Table 3.6 Hydraulic Properties of Circular Sections for manning's Formula.

Constant (n)			Variable (n)		
d/D	v/V	q/Q	n_o/n	v/V	q/Q
1.0	1.000	1.000	1.00	1.000	1.000
0.9	1.124	1.066	1.07	1.056	1.020
0.8	1.140	0.968	1.14	1.003	0.890
0.7	1.120	0.838	1.18	0.952	0.712
0.6	1.072	0.671	1.21	0.890	0.557
0.5	1.000	0.500	1.24	0.810	0.405
0.4	0.902	0.337	1.27	0.713	0.266
0.3	0.776	0.196	1.28	0.605	0.153
0.2	0.615	0.088	1.27	0.486	0.070
0.1	0.401	0.021	1.22	0.329	0.017

Where,

D = Full Depth of Flow (Internal dia)

V = Velocity at full depth

N = Manning's coefficient at full depth

Q = Discharge at full depth

d = Actual Depth of Flow

v = Velocity at depth 'd'

n_o = Manning's coefficient at depth 'd'

q = Discharge at depth 'd'