

Table SWM.6: WURC // ESD to MEP Worksheet (Redevelopment)

Drainage Area	Site	Site Area To Be Treated	%I	Rv	ESD (Non-Structural Practices) (D.A. - Ac.)								PE (Inches)							ESDv Volume (cft)							PE Treated	RCN	
					A-2	N-1	M-2	M-3	M-6	M-7	M-9	Total	A-2	N-1	M-2	M-3	M-6	M-7	M-9	A-2	N-1	M-2	M-3	M-6	M-7	M-9			Total
Ph 1	1	639,635 sf.	90	0.86	0.00	0.00	4.95	6.30	4.40	1.40	0.00	17.05	0.00	0.00	1.83	2.00	1.80	1.00	0.00	0	0	28,314	39,335	24,725	4,371	0	96,744	2.11	77
	2	681,932 sf.	85	0.81	0.00	0.00	0.00	0.00	6.52	7.06	0.00	13.58	0.00	0.00	0.00	0.00	1.80	1.00	0.00	0	0	0	0	34,715	20,884	0	55,599	1.20	74
	3	1,001,880 sf.	78	0.75	0.00	0.00	0.00	0.00	24.74	0.00	0.00	24.74	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0	0	0	0	121,744	0	0	121,744	1.94	84

ESD Devices:

- A-2 = Permeable Pavement
- N-1 = Disconnection of Rooftop Runoff
- M-2 = Submerged Wetlands
- M-3 = Landscape Infiltration
- M-6 = Bioretention / Micro-Bioretention
- M-8 = Swales
- M-9 = Enhanced Filters

Design Assumptions:

Type "C" Hydrologic Soil Groups only; 12-inch sub base for PE equal to 2.00"; Underdrain required
 Disconnection Flow Path Assumed for Calculations = 45 lft with a PE of 0.60
 Surface area of wetland area above stone reservoir assumed to be 6-inch of ponding.
 Surface area of Island Infiltration to equal 10% of parking area (filter media depth = 2.50' with 0.40 Void Ratio); underdrain required
 See Design Assumption for M-3 (additional 1.0' ponding volume above surface area of filter included as 5% of impervious area - 15% total)
 Grass swales proposed within Development. If Bio-swales used additional benefit to be gained within PE calculations.
 Enhanced Filter equivalent to a Micro-Bioretention Facility however has a stone reservoir for recharge below media within filter