
 Adelaide Plains Council	11.3 Confidential Item
13 March 2019	

11.3 Quarry Management

RECOMMENDATION

“that:-

- 1. Pursuant to section 90(2) of the *Local Government Act 1999*, the Infrastructure and Environment Committee orders that all members of the public, except Chief Executive Officer, Acting General Manager – Infrastructure and Environment, General Manager – Finance and Economic Development and Governance Officer be excluded from attendance at the meeting of the Committee for Agenda Item 11.3 – *Quarry Management*;**
- 2. The Committee is satisfied that pursuant to section 90(3)(d) of the *Local Government Act 1999*, Item 11.3 – *Quarry Management* concerns commercial information of a confidential nature, the disclosure of which could be reasonably expected to prejudice the commercial position of the person who supplied the information, being information relating to the rates and charges applied by a contractor; and**
- 3. The Committee is satisfied that the principle that Committee meetings should be conducted in a place open to the public has been outweighed by the need to keep the information, matter and discussion confidential.”**

 Adelaide Plains Council	11.3	Quarry Management
	Department: Report Author:	Infrastructure and Environment Acting General Manager - Infrastructure & Environment
Date: 13 March 2019	Document No:	D19/6706

EXECUTIVE SUMMARY

- The purpose of this report is for the Infrastructure and Environment Committee (the Committee) to consider, and make recommendations to Council in relation to, whether to:-
 - Contract out crushing services;
 - Invest in a new crusher; or
 - Repair Council’s current crusher.
- Council, at its Ordinary Meeting on 17 July 2017, confidentially resolved the following “that Council, having considered Item 21.1 – Rubble Raising and Crushing, dated 17 July 2017, receives and notes the report and in doing so resolves to reject all tenders for Rubble Raising and/or Crushing Services 2017 to 2023 Tender No: BRPG 002-2017.”
- Management, in 2017, indicated that Council’s current process is uneconomical with few personnel available with the required skills and experience to maintain and operate the crusher and dozer.
- Council resolved to continue in-house crushing services but to tender out the ripping and raising component.
- A contractor has been engaged to rip and raise the rubble. The contract expires in 2022.
- The crusher is currently unable to be utilised due to mechanical breakdown. Various options have been attempted to repair the crusher to no avail. Determining the actual issue to be remedied would result in extensive costs.
- It is likely that further significant costs will be incurred over the next 18 months, should the crusher be repaired at this point.
- Given the age of the crusher, and the many breakdowns and repairs to date and likely to occur in the future, any further spend to repair the machine is not viable, or recommended.
- It is recommended that Council consider contracting out the crushing service.

RECOMMENDATION

Option 1

“that the Infrastructure & Environment Committee, having considered Item 11.3 - *Quarry Management*, receives and notes report and in doing so recommends to Council that it instruct the Chief Executive Officer to:

1. Cease any further repairs to the crushing machine;
2. **Contract out all rubble crushing services**, in accordance with Council’s *Procurement Policy*; and
3. Dispose of the current rubble crushing machine, associated generator set, and loader, in accordance with Council’s *Disposal of Land and Other Assets Policy*.”

OR

Option 2

“that the Infrastructure & Environment Committee, having considered Item 11.3 - *Quarry Management*, receives and notes report and in doing so recommends to Council that it instruct the Chief Executive Officer to:

1. Cease any further repairs to the crushing machine;
2. **Acquire a new mobile rubble crushing machine**, in accordance with Council’s *Procurement Policy*; and
3. Dispose of the current rubble crushing machine and associated generator set in accordance with Council’s *Disposal of Land and Other Assets Policy*.”

BUDGET IMPACT

Option 1 – Contract Out Crushing Services

Estimated Cost: \$6.50/tonne (based on current contract price for 14,000 tonne. Contract rate is estimated to reduce if tenders are sought for 40,000 tonnes per annum)

Future ongoing operating costs: Nil

Is this Budgeted? No

Option 2 - Acquisition of Mobile Crusher

Estimated Cost: \$4.60/tonne (based on 40,000 tonnes per annum)

Future ongoing operating costs: Servicing and Maintenance

Is this Budgeted? No

RISK ASSESSMENT

Safety

Even if repaired, operating the current crusher raises significant safety risks due to its age. Being of an older age and to a certain extent 'home made', the crusher will not offer the same level of safety that a modern machine would. Having said that the crusher has passed all relevant safety inspections conducted by Work Safe SA a number of years ago, and is also inspected by Council staff as per our 3 monthly plant safety inspection program.

Finance

Council currently contracts out ripping and raising of rubble services and accordingly, has addressed significant financial risk associated with continuing to operate a dozer that has continued to breakdown due to age and fatigue.

If crushing is contracted out Council will be further addressing significant financial risk associated with continuing to operate the crusher that has continued to breakdown due to age and fatigue.

Should Council contract out this service will ultimately mitigate the risk of having to ensure adequate staff are available with the necessary skills to carry out the task.

It is recommended that Council makes a timely decision. The figures provided at the Budget Impact above are based on current quotes, which may not hold or may vary between the time of quote and the time of purchase.

Attachments

1. Detailed New Crusher Costing

DETAILED REPORT

Purpose

The purpose of this report is for the Infrastructure and Environment Committee (the Committee) to consider, and make recommendations to Council in relation to, whether to:-

- Contract out crushing services;
- Invest in a new crusher; or
- Repair Council's current crusher.

Background/History

Council has historically raised and crushed its own rubble for road making and repair purposes utilising plant and equipment that it owns.

Management, in 2017, indicated that Council's current process is uneconomical with few personnel available with the required skills and experience to maintain and operate the crusher and dozer.

In 2018 Council resolved to contract out the ripping and raising component of rubble due to the age and inefficiency of Council undertaking this service in-house using its dozers. Council also resolved to dispose of both dozers.

Council resolved to continue in-house crushing services.

Discussion

The crusher is currently unable to be utilised due to mechanical breakdown. Various options have been attempted to repair the crusher to no avail. Determining the actual issue to be remedied would result in extensive costs.

It is likely that further significant costs will be incurred over the next 18 months, should the crusher be repaired at this point.

Given the age of the crusher, and the many breakdowns and repairs to date and likely to occur in the future, any further spend to repair the machine is not viable, or recommended.

The following are analysis of the three different methods of delivering Crushing Services into the future.

Option 1 - Contract Out Crushing Services.

The market for crushing services is competitive.

Council would reduce its risks by contracting out a relatively hazardous activity. However, in doing so Council will need to ensure it conducts prudent contract management practices to ensure the contractor continues to operate in a safe manner.

Staff hours normally allocated to this activity would need to be absorbed into the remainder of the business. Council's *Strategic Plan* envisions significant growth, which brings more income from rates but also a greater workload in maintaining more assets and infrastructure. Because of this it would be easy to absorb these staff particularly in the horticulture area.

The cost to rip and raise, crush and stockpile rubble via contractor is estimated to be:-

- To rip and raise rubble is \$1.80/tonne (based on current contract ending 2022)
- To crush and stockpile rubble is \$6.50 (based on current contract price)
- Above combined is **\$8.30/tonne**

Option 2 – Invest in a New Crusher

A new crushing machine would consist only of a new crusher and stacker. The cost of a new suitable crusher with a stacker is approximately \$780,000. The crushing machine would be self-powered, meaning it does not require a separate generator set to provide power and self-manoeuvring, meaning that it can be easily moved around the pit for maximum accessibility and efficiency.

There would be value left in the existing crusher and generator set if sold. The current estimated value is \$150k-\$200k.

Council will need to borrow money to purchase new crushing plant for a ten (10) year period at a rate of around 4.5%.

The cost to rip and raise rubble via a contractor and crush the rubble with a new crushing machine utilising existing staff is estimated to be:-

- To rip and raise rubble is \$1.80/tonne (based on current contract ending 2022);
- To crush and stockpile rubble is \$4.60/tonne (see detailed costing – **Attachment 1**);
- Above combined is **\$6.40/tonne**.

The estimate above does not take into account:

- any major maintenance that maybe required through the life of the equipment. It is nearly impossible to predict what may be required in the future; or
- additional and extensive training that would be required to ensure that more staff have capacity to operate the equipment.

Option 3 – Repair Council's Current Plant and Equipment

*Management does **not** recommend this option*

Council currently owns and operates various machinery that are used to crush rubble, including include loaders and a crusher. The primary unit of the crusher was constructed at the Mallala depot by a contractor and council staff circa 1993. This unit consisted of a new jaw crusher which was mounted on an old low loader. A contractor with staff then fabricated the hopper, shaker and conveyor systems. The crusher is powered by a diesel generator set which was purchased new in 2000 when Council

added the secondary crusher and screen. The rubble is firstly raised and that material is then fed into the crushing plant using a front end loader.

Generally, one (1) employee is required to operate and feed the crusher. Operating a crusher can be a hazardous exercise and is only carried out by highly skilled and experienced staff.

If Council wish to continue to use the current crusher, the following risks must be considered:-

1. Given the age of this crusher, there have been many breakdowns requiring rebuilds of motors and other mechanical components, numerous 'wear parts' have been replaced frequently. In 2016/2017 the crusher had major repairs carried out to the Secondary wear bars, primary jaws and hopper. The cost of general maintenance and repairs to the crusher in 2017/18 was \$180,968.
2. Operating and maintaining the crusher is a specialist task and there are only a few staff remaining with these skills.
3. The crusher being of an older age and to a certain extent 'home made', will not offer the same level of safety than a modern machine. Having said that the crusher has passed all relevant safety inspections conducted by Work Safe SA a number of years ago, and is also inspected by Council staff as per our 3 monthly plant safety inspection program.
4. The generator set is in fair condition with no major breakdowns recorded in recent history, however if continued to be relied upon may start to generate significant maintenance costs in the next 18 months and beyond.

Option Analysis

If cost was the only consideration, Option 2 would be the most attractive option. However, Council must also consider the risk element associated with crushing.

Option 1 is still significantly more cost effective than the current crushing arrangement, and also mitigates significant risk that Council would otherwise be exposed to in the future.

Conclusion

Council's crusher is currently unable to be utilised due to a mechanical breakdown. Various options have been attempted to repair the crusher to no avail. Determining the actual issue to be remedied would result in extensive costs.

Given the age of the crusher, and the many breakdowns and repairs to date and likely to occur in the future, any further spend to repair the machine is not viable, or recommended.

It is for the Committee to consider the options available to Council, and make recommendations accordingly.

References

Legislation

Local Government Act 1999

Council Policies

Disposal of Land and Other Assets Policy

Procurement Policy

RECOMMENDATION

“that the Infrastructure and Environment Committee, having considered the matter of Item 11.3 – *Quarry Management* in confidence under sections 90(2) and 90(3)(d) of the *Local Government Act 1999*, resolves that:-

- 1. The agenda item, report, Attachment 1 and any other associated information pertaining to Agenda Item 11.3 – *Quarry Management* remain confidential and not available for public inspection until further order of Council;**
- 2. Pursuant to section 91(9)(a) of the *Local Government Act 1999*, the confidentiality of the matter will be reviewed every 12 months; and**
- 3. Pursuant to section 91(9)(c) of the *Local Government Act 1999*, the Committee delegates the power to revoke this confidentiality order to the Chief Executive Officer.”**