Calle Cuarta MU

Rational Method for determining how much water is going to occur on site per 2022 CGP Parameters

Q=CiA

1	C = runoff coefficient, 1 is all water run off			
0.1	i = rainfall		using 2 year 24 hour for site	1.2inch /12ft
106722	A is the area of site	2.45 acres *43560ft^2 / acre		
10672.2	cubic feet needed by calculation. 8820 cubic feet is needed by regulation (3600 cf per acre drained).			
9275	cubic feet constructed (Sheet 8, TESCP - Calle Cuarta MU)			

Pond Drainage

saturated hydraulic conductivity rate of 2.82 micro m/sec	
is equal to 0.399685 inch per hour	0.39966
is equal to 0.79937 ft per day	0.79932
times the pond area of 9275ft^3 gives	7413.69

In total the 24 hour event produces about 10672.2ft^3 of water in the 9275 ft^3 pond but drains 7413.69 ft^3 leaving 3258.51 ft^3 of water in the 9275 ft^3 ponds

Calle Cuarta TH

Rational Method for determining how much water is going to occur on site per 2022 CGP Parameters

Q=CiA

1	C = runoff coefficient, 1 is all water run off			
0.1	i = rain fall		using 2 year 24 hour for site	1.2inch /12ft
108900	A is the area of site	2.5 acres *43560ft^2 / acre		
10890	cubic feet needed by calculation. 9000 cubic feet is needed by regulation (3600 cf per acre drained).			
11700	cubic feet constructed (Sheet 9, TESCP - PWO)			

Pond drainage

saturated hydraulic conductivity rate of 2.82 micro m/sec	
is equal to 0.399685 inch per hour	0.39966
is equal to 0.79937 ft per day	0.79932
times the pound area of 9275ft^3 gives	9352.041

In total the 24 hour event produces about 10890ft^3 of water in the 11700 ft^3 pond but drains 9352.041 ft^3 leaving 1537.959 ft^3 of water in the 11700 ft^3 ponds