Project: _____   By: _____   Date: _____

A7 RATIONAL METHOD PIPE DESIGN FOR INLET CONTROL

Type of Channel _____ x _____   Type of Channel _____ x _____   Type of Channel _____ x _____

Elevation 1 _____	Elevation 1 _____	Elevation 1 _____
Elevation 2 _____	Elevation 2 _____	Elevation 2 _____
ΔY _____ ft	ΔY _____ ft	ΔY _____ ft
L _____ ft	L _____ ft	L _____ ft

TIME OF CONCENTRATION

Tc = _____ x _____ min.   Tc = _____ x _____ min.   Tc = _____ x _____ min.

= _____ min.   = _____ min.   = _____ min.

Tc total = _____ min.

DETERMINATION OF "C" VALUE

Type of Land Use : _____

Range = _____   Choose C = _____

Reason for C : _____

_____

_____

RAINFALL INTENSITY

Tc total = _____ min.   Return Period _____ years

Rainfall Intensity, I = _____ in/hr

DRAINAGE AREA

Area = _____ sq. ft. / 43,560

Drainage Area = _____ acres

DISCHARGE CALCULATION

Q = _____ X _____ X _____

      C   I (in/hr)   A (acres)

Q = _____ cfs

PIPE SIZE AND HEADWATER

For RCP & HDPE use : n = 0.012   HW/D = _____ (scaling factor)

n = _____ s = _____ %   HW = _____ X _____ / 12 in

Q = _____ cfs   (HW/D)   Diameter

Diameter = _____ *in.*

Velocity = _____ *ft/s*   *HW* = _____ *ft*