

PROJECT - AMRAPALI LA RESIDENTIA AT GREATER NOIDA (PHASE 1 + PHASE 2)									
WATER REQUIREMENT CALCULATIONS									
sl. no.	Description	No. of units	Unit Population	Built up Area	Population	Unit Water Consumption	Total Water Required	Recycle Water Requirement	Total Recycle Water
				(Sq M)	(persons)	(liters)	(liters)	(liters)	(liters)
1	Apartments (Phase-1)	1484	4.5		6678	135	901530	45	300510
2	Apartments (Phase-2)	1772	4.5		7974	135	1076490	45	358830
3	Servant Units (Phase-1)	306	2.25		689	135	92948	45	30983
4	Servant Units (Phase-2)	184	2.25		414	135	55890	45	18630
5	Club & Floating Population				2200	15	33000	5	11000
6	Staff				100	45	4500	15	1500
7	Commercial / Shopping				400	45	18000	15	6000
8	Filter Backwash						50000		0
9	Make-up water for swimming pool						20000		0
10	Horticulture			20000		4	80000	100%	80000
						total	23,32,358		8,07,453
SUMMARY OF WATER REQUIREMENT									
Total Permanent Population						=	15755	persons	
Total Domestic Water Requirement						=	23,32,358	lit/day	
Total Recycle Water Requirement						=	8,07,453	lit/day	
<u>Net Domestic Water Requirement</u>						=	15,24,905	lit/day	
Total Sewage Load (total domestic water required - horticulture - s.pool makeup - filter backwash)						=	21,82,358	lit/day	
Net Sewage Flow - 80% of sewage load						=	17,45,886	lit/day	
Sewage Treatment Plant capacity required						=	1750	KLD	600 kld x 3
Total recycle water required						=	8,07,453	liters	
Net water balance (to discharge into drainage system)						=	9,38,434	liters	
UGT Capacity (for Domestic Use) = 16 hrs storage						=	10,16,603	provided	1000 KL
Fire Tank Capacity						=			400 KL
Total UGT Capacity (Domestic + Fire)						=			1400 KL