



20/09/13

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Mr Graham Lantzke
Shire Of York
Joaquina Street
York WA 6302

Dear Graham,

2012/2013 ROAD NETWORK ASSET VALUATION

Please find included the Road Network Asset Valuation Report updated to 30 June, 2013.

The valuation was generated from the RAMM Pavement Management System.

1. Data Confidence

The Shire had a full network condition survey completed in 2010 and data for works undertaken during the subsequent years have not been updated. There is a medium level of confidence in the inventory data being relevant and a low level of confidence of the condition data being a true representation of the current state and value of the road network asset.

It is highly recommended that a full inventory and condition survey be undertaken prior to the next valuation. Unit rates have been reviewed by the Shire and can be considered suitable for use in this valuation. It has been acknowledged that due to staff turnover there is a lack of knowledge as to current unit rates and it is highly recommended that unit rates be reviewed prior to the next valuation.

2. ROMAN and RAMM Valuation Comparison

2.1. Depreciation Methodology

RAMM utilises straight line depreciation with a user defined asset life expectancy for the surface structure, pavement structure and surface water channel components. The subgrade component is not depreciated.

2.2. Unit Rate Application

RAMM utilises basic unit rates in square metres for subgrade, pavement and seal with kerbing in linear metres to calculate replacement costs. RAMM includes the cost of forming table drain costs and kerbs separately into Surface Water Channel (SWC) costs.

RAMM applies a user defined percentage factor to unit rates to account for any overhead costs incurred. The unit rates can be calculated and taken into account in the raw unit rate or accounted for as a general percentage factor that is then applied.

All unit rates as well as life expectancies for all road components were reviewed by the Shire of York and confirmed as suitable and are as stated below.

Description	Unit of Measure	Replacement Unit Cost	Overhead %	Overhead Unit Cost	Total Replacement Unit Cost	Residual Value Unit Cost	TUL Years
Pavement Structure							
Pavement - Sealed	m ²	\$7.95	10%	\$0.80	\$8.75	\$2.39	40
Pavement - Unsealed	m ²	\$3.00	10%	\$0.30	\$3.30	\$0.30	10
Surface Water Channel							
Kerb - all types	m	\$30.00	10%	\$3.00	\$33.00	\$0.00	40
SWC - table drains	m	\$1.50	0%	\$0.00	\$1.50	\$0.00	5
Subgrade Structure							
Subgrade – xsect 0	m ²	\$15.00	10%	\$1.50	\$16.50	\$0.00	NA
Subgrade – xsect 1	m ²	\$0.50	10%	\$0.05	\$0.55	\$0.00	NA
Subgrade – xsect 2 – 6	m ²	\$15.00	10%	\$1.50	\$16.50	\$0.00	NA
Surface Structure							
2 Coat Seal	m ²	\$7.63	10%	\$0.76	\$8.39	\$0.76	15
1 Coat Seal	m ²	\$3.82	10%	\$0.38	\$4.20	\$0.38	12
Asphalt	m ²	\$18.27	10%	\$1.82	\$20.09	\$1.82	20

2.3. Residual Value Application

If desired, RAMM can consider a residual value for the pavement or seal components and will not automatically depreciate fully. RAMM allows the user to define a residual unit rate that the valuation will not depreciate past. This is applied to only the seal and pavement as it is commonly considered that they do have some residual economic value. This is realised when pavements are rehabilitated rather than removed and reconstructed and asphalt seals are overlaid but still contribute to the overall structural integrity of the sealed surface.

The valuation parameters were amended to reflect the sealed pavement structure having a 30% residual value and the surface structure having a 10% residual value. This had a positive effect on the calculation of the SWC, pavement and surface structure depreciated replacement values.

3. Valuation Summary

The following Road Network valuation report was generated using RAMM.

Asset Type	Component	RC	DRC	Ann Dep	Acc Dep
SW Channel	SW Channel	\$4,423,005.00	\$2,800,230.00	\$57,956.25	\$1,622,775.00
Treatment Length	Pavement Structure	\$23,084,798.07	\$6,240,497.84	\$1,247,726.87	\$16,844,300.23
	Subgrade Structure	\$63,741,025.70	\$63,741,025.70	\$0.00	\$0.00
	Surface Structure	\$498,043.91	\$246,939.30	\$21,262.08	\$251,104.61
Total		\$91,746,872.68	\$73,028,692.84	\$1,326,945.20	\$18,718,179.84

The valuation report has been generated using unit rates, expected lives and overhead percentages as supplied by the Shire of York.

Should you have any queries related to this valuation please do not hesitate to contact me.

Yours sincerely,



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Enc: Valuation Report By Road