

ATTACHMENT A-5

Quantity of Storm Water Discharge
(Item C.4 of Form C)

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C.4 Quantity of Storm Water Discharge

Stormwater flow rates were calculated using the *Rules Relating to Storm Drainage Standards* (City and County of Honolulu, 2000) for drainage areas of 100 acres or less. A storm recurrence interval of 2 years was used to estimate the quantity of runoff. A correction factor of 2.3 (Plate 4 of the *Rules Relating to Storm Drainage Standards*) was used to calculate the Rainfall Intensity at each site.

Table 2-1

Site Number	On-Site Disturbed Area Runoff (cfs)
H-3 & Likelike Interchange	1.87
PID 207	1.78
PID 208	1.59
PID 209	2.50
PID 210	1.96
PID 1008	1.41
Total	11.11

Table 2-1 summarizes stormwater runoff quantities calculated for each of the 6 project sites (**Tables 2-2** through **2-7** show the values used to determine these runoff quantities). Disturbed areas of the project sites are slopes adjacent to highways and adjacent areas (typically grassed areas) that will be used for staging. A one-half acre was assumed disturbed per each site due to the staging/storage area. The disturbed area runoff accounts for the anticipated storage/staging area.

Project Site 1 – H-3 & Likelike Interchange

Table 2-2

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.62	3.6	0.84	1.87

Project Site 2 – PID 207

Table 2-3

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.59	4.2	0.72	1.78

Project Site 3 – PID 208

Table 2-4

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.59	4.2	0.64	1.59

Project Site 4 - 209

Table 2-5

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.59	4.2	1.01	2.50

Project Site 5 – PID 210**Table 2-6**

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.59	4.2	0.79	1.96

Project Site 6 – PID 1008**Table 2-7**

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.59	4.2	.57	1.41

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