



Shire of Kent

Non-potable strategic community water supplies plan

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Cover photograph: Mindarabin Dam, Shire of Kent

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Summary

Water supply planning is essential in rural areas and requires collaboration, involvement and participation from all stakeholders, including farmland communities, local government authorities (LGAs) and State Government agencies as part of an integrated approach to sustainable water supply for the future.

This plan provides information for the Shire and farmers on the location of strategic community water supplies (SCWS). It advises how to access non-potable water for emergency stock watering and firefighting purposes, including what facilities are available at each site.

Introduction

Over the past 40 years, recurrent water supply problems have affected the dryland agricultural region. Emerging climate changes are likely to increase the occurrences of low rainfall years, resulting in water shortages and restrictions in rural communities.

Facing long-term water security challenges, farmers are encouraged to proactively develop and maintain on-farm water infrastructure to better prepare for dry periods.

Rural water planning recognises the importance to prepare for these events and increase the opportunities to deliver an assured water supply to farmland communities in the dryland agriculture areas of Western Australia (WA).

SCWS planning is one of the key roles of the Department of Water and Environmental Regulation's (the department's) rural water program. The aim is to safeguard dryland agricultural areas wherever possible against serious water deficiencies.

While landholder self-sufficiency must remain the primary objective, the rural water program recognises the importance of emergency off-farm water supplies to farming communities. It also builds on the SCWS network across the dryland agricultural area through the community water supplies partnership (CWSP) program and the agricultural areas (AA) Dam works program.

Both programs establish and improve non-potable water supplies with an aim to ensure water is available for emergency livestock watering, firefighting and for other farm needs. The CWSP program also aims to reduce reliance on potable scheme water supplies for non-potable needs and to increase water availability for public amenities such as sportsgrounds.

This SCWS plan has been compiled for the Shire of Kent to provide a clear description of each of the SCWS in the Shire available for firefighting purposes, and to farmers and farming communities in times of emergency.

Strategic community water supplies and AA Dams

A network of SCWS has been developed across WA's dryland agricultural areas to provide an important source of non-potable water for farming and firefighting needs.

These supplies are for emergency use in times when low rainfall causes on-farm supplies to become depleted and farmers need to travel to access water for livestock and essential farming purposes.

Vesting of the strategic dams and bores in each LGA varies, with some sites owned by government agencies (including the department), Water Corporation, the LGA itself, or by private entities where an agreement has been made to allow access.

It is important that these water supplies are carefully managed to ensure water is available during times of emergency.

The department keeps in regular contact with rural communities to monitor the condition of SCWS and to identify and address any maintenance issues.

Each year, the department's rural water program undertakes works to maintain and upgrade sites vested with it, and sites in priority areas vulnerable to dry conditions.

AA Dams have been developed since the early 1990s to provide water and support the growth of farming in the dryland agricultural area. There are about 480 of the original 681 AA Dams that range from high value to no value in terms of their condition and serviceability.

SCWS are a subset of the AA Dams that are reliable, in good to excellent repair and retain a high value. The department uses LGA maps to determine which sites are worth upgrading and to identify priority areas to develop new SCWS.

Figure 1 shows the location of the strategic community supplies and AA Dams in the Shire of Kent, with symbols indicating the capacity, vesting and values of each site.

Shire of Kent map

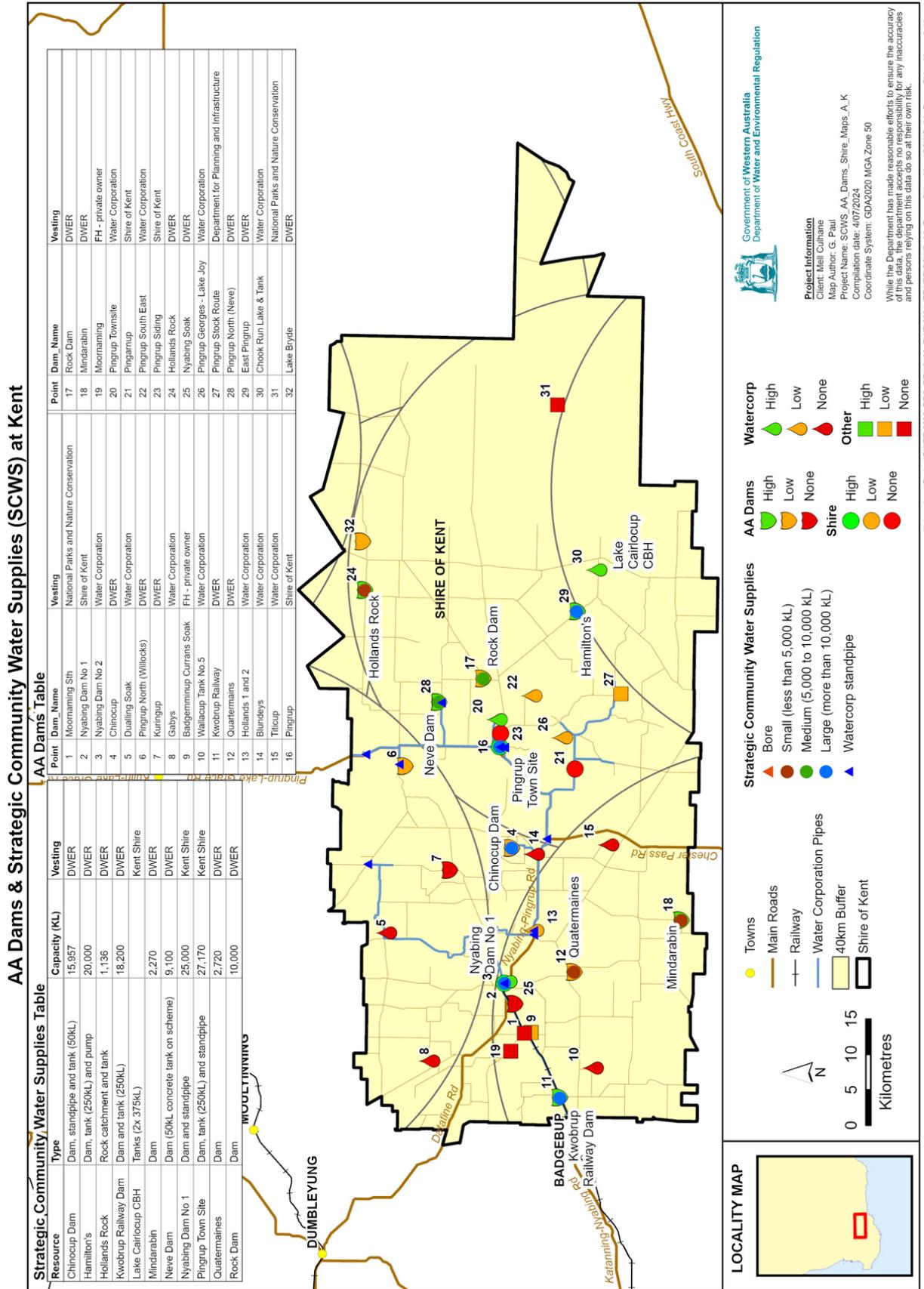


Figure 1 Location of strategic community water supplies (at 4 July 2024)

Strategic community water supply access

Overview of different fill points

Each SCWS will have a fill point to allow access to water supply for agricultural purposes. Each fill point will have a camlock fitting. Standard sizes of camlocks include 50 mm (2 inch), 80 mm (3 inch) fitting and, in some cases, a 100 mm (4 inch) connection is fitted for firefighting purposes. These camlock fittings will be available where there is a tank, standpipe, swipe card system or bore fill point. When accessing water directly from dams without tank storage, you will need to bring your own pump to extract water.

Swipe card systems

Swipe card systems are metered fill points that require a swipe card or fob from your Shire to access the water supply. Contact your local Shire office to obtain a swipe card to access these water supplies.

During emergencies such as bushfires, the Shire can remotely switch the swipe card system to allow access without a swipe card. Nyabing and Pingrup fire trucks both have swipe card access. The emergency access contact is the Manager Infrastructure 0429 993 987 or Community Emergency Services Manager (CESM) 0436 668 242.

Farm bots

Some tanks are fitted with farm bots, which regularly record the water level and feed this information into a website. You can access this website at app.farmbot.com.au (Login ID: **public.access** Password: **access1**) to view water tank levels for tanks fitted with farm bots.

Below are examples of different fill points you may come across in the Shire.



Tank standard camlock fitting



Farm bot positioned on top of tank



Swipe card standpipe system



Tank, electric swipe card and pump for bore

Shire of Kent SCWS sites

Site name	Location
Chinocup Dam	Chinocup Road <i>~4.5 km from Nyabing–Pingrup Road</i>
Hamilton's	Range Road, Pingrup <i>~7.8 km north-west of Needilup Road North</i>
Hollands Rock	Hollands Tank Road <i>~400 m west of Day Road</i>
Kwobrup Railway Dam	Brown Street off Katanning–Nyabing Road <i>west of Nyabing town</i>
Lake Cairlocup CBH	Needilup Road North at CBH
Mindarabin	Glen Road, off Mindarabin Road
Neve Dam (North Pingrup)	Neve Road <i>~6.2 km from Pingrup – Lake Grace Road</i>
Nyabing Dam no.1	Neve Road <i>~6.2 km from Pingrup – Lake Grace Road</i>
Pingrup Town Site	Junction of Paterson Street and Pingrup – Lake Grace Road
Quartermaines	Nyabing Road South <i>~235 m from Manuel Road</i>
Rock Dam	Corner Rock Dam Road and Newdegate–Pingrup Road

Description of community water supplies

Chinocup Dam



Aerial view of Chinocup Dam



Location map



Chinocup Dam (2021)



Chinocup standpipe, Chinocup Road (Aug 2022)

Chinocup Dam site description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply including agricultural purposes, emergency stock and firefighting water
Associated reserve	18803
Catchment type	Earth
Catchment area (ha)	4.66 ha

Location and coordinates

Location: Chinocup Road ~4.5 km from Nyabing–Pingrup Road

Latitude	-33.548887090
Longitude	118.359802206
Eastings	626239.34
Northings	6287032.72

Water supply and access

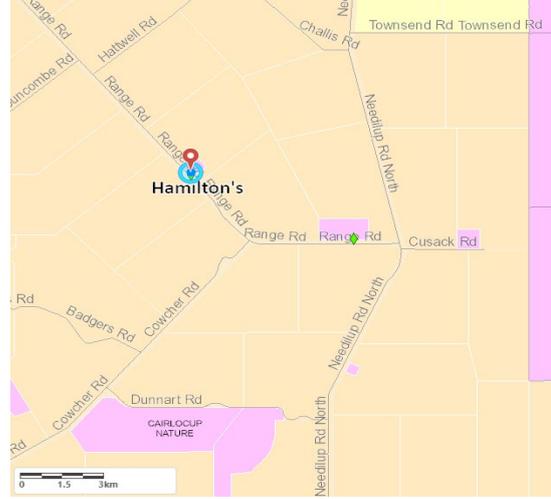
Structure type	Dam, tank and standpipe (see Appendix A)
Capacity	15,957 kL
Tank storage	50 kL
Standpipe Y/N	Yes
Pump available Y/N	No
Heavy vehicle access	Yes
Turnaround area	No
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Hamilton's



Aerial view of Hamilton's



Location map



Hamilton's Dam dry (June 2021)



Tanks, solar pump and windmill at Hamilton's (February 2020)



Tank (windmill not working)



Standpipe

Hamilton's site description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply including agricultural purposes, emergency stock and firefighting water
Associated reserve	28556
Catchment type	Earth
Catchment area (ha)	20.62 ha

Location and coordinates

Location: Range Road, Pingrup ~7.8 km north-west of Needilup Road North

Latitude	-33.626714054
Longitude	118.721198870
Eastings	659650.24
Northings	6277903.77

Water supply and access

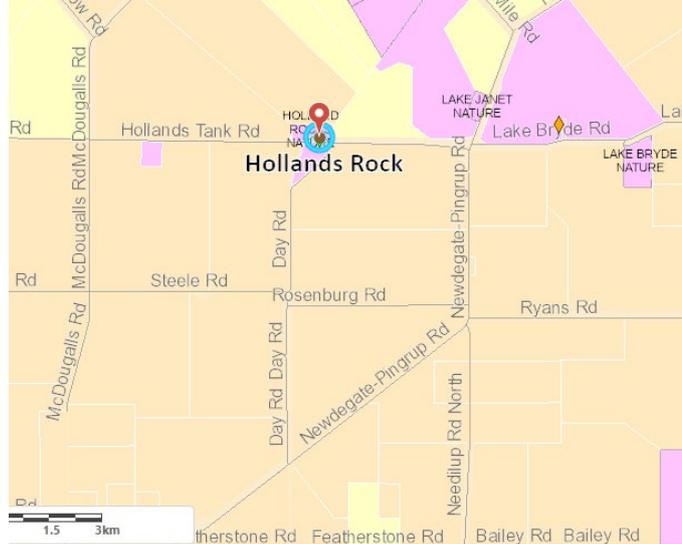
Structure type	Earth Dam, tank and pump (see Appendix A)
Dam capacity	7,882 kL
Tank storage	Yes, 250 kL (small tank is for fire purposes only)
Farm bot	Yes
Camlock sizes	80 mm (three inch), 100 mm (four inch) at tank
Standpipe Y/N	Yes, on small tank
Pump available Y/N	No, solar pump to tank
Heavy vehicle access	Yes
Turnaround area	Yes
Site notes	The small tank is filled by manually turning on the pump at the tank and is for fire emergency use only. A farmer has been assigned to this task. Please do not alter the pump settings
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Hollands Rock



Aerial view of Hollands Rock



Location map



Hollands Rock tank (November 2022)



Rock catchment (November 2022)



Camlocks



New signage



Standpipe

Hollands Rock site description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply including agricultural purposes, emergency stock and firefighting water
Associated reserve	15296
AA Dam #	439
Catchment type	Rock catchment
Catchment area (ha)	4 ha + natural bushland

Location and coordinates

Location: Hollands Tank Road ~400 m west of Day Road

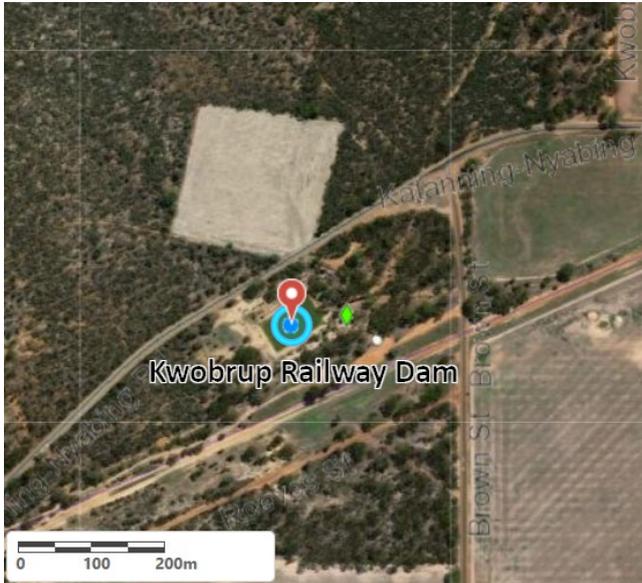
Latitude	-33.357897971
Longitude	118.748527818
Eastings	659650.24
Northings	6277903.77

Water supply and access

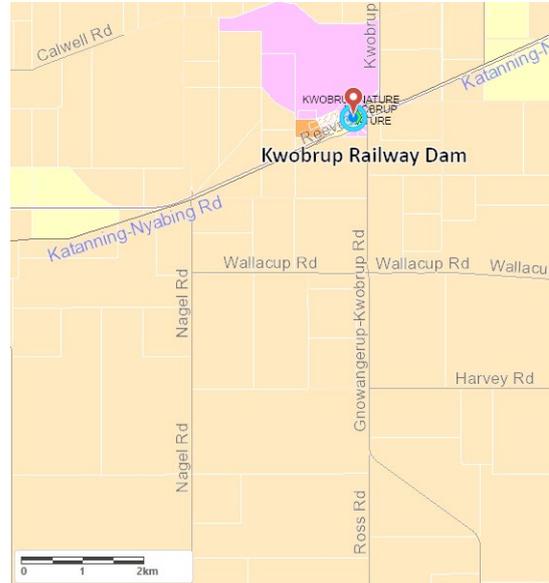
Structure type	Rock catchment and concrete tank
Tank storage	Yes 1,136 kL (tank has new liner, refer to new signage)
Farm bot	Yes
Camlock sizes	80 mm (three inch) and 100 mm (four inch) at tank
Standpipe Y/N	Yes, not at tank, on track to the north (used for fire purposes and small trucks)
Pump available Y/N	No
Heavy vehicle access	Yes, small vehicle access only
Turnaround area	Yes
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Kwobrup Railway Dam



Aerial image of Kwobrup Railway Dam



Location map



Kwobrup Railway Dam (August 2020)



Tank and swipe card system (March 2020)

Kwostrup Railway Dam site description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	14522
AA Dam #	211
Catchment type	Bitumen catchment
Catchment area (ha)	3.6 ha

Location and coordinates

Location: Brown Street off Katanning–Nyabing Road, west of Nyabing town

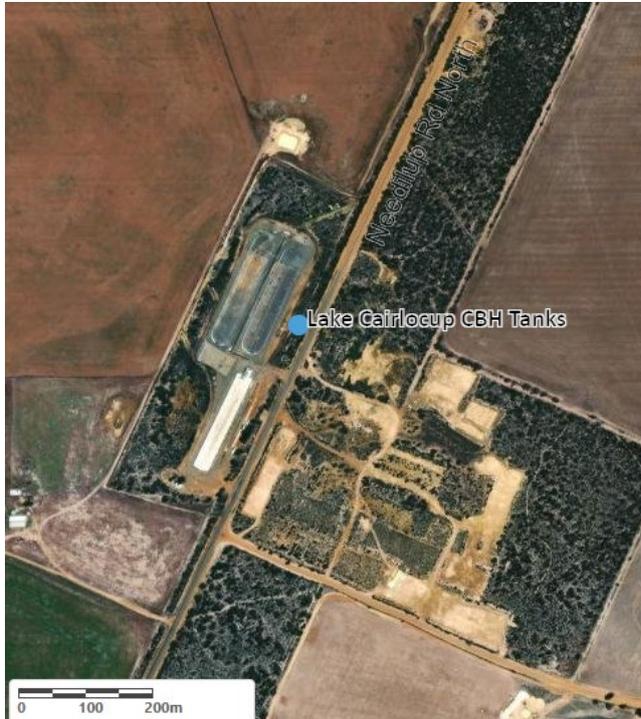
Latitude	-33.613425184
Longitude	117.979835286
Eastings	590895.22
Northings	6280275.04

Water supply and access

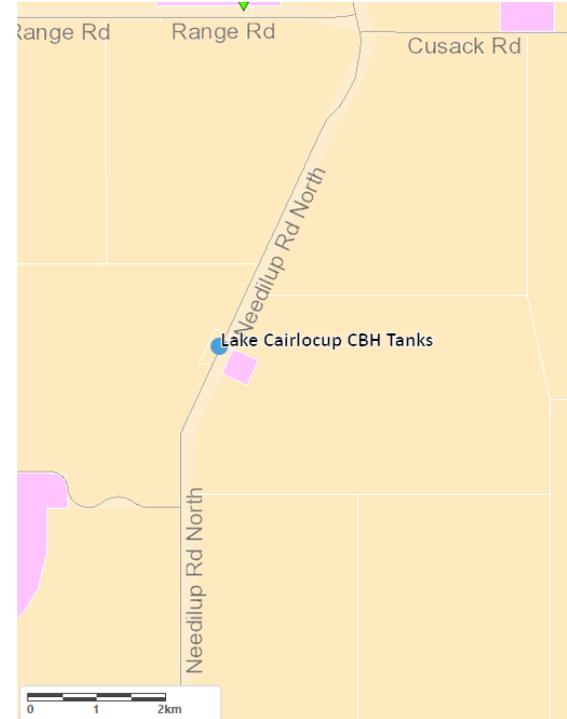
Structure type	Dam, tank
Dam capacity	18,200 kL
Tank storage	Yes 250 kL
Standpipe Y/N	Yes
Swipe card Y/N	Yes (please contact Shire for access)
Pump available Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Lake Cairlocup CBH



Aerial view of Lake Cairlocup



Location map



Tanks (2 x 375 kL) at Lake Cairlocup CBH

Lake Cairlocup CBH site description

Vesting	Shire of Kent
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Lot 1988 Crown allotment
Catchment type	CBH roof area
Catchment area (ha)	~0.4 ha

Location and coordinates

Location: Needilup Road North at CBH

Latitude	-33.69780
Longitude	118.78063
Eastings	665026.53867
Northings	6269926.90115

Water supply and access

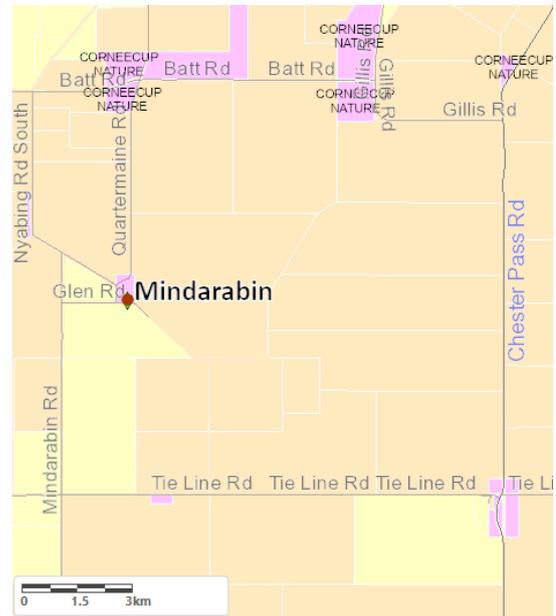
Structure type	Tanks
Tank storage	2 x 375 kL
Camlock coupling sizes	50 mm (2 inch), 80 mm (3 inch) and 100 mm (4 inch)
Standpipe Y/N	No
Swipe card Y/N	No
Pump available Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Mindarabin



Aerial view of Mindarabin Dam & catchment



Location map



Mindarabin Dam and catchment (July 2019)



Mindarabin Dam (February 2021)

Mindarabin site description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	16268
AA Dam #	229
Catchment type	Earth
Catchment area (ha)	5.3 ha

Location and coordinates

Location: Glen Road, off Mindarabin Road

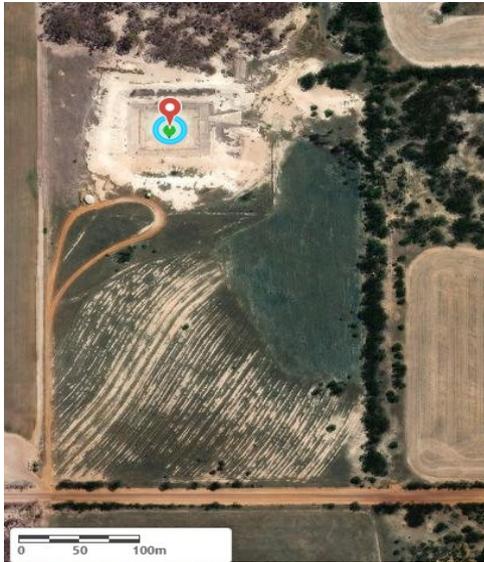
Latitude	-33.764520396
Longitude	118.252934301
Eastings	616027.63
Northings	6263247.88

Water supply and access

Structure type	Earth dam
Capacity	2,270 kL
Tank storage	No
Standpipe Y/N	No
Pump available Y/N	No (farmers to provide own pipe and pump)
Heavy vehicle access	Yes, note below
Turnaround area	Yes, tight turnaround (smaller trucks preferable)
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Neve Dam (North Pingrup)



Aerial view of Neve Dam



Location map



Neve Dam (November 2022)



Asbestos signage (see Appendix B for asbestos-contained cell locations)

Neve Dam (North Pingrup) site description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	22786
AA Dam #	228
Catchment type	Bitumen and earth
Catchment area (ha)	~6.1 ha

Location and coordinates

Location: Neve Road ~6.2 km from Pingrup – Lake Grace Road

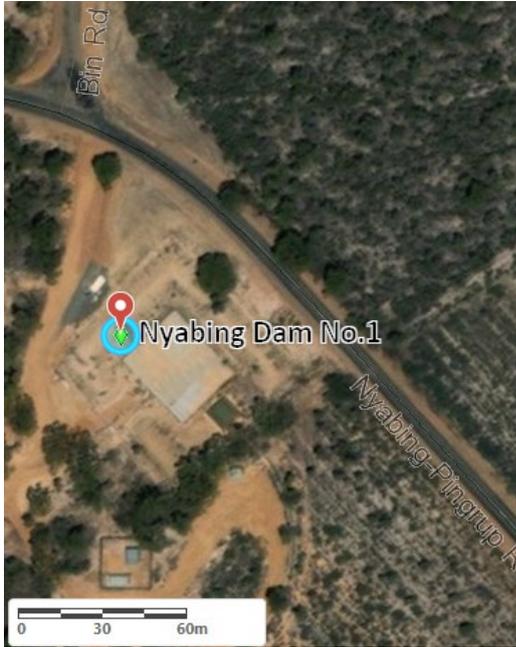
Latitude	-33.454408569
Longitude	118.580289170
Eastings	646870.02
Northings	6297218.70

Water supply and access

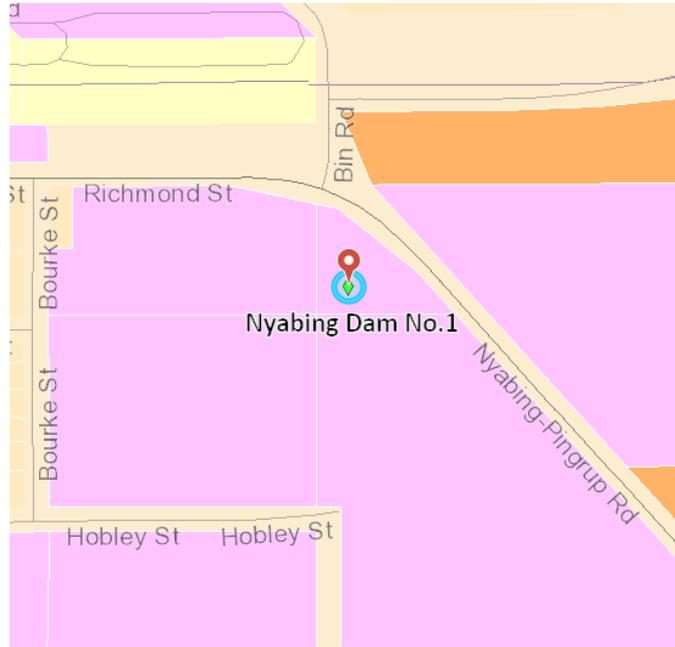
Structure type	Concrete dam
Dam capacity	9,100 kL
Tank storage	See supply comment below
Standpipe Y/N	Yes
Pump available Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Supply comments	<p>Catchment asbestos on site has been remediated. Please limit access to turnaround and fill point area only and observe asbestos signs. A site management plan is in place. See Aurora site aerial of contained asbestos cells (see Appendix B)</p> <p>Plans are in place to upgrade catchment and install a solar pump and access tank. Also note a scheme water tank can be accessed on site. Users to record volumes taken in the logbook</p>
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Nyabing Dam no.1



Nyabing Dam (August 2020)



Location map



Nyabing Dam (August 2020)

Nyabing Dam no.1 site description

Vesting	Water Corporation/Shire agreement for standpipe access
Purpose	Strategic community water supply including agricultural purposes, emergency stock and firefighting water
Associated reserve	22786
Catchment type	Bitumen and earth
Catchment area (ha)	~6.1 ha

Location and coordinates

Location: Neve Road ~6.2 km from Pingrup – Lake Grace Road

Latitude	-33.454408569
Longitude	118.1541
Eastings	607147.37561
Northings	6288033.67214

Water supply and access

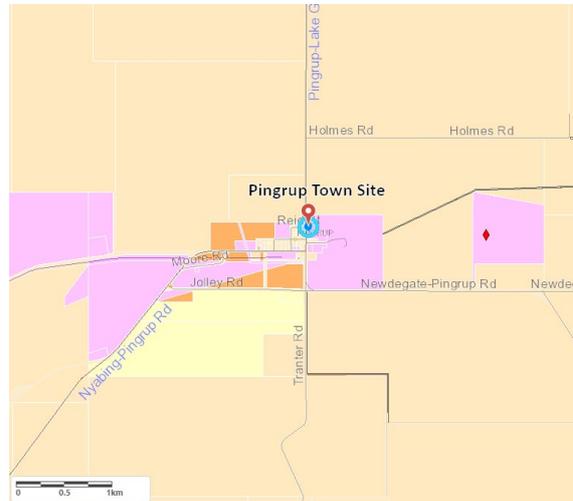
Structure type	Earth dam
Dam capacity	25,000 kL
Tank storage	No
Standpipe Y/N	Yes
Swipe card	Yes
Pump available Y/N	No
Heavy vehicle access	Yes
Turnaround area	Yes
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Pingrup Town Site



Aerial view of Pingrup Town Site



Location map



Pingrup Town Dam



Holding tank (250 kL, town site)



Standpipe and swipe card system (February 2020)

Pingrup Town Site description

Vesting	Shire of Kent
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	Dam reserve 34518, tank and standpipe reserve 3273
AA Dam #	391
Catchment type	Bitumen
Catchment area (ha)	~17.8 ha

Location and coordinates

Location: Junction of Paterson Street and Pingrup – Lake Grace Road

Latitude	-33.5321
Longitude	118.5137
Eastings	640555.10
Northings	6288696.10

Water supply and access

Structure type	Dam, tank and standpipe
Dam capacity	37,000 kL
Tank storage	2 x purple tanks 90 kL, steel tank 250 kL
Standpipe Y/N	Yes
Pump available Y/N	No
Swipe card system	Yes (please contact Shire for access)
Heavy vehicle access	Yes
Turnaround area	Yes
Supply comments	Dam ~3.8 km from tank site, water pumped into holding tank at town site
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Quartermaines



Aerial view of Quartermaines



Location map



Quartermaines Dam (2020)

Quartermaines site description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	16387
AA Dam #	212
Catchment type	Earth
Catchment area (ha)	3.7 ha

Location and coordinates

Location: Nyabing Road South ~235 m from Manuel Road

Latitude	-33.629689188
Longitude	118.172151125
Eastings	608716.02
Northings	6278286.18

Water supply and access

Structure type	Dam
Capacity	2,720 kL
Tank storage	No
Standpipe Y/N	No
Pump available Y/N	No
Heavy vehicle access	No
Turnaround area	Small turnaround area
Emergency access contacts	Manager Infrastructure 0429 993 987

Description of community water supplies

Rock Dam



Aerial view of Rock Dam



Location map



Rock Dam (November 2022)

Rock Dam site description

Vesting	Department of Water and Environmental Regulation
Purpose	Strategic community water supply for agricultural purposes, including emergency stock and firefighting water
Associated reserve	16374
Catchment type	Earth
Catchment area (ha)	~2.7 ha

Location and coordinates

Location: Corner Rock Dam Road and Newdegate–Pingrup Road

Latitude	-33.509657644
Longitude	118.617069223
Eastings	650193.25
Northings	6291039.75

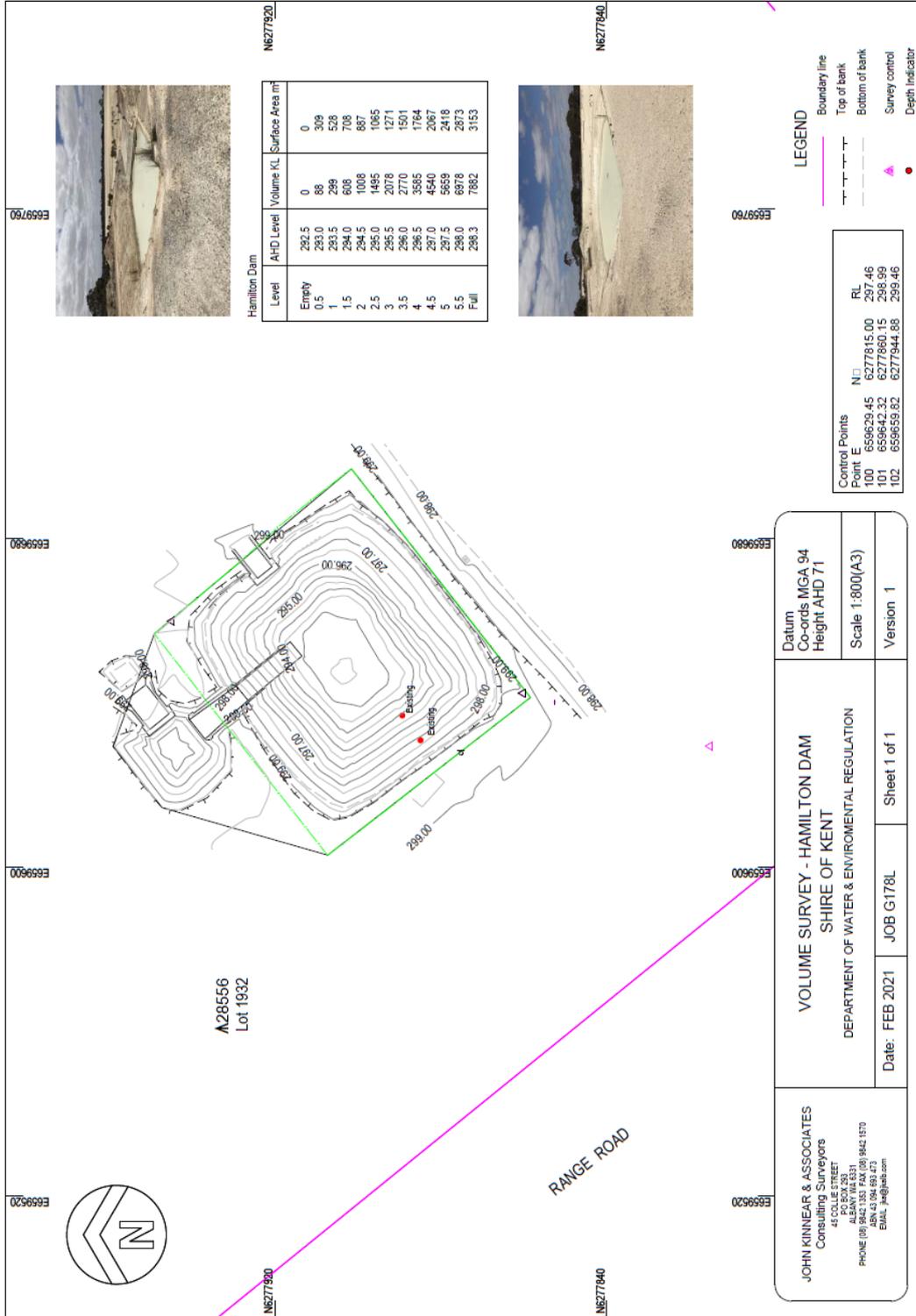
Water supply and access

Structure type	Dam
Dam capacity	10,000 kL
Tank storage	No
Standpipe Y/N	No
Pump available Y/N	No
Heavy vehicle access	No
Turnaround area	Small turnaround area (plans in place to upgrade catchment and dam)
Emergency access contacts	Manager Infrastructure 0429 993 987

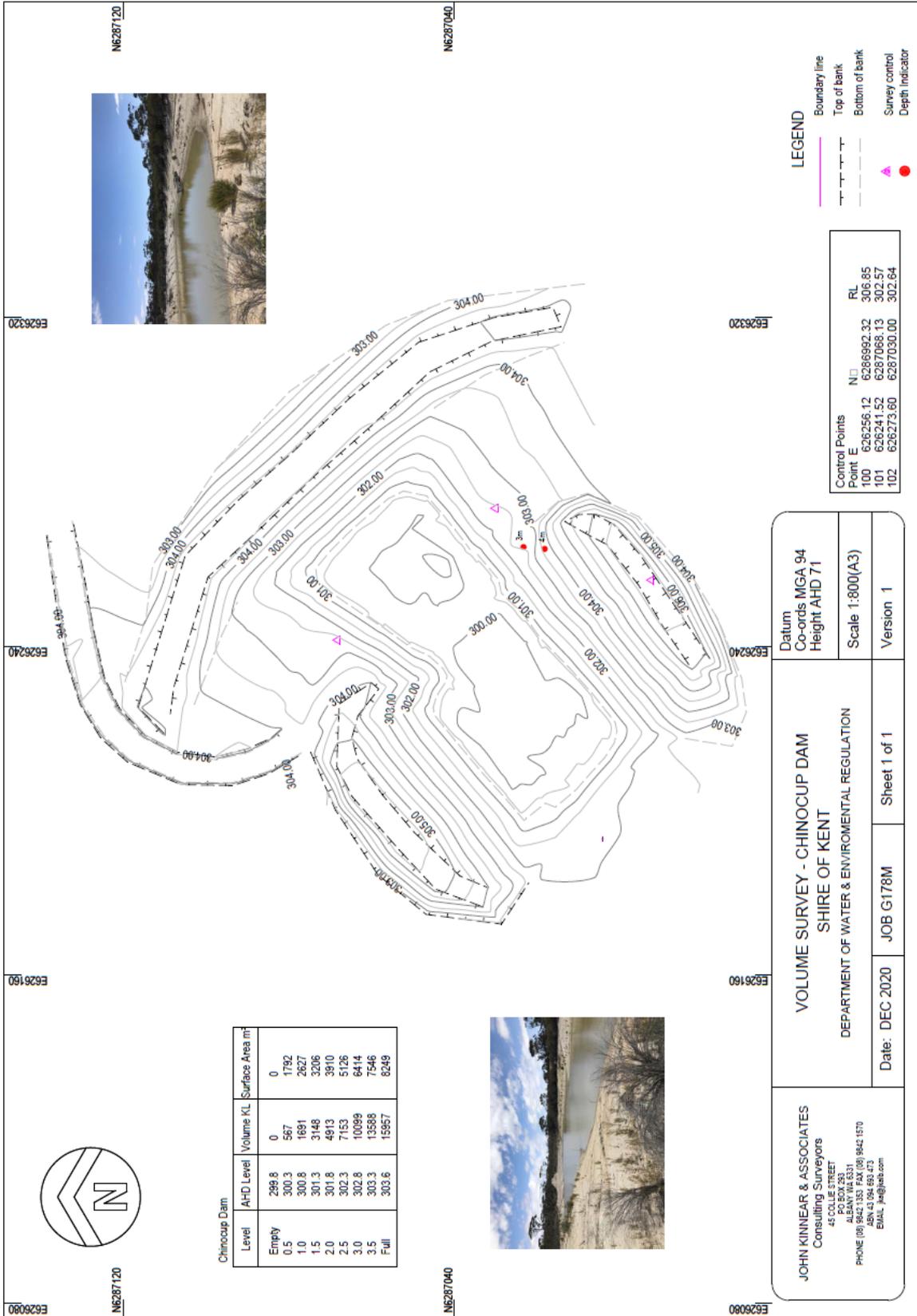
Appendices

Appendix A Dam surveys

Hamilton's Dam survey



Chinocup Dam survey



Appendix B Neve Dam asbestos site plan

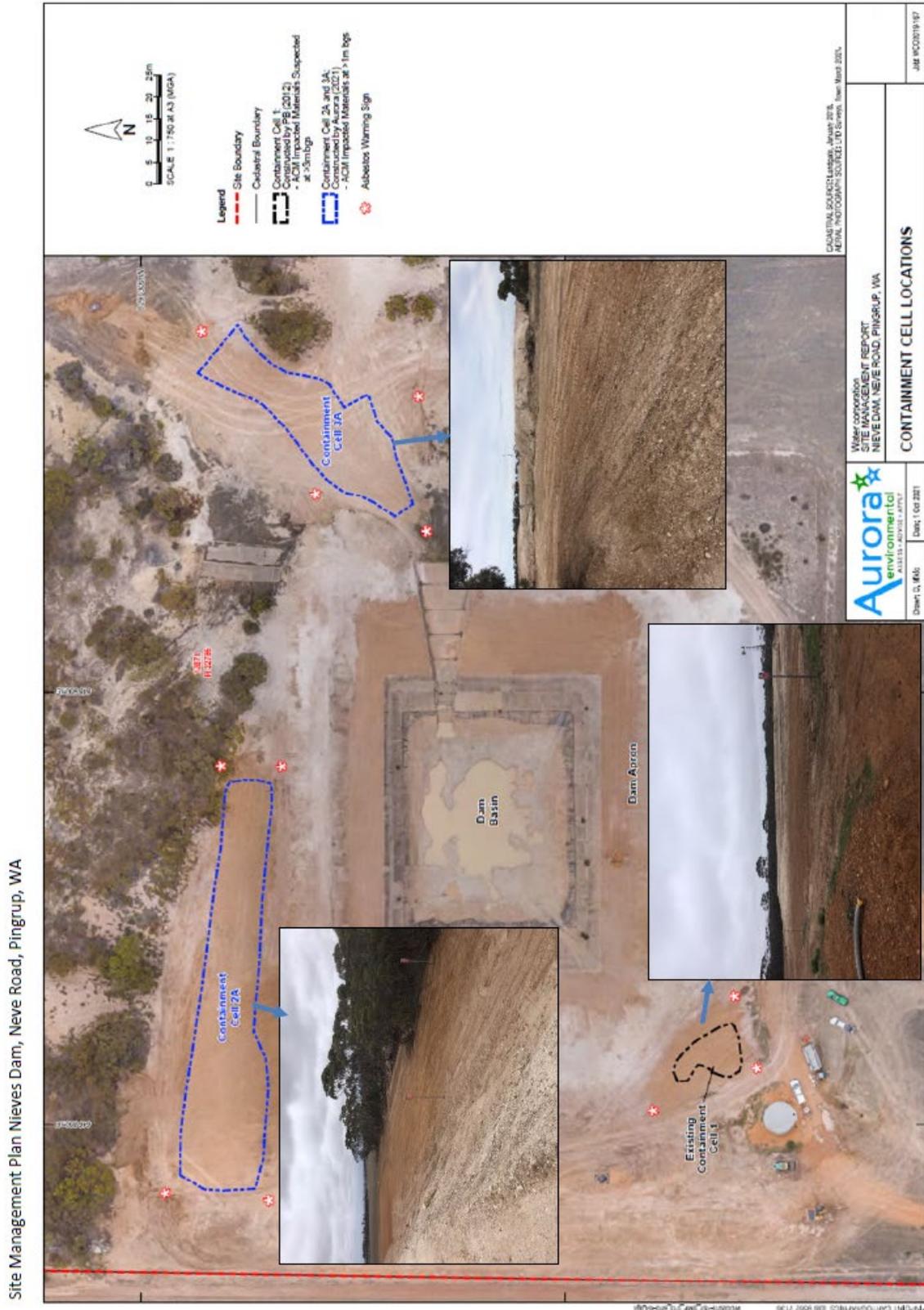


Figure B: Locations and Photographs of each asbestos containment Cell (Cell 1, 2A and 3A) onsite.

Glossary

Camlock	A male hose coupling fixed for connection of a water hose. Camlocks can be attached to fill points such as tanks, or standpipes to allow access to water supply. Camlock sizes vary from site to site and generally include 50 mm (2 inch) and 80 mm (3 inch) as a standard. At some sites, a 100 mm (4 inch) camlock has been included for firefighting purposes.
Catchment types	<p>Earth – land cleared, cambered and compacted to provide a catchment area for surface water.</p> <p>Bitumen – catchment lined with bitumen to allow capture of surface water.</p> <p>Rock catchment – rock that slopes, has containment walls to capture surface water to a storage source (e.g. a tank or a concrete dam).</p> <p>Bore – a drilled casing that accesses groundwater to provide a water supply.</p> <p>CBH – water is captured from CBH grain silo storage facility and stored in a dam or tank.</p>
Fill point	Location where a water supply can be accessed from using camlock fittings either via standpipe, swipe card system, tank or bore.
Farm bot	A device fitted to some tanks to regularly record the water level and feed this information into a website. You can access this website at app.farmbot.com.au (Login ID: public.access Password: access1) to see water tank levels for tanks fitted with farm bots.
Non-potable	Water not suitable for human consumption.
Solar pump	A pump powered via solar energy that pumps water from one location to another (e.g. from dam to dam or from dam to tank).
Staff gauges	A marker measuring tool positioned at surveyed depths in a dam to indicate water levels.
Standpipe	A pipe overhead, on a plinth or raised off the ground to provide a fill point for water supply.
Swipe card	A metered fill point requiring a card to be swiped to start pumping system. Contact the LGA for further information.
Vesting	Person or governing agency with responsibility for managing land.

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