

Project: STEWART BUILDING DEV. 0N-SITE WORST CASE BASIN TO 1' WIDE OPENING

22-Jan-99

Calculations: Total Basin

Calculations are based on "Section 22.2 Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, New Mexico, January 1993 - basins < 40 acres".

Precipitation Zone = 2

Depth at 100-year, 6-hour storm: (Table A-2)

P = 2.35 inches

Land Treatments:

From Table 5 - Percent Treatment D

Single Family Residential =

$$7 * \text{SQR}((N * N) + (5 * N))$$

where N = units/acre

$$N = \text{-----} = \text{-----}, \text{ok} < 6$$

$$N = 0.00$$

Therefore Percent Treatment D = 0.00%

(includes local streets)

Areas: (acres)	Existing	Proposed
Treatment A	0.13	0.00
Treatment B	0.00	0.00
Treatment C	0.00	0.00
Treatment D	0.00	0.13
Total (acres) =	0.13	0.13

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.01	0.02	0.00	0.01	0.00	0.01
Volume (cubic feet) =	250	1,000	61	632	0	373

Total Q(p), cfs:	100 year Existing Q(p)*A	100 year Proposed Q(p)*A	10 year Existing Q(p)*A	10 year Proposed Q(p)*A	2 year Existing Q(p)*A	2 year Proposed Q(p)*A
Treatment A	0.20	0.00	0.05	0.00	0.00	0.00
Treatment B	0.00	0.00	0.00	0.00	0.00	0.00
Treatment C	0.00	0.00	0.00	0.00	0.00	0.00
Treatment D	0.00	0.61	0.00	0.41	0.00	0.24
Total Q (cfs) =	0.20	0.61	0.05	0.41	0.00	0.24