504	18
696	Seal	Lifey Rd	00 Bishopbourne Rd	2.10 Pflts	9	2024	\$41,473	18
998	Seal	Lifey Rd	00 Bishopbourne Rd	3.91 Green Rises	9	2024	\$23,870	18
997	Seal	Lifey Rd	00 Bishopbourne Rd	Seal Change	9	2024	\$12,960	18
765	Seal	Maquarie River Rd	00 Poatina Hwy	Seal Change	9	2024	\$24,100	18
762	Seal	Maquarie River Rd	18.99 Rathbury	20.23 Barton	9	2024	\$29,400	18

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
808	Seal	Main St Perth	King	Frederick	9	2024	\$5,523	18
810	Seal	Main St Perth	Score	Trafiker	9	2024	\$2,604	18
845	Seal	Mariborough St Longford	Cracott	End K&C	9	2024	\$8,888	20
841	Seal	Mariborough St Longford	Hobhouse	Bulwer	9	2024	\$1,916	16
894	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	9	2024	\$5,488	18
892	Seal	Mount Joy Rd	00 Barton Rd	Seal Change	9	2024	\$17,214	18
1385	Seal	Mount Joy Rd	Seal Change	Seal Change	9	2024	\$30,267	18
1036	Seal	Powranna Rd	00 Midlands Hwy	Cresky Main Rd	9	2024	\$15,750	30
1026	Seal	Powranna Rd	00 Midlands Hwy	Seal Change	9	2024	\$26,760	18
1200	Seal	Tannery La	00 Ilhawarra Rd	Berd Right	9	2024	\$13,984	18
1222	Seal	Tooms Lake Rd	Seal Change	Bridge	9	2024	\$49,201	20
1221	Seal	Tooms Lake Rd	Seal Change	Seal Change	9	2024	\$84,538	20
1213	Seal	Tooms Lake Rd	Seal Change	Seal Change	9	2024	\$7,344	18
1326	Seal	Valleyfield Rd	00 Barton Rd	Seal Change	9	2024	\$15,956	18
1357	Seal	Wellington St Longford	Bulwer	Lewis	9	2024	\$5,460	18
1391	Seal	William St Perth	Dryden	Trafiker St	9	2024	\$2,621	16
1393	Seal	William St Perth	Frederick St	Elizabeth St	9	2024	\$3,854	16
1390	Seal	William St Perth	Old Punt Rd	Dryden	9	2024	\$2,234	16
1392	Seal	William St Perth	Trafiker St	Frederick St	9	2024	\$3,210	16
1435	Seal	Woodroves La	00 Midlands Hwy	Bridge Cir	9	2024	\$16,576	18
1431	Seal	Woodroves La	00 Midlands Hwy	Property Ent.	9	2024	\$56,296	18
207	Unsealed Pavement	Bryants Lane	00 Deddington Rd	Change	9	2024	\$40,000	10
209	Unsealed Pavement	Bryants Lane	00 Deddington Rd	Double Gate LIS	9	2024	\$34,088	10
210	Unsealed Pavement	Bryants Lane	00 Deddington Rd	Gate RHS	9	2024	\$34,125	10
211	Unsealed Pavement	Bryants Lane	00 Deddington Rd	Nile Rd	9	2024	\$29,375	10
1178	Unsealed Pavement	Story's Creek Rd	00 Ek Hwy	Stanhope	9	2024	\$36,750	10
1179	Unsealed Pavement	Story's Creek Rd	Stanhope	Seal	9	2024	\$5,225	10
Subtotal							\$3,775,969	
Program Total							\$26,608,235	

Appendix B Projected 10 year Capital Upgrade/New Works program

Projected Expenditure	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capital Expenditure on \$5,127	\$3,201	\$364	\$4,751	\$722	\$2,502	\$2,300	\$3,477	\$3,390	\$3,776	
Renewal/Replacement of existing assets										
Capital Expenditure on Upgrade/New \$550 assets	\$550	\$550	\$550	\$550	\$550	\$550	\$550	\$550	\$550	
Operational cost of existing assets	\$395	\$395	\$395	\$395	\$395	\$395	\$395	\$395	\$395	
Maintenance cost of existing assets	\$2,280	\$2,280	\$2,280	\$2,280	\$2,280	\$2,280	\$2,280	\$2,280	\$2,280	
Operational cost of New assets	\$0	\$1	\$3	\$4	\$5	\$7	\$8	\$9	\$11	
Maintenance cost of New assets	\$0	\$8	\$16	\$23	\$31	\$39	\$47	\$55	\$62	
Disposal of Surplus assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

Appendix C LTFP Budgeted Expenditures Accommodated in AMI Plan

MUSKIEGON Asset Management Northern Kentlands

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Transportation S1 V1 Asset Management Plan



Transportation First year of expenditure projections
Asset values in last of planning period
Current replacement cost
Depreciated replacement cost
Actual expenditures reported

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
62,472,531	60,000,000	57,527,500	55,055,000	52,582,500	50,110,000	47,637,500	45,165,000	42,692,500	40,220,000	37,747,500	35,275,000	32,802,500	30,330,000	27,857,500	25,385,000	22,912,500	20,440,000	17,967,500	15,495,000

Planned Expenditure from LTFP

Note: Enter all values in current values

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Expenditures Outlays Included in Long-Term Financial Plan (in current \$ values)	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	
Average of first 10 Year Expenditure Outlays from LTFP																					

Operations

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Operations budget	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Management budget	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Actual expenditures reported	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400

Maintenance

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total maintenance	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Board maintenance budget	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Special, non-billed items budget	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Capital

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital budget	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Actual expenditures	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400

Additional Expenditure Outlays Requirements (See From Infrastructure's Risk Management Plan)

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Additional Expenditure Outlays	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Forecast Capital Expenditure

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Forecast Capital Expenditure	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000

Appendix D Planned Expenditure for LTFP

Northern Midlands -> Planned Expenditures for Long Term Financial Plan (Transport)									
Year End Jun-30	Total Operations Expenditure (\$'000)	Total Maintenance Expenditure (\$'000)	Projected Capital Renewal Expenditure (\$'000)	Planned Capital Upgrade/New Expenditure (\$'000)	Planned Disposals (\$'000)	Planned Capital Renewal Expenditure (\$'000)	Shortfall in Renewal Expenditure (Projected - Planned) (\$'000)	Cumulative Renewal Funding Shortfall (\$'000)	
2011	\$640,42	\$1,907,22	\$5,815,75	\$459,34	\$0,00	\$3,293,00	\$2,522,75	\$2,522,75	
2012	\$642,85	\$1,914,43	\$1,713,44	\$459,34	\$0,00	\$3,293,00	-\$1,579,56	\$943,19	
2013	\$645,27	\$1,921,65	\$3,288,23	\$459,34	\$0,00	\$3,293,00	-\$4,77	\$938,42	
2014	\$647,69	\$1,928,87	\$2,550,42	\$459,34	\$0,00	\$3,293,00	-\$742,58	\$195,84	
2015	\$650,12	\$1,936,09	\$2,989,95	\$459,34	\$0,00	\$3,293,00	-\$303,05	-\$107,21	
2016	\$652,54	\$1,943,30	\$5,196,26	\$459,34	\$0,00	\$3,293,00	\$1,903,26	\$1,796,05	
2017	\$654,96	\$1,950,52	\$4,177,64	\$459,34	\$0,00	\$3,293,00	\$884,64	\$2,680,70	
2018	\$657,39	\$1,957,74	\$1,849,08	\$459,34	\$0,00	\$3,293,00	-\$1,443,92	\$1,236,77	
2019	\$659,81	\$1,964,95	\$2,648,09	\$459,34	\$0,00	\$3,293,00	-\$644,91	\$591,86	
2020	\$662,23	\$1,972,17	\$2,781,53	\$459,34	\$0,00	\$3,293,00	-\$511,47	\$80,40	
2021	\$664,66	\$1,979,39	\$3,558,32	\$459,34	\$0,00	\$3,293,00	\$265,32	\$345,71	
2022	\$667,08	\$1,986,61	\$6,536,13	\$459,34	\$0,00	\$3,293,00	\$3,243,13	\$3,588,84	
2023	\$669,51	\$1,993,82	\$3,146,03	\$459,34	\$0,00	\$3,293,00	-\$146,97	\$3,441,88	
2024	\$671,93	\$2,001,04	\$3,522,60	\$459,34	\$0,00	\$3,293,00	\$229,60	\$3,671,48	
2025	\$674,35	\$2,008,26	\$4,105,37	\$459,34	\$0,00	\$3,293,00	\$812,37	\$4,483,85	
2026	\$676,78	\$2,015,48	\$1,104,75	\$459,34	\$0,00	\$3,293,00	-\$2,188,25	\$2,295,60	
2027	\$679,20	\$2,022,69	\$2,199,96	\$459,34	\$0,00	\$3,293,00	-\$1,093,04	\$1,202,56	
2028	\$681,62	\$2,029,91	\$5,848,83	\$459,34	\$0,00	\$3,293,00	\$2,555,83	\$3,758,39	
2029	\$684,05	\$2,037,13	\$2,833,24	\$459,34	\$0,00	\$3,293,00	-\$459,76	\$3,298,63	
2030	\$686,47	\$2,044,34	\$3,240,30	\$459,34	\$0,00	\$3,293,00	-\$52,70	\$3,245,93	
			\$69,105,92	\$9,186,80		\$65,860,00	\$3,245,92		

Appendix E Road Hierarchy and Target Design Standards

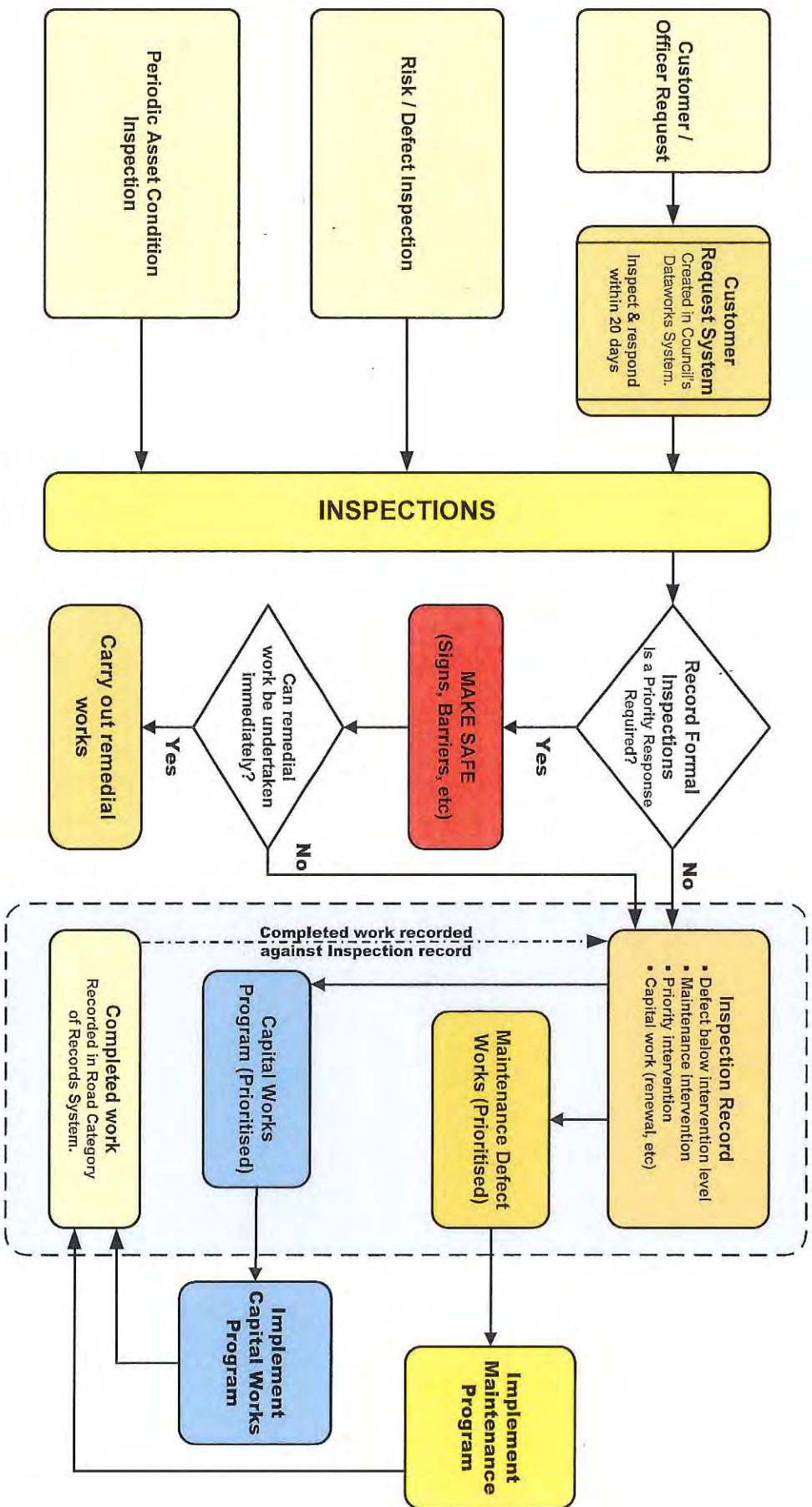
Road Hierarchy Categories	Sub-Categories	Description of Categories	Target Design Standards
Category 5: Arterial State Govt. Responsibility	State Arterials	<ul style="list-style-type: none"> Function is to carry the heaviest volumes of traffic, including commercial vehicles, and provide the principal routes for traffic flows in and around the municipality. These come under the jurisdiction of DIER and as such maintenance of the road pavement & surface is not the responsibility of Council. 	<ul style="list-style-type: none"> 6.2m wide seal; 1.0m wide shoulders; Pavement designed in accordance with DEIR Guide to Pavement Design, Technical Bulletin No.37
	Link Road	<ul style="list-style-type: none"> Link roads provide the linkage between centres and they are supplementary to the arterial road system within the municipal area. Link roads generally have a relatively high vehicle count. 	<ul style="list-style-type: none"> 6.2m wide seal; 1.0m wide shoulders; Pavement depth in accordance with Technical Bulletin No.37
Category 4: Link Roads	Industrial Road	<ul style="list-style-type: none"> Industrial roads provide heavy vehicle access directly to industries (including forestry) and have a high heavy vehicle count. 	<ul style="list-style-type: none"> 5.5m. wide seal; Rehabilitation to existing standard; Pavement depth in accordance with Technical Bulletin No.37
	Collector – Sealed	<ul style="list-style-type: none"> Carry moderate volumes of traffic and provide access by linking local areas to link and arterial roads. They also provide links between the various collector roads. They should have limited through traffic (this is not promoted or encouraged). 	<ul style="list-style-type: none"> 5.5m width pavement; Resheeing depth 100 mm
Category 3: Collector Roads	Collector – Gravel	<ul style="list-style-type: none"> Carry moderate volumes of traffic and provide access by linking local areas to link and arterial roads. 	<ul style="list-style-type: none"> 4.8m wide seal; Rehabilitation to existing standard; Pavement depth in accordance with Technical Bulletin No.37
	Access – Sealed	<ul style="list-style-type: none"> Primary function is to provide access to properties; They cater for relatively short distance travel to higher level roads. 	<ul style="list-style-type: none"> 4.8m width pavement; Resheeing depth 75 mm
Category 2: Local Access Roads	Access – Gravel	<ul style="list-style-type: none"> Primary function is to provide access to properties; They cater for relatively short distance travel to higher level roads. 	<ul style="list-style-type: none"> 4.5m width pavement (sealed & gravel); Resheeing depth 75 mm (gravel)
	Limited Access Roads	<ul style="list-style-type: none"> Provide secondary property access 	
Category 1: Low Maintenance Lanes and Tracks	Crown Road Reserves	<ul style="list-style-type: none"> In Crown or private ownership, so not a Council responsibility 	
	Private Roads & Lanes	<ul style="list-style-type: none"> In private ownership/control, so not a Council responsibility. 	

Reference sources for descriptions:
 Road Management Act 2004 (Victoria)
 International Infrastructure Management Manual – Australia/NZ Edition 2002
 UK Highway Code of Practice for Maintenance Management 2001

Inspection Type	Purpose	Inspection Performed by & Reporting Requirements
Risk Assessment Reactive/Safety Inspection	<ul style="list-style-type: none"> ▪ Safety inspections are designed to identify all defects likely to create danger or serious inconvenience to users of the network or the wider community. ▪ Safety issues may be detected as the result of: observation followed by notification to council either by members of the community or by council employees while undertaking their normal work duties with a subsequent safety inspection to be conducted by an appropriate council officer. 	<ul style="list-style-type: none"> ▪ Council representative with some knowledge of road maintenance techniques who may then call in a higher level of expertise if necessary. ▪ Recording to identify specific safety defect; time first reported, time inspected & by whom, subsequent action & time of completion.
Incident Inspection	<ul style="list-style-type: none"> ▪ This inspection enables an incident condition report to be prepared for use in legal proceedings and the gathering of information for the analysis of the causes of accidents and the planning and implementation of road management and safety measures. 	<ul style="list-style-type: none"> ▪ Qualified engineer or experienced technical officer with extensive knowledge and experience in road construction and maintenance practices. ▪ Formal Incident Report prepared.
Programmed Inspection	<ul style="list-style-type: none"> ▪ Footpaths and bridges - Inspection undertaken in accordance with a formal inspection schedule to determine if there are defects that need remedial work; ▪ Roads and kerb & channel – No formal program of inspections is undertaken to detect 	<ul style="list-style-type: none"> ▪ Engineer or technical officer with knowledge of road maintenance techniques; ▪ A record of the inspection is to be signed by the inspector for placing on council's asset database for reference purposes (NB: this may include insurance or litigation requirements).
Condition Inspection	<ul style="list-style-type: none"> ▪ An inspection specifically to identify deficiencies in the structural integrity of the various components of the road infrastructure assets which if untreated, are likely to adversely affect network values. The deficiencies may well impact short-term serviceability as well as the ability of the component to continue to perform for the duration of its intended life span; ▪ The condition inspection process must also meet the requirements for accounting regulations and asset management; ▪ Regular or periodic assessment, measurement and interpretation of the resulting condition data is required so as to determine the need for any preventive or remedial action then development of relevant programs of rehabilitation or renewal works. 	<ul style="list-style-type: none"> ▪ Inspection undertaken under the direction of a qualified engineer or experienced technical officer with extensive knowledge and experience in road construction and maintenance practices; ▪ Specific data to be recorded is determined by requirements of the Asset Information System which is then used to assess asset component needs.

Road Asset Inspection Frequencies

Hierarchy Category	Asset Group Category	Sub-Category	Inspection Interval	
			Programmed Inspections	Condition Inspections (for Structural & Physical Integrity)
Roads				
Category 5:	Primary Arterial		DEIR responsibility	DEIR responsibility
Category 4:	Link Roads		Annually	3-4 Years
Category 3:	Collector Road – Sealed		Annually	3-4 Years
	Collector Road – Gravel		Annually	3-4 Years
Category 2:	Local Access Road – Sealed		Annually	3-4 Years
	Local Access Road – Unsealed		Annually	3-4 Years
Category 1	Limited Access Road – Sealed		Annually	3-4 Years
	Limited Access Road – Unsealed		Annually	3-4 Years
Footpaths				
Category 3:	Shopping Zones		Annually	3-4 Years
Category 2:	Specific Pedestrian Generators		Annually	3-4 Years
Category 1:	Other Areas		Annually	3-4 Years
Kerb & Channel				
Category 4 Roads:	Link Roads & Industrial Roads		3 Years	3-4 Years
Category 3 Roads:	Collector		3 Years	3-4 Years
Category 2 Roads:	Local Access Roads & Streets		3 Years	3-4 Years
Category 1 Roads:	Limited Local Access Roads		3 Years	3-4 Years
Bridges/Major Culverts				
Category 4 Roads:	Link Roads & Industrial Roads		Annually	3-4 Years
Category 3 Roads:	Collector		Annually	3-4 Years
Category 2 Roads:	Local Access Roads & Streets		Annually	3-4 Years
Category 1 Roads:	Limited Local Access Roads		Annually	3-4 Years



Appendix G Maintenance Response Levels of Service (Defect Tolerance Levels)

INTERVENTION LEVELS – SEALED ROADS					
Service Code	Item	Defect Levels when Intervention is Required	Cat.	Target Rectification Response Time	Unit
PH	Pothole Patching	Repair if conditions are wet and the hole is unsafe or likely to deteriorate. In dry conditions, repair if hole >35mm deep or 400mm diam.	4	Within 3 working days	m ²
			3	5 working days	m ²
			2	15 working days	m ²
MR	Wheel Rutting	Regulate if >50mm (Cat 4) or 75mm (Cat 3/2) deep under a 1.2m straight edge. Areas >25m ²	1	20 working days	m ²
			4	8 weeks	m ²
			3	16 weeks	m ²
			2	16 weeks	m ²
CSR	Crack Sealing	Fill all cracks >10 mm wide and a length > 2.0m	1	20 weeks	m ²
			4	6 weeks	lin.m
			3	12 weeks	lin.m
			2	12 weeks	lin.m
MIR	Minor Reseals	If stripping >10m ² & stone loss >50% without pavement failure.	1	20 weeks	lin.m
			4	4 weeks	m ²
			3	12 weeks	m ²
			2	12 weeks	m ²
DP	Depressions	Regulate if >50mm (Cat 4) or 75mm (Cat 3/2) deep under a 1.2m straight edge. Areas >25m ² .	1	20 weeks	m ²
			4	8 weeks	m ²
			3	16 weeks	m ²
			2	16 weeks	m ²
SW	Sweeping	Any area > 40m ² that has build up that is visible in the travel path and/or is a potential hazard to vehicles or pedestrians.	1	20 weeks	m ²
			4	Within 5 working days	hours
			3	2 weeks	hours
			2	3 weeks	hours
			1	4 weeks	hours

INTERVENTION LEVELS – GRAVEL ROADS INCLUDING UNSEALED URBAN ROADS

Service Code	Item	Defect Levels when Intervention is Required	Cat.	Target Rectification Response Time	Unit
GPP	Pot Holes	Frequency of holes 75mm deep or 400mm diameter is equal to or greater than:	4	No gravel Category 4	
		Category 3 roads - 1% of road area in any 100m section;	3	4 weeks	m ²
		Category 2 roads – 5% of road area in any 250m section	2	12 weeks	m ²
MR	Rutting	Rutting concentration for a length of road & average depth not exceeding 75mm:	1	Annual	m ²
			4	No gravel Category 4	
			3	4 weeks	m ²
			2	16 weeks (grader cycle)	m ²
C	Corrugations	Corrugation concentration for a length of road & average depth not exceeding:	1	Annual	m ²
			4	No gravel Category 4	
			3	4 weeks	m ²
			2	16 weeks (grader cycle)	m ²
			1	Annual	m ²
SS	Slippery Surface	Any Part	4	No gravel Category 4	m ²
			3	5 working days	m ²
			2	4 weeks	m ²
			1	4 weeks	m ²
			SC	Surface Scour	Area if long or transverse scouring exceeds 75mm depth:
3	5 working days	m ²			
2	2 weeks	m ²			
1	4 weeks	m ²			
LOM	Loss of Material	Subgrade with 20% or more of area showing loss of material in any 100m length:			
			3	2 working days	m ²
			2	5 working days	m ²
			1	2 weeks	m ²

INTERVENTION LEVELS – GRAVEL ROADS INCLUDING UNSEALED URBAN ROADS

Service Code	Item	Defect Levels when Intervention is Required	Cat.	Target Rectification Response Time	Unit
GPP	Pot Holes	Frequency of holes 75mm deep or 400mm diameter is equal to or greater than:	4	No gravel Category 4	
		Category 3 roads - 1% of road area in any 100m section;	3	4 weeks	m ²
		Category 2 roads – 5% of road area in any 250m section	2	12 weeks	m ²
WR	Rutting	Rutting concentration for a length of road & average depth not exceeding 75mm:	1	Annual	m ²
		Category 3 roads - 5% of road area of 10m ² in any 100m ² ;	4	No gravel Category 4	
		Category 2 roads - 10% of road area of 50m ² in any 100m ²	3	4 weeks	m ²
C	Corrugations	Corrugation concentration for a length of road & average depth not exceeding:	2	16 weeks (grader cycle)	m ²
		Category 3 roads - 75mm for 10% of road area in any 100m length & within 30 m of an intersection;	1	Annual	m ²
		Category 2 roads - 75mm for 20% of road area in any 100m	4	No gravel Category 4	
SS	Slippery Surface	Any Part	3	5 working days	m ²
			2	4 weeks	m ²
			1	4 weeks	m ²
SC	Surface Scour	Area if long or transverse scouring exceeds 75mm depth:	4	No gravel Category 4	
		Urban gravel roads 25 m ²	3	5 working days	m ²
		Category 3 rural roads 25 m ²	2	2 weeks	m ²
LOM	Loss of Material	Category 2 rural roads 50 m ²	1	4 weeks	m ²
		Subgrade with 20% or more of area showing loss of material in any 100m length:	4	No gravel Category 4	
			3	2 working days	m ²
			2	5 working days	m ²
			1	2 weeks	m ²

INTERVENTION LEVELS – GRAVEL ROADS INCLUDING UNSEALED URBAN ROADS (Continued)

Service Code	Item	Defect Levels when Intervention is Required	Cat.	Target Rectification Response Time	Unit
IH	Isolate Hazards	All hazards to be marked – devices Hazards include flood, fires, storms, traffic accidents to ensure the safety of the public and protection of the asset.	4	No gravel Category 4	hours
			3	4 hours	hours
			2	4 hours	hours
			1	4 hours	hours
FD	Foundation Defects	Heaving or settlement of road surface area: <ul style="list-style-type: none"> ▪ Category 2 roads > 100mm deep or high for >5m², ▪ Category 3 roads > 100mm deep or high for >10m² 	4	No gravel Category 4	m ²
			3	4 weeks	m ²
			2	8 weeks	m ²
			1	No action	m ²
CC	Culverts	Waterway to be free, water build up less 50mm above I.L.	4	No gravel Category 4	
			3	Annually	m
			2	Annually	m
			1	As required	m
TDR	Table, Mitre & Open Drains	Covers all unlined open drains, catch drains, spoon drains, table drains and waterways that contribute to the structural integrity of the roadway. No build up - free to drain.	4	No gravel Category 4	
			3	Annually	m
			2	Annually	m
			1	As required	m

Appendix H Risk Assessment for Roads and Footpaths

Defect Type	Level of Defect	Location	Risk Event & Potential Consequence	Consequence Rating	Road Cat.	Likelihood Ranking	Assessed Risk
Pothole	Beyond the point where intervention is required – maintenance is now a priority.	Urban (lower speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	4 3 2 1	C - Possible D - Unlikely VH - Rare VH - Rare	H H M M
		Rural (higher speeds)	Loss of control causing vehicle crash, multiple fatalities	5 - Catastrophic	4 3 2 1	C - Possible C - Possible D - Unlikely D - Unlikely	VH H H M
		Urban (lower speeds)	Loss of control causing vehicle crash, minor injuries to several people	3 - Moderate	4 3 2 1	C - Possible D - Unlikely VH - Rare VH - Rare	H M L L
		Rural (higher speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	4 3 2 1	C - Possible C - Possible D - Unlikely D - Unlikely	H H M L
		Urban (lower speeds)	Vehicle sustains damage	2 - Low	4 3 2 1	B - Likely B - Likely C - Possible VH - Rare	H H M L
		Rural (higher speeds)	Vehicle sustains damage	2 - Low	4 3 2 1	B - Likely B - Likely C - Possible D - Unlikely	H H M L

Appendix H – Risk Assessment – Roads & Footpaths continued

Defect Type	Level of Defect	Location	Risk Event & Potential Consequence	Consequence Rating	Road Cat.	Likelihood Ranking	Assessed Risk
Edge Breaks, Drop offs, Wheel Ruts & Depressions, and Pavement Showing	Beyond the point where intervention is required – maintenance is now a priority.	Urban (lower speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	4	D - Unlikely	H
		Urban (lower speeds)	Loss of control causing vehicle crash, minor injuries to several people	3 - Moderate	3	D - Unlikely	M
		Urban (lower speeds)	Loss of control causing vehicle crash, multiple fatalities	5 - Catastrophic	2	D - Unlikely	M
		Rural (higher speeds)	Loss of control causing vehicle crash, multiple fatalities	5 - Catastrophic	1	D - Unlikely	M
		Rural (higher speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	4	D - Unlikely	H
		Rural (higher speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	3	C - Possible	H
	At intervention level	Urban (lower speeds)	Vehicle sustains damage	2 - Low	2	D - Unlikely	M
		Urban (lower speeds)	Vehicle sustains damage	2 - Low	1	D - Unlikely	L
		Rural (higher speeds)	Vehicle sustains damage	2 - Low	4	B - Likely	H
		Rural (higher speeds)	Vehicle sustains damage	2 - Low	3	B - Likely	H
		Rural (higher speeds)	Vehicle sustains damage	2 - Low	2	C - Possible	M
		Rural (higher speeds)	Vehicle sustains damage	2 - Low	1	D - Unlikely	L
Crack Sealing	Risk is assessed as being the same whether at or beyond the Intervention Level	Urban (lower speeds)	Structural risk only	2 - Low	4	D - Unlikely	H
		Rural (higher speeds)	Structural risk only	2 - Low	4	D - Unlikely	H

Appendix H – Risk Assessment – Roads & Footpaths continued

Defect Type	Level of Defect	Location	Risk Event & Potential Consequence	Consequence Rating	Road Cat.	Likelihood Ranking	Assessed Risk
Delamination	Risk is assessed as being the same whether at or beyond the Intervention Level	Urban (lower speeds)	Vehicle sustains damage	2 - Low	4	VH - Rare	M
		Rural (higher speeds)	Vehicle sustains damage	2 - Low	4	VH - Rare	M
Stripped Seals & Slick Surfaces	Risk is assessed as being the same whether at or beyond the Intervention Level	Urban (lower speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	4	D - Unlikely	H
		Rural (higher speeds)	Loss of control causing vehicle crash, multiple fatalities	5 - Catastrophic	4	D - Unlikely	H
Bleeding Seals	Risk is assessed as being the same whether at or beyond the Intervention Level	Urban (lower speeds)	Loss of control causing vehicle crash, serious injuries to several people, also a public nuisance in urban areas	4 - Major	4	VH - Rare	M
		Rural (higher speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	4	VH - Rare	M

Appendix H – Risk Assessment – Roads & Footpaths continued

Defect Type	Level of Defect	Location	Risk Event & Potential Consequence	Consequence Rating	Road Cat.	Likelihood Ranking	Assessed Risk	
Potholes, rutting and scouring	Beyond the point where intervention is required – maintenance is now a priority.	Urban (lower speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	4 3 2 1	N/A N/A VH - Rare VH - Rare	M L	
		Rural (higher speeds)	Loss of control causing vehicle crash, multiple fatalities	5 - Catastrophic	4 3 2 1	N/A C - Possible D - Unlikely VH - Rare	VH H M M	
		Urban (lower speeds)	Loss of control causing vehicle crash, minor injuries to several people	3 - Moderate	4 3 2 1	N/A D - Unlikely D - Unlikely C - Possible	M L H	
		Rural (higher speeds)	Loss of control causing vehicle crash, serious injuries to several people	4 - Major	4 3 2 1	N/A VH - Rare VH - Rare N/A	M M M	
		Urban (lower speeds)	Vehicle sustains damage	2 - Low	3 2 1	N/A D - Unlikely VH - Rare	M L	
		Rural (higher speeds)	Vehicle sustains damage	2 - Low	4 3 2 1	N/A B - Likely C - Possible D - Unlikely	H M L	
	At intervention level		Urban (lower speeds)	Vehicle sustains damage	2 - Low	3 2 1	N/A D - Unlikely VH - Rare	M L
			Rural (higher speeds)	Vehicle sustains damage	2 - Low	4 3 2 1	N/A B - Likely C - Possible D - Unlikely	H M L

Appendix H – Risk Assessment – Roads & Footpaths continued

Defect Type	Level of Defect	Location	Risk Event & Potential Consequence	Consequence Rating	Cat.	Likelihood Ranking	Assessed Risk
Footpaths Edge lips, pavers dislocated, concrete bays raised or broken - where repairs can be undertaken by lip grinding	Risk is assessed as being the same whether at or beyond the Intervention Level	Urban	Person falls and sustains serious injury	3 - Moderate	3	A - Almost Certain	VH
					2	A - Almost Certain	VH
					1	B - Likely	H
Footpaths Pavers dislocated or missing, concrete bays cracked, raised or broken, asphalt lifted by roots, depressed, cracked or potholes - where minor works & repairs can be undertaken	Risk is assessed as being the same whether at or beyond the Intervention Level	Urban	Person falls and sustains serious injury	3 - Moderate	3	A - Almost Certain	VH
					2	A - Almost Certain	VH
					1	B - Likely	H

- Road Pavement & Seal Improvement program (based on age, condition, & visual assessment)

I.D. No.	STREET NAME	FROM Street Name or Description	Dist. m	TO Street Name or Description	Dist. m	O/A Wid m	Total Pav Length	O/A Cond 0-10	Type	Comments	Year Programmed
		Reconstruct 2015-2016		2015-2016	Reconstruct 2021-2022			2021-2023	Urban Street Upgrade		Year
Maloney's Road Score											
		Reconstruct 2016-2017		2016-2017	Reconstruct 2022-2023			2022-2023	K&G and Road Verge		Year
		Reconstruct 2017-2018		2017-2018	Reconstruct 2023-2024			2023-2024	Not Programmed		Low Usage
		Reconstruct 2018-2018		2018-2019	Reconstruct 2024-2025			20024-2025	Remove From List		Delist
		Reconstruct 2019-2020		2019-2020	Reconstruct 2025-2026			2025-2026	Reshape Road		
		Reconstruct 2020-2021		2020-2021				2026-2027			
1138	Smith St	Abel T asman Av.	0	Latour	140	4.8	182	6.0	Street	Changed to footpath	Delist
1561	Connorville Rd	Macquarie River Rd	0	Gate	1,105	3.3	1,105	8.0	Street	PRIVATE ROAD	Delist
927	Newry St Ext of Tanne Tannery		0	End	500	5.5	500	8.0	Rural	Take off list. Fenced off	Delist
116	Bellevue	00 Midlands Hwy	2,660	Seal Change	3,210	4.2	550	8.0	Rural	Low Usage	Low Usage
1189	Storys Creek Rd	19.87 Bridge Seal	20,430	Bridge - Storys Ck	121,275	4.0	845	8.0	Rural	Low Usage	Low Usage
951	Nivelle St	Badajos St Fence Link	0	End of Seal	263	3.8	263	7.0	Street	Low Usage	Low Usage
1208	The Stock Route	Saunbridge St	0	Seal Change	85	4.8	85	7.0	Street	Low Usage	Low Usage
109	Bedford St	Start of Seal	212	Franklin	269	2.4	57	7.0	Street	Low Usage	Low Usage
307	Conara Rd	Bend Right	295	Start K&C	900	5.7	605	7.0	Rural	Low Usage	Low Usage
310	Conara Rd	Gate	1,495	End	1,626	5.6	131	7.0	Rural	Low Usage	Low Usage
184	Bridge St Campb T	Clare	2,102	End of Seal	2,270	2.6	188	7.0	Street	Low Usage	Low Usage
1071	Rossarden Rd	Pole No 161	3,950	Culvert	5,570	5.0	1,620	7.0	Rural	Low Usage	Low Usage
1573	Gay St	Goderich St	151	Howick St	250	4.8	99	8.0	Street	Low Usage	Low Usage
1190	Storys Creek Rd	Bridge - Storys Ck Brt	21,275	21.9 Old Storys Ck	23,020	5.0	1,745	7.0	Rural	Low Usage	Low Usage
492	Gleneig St	Peddler St BOK	0	Church	285	4.5	285	6.0	Street	Reconstructed 2014-2015	Completed
923	New St Campb. T	Midlands H/Way	0	Leake St	227	13.5	234	8.0	Street	Tree Roots. Maintenance Required	
1399	Wilmores La	00 Cressy Main Rd	1,101	Seal Change	1,295	5.0	194	6.0	Rural	Reconstruct Section /Complete	2015-2016
1400	Wilmores La	00 Cressy Main Rd	1,295	Loading Ramp	2,690	5.6	1,395	8.0	Rural	Reconstruct /Complete	2015-2016
1401	Wilmores La	Loading Ramp	2,690	Seal Change	3,809	5.7	1,118	6.0	Rural	Reconstruct /Complete	2015-2016
361	Delmont	00 Maguaree River Rd	1,800	Seal Change	2,485	5.6	685	8.0	Rural	Reconstruct /Complete	2015-2016
364	Delmont	00 Maguaree River Rd	3,910	Seal Change	4,920	5.2	1,010	8.0	Rural	Reconstruct /Complete	2015-2016
755	Macquarie River Rd	Seal Change	10,680	11.29 Macquarie St	11,675	5.6	995	6.0	Rural	Reconstruct /Complete	2015-2016
460	Gatenby St	Spencers Lane	0	Macquarie	292	9.2	298	4.0	Street	K&G Section East side/Complete	2015-2016
493	Gleneig St	Church St	285	Queen	640	4.5	355	6.0	Street	Reconstruct /Complete	2015-2016
156	Bond St Campb. T	Midlands Hwe	0	Grant St	289	6.0	291	4.0	Street	K&G Section Sth side/Complete	2015-2016

I.D. No.	STREET NAME 965978	FROM Street Name or Description	Dist. m	TO Street Name or Description	Dist. m	O/A Wid m	Total Pav Length	O/A Cond 0-10	Type	Comments	Year Programmed
421	Eskley Perfr Nursing H	Seal Change	185	Home Ent	1,065	4.7	886	7.0	Rural	Tree Root Concerns. Road Repairs Carried Out	2015-2016
774	Macquarie River Rd	00 Poatina Hwy	32,940	Seal Change	33,865	5.1	925	8.0	Rural	Consider Reconstruction	2016-2017
1548	Macquarie River Rd	Seal Change	33,865	Bridge	34,215	4.8	350	4.0	Rural	Consider Reconstruction	2016-2017
1412	Woolmers La	00 Midlands Hwy	3,000	5.35 Point Rd	4,490	6.2	1,490	5.0	Rural	Consider Reconstruction	2016-2017
1413	Woolmers La	00 Midlands Hwy	4,490	Parashager	5,800	6.1	1,310	6.0	Rural	Consider Reconstruction	2016-2017
933	Nile Rd	00 High St Evandale	7,300	Bryants	8,085	6.9	785	6.0	Rural	Consider Reconstruction	2016-2017
225	Burghley St Longford	High St	155	Pultrey St	380	8.9	215	5.0	Street	Consider Street Reconstruction	
226	Burghley St Longford	Pultrey St	380	Malcombe St	609	8.9	236	6.0	Street	Consider Street Reconstruction	2016-2017
561	High St Ross	Esplanade	0	Church St	111	4.2	111	6.0	Street	Program Reconstruction	2016-2017
180	Bridge St Campb T	Church	782	Midlands Hwy	920	5.1	138	3.0	Street	K&g; Carparking and Street Rec	2016-2017
722	Logan Rd	00 Hurxtable St Evend	2,685	Seal Change	3,490	5.3	805	5.0	Rural	Urban k&g and road verge	2016-2017
1257	Torlesse St	WBL No 1	0	Leake St	108	4.4	108	3.0	Street	Urban k&g and road verge	2016-2017
684	Leake St	Mason St	0	Torlesse St	232	5.4	244	3.0	Street	Urban k&g and road verge	2016-2017
852	Mason St Campb T	Leake St	213	Midlands Hwy	429	5.9	210	4.0	Street	Urban k&g and road verge	2016-2017
333	Cromwell Street	Phillip Street		Nelson Place				2.0	Street	Urban k&g and road verge	2016-2017
935 +	Nile Rd Township	00 High St Evandale	10,385	Start of Kerb Left	10,585	7.2	200	5.0	Rural	Urban k&g and road verge	2016-2017
1411	Woolmers La	00 Midlands Hwy	730	Property Ent	3,000	6.2	2,270	6.0	Rural	Consider Reconstruction	2017-2018
99	Barton Rd	00 Midlands Hwy	8,090	Seal Change	9,050	4.9	935	6.0	Rural	Consider Reconstruction	2017-2018
100	Barton Rd	00 Midlands Hwy	9,050	Pave Change	10,230	4.8	1,180	5.0	Rural	Consider Reconstruction	2017-2018
105	Barton Rd	00 Midlands Hwy	11,400	Seal Change	13,795	5.3	2,395	6.0	Rural	Urban k&g and road verge	2017-2018
59&60	High Street Long	Burghley		No 43					Street	Urban k&g and road One side	2017-2018
235	Carins St	Union St	0	End	200	6.0	203	6.0	Street	Urban k&g and road Part Sub	2017-2018
37	Arthur St Perth	Rail X	565	Clarence St	832	8.3	267	6.0	Street	Consider Reconstruction	2017-2018
579	Hobhouse St	Catherine St	897	Burghley St	1,064	10.4	152	6.0	Street	Consider Reconstruction	2017-2018
999	Paton Street	00 Burghley	0	End	151		151		Street	Urban Street Upgrade	2017-2018
	Youl Road	Subject to funding by State Growth the owners in conjunction with By Pass negotiations									
132	Bishopspourne Rd	00 Illawarra	7,375	Seal Change	8,520	5.8	1,145	5.0	Rural	Consider Reconstruction	2018-2019
133	Bishopspourne Rd	00 Illawarra	8,520	9.08 Armstrongs	9,980	5.3	480	5.0	Rural	Consider Reconstruction	2018-2019
525	Green Rises	Change	9,600	Seal Change	10,590	5.0	990	6.0	Rural	Consider Reconstruction	2018-2019
931	Nile Rd	00 High St Evandale	4,845	5.10 Clarandon L.R	5,705	6.8	860	6.0	Rural	Consider Reconstruction	2018-2019
1033	Powrana Rd	00 Midlands Hwy	14,010	Pave Change	15,020	6.0	1,010	6.0	Rural	Consider Reconstruction	2018-2019
1450	Valleyfield Rd	Barton	0	Pave Change	200	5.1	200	6.0	Rural	Consider Reconstruction	2018-2019
1372	Valleyfield Rd	00 Barton Rd	8,505	Seal Change	10,410	5.0	1,905	6.0	Rural	Consider Reconstruction	2018-2019
822	Malcombe St	Wellington St	0	Laycock	139	6.2	136	6.0	Street	Urban Street Upgrade	2018-2019

I.D. No.	STREET NAME 966978	FROM Street Name or Description	Dist. m	TO Street Name or Description	Dist. m	O/A Wid m	Total Pav Length	O/A Cond 0-10	Type	Comments	Year Programmed
574	Hobhouse St	End Path	168	Laycock St	245	8.0	68	3.0	Street	Urban Street Upgrade	2018-2019
232	Burnett St	Pulney St	0	Change	82	6.2	87	2.0	Street	K&G and Road Verge	2018-2019
550	High St Evandale	Barclay	444	Russell	812	3.2	368	4.0	Street	K&G and Road Verge	2018-2019
1011	Phillip St	Cromwell St	256	Seal Change	413	5.8	164	3.0	Street	K&G and Road Verge	2018-2019
1012	Phillip St	Seal Change	413	Youl Main Rd	520	6.0	107	3.0	Street	K&G and Road Verge	2018-2019
540	Herberts Rd	Hobhouse St	0	Bulwer	237	5.6	226	2.0	Street	K&G and Road Verge	2018-2019
104	Barton Rd	00 Midlands Hwy	10,890	Seal Change	11,400	5.8	510	5.0	Rural	Consider Reconstruction	2019-2020
106	Barton Rd	00 Midlands Hwy	13,795	Macquarie	14,900	5.3	1,105	5.0	Rural	Consider Reconstruction	2019-2020
1118	Saundridge Rd	Bridge	11,530	Bridge	13,235	5.2	1,705	6.0	Rural	Consider Reconstruction	2019-2020
1108	Saundridge Rd	Change	1,750	Seal Change	4,205	6.5	2,455	6.0	Rural	Consider Reconstruction	2019-2020
320	Cox St	Nile EBL	0	End	259	6.4	267	4.0	Street	K&G and full Road Construction	2019-2020
197	Bridge St South	Montagu	256	Mason	515	4.8	269	2.0	Street	K&G and Road Verge	2019-2020
213	Bulwer St	Wellington St	0	Seal Change	172	8.2	177	2.0	Street	K&G and Road Verge	2019-2020
573	Hobhouse St	Wellington St	0	End Path	168	8.0	174	2.0	Street	K&G and Road Verge	2019-2020
574	Hobhouse St	End Path	168	Laycock	245	8.0	77	3.0	Street	K&G and Road Verge	2019-2020
681	Laycock St	Bulwer	0	Hobhouse St	237	7.3	244	3.0	Street	K&G and Road Verge	2019-2020
1100	Russell St	High St	0	Junction	381	9.3	385	2.0	Street	K&G and Road Verge	2019-2020
1101	Russell St	Junction	381	Huxtable EBL	487	8.0	113	2.0	Street	K&G and Road Verge	2019-2020
97	Barton Rd	00 Midlands Hwy	6,120	Seal Change	6,600	6.4	615	6.0	Rural	Check Asset No	2020-2021
98	Barton Rd	00 Midlands Hwy	6,600	Seal Change	8,090	6.4	1,780	6.0	Rural	Consider Reconstruction	2020-2021
495	Glenesk Rd	00 Nile Rd	0	Seal Change	970	5.7	970	6.0	Rural	Consider Reconstruction	2020-2021
496	Glenesk Rd	00 Nile Rd	970	Seal Change	2,525	5.2	1,555	6.0	Rural	Consider Reconstruction	2020-2021
532	Haselwood	0Burnby Street	0	Marlborough	1,105		1,180	6.0	Rural	Consider Reconstruction	2020-2021
664	Lake River Rd	00 Macquarie River	7,265	Seal Change	8,395	5.0	1,130	6.0	Rural	Consider Reconstruction	2020-2021
665	Lake River Rd	00 Macquarie River	8,395	Seal Change	9,050	5.8	655	6.0	Rural	Consider Reconstruction	2020-2021
666	Lake River Rd	00 Macquarie River	9,050	9,70 Glen	9,780	5.8	770	5.0	Rural	Consider Reconstruction	2020-2021
851	Mason St Campb T	Davidson St	0	Leake St	213	4.9	228	4.0	Street	K&G and Road Verge	2020-2021
221	Bulwer St	Burghley	1,183	BRIDGE	1,373	6.1	190	2.0	Street	K&G and Road Verge	2020-2021
50	Ashby Rd	00 Midlands Hwy	5,765	Seal Change	6,705	5.3	940	6.0	Rural	Consider Reconstruction	2021-2022
59	Auburn Rd	00 Midlands Hwy	2,390	Curvet	2,780	4.5	390	6.0	Rural	Consider Reconstruction	2021-2022
756	Macquarie River Rd	11,29 Macquarie Sett	11,675	Seal Change	12,300	5.4	625	4.0	Rural	Consider Reconstruction	2021-2022
757	Macquarie River Rd	Seal Change	12,300	13,70 Darlington Pa	13,790	5.3	1,490	4.0	Rural	Consider Reconstruction	2021-2022
4	Adelaide St	Adelaide SBL	0	Seal Change	40	4.8	40	6.0	Street	Urban Street Upgrade	2021-2022
5	Adelaide St	Seal Change	40	End of Seal	170	4.5	130	4.0	Street	Urban Street Upgrade	2021-2022
197	Bridge St Sth	Montague to North		Adelaide				2.0	Street	Urban Street Upgrade	2021-2022

I.D. No.	STREET NAME 965978	FROM		Dist. m	TO		Dist. m	O/A Wid m	Total Pav Length	O/A Cond 0-10	Type	Comments	Year Programmed
		Street Name	or Description		Street Name	or Description							
194	Bridge St South	Adelaide St	0 Broad St	136	5.1	136	4.0		136	4.0	Street	Urban Street Upgrade	2021-2022
195	Bridge St South	Broad St	136 Seal Change	218	5.0	82	5.0		82	5.0	Street	Urban Street Upgrade	2021-2022
196	Bridge St South	Seal Change	218 Montagu	256	7.9	38	3.0		38	3.0	Street	Urban Street Upgrade	2021-2022
368	Devon Hills	0 Midlands Hwy	0 Christine	1,105	6.8	1,105	6.0		1,105	6.0	Street	Urban Street Upgrade	2021-2022
369	Devon Hills	0 Midlands Hwy	1,105 Loop Rd	2,235	5.9	1,130	6.0		1,130	6.0	Street	Urban Street Upgrade	2021-2022
370	Devon Hills	0 Midlands Hwy	2,235 Seal Change	3,345	5.9	1,110	6.0		1,110	6.0	Street	Urban Street Upgrade	2021-2022
13	Archer Street	Wilson	215 William	342		132	2.0		132	2.0	Street	K&G and Road Verge	2021-2022
1387	William St	Archer	0 Cressy Road	153		153	1.0		153	1.0	Street	K&G and Road Verge	2021-2022
536	Hay St	Park	370 Seal Change	500	6.0	130	2.0		130	2.0	Street	K&G and Road Verge	2021-2022
994	Park St Longford	Howick St	245 Hay St	319	9.0	62	3.0		62	3.0	Street	K&G and Road Verge	2021-2022
131	Bishopbourne Rd	0 Illawarra	5,080 Rail X	7,375	5.6	2,295	5.0		2,295	5.0	Rural	Consider Reconstruction	2022-2023
340	Deddington	0 Nile Road	1,233 Seal Change	3,075	5.4	1,842	6.0		1,842	6.0	Rural	Consider Reconstruction	2022-2023
341	Deddington	0 Nile Road	3,075 Seal Change	4,770	5.5	1,695	6.0		1,695	6.0	Rural	Consider Reconstruction	2022-2023
1006	Perth Mill Rd	0 Ewandale Rd	0 Range Rd	1,660	6.2	1,660	6.0		1,660	6.0	Rural	Consider Reconstruction	2022-2023
8	Ansley St	Lewis	0 Cracroft St	314	5.0	321	4.0		321	4.0	Street	Urban Street Upgrade plus k&g	2022-2023
230	Cemetery Rd	Drummond St	0 End of Bowl	247	4.9	254	4.0		254	4.0	Street	Urban Street Upgrade plus k&g	2022-2023
337	Cracroft St	Home	957 Wellington	1,278	5.7	334	4.0		334	4.0	Street	Urban Street Upgrade plus k&g	2022-2023
978	Panshanger Rd	00 Woolmers	520 Pave Change	850	6.0	330	6.0		330	6.0	Rural	Consider Reconstruction	2023-2024
979	Panshanger Rd	00 Woolmers	850 Seal Change	2,140	6.0	1,290	6.0		1,290	6.0	Rural	Consider Reconstruction	2023-2024
849	Marlborough St Longf	00 William St	5,345 Chatsworth	6,125	5.8	780	6.0		780	6.0	Street	Program Reconstruction	2023-2024
1379	White Hills Rd	Seal Change	1,500 Dalness	2,350	6.4	850	6.0		850	6.0	Rural	Minor Work Required	2023-2024
295	Clarendon Stet.	0 Nile Road	0 Seal Change	1,740	5.7	1,740	6.0		1,740	6.0	Rural	Reconsider	2023-2024
1047	Range Rd	Perth Mill Road	0 End of Circuit	1,115	5.5	1,115	6.0		1,115	6.0	Rural	Program Reconstruction	2023-2024
905	Murfett St	Saundridge St	0 Seal Change	102	5.6	108	4.0		108	4.0	Street	Reconstruct ??	2023-2024
785	Macquarie St Cressy	Gateby St	108 Condition Change	250	5.7	137	6.0		137	6.0	Street	To be considered	2023-2024
1124	Saundridge St East	Main St	0 End K&G	164	7.2	189	3.0		189	3.0	Street	Urban Street Upgrade plus k&g	2023-2024
275	Church St Pt 2	Gleneig St	0 West St	630	5.0	648	5.0		648	5.0	Street	Urban Street Upgrade plus k&g	2023-2024
569	Hobart Rd	Seal Change	340 1.70 Marchington	1,665	11.4	1,325	5.0		1,325	5.0	Rural	Consider Reconstruction	2024-2025
570	Hobart Rd	1.70 Marchington	1,665 Seal Change	2,675	12.5	1,010	5.0		1,010	5.0	Rural	Consider Reconstruction	2024-2025
1023	Powranna Rd	00 Midlands Hwy	3,340 Seal Change	4,860	6.2	1,520	5.0		1,520	5.0	Rural	Consider Reconstruction	2024-2025
1034	Powranna Rd	00 Midlands Hwy	15,020 16.76 Barfington	16,960	5.9	1,840	5.0		1,840	5.0	Rural	Consider Reconstruction	2024-2025
1108	Saundridge Rd	Change	1,750 Condition Change	4,205	5.5	2,455	6.0		2,455	6.0	Rural	Consider Reconstruction	2024-2025
1080	Royal George	00 St Pauls SBL	720 Seal Change	2,065	5.6	1,345	6.0		1,345	6.0	Rural	Consider Reconstruction	2025-2026
1086	Royal George	00 St Pauls SBL	8,100 Seal Change	8,800	5.3	700	6.0		700	6.0	Rural	Consider Reconstruction	2025-2026
1087	Royal George	00 St Pauls SBL	8,800 Old Seal Change	9,750	5.3	950	6.0		950	6.0	Rural	Consider Reconstruction	2025-2026

I.D. No.	STREET NAME 965978	FROM		TO		O/A Wid	Total Pav Length	O/A Cond	Type	Comments	Year
		Street Name or Description	Dist. m	Street Name or Description	Dist. m						
1116	Saundridge Rd	Blackwod Ck	9,705	Bridge	10,350	5.5	645	5.0	Rural	Consider Reconstruction	2025-2026
1119	Saundridge Rd	Bridge	13,235	Positna	14,050	5.1	885	5.0	Rural	Consider Reconstruction	2025-2026
614	Isis Rd	00 Macquarie River	20	Seal Change	835	4.8	815	6.0	Rural	Consider Reconstruction	2025-2026
616	Isis Rd	00 Macquarie River	1,520	Old Seal Change	3,285	4.8	1,765	6.0	Rural	Consider Reconstruction	2025-2026
93	Barton Rd	00 Midlands Hwy	0	Old Seal Change	1,870	5.2	1,670	5.0	Rural	Consider Reconstruction	2026-2027
94	Barton Rd	00 Midlands Hwy	1,670	Old Seal Change	2,670	5.2	1,000	5.0	Rural	Consider Reconstruction	2026-2027
95	Barton Rd	00 Midlands Hwy	2,670	Seal Change	3,625	5.2	955	5.0	Rural	Consider Reconstruction	2026-2027
1414	Woolmers La	00 Midlands Hwy	5,800	Seal Change	6,100	6.0	300	5.0	Rural	Consider Reconstruction	2026-2027
1419	Woolmers La	00 Midlands Hwy	9,560	Craicraft	9,930	5.5	370	5.0	Rural	Consider Reconstruction	2026-2027
129	Bishopbourne Rd	00 Illawarra	2,680	Seal Change	3,675	5.6	995	5.0	Rural	Consider Reconstruction	2026-2027
928	Nile Rd	00 High St Evandale	845	Seal Change	1,845	6.8	1,000	5.0	Rural	Consider Reconstruction	2026-2027
929	Nile Rd	00 High St Evandale	1,845	Seal Change	3,475	6.8	1,630	5.0	Rural	Consider Reconstruction	2026-2027
930	Nile Rd	00 High St Evandale	3,475	3.84 Bridge	4,845	6.8	1,370	5.0	Rural	Consider Reconstruction	2026-2027
934	Nile Rd	00 High St Evandale	8,085	Seal Change	10,385	7.2	2,300	5.0	Rural	Consider Reconstruction	2026-2027
1571	Nile Rd	Seal Change	10,680	Bridge	10,890	6.0	210	5.0	Rural	Consider Reconstruction	2026-2027
940	Nile Rd	00 High St Evandale	12,480	Seal Change	13,665	5.2	1,185	5.0	Rural	Consider Reconstruction	2026-2027
942	Nile Rd	00 High St Evandale	14,125	14.80 Bridge	15,775	5.6	1,650	5.0	Rural	Consider Reconstruction	2026-2027
943	Nile Rd	00 High St Evandale	15,775	18.53 Fernhill	18,355	5.6	2,580	5.0	Rural	Consider Reconstruction	2026-2027
658	Lake River Rd	00 Macquarie River	2,555	Seal Change	3,460	5.0	905	5.0	Rural	Consider Reconstruction	2026-2027
663	Lake River Rd	00 Macquarie River	6,600	Seal Change	7,265	6.0	685	5.0	Rural	Consider Reconstruction	2026-2027
50	Ashby Rd	00 Midlands Hwy	5,765	Seal Change	6,705	5.3	940	6.0	Rural	Consider Reconstruction	2026-2027

DRAFT DOCUMENT (Subject to changes) Footpath Replacement Program 2015/2016

Seq I.D. No.	ROAD OR STREET NAME	Footpath Details All Segments										Footpath Replacement Program 2015/2016		Footpath General		F/P Priority	REPLACE YEAR	REPLACEMENT COST Council to Fill in		
		FROM Street Name or Description	TO Street Name or Description	Dist m	Street Name or Description	Dist m	Loc	Footpath Length metres	Width metres	Area sqm	Drainage Square metres	Side of street	Rep or Meth	SM REC	\$m Rate Council				Comments Relating To Footpath	
1322	Wellington St	High Street	Swan Avenue	1,201	1,410.00	Long	98.00	1.60	147.00		West	Comp	Rep	\$92	Includes extra width at driveway - 1 PC High St	1	2015-2016	\$	13,824.00	
1323	Wellington St	Aspen Avenue	Pauliney	1,410	1,544.00	Long	123.00	1.60	194.50		West	Comp	Rep	\$92	Includes extra width at driveway - 1 PC High St	2	2015-2016	\$	17,886.00	
1189	Stockmans Road	Lugera Road	Buckley	0	205	East	253	1.20	245		East	Comp	Replace	\$92	Plus 7 New Drive Crossings 24' in New 1/2's	3	2015-2016	\$	29,892.00	
306	Pioneer Park	Memorial Rd. Car Park	Buckley	0	300m	East	14	1.50	21		West	Comp	Rep	\$92	Access to carpark	4	2015-2016	\$	1,892.00	
423	Enfildough Street	Midlands Hwy	Dodgers			West	14	1.80	206		West	Comp	New		Plus 2 F/C	5	2015-2016	\$	24,000.00	
29	Callitremour Cr	Arthur St	Collessic	0	114.20	West	174.0	1.80	206.20	18.4	East	Comp	New	\$104	203.00 km Plus 2m extra \$500 2PC 2' x 1.55	7	2015-2016	\$	26,295.40	
79	Walkway	Callitremour Cr	Bensia Grove	0	89.5	West	86.18	1.80	116.15		East	Comp	New		125.1		7	2015-2016	\$	12,291.80
									324.4										37,648.00	
33	Bankia Grove	Phillip St	Eric	0	87.4	West	87.4	1.80	157.32	66.41	West	Comp	New		3 driveways - extra include 1/2 Telena Ln	8	2015-2016	\$	\$22,227.90	
460	Gatenby Street	No 10 Driveway	Spencers La	182	202	West	130	1.50	195	16	West	Comp	New	\$108	One extra 1/2 m of driveway = 2111 R116 0	11	2015-2016	\$	23,483.50	
1150	Spencers Lane	Greasy Road	Serenity	0	89	North	88	1.50	146.03		North	Comp	Replace	\$108	One extra 1/2 m of driveway = 2111 R116 0	12	2015-2016	\$	17,492.17	
493	Glenelg Street	Church	Queen	255	840	East	355	1.80	516		East	Comp	Replace	\$112.00	One PC 65x5 x 4.4 SW driveway = 54.5	13	2015-2016	\$	84,724.00	
32	Arthur Street	Enfildough	Chango	455	832	South	250	1.80	520	180	South	Comp	New		To be separately quoted when required	14	2015-2016	\$	110,000.00	
473	George Street	Enfildough Street	Enfildough	0	130	South	130	1.80	294		South	Comp	New		Plus section in St Georges Square	16	2015-2016	\$	29,000.00	
New	St Georges Square	Smith Street	Tasman Ave	130	130	West	130	2.50	325+		West	Comp	New		Near 83L	17	2015-2016	\$	80,000.00	
1331	Wellington Street	No 44	High	1,081	1,201	West	110	1.80	198	20	West	Comp	Rep			18	2015-2016	\$	26,000.00	
1382	Wellington Street	Swan Ave	Swan Ave			East	20	1.80	38		East	Comp	New		Plus 2 F/C	19	2015-2016	\$	6,500.00	
1346	Wellington Street	Tan-Cook Terrace	Archer			West	73	3.00	225	N/A	West	Comp	Replace						30,000	

DRAFT DOCUMENT (Subject to changes) Footpath Replacement Program 2016/2017 to 2017/2018

Seg ID, ROAD OR STREET NAME	Segment		TO		Footpath Details All Segments		Area sqm	Driveway Square Meters	Side of street	Rep With	3M REC	3m Rate	Footpath General Comments Referring To Footpath Council	FP Priority	REPLACE YEAR	REPLACEMENT COST Council to Fill in
	FROM Street Name or Description	Dist m	Street Name if Described	Dist m	Use	Footpath Length Meters										
135	Wellington	Hobhouse	2,022	Balfour	2,278	Long	240	1,80	432	West	Conc	Replac	\$104	Reduce by section done.	2016-2017	\$ 63,360.00
307	Goderich	William	0	Arthur	70	Long	80	1,80	144	East	Conc	New	\$104	West Boundary Not Urgent. Alter private driveway/recessed	2016-2017	\$ 39,000.00
735&736	Main Street Cressy	5th B No 134	195	No 120	300	Crossy	175	1,80	300	West	Conc	Rep	\$108	60 am driveways	2016-2017	\$ 38,000.00
791	Main Street	No 120	370	Bus Park	445	Crossy	115	1,80	173	West	Conc	Rep	\$108		2016-2017	\$ 22,000.00
796	Main Street	Newspaper	880	Church	947	Crossy	87	1,80	101	East	Conc	Rep	\$108	20 am driveway	2016-2017	\$ 15,000.00
114	Smiths St	Haywick	873	Hay St	955	Long	147	1,80	264	North	Conc	New	\$104		2016-2017	\$ 35,000.00
623	Malcombe	Laycock	130	Marlbrough	494	Long	285	1,80	508	North	Conc	New	\$104		2016-2017	\$ 70,000.00
164	Queen	Bridge Street	161	General Street	363	Camp	172	1,80	310	Conc	New	\$117	20 ?	2018-2017	\$ 40,000.00	
496	Granite Street	Pedlar	0	Church	285	Camp	216	1,80	513	Conc	New	\$117	?	2018-2017	\$ 60,000.00	
																\$60,380.00
	Barclay Street	Manuarne	?	Leopold	?					South		Rep	\$108	Requested by Richard Goss	2017-2018	\$ 40,000.00
523	High Street	Collins	?	End of Park	15	Exam				Asphalt		Rep	\$140	To be considered	2017-2018	\$ 40,320.00
520	High St	Barley St	444	17A	804	Exam	195	1,80	285	East	Exp Aug	Upgrade	\$108	Exposed Aggregate Plus 2 PC	2017-2018	\$ 37,260.00
624	Malcombe	Marlbrough	484	Pakenham	868	Long	172	1,80	309	North	Conc	New	\$108		2017-2018	\$ 16,524.00
625	Malcombe	Pakenham	406	Caberline	775	Long	75	1,80	135	North	Conc	New	\$108		2017-2018	\$ 33,654.00
627	Malcombe	Caberline	724	Burghley	957	Long	160	1,80	288	North	Conc	New	\$108		2017-2018	\$ 13,932.00
	Smith	Hay		Goderich		Long	65	1,80	117	North	Conc	New	\$108		2017-2018	\$ 31,752.00
378	Palmerby	Marlbrough	319	Pakenham	450	Long	145	1,80	261	North	Conc	New	\$108		2017-2018	\$ 35,208.00
378	Palmerby	Caberline	657	Burghley	840	Long	160	1,80	288	North	Conc	New	\$108		2017-2018	\$ 67,176.00
378	Palmerby	Wellington	0	Marlbrough	312	Long	310	1,80	558	North	Conc	New	\$108	Site 2 - see Near Kern	2017-2018	\$ 363,636.00
																\$ 34,104.00
797	Main Street	Church St	620	Hotel	1,116		168	1,80	294	West	Conc	Rep	\$116		2018-2019	\$ 9,366.00
797	Main Street	Sh. Of Hotel	1,116	Nth Of Hotel	1,170		54	1,80	81	West	Conc	Rep	\$116		2018-2019	\$ 7,656.00
797	Main Street	Nth Of Hotel	1,170	King Street	1,214		44	1,80	66	West	Conc	Rep	\$116		2018-2019	\$ 66,352.00
796	Main Street	Saundridge	433	Church	947	Crossy	280	1,80	500	West	Conc	Rep	\$112	Includes 12 driveways	2018-2019	\$ 51,072.00
314	Hay	Burghley	0	Smith	162	Long	150	1,80	300	East	Conc	New	\$112	Near Boundary. Not Urgent. Wide Fossil Low Traffic	2018-2019	\$ 56,448.00
979 973	Pakenham street	Pulney St	615	Malcombe	735	Long	220	1,80	396	East	Conc	New	\$112		2018-2019	\$ 24,182.00
978	Pakenham street	Malcombe St	745	Hobhouse St	965	Long	220	1,80	396	East	Conc	New	\$112		2018-2019	\$ 100,000.00
977	Pakenham street	Hobhouse	986	Barker	1,192	Long	220	1,80	396	East	Conc	New	\$112		2018-2019	\$ 439,492.00
217	Burghley	Malcombe St	606	Hobhouse St	835	Long	120	1,80	216	West	Conc	New	\$112	Near property boundary	2018-2019	\$ 439,492.00
	Kool Road	Edward St	0	Phillip St	374	Path	374	1,80	673	Sh	Conc	New	\$112			

DRAFT DOCUMENT (Subject to changes) Footpath Replacement Program 2019/2020 to 2022/2023

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Seg ID. No.	ROAD OR STREET NAME	Segment		Footpath Details All Segments		Footpath Replacement Program 2019/2020 to 2022/2023		Footpath General		FIP REPLACEMENT YEAR	REPLACEMENT COST Council to					
		FROM Street Name or Description	TO Street Name or Description	Dist m	Dist m	Footpath Length Meters	Width metres	Area sqm	Driveway Square Meters			Size of Rep	Comments Relating To Footpath			
794	Main Street	No 138		275	418	143	1.50	215	80	East	Rep	\$120	2019-2020	\$	35,400.00	
795	Main Street			490	833	143	1.50	215	100	East	Rep	\$120	2019-2020	\$	37,600.00	
1021	Phillip St	Cornwell	Seal Change	299	413	157	1.80	283	Nil	Nth	Conc	New	\$116	2019-2020	\$	32,828.00
112	Phillip St	Seal Change	Youl Rd	413	520	107	1.80	193	Nil	Nth	Conc	New	\$116	2019-2020	\$	22,368.00
36&39	Arthur Street	Cherone St	Sunday			120	1.80	216	64	Sn	Conc	New	\$116	2019-2020	\$	32,480.00
176	Bridge	Esplanade	King	0	252	270	1.80	486	285	East	Conc	New	\$132	2019-2020	\$	80,000.00
208	Burghley	Hobhouse	Blower	835	1,074	220	1.80	396	72	East	New	\$116	2019-2020	\$	54,288.00	
227	Burghley	No 52	Hobhouse			125	1.80	225	Nil	West	Rep	\$116	2019-2020	\$	26,100.00	
333	High St Longford	Marlborough St	Pakenham St	285	375	160	1.80	288	Nil	Nth	Conc	Rep	\$116	2019-2020	\$	33,408.00
336	High St Longford	Pakenham St	Catherine St	378	547	168	1.80	304	4	Nth	Conc	Rep	\$118	2019-2020	\$	35,728.00
677	Latour	Lyreton	Archer	0	122	110	1.80	198	Nil	West	New	\$116	2019-2020	\$	22,968.00	
678	Latour	Archer	Smba	122	274	152	1.80	274	40		New	\$118	2019-2020	\$	35,424.00	
														\$	390,420.00	
456	Frederick street	Saone St	Cherone St	795	951	200	1.80	360	20	Nth	Rep	\$120	2020-2021	\$	45,600.00	
372	Hobhouse St	Catherine St	Burghley St	857	1,084	160	1.80	288	72	Nth	New	\$120	2019-2020	\$	43,200.00	
378	Hobhouse St	Pakenham	Catherine St	720	987	170	1.80	306	14	Nth	New	\$120	2019-2020	\$	35,400.00	
376	Hobhouse St	No 34	Mancroagh	249	549	150	1.80	270	70	Nth	New	\$120	2019-2020	\$	47,280.00	
377	Hobhouse	Marlborough	Pakenham	549	720	171	1.80	308		West	Rep	\$120	2020-2021	\$	35,960.00	
338	Wyllington	Hobhouse	Blower	2,022	2,279	240	1.80	432	144	West	Rep	\$120	2020-2021	\$	69,120.00	
335	Exey St	Smith	park	182	370	160	1.80	288	12	East	New	\$120	2020-2021	\$	42,480.00	
456	Frederick street	Saone St	Cherone St	795	951	200	1.80	360	20	Nth	Rep	\$120	2020-2021	\$	45,600.00	
														\$	368,640.00	
796	Main Street	Spencers Lane	Marianne St	1,294	1,833	300	1.80	540	84	East	Conc			\$	69,420.00	
213	Butner	Wallington	Seal Change	0	172	172	1.80	309	48	South	Conc	New	\$125	2021-2022	\$	44,625.00
214	Butner	Seal Change	Laycock	172	368	198	1.80	362	40	South	Conc	New	\$125	2021-2022	\$	49,000.00
215	Butner	Stooker	Stooker	368	428	68	1.80	104	82	South	Conc	New	\$125	2021-2022	\$	19,500.00
216	Butner	Stooker	Marlborough	428	674	248	1.80	446	80	South	Conc	New	\$125	2021-2022	\$	65,760.00
220	Butner	Catherine	Burghley	1,031	1,183	152	1.80	273	100	South	Conc	New	\$125	2021-2022	\$	46,625.00
453	Laycock	No 14	Malcombe			60	1.80	108	Nil	West	Conc	New	\$125	2021-2022	\$	13,500.00
452	Laycock	Malcombe	No 20 A			70	1.80	126	Nil	West	Conc	New	\$125	2021-2022	\$	15,750.00
452	Laycock	Hobhouse	Blower			220	1.80	396	Nil	West	Conc	New	\$125	2021-2022	\$	49,500.00
														\$	373,670.00	
797	Main Street	Service Station	Spencers Lane	657	1,200	343	1.80	615	210	East	Conc			\$	97,875.00	
143	Marlborough	Putney	Malcombe	825	825	220	1.80	396	40	West	Rep	\$130	2022-2023	\$	56,680.00	
142	Marlborough	Malcombe	Hobhouse	825	1,044	218	1.80	394	50	West	Rep	\$130	2022-2023	\$	57,720.00	
832	Malcombe	Wellington	Laycock	0	130	130	1.80	234	Nil	West	Conc	New	\$130	2022-2023	\$	30,420.00
678	Latour	Archer	Smith	122	266	126	1.80	226	246	West	Conc	New	\$130	2022-2023	\$	26,080.00
119	Smith	Estour	Wallington	140	285	133	1.80	246	50	South	Conc	New	\$130	2022-2023	\$	34,580.00
641	King Street	Cherryroad	0	109	109	109	1.80	193			Rep	\$135	2022-2023	\$	22,005.00	
642	King Street	Bend	East Conc	109	298	189	1.80	294			Rep	\$135	2022-2023	\$	36,340.00	
														\$	386,700.00	

DRAFT DOCUMENT (Subject to changes) Footpath Replacement Program 2023/2024 to 2025/2026

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Seg ID, No.	ROAD OR STREET NAME	Footpath Details All Segments										Footpath Replacement Program 2023/2024 to 2025/2026				
		FROM Street Name or Description	Dist. m	TO Street Name or Description	Dist. m	Loc	Footpath Length Meters	Width Meters	Area sqm	Dewey Square Meters	Side of street	Rep. With	3M REC Council	3M Rate	Comments Relating To Footpath	REPLACE YEAR
320	Drymonmond St	Drymonmond C West	394	Drymonmond	414	Perth	74	1.80	133		Comp	New	\$135	Nth side, Near Kebs	2023-2024	\$ 17,955.00
312	Drymonmond Cr East	Drymonmond East	0	Charles	201	Perth	87	1.80	156		Comp	New	\$135	West side	2023-2024	\$ 21,060.00
374	Drymonmond Cresc	Change	291	Star Kebs	324	Perth	99	1.80	178		Comp	New	\$135		2023-2024	\$ 70,470.00
379	Drymonmond St	Drymonmond C East	407	End Kebs	488	Perth	81	1.80	146		Comp	New	\$135	Nth side, Near Fern	2023-2024	\$ 19,710.00
852	Norfolk	Drymonmond	0	Seal Change	125	Perth	125	1.80	225		Comp	New	\$135		2023-2024	\$ 30,375.00
454	Norfolk	Seal Change	125	William	291	Perth	136	1.80	246		Comp	New	\$135		2023-2024	\$ 33,075.00
365	Edward	Clarence	0	Cronwell	1164	Perth	252	1.80	454		Comp	New	\$135		2023-2024	\$ 81,290.00
																\$ 323,895.00
634	Lewis Street	Tasmania St	1100	Wallington	1248	Long	130	1.80	218		Comp	New	\$140		2023-2025	\$ 30,240.00
1204	Tasmania Street	Lewis	0	Bulwer	135	Long	140	1.80	252		Comp	New	\$140		2024-2025	\$ 35,280.00
206	Catherine St	William	0	High	206	Long	206	1.80	371		Comp	Replace	\$140	Consider width	2024-2025	\$ 51,940.00
829 7240	Catherine St	High	206	No 23		Long	70	1.80	126		Comp	New	\$140		2024-2025	\$ 17,640.00
247	Catherine St	Talbot		Cracroft		Long	45	1.80	81		Comp	New	\$140		2024-2025	\$ 11,340.00
248	Catherine St	Cracroft		End		Long	123	1.80	221		Comp	New	\$140		2024-2025	\$ 30,940.00
39	Arthur	Clarence	832	Seal Change	504	Perth	218	1.80	392		Comp	New	\$140		2024-2025	\$ 54,980.00
34	Arthur	0	935	Seal Change	968	Perth	33	1.80	60		Comp	New	\$140		2024-2025	\$ 8,280.00
39	Arthur	0	968	End	1000	Perth	32	1.80	58		Comp	New	\$140		2024-2025	\$ 8,120.00
12	Archer Street	No 32	87	Wilson	215	Creasy	128	1.50	192		Comp	New	\$145		2024-2025	\$ 30,240.00
1403	Wilson	Creasy Road	0	Archer St	161	Creasy	156	1.50	234		Comp	New	\$145		2024-2025	\$ 33,530.00
1124	Samundridge Street East	Creasy Road		End Kebs	164	Creasy	164	1.50	246		Comp	New	\$145		2024-2025	\$ 44,950.00
																\$ 383,680.00
600	Horne Street	Lewis		Cracroft	300	Long	300	1.80	540		Comp	New	\$145		2025-2026	\$ 78,300.00
971	Old punt	Clarence	0	William	237	Perth	236	1.80	425		Comp	New	\$145		2025-2026	\$ 62,060.00
1639	Bulwer	Pakenham	490	Catherine	667	Long	177	1.80	316		Comp	New	\$145	Should be part of sidewalk on demolition	2025-2026	\$ 44,560.00
321	Cracroft	Catherine	0	Creasy Rd	250	Long	250	1.80	450		Comp	New	\$145		2025-2026	\$ 65,250.00
322	Cracroft	Creasy Road	230	Marborough	349	Long	80	1.80	144		Comp	New	\$145		2025-2026	\$ 20,860.00
323	Cracroft	Marlborough	349	Mews Crt	429	Long	70	1.80	126		Comp	New	\$145		2025-2026	\$ 18,270.00
324	Cracroft	Mews Crt	429	Equus Court	571	Long	142	1.80	256		Comp	New	\$145		2025-2026	\$ 37,120.00
325	Cracroft	Equus Court	571	Anselvy	653	Long	82	1.80	148		Comp	New	\$145		2025-2026	\$ 21,460.00
1126	Talbot Street	Catherine St	0	Creasy Rd	254	Long	254	1.80	457		Comp	New	\$145		2025-2026	\$ 70,260.00
470471	George Street	Park	439	Gay St	762	Long	205	1.80	371		Comp	New	\$145		2025-2026	\$ 51,940.00
1169	Stocker	Lewis	0	Bulwer	135	Long	135	1.80	243		Comp	New	\$145		2025-2026	\$ 33,530.00
610011	Coderock	Park	418	Gay St	830	Long	211	1.80	386		Comp	New	\$145		2025-2026	\$ 47,520.00

- Bridge Improvement Program

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Bridge Number	Location/Map Area Ref	Map Co-Ord	Location Road	Water Course	Deck Area	Year	Span	Abut	Rep	Repara	Rep	Bridge	Comp
								Type	Wh	Cost 1	Cost 2	Builder	
3229	LONG OCONNORS	65665	LAKE RIVER ROAD	LAKE RIVER	65.56	2001	12	VG CONC	CONC	015-015	\$ 160,900	Bridge pro completed	Comp
2636	LONG ORESSY	112813	POYLANNA ROAD	POYLANNA RIVER	159.60	1993	23	TRB	CONC	015-016	\$ 1,895,000	Allow for 2 lanes	In Prog
3167	LONG ORESSY	112815	POYLANNA ROAD	LAKE RIVER	45.50	1987	26	VG CONC	CONC	015-015	Inclined arch bridge with 1.6m	In Prog	In Prog
3167	LONG HENRY	611668	ROYAL GEORGE ROAD	POYLANNA RIVER	24.58	1993	13	VG CONC	CONC	015-016	70,000	By Council	In Prog
7330	LONG DELMONI	082741	MACQUARIE ROAD	LAKE RIVER	355.60	1997	21	TRB	CONC	015-015	\$ 1,200,000	Allow for 2 lanes	4
										015-016	\$ 3,512,000		
1136	LONG LONGORD	122913	WOODMANS LANE	MACQUARIE RIVER	187.20	1992	21	TRB	CONC	015-017	\$ 1,500,000	Allow for 2 lanes	2
2130	LONG ROTS	74351	SPY HILL ROAD	SPY HILL CREEK	18.60	1991	30	VG CONC	CONC	015-017	\$ 25,000	By Council	3
2380	LONG ROTS	730691	ROYAL GEORGE ROAD	LEITH HILL CREEK	43.30	1994	19	VG CONC	CONC	015-017	\$ 20,000	By Contract	4
3725	LONG HENRY	635695	MOSHANS ROAD	ROYAL CREEK	25.1	1996	17	TRB	CONC	017-019	\$ 300,000	By Contract	5
										018-017	\$ 1,945,000		
1533	LONG ROSSARDEN	616864	ROSSARDEN ROAD	STORYS CREEK	45.10	2004	9	VG CONC	CONC	017-018	\$ 120,000	Replaced by Gurns	7
3241	CAMP CAMP	42473	BRIDGE STREET	CHANNED CREEK	28.30	1973	27	STONE	TIMBER	017-018	\$ 12,000	Council With Timber	8
										017-018	\$ 134,000		
1489	LONG WANGANA	609668	STORYS CREEK ROAD	STORYS CREEK	67.5	1987	16	VG CONC	CONC	019-019	\$ 700,000	By Contract	9
4003	LONG STANHOPE	526577	STORYS CREEK ROAD	STANHOPE CREEK	31.43	1997	16	VG CONC	CONC	018-018	\$ 120,000	By Contract	10
2110	LONG STANHOPE	564500	GIBBS CREEK ROAD	STANHOPE CREEK	42.60	1997	16	TRB	CONC	018-018	\$ 150,000	By Contract	11
1520	LONG EVAN	437725	BRANBLETT	BRANBLETT CREEK	26.25	1995	13		CONC	015-015	\$ 45,000	By Council	4
										018-019	\$ 410,000		
4619	LONG ROSS	478313	FOOT OF LAKE	LAKE RIVER	69.30	1993	14	TRB	CONC	014-020	\$ 350,000	By Contract	12
5028	LONG HENRY	627692	OLD COACHMANS ROAD	UNNAMED CREEK	15.30	1999	14	VG CONC	CONC	019-020	\$ 70,000	By Council	13
4513	LONG ROSS	911776	FOY VALLEN	GEEGLAS CREEK	48.7	1996	16	VG CONC	CONC	019-020	\$ 140,000	Deplan Deckens Span	14
4519	LONG ROSS	257446	VERVOD	FINCHALE CREEK	21.70	2000	13	CONC	CONC	019-020	\$ 60,000		15
5261	LONG LIBBY	842835	OFF GULF ROAD	LAKE RIVER	51.24	2011	6	CONC	Steel Frame	019-020	\$ 880,000		16
2461	LONG OCONNORS	657663	LAKE RIVER ROAD	BRANBLETT CREEK	27.20	1990	17	TRB	Steel Frame	019-020	\$ 200,000	150' for P. re put in by Gurns	17

Appendix K Road Project Business Case (Draft)

Introduction

Council has developed a system for analytically determining the priority given to a proposed capital project, by introducing a fair process of assessment for each nominated project. Adopting this method of project prioritisation ensures a justified decision making process with respect to good practice asset management. A standard and consistent application for nominating potential capital projects will result in a complete and auditable process. This process will incorporate; works program development, identifying asset requirements, setting appropriate levels of service, levels of maintenance intervention, selection of treatment options and the process of prioritisation and optimisation of the programmed works to ensure best value for money.

This approach to capital project evaluation is based on the *IIMM* structured process of prioritising capital works using Multi-Criteria Analysis and Benefit-Cost Analysis. Multi-Criteria Analysis involves ranking projects individually on Risk/Safety, Technical, Corporate, Social, Environmental impacts and also on criteria that directly applies to the particular asset category. Each criterion is nominated a ranking system which is then weighted based on the importance of the criteria. All scores are added to create a project priority percentage, which allows for comparison to similar projects, the higher percentage resulting in higher priority.

The Benefit-Cost Analysis provides the link between Multi-Criteria Analysis and the projects predicted lifecycle costs to council. The analysis results in a Benefit Cost Ratio that is comparable with similar projects in determining "value for money".

Risk Management

One of the main objectives in developing this process of project identification is the initial evaluation of risk associated with undertaking a project, or, safety/risk issues associated with NOT completing a project. Large or complex projects may involve the completion of a risk assessment in accordance with the relative Asset Management Plan (AMP) and Infrastructure Risk Management Plan (IRMP). General projects relatively small may be assessed mindful of the associated content in the AMP and IRMP.

Level of Service

Council has devised within the AMP's documented current service level standards for each respective asset category. Each asset category service level has an optimum performance target which has identified areas requiring improvement. Through analysis of the areas requiring improvement has evolved a number of capital projects to raise the current level of service to meet the optimum performance targets. Due to the large number of project identified it is essential to devise a semi automated process of prioritisation to filter projects of importance to the top of the list.

Project Priority Rating

The following criteria measures the potential impact the project will have on the various areas of identified importance.

Risk/Safety

Risk priority is assessed in accordance with an Infrastructure Risk Management Plan **(yet to be implemented)** for the particular asset category, based on the likelihood and consequence of failure. Probable risks associated with asset creation/ upgrade/ renewal include;

- Physical Risk; potential for personal damage/injury to the user if assets remain in service
- Financial Risk; over expenditure on maintenance to sustain a serviceable asset, uncertain funding and/or conditions of the proposed project
- Political Risk; if asset falls below service standard will attract public concern and/or political pressure for asset creation/upgrade due to community demand.

The scoring for risk/safety is to be scaled to suit the significant of each asset class and category as documented in the respective asset management plans.

0. Nil risk or safety issues involved
1. Low risk with minor consequences
2. Medium risk
3. Medium – High
4. High

The scoring of this criterion has the highest weighting of 25% due to the risk based approach to identifying priority projects.

Technical

Technical priority is assessed based on the current standard of the asset/s and the project's ability to improve the asset's function/condition. This may be further based on the assessed condition of the asset and the estimated remaining life to determine its priority. Improvement of the asset's function by comparing the current capacity of the existing assets to the proposed upgrade of the assets through;

- Technology enhancement
- Higher design standard
- Increased serviceability
- Condition/Life remaining
- Improved function efficiency

The scoring of technical aspects is to be scaled to suit the significant of each asset class and category as documented in the respective asset management plans.

1. Neutral
2. Good Condition / Minimal improved function
3. Average Condition / Some improvement in function
4. Requires work / Significant improvement in function

5. End of serviceable life / Optimum improved function

The scoring of the Technical criteria has adopted a 20% weighting to recognise the process of logical assessment in the asset lifecycle and potential function efficiencies.

Corporate

Corporate priority is linked to whether the project is a commitment through a Council resolution and/or included in the following Council approved documents:

- Asset Management Policy
- Risk Management Policy
- Asset Management Plan/Strategy
- Emergency Response Plan
- Business Plans

Projects stated in the above Council approved documents are to be scored relative to the documented importance of the project outcome. For example, Council policy is to provide a footpath on at least one side of the road connecting all urban streets from town centres to town boundaries (resulting in streets closer to town centres gaining a higher priority for footpath construction, hence higher pedestrian use). The scoring of corporate responsibilities is to be scaled to suit the significant of each asset class and category as documented in the respective asset management plans.

0. Neutral
1. Low
2. Medium
3. High

The scoring of the corporate criteria has adopted a 20% weighting due to the importance of Council commitments and approved policies.

Transport – Road Category

This is related to the specified road category of the asset, as documented in the *Road Asset Management Plan*;

1. Arterial
2. Link or Industrial
3. Collector
4. Local Access

Social/Community Impact

This criterion is based on the perceived community benefit through project completion. This can be measured and assessed based on the number of residential properties directly affected or the potential number of users the completed project will attract.

- Number of properties in the general area of the project
- Public/community usage

→ Public/community perception of project outcome

→ Social community involvement

The scoring of Social/Community aspects is to be scaled to suit the significants of each asset class and category as documented in the respective asset management plans.

0. Neutral
1. Low
2. Medium
3. High

The scoring of the Social/Community criteria has adopted a 10% weighting to recognise the importance of community satisfaction with Council projects.

Environment

Environmental impact is assessed based on the significants of the surrounding environment, including the natural and built environment.

- Impact on Flora and Fauna; removal of trees and significant native species
- Impact on landscape; rural scenic character or urban town character
- Cultural heritage
- Pollution; residents affected by increased traffic volume, noise

The scoring of Environment aspects is to be scaled to suit the significants of each asset class and category as documented in the respective asset management plans.

1. Neutral
2. Low
3. Medium
4. High

The scoring of the Environment criteria has adopted a 10% weighting to recognise the importance of environmental conditions when proposing a Capital Project.

Capital Project Business Case application forms to be adopted:

Capital Project Business Case

Capital Project Creation/Upgrade/Renewal Selection Criteria

Project Description: _____

Details:

Date: _____

Project Size: Small Medium Large

Project Origin: Council decision
 General Manager
 Engineering Services
 Community Body
 Resident request

Asset Class: Transport Buildings
 Stormwater Parks & Reserves

Project Type: Creation
 Upgrade
 Renewal

Asset Category: Road Reconstruction SW Latrobe
 Road Reseal SW Port Sorell
 Kerb & Channel Building Substructure
 Footpath Building Superstructure
 Bridges Building Internal
 Car parks Building Services
 Other Road Assets

Project Priority Rating

Criteria	Rating	Weighting	Score	
Risk/Safety Is to be assessed in accordance with the Infrastructure Risk Management Plan, based on the likelihood and consequences of failure	/ 4	25%	/ 100	
Technical Is to be assessed based on the current standard of the assets and the project's ability to improve the asset's condition/function	/ 5	20%	/ 100	
Corporate Is linked to whether the project is a commitment through a Council resolution or included in the strategic plan or policy (e.g. extending infrastructure from the town centre out)	/ 3	20%	/ 60	
Asset Class Priority is based on the current use and the effective use of the complete project	Transport - Road Category Is related to the specified road category of the asset (1) Residential (2) Commercial (3) Collector	/ 3	15%	/ 45
	Stormwater - Significant Stormwater Link Priority is assessed based on the significance of the project within the stormwater network	/ 3	15%	/ 45
	Buildings - Building Usage Priority is based on the current building use and the effective use of the complete project	/ 3	15%	/ 45
	Parks & Reserves - Park/Reserve Usage Priority is based on the current park/reserve use and the effective use of the complete project	/ 3	15%	/ 45
Social/Community Impact Community benefit through project completion e.g. number of properties affected	/ 3	10%	/ 30	
Environment Environmental impact is assessed based on the significance of the surrounding environment, including the natural and built environment	/ 3	10%	/ 30	
		Total	/ 365	
	PROJECT SCORE		%	

Capital Project Business Case

Capital Project Construction and Lifecycle Costs

Project Construction Cost Breakdown

Creation/New works which create assets that did not previously exist	£	\$
Upgrade works that improve an asset beyond its existing capacity	£	\$
Renewal/Replacement major work which does not increase assets capacity but restores, rehabilitates, replaces or renews to original service potential	£	\$
Estimated Project Construction Cost		\$

Asset Lifecycle Costs

Asset's Useful Life (years): _____ **Years**
 the asset useful life is for the asset component with the longest lifespan
 e.g. a road reconstruction is treated based on the pavement asset as it would have the longest lifespan.

Criteria	Cost
Asset Operational Costs criteria for operations including personnel, material, fuel, energy, management...	
Current Annual Operation Costs	\$
Proposed Annual Operational Costs	\$
Proposed Lifecycle Operational Costs	\$
Asset Maintenance Costs work that does not increase service potential or life but ensures that the asset provides service for expected amount of time	
Current Annual Maintenance Costs	\$
Proposed Annual Maintenance Costs	\$
Proposed Lifecycle Maintenance Costs	\$
Asset Depreciation/Renewal Costs Required capital renewals to ensure the asset reaches expected useful life. E.g. Road reconstruction project requires resurfacing throughout pavement life	
Current Annual Depreciation/Renewal Costs	\$
Proposed Annual Depreciation/Renewal Costs	\$
Proposed Lifecycle Depreciation/Renewal Costs	\$
Total Asset Lifecycle Cost	\$

Project Notes:

Appendix L Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the Assets
SS	Suspended solids
vph	Vehicles per hour
WDCRC	Written down current replacement cost

Appendix M Glossary

Annual service cost (ASC)

- 1) Reporting actual cost
The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
- 2) For investment analysis and budgeting
An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset management (AM)

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new

Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal

Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

Capital expenditure - upgrade

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capitalisation threshold

The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Core asset management

Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision-making).

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets

Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Deferred maintenance

The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value.

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital outlays.

Expenses

Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Financing gap

A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg, roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business.

Key performance indicator

A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Level of service

The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

Life Cycle Cost *

1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure

The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings

See borrowings.

Maintenance

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, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

- **Reactive maintenance**

Unplanned repair work that is carried out in response to service requests and management/supervisory directions.

- **Specific maintenance**

Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.

- **Unplanned maintenance**

Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance expenditure *

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset

Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)

The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations

Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

Operating expenditure

Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense

The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Operating expenses

Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

Operations, maintenance and renewal financing ratio

Ratio of estimated budget to projected expenditure for operations, maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Operations, maintenance and renewal gap

Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Pavement management system (PMS)

A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption *

The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *

The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade/new *

A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining useful life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

Renewal

See capital renewal expenditure definition above.

Residual value

The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining

A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

Source: IPWEA, 2009, Glossary

Additional and modified glossary items show.

Specific Maintenance

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Strategic Longer-Term Plan

A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

Value in Use

The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

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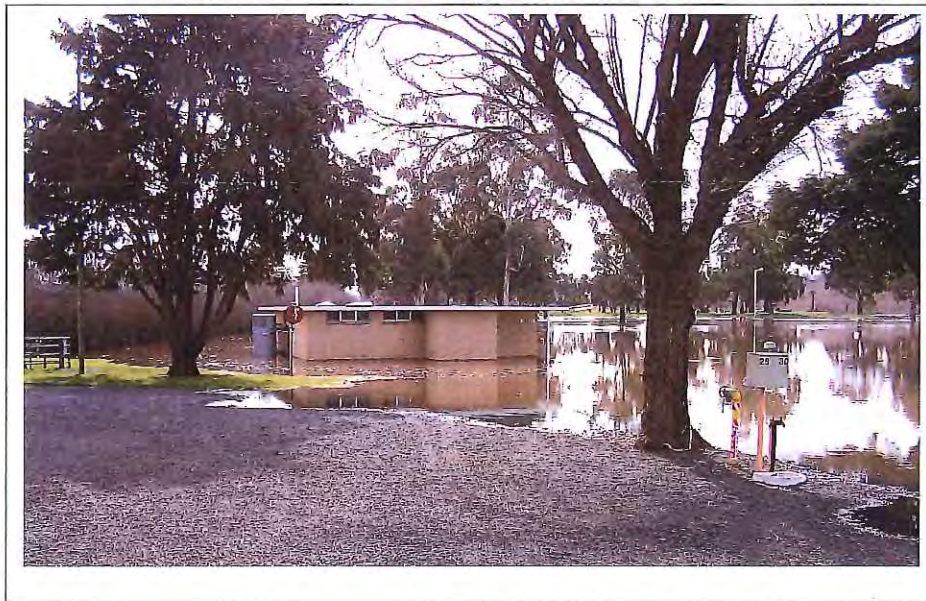
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**NORTHERN
MIDLANDS
COUNCIL**

STORMWATER Asset Management Plan



Version 1b

January 2016

Document Control		 			
Document ID: 59 299 140531 nams plus3 amp template v3.1					
Rev No	Date	Revision Details	Author	Reviewer	Approver
1a	Jan 2012		JG/MB		NMC
1b	Jan 2016		MB		NMC

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1. EXECUTIVE SUMMARY

Context

Northern Midlands Council provides a stormwater network within town areas to drain the majority of properties, roads reservations and public open spaces.

This stormwater asset management plan includes all stormwater related assets of pipes, council maintained open drains, manholes, stormwater entry pits and grates, pollutant traps, and detention storage facilities.

Bridges, kerb and channel, open drains, and rural roadside drainage are referenced in Council's Transport Asset Management Plan.

Council employs a Plumbing Inspector to oversee stormwater house connections. New stormwater works are predominantly undertaken by private subdividers. Council stormwater extensions are undertaken by the maintenance staff or by contractors.

Council is currently working on Stormwater Management Plans for each of its towns beginning with Perth, Cressy and Longford. In addition, detailed engineering studies are being undertaken on improvements to the Translink Industrial Precinct stormwater system, and the West Perth Stormwater System.

The Stormwater Service

The Stormwater network comprises:

- 90.842 kms total length of pipes (2,690 records) with value of \$28,880,912
- 2,661 Manholes, pits and grates with value of \$5,837,362.

These infrastructure assets have a total replacement value of \$34,045,073.

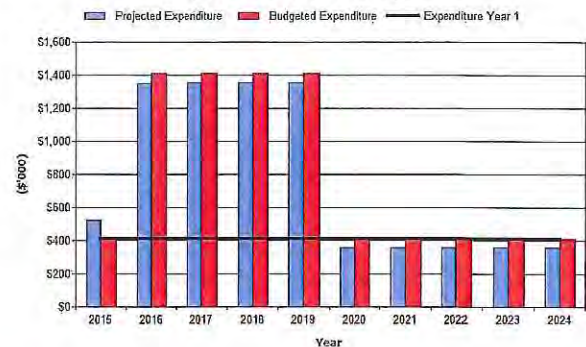
What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is \$7.735m or \$773,000 on average per year.

Estimated available funding for this period is \$8.1m or \$810,000 on average per year which is 105% of the cost to provide the service. This is fully funding average expenditure per year (subject to grant funding or reserve funding of the Translink Stormwater Upgrade Plan). Projected expenditure required to

provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the graph below.

Northern Midlands - Projected and Budget Expenditure for (Stormwater_S1_V1)



What we will do

We plan to provide Stormwater services for the following:

- Operation, maintenance, renewal and upgrade of stormwater to meet service levels set by Council in annual budgets.
- Stormwater within the 10 year planning period.



What we cannot do

Works and services that cannot be provided under present funding levels possibly are:

- Major upgrades of stormwater systems at Translink Industrial Precinct and West Perth may need to be staged over several years without external funding sources being identified;
- Extension of the Longford Flood levee systems.

Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- adequate maintenance of assets
- renewal at optimal time
- over-engineering/design
- emergency management.

We will endeavour to manage these risks within available funding by:

- maintenance levels
- condition assessments at regular intervals
- qualified experienced staff.

Confidence Levels

This AM Plan is based on medium level of confidence of information.

The Next Steps

The actions resulting from this asset management plan are:

- Asset data collection/refining and modelling,
- Review risk analysis of stormwater network to better identify priority items,
- Capital works expenditure to be further refined/ investigated,
- Incorporate any relevant components as a result of the Urban Drainage Act 2013 noting a key requirement being the development of Stormwater System Management Plan for the urban area within 6 years which is to specify:
 - i) Plans for the management of any assets used for the delivery of a stormwater service
 - ii) The level of risk from flooding for each urban stormwater catchment
 - iii) Any other matters prescribed in the regulations or that the council considers appropriate.

Questions you may have

What is this plan about?

This asset management plan covers the infrastructure assets that serve the Northern Midlands Council community's stormwater needs. These assets include stormwater pipes and associated pits throughout the community that enable people to live without water inundation where possible.

What is an Asset Management Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

An asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

Why is there a funding shortfall?

Most of the Council's stormwater network was constructed by developers and from government grants, often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

Many of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

Our present funding levels are sufficient to continue to provide existing services at current levels in the medium term.

What options do we have?

Resolving any funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
2. Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
3. Identifying and managing risks associated with providing services from infrastructure,
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,

5. Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
6. Consulting with the community to ensure that stormwater services and costs meet community needs and are affordable,
7. Developing partnership with other bodies, where available to provide services,
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage any shortfall?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found to fund any shortfall. For stormwater, the service level reduction may include open drains in urban areas, some flash flooding in heavy rain events.



What can we do?

We can develop options, costs and priorities for future stormwater services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual¹.

The asset management plan is to be read with the organisation's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- 'Mapping Our Direction' – 2007-2017 Strategic Plan Volumes 1 & 2
This document outlines Council's vision and guiding principles to meet strategic objectives.
- Annual / Financial Report
This outlines Council's activities and achievements for the financial year compared to its annual plan and strategic objectives, it also reports on the financial performance and position of Council.
- Annual Plan
A detailed plan of projects and financial commitments for each year.
- Asset Management Policy & Strategy
These documents outline Council's commitment to Asset Management.
- 10 Year Financial Plan
This plan details Council's planned financial operating results, financial position and cash flows for each of the next 10 years. It outlines all aspects the key financial strategy objectives, funding parameters and commitments.
- 10 Year Capital Works Plan
A detailed list of scheduled capital works projects for each year for the next 10 years.

This infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide stormwater services to the community.

Table 2.1: Assets covered by this Plan

Asset category	Dimension	Replacement Value
Drainage Mains	90.842 kms (2,690 recorded assets)	\$28,880,912
• Pits (including Gross Pollutant Traps, headwalls, grated pits, manholes and side entry pits)	2,661 recorded assets	\$5,837,362
TOTAL		\$34,045,073.

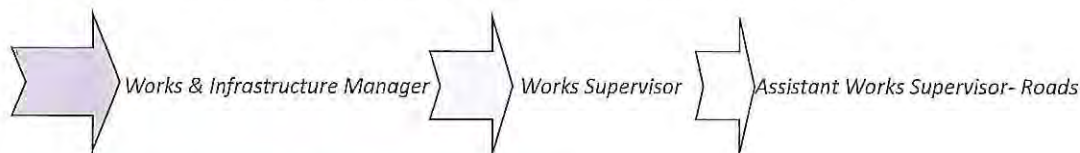
Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

¹ IPWEA, 2011, Sec 4.2.6, *Example of an Asset Management Plan Structure*, pp 4 | 24 – 27.

Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors/Board Members	<ul style="list-style-type: none"> • Represent needs of community/shareholders, • Allocate resources to meet the organisation's objectives in providing services while managing risks, • Ensure organisation is financial sustainable.
CEO/General Manager	<ul style="list-style-type: none"> • To maintain a proactive approach to customer requests and • To maintain asset management systems and procedures which can better inform decisions by Councillors
Community	<ul style="list-style-type: none"> • The business community and residents in general (reporting perceived shortcomings, damage, safety concerns etc) • Tourists and visitors to the area
Emergency Services	<ul style="list-style-type: none"> • Emergency services reporting concerns with the current infrastructure in relation to their needs
Governments	<ul style="list-style-type: none"> • Governments providing input with regard to overall infrastructure performance in conjunction with infrastructure under their jurisdiction
Utility Services	<ul style="list-style-type: none"> • Utility companies providing input with regard to access to their assets
Developers	<ul style="list-style-type: none"> ▪ Developers providing input with regard to their interests in future investment in the infrastructure
Neighbouring Councils	<ul style="list-style-type: none"> ▪ Neighbouring councils with maintaining a dialogue in regard to asset management practices, construction standards, resource sharing etc

Our organisational structure for service delivery from infrastructure assets is detailed below,



2.2 Goals and Objectives of Asset Management

The organisation exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', by contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our goal in managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.²

² Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

2.3 Plan Framework

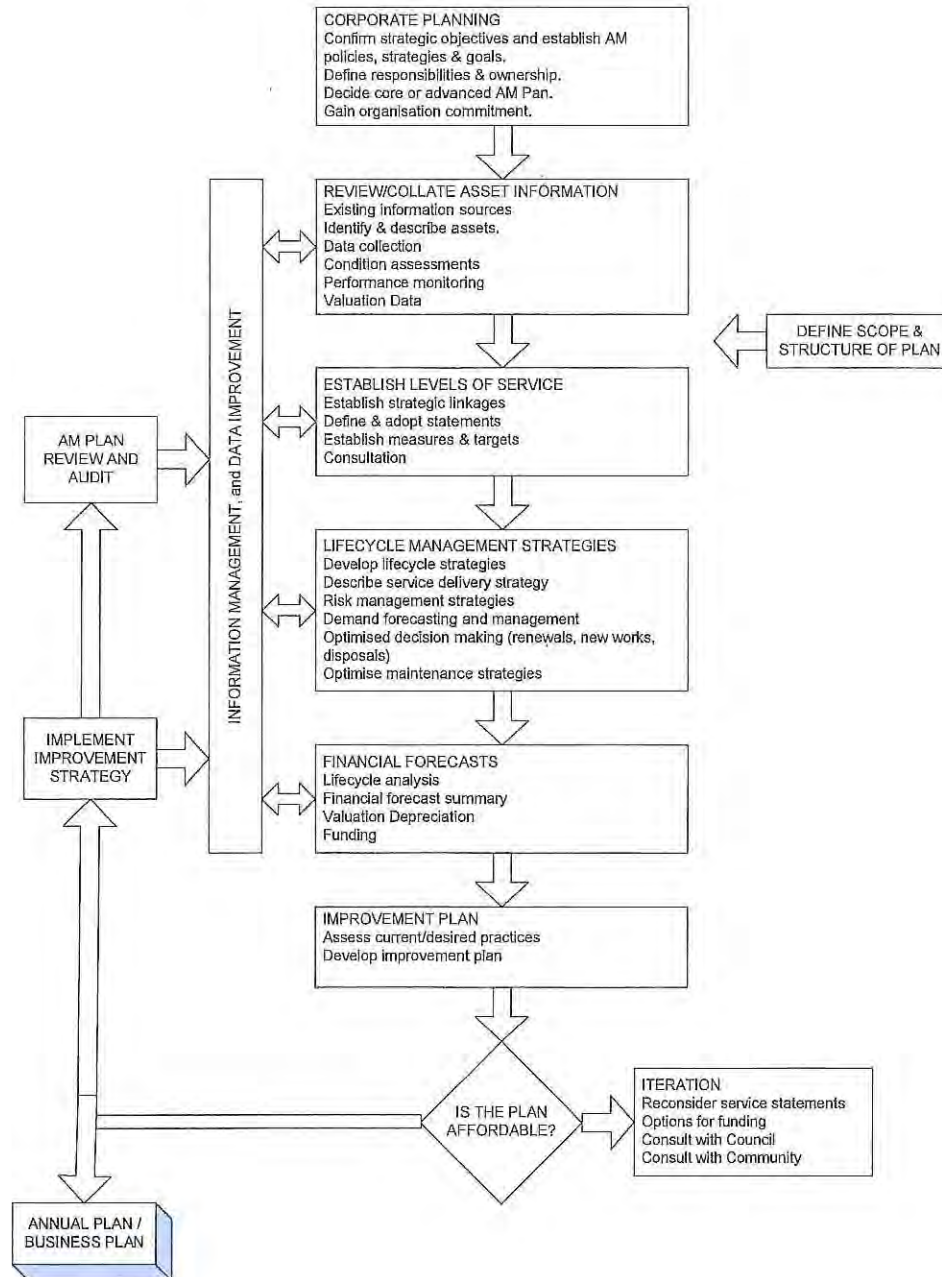
Key elements of the plan are

- Levels of service – specifies the services and levels of service to be provided by the organisation,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how Council will manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices,
- Monitoring – how the plan will be monitored to ensure it is meeting organisation’s objectives,
- Asset management improvement plan.

A road map for preparing an asset management plan is shown below.

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual³. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels in a financially sustainable manner.

2.5 Community Consultation

In all cases, the asset functionality and asset maintenance targets need to be clearly defined with the community (users) and the asset service provider (Council) to determine the "line of best fit" having regard to practicality and economics. That is, a level of service provided within a reasonable duty of care in an affordable financially sustainable manner that considers community expectations in regard to safety and overall condition of the stormwater network.

Consultation with the community has been developed as a two-way process in order to encourage feedback and to assist with the corporate decision making process in determining future and strategic direction.

Council operates a Local District Committee Structure for the towns and villages of Ross, Campbell Town, Avoca/Royal George, Perth, Cressy, Longford and Evandale that is designed to measure and compare community satisfaction with Council and its services and provides data to ensure continuous improvement. These forums provide Council advice of a wide range of issues in their area.

In addition the Council's Customer Request System is tracked to determine the level of dissatisfaction with Council's local stormwater systems.

Council uses this information in developing the Strategic Management Plan and in allocation of resources in the annual budget.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council engineers and technical officers have traditionally worked to the provision of a level of service that is assumed to be the community's expectation.

During any future consultation process Council will test this assumption to make sure that it is correct or amend it accordingly. The assumptions are that the stormwater network will provide for:

- Adequate drainage for roads and streets,
- Drainage for public open spaces to ensure the safety of the public and allow use of these areas at all times of year
- Adequate drainage for properties and businesses;
- Acceptable water quality at point of discharge;
- The use of Water Sensitive Urban Design Principles including re-use of stormwater and reducing the amount of stormwater discharged to the stormwater system.

In the future consideration could be given to formally research customer expectations with respect to stormwater drainage assets. This may be investigated for future updates of the asset management plan.

³ IPWEA, 2011, IIMM.

3.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision is:

Northern Midlands communities will be vibrant, sustainable and resilient, promoting their diversity and conserving the heritage values of our towns. Our competitive strengths will attract more people to the municipality, increase employment, business activity and property values. Our community pride will be based on co-operation and self help, evident by our leadership in environmental management. Each community's needs will be met with fair and appropriate quality services, creating high community satisfaction with Council's performance and high employee morale and well-being.

Council's mission is:

Northern Midlands is committed to providing effective, innovative and efficient service to the community it represents. It aims to encourage active local communities of distinct character and to foster a sense of pride in the Northern Midlands area.

Relevant Council goals and objectives and how these are addressed in this asset management plan are:

Table 1.2: Council Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in the Asset Management Plan (AMP)
Improved governance and accountability	To demonstrate to owners, customers and stakeholders that services are being managed sustainably and delivered effectively and efficiently	This will be addressed with the successful completion and adoption of this AMP by Council
Enhanced service management and customer satisfaction	To identify current service levels and target levels to work towards	This will be an ongoing task to be monitored and reviewed with future revisions of this AMP
Improved risk management	To identify and address all known significant risks to Stormwater assets	The Risk Management Plan will document a structured approach to the identification and management of significant risks
Improved financial efficiency	To model and identify financial efficiencies within the asset category	This will be an ongoing task to be monitored and reviewed with future revisions of this AMP
Sustainability	Improved decision making	To consider all viable options (including demand management) and all aspects of decisions

The organisation will exercise its duty of care to ensure public safety is accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2

3.3 Legislative Requirements

The organisation has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Sewers and Drains Act 1954	An Act to make better provision for schemes and systems of drainage.
Local Government (Highways) Act and Regulations	An Act concerning the functions with respect to highways and certain other ways and places open to the public
Occupational Health, Safety and Welfare Act & Regulations	Setting out minimum requirements in regard to the safety and wellbeing of workers and the public in and around infrastructure work sites
Work, Health and Safety Act 2012	Sets out requirements in regards to the safety and wellbeing of workers and the public in and around work sites.
Road and Jetties Act (1935)	An Act to consolidate and amend certain enactments relating to roads and jetties and to make provision for the establishment and maintenance of aerodromes.

The organisation will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan linked to this AM Plan. Management of risks is discussed in Section 5.2.

3.4 Levels of Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service.

Community Levels of Service measure how the community receives the service and whether the organisation is providing community value.

Community levels of service measures used in the asset management plan are:

Quality	How good is the service?
Function	Does it meet users' needs?
Safety/Responsiveness	Is the service over or under used?

The organisation's current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of service based on resource levels in the current long-term financial plan and community consultation/engagement.

Table 3.4: Community Level of Service

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Provide stormwater drainage system that meets community expectations by adequate collection and disposal	Number of customer service requests / complaints	<1 per month	No. of reported incidents ??
Function	Drainage point for all properties in town areas	No of properties where there is no stormwater discharge point	1 in 500 properties have to pump stormwater from property	Nil properties not meeting standard
Safety	Minimise flooding of roads and properties and ponding of stormwater for long periods	Inspections during rainfall events – number of reports of inconvenience claims, health or ponding.	<5 per annum	No. of requests ?? pa
Responsiveness	Council's response to various community raised issues ranging from calls about problems, handling correspondence and service applications	(a) Provision of a 24 hour, 7 day per week call-out service to attend to issues (b) Percentage of issues responded to in set timeframes	100% of time 95% of time	
TECHNICAL LEVELS OF SERVICE				
Condition	Undertake inspections, routine maintenance tasks and repairs in a timely manner	Frequency of inspections, maintenance or repairs	Inspect every 24 months and repair within 3 months. Monthly cleaning of pits during autumn.	Not programmed
Accessibility	Ensure adequate stormwater drainage services are available within declared drainage districts	Number of reported property / road inundation events within serviced area following rain greater than 1in10 year event and discharge options exist	Flooding no more than one time in average 10 year period unless an upgrade or improvement program exists and a connection point or discharge option can be devised	Not currently measured
Cost Effectiveness	Provide services in a cost effective manner	Benchmarking against other councils or contractors	Validate cost of council undertaking works or cost to maintain system is < or = to that of other municipalities	On a case by case basis. No current benchmarking against other Councils.
Safety	Ensure stormwater infrastructure poses low risk to community and provides physical barriers or signage to identify and protect from hazards. Grates and covers are installed on stormwater entry pits.	Number of injury / damage claims, defect and condition survey results and site specific risk assessments	Less than 1 claim for compensation per 10 km of network and any high risks identified are addresses within 3 months	No currently measured

3.5 Technical Levels of Service

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 organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.⁴

Table 3.5 shows the technical level of service expected to be provided under this AM Plan. The agreed sustainable position in the table documents the position agreed by the Council/Board following community consultation and trade-off of service levels performance, costs and risk within resources available in the long-term financial plan.

Table 3.5: Technical Levels of Service

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
TECHNICAL LEVELS OF SERVICE				
Condition	Undertake inspections, routine maintenance tasks and repairs in a timely manner	Frequency of inspections, maintenance or repairs	Inspect every 24 months and repair within 3 months. Monthly cleaning of pits during autumn.	Not programmed
Accessibility	Ensure adequate stormwater drainage services are available within declared drainage districts	Number of reported property / road inundation events within serviced area following rain greater than 1in10 year event and discharge options exist	Flooding no more than one time in average 10 year period unless an upgrade or improvement program exists and a connection point or discharge option can be devised	Not currently measured
Cost Effectiveness	Provide services in a cost effective manner	Benchmarking against other councils or contractors	Validate cost of council compared to contractor undertaking works or cost to maintain system is < or = to that of other municipalities	On a case by case basis. No current benchmarking against other Councils.
Safety	Ensure stormwater infrastructure poses low risk to community and provides physical barriers or signage to identify and protect from hazards. Grates and covers are installed on stormwater entry pits.	Number of injury / damage claims, defect and condition survey results and site specific risk assessments	Less than 1 claim for compensation per 10 km of network and any high risks identified are addresses within 3 months	No currently measured

⁴ IPWEA, 2011, IIMM, p 2.22

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

4.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	12,775 as at 31/12/2015		Increase in population require an extension of the stormwater system to drain new properties and businesses
Demographics	Median age of 40 as at June 2011	Continued increase in median age	Increased median age may lead to more unit developments which will increase pressure on the existing system
Climate Change	Can be hotter, wetter, and windier.	May increase seasonal extremes in rainfall, temperature, winds and pressure systems	What was once a 1 in 20 year system may be 1 in 10 year system. May require review of service levels and capital upgrades.
Density	Smaller land sizes	Likely to increase number of multiple tenancies, gated communities for retirees	Consider impact and possible overloading of stormwater assets
Planning Scheme	Revised Development Plans	Changes to zoning to facilitate new domestic subdivisions	Implications on existing infrastructure, consider need to redirect, detain, reuse, upgrade – or limit development
Water Quality	Limit structures to make improvements to public environmental awareness	Greater demand on treating stormwater runoff to higher standards	Increase in cost to install, maintain and replace a stormwater system that reduces pollution
Defective Plumbing connections to sewer	Number of occurrences where stormwater enters into the sewer system	Ben Lomond Water to require rectification	May increase costs and require extensions for collection of stormwater from previously unserved areas.

4.4 Demand Management Plan

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. Demand management practices include non-asset solutions, insuring against risks and managing failures.

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures⁵.

⁵ IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

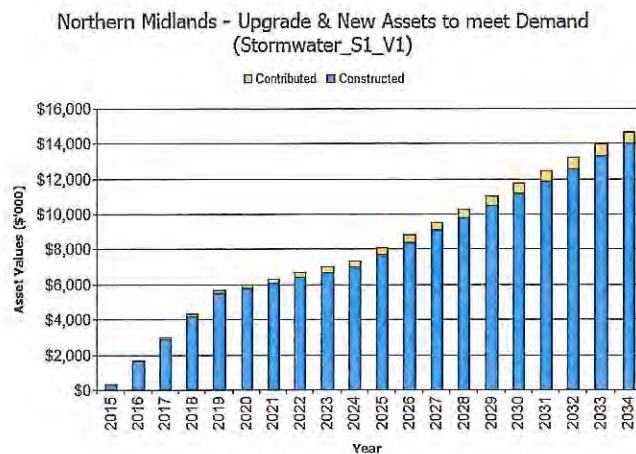
Table 4.4: Demand Management Plan Summary

Service Activity	Demand Management Plan
Development controls	<p>Require land developers to assess the impact of their developments on the capacity of existing infrastructure and to upgrade it if required.</p> <p>Consider implementation of developer contribution for upgrade of existing council infrastructure to cope with increased inflow of proposed development (eg \$ per new lot created). Also known as a "headworks charge".</p> <p>Consider measures to encourage greater level of on-site retention of stormwater (eg use of permeable paving, on-site retention systems etc).</p> <p>Consider greater restriction on developable land with respect to stormwater drainage issues.</p>
Infrastructure design	<p>Consider increasing the design standard of new / upgraded stormwater infrastructure</p> <p>Have to consider new/old infrastructure interface. e.g Investigate new construction techniques/materials such as open, permanent channels/swales in place of underground piping.</p> <p>Increase use of sediment/pollutant traps.</p>
Renewal / Upgrade programming	<p>Audit current system capacity to identify weaknesses in network.</p> <p>Continue to investigate alternative renewal treatments to lower lifecycle costs (eg pipe relining).</p>

4.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by the organisation. New assets constructed/acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5. *Projected expenditure after 10 years is based on average projected expenditure for the first 10 year period in the model.*

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the organisation plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

5.1 Background Data

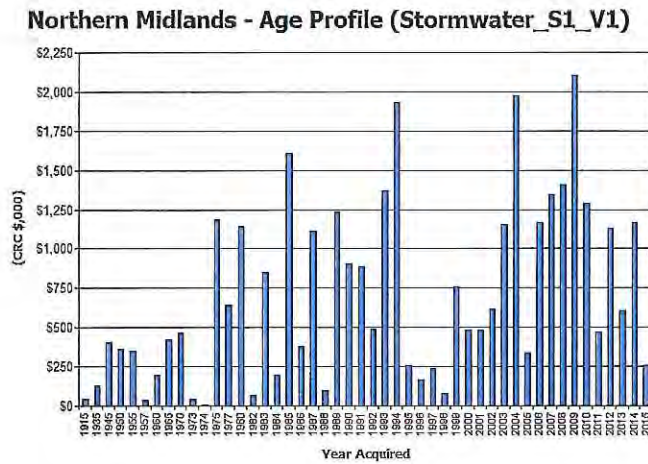
5.1.1 Physical parameters

The assets covered by this asset management plan are shown below (also refer Table 2.1).

- Mains 90.842 kms (2,690 individual assets)
- Pits, manholes etc 2,661 units

The age profile of the assets include in this AM Plan is shown in Figure 2.

Figure 2: Asset Age Profile



The data for age profile is sourced from Council’s asset register. While ages of assets acquired prior to 1993 are largely based on estimates - this is considered to be accurate enough given the long lifecycle of stormwater assets.

5.1.2 Asset capacity and performance

The organisation’s services are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Drummond Street, Perth	An open drain maintained by State Growth runs along the southern side of Drummond Street. Due to the flat nature of the land in the Drummond Street area it is not possible to drain surface water from some properties to the stormwater system and localised flooding occurs in the yards of these properties.
West Perth	Refer West Perth Drainage Study
Translink Precinct	Refer Translink Stormwater Improvement Study

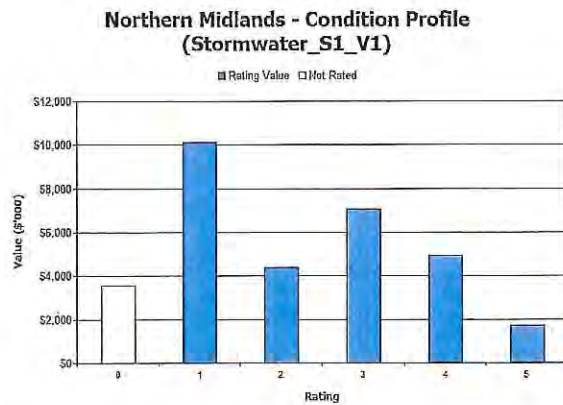
The above service deficiencies were identified from customer requests and inspections carried out by Council officers during rainfall events.

5.1.3 Asset condition

Council had not undertaken an asset condition of its underground stormwater infrastructure, although given the relative newness of the systems in their lifecycle it is expected condition rating will general be rates as 3 or better. For this reason the assets remaining life (useful life minus age) has been used as the most appropriate basis on which to model future renewals expenditure. It should be noted that, whilst this approach provides robust results for the network as a whole, it is less than ideal when considering any particular individual asset.

The condition profile of our assets is shown in Figure 3.

Fig 3: Asset Condition Profile



Condition is measured using a 1 – 5 grading system⁶ as detailed in Table 5.1.3.

Table 5.1.3: Simple Condition Grading Model

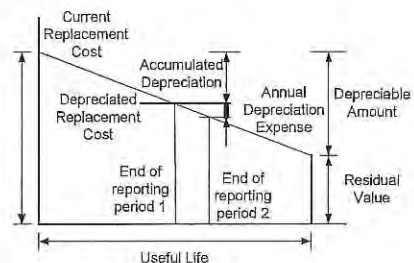
Condition Grading	Description of Condition
1	Very Good: only planned maintenance required
2	Good: minor maintenance required plus planned maintenance
3	Fair: significant maintenance required
4	Poor: significant renewal/rehabilitation required
5	Very Poor: physically unsound and/or beyond rehabilitation

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 1 July 2015 covered by this asset management plan is shown below. Assets were last revalued at 1 July 2015. Assets are valued at fair value to replace service capacity.

Replacement Cost	\$34,045,073
Depreciable Amount	\$25,593,208
Depreciated Replacement Cost ⁷	\$25,593,208
Annual Depreciation Expense	\$403,693

Useful lives were reviewed in June 2013 by Pitt & Sherry (consultants).



⁶ IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

⁷ Also reported as Written Down Current Replacement Cost (WDCRC).

Key assumptions made in preparing the valuations were:

- Depth of stormwater mains, and
- Age of stormwater mains.

There were no major changes from previous valuations.

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption 1.6%
(Depreciation/Depreciable Amount)

Rate of Annual Asset Renewal 0.20%
(Capital renewal exp/Depreciable amount)

In 2015/16 the organisation plans to renew assets at 14.6% of the rate they are being consumed and will be increasing its asset stock by 1.3% in the year.

5.1.5 Historical Data

Council has made substantial improvement to urban stormwater systems over recent years and the expenditure breakdown for the last 5 year period is detailed in Table 5.1.5.

Table 5.1.5: Stormwater Asset Capital Expenditure History

Year	New Assets	Replacement Value
2010/11	\$70,082	\$404,161
2011/12	\$146,450	\$86,161
2012/13	\$257,278	\$77,681
2013/14	\$299,248	\$nil
2014/15	\$584,563	\$nil
TOTAL	\$1,357,621	\$568,003

5.2 Infrastructure Risk Management Plan

An assessment of risks⁸ associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' - requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council.

Table 5.2: Critical Risks and Treatment Plans

Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan
Property flooding	Significant property damage/ minor injury	VH	Replace aged or damaged infrastructure Regular inspections of pits and grates to prevent blockages.

			Assesment of all new developments to ensure that the capacity of the system is sufficient.
Road flooding	Traffic delays, vehicular accident	H	Replace aged or damaged infrastructure Regular inspections of pits and grates to prevent blockages. Assesment of all new developments to ensure that the capacity of the system is sufficient.
Flooding or ponding in public open space	Minor injuries (e.g. slips trips or falls)	H	Regular inspection of pits and grates to remove blockages. Inspections during and after rainfall events
Discharge of pollutants into river system	Risk to downstream of river Damage to marine life and river eco-systems	H	Installation of gross pollutant traps if required Encourage implementation of water sensitive urban design principles Impose planning conditions on potential polluters to control pollutants at source with interceptor traps or other control methods
Road failure due to failure of stormwater system	Pavement failure / defects	H	Regular inspections Replacement of aged or damage infrastructure
Property (private and council)	Flooding due to restriction, capacity shortfall or excessive flow	Medium	Timely clearing of restrictions, sandbags, owner awareness, system upgrades
Roads (due to stormwater system failure or excessive water)	Isolation, aquaplaning, damage to roads, person or property	Medium	This is a regular occurrence in some communities and learned to be lived with. Road users to be responsible for their own actions regarding driving conditions and circumstances. Council to consider system upgrades, installation of signage, repairs etc.
Persons	Health issues due to stormwater in sewerage system causing sewer overflows, injury or drowning	Medium	Flooding generally poses no greater risk to community than normal function of creeks, drains, rivers etc. Responsible adults are expected to appropriately educate and manage children's exposure and decision making in relation to risks and their own behaviour.

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, eg cleansing, street sweeping, grass mowing and street lighting.

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

5.3.1 Operations and Maintenance Plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Cyclic maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, etc. This work generally falls below the capital/maintenance threshold.

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure	
	Planned and Specific	Unplanned
2011/12	\$60,953	Not separated
2012/13	\$88,620	Not separated
2013/14	\$109,643	Not separated
2014/15	\$85,174	Not separated

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

5.3.2 Operations and Maintenance Strategies

The organisation will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure Council is obtaining best value for resources used.

Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, organisations can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
Mains	Not yet identified	
Pits	Not yet identified	

Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

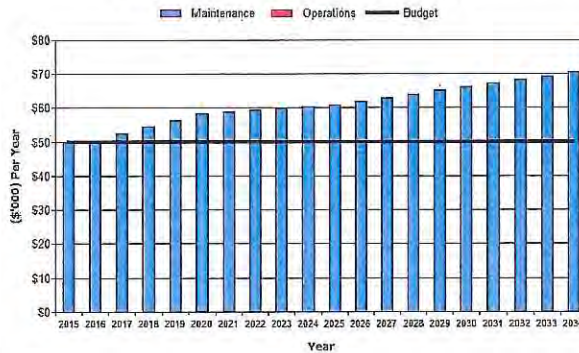
- Municipal Standards
- Municipal Specifications
- Subdivison guidelines
- Plumbing Codes (AS 3500 etc.)
- IPWEA Municipal Standards and Specification

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2015 dollar values (ie real values).

Figure 4: Projected Operations and Maintenance Expenditure

Northern Midlands - Projected Operations & Maintenance Expenditure (Stormwater_S1_V1)



Deferred maintenance, ie works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan.

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset’s design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

Assets requiring renewal/replacement are identified from one of three methods provided in the 'Expenditure Template'.

- Method 1 uses Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or
- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template'.

Method 1 was used for this asset management plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on 1 July 2013.⁹

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Useful life
Mains	100 Years
Pits	80 Years

5.4.2 Renewal and Replacement Strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
 - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
 - the project objectives to rectify the deficiency,
 - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
 - and evaluate the options against evaluation criteria adopted by the organisation, and
 - select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (eg replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (eg roughness of a road).¹⁰

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.¹¹

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 5.4.2.

Table 5.4.2: Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting	Ranking
Risk/Safety Risk priority is assessed in accordance with Council's Infrastructure Risk Management process which is based on probability and consequence of failure	25%	0 - 4
Technical Technical priority is assessed based on the project's ability to improve stormwater drainage capacity	20%	0 - 5
Corporate Corporate priority is linked to whether the projects are commitments through a Council resolution or included in Council policy and strategic plan.	20%	0 - 3
Social Community Impact Priority based on amount of community benefit through project completion	15%	0 - 3
Environment Environmental impact is assessed based on the significant of the surrounding environment.	20%	0 - 3
Total	100%	

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

Examples of low cost renewal include directional drilling, which avoids the additional costs associated with excavation in sensitive areas such as roads or private properties.

Renewal and replacement standards

Renewal work is carried out in accordance with the following Standards and Specifications.

- Sewers and Drains act 1954
- Local Government Highways Act
- Northern Midlands Council Standard Drawings
- State Growth standards and specifications
- Traffic Control AS1742.3 – Manual of uniform Traffic Control Devices. Part 3 Traffic Control Devices for Works on Roads

5.4.3 Summary of future renewal and replacement expenditure

¹⁰ IPWEA, 2011, IIMM, Sec 3.4.4, p 3 | 60.

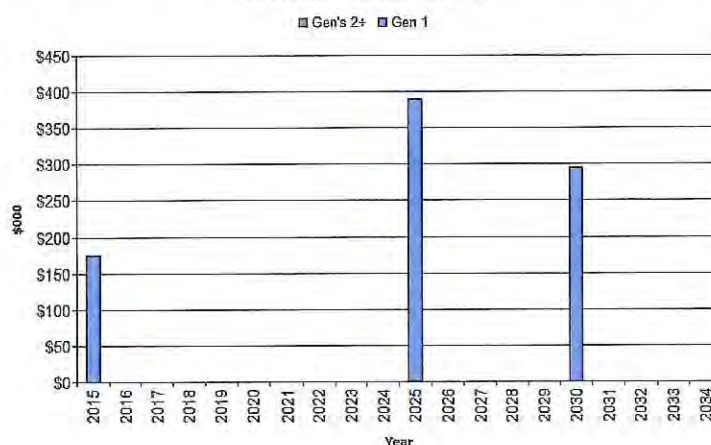
¹¹ Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3 | 66.

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Fig 5. Note that all amounts are shown in real values.

The projected capital renewal and replacement program is shown in Appendix B.

Fig 5: Projected Capital Renewal and Replacement Expenditure

Northern Midlands - Projected Capital Renewal Expenditure (Stormwater_S1_V1)



Deferred renewal and replacement, ie those assets identified for renewal and/or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the risk management plan.

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the organisation from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor/director or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed Table 5.4.2.

5.5.2 Capital Investment Strategies

The organisation will plan capital upgrade and new projects to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
 - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,