

**Table 2.1.1: Aggregate Gradation Specifications for Designations 1-3**

Designation	1				2	3				
Class	10	10	20	16.0*	20	20	25	40	63	80
Application	10mm-HT	10mm-LT	20mm-B	SMA	Soil Cement	Granular Base	Granular Base	Granular Base	Granular Base	Granular Sub-Base
80 000										100
63 000								100	100	
25 000			100				100	70 -94	55 -75	46 -85
20 000			97 - 100	100	100	100	82-97	60 -90	50 -70	40 -81
16 000			83 – 97	97-100	-	84 -95	70-93	55 -85	44 -65	32 -76
12 500	100	100	70 – 92	88-100	60 -96	60-90	60-86	50 -80	38 -60	30 -70
10 000	97-100	97-100	61 - 84	30 -80	-	50-84	52-79	44 -74	-	-
8 000	70-94	80-94	52 – 77	-						
6 300	45-85	65-85	44 – 70	22-45	-	-	-	-	23 -47	-
5 000	32-75	50-75	38 – 65	20-35	36 -75	37- 62	35-64	32 -62	20 -45	25 -50
2 500	23-55	35-55	26 – 52	16-26		-	-	-	-	-
2 000	-	-	-	-	24 -54	26- 50	24-50	20 -50	14 -38	19 -42
1 250	16-45	25-45	18 – 41	14-22	20-43	19- 43	19-43	17 -43	12 -34	15 -38
630	11-36	20-36	13 – 31	13-20	14-34	14- 34	14-34	12 -34	10 -28	10 -32
400	-	-	-	-	11 -29	11- 28	10-27	10 -28	8 -24	7 -27
315	8-26	14-26	9 – 22	12-18	9 –26	10- 25	9-24	8 -25	7 -22	6 -24
160	5-15	7-15	6 – 14	10-16	6 -20	6 -18	6-18	5 -18	4 -17	3 -18
80	3-8	4-8	3 - 7	10 -14	2 -10	2-10	2-10	0 -10	0 -10	0 -10

\*Note: SMA Combined Aggregate gradation includes the required mineral filler

**Table 2.1.2: Aggregate Gradation Specifications for Designations 4 – 7**

Designation	4		5		6		7	
Class	2.5	10	5	80	20	25	10	80
Application	Unit Pavers Joint Sand	Unit Pavers Bedding	Grout Sand	Culvert Bedding	Sub-Drain Rock	Sewer Rock	Sewer Backfill	Culvert Backfill
80 000				100				100
25 000						100		
20 000				85 - 100	100			
14 000					90 - 100			
10 000		100			45 - 75		100	
5000		75 - 95	100	70 - 90	0 - 15	10 max	70 - 100	30 - 60
2500	100	35 - 70			0 - 5			
1250	85 – 100	20 - 50						
800				40 - 80				
630	50 – 90	10 - 40						
315	25 – 60	5 – 20	50 – 95					
160	12 – 30	2- 8					5 - 20	
80	10 – 15	0 - 5	25 max	0 - 15		2 max	0 - 12	0 - 15

Table 2.1.3: Aggregate Properties

Designation	1			2	3			
	10	20	16	20	20 & 25	40	63	80
Class	10mm-HT & 10mm-LT	20mm - B	SMA	Soil Cement	Granular Base	Granular Base	Granular Base	Granular Sub-Base
+5000 µm with ≥2 fractured faces (% mass)	*	*	**	60 min	60 min	75 min	75 min	
Plasticity Index <400 µm	*	*	**	6 max	6 max	6 max	6 max	
Liquid Limit	*	*	**	25 max	25 max	25 max	25 Max	
LA abrasion wear (% mass)	*	*	**					
Soundness loss (% mass)	*	*	**					
Lightweight Pieces (% mass)	*	*	**	2 max	2 max	2 max	2 max	2 max

\*Note: See Section 02066 SGC HOT MIX ASPHALT CONCRETE for requirements

\*\*Note: See Section 02067 STONE MASTIC ASPHALT CONCRETE for requirements

### 2.1.2.2 Equipment

- **Crushers:** capable of producing aggregate as specified.
- **Truck Weigh Scales:** are to be furnished by the Contractor. Have the scales inspected and certified by the Weights and Measures Branch of Canada Consumer and Corporate Affairs prior to start of every construction season and as requested by the City, to ensure their accuracy.
- **Scale Tickets:** Supply truckers with scale ticket forms approved by the City.
- **Metric Sieves:** CAN/CGSB-8.2-M sieve sizes shall replace ASTM E11 sieves as per Table 2.1.4.