

# Reservoir Critical Maintenance Priorities Report



27/06/2023

**Date:** 11/05/2013      **Client Name:** All State City Council  
**WS #:** 0      **Reservoir Name:** High St No1  
**Asset No:** 0      **Location:** RHS off High Street  
**Job No:** 024897      **Project Number:** 0  
**Cleaning Due:** 11/5/2012      **Inspection Due:** 11/5/2014

## External

Area	Priority	Status	Comments
Ladder External	2	F	The external ladder is to be climbed by experienced personnel only
Entry Hatch	1	A	The entry hatch is not sealed against contamination around the edges
Roof Platforms	1	A	The platform area is not sealed against contamination - there are a significant amount of leaves inside the tank
Roof Hatches	1	A	The roof hatch is not secure against unauthorized access and there are a significant amount of leaves entering the tank
Handrails	2	A	An improved guard rail system is required to upgrade personnel safety around the platform area

## Internal

Area	Priority	Status	Comments
Overflow	2	A	The overflow riser is heavily corroded
Ladder Internal	1	A	The ladder is heavily corroded and should be replaced with a Nextep vertical FRP system 6800mm long when the platform is renovated

## Comments

### External Comment:

The entry hatch and platform areas are not sealed against contamination - there are a significant amount of leaves inside the tank.

### Internal Comment:

The ladder is heavily corroded and should be replaced with a Nextep vertical FRP system 6800mm long when the platform is renovated - this ladder length has allowed for a platform renovation higher than the existing entry hatch level.

*Priority 0 Item requires immediate attention.*

*Priority 1 Item is in poor condition or otherwise non functional.*

*Priority 2 Item is to receive precedence during maintenance*

*Priority 3 Item is functional but deteriorated/ not in operational order.*

*Priority 4 Item is in good condition.*

*Status A = Attention Required*

*Status F = Item to be Reassessed*

*Status D = Item to be Deferred until next Inspection*

# Reservoir Critical Maintenance Priorities Report



27/06/2023

**Date:** 23/05/2011      **Client Name:** All State City Council  
**WS #:** 0      **Reservoir Name:** High St No2  
**Asset No:** 0      **Location:** off High Street  
**Job No:** 024913      **Project Number:** 0  
**Cleaning Due:** 23/5/2013      **Inspection Due:** 23/5/2013

## External

Area	Priority	Status	Comments
Roof Platforms	2	A	The kick plates are sealed and allowing debris and water ponding to occur - large drainage holes need to be cut into the base areas

## Internal

Area	Priority	Status	Comments
Floor	1	A	Corrosion nodules are forming over most of the floor - Cathodic protection will help prolong the coating life if it is installed promptly
Inlet	2	A	The inlet needs a flange and diversion nozzle fitted during re-coating to direct the water flow upwards and away from the floor area

## Comments

### External Comment:

The kick plates are sealed and allowing debris and water ponding to occur - large drainage holes need to be cut into the base areas.

### Internal Comment:

Corrosion nodules are forming over most of the floor - Cathodic protection will help prolong the coating life if it is installed promptly. The 1993 PWD coating report stated - minor pitting on the floor, and this problem has developed significantly over the last 15 years.

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# Reservoir Critical Maintenance Priorities Report



27/06/2023

<b>Date:</b>	14/06/2011	<b>Client Name:</b>	All State City Council
<b>WS #:</b>	01	<b>Reservoir Name:</b>	Reservoir Hill No1
<b>Asset No:</b>	0	<b>Location:</b>	off Reservoir Hill Lane
<b>Job No:</b>	024937	<b>Project Number:</b>	0
<b>Cleaning Due:</b>	14/6/2015	<b>Inspection Due:</b>	14/6/2015

## External

Area	Priority	Status	Comments
Walls	2	F	There is a high carbonation factor of 76%, due to shallow steel covering
Ladder External	2	F	The vertical external ladder has no effective security system fitted and it should only be climbed by experienced personnel
Entry Hatch	2	A	The hatch cover is not effectively sealed onto the surrounding frame area and contamination can enter the tank
Roof Platforms	2	A	There is no solid area present on the roof to set up a rescue system
Roof	1	A	The asbestos roof is unsafe to walk on and the centre gutter is unsealed and draining back into the tank
Handrails	2	A	An improved guard rail system is required to upgrade personnel safety around the platform area
Ventilation	1	A	Most of the 12 side wall vents are open, as the mesh has corroded away
Bird Proofing	1	A	The defective side wall vents will allow small birds to enter the tank

## Internal

Area	Priority	Status	Comments
Roof Framing	2	F	There is corrosion present in the galvanized Z purlins, where moisture is collecting in the channel areas
Inlet	2	F	The inlet elbow is heavily corroded - the pipework runs across the floor on piers
Outlet	2	A	Sediments can enter the pipework because the outlet penetration is level with the floor - a riser section is required
Overflow	2	A	The overflow base and riser sections are heavily corroded

## Comments

### External Comment:

The entry hatch cover is not effectively sealed onto the surrounding frame area and contamination can enter the tank . The asbestos roof is unsafe to walk on and the centre gutter is unsealed and draining back into the tank. Most of the 12 side wall vents are open, as the mesh has corroded away, allowing small birds to enter the tank.

### Internal Comment:

There is corrosion present in the galvanized Z purlins, where moisture is collecting in the channel areas. Sediments can enter the pipework because the outlet penetration is level with the floor - a riser section is required.

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*Inspection*

# Reservoir Critical Maintenance Priorities Report



27/06/2023

**Date:** 17/06/2011      **Client Name:** All State City Council  
**WS #:** 0      **Reservoir Name:** Reservoir Hill No2  
**Asset No:** MA 01      **Location:** off Reservoir Hill Rd  
**Job No:** 024944      **Project Number:** 0  
**Cleaning Due:** 21/9/2008      **Inspection Due:** 17/6/2015

## External

Area	Priority	Status	Comments
Compound	2	F	There is a compound around the external ladder, but it will not keep out determined persons - there has been dumping activity around the site so regular checks are required
Walls	2	A	There is concrete spalling under three of the rafter connection areas - a more detailed structural inspection should be carried out and repairs made as necessary
Entry Hatch	1	A	The hatch cover is sealed but the roof is draining in under the hatch frame area, where the roof sheets join the platform
Roof Platforms	1	A	There is an open area under the platform where it sits on top of the wall - this needs to be sealed off ASAP to stop possums from entering the tank
Roof	1	A	Water is ponding and draining back into the tank, where the roof joins the entry hatch frame - a gutter flashing needs to be fitted to drain the water away
Bird Proofing	0	A	Possums have been entering this tank on a frequent basis - the area under the platform, where it sits on top of the wall has been identified and needs to be sealed off ASAP

## Internal

Area	Priority	Status	Comments
Walls	2	A	Three areas of external spalling were noted where the rafters sit on top of the wall - the internal walls need to be checked in more detail for similar issues
Overflow	2	A	The overflow riser is heavily corroded
Ladder Internal	2	A	The ladder, cage and platform areas have significant corrosion present and should be replaced with a Nextep vertical FRP system 9400mm long

## Comments

### External Comment:

There is concrete spalling under three of the rafter connection areas - the carbonation factor of 35% is significant for the age of the tank. Water is ponding and draining back into the tank, where the roof joins the entry hatch frame - a gutter flashing needs to be fitted to drain the water away. Possums have been entering this tank on a frequent basis - the area under the platform, where it sits on top of the wall has been identified.

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**Internal Comment:**

Three areas of external spalling were noted where the rafters sit on top of the wall - the internal walls need to be checked in more detail for similar issues. The ladders, cages and platform have significant corrosion present and should be replaced with a Nextep vertical FRP system 9400mm long - this will improve safety and water quality.

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# Reservoir Critical Maintenance Priorities Report



27/06/2023

**Date:** 7/07/2011 **Client Name:** All State City Council  
**WS #:** 0 **Reservoir Name:** Reservoir Hill No3  
**Asset No:** 0 **Location:** off Reservoir Hill Lane  
**Job No:** 024961 **Project Number:** 0  
**Cleaning Due:** 7/7/2012 **Inspection Due:** 7/7/2012

## External

Area	Priority	Status	Comments
Walls	2	F	There are several weeping areas on the upper wall joint - these could be crack injected with good results
Entry Hatch	1	A	A raised edge and fitted cover are required to efficiently seal the tank against natural or deliberate contamination
Roof Platforms	1	A	The platform area is not sealed - leaf debris and other natural contaminants are entering the tank
Roof	2	F	The gutter adjacent to the platform area is blocked with leaves and there is a tree overhanging the roof @ 4 oclock

## Internal

Area	Priority	Status	Comments
Ladder Internal	2	A	The ladders and platform are heavily corroded - they are being replaced with a Nextep vertical FRP system 7800mm long

## Comments

### External Comment:

A raised edge and fitted cover are required to efficiently seal the tank against natural or deliberate contamination . The platform area is also not sealed - leaf debris and other natural contaminants are entering the tank.

### Internal Comment:

The ladders and platform are heavily corroded - they are being replaced with a Nextep vertical FRP system 7800mm long.

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# Reservoir Critical Maintenance Priorities Report



27/06/2023

<b>Date:</b>	12/08/2014	<b>Client Name:</b>	All State City Council
<b>WS #:</b>	0	<b>Reservoir Name:</b>	Reservoir Hill No4
<b>Asset No:</b>	0	<b>Location:</b>	Lot 100 Reservoir Hill Rd,
<b>Job No:</b>	026079	<b>Project Number:</b>	0
<b>Cleaning Due:</b>	12/8/2022	<b>Inspection Due:</b>	12/8/2018

## External

Area	Priority	Status	Comments
Entry Hatch	2	A	The hatch cover is not sealed where the ladder stiles pass through

## Internal

Area	Priority	Status	Comments
Columns	2	A	The aluminium posts are heavily corroded with deep pitting
Roof Framing	2	A	The water level may be set too high - the major roof beams are showing signs of semi submersion on a regular basis
Ladder Internal	1	A	The light weight aluminium ladder is heavily corroded and not safe to use

## Comments

### External Comment:

The entry hatch cover needs to be modified to seal against contamination - the internal ladder stiles need to be removed where they pass through the cover.

### Internal Comment:

The light weight aluminium ladder is heavily corroded and not safe to use - it needs replacing with a Nextep vertical FRP ladder 6600mm long. The posts will also deteriorate over time and will effect water quality due to the heavy aluminium corrosion present.

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