ON-SITE STORMWATER DETENTION FACILITY BASED ON 'MSMA 2ND EDITION'

Solution:

Reference	Calculation	Output
	Projek:- Cadangan Pembangunan Bercampur Yang Mengandungi: Fasa 1 Diatas Lot 21135, Persiaran Cassia Barat 3, Mukim 13, SPS, Pulau Pinang. Untuk : Paramount Property (PW) Sdn. Bhd. *Date:* *5-Apr-16* ***Job No.: PK/BK/15/02***	
Figure 5.A1	Pulau Pinang falls under Region 3 - Northen So, use OSD Characteristic for Region 3 - Northen Project Area = 2.12 ha Terrain = Mild % of Impervious Area = 90%	
Table 5.A1	Permissible Site Discharge (PSD)/ha : =	56.5 l/s/ha
	For area of 2.12 ha, PSD = 2.12 x 56.5 = =	119.78 l/s **0.1198** m³/s
Table 5A1	Site Storage Requirement (SSR)/ha: =	564.4 m³/ha
	For area of 2.12 ha, SSR = 2.12 x 564.4 =	1196.53 m³
	Sizing of OSD Tank: The required storage is 1196.53 m³ Tank storage = 813.00 m2 x 1.50 m (depth of drain)	1219.5 m³ > 1196.5 m³ OK
Table 5.A2	Inlet Flow: As Pulau Pinang is not in the list in Table 5.A2, refer to Table 5.A3 only.	
Table 5.A2	PSD: As Pulau Pinang is not in the list in Table 5.A2, refer to Table 5.A1 only.	
Table 5.A2	SSR: As Pulau Pinang is not in the list in Table 5.A2, refer to Table 5.A1 only.	

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Table 5.A3	Inlet Pipe: (adopt 1 nos. of 600mm Dia. As it is readily available in the market)	=	597 mm dia. (Adopt 1 nos. of 600mm dia.)
Table 5.A3	Outlet Pipe: (adopt 1 Nos 250mm Dia. As it is readily available in the market)	=	262 mm dia. (Adopt 250mm dia.)
Table 5.A4	Inlet Pipe: As Pulau Pinang is not in the list in Table 5.A2, no checking for Table 5.A4 is required. Refer to Table 5.A3 only.		
Table 5.A4	Outlet Pipe: As Pulau Pinang is not in the list in Table 5.A2, no checking for Table 5.A4 is required. Refer to Table 5.A3 only.		