CANTIDADES DE OBRA LINEA PLANTA EL COLEGIO
CONSTRUCCION PLANTA DE TRATAMIENTO DE AGUAS RESIDUALES
MUNICIPALIDAD DE VALLADOLID

Datos	
Espesor de Cama de Arena (m)	0.10
Espesor de Material Selecto 1 (m)	0.10
Espesor de Material Selecto 2 (m)	0.15
Factor de Abundamiento (25.00 %)	1.25

					Terreno Natural (m)			**Invertidas de Pozos (m)**			**Altura de Pozos (m)**								
A	**Long. Hor. (m)**	**Long. Hor. Acum. (m)**	**Long. Tube. (m)**	**Long. Tube. Acum. (m)**	**Inicial**	**Final**	**S (%) T.N.**	**Inicial**	**Final**	**S (%) Tubería**	**Inicial**	**Final**	**Ancho de Zanjo (m)**	**Excavación de Tubería (m^3)**	**Cama de Arena (m^3)**	**Relleno con Material Selecto (m^3)**	**Relleno con Material de Sitio (m^3)**	**Volumen de Acarreo (m^3)**	**Volumen de Tubería (m^3)**
PN48	41.43	41.43	41.43	41.43	1248.65	1246.32	5.62%	1247.65	1244.82	6.83%	1.00	1.50	0.60	31.073	2.486	9.247	18.584	15.611	0.756
PN49	25.05	66.48	25.05	66.48	1246.32	1245.96	1.44%	1244.82	1244.46	1.44%	1.50	1.50	0.60	22.545	1.503	5.591	14.994	9.439	0.457
PN50	30.53	97.01	30.53	97.01	1252.47	1251.36	3.64%	1251.47	1249.86	5.27%	1.00	1.50	0.60	22.898	1.832	6.814	13.695	11.504	0.557
PN51	16.06	113.07	16.06	113.07	1251.36	1250.31	6.54%	1249.86	1248.31	9.65%	1.50	2.00	0.80	22.484	1.285	4.877	16.029	8.069	0.293
PN49	17.81	130.88	17.81	130.88	1250.31	1245.96	24.42%	1248.31	1244.96	18.81%	2.00	1.00	0.60	16.029	1.069	3.975	10.660	6.711	0.325
PN53	25.45	156.33	25.45	156.33	1256.25	1252.07	16.42%	1255.25	1251.07	16.42%	1.00	1.00	0.60	15.270	1.527	5.680	7.598	9.590	0.464
PN54	23.05	179.38	23.05	179.38	1252.07	1247.95	17.87%	1251.07	1245.95	22.21%	1.00	2.00	0.60	20.745	1.383	5.145	13.797	8.685	0.420
PN55	17.15	196.53	17.15	196.53	1247.95	1244.24	21.63%	1245.95	1243.24	15.80%	2.00	1.00	0.60	15.435	1.029	3.828	10.265	6.462	0.313
PN55	11.40	207.93	11.40	207.93	1245.96	1244.24	15.09%	1244.46	1243.24	10.70%	1.50	1.00	0.60	8.550	0.684	2.544	5.114	4.296	0.208
PN56	31.26	239.19	31.26	239.19	1244.24	1236.75	23.96%	1243.24	1235.75	23.96%	1.00	1.00	0.60	18.756	1.876	6.977	9.333	11.779	0.570
PN58	13.50	252.69	13.50	252.69	1238.83	1238.28	4.07%	1237.33	1236.78	4.07%	1.50	1.50	0.60	12.150	0.810	3.013	8.081	5.087	0.246
PN56	24.05	276.74	24.05	276.74	1238.28	1236.75	6.36%	1236.78	1235.75	4.28%	1.50	1.00	0.60	18.038	1.443	5.368	10.788	9.062	0.439
PN61	49.04	301.73	49.04	301.73	1236.75	1231.76	10.18%	1235.75	1230.26	11.19%	1.00	1.50	0.60	36.780	2.942	10.946	21.997	18.478	0.895
CN15	24.16	325.89	24.16	325.89	1231.76	1229.53	9.23%	1230.26	1228.53	7.16%	1.50	1.00	0.60	18.120	1.450	5.392	10.837	9.103	0.441
PN60	78.29	404.18	78.29	404.18	1229.53	1229.35	0.23%	1228.53	1227.85	0.87%	1.00	1.50	0.60	58.718	4.697	17.474	35.118	29.500	1.428
PN59	36.69	440.87	36.69	440.87	1236.75	1231.24	15.02%	1235.75	1230.24	15.02%	1.00	1.00	0.60	22.014	2.201	8.189	10.954	13.825	0.669
PN60	25.67	466.54	25.67	466.54	1231.24	1229.35	7.36%	1230.24	1227.85	9.31%	1.00	1.50	0.60	19.253	1.540	5.730	11.515	9.672	0.468
PN62	53.77	520.31	53.77	520.31	1229.35	1226.91	4.54%	1227.85	1225.91	3.61%	1.50	1.00	0.60	40.328	3.226	12.001	24.119	20.261	0.981
PN69	52.68	572.99	52.68	572.99	1229.35	1226.05	6.26%	1227.85	1223.05	9.11%	1.50	3.00	0.65	77.045	3.424	12.818	59.841	21.504	0.961
PN69	44.61	617.60	44.61	617.60	1224.49	1226.05	-3.50%	1223.49	1223.05	0.99%	1.00	3.00	0.65	57.993	2.900	10.854	43.425	18.210	0.814
PN72	45.65	663.25	45.65	663.25	1224.25	1223.08	2.56%	1221.75	1221.58	0.37%	2.50	1.50	0.65	59.345	2.967	11.107	44.438	18.634	0.833
PN74	7.62	670.87	7.62	670.87	1225.62	1225.59	0.39%	1222.62	1222.59	0.39%	3.00	3.00	0.70	16.002	0.533	2.007	13.322	3.350	0.139
PN62	26.88	697.75	26.88	697.75	1227.19	1226.91	1.04%	1226.19	1225.91	1.04%	1.00	1.00	0.60	16.128	1.613	6.000	8.025	10.128	0.490
PN74	53.42	751.17	53.42	751.17	1226.91	1225.59	2.47%	1225.91	1222.59	6.21%	1.00	3.00	0.65	69.446	3.472	12.998	52.001	21.806	0.974
PN65	55.83	807.00	55.83	807.00	1226.91	1227.86	-1.70%	1225.91	1225.36	0.99%	1.00	2.50	0.80	78.162	4.466	16.954	55.723	28.049	1.018
PN65	29.27	836.27	29.27	836.27	1227.10	1227.86	-2.60%	1225.60	1225.36	0.82%	1.50	2.50	0.65	38.051	1.903	7.122	28.493	11.948	0.534
PN67	31.22	867.49	31.22	867.49	1227.86	1226.27	5.09%	1225.36	1224.77	1.89%	2.50	1.50	0.65	40.586	2.029	7.596	30.391	12.744	0.569
PN68	23.64	891.13	23.64	891.13	1226.27	1224.52	7.40%	1224.77	1222.02	11.63%	1.50	2.50	0.65	30.732	1.537	5.752	23.012	9.650	0.431
PN68	52.07	943.20	52.07	943.20	1225.59	1224.52	2.05%	1222.59	1222.02	1.09%	3.00	2.50	0.80	114.554	4.166	15.813	93.626	26.160	0.950
PN75	24.35	967.55	24.35	967.55	1224.52	1223.32	4.93%	1222.02	1221.82	0.82%	2.50	1.50	0.65	31.655	1.583	5.925	23.703	9.940	0.444
PN72	5.51	973.06	5.51	973.06	1223.32	1223.08	4.36%	1221.82	1221.58	4.36%	1.50	1.50	0.60	4.959	0.331	1.230	3.298	2.076	0.101
PN77	50.40	1023.46	50.40	1023.46	1223.08	1219.46	7.18%	1221.58	1217.96	7.18%	1.50	1.50	0.60	45.360	3.024	11.249	30.167	18.991	0.919
PN78	10.70	1034.16	10.70	1034.16	1219.46	1218.62	7.85%	1217.96	1217.12	7.85%	1.50	1.50	0.60	9.630	0.642	2.388	6.405	4.032	0.195
PN80	34.85	1069.01	34.85	1069.01	1221.13	1221.08	0.14%	1220.13	1219.58	1.58%	1.00	1.50	0.60	26.138	2.091	7.778	15.632	13.131	0.636
PN78	43.02	1112.03	43.02	1112.03	1221.08	1218.62	5.72%	1219.58	1217.12	5.72%	1.50	1.50	0.60	38.718	2.581	9.602	25.750	16.210	0.785
PN82	60.28	1172.31	60.28	1172.31	1218.62	1209.54	15.06%	1217.12	1208.04	15.06%	1.50	1.50	0.60	54.252	3.617	13.454	36.081	22.714	1.100
PN83	37.62	1209.93	37.62	1209.93	1209.54	1204.85	12.47%	1208.04	1203.35	12.47%	1.50	1.50	0.60	33.858	2.257	8.397	22.518	14.175	0.686
PN84	48.58	1258.51	48.58	1258.51	1204.85	1200.52	8.91%	1203.35	1199.02	8.91%	1.50	1.50	0.60	43.722	2.915	10.843	29.078	18.305	0.886
PN84	33.88	1292.39	33.88	1292.39	1202.11	1200.52	4.69%	1200.61	1199.02	4.69%	1.50	1.50	0.60	30.492	2.033	7.562	20.279	12.766	0.618
PN86	39.02	1331.41	39.02	1331.41	1200.52	1198.45	5.30%	1199.02	1196.95	5.30%	1.50	1.50	0.60	35.118	2.341	8.709	23.356	14.703	0.712
PN87	49.45	1380.86	49.45	1380.86	1198.45	1197.56	1.80%	1196.95	1196.06	1.80%	1.50	1.50	0.60	44.505	2.967	11.037	29.599	18.633	0.902
PN88	75.16	1456.02	75.16	1456.02	1197.56	1194.51	4.06%	1196.06	1193.01	4.06%	1.50	1.50	0.60	67.644	4.510	16.776	44.988	28.320	1.371
PN89	81.78	1537.80	81.78	1537.80	1194.51	1187.24	8.89%	1193.01	1185.74	8.89%	1.50	1.50	0.60	73.602	4.907	18.253	48.950	30.815	1.492
PN90	49.92	1587.72	49.92	1587.72	1187.24	1183.99	6.51%	1185.74	1182.49	6.51%	1.50	1.50	0.60	44.928	2.995	11.142	29.880	18.810	0.911
PN90-A	80.71	1668.43	80.71	1668.43	1183.99	1181.21	3.44%	1182.49	1179.71	3.44%	1.50	1.50	0.60	72.639	4.843	18.014	48.310	30.412	1.472
PN91	80.77	1749.20	80.77	1749.20	1181.21	1178.43	3.44%	1179.71	1176.93	3.44%	1.50	1.50	0.60	72.693	4.846	18.028	48.346	30.434	1.473
PN92	52.04	1801.24	52.04	1801.24	1178.43	1174.15	8.22%	1176.93	1172.65	8.22%	1.50	1.50	0.60	46.836	3.122	11.615	31.149	19.609	0.949
PN93	25.33	1826.57	25.33	1826.57	1174.15	1173.14	3.99%	1172.65	1171.64	3.99%	1.50	1.50	0.60	22.797	1.520	5.654	15.162	9.544	0.462
PN94	75.55	1902.12	75.55	1902.12	1173.14	1165.55	10.05%	1171.64	1164.05	10.05%	1.50	1.50	0.60	67.995	4.533	16.863	45.221	28.467	1.378
PN95	15.62	1917.74	15.62	1917.74	1165.55	1164.41	7.30%	1164.05	1162.91	7.30%	1.50	1.50	0.60	14.058	0.937	3.486	9.350	5.886	0.285
PN96	33.52	1951.26	33.52	1951.26	1164.41	1163.09	3.94%	1162.91	1161.59	3.94%	1.50	1.50	0.60	30.168	2.011	7.482	20.064	12.630	0.611
PN97	31.66	1982.92	31.66	1982.92	1163.09	1160.56	7.99%	1161.59	1159.06	7.99%	1.50	1.50	0.60	28.494	1.900	7.066	18.950	11.929	0.578
PN98	37.63	2020.55	37.63	2020.55	1160.56	1157.78	7.39%	1159.06	1156.28	7.39%	1.50	1.50	0.60	33.867	2.258	8.399	22.524	14.179	0.686
PN99 PIPT	70.35	2090.90	70.35	2090.90	1157.78	1145.60	17.31%	1156.28	1144.10	17.31%	1.50	1.50	0.60	63.315	4.221	15.702	42.109	26.508	1.283
Tramo	**2114.950**	**Long. Hor. Acum. (m)**	**2114.950**	**Long. Tube. Acum. (m)**	**Terreno Natural (m)**		**S (%) T.N.**	**Invertidas de Pozos (m)**		**S (%) Tubería**	**Altura de Pozos (m)**		**Ancho de Zanjo (m)**	**2054.669**	**130.977**	**488.470**	**1396.643**	**822.533**	**38.580**
	Long. Hor. (m)		**Long. Tube. (m)**																