

6155: Walmersley Old Road, Bury

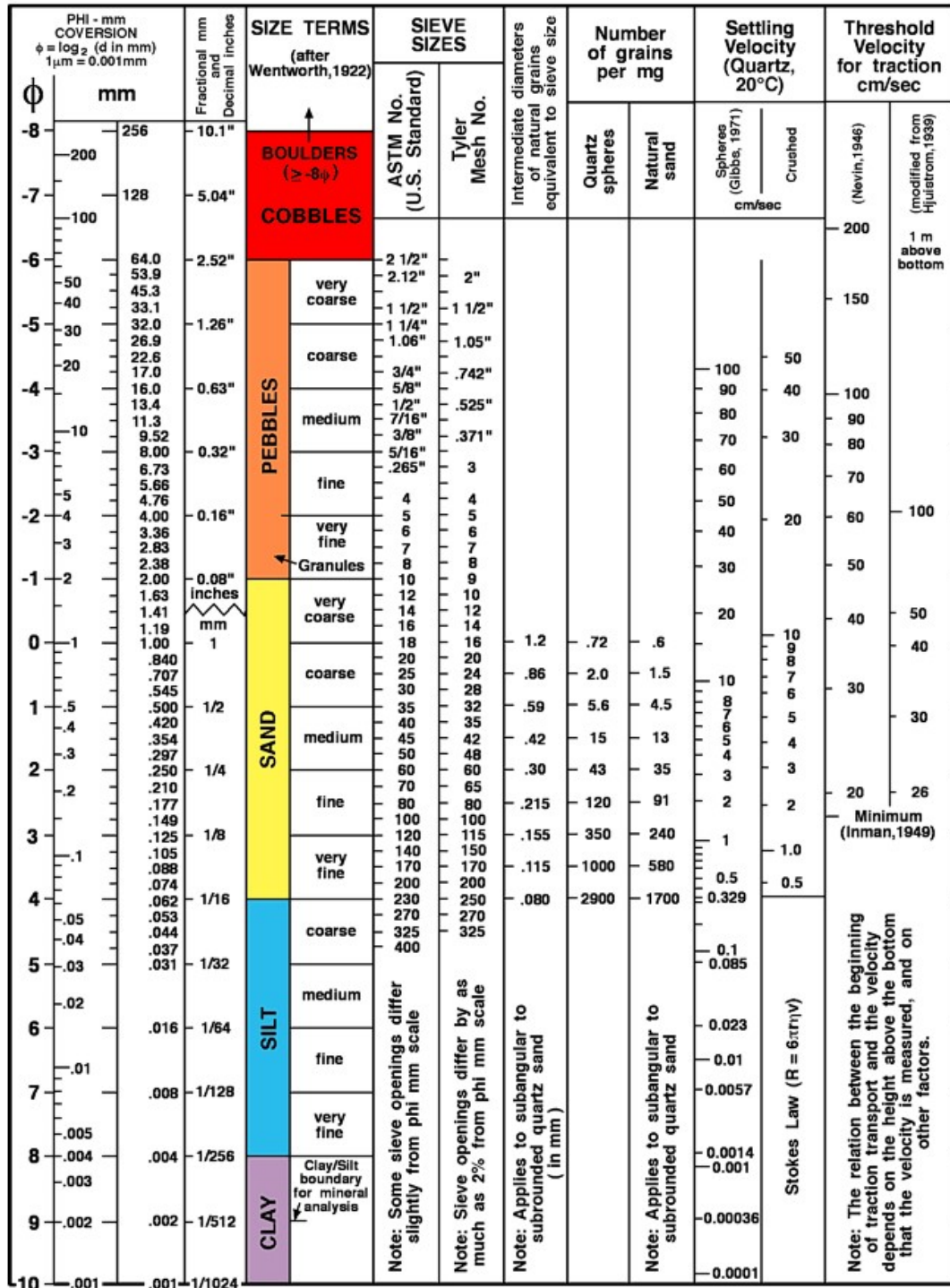
29th July 2021

Table – Modelled Peak Velocity Flow at Section Locations (used to specify sediment sizes)

Cross section Reference	Parameter	Return Event								
		1:2yr	1:10yr	1:30yr	1:50yr	1:75yr	1:100yr	1:100yr +35%	1:100yr + 70%	1:1000 yr
PLB352	Mannings n value: 0.09									
	Peak Water Level (mAOD)	146.926	147.073	147.152	147.197	147.241	147.274	147.405	147.549	147.581
	Peak Water Depth (m)	0.476	0.623	0.702	0.747	0.791	0.824	0.955	1.099	1.131
	Wetted Perimeter (m)	3.866	4.621	5.026	5.258	5.484	5.653	6.326	7.064	7.229
	Wetted Area (m ²)	1.001	1.576	1.928	2.140	2.358	2.528	3.251	4.140	4.351
	Peak Velocity (m/s)	1.43	1.59	1.67	1.71	1.74	1.77	1.85	1.94	1.95
PLB387	Mannings n value: 0.09									
	Peak Water Level (mAOD)	146.823	146.909	146.968	146.998	147.028	147.051	147.155	147.255	147.280
	Peak Water Depth (m)	0.473	0.559	0.618	0.648	0.678	0.701	0.805	0.905	0.930
	Wetted Perimeter (m)	5.959	6.417	6.732	6.891	7.051	7.174	7.728	8.26	8.394
	Wetted Area (m ²)	1.832	2.353	2.732	2.931	3.135	3.294	4.047	4.82	5.018
	Peak Velocity (m/s)	0.79	0.93	1.00	1.05	1.09	1.11	1.22	1.34	1.36
PLB427	Mannings n value: 0.09									
	Peak Water Level (mAOD)	145.967	146.011	146.085	146.125	146.164	146.192	146.326	146.497	146.537
	Peak Water Depth (m)	0.397	0.441	0.515	0.555	0.594	0.622	0.756	0.927	0.967
	Wetted Perimeter (m)	5.59	5.841	6.262	6.49	6.712	6.872	7.635	8.614	8.837
	Wetted Area (m ²)	1.404	1.651	2.094	2.344	2.596	2.782	3.725	5.075	5.411
	Peak Velocity (m/s)	1.33	1.33	1.33	1.32	1.32	1.33	1.33	1.33	1.32
PLB468	Mannings n value: 0.09									
	Peak Water Level (mAOD)	145.009	145.103	145.167	145.204	145.236	145.259	145.379	145.512	145.544
	Peak Water Depth (m)	0.479	0.573	0.637	0.674	0.706	0.729	0.849	0.982	1.014
	Wetted Perimeter (m)	5.965	6.458	6.794	6.989	7.157	7.278	7.908	8.606	8.774
	Wetted Area (m ²)	1.857	2.428	2.842	3.093	3.313	3.474	4.353	5.415	5.682

	Peak Velocity (m/s)	0.75	0.89	0.97	1.00	1.02	1.04	1.09	1.09	1.09
PLB508	Mannings n value: 0.09									
	Peak Water Level (mAOD)	143.357	143.441	143.498	143.532	143.564	143.588	143.703	143.834	143.866
	Peak Water Depth (m)	0.427	0.511	0.568	0.602	0.634	0.658	0.773	0.904	0.936
	Wetted Perimeter (m)	6.700	7.151	7.458	7.641	7.813	7.942	8.56	9.265	9.437
	Wetted Area (m²)	2.669	3.235	3.639	3.888	4.127	4.31	5.227	6.351	6.638
	Peak Velocity (m/s)	0.92	1.08	1.12	1.19	1.21	1.23	1.30	1.33	1.34
PLB548	Mannings n value: 0.09									
	Peak Water Level (mAOD)	141.499	141.609	141.690	141.734	141.775	141.804	141.944	142.095	142.131
	Peak Water Depth (m)	0.319	0.429	0.51	0.554	0.595	0.624	0.764	0.915	0.951
	Wetted Perimeter (m)	5.199	6.118	6.796	7.164	7.506	7.749	8.919	10.182	10.483
	Wetted Area (m²)	0.996	1.611	2.127	2.43	2.726	2.944	4.09	5.506	5.87
	Peak Velocity (m/s)	1.08	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
PLB588	Mannings n value: 0.05									
	Peak Water Level (mAOD)	139.388	139.535	139.659	139.732	139.804	139.858	140.116	140.414	140.485
	Peak Water Depth (m)	0.488	0.635	0.759	0.832	0.904	0.958	1.216	1.514	1.585
	Wetted Perimeter (m)	6.236	7.163	7.944	8.405	8.858	9.199	10.825	12.704	13.151
	Wetted Area (m²)	1.948	2.913	3.828	4.41	5.015	5.489	7.995	11.384	12.27
	Peak Velocity (m/s)	0.75	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PLB628	Mannings n value: 0.05									
	Peak Water Level (mAOD)	139.236	139.442	139.593	139.676	139.755	139.814	140.086	140.393	140.466
	Peak Water Depth (m)	0.656	0.862	1.013	1.096	1.175	1.234	1.506	1.813	1.886
	Wetted Perimeter (m)	5.493	6.534	7.297	7.717	8.116	8.414	9.789	11.341	11.71
	Wetted Area (m²)	2.261	3.437	4.424	5.011	5.599	6.057	8.377	11.406	12.19
	Peak Velocity (m/s)	0.50	0.49	0.50	0.50	0.50	0.50	0.49	0.50	0.49
PLB641	Mannings n value: 0.05									
	Peak Water Level (mAOD)	139.195	139.409	139.564	139.649	139.731	139.790	140.066	140.377	140.451
	Peak Water Depth (m)	0.695	0.909	1.064	1.149	1.231	1.290	1.566	1.877	11.951

	Wetted Perimeter (m)	5.083	6.137	6.901	7.32	7.725	8.015	9.136	10.909	11.274
	Wetted Area (m²)	2.239	3.366	4.31	4.875	5.45	5.882	8.113	11.038	1.798
	Peak Velocity (m/s)	0.66	0.66	0.66	0.67	0.67	0.67	0.67	0.67	0.67



Sediment Grading Table used by JBA to specify sediment Sizes