

PA Addendums to Engr Field Handbook Folder
EFH p 8-102, Exh 8-5, Orifice Discharge

8-102

Riser Size		Orifice Diameter		Head - (feet) ↓										
Above Orifice	Below Orifice	Inches	Sq.Ft.	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
6" C.M. Pipe	4" Sewer Pipe	1.00	.006	.027	.033	.038	.042	.046	.050	.053	.056	.059	.062	.065
		1.25	.009	.042	.051	.059	.066	.072	.078	.083	.088	.093	.097	.102
		1.50	.012	.059	.073	.084	.094	.103	.111	.119	.126	.133	.139	.146
		1.75	.017	.081	.099	.114	.128	.140	.151	.162	.172	.181	.190	.198
		2.00	.022	.105	.129	.149	.166	.182	.197	.210	.223	.235	.247	.258
		2.25	.028	.133	.163	.188	.210	.231	.249	.266	.282	.298	.312	.326
		2.50	.034	.164	.201	.232	.259	.284	.307	.328	.348	.367	.385	.402
		2.75	.041	.199	.243	.281	.314	.344	.371	.397	.421	.444	.466	.486
		3.00	.049	.236	.289	.333	.373	.408	.441	.472	.500	.527	.553	.578
		3.25	.058	.277	.339	.391	.438	.479	.518	.554	.587	.619	.649	.678
		3.50	.067	.321	.393	.454	.508	.556	.600	.642	.681	.718	.753	.786
8" C.M. Pipe	6" Sewer Pipe	3.75	.077	.369	.451	.521	.583	.638	.689	.737	.782	.824	.864	.903
		4.00	.087	.419	.513	.592	.662	.725	.783	.837	.888	.936	.982	1.03
		4.25	.099	.473	.579	.668	.747	.818	.884	.945	1.00	1.06	1.11	1.16
		4.50	.110	.530	.649	.749	.838	.917	.991	1.06	1.12	1.18	1.24	1.30
		4.75	.123	.590	.723	.835	.933	1.02	1.10	1.18	1.25	1.32	1.38	1.45
		5.00	.136	.654	.801	.925	1.03	1.13	1.22	1.31	1.39	1.46	1.53	1.60
		5.25	.150	.721	.883	1.02	1.14	1.24	1.35	1.44	1.53	1.61	1.69	1.77
		5.50	.165	.790	.968	1.12	1.25	1.37	1.48	1.58	1.68	1.77	1.85	1.94
10" C.M. Pipe	8" Sewer Pipe	5.75	.180	.863	1.06	1.22	1.37	1.50	1.62	1.72	1.83	1.93	2.02	2.11
		6.00	.196	.940	1.15	1.33	1.49	1.63	1.76	1.88	1.99	2.10	2.20	2.30

Exhibit 8-5 Discharge rates of circular orifice in c.f.s.