



HEAVY PLANT REVIEW COMMITTEE

MINUTES

Section 5.9(2)(c) LGA 1995

The function of the Heavy Plant Committee is to review the 12 Year Plant Replacement Program annually prior to budget adoption and to make recommendations to the Council as to plant purchases to be funded.

Held in the Council Committee Room
Lowood Road, Mount Barker WA 6324
at 1.00pm on Tuesday 23 February 2021

P. J. Sheedy

PAUL SHEEDY
ACTING CHIEF EXECUTIVE OFFICER

Committee Members

Cr C Pavlovich, Cr J Oldfield, Cr L Handasyde, Cr J Moir (Resolution No. 205/19)

TABLE OF CONTENTS

ITEM	SUBJECT	PAGE NO
1	DECLARATION OF OPENING / ANNOUNCEMENT OF VISITORS	1
2	RECORD OF ATTENDANCE / APOLOGIES / LEAVE OF ABSENCE (PREVIOUSLY APPROVED)	1
3	CONFIRMATION OF MINUTES	1
4	DISCLOSURES OF INTEREST	1
5	REPORTS OF COMMITTEE MEMBERS AND OFFICERS	1
5.1	HEAVY PLANT REPLACEMENT PROGRAM UPDATE	1
5.2	MULCHING MACHINERY OPTIONS	2
6	NEXT MEETING	5
7	MEETING CLOSURE	5

Presiding Member: Cr J Oldfield

Membership: Quorum (2)

Cr L Handasyde	Council Representative
Cr J Oldfield	Council Representative
Cr J Moir	Council Representative
Cr C Pavlovich	Council Representative

1 DECLARATION OF OPENING / ANNOUNCEMENT OF VISITORS

The presiding member, Cr Oldfield, declared the meeting open at 12.57pm

**2 RECORD OF ATTENDANCE / APOLOGIES / LEAVE OF ABSENCE
(PREVIOUSLY APPROVED)**Attendance

Cr L Handasyde	Council Representative
Cr J Oldfield	Council Representative
Cr J Moir	Council Representative
Cr C Pavlovich	Council Representative

Staff

Mr P Sheedy	Acting Chief Executive Officer
Mr D Lynch	Executive Manager Works and Services
Miss K Evans	Administration Officer, Executive Services

Apologies

Nil

3 CONFIRMATION OF MINUTES

Moved Cr Handasyde, seconded Cr Moir that the Minutes of the Ordinary Meeting of the Heavy Plant Committee, held on 6 October 2020 as circulated, be taken as read and adopted as a correct record.

CARRIED

4 DISCLOSURES OF INTEREST

Part 5 Division 6 Local Government Act 1995

Nil

5 REPORTS OF COMMITTEE MEMBERS AND OFFICERS**5.1 HEAVY PLANT REPLACEMENT PROGRAM UPDATE**

Report provided by David. See Attachment One.

5.2 MULCHING MACHINERY OPTIONS

File Ref:	N54359
Attachments:	Estimated Capital and Operating Cost Schedule
Responsible Officer:	David Lynch Executive Manager Works and Services
Author:	Nicole Selesnew Project Officer
Proposed Meeting Date:	28 January 2020

PURPOSE

The purpose of this report is to review options for mulching and pruning.

BACKGROUND

The Council's roadside mulching and pruning program is completed by contractors. The Shire supplies traffic control for small mulching activities, however, for large programs such as the Porongurup Road and Carbarup Road mulching and pruning program, traffic control was incorporated into the contractor's costing.

STATUTORY ENVIRONMENT

Environmental Protection Act 1986

Environmental Protection (Clearing of Native Vegetation) Regulations 2004

EXTERNAL CONSULTATION

Consultation has taken place with representatives from the City of Albany regarding their mulching and pruning resources and methodology.

FINANCIAL IMPLICATIONS

The 2020/2021 Annual Budget includes a \$155,000.00 allocation for mulching and pruning activities.

BUDGET IMPLICATIONS

If an alternate method of roadside mulching and pruning was adopted, a budget allocation would be required to purchase new machinery and potential additional staff resources.

POLICY IMPLICATIONS

Policy I/RR/2 – Rural Road Verge Vegetation Management Policy applies.

STRATEGIC IMPLICATIONS

The Shire of Plantagenet Strategic Community Plan 2017–2026 provides at Outcome 4.1 (Effective governance and leadership) the following strategy:

Strategy 4.1.4:

'Support strategic alliances, stakeholder forums and advisory committees that assist Shire in policy development and service planning.'

OFFICER COMMENT

A series of reach mowers were reviewed for their pruning and mulching capabilities. The mowers are typically a maintenance machine, designed for materials less than 60mm in diameter.

The City of Albany runs two tractors, each fitted with a reach mower. In addition, one of the tractors is fitted with a slasher and the other is fitted with a fire fighting unit. Both tractors work in tandem with the following methodology:

- A two kilometre loop is programmed, less in heavier country;
- The first machine does a mulching cut, typically 0mm - 900mm high (the width of the mulching head). The second tractor follows overlapping the first mulching cut to a small extent;
- The tractors continue moving around the programmed loop, repeating the mulching at heights of 1,800 – 2,700mm and 2,700 – 3,600mm;
- One tractor does a final loop, mulching at a height of 3,600 – 4,500mm;
- The second tractor follows with the slasher engaged, slashing debris on the ground as a cleanup; and
- A two-man crew follow with pole saws to clean up any ragged cuts or larger material.

The two mulching operators have a dedicated utility with tools and spare parts.

The estimated cost to resource this operation is as follows:

Resource	Amount	Cost per unit (\$)	Total cost (\$)
Massey 6613 Tractor	2	160,000.00	320,000.00
Noremat M61T Forestry Mulcher	2	110,000.00	220,000.00
Utility	1	45,000.00	45,000.00
Allowance for Tools	1	3,000.00	3,000.00
		Total	\$588,000.00

This cost does not include additional protection for the tractor, the slasher, fire fighting requirements or additional staff resources.

C&C Machinery has supplied two demonstration videos:

<https://www.youtube.com/watch?v=TKptyMXrAH0>

<https://www.youtube.com/watch?v=oiDDWbDbXdo>

The first video shows the unit cutting grass at a speed which is considerably less than the Shire's positrack mounted slasher. The second video shows the unit cutting off a small limb.

Another demonstration video has been sourced which shows a larger unit and tractor: <https://www.youtube.com/watch?v=0gakOhiEAXE> It is worth noting the size of the branches being mulching and the potential damage that can occur to the unit and tractor while mulching is taking place

The benefits of owning and operating a reach mulcher unit are as follows:

- It would be a useful machine for roads that have been mulched with an excavator in the past ten years, where sapling size is smaller and larger limbs are not present;
- Produces savings for roadside slashing on a line kilometer basis; and
- Increase the Shire's roadside maintenance to a higher standard.

The adverse comparison of owning and operating a reach mulcher includes:

- High cost of initial purchase;
- Estimates of cost per line kilometer are likely to be on the low side and do not account for breakdowns and other delays / stoppages (for example, staff leave and periods of inactivity due to Vehicle Movement Bans and Total Fire Bans);
- Machinery use will require dedicated staff member/s to operate. The City of Albany Supervisor stresses that it is critical for trained, experienced staff to operate the units given the risk to public and equipment damage;
- An additional one or two Full Time Equivalent roles will need to be created; and
- Even with a single mulching unit this would represent a significant increase in service levels (~>4% rate increase) which may not be required. In general, the Shire roadsides are being maintained moderately well.

Estimated capital and operating costs to operate a reach mulcher system are provided in Attachment Two.

The Shire's current method of operation is to use a contractor, with the Shire providing a single spotter for traffic control on minor or secondary roads. Distributor roads such as Carbarup and Porongurup Roads were let by contract and included traffic control.

The cost per line kilometre for minor and secondary roads averages \$1,500.00 to \$2,000.00. This is more expensive than the cost of operating a reach mulcher, however the end result is considerably neater.

Further, by using a contractor, the full corridor is mulched including to six metres in height which the boom mounted reach machines cannot achieve.

The excavator system can also address limbs up to 400mm without any significant drop in productivity.

The end mulching result from contractor's equipment is more professional and tends to smother regrowth for some years.

In the past three years the Shire has increased the roadside spraying program to include a mandatory spray of roads which have undergone mulching in the previous year. The spray is a combination of Metsulfuron and Glyphosate at a high rate. This has improved the mortality rates of regrowth.

A general observation is that the current program is satisfying the needs of the community and there is no appetite to increase the service levels.

VOTING REQUIREMENTS

Simple Majority

OFFICER RECOMMENDATION

That:

- 1. The cost to purchase and operate a reach mowing system be noted.**
- 2. Further discussion take place with the Heavy Plant Review Committee regarding the cost benefit of a reach mulcher.**

COMMITTEE DECISION

Moved Cr Moir, seconded Cr Pavlovich that:

- 1. The cost to purchase and operate a reach mowing system be noted.**
- 2. Further discussion take place with the Heavy Plant Review Committee regarding the cost benefit of a reach mulcher.**

Carried

6 NEXT MEETING

Date to be decided

7 MEETING CLOSURE

The presiding member, Cr Oldfield, declared the meeting closed at 1.39pm.

ATTACHMENT ONE
PLANT REPLACEMENT PROGRAM

ATTACHMENT TWO

CAPITAL AND OPERATING COSTS – REACH MULCHER OPTION

