

HYDRAULIC REPORT SUMMARY

		Existing Structure	Recommended Structure
		Steel Pipe Arch	Invert Lining Rehabilitation
Total Area of Waterway Opening	ft ²	54	47
Headwater elevation for August	ft	396.1	396.1
Headwater elevation for April	ft	396.6	396.8
Headwater elevation @ Q _{1.1}	ft	397.6	397.9
Headwater elevation @ Q ₁₀	ft	399.5	400.1
Headwater elevation @ Q ₂₅	ft	400.2	400.8
Headwater elevation @ Q ₅₀	ft	400.5	401.2
Headwater elevation @ Q ₁₀₀	ft	401.1	401.7
Headwater elevation @ Q ₅₀₀	ft	402.2	402.9
Hw/D @ Q ₅₀	ft	0.74	0.82
Hw/D @ Q ₁₀₀	ft	0.81	0.91
Outlet velocity @ Q _{1.1}	ft/s	2.9	5.5
Outlet velocity @ Q ₁₀	ft/s	6.3	8.0
Outlet velocity @ Q ₂₅	ft/s	7.6	8.7
Outlet velocity @ Q ₅₀	ft/s	8.4	9.1
Outlet velocity @ Q ₁₀₀	ft/s	9.4	9.7
Outlet velocity @ Q ₅₀₀	ft/s	10.7	10.8

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Note: All elevations based on North American Vertical Datum (NAVD) of 1988.