

CHAPTER 3

STORM DRAINAGE SYSTEMS

3.2 Symbols And Definitions

To provide consistency with this chapter as well as throughout this manual the following symbols presented in Table 3.2-1 will be used. These symbols were selected because of their wide use in storm drainage publications. In some cases the same symbol is used in existing publications for more than one definition. Where this occurs in this chapter, the symbol will be defined where it occurs in the text or equations.

**Table 3.2-1
Symbols and Definitions**

<u>Symbol</u>	<u>Definition</u>	<u>Units</u>
a	Gutter depression	in
A	Area of cross section	ft ²
d or D	Depth of gutter flow at the curb line	ft
D	Diameter of pipe	ft
E _o	Ratio of frontal flow to total gutter flow Q _w /Q	--
g	Acceleration due to gravity (32.2 ft/s ²)	ft/s ²
h	Height of curb opening inlet	ft
H	Head loss	ft
K	Loss coefficient	--
L or L _T	Length of curb opening inlet	ft
L	Pipe length	ft
n	Roughness coefficient in the modified Manning formula for triangular gutter flow	--
P	Perimeter of grate opening, neglecting bars and side against curb	ft
Q	Rate of discharge in gutter	cfs
Q _i	Intercepted flow	cfs
Q _s	Gutter capacity above the depressed section	cfs
S or S _x	Cross Slope – Traverse slope	ft/ft
S or S _L	Longitudinal slope of pavement	ft/ft
S _f	Friction slope	ft/ft
S' _w	Depression section slope	ft/ft
T	Top width of water surface (spread on pavement)	ft
T _s	Spread above depressed section	ft
V	Velocity of flow	ft/s
W	Width of depression for curb opening inlets	ft
Z	T/d, reciprocal of the cross slope	--

END OF SECTION 3.2