APPENDIX FOR CHAPTER B6 WATER SUPPLY SYSTEM LONG-TERM PLAN (UPTO 2038)

AB6.1 Hydraulic Analysis for Transmission Main and Arterial Network

1. Demand Distribution by Distribution Zones

Water Supply Zone	Distribution Zone	Water Demand (Day maximum)								Constriction Year of DC
		2023		2028		2033		2038		
		m^3/d	mgd	m^3/d	mgd	m^3/d	mgd	m^3/d	mgd	
WSZ -I	1	12,700	2.79	16,590	3.65	20,900	4.60	22,140	4.87	2033
	3	12,242	2.69	15,985	3.52	20,107	4.42	20,821	4.58	2028
	4	6,858	1.51	8,815	1.94	10,982	2.42	23,530	5.18	2028
	5	13,452	2.96	17,211	3.79	21,214	4.67	22,177	4.88	2023
	6	2,412	0.53	3,094	0.68	3,834	0.84	22,621	4.98	2038
	7	12,722	2.80	16,347	3.60	20,272	4.46	21,203	4.66	2023
	9	13,091	2.88	17,147	3.77	21,614	4.75	22,897	5.04	2023
	10	11,939	2.63	15,472	3.40	19,358	4.26	20,399	4.49	2028
	11	14,754	3.25	19,032	4.19	23,611	5.19	24,658	5.42	2023
	23	13,408	2.95	17,259	3.80	21,809	4.80	23,018	5.06	2023
	26	12,450	2.74	16,036	3.53	19,918	4.38	20,835	4.58	2028
	27	15,733	3.46	19,788	4.35	24,065	5.29	24,847	5.47	2023
	38	14,673	3.23	18,932	4.16	23,527	5.18	24,233	5.33	2023
	49	15,204	3.34	19,482	4.29	24,144	5.31	25,205	5.54	2023
	50	11,789	2.59	15,152	3.33	18,807	4.14	19,671	4.33	2028
	51	10,771	2.37	14,306	3.15	18,224	4.01	19,799	4.36	2028
	55	14,860	3.27	19,370	4.26	24,355	5.36	25,782	5.67	2033
	FDA	4,540	1.00	8,680	1.91	13,040	2.87	17,380	3.82	2023
	UC185	5,100	1.12	6,570	1.45	8,190	1.80	8,540	1.88	2023
	Subtotal	**218,697**	**48.11**	**285,265**	**62.75**	**357,971**	**78.74**	**409,759**	**90.14**	
	Water Source		**67.5**		**77.5**		**87.5**		**87.5**	
WSZ -II	2	12,409	2.73	15,651	3.44	19,115	4.20	19,675	4.33	2023
	8	13,606	2.99	17,892	3.94	22,263	4.90	23,346	5.14	2023
	12	13,286	2.92	17,096	3.76	21,009	4.62	21,759	4.79	2023
	36	13,794	3.03	17,845	3.93	22,255	4.90	23,395	5.15	2028
	43	10,845	2.39	14,103	3.10	17,683	3.89	18,663	4.11	2033
	44	8,720	1.92	12,168	2.68	14,620	3.22	22,218	4.89	2038
	45	16,185	3.56	20,594	4.53	25,366	5.58	26,243	5.77	2028
	46	8,475	1.86	10,745	2.36	13,106	2.88	23,545	5.18	2038
	47	12,672	2.79	16,387	3.60	20,402	4.49	21,422	4.71	2028
	52	13,691	3.01	17,219	3.79	20,985	4.62	21,575	4.75	2028
	53	13,048	2.87	16,874	3.71	21,066	4.63	22,148	4.87	2023
	54	14,460	3.18	18,388	4.04	22,569	4.96	23,314	5.13	2033
	56	15,440	3.40	19,372	4.26	23,441	5.16	23,966	5.27	2028
	Subtotal	**166,631**	**36.65**	**214,335**	**47.15**	**263,881**	**58.05**	**291,270**	**64.07**	
	Water Source		**0.0**		**20.0**		**40.0**		**60.0**	
WSZ -III	37	13,814	3.04	17,724	3.90	21,977	4.83	22,932	5.04	2028
	39	14,214	3.13	17,937	3.95	21,908	4.82	22,757	5.01	2023
	42	11,252	2.48	14,429	3.17	17,865	3.93	18,661	4.10	2028
	Subtotal	**39,280**	**8.64**	**50,090**	**11.02**	**61,750**	**13.58**	**64,350**	**14.16**	
	Water Source		**18.0**		**18.0**		**18.0**		**18.0**	
WSZ -IV	13	12,918	2.84	16,612	3.65	20,614	4.53	21,020	4.62	2023
	14	8,697	1.91	17,786	3.91	22,984	5.06	23,703	5.21	2033
	15	16,172	3.56	20,212	4.45	24,535	5.40	25,105	5.52	2023
	16	11,658	2.56	15,481	3.41	20,361	4.48	20,009	4.40	2023
	17	11,680	2.57	15,429	3.39	20,386	4.48	19,522	4.29	2028
	28	0	0.00	0	0.00	0	0.00	20,840	4.58	2038
	29	15,780	3.47	20,307	4.47	25,308	5.57	26,423	5.81	2023
	32	12,411	2.73	16,508	3.63	20,781	4.57	22,067	4.85	2023
	33	12,475	2.74	16,174	3.56	20,277	4.46	21,418	4.71	2033
	35	13,562	2.98	17,014	3.74	20,673	4.55	21,192	4.66	2023
	41	8,340	1.83	12,422	2.73	15,505	3.41	23,078	5.08	2028
	48	14,664	3.23	19,273	4.24	24,407	5.37	26,130	5.75	2023
	Subtotal	**138,357**	**30.43**	**187,219**	**41.18**	**235,830**	**51.88**	**270,507**	**59.50**	
	Water Source		**5.0**		**10.0**		**10.0**		**10.0**	
WSZ -V	20	7,925	1.74	10,135	2.23	12,558	2.76	13,126	2.89	2018
	30	6,233	1.37	8,012	1.76	9,925	2.18	21,870	4.81	2038
	31	4,158	0.91	5,345	1.18	6,626	1.46	20,287	4.46	2038
	34	0	0.00	10,560	2.32	13,090	2.88	24,340	5.35	2038
	40	12,690	2.79	16,320	3.59	20,230	4.45	21,110	4.64	2033
	Subtotal	**31,006**	**6.82**	**50,373**	**11.08**	**62,428**	**13.73**	**100,733**	**22.16**	
	Water Source		**25.0**		**50.0**		**75.0**		**75.0**	
WSZ -VI	18	13,783	3.03	17,681	3.89	21,915	4.82	22,864	5.03	2028
	21	9,309	2.05	11,930	2.62	14,785	3.25	15,444	3.40	2023
	22	4,580	1.01	6,010	1.32	7,510	1.65	8,050	1.77	2023
	Subtotal	**27,672**	**6.09**	**35,621**	**7.84**	**44,210**	**9.73**	**46,358**	**10.20**	
	Water Source		**5.0**		**10.0**		**10.0**		**10.0**	
WSZ -VII	19	12,824	2.82	16,414	3.61	20,360	4.48	21,209	4.67	2023
	24	14,113	3.10	18,123	3.99	22,500	4.95	23,570	5.18	2023
	25	14,420	3.17	18,560	4.08	23,070	5.07	24,245	5.33	2023
	Subtotal	**41,357**	**9.10**	**53,097**	**11.68**	**65,930**	**14.50**	**69,024**	**15.18**	
	Water Source		**16.5**		**16.5**		**16.5**		**16.5**	
	Total	**663,000**	**145.84**	**876,000**	**192.70**	**1,092,000**	**240.21**	**1,252,000**	**275.41**	
	Water Source		**137.0**		**202.0**		**257.0**		**277.0**	

note *1: Distribution Zone with shadow is supplied by dravity from Overhead Reservoir at respective key years

*2: Distribution Zone without shadow is supplied from adjacent Distribution Center or directly from Arterial Network at respective key years

*3: Distribution Zone with light pink color is out of service area at respective key years

*4: Ditribution Zone No.20 is constructed under the Pilot Project which will be combined with DZ 40 at appropriate timing

Annex 1.1 to Appendix 6.2 Distribution of Administrative Area by Distribution Zones-1)

Water Supply Zone		WSZ I																			
Union	Area (GIS)	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total
Council	km2	0.90	1.10	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.70	52.33
Jalanwala Town																					
34	9.27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town																					0
182	12.08																				0
234	0.75																				0
235	0.37																				0
236	0.62																				0
237	0.72																				0
240	0.95																				0
241	0.31																				0
242	1.84																				0
243	0.56																				0
244	0.28																				0
245	0.45																				0
246	0.48																				0
247	0.68																				0
248	0.55																				0
250	5.02																				0
251	0.86																				0
252	1.14																				0
253	0.48																				0
254	0.82																				0
255	1.88																				0
256	0.61																				0
257	0.60																				0
258	0.87																				0
259	0.60																				0
260	0.37																				0
261	0.63																				0
262	7.35																				0
147	22.48																				0
148	23.67																				0
149	13.60																				0
subtotal	101.62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jinnah Town																					0
187	0.77																	0.77			0.77
263	1.13																				0
264	0.45							0.12													0.12
265	0.59																				0
266	0.56																				0
267	1.69																				0
268	0.66																				0
269	0.56																				0
270	3.69																				0
271	1.42																				0
272	2.00																				0
273	1.09																				0
274	1.33																				0
275	2.05																				0
276	0.50																				0
277	0.42	0.42																			0.42
278	0.48	0.48																			0.48
279	0.37																				0
280	1.08																				0
281	0.28																				0
282	0.71																				0
283	0.87																				0
284	0.27																				0
285	0.46								0.46												0.46
286	0.84																				0
287	0.52								0.23												0.23
288	0.60							0.36	0.24												0.6
289	0.90							0.90													0.9
180	5.90																				0
181	4.09																				0
155	5.55																				0
156	9.71																				0
157	16.39																				0
158	15.53																				0
159	36.63																				0
subtotal	120.09	0.90	0.00	0.00	0.00	0.00	0.00	1.38	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00	3.98

Water Supply Zone		WSZ II												
Union	Area (GIS)	2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	km2	2.59	2.45	2.14	1.77	9.85	18.36	1.40	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Jalanwala Town															
34	9.27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town															
182	12.08						1.34								1.34
234	0.75														0
235	0.37														0
236	0.62														0
237	0.72														0
240	0.95														0
241	0.31														0
242	1.84														0
243	0.56														0
244	0.28														0
245	0.45														0
246	0.48														0
247	0.68														0
248	0.55														0
250	5.02														0
251	0.86														0
252	1.14														0
253	0.48														0
254	0.82														0
255	1.88														0
256	0.61														0
257	0.60														0
258	0.87														0
259	0.60														0
260	0.37														0
261	0.63														0
262	7.35			0.66		6.69									7.35
147	22.48														0
148	23.67						12.33								12.33
149	13.60														0
subtotal	101.62	0	0	0.66	0	6.69	13.67	0	0	0	0	0	0	0	21.02
Jinnah Town															
187	0.77														0
263	1.13			0.93		0.2									1.13
264	0.45			0.33											0.33
265	0.59										0.59				0.59
266	0.56										0.56				0.56
267	1.69	1.69													1.69
268	0.66	0.34									0.32				0.66
269	0.56	0.56													0.56
270	3.69					2.96						0.73			3.69
271	1.42											1.42			1.42
272	2.00											2.00			2
273	1.09		0.64		0.36							0.09			1.09
274	1.33		1.33												1.33
275	2.05												2.05		2.05
276	0.50												0.25	0.25	0.5
277	0.42														0
278	0.48														0
279	0.37													0.37	0.37
280	1.08												0.69	0.39	1.08
281	0.28													0.28	0.28
282	0.71				0.71										0.71
283	0.87		0.17		0.70										0.87
284	0.27							0.27							0.27
285	0.46														0
286	0.84							0.84							0.84
287	0.52							0.29							0.29
288	0.60														0
289	0.90														0
180	5.90		0.31						5.59						5.9
181	4.09						4.69								4.69
155	5.55														0
156	9.71														0
157	16.39														0
158	15.53														0
159	36.63														0
subtotal	120.09	2.59	2.45	1.26	1.77	3.16	4.69	1.40	5.59	0.00	1.47	4.24	2.99	1.29	32.90

Annex 1.1 to Appendix 6.2 Distribution of Administrative Area by Distribution Zones-2)

Annex 1.1 to Appendix 6.2 Distribution of Administrative Area by Distribution Zones-3)

Water Supply Zone		WSZ III				WSZ IV													WSZ V						WSZ VI				SZ VII				Grand
Union	Area (GIS)	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	km2	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16.00	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.10	61.02	4.12	2.48	0.80	7.40	2.30	1.24	2.54	6.08	293.35
Jalanwala Town																																	
34	9.27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.27	0	0	0	9.27	0	0	0	0	0	0	0	0	9.27
Iqbal Town																																	
182	12.08				0		8.50									2.24		10.74						0				0				0	12.08
234	0.75				0													0						0				0		0.75		0.75	0.75
235	0.37				0					0.19								0.19						0				0		0.18		0.18	0.37
236	0.62				0					0.62								0.62						0				0				0	0.62
237	0.72				0							0.57			0.15			0.72						0				0				0	0.72
240	0.95				0				0.43	0.52								0.95						0				0				0	0.95
241	0.31				0													0						0				0		0.31		0.31	0.31
242	1.84				0													0						0				0			1.84	1.84	1.84
243	0.56				0													0						0				0			0.56	0.56	0.56
244	0.28				0			0.14										0.14						0				0			0.14	0.14	0.28
245	0.45				0			0.33	0.12									0.45						0				0				0	0.45
246	0.48				0										0.48			0.48						0				0				0	0.48
247	0.68				0				0.68									0.68						0				0				0	0.68
248	0.55				0									0.33	0.22			0.55						0				0				0	0.55
250	5.02				0	0.10	1.97							2.95				5.02						0				0				0	5.02
251	0.86				0			0.50						0.13	0.23			0.86						0				0				0	0.86
252	1.14				0			0.36						0.78				1.14						0				0				0	1.14
253	0.48				0	0.48												0.48						0				0				0	0.48
254	0.82				0	0.24		0.58										0.82						0				0				0	0.82
255	1.88				0	1.02										0.86		1.88						0				0				0	1.88
256	0.61				0	0.25							0.22				0.14	0.61						0				0				0	0.61
257	0.60				0											0.15	0.45	0.6						0				0				0	0.6
258	0.87				0											0.69	0.18	0.87						0				0				0	0.87
259	0.60				0												0.60	0.6						0				0				0	0.6
260	0.37				0								0.21				0.16	0.37						0				0				0	0.37
261	0.63				0								0.63					0.63						0				0				0	0.63
262	7.35				0													0						0				0				0	7.35
147	22.48				0													0						0				0				0	0
148	23.67				0											11.34		11.34						0				0				0	23.67
149	13.60				0													0						0				0				0	0
subtotal	101.62	0	0	0	0	2.09	10.47	1.91	1.23	1.33	0	0.57	1.06	4.19	1.08	15.28	1.53	40.74	0	0	0	0	0	0	0	0	0	0	0	1.24	2.54	3.78	65.54
Jinnah Town																																	
187	0.77				0													0						0				0				0	0.77
263	1.13				0													0						0				0				0	1.13
264	0.45				0													0						0				0				0	0.45
265	0.59				0													0						0				0				0	0.59
266	0.56				0													0						0				0				0	0.56
267	1.69				0													0						0				0				0	1.69
268	0.66				0													0						0				0				0	0.66
269	0.56				0													0						0				0				0	0.56
270	3.69				0													0						0				0				0	3.69
271	1.42				0													0						0				0				0	1.42
272	2.00				0													0						0				0				0	2.00
273	1.09				0													0						0				0				0	1.09
274	1.33				0													0						0				0				0	1.33
275	2.05				0													0						0				0				0	2.05
276	0.50				0													0						0				0				0	0.5
277	0.42				0													0						0				0				0	0.42
278	0.48				0													0						0				0				0	0.48
279	0.37				0													0						0				0				0	0.37
280	1.08				0													0						0				0				0	1.08
281	0.28				0													0						0				0				0	0.28
282	0.71				0													0						0				0				0	0.71
283	0.87				0													0						0				0				0	0.87
284	0.27				0													0						0				0				0	0.27
285	0.46				0													0						0				0				0	0.46
286	0.84				0													0						0				0				0	0.84
287	0.52				0													0						0				0				0	0.52
288	0.60				0													0						0				0				0	0.6
289	0.90				0													0						0				0				0	0.9
180	5.90				0													0						0				0				0	5.9
181	4.09				0													0						0				0				0	4.69
155	5.55				0													0						0				0				0	0
156	9.71				0													0						0				0				0	0
157	16.39				0													0						0				0				0	0
158	15.53				0													0						0				0				0	0
159	36.63				0													0						0				0				0	0
subtotal	120.09	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	36.88

Annex 1.1 to Appendix 6.2 Distribution of Administrative Area by Distribution Zones-4)

Water Supply Zone		WSZ III				WSZ IV													WSZ V						WSZ VI				SZ VII				Grand
Union	Area (GIS)	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	km2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.80	0.00	1.24	2.54	3.78	4.58
Layllpur Town																																	
183	0.99																	0						0				0				0	0.99
184	2.09				0													0						0				0				0	2.09
185	3.70				0													0						0				0				0	3.7
186	2.48				0													0						0				0				0	2.48
188	1.16				0													0						0				0				0	1.16
189	3.90				0													0						0				0				0	3.9
190	2.23				0													0						0				0				0	2.23
191	2.82				0													0						0				0				0	2.82
192	5.61				0													0						0				0				0	5.61
193	2.41				0													0						0				0				0	2.41
194	1.90				0													0						0				0				0	1.90
195	1.60				0													0						0				0				0	1.60
196	1.90				0													0						0				0				0	1.90
208	0.91				0													0						0				0				0	0.91
209	0.49				0													0						0				0				0	0.49
210	0.74				0													0						0				0				0	0.74
211	0.34				0													0						0				0				0	0.34
212	0.28				0													0						0				0				0	0.28
231	1.42				0													0						0				0				0	1.42
232	0.38				0													0						0				0				0	0.38
233	0.25				0													0						0				0				0	0.25
179	13.05				0													0						0				0				0	13.05
160	25.81				0													0						0				0				0	0
163	26.11				0													0						0				0				0	0
164	30.55				0													0						0				0				0	0
165	19.14				0													0						0				0				0	0
166	17.19				0													0						0				0				0	0
167	18.90				0													0						0				0				0	18.90
168	12.16				0													0						0				0				0	0
169	22.33				0													0						0				0				0	0
170	19.60				0													0						0				0				0	0
171	54.47				0													0						0				0				0	0
172	16.88				0													0						0				0				0	0
173	15.67				0													0						0				0				0	0
174	3.80				0													0						0				0				0	3.80
175	29.24				0													0						0				0				0	0
176	9.54				0													0				9.54		9.54				0				0	9.54
subtotal	372.04	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	9.54	0.00	9.54	0.00	0.00	0.00	0	0.00	0.00	0.00	0	82.89
Madina Town																																	
177	12.79				0													0				12.79		12.79				0				0	12.79
197	0.53				0													0						0				0				0	0.53
198	0.75																	0						0				0				0	0.75
199	2.79				0													0						0				0				0	2.79
200	3.70	3.70			3.7													0						0				0				0	3.70
201	2.78	2.78			2.78													0						0				0				0	2.78
202	3.23	1.07		2.16	3.23													0						0				0				0	3.23
203	1.82			1.82	1.82													0						0				0				0	1.82
204	0.46		0.36	0.10	0.46													0						0				0				0	0.46
205	0.56				0													0						0				0				0	0.56
206	1.15				0													0						0				0				0	1.15
207	0.58				0													0						0				0				0	0.58
213	1.28				0													0						0				0				0	1.28
214	0.50				0													0						0				0				0	0.50
215	0.76				0													0						0				0				0	0.76
216	0.38		0.38		0.38													0						0				0				0	0.38
217	0.39		0.39		0.39													0						0				0				0	0.39
218	0.80				0													0						0			0.80	0.8				0	0.80
219	2.73				0													0					2.73	2.73				0				0	2.73
220	5.37				0													0		5.11				5.11	0.26			0.26				0	5.37
221	0.82				0													0	0.58					0.58		0.24		0.24				0	0.82
222	1.53				0													0	0.89					0.89		0.64		0.64				0	1.53
223	1.37				0													0					1.37	1.37				0				0	1.37
224	1.24				0													0						0		0.71		0.71	0.53			0.53	1.24
225	2.56				0													0						0	1.27	0.89		2.16	0.40			0.4	2.56
226	1.94				0													0			0.63			0.63	1.31			1.31				0	1.94
227	1.29				0													0			0.42			0.42	0.87			0.87				0	1.29
228	1.03				0													0						0	0.41			0.41	0.62			0.62	1.03
229	0.23				0													0						0				0	0.23			0.23	0.23
230	1.54				0													0						0				0	0.52			0.52	1.54
239	0.63				0							0.55			0.08			0.63						0				0				0	0.63
238	1.01				0							1.01						1.01						0				0				0	1.01
178	1.81				0													0						0				0				0	1.81
249	4.73				0		4.08					0.48			0.17			4.73						0				0				0	4.73
143	57.93				0													0						0				0				0	
144	17.69				0													0		3.07	14.62			17.69				0				0	17.69
145	16.00				0						16.00							16						0				0				0	16.00
subtotal	156.70	7.55	1.13	4.08	12.76	0.00	4.08	0.00	0.00	0.00	16.00	2.04	0.00	0.00	0.25	0.00	0.00	22.37	1.47	8.18	15.67	12.79	4.10	42.21	4.12	2.48	0.80	7.4	2.30	0.00	0.00	2.3	98.77
	759.72	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16.00	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.10	61.02	4.12	2.48	0.80	7.40	2.30	1.24	2.54	6.08	293.35

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2023 -1)

Water Supply Zone		WSZ I																				WSZ II														
Union	Day Max.	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total	2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	Demand	0.9	1.1	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.7	52.33	2.59	2.45	2.14	1.77	9.85	18.36	1.4	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Jalanwala Town																																				
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town																																				
182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	5,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	5,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
236	4,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
237	5,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240	7,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
241	5,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	4,820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
243	6,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	5,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
245	5,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
246	6,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
247	6,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
248	6,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250	5,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
251	6,530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
252	6,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
253	6,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	4,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
255	5,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
256	5,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	6,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	5,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
259	5,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	5,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
261	7,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
262	5,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	524	0	5,316	0	0	0	0	0	0	0	0	5,840
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	153,760	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	524	0	5,316	0	0	0	0	0	0	0	0	5,840
Jinnah Town																																				5,840
187	6,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,900	0	0	6,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
263	7,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,794	0	1,246	0	0	0	0	0	0	0	0	7,040
264	5,230	0	0	0	0	0	0	1,395	0	0	0	0	0	0	0	0	0	0	0	0	1,395	0	0	3,835	0	0	0	0	0	0	0	0	0	0	3,835
265	5,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,630	0	0	0	5,630
266	5,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,540	0	0	0	5,540
267	4,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,930	0	0	0	0	0	0	0	0	0	0	0	0	4,930
268	5,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,679	0	0	0	0	0	0	0	0	2,521	0	0	0	5,200
269	4,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,800	0	0	0	0	0	0	0	0	0	0	0	0	4,800
270	5,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,284	0	0	0	0	0	1,056	0	0	5,340
271	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,320	0	0	6,320
272	5,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,090	0	0	5,090
273	7,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,134	0	2,325	0	0	0	0	0	0	581	0	0	7,040
274	7,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,800	0	0	0	0	0	0	0	0	0	0	0	7,800
275	6,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,880	0	6,880
276	7,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,625	3,625	7,250
277	6,830	6,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0
278	5,870	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0
279	5,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,040	5,040
280	6,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,955	2,235	6,190
281	4,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,540	4,540
282	5,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,780	0	0	0	0	0	0	0	0	0	5,780
283	7,070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,381	0	5,689	0	0	0	0	0	0	0	0	0	7,070
284	4,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,910	0	0	0	0	0	0	4,910
285	5,870	0	0	0	0	0	0	0	5,870	0	0	0	0	0	0	0	0	0	0	0	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0
286	7,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,260	0	0	0	0	0	0	7,260
287	7,200	0	0	0	0	0	0	0	3,185	0	0	0	0	0	0	0	0	0	0	0	3,185	0	0	0	0	0	0	4,015	0	0	0	0	0	0	4,015
288	7,210	0	0	0	0	0	0	4,326	2,884	0	0	0	0	0	0	0	0	0	0	0	7,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	7,370	0	0	0	0	0	0	7,370	0	0	0	0	0	0	0	0	0	0	0	0	7,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	5,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	291	0	0	0	0	0	5,249	0	0	0	0	0	5,540
181	8,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,720	0	0	0	0	0	0	0	8,720
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	186,390	12,700	0	0	0	0	0	13,091	11,939	0	0	0	0	0	0	0	0	6,900	0	0	44,629	12,409	13,606	9,629	13,794	5,530	8,720	16,185	5,249	0	13,691	13,048	14,460	15,440	141,761

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2023 -2)

Water Supply Zone		WSZ I																				WSZ II														
Union	Day Max.	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total	2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	Demand	0.9	1.1	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.7	52.33	2.59	2.45	2.14	1.77	9.85	18.36	1.4	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Layllpur Town																				check	44,629													check	141,761
183	6,130	0	0	0	0	0	0	0	0	6,130	0	0	0	0	0	0	0	0	0	0	6,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	5,580	0	0	0	0	0	0	0	0	5,286	0	0	294	0	0	0	0	0	0	0	5,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	5,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,100	5,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186	5,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,240	0	2,500	0	0	5,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0
188	5,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,460	0	0	5,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0
189	6,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,180	0	0	0	0	6,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0
190	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,369	0	0	0	0	2,369	0	0	0	0	0	0	0	0	3,501	0	0	0	0	3,501
191	5,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,570	0	0	0	0	5,570
192	6,530	0	0	0	0	0	0	0	0	0	0	6,053	0	0	0	0	0	0	0	0	6,053	0	0	0	0	0	0	0	0	477	0	0	0	0	477
193	5,680	0	0	4,643	0	0	0	0	0	0	0	1,037	0	0	0	0	0	0	0	0	5,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	5,360	0	0	0	0	0	0	0	0	0	0	5,360	0	0	0	0	0	0	0	0	5,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	7,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,910	0	0	0	7,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0
196	6,190	0	0	2,215	0	0	3,975	0	0	0	0	0	0	0	0	0	0	0	0	0	6,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	6,350	0	0	0	3,489	0	0	0	0	0	0	0	0	0	0	0	2,861	0	0	0	6,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0
209	6,950	0	6,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0
210	6,420	0	5,292	0	0	0	0	0	0	0	0	0	1,128	0	0	0	0	0	0	0	6,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0
211	5,260	0	0	0	3,249	0	0	0	0	0	0	0	2,011	0	0	0	0	0	0	0	5,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0
212	5,340	0	0	0	0	0	0	0	0	0	0	0	5,340	0	0	0	0	0	0	0	5,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0
231	6,520	0	0	0	0	0	0	0	0	0	6,520	0	0	0	0	0	0	0	0	0	6,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0
232	5,410	0	0	0	0	0	0	0	0	0	2,278	0	0	0	0	0	0	0	0	0	2,278	0	0	3,132	0	0	0	0	0	0	0	0	0	0	3,132
233	4,610	0	0	0	0	0	0	0	0	0	4,610	0	0	0	0	0	0	0	0	0	4,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	6,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,226	3,124	0	0	0	0	6,350
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	130,510	0	12,242	6,858	6,738	0	3,975	0	0	11,416	13,408	12,450	8,773	0	0	11,789	10,771	7,960	0	5,100	111,480	0	0	3,132	0	0	0	0	3,226	12,672	0	0	0	0	19,030
Madina Town																																			19,030
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
197	5,870	0	0	0	0	0	3,323	0	0	0	0	0	0	0	2,547	0	0	0	0	0	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0
198	5,810	0	0	0	0	0	2,401	0	0	0	0	0	0	0	3,409	0	0	0	0	0	5,810	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	5,340	0	0	0	0	2,412	0	0	0	0	0	0	0	0	2,928	0	0	0	0	0	5,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	5,470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	6,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
203	5,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	6,320	0	0	0	0	0	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0
206	6,320	0	0	0	1,594	0	2,033	0	0	0	0	0	0	2,693	0	0	0	0	0	0	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	5,120	0	0	0	5,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213	6,960	0	0	0	0	0	0	0	0	0	0	0	6,960	0	0	0	0	0	0	0	6,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	6,130	0	0	0	0	0	0	0	0	0	0	0	0	6,130	0	0	0	0	0	0	6,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	6,840	0	0	0	0	0	990	0	0	0	0	0	0	5,850	0	0	0	0	0	0	6,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216	5,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
217	4,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
218	4,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
219	6,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	6,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
221	6,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
222	6,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
223	6,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	5,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	5,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
226	7,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
227	5,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
228	4,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
229	5,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
230	5,040	0	0	0	0	0	0	0	0	3,338	0	0	0	0	0	0	0	0	0	0	3,338	0	0	0	0	0	0	0	0	0	0	0	0	0	0
239	5,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	5,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
249	7,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	187,800	0	0	0	6,714	2,412	8,747	0	0	3,338	0	0	6,960	14,673	15,204	0	0	0	0	0	58,048	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FDA	4,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,540	0	4,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	663,000	12,700	12,242	6,858	13,452	2,412	12,722	13,091	11,939	14,754	13,408	12,450	15,733	14,673	15,204	11,789	10,771	14,860	4,540	5,100	218,697	12,409	13,606	13,286	13,794	10,845	8,720	16,185	8,475	12,672	13,691	13,048	14,460	15,440	166,631

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2023 -3)

Water Supply Zone		WSZ III				WSZ IV													WSZ V						WSZ VI				W S Z VII				Grand
Union	Day Max.	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	Demand	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.1	61.02	4.12	2.48	0	6.6	2.3	0	0	2.3	
Jalanwala Town																																	
34		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town																																	
182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	5,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,540	0	5,540	5,540
235	5,330	0	0	0	0	0	0	0	0	2,737	0	0	0	0	0	0	0	2,737	0	0	0	0	0	0	0	0	0	0	0	2,593	0	2,593	5,330
236	4,980	0	0	0	0	0	0	0	0	4,980	0	0	0	0	0	0	0	4,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,980
237	5,650	0	0	0	0	0	0	0	0	0	0	4,473	0	0	1,177	0	0	5,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,650
240	7,240	0	0	0	0	0	0	0	3,277	3,963	0	0	0	0	0	0	0	7,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,240
241	5,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,980	0	5,980	5,980
242	4,820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,820	4,820	4,820
243	6,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,950	6,950	6,950
244	5,300	0	0	0	0	0	0	2,650	0	0	0	0	0	0	0	0	0	2,650	0	0	0	0	0	0	0	0	0	0	0	0	2,650	2,650	5,300
245	5,740	0	0	0	0	0	0	4,209	1,531	0	0	0	0	0	0	0	0	5,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,740
246	6,880	0	0	0	0	0	0	0	0	0	0	0	0	0	6,880	0	0	6,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,880
247	6,850	0	0	0	0	0	0	0	6,850	0	0	0	0	0	0	0	0	6,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,850
248	6,930	0	0	0	0	0	0	0	0	0	0	0	0	4,158	2,772	0	0	6,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,930
250	5,150	0	0	0	0	103	2,021	0	0	0	0	0	0	3,026	0	0	0	5,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,150
251	6,530	0	0	0	0	0	0	3,797	0	0	0	0	0	987	1,746	0	0	6,530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,530
252	6,290	0	0	0	0	0	0	1,986	0	0	0	0	0	4,304	0	0	0	6,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,290
253	6,000	0	0	0	0	6,000	0	0	0	0	0	0	0	0	0	0	0	6,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,000
254	4,990	0	0	0	0	1,460	0	3,530	0	0	0	0	0	0	0	0	0	4,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,990
255	5,700	0	0	0	0	3,093	0	0	0	0	0	0	0	0	0	2,607	0	5,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,700
256	5,520	0	0	0	0	2,262	0	0	0	0	0	0	1,991	0	0	0	1,267	5,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,520
257	6,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,505	4,515	6,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,020
258	5,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227	1,103	5,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,330
259	5,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,440	5,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,440
260	5,410	0	0	0	0	0	0	0	0	0	0	0	3,071	0	0	0	2,339	5,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,410
261	7,350	0	0	0	0	0	0	0	0	0	0	0	7,350	0	0	0	0	7,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,350
262	5,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,840
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	153,760	0	0	0	0	12,918	2,021	16,172	11,658	11,680	0	4,473	12,411	12,475	12,575	8,340	14,664	119,387	0	0	0	0	0	0	0	0	0	0	0	14,113	14,420	28,533	153,760
Jinnah Town																																	
187	6,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,900
263	7,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,040
264	5,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,230
265	5,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,630
266	5,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,540
267	4,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,930
268	5,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,200
269	4,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,800
270	5,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,340
271	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,320
272	5,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,090
273	7,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,040
274	7,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,800
275	6,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,880
276	7,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,250
277	6,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,830
278	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,870
279	5,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,040
280	6,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,190
281	4,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,540
282	5,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,780
283	7,070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,070
284	4,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,910
285	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,870
286	7,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,260
287	7,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,200
288	7,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,210
289	7,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,370
180	5,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,540
181	8,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,720
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	186,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	186,390

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2023 -4)

Water Supply Zone		WSZ III				WSZ IV													WSZ V						WSZ VI				W S Z VII				Grand
Union	Day Max.	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	Demand	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.1	61.02	4.12	2.48	0	6.6	2.3	0	0	2.3	
Layllpur Town																																	186,390
183	6,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,130
184	5,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,580
185	5,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,100
186	5,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,740
188	5,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,460
189	6,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,180
190	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,870
191	5,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,570
192	6,530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,530
193	5,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,680
194	5,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,360
195	7,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,910
196	6,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,190
208	6,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,350
209	6,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,950
210	6,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,420
211	5,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,260
212	5,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,340
231	6,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,520
232	5,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,410
233	4,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,610
179	6,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,350
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	130,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130,510
Madina Town																																	
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
197	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,870
198	5,810	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,810
199	5,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,340
200	5,470	5,470	0	0	5,470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,470
201	6,320	6,320	0	0	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,320
202	6,110	2,024	0	4,086	6,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,110
203	5,890	0	0	5,890	5,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,890
204	5,870	0	4,594	1,276	5,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,870
205	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,320
206	6,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,320
207	5,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,120
213	6,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,960
214	6,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,130
215	6,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,840
216	5,020	0	5,020	0	5,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,020
217	4,600	0	4,600	0	4,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,600
218	4,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,580	4,580	0	0	0	0	4,580
219	6,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,060	6,060	0	0	0	0	0	0	0	0	6,060
220	6,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,233	0	0	0	6,233	317	0	0	317	0	0	0	0	6,550
221	6,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,371	0	0	0	0	4,371	0	1,809	0	1,809	0	0	0	0	6,180
222	6,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,554	0	0	0	0	3,554	0	2,556	0	2,556	0	0	0	0	6,110
223	6,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,630	6,630	0	0	0	0	0	0	0	0	6,630
224	5,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,949	0	2,949	2,201	0	0	2,201	5,150
225	5,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,848	1,996	0	4,843	897	0	0	897	5,740
226	7,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,319	0	0	2,319	4,821	0	0	4,821	0	0	0	0	7,140
227	5,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,840	0	0	1,840	3,810	0	0	3,810	0	0	0	0	5,650
228	4,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,986	0	0	1,986	3,004	0	0	3,004	4,990
229	5,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,020	0	0	5,020	5,020
230	5,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,702	0	0	1,702	5,040
239	5,580	0	0	0	0	0	0	0	0	0	0	4,871	0	0	709	0	0	5,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,580
238	5,650	0	0	0	0	0	0	0	0	0	0	5,650	0	0	0	0	0	5,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,650
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
249	7,740	0	0	0	0	0	6,676	0	0	0	0	785	0	0	278	0	0	7,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,740
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	187,800	13,814	14,214	11,252	39,280	0	6,676	0	0	0	0	11,307	0	0	987	0	0	18,970	7,925	6,233	4,158	0	12,690	31,006	13,783	9,309	4,580	27,672	12,824	0	0	12,824	187,800
FDA	4,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,540
Total	663,000	13,814	14,214	11,252	39,280	12,918	8,697	16,172	11,658	11,680	0	15,780	12,411	12,475	13,562	8,340	14,664	138,357	7,925	6,233	4,158	0	12,690	31,006	13,783	9,309	4,580	27,672	12,824	14,113	14,420	41,357	663,000

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2028 -1)

Water Supply Zone		WSZ I																				WSZII														
Union	Day Max.	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total	2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	Demand	0.9	1.1	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.7	52.33	2.59	2.45	2.14	1.77	9.85	18.36	1.4	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Jalanwala Town																																				
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town																																				
182	8,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	988	0	0	0	0	0	0	0	988
234	7,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	6,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
236	6,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
237	7,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240	10,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
241	7,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	6,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
243	9,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	6,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
245	6,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
246	8,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
247	9,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
248	9,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250	6,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
251	8,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
252	8,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
253	7,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	6,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
255	7,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
256	7,080	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	6,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
259	7,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	6,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
261	10,010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
262	7,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	674	0	6,836	0	0	0	0	0	0	0	0	7,510
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	207,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	674	0	6,836	988	0	0	0	0	0	0	0	8,498
Jinnah Town																																				8,498
187	9,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,140	0	0	9,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0
263	9,470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,794	0	1,676	0	0	0	0	0	0	0	0	9,470
264	6,310	0	0	0	0	0	0	1,683	0	0	0	0	0	0	0	0	0	0	0	0	1,683	0	0	4,627	0	0	0	0	0	0	0	0	0	0	4,627
265	6,790	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,790	0	0	0	6,790
266	7,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,210	0	0	0	7,210
267	6,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,430	0	0	0	0	0	0	0	0	0	0	0	0	6,430
268	6,640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,421	0	0	0	0	0	0	0	0	3,219	0	0	0	6,640
269	5,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,800	0	0	0	0	0	0	0	0	0	0	0	0	5,800
270	6,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,591	0	0	0	0	0	1,379	0	0	6,970
271	8,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,230	0	0	8,230
272	6,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,510	0	0	6,510
273	9,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,367	0	3,019	0	0	0	0	0	0	755	0	0	9,140
274	10,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,370	0	0	0	0	0	0	0	0	0	0	0	10,370
275	8,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,860	0	8,860
276	8,770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,385	4,385	8,770
277	9,050	9,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0
278	7,540	7,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0
279	6,590	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,590	6,590
280	8,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,143	2,907	0	8,050
281	5,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,490	5,490
282	7,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,440	0	0	0	0	0	0	0	0	0	7,440
283	9,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,794	0	7,386	0	0	0	0	0	0	0	0	0	9,180
284	5,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,910	0	0	0	0	0	0	5,910
285	7,620	0	0	0	0	0	0	0	7,620	0	0	0	0	0	0	0	0	0	0	0	7,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0
286	9,470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,470	0	0	0	0	0	0	9,470
287	9,350	0	0	0	0	0	0	0	4,136	0	0	0	0	0	0	0	0	0	0	0	4,136	0	0	0	0	0	0	5,214	0	0	0	0	0	0	5,214
288	9,290	0	0	0	0	0	0	5,574	3,716	0	0	0	0	0	0	0	0	0	0	0	9,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	9,890	0	0	0	0	0	0	9,890	0	0	0	0	0	0	0	0	0	0	0	0	9,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	6,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	362	0	0	0	0	0	6,528	0	0	0	0	0	6,890
181	11,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,180	0	0	0	0	0	0	0	11,180
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	239,580	16,590	0	0	0	0	0	17,147	15,472	0	0	0	0	0	0	0	0	9,140	0	0	58,348	15,651	17,892	12,421	17,845	7,267	11,180	20,594	6,528	0	17,219	16,874	18,388	19,372	181,232

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2028 -2)

Water Supply Zone		WSZ I																				WSZII														
Union	Day Max.	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total	2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	Demand	0.9	1.1	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.7	52.33	2.59	2.45	2.14	1.77	9.85	18.36	1.4	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Layllpur Town																																				181,232
183	7,890	0	0	0	0	0	0	0	0	7,890	0	0	0	0	0	0	0	0	0	0	7,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	7,210	0	0	0	0	0	0	0	0	6,831	0	0	379	0	0	0	0	0	0	0	7,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	6,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,570	6,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186	7,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,160	0	3,210	0	0	7,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0
188	7,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,020	0	0	7,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
189	7,940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,940	0	0	0	0	7,940	0	0	0	0	0	0	0	0	0	0	0	0	0	0
190	7,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,051	0	0	0	0	3,051	0	0	0	0	0	0	0	0	4,509	0	0	0	0	4,509
191	7,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,180	0	0	0	0	7,180
192	8,420	0	0	0	0	0	0	0	0	0	0	7,805	0	0	0	0	0	0	0	0	7,805	0	0	0	0	0	0	0	0	615	0	0	0	0	615
193	7,290	0	0	5,959	0	0	0	0	0	0	0	1,331	0	0	0	0	0	0	0	0	7,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	6,900	0	0	0	0	0	0	0	0	0	0	6,900	0	0	0	0	0	0	0	0	6,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	10,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,490	0	0	0	10,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0
196	7,980	0	0	2,856	0	0	5,124	0	0	0	0	0	0	0	0	0	0	0	0	0	7,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	8,470	0	0	0	4,654	0	0	0	0	0	0	0	0	0	0	0	3,816	0	0	0	8,470	0	0	0	0	0	0	0	0	0	0	0	0	0	0
209	8,970	0	8,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0
210	8,510	0	7,015	0	0	0	0	0	0	0	0	0	1,495	0	0	0	0	0	0	0	8,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0
211	6,390	0	0	0	3,947	0	0	0	0	0	0	0	2,443	0	0	0	0	0	0	0	6,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0
212	6,430	0	0	0	0	0	0	0	0	0	0	0	6,430	0	0	0	0	0	0	0	6,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0
231	8,800	0	0	0	0	0	0	0	0	0	8,800	0	0	0	0	0	0	0	0	0	8,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
232	6,910	0	0	0	0	0	0	0	0	0	2,909	0	0	0	0	0	0	0	0	0	2,909	0	0	4,001	0	0	0	0	0	0	0	0	0	0	4,001
233	5,550	0	0	0	0	0	0	0	0	0	5,550	0	0	0	0	0	0	0	0	0	5,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	8,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,217	4,083	0	0	0	0	8,300
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	168,150	0	15,985	8,815	8,601	0	5,124	0	0	14,721	17,259	16,036	10,748	0	0	15,152	14,306	10,230	0	6,570	143,545	0	0	4,001	0	0	0	0	4,217	16,387	0	0	0	0	24,605
Madina Town																																				24,605
177	10,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
197	7,510	0	0	0	0	0	4,251	0	0	0	0	0	0	0	3,259	0	0	0	0	0	7,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0
198	7,460	0	0	0	0	0	3,083	0	0	0	0	0	0	0	4,377	0	0	0	0	0	7,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	6,850	0	0	0	0	3,094	0	0	0	0	0	0	0	0	3,756	0	0	0	0	0	6,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	7,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201	8,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	7,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
203	7,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	7,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	8,090	0	0	0	0	0	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0
206	8,090	0	0	0	2,040	0	2,603	0	0	0	0	0	0	3,447	0	0	0	0	0	0	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	6,570	0	0	0	6,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213	9,040	0	0	0	0	0	0	0	0	0	0	0	9,040	0	0	0	0	0	0	0	9,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	7,890	0	0	0	0	0	0	0	0	0	0	0	0	7,890	0	0	0	0	0	0	7,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	8,880	0	0	0	0	0	1,285	0	0	0	0	0	0	7,595	0	0	0	0	0	0	8,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216	6,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
217	5,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
218	6,010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
219	7,790	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	8,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
221	7,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
222	7,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
223	8,530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	6,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	7,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
226	9,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
227	7,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
228	6,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
229	6,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
230	6,510	0	0	0	0	0	0	0	0	4,312	0	0	0	0	0	0	0	0	0	0	4,312	0	0	0	0	0	0	0	0	0	0	0	0	0	0
239	7,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	7,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
249	10,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	251,960	0	0	0	8,610	3,094	11,223	0	0	4,312	0	0	9,040	18,932	19,482	0	0	0	0	0	74,692	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FDA	8,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		8,680	0	8,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	876,000	16,590	15,985	8,815	17,211	3,094	16,347	17,147	15,472	19,032	17,259	16,036	19,788	18,932	19,482	15,152	14,306	19,370	8,680	6,570	285,265	15,651	17,892	17,096	17,845	14,103	12,168	20,594	10,745	16,387	17,219	16,874	18,388	19,372	214,335

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2028 -3)

2028 -2)

Water Supply Zone		WSZIII				WSZ IV													WSZ V						WSZ VI				WSZ VII				Grand
Union	Day Max.	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	Demand	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.1	61.02	4.12	2.48	0	6.6	2.3	0	0	2.3	
Jalanwala Town																																	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town																																	
182	8,910	0	0	0	0	0	6,269	0	0	0	0	0	0	0	0	1,652	0	7,922	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,910
234	7,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,130	0	7,130	7,130
235	6,830	0	0	0	0	0	0	0	0	3,507	0	0	0	0	0	0	0	3,507	0	0	0	0	0	0	0	0	0	0	0	3,323	0	3,323	6,830
236	6,360	0	0	0	0	0	0	0	0	6,360	0	0	0	0	0	0	0	6,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,360
237	7,250	0	0	0	0	0	0	0	0	0	0	5,740	0	0	1,510	0	0	7,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,250
240	10,160	0	0	0	0	0	0	0	4,599	5,561	0	0	0	0	0	0	0	10,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,160
241	7,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,670	0	7,670	7,670
242	6,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,200	6,200	6,200
243	9,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,180	9,180	9,180
244	6,360	0	0	0	0	0	0	3,180	0	0	0	0	0	0	0	0	0	3,180	0	0	0	0	0	0	0	0	0	0	0	0	3,180	3,180	6,360
245	6,910	0	0	0	0	0	0	5,067	1,843	0	0	0	0	0	0	0	0	6,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,910
246	8,300	0	0	0	0	0	0	0	0	0	0	0	0	0	8,300	0	0	8,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,300
247	9,040	0	0	0	0	0	0	0	9,040	0	0	0	0	0	0	0	0	9,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,040
248	9,190	0	0	0	0	0	0	0	0	0	0	0	0	5,514	3,676	0	0	9,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,190
250	6,620	0	0	0	0	132	2,598	0	0	0	0	0	0	3,890	0	0	0	6,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,620
251	8,390	0	0	0	0	0	0	4,878	0	0	0	0	0	1,268	2,244	0	0	8,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,390
252	8,040	0	0	0	0	0	0	2,539	0	0	0	0	0	5,501	0	0	0	8,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,040
253	7,720	0	0	0	0	7,720	0	0	0	0	0	0	0	0	0	0	0	7,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,720
254	6,430	0	0	0	0	1,882	0	4,548	0	0	0	0	0	0	0	0	0	6,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,430
255	7,330	0	0	0	0	3,977	0	0	0	0	0	0	0	0	0	3,353	0	7,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,330
256	7,080	0	0	0	0	2,902	0	0	0	0	0	0	2,553	0	0	0	1,625	7,080	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,080
257	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,000	6,000	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,000
258	6,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,417	1,413	6,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,830
259	7,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,230	7,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,230
260	6,950	0	0	0	0	0	0	0	0	0	0	0	3,945	0	0	0	3,005	6,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,950
261	10,010	0	0	0	0	0	0	0	0	0	0	0	10,010	0	0	0	0	10,010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,010
262	7,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,510
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	207,630	0	0	0	0	16,612	8,867	20,212	15,481	15,429	0	5,740	16,508	16,174	15,730	12,422	19,273	162,449	0	0	0	0	0	0	0	0	0	0	0	18,123	18,560	36,683	207,630
0																																	207,630
187	9,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,140
263	9,470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,470
264	6,310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,310
265	6,790	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,790
266	7,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,210
267	6,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,430
268	6,640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,640
269	5,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,800
270	6,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,970
271	8,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,230
272	6,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,510
273	9,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,140
274	10,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,370
275	8,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,860
276	8,770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,770
277	9,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,050
278	7,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,540
279	6,590	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,590
280	8,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,050
281	5,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,490
282	7,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,440
283	9,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,180
284	5,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,910
285	7,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,620
286	9,470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,470
287	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,350
288	9,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,290
289	9,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,890
180	6,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,890
181	11,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,180
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	239,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	239,580

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2028 -4)

Water Supply Zone		WSZIII				WSZ IV													WSZ V						WSZ VI				WSZ VII				Grand
Union	Day Max.	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	Demand	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.1	61.02	4.12	2.48	0	6.6	2.3	0	0	2.3	
Layllpur Town																																	239,580
183	7,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,890
184	7,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,210
185	6,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,570
186	7,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,370
188	7,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,020
189	7,940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,940
190	7,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,560
191	7,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,180
192	8,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,420
193	7,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,290
194	6,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,900
195	10,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,490
196	7,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,980
208	8,470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,470
209	8,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,970
210	8,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,510
211	6,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,390
212	6,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,430
231	8,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,800
232	6,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,910
233	5,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,550
179	8,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,300
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	168,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	168,150
Madina Town																																	168,150
177	10,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,560	0	10,560	0	0	0	0	0	0	0	0	10,560
197	7,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,510
198	7,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,460
199	6,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,850
200	7,020	7,020	0	0	7,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,020
201	8,110	8,110	0	0	8,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,110
202	7,830	2,594	0	5,236	7,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,830
203	7,560	0	0	7,560	7,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,560
204	7,510	0	5,877	1,633	7,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,510
205	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,090
206	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,090
207	6,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,570
213	9,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,040
214	7,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,890
215	8,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,880
216	6,510	0	6,510	0	6,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,510
217	5,550	0	5,550	0	5,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,550
218	6,010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,010	6,010	0	0	0	0	6,010
219	7,790	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,790	7,790	0	0	0	0	0	0	0	0	7,790
220	8,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,012	0	0	0	8,012	408	0	0	408	0	0	0	0	8,420
221	7,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,581	0	0	0	0	5,581	0	2,309	0	2,309	0	0	0	0	7,890
222	7,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,555	0	0	0	0	4,555	0	3,275	0	3,275	0	0	0	0	7,830
223	8,530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,530	8,530	0	0	0	0	0	0	0	0	8,530
224	6,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,790	0	3,790	2,830	0	0	2,830	6,620
225	7,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,646	2,555	0	6,202	1,148	0	0	1,148	7,350
226	9,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,984	0	0	2,984	6,206	0	0	6,206	0	0	0	0	9,190
227	7,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,360	0	0	2,360	4,890	0	0	4,890	0	0	0	0	7,250
228	6,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,532	0	0	2,532	3,828	0	0	3,828	6,360
229	6,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,410	0	0	6,410	6,410
230	6,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,198	0	0	2,198	6,510
239	7,180	0	0	0	0	0	0	0	0	0	0	6,268	0	0	912	0	0	7,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,180
238	7,250	0	0	0	0	0	0	0	0	0	0	7,250	0	0	0	0	0	7,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,250
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
249	10,340	0	0	0	0	0	8,919	0	0	0	0	1,049	0	0	372	0	0	10,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,340
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	251,960	17,724	17,937	14,429	50,090	0	8,919	0	0	0	0	14,568	0	0	1,283	0	0	24,770	10,135	8,012	5,345	10,560	16,320	50,373	17,681	11,930	6,010	35,621	16,414	0	0	16,414	251,960
FDA	8,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,680
Total	876,000	17,724	17,937	14,429	50,090	16,612	17,786	20,212	15,481	15,429	0	20,307	16,508	16,174	17,014	12,422	16,273	187,219	10,135	8,012	5,345	10,560	16,320	50,373	17,681	11,930	6,010	35,621	16,414	18,123	18,560	53,097	876,000

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2033 -1)

Water Supply Zone		WSZ I																			
Union	Day Max.	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total
Council	Demand	0.9	1.1	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.7	52.33
Jalanwala Town																					
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town																					
182	11,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	8,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
236	7,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
237	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240	14,810	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
241	9,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	7,690	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
243	11,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	7,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
245	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
246	9,710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
247	11,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
248	11,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250	8,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
251	10,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
252	10,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
253	9,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	7,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
255	9,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
256	8,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	10,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
259	9,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	8,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
261	12,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
262	9,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	260,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jinnah Town																					
187	11,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,670	0	0	11,670
263	12,220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	7,380	0	0	0	0	0	0	1,968	0	0	0	0	0	0	0	0	0	0	0	0	1,968
265	7,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
266	9,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
267	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
268	8,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
269	6,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
270	8,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
271	10,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
272	8,070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
273	11,450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	12,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
275	10,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
276	10,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
277	11,550	11,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,550
278	9,350	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,350
279	8,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
280	10,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
281	6,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
282	9,220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
283	11,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	6,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
285	9,570	0	0	0	0	0	0	0	9,570	0	0	0	0	0	0	0	0	0	0	0	9,570
286	11,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
287	11,720	0	0	0	0	0	0	0	5,184	0	0	0	0	0	0	0	0	0	0	0	5,184
288	11,510	0	0	0	0	0	0	6,906	4,604	0	0	0	0	0	0	0	0	0	0	0	11,510
289	12,740	0	0	0	0	0	0	12,740	0	0	0	0	0	0	0	0	0	0	0	0	12,740
180	8,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
181	13,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	296,450	20,900	0	0	0	0	0	21,614	19,358	0	0	0	0	0	0	0	0	11,670	0	0	73,542

Water Supply Zone		WSZ II													
Union	Day Max.	2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	Demand	2.59	2.45	2.14	1.77	9.85	18.36	1.4	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Jalanwala Town															
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town															
182	11,090	0	0	0	0	0	1,230	0	0	0	0	0	0	0	1,230
234	8,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0
236	7,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0
237	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240	14,810	0	0	0	0	0	0	0	0	0	0	0	0	0	0
241	9,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	7,690	0	0	0	0	0	0	0	0	0	0	0	0	0	0
243	11,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	7,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0
245	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0
246	9,710	0	0	0	0	0	0	0	0	0	0	0	0	0	0
247	11,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0
248	11,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250	8,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0
251	10,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0
252	10,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
253	9,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	7,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0
255	9,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
256	8,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	10,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0
259	9,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	8,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0
261	12,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0
262	9,340	0	0	839	0	8,501	0	0	0	0	0	0	0	0	9,340
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	260,210	0	0	839	0	8,501	1,230	0	0	0	0	0	0	0	10,570
Jinnah Town														check	10,570
187	11,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0
263	12,220	0	0	10,057	0	2,163	0	0	0	0	0	0	0	0	12,220
264	7,380	0	0	5,412	0	0	0	0	0	0	0	0	0	0	5,412
265	7,930	0	0	0	0	0	0	0	0	0	7,930	0	0	0	7,930
266	9,060	0	0	0	0	0	0	0	0	0	9,060	0	0	0	9,060
267	8,090	8,090	0	0	0	0	0	0	0	0	0	0	0	0	8,090
268	8,240	4,245	0	0	0	0	0	0	0	0	3,995	0	0	0	8,240
269	6,780	6,780	0	0	0	0	0	0	0	0	0	0	0	0	6,780
270	8,750	0	0	0	0	7,019	0	0	0	0	0	1,731	0	0	8,750
271	10,320	0	0	0	0	0	0	0	0	0	0	10,320	0	0	10,320
272	8,070	0	0	0	0	0	0	0	0	0	0	8,070	0	0	8,070
273	11,450	0	6,723	0	3,782	0	0	0	0	0	0	945	0	0	11,450
274	12,860	0	12,860	0	0	0	0	0	0	0	0	0	0	0	12,860
275	10,980	0	0	0	0	0	0	0	0	0	0	0	10,980	0	10,980
276	10,260	0	0	0	0	0	0	0	0	0	0	0	5,130	5,130	10,260
277	11,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0
278	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0
279	8,290	0	0	0	0	0	0	0	0	0	0	0	0	8,290	8,290
280	10,110	0	0	0	0	0	0	0	0	0	0	0	6,459	3,651	10,110
281	6,370	0	0	0	0	0	0	0	0	0	0	0	0	6,370	6,370
282	9,220	0	0	0	9,220	0	0	0	0	0	0	0	0	0	9,220
283	11,500	0	2,247	0	9,253	0	0	0	0	0	0	0	0	0	11,500
284	6,960	0	0	0	0	0	0	6,960	0	0	0	0	0	0	6,960
285	9,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0
286	11,870	0	0	0	0	0	0	11,870	0	0	0	0	0	0	11,870
287	11,720	0	0	0	0	0	0	6,536	0	0	0	0	0	0	6,536
288	11,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	12,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	8,240	0	433	0	0	0	0	0	7,807	0	0	0	0	0	8,240
181	13,390	0	0	0	0	0	13,390	0	0	0	0	0	0	0	13,390
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	296,450	19,115	22,263	15,469	22,255	9,182	13,390	25,366	7,807	0	20,985	21,066	22,569	23,441	222,908

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2033 -2)

Water Supply Zone		WSZ I																				WSZ II														
Union	Day Max.	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total	2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	Demand	0.9	1.1	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.7	52.33	2.59	2.45	2.14	1.77	9.85	18.36	1.4	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Layllpur Town																				check	73,542													check	222,908
183	9,800	0	0	0	0	0	0	0	0	9,800	0	0	0	0	0	0	0	0	0	0	9,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	8,950	0	0	0	0	0	0	0	0	8,479	0	0	471	0	0	0	0	0	0	0	8,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	8,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,190	8,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186	9,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,165	0	3,985	0	0	9,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0
188	8,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,700	0	0	8,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0
189	9,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,860	0	0	0	0	9,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0
190	9,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,782	0	0	0	0	3,782	0	0	0	0	0	0	0	0	5,588	0	0	0	0	5,588
191	8,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,920	0	0	0	0	8,920
192	10,440	0	0	0	0	0	0	0	0	0	0	9,677	0	0	0	0	0	0	0	0	9,677	0	0	0	0	0	0	0	0	763	0	0	0	0	763
193	9,100	0	0	7,439	0	0	0	0	0	0	0	1,661	0	0	0	0	0	0	0	0	9,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	8,580	0	0	0	0	0	0	0	0	0	0	8,580	0	0	0	0	0	0	0	0	8,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	13,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,340	0	0	0	13,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0
196	9,900	0	0	3,543	0	0	6,357	0	0	0	0	0	0	0	0	0	0	0	0	0	9,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	10,840	0	0	0	5,956	0	0	0	0	0	0	0	0	0	0	0	4,884	0	0	0	10,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0
209	11,130	0	11,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0
210	10,890	0	8,977	0	0	0	0	0	0	0	0	0	1,913	0	0	0	0	0	0	0	10,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0
211	7,430	0	0	0	4,589	0	0	0	0	0	0	0	2,841	0	0	0	0	0	0	0	7,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0
212	7,540	0	0	0	0	0	0	0	0	0	0	0	7,540	0	0	0	0	0	0	0	7,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0
231	11,860	0	0	0	0	0	0	0	0	0	11,860	0	0	0	0	0	0	0	0	0	11,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0
232	8,120	0	0	0	0	0	0	0	0	0	3,419	0	0	0	0	0	0	0	0	0	3,419	0	0	4,701	0	0	0	0	0	0	0	0	0	0	4,701
233	6,530	0	0	0	0	0	0	0	0	0	6,530	0	0	0	0	0	0	0	0	0	6,530	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	10,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,299	5,131	0	0	0	0	10,430
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	209,070	0	20,107	10,982	10,545	0	6,357	0	0	18,279	21,809	19,918	12,765	0	0	18,807	18,224	12,685	0	8,190	178,668	0	0	4,701	0	0	0	0	5,299	20,402	0	0	0	0	30,402
Madina Town																				check	178,668													check	30,402
177	13,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
197	9,290	0	0	0	0	0	5,258	0	0	0	0	0	0	0	4,032	0	0	0	0	0	9,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0
198	9,250	0	0	0	0	0	3,823	0	0	0	0	0	0	0	5,427	0	0	0	0	0	9,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	8,490	0	0	0	0	3,834	0	0	0	0	0	0	0	0	4,656	0	0	0	0	0	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	8,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201	10,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	9,710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
203	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	9,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	10,030	0	0	0	0	0	0	0	0	0	0	0	0	0	10,030	0	0	0	0	0	10,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0
206	10,030	0	0	0	2,529	0	3,227	0	0	0	0	0	0	4,274	0	0	0	0	0	0	10,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	8,140	0	0	0	8,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213	11,300	0	0	0	0	0	0	0	0	0	0	0	11,300	0	0	0	0	0	0	0	11,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	9,760	0	0	0	0	0	0	0	0	0	0	0	0	9,760	0	0	0	0	0	0	9,760	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	11,100	0	0	0	0	0	1,607	0	0	0	0	0	0	9,493	0	0	0	0	0	0	11,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216	8,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
217	6,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
218	7,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
219	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	10,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
221	9,760	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
222	9,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
223	10,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	8,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	9,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
226	11,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
227	8,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
228	7,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
229	7,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
230	8,050	0	0	0	0	0	0	0	0	5,332	0	0	0	0	0	0	0	0	0	0	5,332	0	0	0	0	0	0	0	0	0	0	0	0	0	0
239	8,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	8,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
249	13,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	313,230	0	0	0	10,669	3,834	13,915	0	0	5,332	0	0	11,300	23,527	24,144	0	0	0	0	0	92,722	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FDA	13,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		13,040	0	13,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,092,000	20,900	20,107	10,982	21,214	3,834	20,272	21,614	19,358	23,611	21,809	19,918	24,065	23,527	24,144	18,807	18,224	24,355	13,040	8,190	357,971	19,115	22,263	21,009	22,255	17,683	14,620	25,366	13,106	20,402	20,985	21,066	22,569	23,441	263,881

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2033 -3)

2033 -2)

Water Supply Zone		WSZIII				WSZ IV													WSZ V						WSZ VI				WSZVII				Grand
Union	Day Max.	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	Demand	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.1	61.02	4.12	2.48	0	6.6	2.3	0	0	2.3	
Jalanwala Town																																	
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town																																	
182	11,090	0	0	0	0	0	7,803	0	0	0	0	0	0	0	0	2,056	0	9,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,090
234	8,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,850	0	8,850	8,850
235	8,490	0	0	0	0	0	0	0	0	4,360	0	0	0	0	0	0	0	4,360	0	0	0	0	0	0	0	0	0	0	0	4,130	0	4,130	8,490
236	7,920	0	0	0	0	0	0	0	0	7,920	0	0	0	0	0	0	0	7,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,920
237	9,000	0	0	0	0	0	0	0	0	0	0	7,125	0	0	1,875	0	0	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,000
240	14,810	0	0	0	0	0	0	0	6,703	8,107	0	0	0	0	0	0	0	14,810	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14,810
241	9,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,520	0	9,520	9,520
242	7,690	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,690	7,690	7,690
243	11,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,650	11,650	11,650
244	7,460	0	0	0	0	0	0	3,730	0	0	0	0	0	0	0	0	0	3,730	0	0	0	0	0	0	0	0	0	0	0	0	3,730	3,730	7,460
245	8,090	0	0	0	0	0	0	5,933	2,157	0	0	0	0	0	0	0	0	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,090
246	9,710	0	0	0	0	0	0	0	0	0	0	0	0	0	9,710	0	0	9,710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,710
247	11,500	0	0	0	0	0	0	0	11,500	0	0	0	0	0	0	0	0	11,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,500
248	11,670	0	0	0	0	0	0	0	0	0	0	0	0	7,002	4,668	0	0	11,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,670
250	8,240	0	0	0	0	164	3,234	0	0	0	0	0	0	4,842	0	0	0	8,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,240
251	10,430	0	0	0	0	0	0	6,064	0	0	0	0	0	1,577	2,789	0	0	10,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,430
252	10,020	0	0	0	0	0	0	3,164	0	0	0	0	0	6,856	0	0	0	10,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,020
253	9,570	0	0	0	0	9,570	0	0	0	0	0	0	0	0	0	0	0	9,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,570
254	7,980	0	0	0	0	2,336	0	5,644	0	0	0	0	0	0	0	0	0	7,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,980
255	9,100	0	0	0	0	4,937	0	0	0	0	0	0	0	0	0	4,163	0	9,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,100
256	8,800	0	0	0	0	3,607	0	0	0	0	0	0	3,174	0	0	0	2,020	8,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,800
257	10,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,553	7,658	10,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,210
258	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,733	1,757	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,490
259	9,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,250	9,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,250
260	8,610	0	0	0	0	0	0	0	0	0	0	0	4,887	0	0	0	3,723	8,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,610
261	12,720	0	0	0	0	0	0	0	0	0	0	0	12,720	0	0	0	0	12,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,720
262	9,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,340
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	260,210	0	0	0	0	20,614	11,037	24,535	20,361	20,386	0	7,125	20,781	20,277	19,042	15,505	24,407	204,070	0	0	0	0	0	0	0	0	0	0	0	22,500	23,070	45,570	260,210
Jinnah Town																																	260,210
187	11,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,670
263	12,220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,220
264	7,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,380
265	7,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,930
266	9,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,060
267	8,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,090
268	8,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,240
269	6,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,780
270	8,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,750
271	10,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,320
272	8,070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,070
273	11,450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,450
274	12,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,860
275	10,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,980
276	10,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,260
277	11,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,550
278	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,350
279	8,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,290
280	10,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,110
281	6,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,370
282	9,220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,220
283	11,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,500
284	6,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,960
285	9,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,570
286	11,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,870
287	11,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,720
288	11,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,510
289	12,740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,740
180	8,240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,240
181	13,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,390
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	296,450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	296,450

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2033 -4)

Water Supply Zone		WSZIII				WSZ IV													WSZ V						WSZ VI				WSZVII				Grand
Union	Day Max.	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	Demand	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.1	61.02	4.12	2.48	0	6.6	2.3	0	0	2.3	
Layllpur Town																																	296,450
183	9,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,800
184	8,950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,950
185	8,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,190
186	9,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,150
188	8,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,700
189	9,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,860
190	9,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,370
191	8,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,920
192	10,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,440
193	9,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,100
194	8,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,580
195	13,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,340
196	9,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,900
208	10,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,840
209	11,130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,130
210	10,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,890
211	7,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,430
212	7,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,540
231	11,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,860
232	8,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,120
233	6,530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,530
179	10,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,430
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	209,070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209,070
Madina Town																																	209,070
177	13,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,090	0	13,090	0	0	0	0	0	0	0	0	13,090
197	9,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,290
198	9,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,250
199	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,490
200	8,700	8,700	0	0	8,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,700
201	10,060	10,060	0	0	10,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,060
202	9,710	3,217	0	6,493	9,710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,710
203	9,350	0	0	9,350	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,350
204	9,300	0	7,278	2,022	9,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,300
205	10,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,030
206	10,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,030
207	8,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,140
213	11,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,300
214	9,760	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,760
215	11,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,100
216	8,150	0	8,150	0	8,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,150
217	6,480	0	6,480	0	6,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,480
218	7,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,510	7,510	0	0	0	0	7,510
219	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,650	9,650	0	0	0	0	0	0	0	0	9,650
220	10,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,925	0	0	0	9,925	505	0	0	505	0	0	0	0	10,430
221	9,760	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,903	0	0	0	0	6,903	0	2,857	0	2,857	0	0	0	0	9,760
222	9,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,654	0	0	0	0	5,654	0	4,066	0	4,066	0	0	0	0	9,720
223	10,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,580	10,580	0	0	0	0	0	0	0	0	10,580
224	8,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,695	0	4,695	3,505	0	0	3,505	8,200
225	9,110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,519	3,167	0	7,687	1,423	0	0	1,423	9,110
226	11,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,705	0	0	3,705	7,705	0	0	7,705	0	0	0	0	11,410
227	8,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,920	0	0	2,920	6,050	0	0	6,050	0	0	0	0	8,970
228	7,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,137	0	0	3,137	4,743	0	0	4,743	7,880
229	7,970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,970	0	0	7,970	7,970
230	8,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,718	0	0	2,718	8,050
239	8,920	0	0	0	0	0	0	0	0	0	0	7,787	0	0	1,133	0	0	8,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,920
238	8,990	0	0	0	0	0	0	0	0	0	0	8,990	0	0	0	0	0	8,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,990
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
249	13,850	0	0	0	0	0	11,947	0	0	0	0	1,405	0	0	498	0	0	13,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,850
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	313,230	21,977	21,908	17,865	61,750	0	11,947	0	0	0	0	18,183	0	0	1,630	0	0	31,760	12,558	9,925	6,626	13,090	20,230	62,428	21,915	14,785	7,510	44,210	20,360	0	0	20,360	313,230
FDA	13,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,040
Total	1,092,000	21,977	21,908	17,865	61,750	20,614	22,984	24,535	20,361	20,386	0	25,308	20,781	20,277	20,673	15,505	24,407	235,830	12,558	9,925	6,626	13,090	20,230	62,428	21,915	14,785	7,510	44,210	20,360	22,500	23,070	65,930	1,092,000

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2038 -1)

Water Supply Zone		WSZ I																					WSZ II													
Union	Day Max.	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total		2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	Demand	0.9	1.1	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.7	52.33		2.59	2.45	2.14	1.77	9.85	18.36	1.4	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Jalanwala Town																																				
34	8,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iqbal Town																																				
182	11,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	1,287	0	0	0	0	0	0	0	1,287
234	9,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	8,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
236	8,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
237	9,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
240	12,170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
241	9,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
242	8,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
243	12,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	7,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
245	7,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
246	9,590	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
247	12,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
248	12,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
250	8,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
251	10,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
252	10,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
253	9,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	8,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
255	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
256	9,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
257	11,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
258	8,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
259	10,010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
260	9,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
261	13,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
262	9,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	878	0	8,902	0	0	0	0	0	0	0	0	9,780
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	14,170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	7,381	0	0	0	0	0	0	0	7,381
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	283,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	878	0	8,902	8,668	0	0	0	0	0	0	0	18,448
Jinnah Town																																				
187	12,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,490	0	0	12,490		0	0	0	0	0	0	0	0	0	0	0	0	0	0
263	13,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	10,888	0	2,342	0	0	0	0	0	0	0	0	13,230
264	7,310	0	0	0	0	0	0	1,949	0	0	0	0	0	0	0	0	0	0	0	0	1,949		0	0	5,361	0	0	0	0	0	0	0	0	0	0	5,361
265	7,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	7,850	0	0	0	7,850
266	9,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	9,550	0	0	0	9,550
267	8,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		8,540	0	0	0	0	0	0	0	0	0	0	0	0	8,540
268	8,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		4,435	0	0	0	0	0	0	0	0	4,175	0	0	0	8,610
269	6,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		6,700	0	0	0	0	0	0	0	0	0	0	0	0	6,700
270	9,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	7,420	0	0	0	0	0	1,830	0	0	9,250
271	10,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	10,880	0	0	10,880
272	8,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	8,440	0	0	8,440
273	12,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	7,099	0	3,993	0	0	0	0	0	0	998	0	0	12,090
274	13,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	13,440	0	0	0	0	0	0	0	0	0	0	0	13,440
275	11,450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	11,450	0	11,450
276	10,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	5,060	5,060	10,120
277	12,360	12,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,360		0	0	0	0	0	0	0	0	0	0	0	0	0	0
278	9,780	9,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,780		0	0	0	0	0	0	0	0	0	0	0	0	0	0
279	8,770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	8,770	8,770
280	10,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	6,804	3,846	10,650
281	6,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	6,290	6,290
282	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	9,650	0	0	0	0	0	0	0	0	0	9,650
283	12,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	2,368	0	9,752	0	0	0	0	0	0	0	0	0	12,120
284	6,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	6,840	0	0	0	0	0	0	6,840
285	10,120	0	0	0	0	0	0	0	10,120	0	0	0	0	0	0	0	0	0	0	0	10,120		0	0	0	0	0	0	0	0	0	0	0	0	0	0
286	12,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	12,510	0	0	0	0	0	0	12,510
287	12,360	0	0	0	0	0	0	0	5,467	0	0	0	0	0	0	0	0	0	0	0	5,467		0	0	0	0	0	0	6,893	0	0	0	0	0	0	6,893
288	12,030	0	0	0	0	0	0	7,218	4,812	0	0	0	0	0	0	0	0	0	0	0	12,030		0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	13,730	0	0	0	0	0	0	13,730	0	0	0	0	0	0	0	0	0	0	0	0	13,730		0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	8,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	439	0	0	0	0	0	7,911	0	0	0	0	0	8,350
181	13,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	13,550	0	0	0	0	0	0	0	13,550
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	309,060	22,140	0	0	0	0	0	22,897	20,399	0	0	0	0	0	0	0	0	12,490	0	0	77,926		19,675	23,346	16,249	23,395	9,762	13,550	26,243	7,911	0	21,575	22,148	23,314	23,966	231,134

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2038 -2)

Water Supply Zone		WSZ I																				WSZ II														
Union	Day Max.	1	3	4	5	6	7	9	10	11	23	26	27	38	49	50	51	55	FDA	UC185	Total	2	8	12	36	43	44	45	46	47	52	53	54	56	Total
Council	Demand	0.9	1.1	6.45	1.58	3.07	2.31	1.38	0.93	3.99	1.83	7.54	1.93	1.64	2.76	6.2	2.01	3.01	-	3.7	52.33	2.59	2.45	2.14	1.77	9.85	18.36	1.4	31.12	10.98	1.47	4.24	2.99	1.29	90.65
Layllpur Town																																			
183	10,250	0	0	0	0	0	0	0	0	10,250	0	0	0	0	0	0	0	0	0	0	10,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	9,350	0	0	0	0	0	0	0	0	8,858	0	0	492	0	0	0	0	0	0	0	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	8,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,540	8,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186	9,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,408	0	4,172	0	0	9,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0
188	9,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,120	0	0	9,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0
189	10,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,300	0	0	0	0	10,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
190	9,820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,963	0	0	0	0	3,963	0	0	0	0	0	0	0	0	5,857	0	0	0	0	5,857
191	9,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,330	0	0	0	0	9,330
192	10,940	0	0	0	0	0	0	0	0	0	0	10,140	0	0	0	0	0	0	0	0	10,140	0	0	0	0	0	0	0	0	800	0	0	0	0	800
193	9,500	0	0	7,766	0	0	0	0	0	0	0	1,734	0	0	0	0	0	0	0	0	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	8,960	0	0	0	0	0	0	0	0	0	0	8,960	0	0	0	0	0	0	0	0	8,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	14,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14,460	0	0	0	14,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0
196	10,350	0	0	3,704	0	0	6,646	0	0	0	0	0	0	0	0	0	0	0	0	0	10,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	11,850	0	0	0	6,511	0	0	0	0	0	0	0	0	0	0	0	5,339	0	0	0	11,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0
209	11,020	0	11,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
210	11,890	0	9,801	0	0	0	0	0	0	0	0	0	2,089	0	0	0	0	0	0	0	11,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0
211	7,340	0	0	0	4,534	0	0	0	0	0	0	0	2,806	0	0	0	0	0	0	0	7,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0
212	7,430	0	0	0	0	0	0	0	0	0	0	0	7,430	0	0	0	0	0	0	0	7,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0
231	13,230	0	0	0	0	0	0	0	0	0	13,230	0	0	0	0	0	0	0	0	0	13,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0
232	8,000	0	0	0	0	0	0	0	0	0	3,368	0	0	0	0	0	0	0	0	0	3,368	0	0	4,632	0	0	0	0	0	0	0	0	0	0	4,632
233	6,420	0	0	0	0	0	0	0	0	0	6,420	0	0	0	0	0	0	0	0	0	6,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	11,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,614	5,436	0	0	0	0	11,050
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	10,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,020	0	0	0	0	0	10,020
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	12,060	0	0	12,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	10,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	251,490	0	20,821	23,530	11,045	0	6,646	0	0	19,108	23,018	20,835	12,817	0	0	19,671	19,799	13,292	0	8,540	199,122	0	0	4,632	0	0	0	0	15,634	21,422	0	0	0	0	41,688
Madina Town																																			
177	13,660	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
197	9,690	0	0	0	0	0	5,485	0	0	0	0	0	0	0	4,205	0	0	0	0	0	9,690	0	0	0	0	0	0	0	0	0	0	0	0	0	0
198	9,650	0	0	0	0	0	3,989	0	0	0	0	0	0	0	5,661	0	0	0	0	0	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	8,860	0	0	0	0	4,001	0	0	0	0	0	0	0	0	4,859	0	0	0	0	0	8,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	9,070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201	10,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	10,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
203	9,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	9,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	10,480	0	0	0	0	0	0	0	0	0	0	0	0	0	10,480	0	0	0	0	0	10,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0
206	10,480	0	0	0	2,643	0	3,372	0	0	0	0	0	0	4,465	0	0	0	0	0	0	10,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	8,490	0	0	0	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213	12,030	0	0	0	0	0	0	0	0	0	0	0	12,030	0	0	0	0	0	0	0	12,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	9,650	0	0	0	0	0	0	0	0	0	0	0	0	9,650	0	0	0	0	0	0	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	11,830	0	0	0	0	0	1,712	0	0	0	0	0	0	10,118	0	0	0	0	0	0	11,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216	8,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
217	6,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
218	8,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
219	10,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	10,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
221	10,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
222	10,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
223	11,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	8,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
226	11,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
227	9,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
228	8,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
229	8,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
230	8,380	0	0	0	0	0	0	0	0	5,550	0	0	0	0	0	0	0	0	0	0	5,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0
239	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	9,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	18,620	0	0	0	0	18,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0
249	14,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	16,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	20,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	382,290	0	0	0	11,133	22,621	14,558	0	0	5,550	0	0	12,030	24,233	25,205	0	0	0	0	0	115,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FDA	17,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17,380		0	17,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,252,000	22,140	20,821	23,530	22,177	22,621	21,203	22,897	20,399	24,658	23,018	20,835	24,847	24,233	25,205	19,671	19,799	25,782	17,380	8,540	409,759	19,675	23,346	21,759	23,395	18,663	22,218	26,243	23,545	21,422	21,575	22,148	23,314	23,966	291,270

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2038 -3)

2038 -2)

Water Supply Zone		WSZ III				WSZ IV													WSZ V						WSZ VI				WSZ VII				Grand
Union	Day Max.	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	Demand	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.1	61.02	4.12	2.48	0	6.6	2.3	0	0	2.3	
Jalanwala Town																																	
34	8,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,680	0	0	0	8,680	0	0	0	0	0	0	0	0	8,680
Iqbal Town																																	
182	11,600	0	0	0	0	0	8,162	0	0	0	0	0	0	0	0	2,151	0	10,313	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,600
0	9,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,260	0	9,260	9,260
0	8,900	0	0	0	0	0	0	0	0	4,570	0	0	0	0	0	0	0	4,570	0	0	0	0	0	0	0	0	0	0	0	4,330	0	4,330	8,900
0	8,290	0	0	0	0	0	0	0	0	8,290	0	0	0	0	0	0	0	8,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,290
0	9,410	0	0	0	0	0	0	0	0	0	0	7,450	0	0	1,960	0	0	9,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,410
0	12,170	0	0	0	0	0	0	0	5,509	6,661	0	0	0	0	0	0	0	12,170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,170
0	9,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,980	0	9,980	9,980
0	8,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,050	8,050	8,050
0	12,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,520	12,520	12,520
0	7,350	0	0	0	0	0	0	3,675	0	0	0	0	0	0	0	0	0	3,675	0	0	0	0	0	0	0	0	0	0	0	0	3,675	3,675	7,350
0	7,990	0	0	0	0	0	0	5,859	2,131	0	0	0	0	0	0	0	0	7,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,990
0	9,590	0	0	0	0	0	0	0	0	0	0	0	0	0	9,590	0	0	9,590	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,590
0	12,370	0	0	0	0	0	0	0	12,370	0	0	0	0	0	0	0	0	12,370	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,370
0	12,560	0	0	0	0	0	0	0	0	0	0	0	0	7,536	5,024	0	0	12,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,560
0	8,610	0	0	0	0	172	3,379	0	0	0	0	0	0	5,060	0	0	0	8,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,610
0	10,930	0	0	0	0	0	0	6,355	0	0	0	0	0	1,652	2,923	0	0	10,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,930
0	10,480	0	0	0	0	0	0	3,309	0	0	0	0	0	7,171	0	0	0	10,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,480
0	9,480	0	0	0	0	9,480	0	0	0	0	0	0	0	0	0	0	0	9,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,480
0	8,350	0	0	0	0	2,444	0	5,906	0	0	0	0	0	0	0	0	0	8,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,350
0	9,500	0	0	0	0	5,154	0	0	0	0	0	0	0	0	0	4,346	0	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,500
0	9,200	0	0	0	0	3,770	0	0	0	0	0	0	3,318	0	0	0	2,111	9,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,200
0	11,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,758	8,273	11,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,030
0	8,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,035	1,835	8,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,870
0	10,010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,010	10,010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,010
0	9,020	0	0	0	0	0	0	0	0	0	0	0	5,119	0	0	0	3,901	9,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,020
0	13,630	0	0	0	0	0	0	0	0	0	0	0	13,630	0	0	0	0	13,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,630
0	9,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,780
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	14,170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,789	0	6,789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14,170
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	283,100	0	0	0	0	21,020	11,541	25,105	20,009	19,522	0	7,450	22,067	21,418	19,498	23,078	26,130	216,837	0	0	0	0	0	0	0	0	0	0	0	23,570	24,245	47,815	283,100
0																																	283,100
0	12,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,490
0	13,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,230
0	7,310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,310
0	7,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,850
0	9,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,550
0	8,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,540
0	8,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,610
0	6,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,700
0	9,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,250
0	10,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,880
0	8,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,440
0	12,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,090
0	13,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,440
0	11,450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,450
0	10,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,120
0	12,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,360
0	9,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,780
0	8,770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,770
0	10,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,650
0	6,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,290
0	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,650
0	12,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,120
0	6,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,840
0	10,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,120
0	12,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,510
0	12,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,360
0	12,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,030
0	13,730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,730
0	8,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,350
0	13,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,550
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal	309,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	309,060

Annex 1.2 to Appendix 6.2 Demand Distribution by Distribution Zones, Year 2038 -4)

Water Supply Zone		WSZIII				WSZ IV													WSZ V						WSZ VI				WSZ VII				Grand
Union	Day Max.	37	39	42	Total	13	14	15	16	17	28	29	32	33	35	41	48	Total	20	30	31	34	40	Total	18	21	22	Total	19	24	25	Total	Total
Council	Demand	7.55	1.13	4.08	12.76	2.09	14.55	1.91	1.23	1.33	16	2.61	1.06	4.19	1.33	15.28	1.53	63.11	1.47	17.45	15.67	22.33	4.1	61.02	4.12	2.48	0	6.6	2.3	0	0	2.3	
0																																	309,060
0	10,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,250
0	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,350
0	8,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,540
0	9,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,580
0	9,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,120
0	10,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,300
0	9,820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,820
0	9,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,330
0	10,940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,940
0	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,500
0	8,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,960
0	14,460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14,460
0	10,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,350
0	11,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,850
0	11,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,020
0	11,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,890
0	7,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,340
0	7,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,430
0	13,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,230
0	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,000
0	6,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,420
0	11,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,050
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	10,020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,020
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	12,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,060
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	10,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,680	0	10,680	0	0	0	0	0	0	0	0	10,680
subtotal	251,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,680	0	10,680	0	0	0	0	0	0	0	0	251,490
0																																	251,490
0	13,660	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,660	0	13,660	0	0	0	0	0	0	0	0	13,660
0	9,690	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,690
0	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,650
0	8,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,860
1	9,070	9,070	0	0	9,070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,070
1	10,510	10,510	0	0	10,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,510
0.331269	10,120	3,352	0	6,768	10,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,120
0	9,780	0	0	9,780	9,780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,780
0	9,720	0	7,607	2,113	9,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,720
0	10,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,480
0	10,480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,480
0	8,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,490
0	12,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,030
0	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,650
0	11,830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,830
0	8,750	0	8,750	0	8,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,750
0	6,400	0	6,400	0	6,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,400
0	8,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,050	8,050	0	0	0	0	8,050
0	10,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,060	10,060	0	0	0	0	0	0	0	0	10,060
0	10,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,382	0	0	0	10,382	528	0	0	528	0	0	0	0	10,910
0	10,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,222	0	0	0	0	7,222	0	2,988	0	2,988	0	0	0	0	10,210
0	10,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,904	0	0	0	0	5,904	0	4,246	0	4,246	0	0	0	0	10,150
0	11,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,050	11,050	0	0	0	0	0	0	0	0	11,050
0	8,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,907	0	4,907	3,663	0	0	3,663	8,570
0	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,713	3,303	0	8,016	1,484	0	0	1,484	9,500
0	11,910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,868	0	0	3,868	8,042	0	0	8,042	0	0	0	0	11,910
0	9,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,047	0	0	3,047	6,313	0	0	6,313	0	0	0	0	9,360
0	8,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,268	0	0	3,268	4,942	0	0	4,942	8,210
0	8,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,290	0	0	8,290	8,290
0	8,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,830	0	0	2,830	8,380
0	9,350	0	0	0	0	0	0	0	0	0	0	8,163	0	0	1,187	0	0	9,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,350
0	9,380	0	0	0	0	0	0	0	0	0	0	9,380	0	0	0	0	0	9,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,380
0	18,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18,620
0	14,100	0	0	0	0	0	12,162	0	0	0	0	1,431	0	0	507	0	0	14,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14,100
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	16,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,808	13,372	0	0	16,180	0	0	0	0	0	0	0	0	16,180
0	20,840	0	0	0	0	0	0	0	0	0	20,840	0	0	0	0	0	0	20,840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,840
subtotal	382,290	22,932	22,757	18,661	64,350	0	12,162	0	0	0	20,840	18,974	0	0	1,694	0	0	53,670	13,126	13,190	20,287	13,660	21,110	81,373	22,864	15,444	8,050	46,358	21,209	0	0	21,209	382,290
FDA	17,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17,380
Total	1,252,000	22,932	22,757	18,661	64,350	21,020	23,703	25,105	20,009	19,522	20,840	26,423	22,067	21,418	21,192	23,078	26,130	270,507	13,126	21,870	20,287	24,340	21,110	100,733	22,864	15,444	8,050	46,358	21,209	23,570	24,245	69,024	1,252,000

2. Sizing of Transmission Mains

Demand Forecast by Supply Zones

unit: m3/d

Year \ Zone	Z-I	Z-II	Z-III	Z-IV	Z-V	Z-VI	Z-VII	Total
2023	218,700	166,600	39,300	138,400	31,000	27,700	41,400	663,100
2028	285,300	214,300	50,100	187,200	50,400	35,600	53,100	876,000
2033	358,000	263,900	61,800	235,800	62,400	44,200	65,900	1,092,000
2038	409,800	291,300	64,400	270,500	100,700	46,400	69,000	1,252,100

Production Capacity by Supply Zones

Year		2023		2028		2033		2038	
Description		m^3/d	mgd	m^3/d	mgd	m^3/d	mgd	m^3/d	mgd
Zone I	Chiniot/JBC (Exist)	295,500	65.0	295,500	65.0	295,500	65.0	295,500	65.0
	JBC New	0	0	45,500	10.0	90,900	20.0	90,900	20.0
	Millat Town (WTP)	4,500	1.0	4,500	1.0	4,500	1.0	4,500	1.0
	Total	300,000	66.0	345,500	76.0	390,900	86.0	390,900	86.0
Zone II	JBC WTP	0	0	90,900	20	181,800	40	272,800	60
Zone III	RBC Well (Exist)	81,800	18.0	81,800	18.0	81,800	18.0	81,800	18.0
Total		381,800	84.0	518,200	114.0	654,500	144.0	745,500	164.0

Unit Cost applied for Comparison

Unit Cost of Pipe (DIP) Installation — unit: Rs/m

ND	700	800	900	1000	1100	1200	1300	1400	1500	1600
Unit cost	51,380	64,024	79,779	99,411	117,329	135,247	177,300	209,999	263,210	326,067

Unit Cost of Pump Equpment	280,000 Rs/kW
Power Cost	16 Rs./kW

2.1 Transmission Main of Supply Zone I and II

1) Transmission Main –Jhang New Well Field to TR Ex.

Demand v.s Production of Supply Zone I

	Year	2023	2028	2033	2038
Demand	(day max.)	218,700	285,300	358,000	409,800
	(day ave.)	190,200	248,100	311,300	356,300
Production	1 Exist. Wells	295,500	295,500	295,500	295,500
	2 Exist. WTP	4,500	4,500	4,500	4,500
	3 New Wells	0	45,500	90,900	90,900
	total	300,000	345,500	390,900	390,900

Shear of Production for Day Average Demand

Production of JBC New Well

percentage	0.0%	13.2%	23.3%	23.3%
m^3/d	0	32,700	72,400	82,900
$000m^3/year$	0	11,936	26,426	30,259

Flow Rate

Phase	Year*1				
Ph-2	2026	10 mgd =	45,500 m3/d =	31.6 m3/min =	0.527 m3/s
Ph-3	2031	20	90,900	63.1	1.052

note *1: year of construction start

Transmission Main

diameter	800 ~	1000 mm	single line	
length		13 km		

Transmission Pumps

Number	working	2 units
	standby	1 unit

Dimenssion for Comparison

Flow:	1.052 m3/s			
Diameter:	mm	800	**900**	1000
Velocity:	m/s	2.09	1.65	1.34
H. gradient	C = 130 ‰	4.27	2.40	1.44
Friction loss:		55.5	31.2	18.7
Static head:	BP Well. (LWL)	3.0	3.0	3.0
	TR Res. (HWL)	1.5	1.5	1.5
		4.5	4.5	4.5
Other Loss:	Pmp piping/residual H.	3.0	3.0	3.0
Pump head:	m	64	**39**	27

Cost Estimate

Initial Cost	Transmission Pipe	(install in 2026)			
	unit cost	Rs/m	64,024	79,779	99,411
	Cost	million Rs.	832	1,037	1,292
	Transmisson Pump	(install in 2026)			
	motor output	(per pump)	473	288	200
	unit cost	Rs/kW	280,000	280,000	280,000
	Cost	million Rs./unit	132	81	56
	Ph-1 (2026)	2 units	265	161	112
	Ph-2 (2031)	1 unit	132	81	56

O & M	(Power cost)	flow:	45,500 m3/d			
		unit cost:	16 Rs/kW			
		Power cost:	Rs./day	181,680	110,711	76,646
		unit cost:	Rs./m3	3.99	2.43	1.68

Present Value Analysis

Discount rate: 8 % cost of pump house construction is not included since it is mostly the same between three alternatives unit: million Rs.

		Demand*	ND800				ND900				ND1000				
Year	DF	m3/year	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV	tial	O & M C.	Total C.	PV	
2026	1.00000	-	1,097	0	1,097.3	1,097.3	1,199	0	1,198.6	1,198.6	##	0	1,404.1	1,404.1	
2027	0.92593	-		0	0.0	0.0		0	0.0	0.0		0	0.0	0.0	
2028	0.85734	11,935,500		47.7	47.7	40.9		29.0	29.0	24.9		20.1	20.1	17.2	
2029	0.79383	14,833,600		59.2	59.2	47.0		36.1	36.1	28.7		25.0	25.0	19.8	
2030	0.73503	17,731,700		70.8	70.8	52.0		43.1	43.1	31.7		29.9	29.9	22.0	
2031	0.68058	20,629,800	132	82.4	214.8	146.2	81	50.2	130.9	89.1	56	34.8	90.6	61.7	
2032	0.63017	23,527,900		93.9	93.9	59.2		57.2	57.2	36.1		39.6	39.6	25.0	
2033	0.58349	26,426,000		105.5	105.5	61.6		64.3	64.3	37.5		44.5	44.5	26.0	
2034	0.54027	27,192,500		108.6	108.6	58.7		66.2	66.2	35.7		45.8	45.8	24.7	
2035	0.50025	27,959,000		111.6	111.6	55.8		68.0	68.0	34.0		47.1	47.1	23.6	
2036	0.46319	28,725,500		114.7	114.7	53.1		69.9	69.9	32.4		48.4	48.4	22.4	
2037	0.42888	29,492,000		117.8	117.8	50.5		71.8	71.8	30.8		49.7	49.7	21.3	
2038	0.39711	30,258,500		120.8	120.8	48.0		73.6	73.6	29.2		51.0	51.0	20.2	
2039	0.36770	30,258,500		120.8	120.8	44.4		73.6	73.6	27.1		51.0	51.0	18.7	
2040	0.34046	30,258,500		120.8	120.8	41.1		73.6	73.6	25.1		51.0	51.0	17.4	
2041	0.31524	30,258,500	265	120.8	385.8	121.6	161	73.6	235.1	74.1	##	51.0	162.7	51.3	replace
2042	0.29189	30,258,500		120.8	120.8	35.3		73.6	73.6	21.5		51.0	51.0	14.9	
2043	0.27027	30,258,500		120.8	120.8	32.7		73.6	73.6	19.9		51.0	51.0	13.8	
2044	0.25025	30,258,500		120.8	120.8	30.2		73.6	73.6	18.4		51.0	51.0	12.8	
2045	0.23171	30,258,500		120.8	120.8	28.0		73.6	73.6	17.1		51.0	51.0	11.8	
2046	0.21455	30,258,500	132	120.8	253.3	54.3	81	73.6	154.4	33.1	56	51.0	106.9	22.9	replace
2047	0.19866	30,258,500		120.8	120.8	24.0		73.6	73.6	14.6		51.0	51.0	10.1	
	Total				2,650.3	2,182.0			1,615.0	**1,859.6**			1,118.1	1,861.7	

Selection: Size of ND 900mm for transmission main is selected taking lowest present value into account

2) Transmission Main – Jhang Water Treatment Plant to TR 1

Demand v.s Production of Supply Zone I

	Year	2023	2028	2033	2038
Demand (day max.)	m^3/d	166,600	214,300	263,900	291,300
(day ave.)	m^3/d	144,900	186,300	229,500	253,300
Production Capacity	m^3/d	0	90,900	181,800	272,800
Production	m^3/d	0	90,900	181,800	253,300
	$000m^3/year$	0	33,179	66,357	92,455

Flow Rate

Ph-2 (2026)	20 mgd =	90,900 m3/d =	63.1 m3/min =	1.052 m3/s
Ph-3 (2031)	40	181,800	126.3	2.104
Ph-4 (2036)	60	272,800	189.4	3.157

Transmission Main

diameter	Ph-2 (2026)	900	~	1100 mm
	Ph-3 (2031)			1000 mm
length				12 km

Transmission Pumps

		Ph-2	Ph-3	Ph-4
Number	working	2 units	4 units	6 units
	standby	1 unit	2 units	3 units
	total	3 units	6 units	9 units

Dimensions for Comparison

			Ph-2		Ph-3	Ph-4
		Diameter	1000	1100	1200	1200	1200
		composit dia.	1000	1100	1200	1,493	1,555
Flow:	m3/s			1.052		2.104	3.157
Diameter:	mm		1000	1100	1200	1,493	1,493
Velocity:	m/s		1.34	1.11	0.93	1.20	1.81
H. gradient	C = 130 ‰		1.44	0.9	0.59	0.74	1.56
Friction loss:			17.3	10.8	7.1	8.9	18.8
Static head:	BP Well. (LWL)		3.0	3.0	3.0	3.0	3.0
	TR Res. (HWL)		1.5	1.5	1.5	1.5	1.5
			4.5	4.5	4.5	4.5	4.5
Other Loss:	Pmp piping/residual H.		3.0	3.0	3.0	3.0	3.0
Pump head:	m		25	19	15	17	27

Cost Estimate

Initial Cost	Transmission Pipe		(install in 2026)			(install in 2031)	-
	unit cost	Rs/m	99,411	117,329	135,247	135,247	135,247
	Cost	million Rs.	1,193	1,408	1,623	1,623	1,623
	Transmisson Pump		(install in 2026)			(install in 2031)	
	motor output	(per pump)	185	140	111	126	200
	unit cost	Rs/kW	280,000	280,000	280,000	280,000	280,000
	Cost	million Rs./unit	52	39	31	35	56
	Ph-2 (2026)	3 units	155	168	168		
	Ph-3 (2031)	3 units				106	
	Ph-4 (2036)	3 units					168
O & M	(Power cost)	flow:	45,500 m3/d				
		unit cost:	16.0 Rs/kW				
		Power cost:	Rs./day	70,969	53,936	42,581	48,259	76,646
		unit cost:	Rs./m3	1.56	1.19	0.94	1.06	1.68

Present Value Analysis

Discount rate: 8 % cost of pump house construction is not included since it is mostly the same between three alternatives unit: million Rs.

		Demand*	ND1000/1200				**ND1100/1200**				ND1200/1200				
Year	DF	m3/year	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV	
2026	1.00000	-	1,348	0	1,348.2	1,348.2	1,576	0	1,575.6	1,575.6	1,791	0	1,790.6	1,790.6	
2027	0.92593	-		0	0.0	0.0		0	0.0	0.0		0	0.0	0.0	
2028	0.85734	########		132.5	132.5	113.6		80.7	80.7	69.2		55.9	55.9	47.9	
2029	0.79383	39,814,200		159.0	159.0	126.2		96.9	96.9	76.9		67.1	67.1	53.2	
2030	0.73503	46,449,900		185.5	185.5	136.3		113.0	113.0	83.1		78.2	78.2	57.5	
2031	0.68058	53,085,600	1,729	212.0	1,940.5	1320.7	1,729	129.2	1,857.7	1264.3	1,791	89.4	1,880.1	1,279.5	
2032	0.63017	59,721,300		238.5	238.5	150.3		145.3	145.3	91.6		100.6	100.6	63.4	
2033	0.58349	66,357,000		265.0	265.0	154.6		161.5	161.5	94.2		111.8	111.8	65.2	
2034	0.54027	71,576,500		285.8	285.8	154.4		174.2	174.2	94.1		120.6	120.6	65.1	
2035	0.50025	76,796,000		306.6	306.6	153.4		186.9	186.9	93.5		129.4	129.4	64.7	
2036	0.46319	82,015,500	106	327.5	433.1	200.6	106	199.6	305.1	141.3	168	138.2	305.8	141.7	
2037	0.42888	87,235,000		348.3	348.3	149.4		212.3	212.3	91.0		146.9	146.9	63.0	
2038	0.39711	92,454,500		369.2	369.2	146.6		225.0	225.0	89.3		155.7	155.7	61.8	
2039	0.36770	92,454,500		369.2	369.2	135.7		225.0	225.0	82.7		155.7	155.7	57.3	
2040	0.34046	92,454,500		369.2	369.2	125.7		225.0	225.0	76.6		155.7	155.7	53.0	
2041	0.31524	92,454,500	323	369.2	692.1	218.2	335	225.0	560.3	176.6	335	155.7	491.1	154.8	replace
2042	0.29189	92,454,500		369.2	369.2	107.8		225.0	225.0	65.7		155.7	155.7	45.5	
2043	0.27027	92,454,500		369.2	369.2	99.8		225.0	225.0	60.8		155.7	155.7	42.1	
2044	0.25025	92,454,500		369.2	369.2	92.4		225.0	225.0	56.3		155.7	155.7	39.0	
2045	0.23171	92,454,500		369.2	369.2	85.5		225.0	225.0	52.1		155.7	155.7	36.1	
2046	0.21455	92,454,500	155	369.2	524.4	112.5	168	225.0	392.6	84.2	168	155.7	323.4	69.4	replace
2047	0.19866	92,454,500		369.2	369.2	73.3		225.0	225.0	44.7		155.7	155.7	30.9	
	Total			6,152.2	8,464.5	5,205.1		3,749.0	6,086.1	4,463.9		2,595.5	5,056.8	**4,281.9**	

Selection: Size of ND 1200mm/1200mm combination for transmission main is selected taking similar present value and lower initial cost into account

2.2 Transmission Main of Supply Zone IV (Water Transmission Main – Gugera Well Field to TR 2)

Demand v.s Production of Supply Zone IV

Demand			2023	2028	2033	2038
	Zone IV	(Day Max)	138,400	187,200	235,800	270,500
		(Day Ave)	120,300	162,800	205,000	235,200
Production						
Gugera Well (to Z-IV)			22,700	45,500	45,500	45,500

Flow Rate

Ph-1	5 mgd =	22,700 m3/d =	15.8 m3/min =	0.263 m3/s
Ph-2	10	45,500	31.6	0.527

Transmission Main

diameter	700	~	900 mm	single line
length			20 km	

Transmission Pumps

Number	working	2 units
	standby	1 unit

Dimensions for Comparison

Flow:	0.527 m3/s			
Diameter:	mm	700	**800**	900
Velocity:	m/s	1.37	1.05	0.83
H. gradient	C = 130 ‰	2.27	1.19	0.67
Friction loss:		45.4	23.8	13.4
Static head:	BP Well. (LWL)	-3.0	-3.0	-3.0
	TR Res. (HWL)	1.5	1.5	1.5
		4.5	4.5	4.5
Other Loss:	Pmp piping/residual H.	3.0	3.0	3.0
Pump head:	m	53	**32**	21

Cost Estimate

Initial Cost	Transmission Pipe	(install in 2021)			
	unit cost	Rs/m	51,380	64,024	79,779
	Cost	million Rs.	1,028	1,280	1,596
	Transmisson Pump	(install in 2021)		Demand > Production	
	motor output	(per pump)	196	118	78
	unit cost	Rs/kW	280,000	280,000	280,000
	Cost	million Rs./unit	55	33	22
	Ph-1 (2021)	2 units	110	66	44
	Ph-2 (2026)	1 unit	55	33	22

O & M	(Power cost)	flow:	22,700 m3/d			
		unit cost:	16 Rs/kW			
		Power cost:	Rs./day	75,346	45,492	29,854
		unit cost:	Rs./m3	3.32	2.00	1.32

Present Value Analysis

Discount rate: 8 % cost of pump house construction is not included since it is mostly the same between three alternatives unit: million Rs.

		Demand*	ND700				**ND800**				ND900				
Year	DF	m3/year	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV	
2021	1.00000	-	1,137	0	1,137.5	1,137.5	1,347	0	1,346.8	1,346.8	1,639	0	1,639.1	1,639.1	
2022	0.92593	-		0	0.0	0.0		0	0.0	0.0		0	0.0	0.0	
2023	0.85734	8,285,500		27.5	27.5	23.6		16.6	16.6	14.2		10.9	10.9	9.3	
2024	0.79383	9,949,900		33.0	33.0	26.2		19.9	19.9	15.8		13.1	13.1	10.4	
2025	0.73503	11,614,300		38.6	38.6	28.3		23.3	23.3	17.1		15.3	15.3	11.2	
2026	0.68058	13,278,700	55	44.1	99.0	67.4	33	26.6	59.8	40.7	22	17.5	39.2	26.7	
2027	0.63017	14,943,100		49.6	49.6	31.3		29.9	29.9	18.9		19.7	19.7	12.4	
2028	0.58349	16,607,500		55.1	55.1	32.2		33.3	33.3	19.4		21.8	21.8	12.7	
2029	0.54027	16,607,500		55.1	55.1	29.8		33.3	33.3	18.0		21.8	21.8	11.8	
2030	0.50025	16,607,500		55.1	55.1	27.6		33.3	33.3	16.6		21.8	21.8	10.9	
2031	0.46319	16,607,500		55.1	55.1	25.5		33.3	33.3	15.4		21.8	21.8	10.1	
2032	0.42888	16,607,500		55.1	55.1	23.6		33.3	33.3	14.3		21.8	21.8	9.4	
2033	0.39711	16,607,500		55.1	55.1	21.9		33.3	33.3	13.2		21.8	21.8	8.7	
2034	0.36770	16,607,500		55.1	55.1	20.3		33.3	33.3	12.2		21.8	21.8	8.0	
2035	0.34046	16,607,500		55.1	55.1	18.8		33.3	33.3	11.3		21.8	21.8	7.4	
2036	0.31524	16,607,500	110	55.1	165.0	52.0	66	33.3	99.6	31.4	44	21.8	65.4	20.6	Pump Replace
2037	0.29189	16,607,500		55.1	55.1	16.1		33.3	33.3	9.7		21.8	21.8	6.4	
2038	0.27027	16,607,500		55.1	55.1	14.9		33.3	33.3	9.0		21.8	21.8	5.9	
2039	0.25025	16,607,500		55.1	55.1	13.8		33.3	33.3	8.3		21.8	21.8	5.5	
2040	0.23171	16,607,500		55.1	55.1	12.8		33.3	33.3	7.7		21.8	21.8	5.1	
2041	0.21455	16,607,500	55	55.1	110.1	23.6	33	33.3	66.5	14.3	22	21.8	43.6	9.4	Pump Replace
2042	0.19866	16,607,500		55.1	55.1	11.0		33.3	33.3	6.6		21.8	21.8	4.3	
	Total				1,239.4	1,658.0			748.3	**1,661.1**			491.1	1,845.4	

Selection: Size of 800 mm of transmission main is selected

2.3 Transmission Main of Supply Zone V
(Raw Water Transmission Main – Gugera Branch Canal to Gugera WTP)

Demand v.s Production of Supply Zone V

Demand			2023	2028	2033	2038
	Zone V	(Day Max)	31,000	50,400	62,400	100,700
		(Day Ave)	27,000	43,800	54,300	87,600
Production						
Gugera WTP (to Z-V)			113,700 *	227,300	341,000	341,000

note *: French Ph-2 project

Flow Rate

Ph-1	25 mgd =	113,700 m3/d =	79.0 m3/min =	1.316 m3/s	under French Phase II project
Ph-2	50	227,300	157.8	2.631	
Ph-3	75	341,000	236.8	3.947	

(ND1000 x L11.3km & 1200mm x L12.7km)

Transmission Main

		Ph-1	Ph-2	
diameter	composit	1080 mm	1300 ~ 1500	mm
length		24 km	24 km	

Transmission Pumps

		Ph-1	Ph-2	Ph-3
Number	working	2 units	4 units	6 units
	standby	1 unit	2 units	3 units

Dimensions for Comparison

			Ph-1	Ph-2			Ph-3		
Flow:	m3/d		124,600		206,600			259,300	
	m3/s		1.316		2.631			3.947	
Diameter:	mm		1000/1200	1300	1400	1500	1300	1400	1500
composit			1080	1,553	1,628	1,707	1,553	1,628	1,707
Velocity:	m/s		1.44	1.39	1.26	1.15	2.09	1.90	1.73
H. gradient	‰	C = 130	1.50	0.92	0.73	0.58	1.95	1.55	1.23
Friction loss:			35.9	22.1	17.5	13.9	46.8	37.1	29.5
Static head:	BP Well. (LWL)		1.0	1.0	1.0	1.0	1.0	1.0	1.0
	TR Res. (HWL)		1.0	1.0	1.0	1.0	1.0	1.0	1.0
			2.0	2.0	2.0	2.0	2.0	2.0	2.0
Other Loss:	Pmp piping/residual H.		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pump head:	m	C=130	**41**	28	23	19	52	**43**	35
		C=120	47	31	26	22	60	49	40

Cost Estimate

Initial Cost				Ph-2			Ph-3		
			Diameter	1300	1400	1500	1300	1400	1500
	Transmission Pipe		install in 2026						
		unit cost	Rs/m	177,300	209,999	263,210	177,300	209,999	263,210
		Cost	million Rs.	4,255	5,040	6,317	-	-	-
	Transmisson Pump								
		Flow	m3/min/unit	39.5	39.5	39.5	39.5	39.5	39.5
		motor output	(per pump)	259	213	176	481	398	324
		unit cost	Rs/kW	400,000	400,000	400,000	400,000	400,000	400,000
		Cost	million Rs./unit	104	85	70	193	159	130
		Ph-2 (2026)	3 units	578	478	389			
		Ph-3 (2031)	3 units				578	478	389
O & M	(Power cost)	flow:	56,800 m3/min/unit						
		unit cost:	16 Rs/kW						
		Power cost:	Rs./day	99,513	81,743	67,527	184,811	152,824	124,392
		unit cost:	Rs./m3	1.75	1.44	1.19	3.25	2.69	2.19

Present Value Analysis

Discount rate: 8 % cost of pump house construction is not included since it is mostly the same between three alternatives unit: million Rs.

		Demand*	ND1300				**ND1400**				ND1500			
Year	DF	m3/year	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV
2026	1.00000	-	4,832.7	0	4,832.7	4,832.7	5,517.6	0	5,517.6	5,517.6	6,706	0	6,705.8	6,705.8
2027	0.92593	-		0	0.0	0.0		0	0.0	0.0		0	0.0	0.0
2028	0.85734	58,801,500		103.0	103.0	88.3		84.6	84.6	72.6		69.9	69.9	59.9
2029	0.79383	62,648,600		109.8	109.8	87.1		90.2	90.2	71.6		74.5	74.5	59.1
2030	0.73503	66,495,700		116.5	116.5	85.6		95.7	95.7	70.3		79.1	79.1	58.1
2031	0.68058	70,342,800	577.5	123.2	700.8	476.9	477.6	101.2	578.8	393.9	389	83.6	472.4	321.5
2032	0.63017	74,189,900		130.0	130.0	81.9		106.8	106.8	67.3		88.2	88.2	55.6
2033	0.58349	78,037,000		253.9	253.9	148.2		210.0	210.0	122.5		170.9	170.9	99.7
2034	0.54027	82,672,500		269.0	269.0	145.3		222.4	222.4	120.2		181.1	181.1	97.8
2035	0.50025	87,308,000		284.1	284.1	142.1		234.9	234.9	117.5		191.2	191.2	95.6
2036	0.46319	91,943,500		299.2	299.2	138.6		247.4	247.4	114.6		201.4	201.4	93.3
2037	0.42888	96,579,000		314.2	314.2	134.8		259.9	259.9	111.4		211.5	211.5	90.7
2038	0.39711	101,214,500		329.3	329.3	130.8		272.3	272.3	108.1		221.7	221.7	88.0
2039	0.36770	101,214,500		329.3	329.3	121.1		272.3	272.3	100.1		221.7	221.7	81.5
2040	0.34046	101,214,500		329.3	329.3	112.1		272.3	272.3	92.7		221.7	221.7	75.5
2041	0.31524	101,214,500	577.5	329.3	906.9	285.9	477.6	272.3	749.9	236.4	389	221.7	610.4	192.4
2042	0.29189	101,214,500		329.3	329.3	96.1		272.3	272.3	79.5		221.7	221.7	64.7
2043	0.27027	101,214,500		329.3	329.3	89.0		272.3	272.3	73.6		221.7	221.7	59.9
2044	0.25025	101,214,500		329.3	329.3	82.4		272.3	272.3	68.1		221.7	221.7	55.5
2045	0.23171	101,214,500		329.3	329.3	76.3		272.3	272.3	63.1		221.7	221.7	51.4
2046	0.21455	101,214,500	577.5	329.3	906.9	194.6	477.6	272.3	749.9	160.9	389	221.7	610.4	131.0
2047	0.19866	101,214,500		329.3	329.3	65.4		272.3	272.3	54.1		221.7	221.7	44.0
	Total		6,565	5,296.1	11,861.4	7,615.3	6,950	4,376.3	11,326.5	**7,816.2**	7,872	3,567.9	11,439.8	8,581.0

Selection: size of 1400mm for 2nd phase transmission is selected from advantage to apply the same dimensions of transmission pump for whole phases

2.4 Transmission Main of Supply Zone IV and V (Transmission from TR V to TR IV)

Flow Rate

Ph-1	25 mgd =	113,700 m3/d =	79.0 m3/min =	1.316 m3/s	under French Phase II project
Ph-2~4	50	227,300	157.8	2.631	

Transmission Main

		Ph-1			Ph-2~4		
diameter	mm	1000	1100	1200	900	1000	1100
composit	mm	1000	1100	1200	1,234	1,363	1,425
length	km	10	10	10	10	10	10

Transmission Pumps

Number	working	2 units	4 units
	standby	1 unit	2 units

Dimensions for Comparison

			Ph-1			Ph-2~4		
Flow:	m3/d			162,800			235,200	
	m3/s			1.316			2.631	
Diameter:	mm		1000	1100	1200	900	1000	1100
composit			1000	1100	1200	1,234	1,296	1,363
Velocity:	m/s		1.68	1.39	1.16	2.20	2.00	1.80
H. gradient	‰	C = 130	2.18	1.37	0.90	2.82	2.22	1.73
Friction loss:			21.8	13.7	9.0	28.2	22.2	17.3
Static head:	BP Well. (LWL)		1.0	1.0	1.0	1.0	1.0	1.0
	TR Res. (HWL)		1.0	1.0	1.0	1.0	1.0	1.0
			2.0	2.0	2.0	2.0	2.0	2.0
Other Loss:	Pmp piping/residual H.		3.0	3.0	3.0	3.0	3.0	3.0
Pump head:	m		27	19	14	34	28	23

Cost Estimate

Initial Cost				Ph-1 (install 2021)				Ph-2~4 (install 2026)		
		Diameter		1000	1100	1200		900	1000	1100
Transmission Pipe										
	unit cost	Rs/m	(install 2021)	99,411	117,329	135,247	(install 2026)	79,779	99,411	117,329
	Cost	million Rs.		2,386	2,816	3,246		1,915	2,386	2,816
Transmisson Pump										
	Flow	m3/min/unit		39.5	39.5	39.5		39.5	39.5	39.5
	motor output	(per pump)		250	176	130		315	259	213
	unit cost	Rs/kW		280,000	280,000	280,000		280,000	280,000	280,000
	Cost	million Rs./unit		70	49	36		88	73	60
	Ph-2 (2026)	3 units		264	218	179				
	Ph-3 (2031)	3 units						264	218	179
O & M	(Power cost)	flow:	56,800 m3/min/unit							
		unit cost:	16.0 Rs/kW							
		Power cost:	Rs./day	95,959	67,527	49,757		120,838	99,513	81,743
		unit cost:	Rs./m3	1.69	1.19	0.88		2.13	1.75	1.44

Present Value Analysis

Discount rate: 8 % cost of pump house construction is not included since it is mostly the same between three alternatives unit: million Rs.

		Demand*	ND1000				ND1100				ND1200				
Year	DF	m3/year	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV	Initial C.	O & M C.	Total C.	PV	
2021	1.00000	-	2,650	0	2,650.2	2,650.2	3,034	0	3,033.6	3,033.6	3,425	0	3,424.7	3,424.7	
2022	0.92593	-		0	0.0	0.0		0	0.0	0.0		0	0.0	0.0	
2023	0.85734	45,479,000		76.8	76.8	65.9		54.1	54.1	46.4		39.8	39.8	34.2	
2024	0.79383	43,413,100		73.3	73.3	58.2		51.6	51.6	41.0		38.0	38.0	30.2	
2025	0.73503	47,260,200		79.8	79.8	58.7		56.2	56.2	41.3		41.4	41.4	30.4	
2026	0.68058	51,107,300	2,179	86.3	2,265.4	1541.8	2,604	89.5	2,693.1	1832.9	2,995	44.8	3,039.5	2,068.6	
2027	0.92593	54,954,400		92.8	92.8	86.0		65.3	65.3	60.5		48.1	48.1	44.6	
2028	0.85734	58,801,500		125.1	125.1	107.2		103.0	103.0	88.3		84.6	84.6	72.6	
2029	0.79383	59,495,000		126.6	126.6	100.5		104.2	104.2	82.7		85.6	85.6	68.0	
2030	0.73503	64,130,500		136.4	136.4	100.3		112.4	112.4	82.6		92.3	92.3	67.8	
2031	0.68058	68,766,000		146.3	146.3	99.6		120.5	120.5	82.0		99.0	99.0	67.4	
2032	0.63017	73,401,500		156.2	156.2	98.4		128.6	128.6	81.0		105.6	105.6	66.6	
2033	0.58349	78,037,000		166.0	166.0	96.9		136.7	136.7	79.8		112.3	112.3	65.5	
2034	0.54027	78,037,000		166.0	166.0	89.7		136.7	136.7	73.9		112.3	112.3	60.7	
2035	0.50025	78,037,000		166.0	166.0	83.1		136.7	136.7	68.4		112.3	112.3	56.2	
2036	0.46319	78,037,000	264	166.0	430.4	199.3	218	136.7	354.4	164.2	179	112.3	291.1	134.8	replace
2037	0.42888	78,037,000		166.0	166.0	71.2		136.7	136.7	58.6		112.3	112.3	48.2	
2038	0.39711	101,214,500		215.3	215.3	85.5		177.3	177.3	70.4		145.7	145.7	57.8	
2039	0.36770	101,214,500		215.3	215.3	79.2		177.3	177.3	65.2		145.7	145.7	53.6	
2040	0.34046	101,214,500		215.3	215.3	73.3		177.3	177.3	60.4		145.7	145.7	49.6	
2041	0.31524	101,214,500	264	215.3	479.7	151.2	218	177.3	395.0	124.5	179	145.7	324.5	102.3	replace
2042	0.29189	101,214,500		215.3	215.3	62.9		177.3	177.3	51.8		145.7	145.7	42.5	
	Total		5,358	3,006.5	8,364.4	**5,958.9**	6,073	2,455.7	8,528.2	6,289.4	6,777	1,969.2	8,746.2	6,646.2	

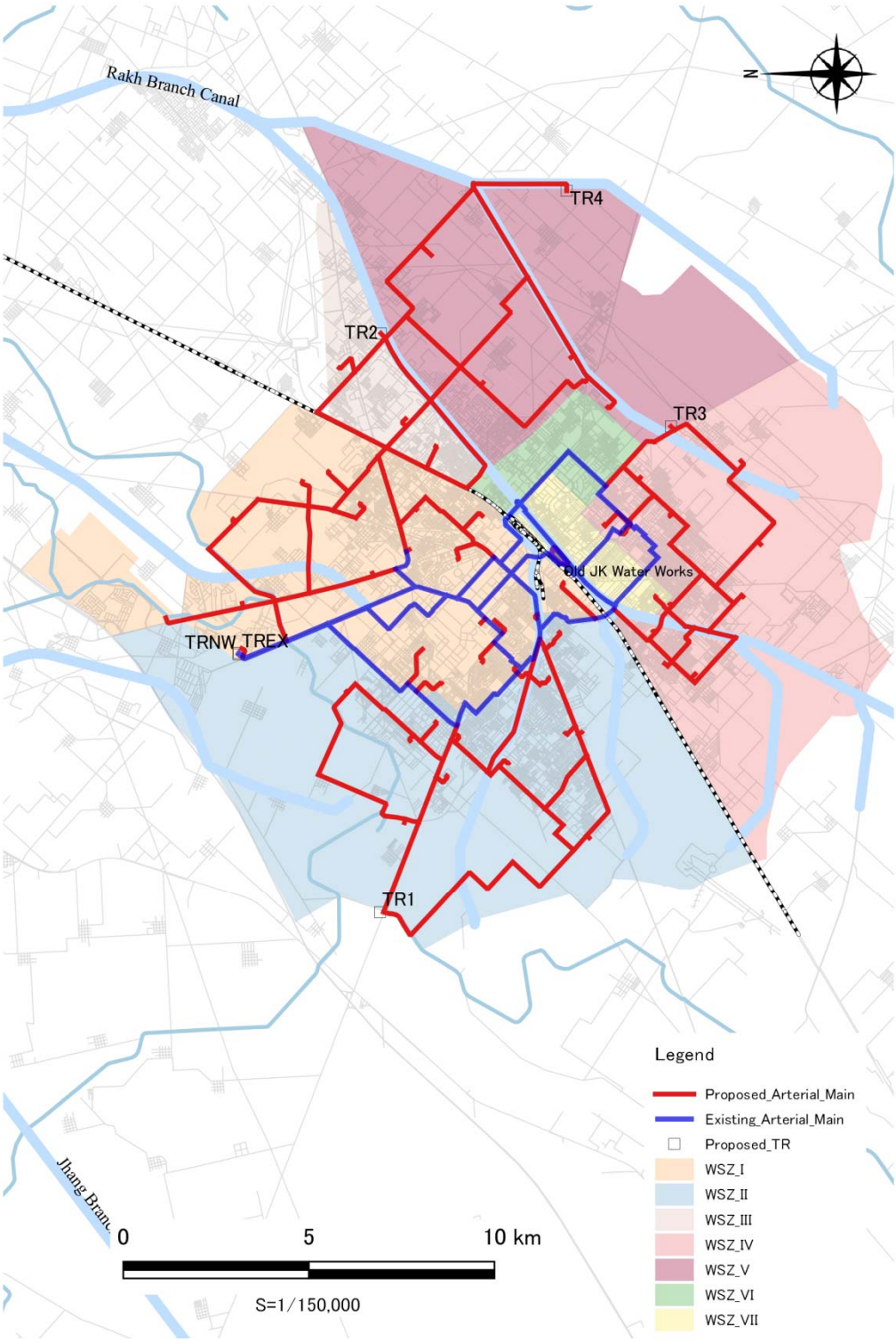
Selection: Size of 1000 mm of transmission main is selected

2.5 Results of Analysis
(Sizing amd Timing of Construction of Transmission Facilities)

Size of Trans. Line	Ph-1		Ph-2		Ph-3		Ph-4	
	Pipe	Pump	Pipe	Pump	Pipe	Pump	Pipe	Pump
1. Jhang Well - TRexist	-	-	ND 900	$Q_{31.6x}H_{44*}P_{325}$	-	-	-	-
	-	-	13 km	$W_2 + S_1$	-	-	-	-
2. Jhang WTP - TR 1			ND 1200	$Q_{31.6x}H_{44*}P_{325}$	ND 1200	$Q_{31.6x}H_{44*}P_{325}$	-	$Q_{31.6x}H_{44*}P_{325}$
			12 km	$W_2 + S_1$	12 km	$W_2 + S_1$	-	$W_2 + S_1$
3. Gugera Well - TR 2	ND 800	$Q_{15.8x}H_{36*}P_{133}$	-	$Q_{15.8x}H_{36*}P_{133}$	-	-	-	-
	20 km	$W_1 + S_1$	-	$W_1 + S_0$	-	-	-	-
4. Gugera WTP - TR 3	ND1000/1200	$Q_{39.5x}H_{49*}P_{454}$	ND1400	$Q_{39.5x}H_{49*}P_{454}$	-	$Q_{39.5x}H_{49*}P_{454}$	-	-
	11.3/12.7	$W_2 + S_1$	24 km	$W_2 + S_1$	-	$W_2 + S_1$	-	-
5. TR 3 - TR 2	ND 1000	$Q_{39.5x}H_{31*}P_{287}$	ND 1000	$Q_{39.5x}H_{31*}P_{287}$	-	-	-	-
	10 km	$W_2 + S_1$	10 km	$W_2 + S_1$	-	-	-	-

3. Network Analysis of Arterial Main

The network analysis was carried out based on the demands distributed and locations of Distribution Centers determined for distribution main system (Arterials Main System), where two supply zones of WSZ VI and VII were neglected for analysis since the production of WSZ VI is transmitted to respective DCs and the capacity of the existing arterials mains is apparently enough to distribute the production (15 mgd) of WSZ VII to respective DCs.



General Layout of Arterial Main Network Water Supply Zones and Areteial Network

3.1 Network Analysis of Arterial Main for Supply Zone I

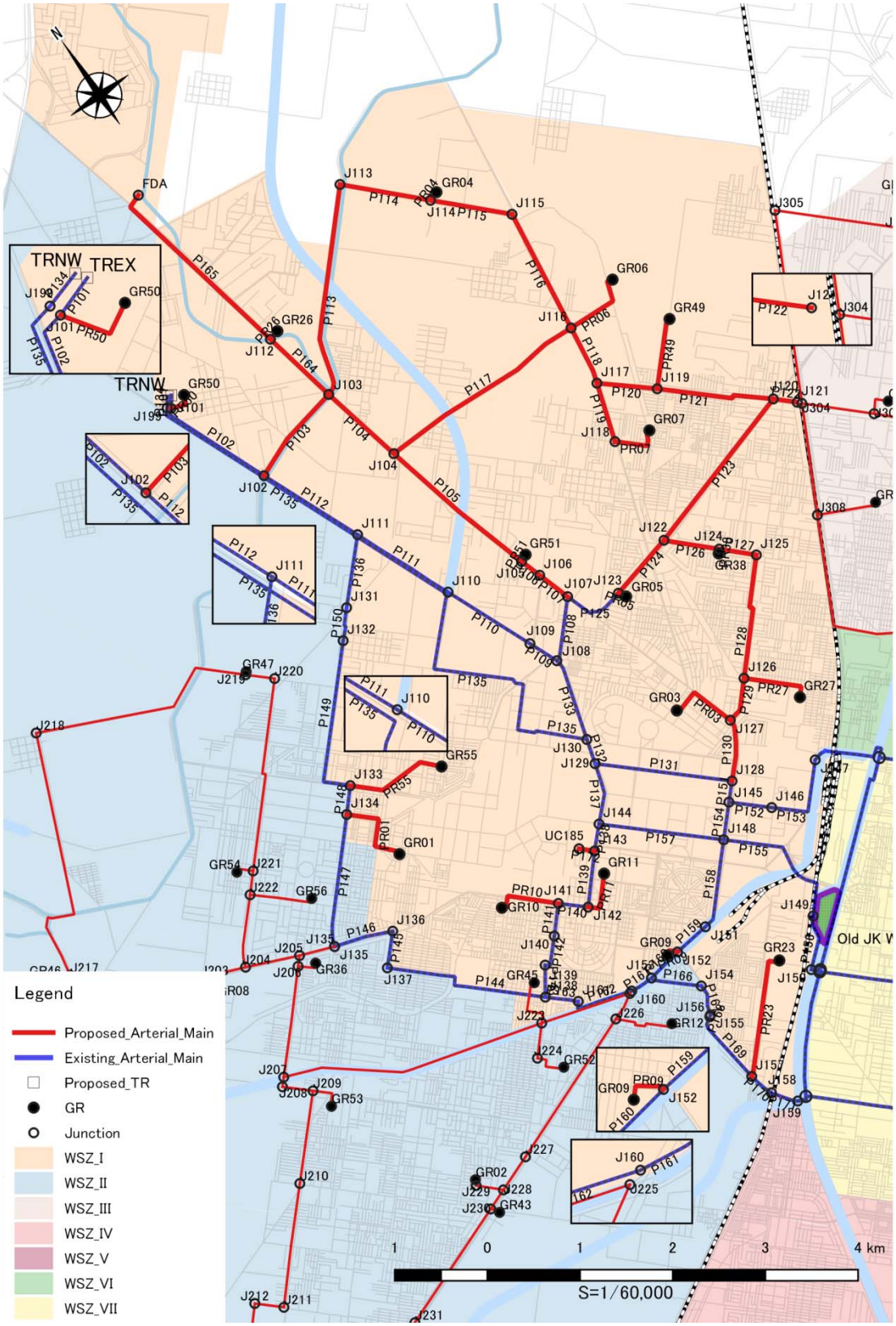


Fig. 5.1.1 Arterial Network of Supply Zone I

Node Data (WSZ – I)

[RESERVOIRS] WSZ1

ID	Dynamic Head m	GL m	Pump Head m
TREX	230.00	185.00	45.00
TRNW	230.00	185.00	45.00

(1/2)

Node ID	Demand m3/d	GL m	Dynamic Head m	Effective Pressure m	Description
J101	0	185.00	229.66	44.66	
J102	0	182.00	226.91	44.91	
J103	0	186.00	223.70	37.70	
J104	0	185.00	222.19	37.19	
J105	0	184.00	221.53	37.53	
J106	0	185.00	221.65	36.65	
J107	0	186.00	221.83	35.83	
J108	0	182.00	223.19	41.19	
J109	0	184.00	223.82	39.82	
J110	0	184.00	224.71	40.71	
J111	0	181.00	225.71	44.71	
J112	0	186.00	220.20	34.20	
J113	0	183.00	216.21	33.21	
J114	0	186.00	213.01	27.01	
J115	0	185.00	212.78	27.78	
J116	0	183.00	212.43	29.43	
J117	0	183.00	211.40	28.40	
J118	0	184.00	210.23	26.23	
J119	0	184.00	211.40	27.40	
J120	0	186.00	214.50	28.50	
J121	0	185.00	214.50	29.50	
J122	0	185.00	219.10	34.10	
J123	0	185.00	220.78	35.78	
J124	0	186.00	217.52	31.52	
J125	0	186.00	217.49	31.49	
J126	0	186.00	217.39	31.39	
J127	0	186.00	217.97	31.97	
J128	0	186.00	221.20	35.20	
J129	0	186.00	222.59	36.59	
J130	0	185.00	222.93	37.93	
J131	0	182.00	225.24	43.24	
J132	0	184.00	225.03	41.03	
J133	0	184.00	223.96	39.96	
J134	0	185.00	223.50	38.50	
J135	0	183.00	223.01	40.01	
J136	0	183.00	222.34	39.34	
J137	0	186.00	221.94	35.94	
J138	0	186.00	220.07	34.07	
J139	0	186.00	220.07	34.07	

Node Data (WSZ – I)

(2/2)

Node ID	Demand m3/d	GL m	Dynamic Head m	Effective Pressure m	Description
J140	0	187.00	220.07	33.07	
J141	0	186.00	220.06	34.06	
J142	0	186.00	220.17	34.17	
J143	0	185.00	220.83	35.83	
J144	0	187.00	221.25	34.25	
J145	0	189.00	221.19	32.19	
J146	0	191.00	221.19	30.19	
J147	0	187.00	221.19	34.19	
J148	0	187.00	221.10	34.10	
J149	0	184.00	221.10	37.10	
J150	0	186.00	221.10	35.10	
J151	0	190.00	219.44	29.44	
J152	0	189.00	218.95	29.95	
J153	0	187.00	218.98	31.98	
J154	0	188.00	217.57	29.57	
J155	0	188.00	216.71	28.71	
J156	0	188.00	216.66	28.66	
J157	0	187.00	215.65	28.65	
J158	0	186.00	215.65	29.65	
J159	0	186.00	215.65	29.65	
J160	0	188.00	219.20	31.20	
J161	0	186.00	219.77	33.77	
J199	0	185.00	229.87	44.87	
FDA	17320	185.00	217.78	32.78	FDACity
UC185	8546	186.00	220.78	34.78	University Of Agriculture Faisalabad
GR01	22048	186.00	221.89	35.89	AdamChowk
GR03	20730	185.00	215.07	30.07	IslamNagar
GR04	23321	185.00	212.37	27.37	MillatTownC.Block
GR05	24867	186.00	220.31	34.31	GulistanColonyNo.2KalmayWaliTanky
GR06	22548	181.00	208.90	27.90	JoharColonyno.2
GR07	22594	183.00	207.87	24.87	JoharColonyno.1
GR09	22639	189.00	218.67	29.67	JhangBazar
GR10	29685	186.00	217.91	31.91	MohammadPura
GR11	24548	187.00	217.62	30.62	GujjarBasti
GR23	27549	186.00	206.97	20.97	ChamraMandi/FactoryArea
GR26	17911	185.00	219.86	34.86	NEW PLACE
GR27	21957	186.00	214.37	28.37	NEW PLACE
GR38	23912	187.00	217.29	30.29	Gulistan
GR50	24412	185.00	228.33	43.33	NEW PLACE
GR49	25094	184.00	207.27	23.27	KatchiAbad
GR51	20821	185.00	214.88	29.88	NEW PLACE
GR55	19048	186.00	222.55	36.55	KanakBasti

Pipeline Data (WSZ – I)

(1/2)

Pipeline No.	Node Up	Node Down	Length m	Dia. mm	Flow m3/d	Velocity m/s	Hydraulic Gradient m/km	Headloss m	Description
P101	TREX	J101	140.35	1600	355134.80	2.04	2.45	0.34	Ex.ArterialMain
P102	J101	J102	1278.44	1600	330722.80	1.90	2.15	2.75	Ex.ArterialMain
P103	J102	J103	1123.71	1000	111883.30	1.65	2.85	3.20	New
P104	J103	J104	948.83	800	45413.18	1.05	1.59	1.51	New
P105	J105	J104	1802.36	600	-9647.77	0.39	0.37	0.67	New
P106	J105	J106	245.96	600	-11173.20	0.46	0.48	0.12	New
P107	J106	J107	379.42	600	-11173.20	0.46	0.48	0.18	New
P108	J108	J107	707.09	1000	90480.54	1.33	1.93	1.36	Ex.ArterialMain
P109	J109	J108	343.30	1200	141984.60	1.45	1.82	0.62	Ex.ArterialMain
P110	J110	J109	1043.95	1400	141984.60	1.07	0.86	0.90	Ex.ArterialMain
P111	J111	J110	1156.02	1400	141984.60	1.07	0.86	0.99	Ex.ArterialMain
P112	J102	J111	1192.99	1600	218839.50	1.26	1.00	1.19	Ex.ArterialMain
P113	J103	J113	2314.82	600	31239.13	1.28	3.23	7.48	New
P114	J113	J114	990.81	600	31239.13	1.28	3.23	3.20	New
P115	J114	J115	892.88	600	7918.13	0.32	0.25	0.22	New
P116	J115	J116	1379.95	600	7918.13	0.32	0.25	0.34	New
P117	J116	J104	2348.49	600	-35765.40	1.46	4.16	9.77	New
P118	J117	J116	658.48	600	-21135.50	0.87	1.57	1.03	New
P119	J117	J118	658.10	600	22594.00	0.92	1.77	1.16	New
P120	J119	J117	653.00	600	1458.46	0.06	0.01	0.01	New
P121	J119	J120	1291.74	600	-26552.50	1.09	2.39	3.09	New
P122	J120	J121	260.07	800	0.00	0.00	0.00	0.00	New
P123	J122	J120	1925.06	600	26552.46	1.09	2.39	4.60	New
P124	J123	J122	752.76	800	54440.31	1.25	2.23	1.68	New
P125	J107	J123	694.43	1000	79307.30	1.17	1.51	1.05	Ex.ArterialMain
P126	J122	J124	604.30	600	27887.84	1.14	2.62	1.58	New
P127	J124	J125	405.24	600	3975.84	0.16	0.07	0.03	New
P128	J125	J126	1374.80	600	3975.84	0.16	0.07	0.10	New
P129	J127	J126	495.89	600	17981.16	0.74	1.16	0.58	New
P130	J127	J128	671.57	600	-38711.20	1.58	4.81	3.23	New
P131	J128	J129	1503.60	900	-46121.10	0.84	0.92	1.38	Ex.ArterialMain
P132	J130	J129	275.50	1200	115919.20	1.19	1.25	0.34	Ex.ArterialMain
P133	J108	J130	914.17	1200	51504.05	0.53	0.28	0.26	Ex.ArterialMain
P134	TRNW	J199	125.66	1000	64415.19	0.95	1.03	0.13	Ex.ArterialMain
P135	J199	J130	6760.28	1000	64415.19	0.95	1.03	6.96	Ex.ArterialMain
P136	J131	J111	795.03	1200	-76854.90	0.79	0.59	0.47	Ex.ArterialMain
P137	J129	J144	671.00	900	69798.18	1.27	1.99	1.34	Ex.ArterialMain
P138	J143	J144	294.43	900	-58922.70	1.07	1.45	0.43	Ex.ArterialMain
P139	J143	J142	607.81	900	50376.70	0.92	1.09	0.66	Ex.ArterialMain
P140	J142	J141	325.68	900	25828.70	0.47	0.32	0.10	Ex.ArterialMain
P141	J141	J140	353.77	900	-3856.31	0.07	0.01	0.00	Ex.ArterialMain
P142	J140	J139	376.45	1000	-3856.31	0.06	0.01	0.00	Ex.ArterialMain
P143	J139	J138	344.85	900	-3856.31	0.07	0.01	0.00	Ex.ArterialMain
P144	J138	J137	1821.79	800	-35758.90	0.82	1.02	1.86	Ex.ArterialMain
P145	J137	J136	399.21	800	-35758.90	0.82	1.02	0.41	Ex.ArterialMain
P146	J136	J135	650.00	800	-35758.90	0.82	1.02	0.66	Ex.ArterialMain
P147	J135	J134	1433.93	1000	-35758.90	0.53	0.34	0.49	Ex.ArterialMain
P148	J134	J133	327.23	900	-57806.90	1.05	1.40	0.46	Ex.ArterialMain
P149	J132	J133	1827.31	1200	76854.93	0.79	0.59	1.08	Ex.ArterialMain
P150	J132	J131	363.67	1200	-76854.90	0.79	0.59	0.21	Ex.ArterialMain
P151	J145	J128	230.05	900	-7409.90	0.13	0.03	0.01	Ex.ArterialMain
P152	J145	J146	465.46	800	0.00	0.00	0.00	0.00	Ex.ArterialMain
P153	J146	J147	958.67	800	0.00	0.00	0.00	0.00	Ex.ArterialMain
P154	J145	J148	408.94	600	7409.89	0.30	0.23	0.09	Ex.ArterialMain
P155	J148	J149	2923.45	800	0.00	0.00	0.00	0.00	Ex.ArterialMain

Pipeline Data (WSZ – I)

(2/2)

Pipeline No.	Node Up	Node Down	Length m	Dia. mm	Flow m3/d	Velocity m/s	Hydraulic Gradient m/km	Headloss m	Description
P156	J150	J149	605.26	800	0.00	0.00	0.00	0.00	Ex.ArterialMain
P157	J144	J148	1355.98	800	10875.49	0.25	0.11	0.15	Ex.ArterialMain
P158	J148	J151	1388.98	600	18285.38	0.75	1.20	1.67	Ex.ArterialMain
P159	J152	J151	404.48	600	-18285.40	0.75	1.20	0.49	Ex.ArterialMain
P160	J152	J153	397.55	600	-4353.62	0.18	0.08	0.03	Ex.ArterialMain
P161	J160	J153	255.43	800	31902.63	0.73	0.83	0.21	Ex.ArterialMain
P162	J161	J160	698.58	800	31902.63	0.73	0.83	0.58	Ex.ArterialMain
P163	J138	J161	359.62	800	31902.63	0.73	0.83	0.30	Ex.ArterialMain
P164	J103	J112	865.66	600	35231.00	1.44	4.04	3.50	New
P165	J112	FDA	2231.74	600	17320.00	0.71	1.08	2.41	New
P166	J154	J153	550.07	600	-27549.00	1.13	2.56	1.41	Ex.ArterialMain
P167	J155	J154	337.55	600	-27549.00	1.13	2.56	0.86	Ex.ArterialMain
P168	J155	J156	20.14	600	27549.00	1.13	2.56	0.05	Ex.ArterialMain
P169	J157	J156	835.58	700	-27549.00	0.83	1.21	1.01	Ex.ArterialMain
P170	J158	J157	276.78	800	0.00	0.00	0.00	0.00	Ex.ArterialMain
P171	J159	J158	299.71	800	0.00	0.00	0.00	0.00	Ex.ArterialMain
P172	J143	UC185	169.06	600	8546.00	0.35	0.29	0.05	New
PR01	J134	GR01	950.56	600	22048.00	0.90	1.70	1.62	RaisingMain
PR03	GR03	J127	787.14	500	-20730.00	1.22	3.68	2.90	RaisingMain
PR04	GR04	J114	139.36	500	-23321.00	1.37	4.57	0.64	RaisingMain
PR05	J123	GR05	90.97	500	24867.00	1.47	5.15	0.47	RaisingMain
PR06	J116	GR06	822.14	500	22548.00	1.33	4.30	3.54	RaisingMain
PR07	J118	GR07	546.70	500	22594.00	1.33	4.31	2.36	RaisingMain
PR09	J152	GR09	155.36	600	22639.00	0.93	1.78	0.28	RaisingMain
PR10	J141	GR10	732.25	600	29685.00	1.22	2.94	2.15	RaisingMain
PR11	J142	GR11	506.13	500	24548.00	1.45	5.03	2.55	RaisingMain
PR23	J157	GR23	1392.53	500	27549.00	1.62	6.23	8.68	RaisingMain
PR26	J112	GR26	120.68	500	17911.00	1.06	2.81	0.34	RaisingMain
PR27	J126	GR27	739.74	500	21957.00	1.29	4.09	3.03	RaisingMain
PR38	J124	GR38	47.83	500	23912.00	1.41	4.79	0.23	RaisingMain
PR49	J119	GR49	789.49	500	25094.00	1.48	5.24	4.14	RaisingMain
PR50	J101	GR50	266.77	500	24412.00	1.44	4.98	1.33	RaisingMain
PR51	J105	GR51	1792.93	500	20821.00	1.23	3.71	6.65	RaisingMain
PR55	J133	GR55	1093.80	600	19048.00	0.78	1.29	1.41	RaisingMain

3.2 Network Analysis of Arterial Main for Supply Zone II

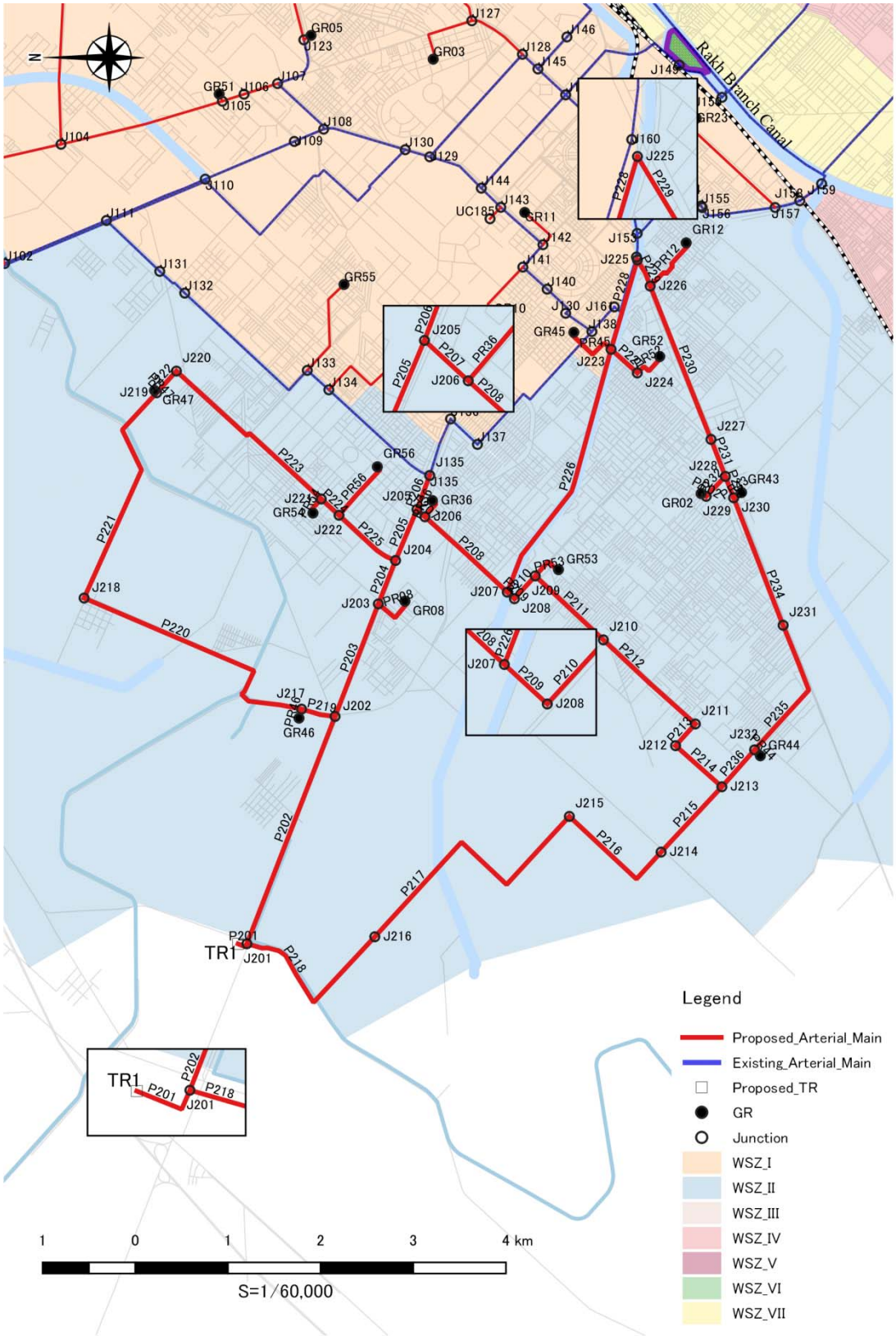


Fig. 5.1.2 Network Skelton of Supply Zone II

Node Data (WSZ – II)

[RESERVOIRS] WSZ2

ID	Dynamic Head m	GL m	Pump Head m
TR1	225.00	180.00	45.00

Node ID	Demand m3/d	GL m	Dynamic Head m	Effective Pressure m	Description
J201	0	179.00	224.18	45.18	
J202	0	180.00	214.46	34.46	
J203	0	184.00	211.24	27.24	
J204	0	183.00	210.29	27.29	
J205	0	185.00	209.13	24.13	
J206	0	183.00	208.91	25.91	
J207	0	180.00	207.42	27.42	
J208	0	185.00	207.41	22.41	
J209	0	185.00	207.38	22.38	
J210	0	178.00	209.30	31.30	
J211	0	180.00	211.87	31.87	
J212	0	180.00	212.48	32.48	
J213	0	179.00	213.75	34.75	
J214	0	180.00	215.11	35.11	
J215	0	179.00	217.06	38.06	
J216	0	181.00	221.36	40.36	
J217	0	179.00	212.54	33.54	
J218	0	183.00	209.61	26.61	
J219	0	179.00	207.11	28.11	
J220	0	180.00	207.16	27.16	
J221	0	184.00	207.90	23.90	
J222	0	185.00	208.63	23.63	
J223	0	185.00	204.30	19.30	
J224	0	185.00	203.69	18.69	
J225	0	188.00	202.52	14.52	
J226	0	187.00	201.96	14.96	
J227	0	185.00	201.72	16.72	
J228	0	184.00	201.66	17.66	
J229	0	185.00	201.25	16.25	
J230	0	185.00	201.84	16.84	
J231	0	183.00	206.98	23.98	
J232	0	176.00	212.63	36.63	
GR02	19593	185.00	201.00	16.00	GulfishanColony
GR08	23776	182.00	208.99	26.99	KaleemShaheedColonyno.2
GR12	17002	188.00	200.17	12.17	NazimAbad
GR36	19911	184.00	208.57	24.57	KaleemShaheedColonyNo1
GR43	18548	185.00	201.43	16.43	Risara
GR44	20412	177.00	212.31	35.31	NEW PLACE
GR45	22184	186.00	203.23	17.23	GulbergC
GR46	23867	179.00	212.05	33.05	NEW PLACE
GR47	22275	180.00	206.97	26.97	NEW PLACE
GR52	21457	185.00	202.18	17.18	NEW PLACE
GR53	28367	179.00	206.41	27.41	NEW PLACE
GR54	23185	184.00	207.52	23.52	NEW PLACE
GR56	23867	184.00	207.24	23.24	LatifChowk

Pipeline Data (WSZ – II)

Pipeline No.	Node Up	Node Down	Length m	Dia. mm	Flow m3/d	Velocity m/s	Hydraulic Gradient m/km	Headloss m	Description
P201	TR1	J201	124.32	1200	284444.00	2.91	6.61	0.82	New
P202	J201	J202	2625.89	1200	207984.20	2.13	3.70	9.72	New
P203	J203	J202	1298.74	1200	-167678.00	1.72	2.48	3.22	New
P204	J204	J203	503.92	1200	-143902.00	1.47	1.87	0.94	New
P205	J205	J204	595.68	1000	-91014.20	1.34	1.95	1.16	New
P206	J135	J205	473.10	600					New
P207	J205	J206	117.12	1000	91014.19	1.34	1.95	0.23	New
P208	J207	J206	1203.20	1000	-71103.20	1.05	1.23	1.48	New
P209	J207	J208	104.80	600	4852.82	0.20	0.10	0.01	New
P210	J208	J209	332.42	600	4852.82	0.20	0.10	0.03	New
P211	J209	J210	1007.17	600	-23514.20	0.96	1.91	1.92	New
P212	J210	J211	1343.99	600	-23514.20	0.96	1.91	2.57	New
P213	J212	J211	316.76	600	23514.18	0.96	1.91	0.61	New
P214	J213	J212	667.36	600	23514.18	0.96	1.91	1.27	New
P215	J214	J213	961.46	1000	76459.81	1.13	1.41	1.36	New
P216	J214	J215	1383.38	1000	-76459.80	1.13	1.41	1.95	New
P217	J216	J215	3049.86	1000	76459.81	1.13	1.41	4.30	New
P218	J216	J201	2001.64	1000	-76459.80	1.13	1.41	2.82	New
P219	J202	J217	371.45	600	40306.09	1.65	5.18	1.92	New
P220	J217	J218	2971.85	600	16439.09	0.67	0.98	2.91	New
P221	J218	J219	2537.79	600	16439.09	0.67	0.98	2.49	New
P222	J220	J219	315.18	600	5835.91	0.24	0.14	0.04	New
P223	J221	J220	2119.62	500	5835.91	0.34	0.35	0.74	New
P224	J222	J221	259.16	600	29020.91	1.19	2.82	0.73	New
P225	J222	J204	787.19	800	-52887.90	1.22	2.11	1.66	New
P226	J207	J223	2889.01	1000	66250.38	0.98	1.08	3.12	New
P227	J224	J223	380.83	600	-21457.00	0.88	1.61	0.61	New
P228	J223	J225	1004.23	600	22609.37	0.93	1.78	1.79	New
P229	J226	J225	315.73	600	-22609.40	0.93	1.78	0.56	New
P230	J227	J226	1776.43	600	-5607.37	0.23	0.13	0.23	New
P231	J228	J227	427.78	600	-5607.37	0.23	0.13	0.06	New
P232	J229	J228	297.96	600	-19593.00	0.80	1.36	0.41	New
P233	J230	J228	246.90	600	13985.63	0.57	0.73	0.18	New
P234	J231	J230	1472.96	600	32533.63	1.33	3.49	5.14	New
P235	J232	J231	1621.02	600	32533.63	1.33	3.49	5.66	New
P236	J213	J232	531.94	800	52945.63	1.22	2.12	1.13	New
PR02	J229	GR02	75.19	500	0	1.15	3.31	0.25	RaisingMain
PR08	J203	GR08	474.06	500	23776.00	1.40	4.74	2.25	RaisingMain
PR12	J226	GR12	701.11	500	17002.00	1.00	2.55	1.79	RaisingMain
PR36	J206	GR36	239.95	600	19911.00	0.82	1.40	0.34	RaisingMain
PR43	J230	GR43	135.87	500	18548.00	1.09	2.99	0.41	RaisingMain
PR44	J232	GR44	89.14	500	20412.00	1.20	3.57	0.32	RaisingMain
PR45	J223	GR45	622.45	600	22184.00	0.91	1.72	1.07	RaisingMain
PR46	J217	GR46	100.86	500	23867.00	1.41	4.77	0.48	RaisingMain
PR47	J219	GR47	34.23	500	22275.00	1.31	4.20	0.14	RaisingMain
PR52	J224	GR52	384.16	500	21457.00	1.26	3.92	1.51	RaisingMain
PR53	J209	GR53	359.41	600	28367.00	1.16	2.71	0.97	RaisingMain
PR54	J221	GR54	203.52	600	23185.00	0.95	1.86	0.38	RaisingMain
PR56	J222	GR56	708.58	600	23867.00	0.98	1.96	1.39	RaisingMain

3.3 Network Analysis of Arterial Main for Supply Zone III and V

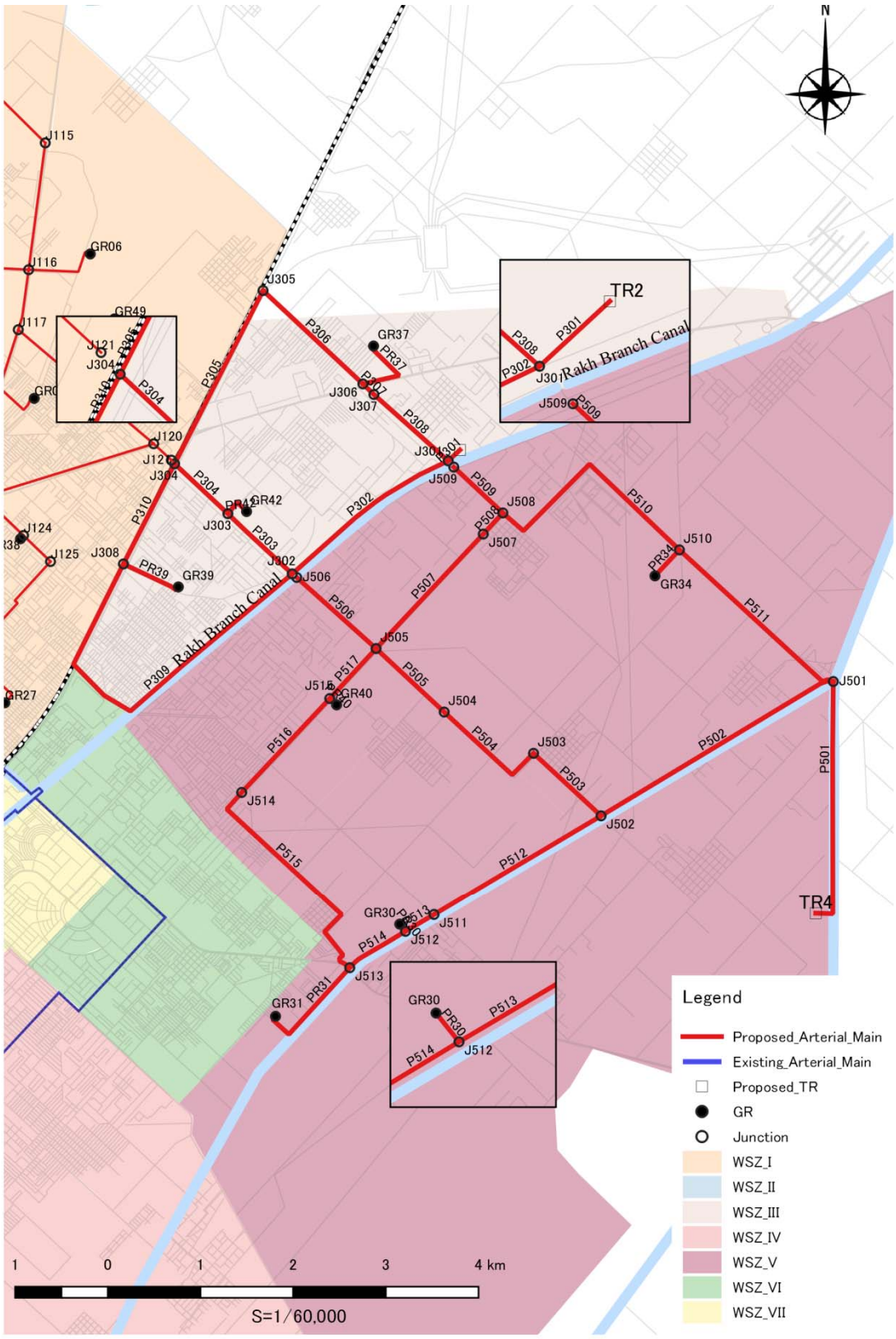


Fig. 5.1.3 Network Skelton of Supply Zone III and V

Node Data (WSZ – III)

[RESERVOIRS] WSZ3

ID	Dynamic Head m	GL m	Pump Head m
TR2	223.00	188.00	35.00

Node ID	Demand m3/d	GL m	Dynamic Head m	Effective Pressure m	Description
J301	0	188.00	222.48	34.48	
J302	0	189.00	219.39	30.39	
J303	0	186.00	218.50	32.50	
J304	0	185.00	218.28	33.28	
J305	0	185.00	218.14	33.14	
J306	0	186.00	218.04	32.04	
J307	0	187.00	218.63	31.63	
J308	0	185.00	215.72	30.72	
GR37	22821	186.00	214.40	28.40	NEW PLACE
GR39	24776	185.00	212.23	27.23	NEW PLACE
GR42	16457	186.00	217.78	31.78	NEW PLACE

Pipeline Data (WSZ – III)

Pipeline No.	Node Up	Node Down	Length m	Dia. mm	Flow m3/d	Velocity m/s	Hydraulic Gradient m/km	Headloss m	Description
P301	TR2	J301	172.06	800	64054.00	1.47	3.01	0.52	New
P302	J301	J302	2090.66	800	43612.04	1.00	1.48	3.09	New
P303	J302	J303	951.10	800	34187.48	0.79	0.94	0.89	New
P304	J303	J304	787.90	800	17730.48	0.41	0.28	0.22	New
P305	J305	J304	2098.60	500	-2379.04	0.14	0.07	0.15	New
P306	J305	J306	1474.64	500	2379.04	0.14	0.07	0.10	New
P307	J306	J307	165.00	500	-20442.00	1.20	3.58	0.59	New
P308	J307	J301	1074.62	500	-20442.00	1.20	3.58	3.85	New
P309	J302	J308	4300.55	500	9424.55	0.56	0.85	3.66	New
P310	J304	J308	1213.43	500	15351.45	0.90	2.11	2.56	New
PR37	J306	GR37	827.52	500	22821.00	1.35	4.39	3.63	RaisingMain
PR39	J308	GR39	681.60	500	24776.00	1.46	5.12	3.49	RaisingMain
PR42	J303	GR42	299.63	500	16457.00	0.97	2.40	0.72	RaisingMain

Node Data (WSZ – V)

[RESERVOIRS] WSZ5

ID	Dynamic Head m	GL m	Pump Head m
TR4	221.00	186.00	35.00

Node ID	Demand m3/d	GL m	Dynamic Head m	Effective Pressure m	Description
J501	0	184.00	216.12	32.12	
J502	0	188.00	210.04	22.04	
J503	0	186.00	208.59	22.59	
J504	0	186.00	206.66	20.66	
J505	0	186.00	205.20	19.20	
J506	0	189.00	205.20	16.20	
J507	0	188.00	205.95	17.95	
J508	0	188.00	206.09	18.09	
J509	0	188.00	206.09	18.09	
J510	0	186.00	207.27	21.27	
J511	0	186.00	202.85	16.85	
J512	0	184.00	201.62	17.62	
J513	0	185.00	201.31	16.31	
J514	0	185.00	202.33	17.33	
J515	0	184.00	202.85	18.85	
GR30	21730	183.00	201.23	18.23	NEW PLACE
GR31	20230	186.00	196.89	10.89	NEW PLACE
GR34	24230	186.00	205.38	19.38	NEW PLACE
GR40	21321	184.00	202.46	18.46	NEW PLACE

Pipeline Data (WSZ – V)

Pipeline No.	Node Up	Node Down	Length m	Dia. mm	Flow m3/d	Velocity m/s	Hydraulic Gradient m/km	Headloss m	Description
P301	TR2	J301	172.06	800	64054.00	1.47	3.01	0.52	New
P302	J301	J302	2090.66	800	43612.04	1.00	1.48	3.09	New
P303	J302	J303	951.10	800	34187.48	0.79	0.94	0.89	New
P304	J303	J304	787.90	800	17730.48	0.41	0.28	0.22	New
P305	J305	J304	2098.60	500	-2379.04	0.14	0.07	0.15	New
P306	J305	J306	1474.64	500	2379.04	0.14	0.07	0.10	New
P307	J306	J307	165.00	500	-20442.00	1.20	3.58	0.59	New
P308	J307	J301	1074.62	500	-20442.00	1.20	3.58	3.85	New
P309	J302	J308	4300.55	500	9424.55	0.56	0.85	3.66	New
P310	J304	J308	1213.43	500	15351.45	0.90	2.11	2.56	New
PR37	J306	GR37	827.52	500	22821.00	1.35	4.39	3.63	RaisingMain
PR39	J308	GR39	681.60	500	24776.00	1.46	5.12	3.49	RaisingMain
PR42	J303	GR42	299.63	500	16457.00	0.97	2.40	0.72	RaisingMain

3.4 Network Analysis of Arterial Main for Supply Zone IV

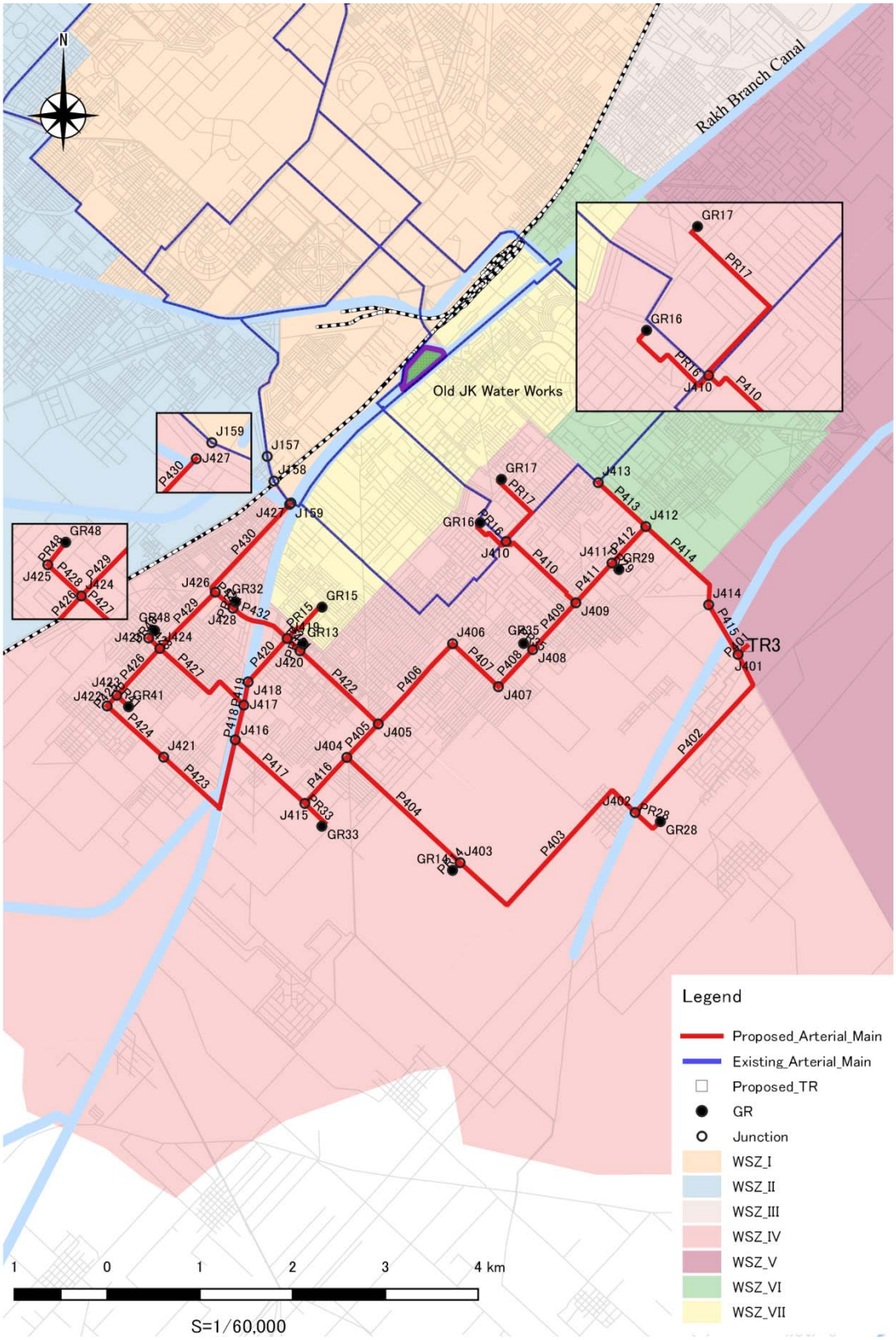


Fig. 5.1.3 Network Skelton of Supply Zone III & 5

Node Data (WSZ – IV)

[RESERVOIRS] WSZ4

ID	Dynamic Head m	GL m	Pump Head m
TR3	220.00	185.00	35.00

[NODE DATA] WSZ4 (1/2)

Node ID	Demand m3/d	GL m	Dynamic Head m	Effective Pressure m	Description
J401	0	186.00	219.65	33.65	
J402	0	186.00	215.97	29.97	
J403	0	183.00	208.23	25.23	
J404	0	183.00	206.26	23.26	
J405	0	183.00	206.37	23.37	
J406	0	185.00	208.72	23.72	
J407	0	184.00	210.07	26.07	
J408	0	186.00	211.16	25.16	
J409	0	185.00	211.98	26.98	
J410	0	186.00	210.69	24.69	
J411	0	184.00	213.19	29.19	
J412	0	186.00	214.69	28.69	
J413	0	185.00	214.69	29.69	
J414	0	185.00	217.91	32.91	
J415	0	182.00	201.78	19.78	
J416	0	186.00	199.64	13.64	
J417	0	184.00	199.50	15.50	
J418	0	185.00	199.63	14.63	
J419	0	185.00	199.97	14.97	
J420	0	180.00	200.54	20.54	
J421	0	183.00	198.28	15.28	
J422	0	183.00	197.58	14.58	
J423	0	184.00	197.44	13.44	
J424	0	184.00	197.49	13.49	
J425	0	184.00	197.40	13.40	
J426	0	180.00	197.75	17.75	
J427	0	186.00	197.75	11.75	
J428	0	187.00	197.83	10.83	
GR13	20957	180.00	198.97	18.97	D.TypeColony
GR14	23594	184.00	207.69	23.69	225.R.BAhmedNagar
GR15	21275	185.00	197.86	12.86	AllamaIqbalColony
GR16	19957	186.00	208.96	22.96	FawaraChowk/WarisPura
GR17	19411	186.00	207.60	21.60	BabarChowk/BatalaColony
GR28	20775	181.00	214.60	33.60	NEW PLACE
GR29	26276	187.00	212.62	25.62	NEW PLACE
GR32	21957	187.00	197.46	10.46	SamanAbad
GR33	21366	180.00	200.42	20.42	NEW PLACE
GR35	21048	186.00	210.66	24.66	NEW PLACE
GR41	19366	181.00	197.21	16.21	NEW PLACE
GR48	25958	186.00	196.83	10.83	Samanabad2

Pipeline Data (WSZ – IV)

Pipeline No.	Node Up	Node Down	Length m	Dia. mm	Flow m3/d	Velocity m/s	Hydraulic Gradient m/km	Headloss m	Description
P401	TR3	J401	132.15	1400	261940.00	1.97	2.68	0.35	New
P402	J402	J401	2241.15	1000	-83028.90	1.22	1.64	3.68	New
P403	J403	J402	2709.53	800	-62253.90	1.43	2.86	7.75	New
P404	J135	J205	1666.01	800	-38659.90	0.89	1.18	1.97	New
P405	J405	J404	494.56	600	7525.89	0.31	0.23	0.11	New
P406	J406	J405	1179.14	1000	92219.13	1.36	1.99	2.35	New
P407	J407	J406	676.86	1000	92219.13	1.36	1.99	1.35	New
P408	J408	J407	543.93	1000	92219.13	1.36	1.99	1.08	New
P409	J409	J408	685.93	1200	113267.10	1.16	1.20	0.82	New
P410	J410	J409	1059.22	800	-39368.00	0.91	1.22	1.29	New
P411	J411	J409	579.33	1200	152635.10	1.56	2.09	1.21	New
P412	J412	J411	536.20	1200	178911.10	1.83	2.80	1.50	New
P413	J412	J413	698.00	800	0.00	0.00	0.00	0.00	New
P414	J414	J412	1147.47	1200	178911.10	1.83	2.80	3.21	New
P415	J401	J414	621.74	1200	178911.10	1.83	2.80	1.74	New
P416	J404	J415	670.93	600	46185.76	1.89	6.67	4.48	New
P417	J415	J416	1015.77	600	24819.75	1.02	2.11	2.14	New
P418	J416	J417	384.77	600	9527.24	0.39	0.36	0.14	New
P419	J417	J418	254.52	600	-11810.40	0.48	0.53	0.13	New
P420	J418	J419	628.92	600	-11810.40	0.48	0.53	0.33	New
P421	J420	J419	191.77	800	63736.25	1.47	2.98	0.57	New
P422	J405	J420	1154.37	800	84693.24	1.95	5.05	5.83	New
P423	J421	J416	1568.98	600	-15292.50	0.63	0.86	1.35	New
P424	J422	J421	822.54	600	-15292.50	0.63	0.86	0.71	New
P425	J422	J423	153.82	600	15292.52	0.63	0.86	0.13	New
P426	J423	J424	686.56	600	-4073.48	0.17	0.07	0.05	New
P427	J417	J424	1255.08	600	21337.61	0.87	1.60	2.01	New
P428	J425	J424	164.46	800	-25958.00	0.60	0.57	0.09	New
P429	J424	J426	851.00	600	-8693.87	0.36	0.30	0.26	New
P430	J427	J426	1301.80	600	0.00	0.00	0.00	0.00	New
P431	J428	J426	257.72	600	8693.87	0.36	0.30	0.08	New
P432	J419	J428	685.30	600	30650.87	1.25	3.12	2.14	New
PR13	J420	GR13	419.69	500	20957.00	1.24	3.75	1.57	RaisingMain
PR14	J403	GR14	115.42	500	23594.00	1.39	4.67	0.54	RaisingMain
PR15	J419	GR15	547.31	500	21275.00	1.25	3.86	2.11	RaisingMain
PR16	J410	GR16	503.37	500	19957.00	1.18	3.43	1.73	RaisingMain
PR17	J410	GR17	948.50	500	19411.00	1.14	3.26	3.09	RaisingMain
PR28	J402	GR28	371.33	500	20775.00	1.22	3.69	1.37	RaisingMain
PR29	J411	GR29	100.72	500	26276.00	1.55	5.71	0.58	RaisingMain
PR32	GR32	J428	91.21	500	-21957.00	1.29	4.09	0.37	RaisingMain
PR33	GR33	J415	350.44	500	-21366.00	1.26	3.89	1.36	RaisingMain
PR35	J408	GR35	132.72	500	0	1.24	3.78	0.50	RaisingMain
PR41	J423	GR41	177.57	600	19366.00	0.79	1.33	0.24	RaisingMain
PR48	J425	GR48	103.21	500	25958.00	1.53	5.58	0.58	RaisingMain

3.5 Summary of New Arterial Main (Diameter and Length)

Summary — Unit : m

Dia. mm	Existing	Year 2023	2028	2033	2038
500	*0.00*	9,157.01	12,533.40	5,002.96	3,127.06
600	*3,507.71*	46,208.50	15,969.11	9,931.33	4,868.90
700	*835.58*				
800	*11,069.94*	17,050.68	787.19	0.00	0.00
900	*4,658.42*				
1000	*10,097.84*	13,267.33	0.00	7,396.34	0.00
1200	*4,518.98*	8,123.54	0.00	0.00	0.00
1400	*2,199.97*	132.15	0.00	0.00	0.00
1600	*2,611.78*				
Subtotal	*39,500.22*	93,939.21	29,289.70	22,330.63	7,995.96
				Total	153,555.50

WSZ 1 — Unit : m

Dia. mm	Existing	Year 2023	2028	2033	2038
500	*0.00*	4,113.39	3,106.88	0.00	822.14
600	*3,507.71*	11,411.09	10,033.49	3,846.72	0.00
700	*835.58*				
800	*11,069.94*	1,961.66	0.00	0.00	0.00
900	*4,658.42*				
1000	*10,097.84*	1,123.71	0.00	0.00	0.00
1200	*4,518.98*	0.00	0.00	0.00	0.00
1400	*2,199.97*	0.00	0.00	0.00	0.00
1600	*2,611.78*				
Subtotal	*39,500.22*	18,609.85	13,140.37	3,846.72	822.14
				Total	36,419.08

WSZ 2 — Unit : m

Dia. mm	Existing	Year 2023	2028	2033	2038
500	*0.00*	1,250.36	2,538.01	135.87	190.00
600	*0.00*	11,768.02	2,526.15	6,084.61	0.00
700	*0.00*				
800	*0.00*	531.94	787.19	0.00	0.00
900	*0.00*				
1000	*0.00*	4,805.01	0.00	7,396.34	0.00
1200	*0.00*	4,552.87	0.00	0.00	0.00
1400	*0.00*	0.00	0.00	0.00	0.00
1600	*0.00*				
Subtotal	*0.00*	22,908.20	5,851.35	13,616.82	190.00
				Total	42,566.37

WSZ 3 — Unit : m

Dia. mm	Existing	Year 2023	2028	2033	2038
500	*0.00*	1,895.03	5,940.01	4,300.55	0.00
600	*0.00*	0.00	0.00	0.00	0.00
700	*0.00*				
800	*0.00*	4,001.72	0.00	0.00	0.00
900	*0.00*				
1000	*0.00*	0.00	0.00	0.00	0.00
1200	*0.00*	0.00	0.00	0.00	0.00
1400	*0.00*	0.00	0.00	0.00	0.00
1600	*0.00*				
Subtotal	*0.00*	5,896.75	5,940.01	4,300.55	0.00
				Total	16,137.31

WSZ 4 — Unit : m

Dia. mm	Existing	Year 2023	2028	2033	2038
500	*0.00*	1,898.23	948.50	465.86	371.33
600	*0.00*	7,800.37	3,409.47	0.00	0.00
700	*0.00*				
800	*0.00*	7,643.36	0.00	0.00	0.00
900	*0.00*				
1000	*0.00*	4,641.08	0.00	0.00	0.00
1200	*0.00*	3,570.67	0.00	0.00	0.00
1400	*0.00*	132.15	0.00	0.00	0.00
1600	*0.00*				
Subtotal	*0.00*	25,685.86	4,357.97	465.86	371.33
				Total	30,881.02

WSZ 5 — Unit : m

Dia. mm	Existing	Year 2023	2028	2033	2038
500	*0.00*	0.00	0.00	100.68	1,743.59
600	*0.00*	15,229.02	0.00	0.00	4,868.90
700	*0.00*				
800	*0.00*	2,912.00	0.00	0.00	0.00
900	*0.00*				
1000	*0.00*	2,697.53	0.00	0.00	0.00
1200	*0.00*	0.00	0.00	0.00	0.00
1400	*0.00*	0.00	0.00	0.00	0.00
1600	*0.00*				
Subtotal	*0.00*	20,838.55	0.00	100.68	6,612.49
				Total	27,551.72

ANNEX 1 to Appendix 6.3 Breakdown of Arterial Mains

Faisalabad Arterial Main Pipe Network Analysis 2038 (1/2)

;ID	Node1	Node2	Length	Diameter	Year	Note	;ID	Node1	Node2	Length	Diameter	Year	Note
Arterial Main - WSZ1							Arterial Main - WSZ1						
P101	TREX	J101	140.35	1600		Ex.ArterialMain	P140	J142	J141	325.68	900		Ex.ArterialMain
P102	J101	J102	1278.44	1600		Ex.ArterialMain	P141	J141	J140	353.77	900		Ex.ArterialMain
P103	J102	J103	1123.71	1000	2023	New	P142	J140	J130	376.45	1000		Ex.ArterialMain
P104	J103	J104	948.83	800	2023	New	P143	J130	J138	344.85	900		Ex.ArterialMain
P105	J105	J104	1802.36	600	2033	New	P144	J138	J137	1821.79	800		Ex.ArterialMain
P106	J105	J106	245.96	600	2028	New	P145	J137	J136	399.21	800		Ex.ArterialMain
P107	J106	J107	379.42	600	2028	New	P146	J136	J135	650.00	800		Ex.ArterialMain
P108	J108	J107	707.09	1000		Ex.ArterialMain	P147	J135	J134	1433.93	1000		Ex.ArterialMain
P109	J109	J108	343.30	1200		Ex.ArterialMain	P148	J134	J133	327.23	900		Ex.ArterialMain
P110	J110	J109	1043.95	1400		Ex.ArterialMain	P149	J132	J133	1827.31	1200		Ex.ArterialMain
P111	J111	J110	1156.02	1400		Ex.ArterialMain	P150	J132	J131	363.67	1200		Ex.ArterialMain
P112	J102	J111	1192.99	1600		Ex.ArterialMain	P151	J145	J128	230.05	900		Ex.ArterialMain
P113	J103	J113	2314.82	600	2028	New	P152	J145	J146	465.46	800		Ex.ArterialMain
P114	J113	J114	990.81	600	2028	New	P153	J146	J147	958.67	800		Ex.ArterialMain
P115	J114	J115	892.88	600	2028	New	P154	J145	J148	408.94	600		Ex.ArterialMain
P116	J115	J116	1379.95	600	2028	New	P155	J148	J149	2923.45	800		Ex.ArterialMain
P117	J116	J104	2348.49	600	2023	New	P156	J150	J149	605.26	800		Ex.ArterialMain
P118	J117	J116	658.48	600	2023	New	P157	J144	J148	1355.98	800		Ex.ArterialMain
P119	J117	J118	658.10	600	2023	New	P158	J148	J151	1388.98	600		Ex.ArterialMain
P120	J119	J117	653.00	600	2023	New	P159	J152	J151	404.48	600		Ex.ArterialMain
P121	J119	J120	1291.74	600	2023	New	P160	J152	J153	397.55	600		Ex.ArterialMain
P122	J120	J121	260.07	800	2023	New	P161	J160	J153	255.43	800		Ex.ArterialMain
P123	J122	J120	1925.06	600	2023	New	P162	J161	J160	698.58	800		Ex.ArterialMain
P124	J123	J122	752.76	800	2023	New	P163	J138	J161	359.62	800		Ex.ArterialMain
P125	J107	J123	694.43	1000		Ex.ArterialMain	P164	J103	J112	865.66	600	2028	New
P126	J122	J124	604.30	600	2023	New	P165	J112	FDA	2231.74	600	2028	New
P127	J124	J125	405.24	600	2023	New	P166	J154	J153	550.07	600		Ex.ArterialMain
P128	J125	J126	1374.80	600	2023	New	P167	J155	J154	337.55	600		Ex.ArterialMain
P129	J127	J126	495.89	600	2023	New	P168	J155	J156	20.14	600		Ex.ArterialMain
P130	J127	J128	671.57	600	2023	New	P169	J157	J156	835.58	700		Ex.ArterialMain
P131	J128	J129	1503.60	900		Ex.ArterialMain	P170	J158	J157	276.78	800		Ex.ArterialMain
P132	J130	J129	275.50	1200		Ex.ArterialMain	P171	J159	J158	299.71	800		Ex.ArterialMain
P133	J108	J130	914.17	1200		Ex.ArterialMain	P172	J143	UC185	169.06	600	2023	New
P134	TRNW	J199	125.66	1000		Ex.ArterialMain	Arterial Main - WSZ2						
P135	J199	J130	6760.28	1000		Ex.ArterialMain	P201	TR1	J201	124.32	1200	2023	New
P136	J131	J111	795.03	1200		Ex.ArterialMain	P202	J201	J202	2625.89	1200	2023	New
P137	J129	J144	671.00	900		Ex.ArterialMain	P203	J203	J202	1298.74	1200	2023	New
P138	J143	J144	294.43	900		Ex.ArterialMain	P204	J204	J203	503.92	1200	2023	New
P139	J143	J142	607.81	900		Ex.ArterialMain	P205	J205	J204	595.68	1000	2023	New
Arterial Main - WSZ2							Arterial Main - WSZ3						
P206	J135	J205	473.10	600	2023	New	P308	J307	J301	1074.62	500	2028	New
P207	J205	J206	117.12	1000	2023	New	P309	J302	J308	4300.55	500	2033	New
P208	J207	J206	1203.20	1000	2023	New	P310	J304	J308	1213.43	500	2023	New
P209	J207	J208	104.80	600	2023	New	Arterial Main - WSZ4						
P210	J208	J209	332.42	600	2023	New	P401	TR3	J401	132.15	1400	2023	New
P211	J209	J210	1007.17	600	2023	New	P402	J402	J401	2241.15	1000	2023	New
P212	J210	J211	1343.99	600	2023	New	P403	J403	J402	2709.53	800	2023	New
P213	J212	J211	316.76	600	2023	New	P404	J135	J205	1666.01	800	2023	New
P214	J213	J212	667.36	600	2023	New	P405	J405	J404	494.56	600	2023	New
P215	J214	J213	961.46	1000	2033	New	P406	J406	J405	1179.14	1000	2023	New
P216	J214	J215	1383.38	1000	2033	New	P407	J407	J406	676.86	1000	2023	New
P217	J216	J215	3049.86	1000	2033	New	P408	J408	J407	543.93	1000	2023	New
P218	J216	J201	2001.64	1000	2033	New	P409	J409	J408	685.93	1200	2023	New
P219	J202	J217	371.45	600	2033	New	P410	J410	J409	1059.22	800	2023	New
P220	J217	J218	2971.85	600	2033	New	P411	J411	J409	579.33	1200	2023	New
P221	J218	J219	2537.79	600	2033	New	P412	J412	J411	536.20	1200	2023	New
P222	J220	J219	315.18	600	2028	New	P413	J412	J413	698.00	800	2023	New
P223	J221	J220	2119.62	500	2028	New	P414	J414	J412	1147.47	1200	2023	New
P224	J222	J221	259.16	600	2028	New	P415	J401	J414	621.74	1200	2023	New
P225	J222	J204	787.19	800	2028	New	P416	J404	J415	670.93	600	2023	New
P226	J207	J223	2889.01	1000	2023	New	P417	J415	J416	1015.77	600	2023	New
P227	J224	J223	380.83	600	2028	New	P418	J416	J417	384.77	600	2023	New
P228	J223	J225	1004.23	600	2023	New	P419	J417	J418	254.52	600	2023	New
P229	J226	J225	315.73	600	2023	New	P420	J418	J419	628.92	600	2023	New
P230	J227	J226	1776.43	600	2023	New	P421	J420	J419	191.77	800	2023	New
P231	J228	J227	427.78	600	2023	New	P422	J405	J420	1154.37	800	2023	New
P232	J229	J228	297.96	600	2023	New	P423	J421	J416	1568.98	600	2028	New
P233	J230	J228	246.90	600	2023	New	P424	J422	J421	822.54	600	2028	New
P234	J231	J230	1472.96	600	2023	New	P425	J422	J423	153.82	600	2028	New
P235	J232	J231	1621.02	600	2023	New	P426	J423	J424	686.56	600	2028	New
P236	J213	J232	531.94	800	2023	New	P426	J425	J424	164.46	800	2023	New
Arterial Main - WSZ3							P427	J417	J424	1255.08	600	2023	New
P301	TR2	J301	172.06	800	2023	New	P428	J424	J426	851.00	600	2023	New
P302	J301	J302	2090.66	800	2023	New	P429	J427	J426	1301.80	600	2023	New
P303	J302	J303	951.10	800	2023	New	P430	J428	J426	257.72	600	2023	New
P304	J303	J304	787.90	800	2023	New	P431	J419	J428	685.30	600	2023	New
P305	J305	J304	2098.60	500	2028	New							
P306	J305	J306	1474.64	500	2028	New							
P307	J306	J307	165.00	500	2028	New							

Faisalabad Arterial Main Pipe Network Analysis 2038 (2/2)

;ID	Node1	Node2	Length	Diameter	**Year**	Note	;ID	Node1	Node2	Length	Diameter	**Year**	Note
Arterial Main - WSZ5							Rising Main - WSZ2						
P501	TR4	J501	2697.53	1000	2023	New	PR02	J229	GR02	75.19	500	2023	RaisingMain
P502	J502	J501	2912.00	800	2023	New	PR08	J203	GR08	474.06	500	2023	RaisingMain
P503	J503	J502	993.18	600	2023	New	PR12	J226	GR12	701.11	500	2023	RaisingMain
P504	J135	J205	1325.42	600	2023	New	PR36	J206	GR36	239.95	600	2028	RaisingMain
P505	J504	J505	1004.71	600	2023	New	PR43	J230	GR43	135.87	500	2033	RaisingMain
P506	J505	J506	1149.90	600	2023	New	PR44	J232	GR44	89.14	500	2038	RaisingMain
P507	J507	J505	1692.29	600	2023	New	PR45	J223	GR45	622.45	600	2028	RaisingMain
P508	J508	J507	310.81	600	2023	New	PR46	J217	GR46	100.86	500	2038	RaisingMain
P509	J509	J508	725.18	600	2023	New	PR47	J219	GR47	34.23	500	2028	RaisingMain
P510	J508	J510	2648.38	600	2038	New	PR52	J224	GR52	384.16	500	2028	RaisingMain
P511	J501	J510	2220.52	600	2038	New	PR53	J209	GR53	359.41	600	2023	RaisingMain
P512	J502	J511	2097.24	600	2023	New	PR54	J221	GR54	203.52	600	2033	RaisingMain
P513	J511	J512	357.89	600	2023	New	PR56	J222	GR56	708.58	600	2028	RaisingMain
P514	J512	J513	721.01	600	2023	New	Rising Main - WSZ3						
P515	J514	J513	2726.85	600	2023	New	PR37	J306	GR37	827.52	500	2028	RaisingMain
P516	J514	J515	1389.26	600	2023	New	PR39	J308	GR39	681.60	500	2023	RaisingMain
P517	J505	J515	735.28	600	2023	New	PR42	J303	GR42	299.63	500	2028	RaisingMain
							Rising Main - WSZ4						
Rising Main - WSZ1							PR13	J420	GR13	419.69	500	2023	RaisingMain
PR01	J134	GR01	950.56	600	2033	RaisingMain	PR14	J403	GR14	115.42	500	2033	RaisingMain
PR03	GR03	J127	787.14	500	2028	RaisingMain	PR15	J419	GR15	547.31	500	2023	RaisingMain
PR04	GR04	J114	139.36	500	2028	RaisingMain	PR16	J410	GR16	503.37	500	2023	RaisingMain
PR05	J123	GR05	90.97	500	2023	RaisingMain	PR17	J410	GR17	948.50	500	2028	RaisingMain
PR06	J116	GR06	822.14	500	2038	RaisingMain	PR28	J402	GR28	371.33	500	2038	RaisingMain
PR07	J118	GR07	546.70	500	2023	RaisingMain	PR29	J411	GR29	100.72	500	2023	RaisingMain
PR09	J152	GR09	155.36	600	2023	RaisingMain	PR32	GR32	J428	91.21	500	2023	RaisingMain
PR10	J141	GR10	732.25	600	2028	RaisingMain	PR33	GR33	J415	350.44	500	2033	RaisingMain
PR11	J142	GR11	506.13	500	2023	RaisingMain	PR35	J408	GR35	132.72	500	2023	RaisingMain
PR23	J157	GR23	1392.53	500	2023	RaisingMain	PR41	J423	GR41	177.57	600	2028	RaisingMain
PR26	J112	GR26	120.68	500	2028	RaisingMain	PR48	J425	GR48	103.21	500	2023	RaisingMain
PR27	J126	GR27	739.74	500	2023	RaisingMain	Rising Main - WSZ5						
PR38	J124	GR38	47.83	500	2023	RaisingMain	PR30	J512	GR30	99.08	500	2038	RaisingMain
PR49	J119	GR49	789.49	500	2023	RaisingMain	PR31	J513	GR31	1259.61	500	2038	RaisingMain
PR50	J101	GR50	266.77	500	2028	RaisingMain	PR34	J510	GR34	384.90	500	2038	RaisingMain
PR51	J105	GR51	1792.93	500	2028	RaisingMain	PR40	J515	GR40	100.68	500	2033	RaisingMain
PR55	J133	GR55	1093.80	600	2033	RaisingMain							