



Shire of
Wongan-Ballidu

Agenda

Special Meeting of Council
Tuesday, 9 April 2024





NOTICE OF SPECIAL COUNCIL MEETING

Dear Elected Members

I advise that A Special Meeting of the Shire of Wongan-Ballidu will be held on Tuesday, 9th April 2024 commencing at 5.00pm at Council Chambers, Shire of Wongan Ballidu, Corner Quinlan Street and Elphin Crescent, Wongan Hills WA 6603

STUART TAYLOR
CHIEF EXECUTIVE OFFICER

Disclaimer

The recommendations contained in the Agenda are subject to confirmation by Council. The Shire of Wongan-Ballidu warns that any person(s) who has an application lodged with Council should rely only on written confirmation of the decision made at the Council meeting. No responsibility whatsoever is implied or accepted by the Shire of Wongan-Ballidu for any act, omission, statement or intimation taking place during a Council meeting.

AGENDA INDEX

ITEM 1. OFFICIAL OPENING 4

ITEM 2. ATTENDANCE AND APOLOGIES..... 4

ITEM 3. OFFICER REPORT..... 5

3.1 2023-2024 MOCARDY DAM MAINTENANCE 5

ITEM 4. MEETING CLOSURE10

Item 1. OFFICIAL OPENING

Acknowledgement of Country: -

"I'd like to begin by acknowledging the first nations people of the land on which we meet today. I would also like to pay my respects to Elders past, present and emerging."

Item 2. ATTENDANCE AND APOLOGIES

Item 3. OFFICER REPORT

3.1 2023-2024 MOCARDY DAM MAINTENANCE

FILE REFERENCE:	
REPORT DATE:	28th March 2024
APPLICANT/PROPONENT:	Shire of Wongan-Ballidu
OFFICER DISCLOSURE OF INTEREST:	Nil
PREVIOUS MEETING REFERENCES:	Nil
AUTHOR:	Stephen Casey (MWS)
ATTACHMENTS:	Cementcrete Composite Blanket Information

PURPOSE OF REPORT:

The purpose of this report is to provide sufficient information summarising the repairs required at Mocardy Dam

BACKGROUND:

The Shire of Wongan-Ballidu acquired Mocardy Dam from the Water Corporation in 2009. Since its acquisition, the dam has played a vital role in the Shire's water management infrastructure, particularly in drought prevention efforts. With the installation of an 8km pipeline linking the dam to other water storage facilities, it has become an indispensable asset in safeguarding Shire assets against water scarcity. However, due to its age and lack of ongoing maintenance, the dam recently experienced a significant failure in the inlet spillway, posing immediate risks to its functionality.

Mocardy Dam, constructed in the late 1950s and early 1960s, has suffered a notable failure in its inlet spillway, necessitating urgent attention. This failure presents immediate risks to the Shire's water supply and infrastructure, requiring prompt action to address the situation effectively. Failure to address this issue promptly may lead to further deterioration of the dam's condition and intensify the potential consequences for the Shire.

COMMENT:

To address the significant failure of the spillway, the following steps will be taken:

1. Draining of the dam: Firstly, the dam will be drained of water to facilitate repair works.
2. Engagement of civil contractor: A civil contractor will be engaged to carry out the necessary repairs. This includes removing the existing damaged spillway and conducting extensive repairs to the dam where it has washed out.



Damage to Existing Spillway

3. Sourcing of materials: Approximately fifty tonnes of bentonite will be sourced from Watheroo for the repair works.
4. Reconstruction of spillway: Once the damaged area has been prepared, a gravel layer will be placed over the top, and wing walls will be formed to direct the water flow.
5. Installation of Cementcrete Composite Blanket: Following the formation of the spillway, a Cementcrete Composite Blanket will be laid over the repaired area. It is anticipated that approximately two hundred square meters will be replaced. Additionally, the blanket will be anchored to the bank to ensure stability.

By implementing these measures, we aim to effectively repair the spillway and restore the functionality and safety of the dam.

Cementcrete Composite Blanket is water hardening, corrosion resistance, erosion resistance and high temperature resistance. It has a fifty-year life expectancy.



Examples of Applications

CONCLUSION

The significant failure at Mocardy Dam requires swift and decisive action to ensure the safety and functionality of the dam and mitigate risks to the Shire's water supply and infrastructure. By implementing the proposed objectives and recommendations, we can effectively address the emergency situation. Further discussion will be required around the ongoing maintenance of Shire water catchment areas and the cost associated.

POLICY REQUIREMENTS:

NIL

LEGISLATIVE REQUIREMENTS:

NIL

STRATEGIC IMPLICATIONS:

Mocardy Dam is specifically referenced in our Strategic Community Plan under the Goal *"Lead by example for sustainability practices, both environment and business"* The strategies and actions for this goal include *"Maintain Mocardy Dam as a local water source."* and *"Support a coordinated approach to local water resource, management including the use of Mocardy Dam."*

SUSTAINABILITY IMPLICATIONS:

- Environment
There are significant environmental implications. With the loss of water harvesting capabilities and the potential for the dam to start leaking should the repair not be carried out, there could be the potential for significant impacts to the surrounding ecosystem.
- Economic
There are significant economic implications. The loss of Mocardy Dam's ability to harvest water increases the Shire of Wongan-Ballidu's reliance on scheme water to water our assets.
- Social
There are no significant social implications.

FINANCIAL IMPLICATIONS:

Budget

The estimated cost of the project is \$50,000. We will require to access the Special Projects Reserve to fund the repair.

VOTING REQUIREMENTS:

ABSOLUTE MAJORITY REQUIRED: Yes

OFFICER RECOMMENDATION:

That Council

1. Allocate \$50,000 from the Special Projects Reserve to conduct substantial maintenance on the inlet spillway of Mocardy Dam.

TALKIN' METAL AND CONCRETE

New product released in Australia and New Zealand

THE Cementcrete Composite Blanket is water hardening, corrosion, erosion and high temperature resistant and is only available from Online Composite Engineering.

The traditional treatment and repair methods for soil erosion are mostly manual and the materials used frequently consist of rubble, cement bricks and mortar.

From the perspective of service life and strength, the rubble, bricks and mortar cannot guarantee the long term durability of the project.

Traditional geomembranes will also age after a certain number of years.

The new Cementcrete Composite Blanket makes up for the shortcomings of traditional materials and can cover multi-industry applications.

The Cementcrete, Online Composite Engineering's Concrete Blanket has a vast range of benefits over the traditional methods including:

- ☐ Time saves up to 95 per cent.
- ☐ Reduces carbon dioxide 90pc.
- ☐ Durability lasting more than 50 years.
- ☐ Composite of fibre and concrete.
- ☐ Faster and easier – simple operation.
- ☐ Quick installation, no onsite mixing concrete and no professional skills.
- ☐ Arbitrary shape laying.
- ☐ Ditches or slopes do not require special bedding treatment.
- ☐ Workable in water.

☐ Can be placed where conventional construction vehicles cannot get to or are inconvenient.

☐ Comprehensive cost advantage, with significantly reduction in labour and tooling costs.

☐ Good integrity, no freezing, cracking, settlement and dislocation, reducing secondary maintenance costs.

☐ Better weather resistance and durability.

☐ High strength.

☐ High temperature resistant.

☐ Wear-resistant.

☐ Scour-resistant.

☐ Resistant to sea water.

☐ Fire resistant.

☐ More environmentally friendly, non-toxic materials used.

The Cementcrete Composite Blanket is easy to install in just four steps: cut, lay, overlap and hydrate.

There's no need for large equipment and it is supplied in rolls, which are convenient for transportation, loading, unloading and installation.

It has been used in council and The University of WA projects, savings are inevitable with labour efficiency allowing two workers to complete up to 400 square metres in one day.

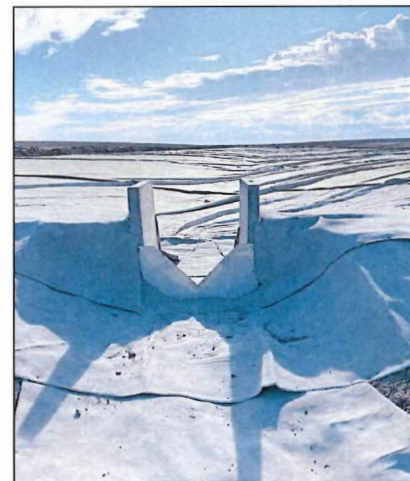
Only basic tools are needed, negating the need for professional skills and the product can be moulded in any shape.

Rapid prototyping means there is no need for major maintenance.

It is also environmentally safe and



☐ Cementcrete is the ideal application for wind, water and coastal erosion control, weed control, dam and bund and slope and wall protection, as well as defence, sports and recreation.



☐ The new Cementcrete Concrete Blanket, makes up for the shortcomings of traditional materials and can cover multi-industry applications.

made with harmless, non-toxic substances.

Cementcrete has an exuded compressive and flexural strength greater than C40 concrete and a durability of more than 50 years.

It is wear, erosion acid and alkali resistant and durable and resistant to UV ageing.

The Cementcrete Composite

Blanket comes in the following sizes:

- ☐ Six millimetre thick x two metres wide x 45m roll.
- ☐ 10mm thick x 2m x 45m roll and
- ☐ 15mm thick x 1.2m x 20m roll.

Online Composite Engineering's Cementcrete Composite Blanket's industry applications include:

- ☐ Wind and water erosion.
- ☐ Coastal erosion.

☐ Weed and dust control.

☐ Dam and bunding solutions.

☐ Slope and wall protection.

☐ Sports and recreation.

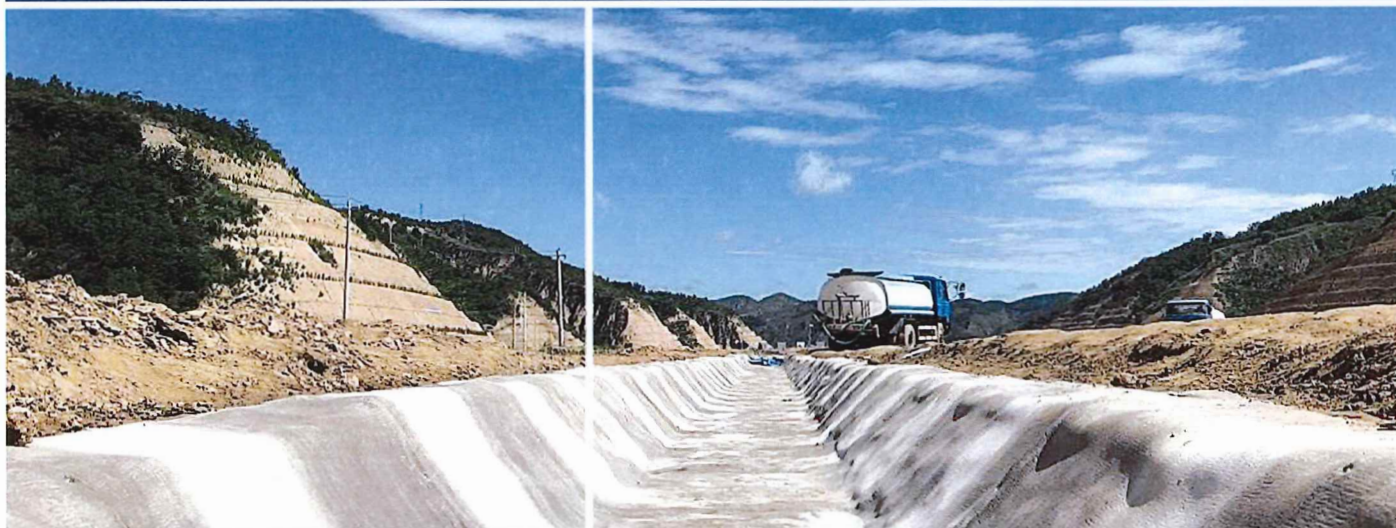
☐ Road and rail.

☐ Defence.

☐ Mining and more.

☐ More information: Go to onlinecompositeengineering.com.au or call 0497 752 194.

CEMENTCRETE Composite Blanket



AUSTRALIA-NEW ZEALAND

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Convenient

Efficient

Environmental

Durable



Water Conservancy



Road



Railway



Agriculture



Electricity



Petrochemical



Mine



Waterproof



Farming



Others

ITEM 4. MEETING CLOSURE