



CULVERT ANALYSIS

PID : 122339 **Date :** 11/25/2024 **Project :** ATB/TRU-CULVERTS-FY26 **Location :** ATB-45-17.196

Description : Ex. 42" CMP Analysis

Designer : MEP

HEADWATER CONTROL CODES: INLET - Inlet Control.
OUTLET - Outlet Control.
OUTLET* - Outlet Control with backwater curve used to compute headwater. See Figure III - 7E in HDS 5 for type flow.
OUTLET** - Outlet Control - See Figure III - 7D in HDS 5 for type flow.
N/A - Flow is supercritical with low headwater and low tailwater. Control Section is at the inlet.

Pipe Number : 1 **Use HW :** 0 **Inlet Invert Elevation (ft.) :** 783.89 **Outlet Invert Elevation (ft.) :** 780.02
Pipe Quantity : 1
Culvert Type : Circular Corrugated **Pipe Length (ft.) :** 152.00 **Culvert Slope (ft./ft.) :** 0.0255
Corrugation Type : Corrugated Metal Pipe (2 2/3 x 1/2 in. corrugations)
Pipe Size : 42 in.
Design Manning 'n' : 0.0237
Entrance Type : Half Headwall **Loss Coef. Ke :** 0.9000

	FLOW (cfs.)	HEAD LOSS (ft.)	HWI (ft.)	HWO (ft.)	FLOW TYPE	VELOCITY (fps.)	DN (ft.)	DC (ft.)	MANNING N	HEADWATER CONTROL	BURIED DEPTH (ft.)	TAILWATER ELEVATION (ft.)
	42.00	4.18	786.96	N/A	1 - C	9.04	1.70	2.02	0.0237	INLET	0.00	781.12
	44.00	4.25	787.06	N/A	1 - C	9.15	1.75	2.07	0.0237	INLET	0.00	781.12
	46.00	4.33	787.16	N/A	1 - C	9.26	1.80	2.12	0.0237	INLET	0.00	781.12
	48.00	4.41	787.26	N/A	1 - C	9.35	1.84	2.16	0.0237	INLET	0.00	781.12
	50.00	4.50	787.37	N/A	1 - C	9.44	1.89	2.21	0.0237	INLET	0.00	781.12
	52.00	4.59	787.49	N/A	1 - C	9.53	1.94	2.26	0.0237	INLET	0.00	781.12
	54.00	4.68	787.60	N/A	1 - C	9.61	1.98	2.30	0.0237	INLET	0.00	781.12
	56.00	4.78	787.72	N/A	1 - C	9.69	2.03	2.34	0.0237	INLET	0.00	781.12



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58.00	4.88	787.85	N/A	1 - C	9.77	2.07	2.38	0.0237	INLET	0.00	781.12
60.00	4.99	787.98	N/A	1 - C	9.84	2.12	2.43	0.0237	INLET	0.00	781.12