8" DIAMETER STORM PIPE CONVEYANCE CALCULATION

Flow Capacity Calcs. (manning's)

$Q = 1.486 / n \times R^{2/3} \times S^{1/2}$

Bold Numbers entered directly

Pipe Dia.	(D)	**8.00 "**	**8.00 "**	**8.00 "**
Manning's n	(n)	**0.014**	**0.012**	**0.014**
Slope	(S)	**0.51%**	**0.51%**	**0.51%**
Depth	(Y)	**0.66'**	**0.66'**	**0.23'**
Qactual		0.83 cfs	0.97 cfs	0.21 cfs
Vactual		2.396 fps	2.795 fps	1.921 fps

> 0.20 CFS PROPOSED BY 100-YEAR STORM

THE 8" DIAMETER PERFORATED STORM PIPE WITH A SLOPE OF 0.51% (FLATTEST OF THE 2 PERFORATED PIPE LENGTHS) CAN CONVEY 0.83 CFS FLOWING FULL AND 0.21 CFS AT A DEPTH OF 0.23'. THEREFORE, THE 8" PERFORATED STORM PIPE CAN EASILY CONVEY THE 100-YEAR STORM PRODUCED BY THE DEVELOPED INTERCEPTOR TRENCH BASIN.