Orifice Pit Design - Alternative 1
Design of Outlet System

Storage is located in a below-ground pipe.

Head = 0.91 m

PSD = 18.00 l/s

$H_{p \, (inlet)}$ = 0.91 m

Orifice Diameter = 95 mm   Pipe Area = 0.0071 m^2 Q_{max} = 18.00 L/s

$2g$ = 19.62 ms^{-2}

Q_{outlet} = 0.0071 x 0.6 x $\sqrt{19.62 \times 0.91}$ (Orifice Flow)

= 17.97 L/s   <   18.00

```
Adopt a 95mm Diameter Orifice
Use Orifice Pit for Retention
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SVC Multi-Cell Design - Alternative 2

From SVC Multi-Cell Charts - MC2-A17 provides:

$H_{p \, (inlet)}$ = 0.91 m

Q_{max} = 18.00 L/s

$Q_{multi-cell}$ = 17.60 L/s   <   18.00

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Adopt a MC2-A17 SVC Multi-cell
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Asset Volume

Description	Volume	
PIPE FROM PIT 1 TO 2 =	6.78	m^3
PIT 1 =	0.95	m^3
PIT 2 =	0.81	m^3
WATERTANK =	5.68	m^3
WATERTANK =	5.00	m^3
Total:	19.21	m^3 > 19.00