

FIGURE 7.7 Test Report Showing Typical Lab Data for Design by the Marshall Method

Compaction: 75 Blows  
 Specific Gravity of AC: 1.030  
 Bulk S.G. Aggregate: 2.674

Grade AC: AC-20  
 Absorbed AC of Aggregate: 0.6%  
 Effective S.G. Aggregate: 2.717

Project:  
 Location:  
 Date:

Trial  
 Mix:

% AC by wt. of mix, Spec. No.	Spec. Height in. (mm)	Mass, grams			Bulk Volume, cc	Bulk S.G. Specimen	Max. S.G. (Loose Mix)	Unit Weight, pcf (Mg/m <sup>3</sup> )	% Air Voids	%VMA	%VFA	Stability, lbs. (N)		Flow 0.01 in. (0.25 mm)
		In Air	In Water	Sat. Surface Dry In Air								Measured	Adjusted	
3.5 - A		1240.6	726.4	1246.3	519.9	2.386	148.9					2440	2440	8
3.5 - B		1238.7	723.3	1242.6	519.3	2.385	148.8					2420	2420	7
3.5 - C		1240.1	724.1	1245.9	521.8	2.377	148.3					2510	2510	6
Average						2.383	148.7	7.3	14.0	48.0			2457	7
4.0 - A		1244.3	727.2	1246.6	519.4	2.396	149.5					2180	2180	7
4.0 - B		1244.6	727.0	1247.6	520.6	2.391	149.2					2260	2260	8
4.0 - C		1242.6	727.9	1244.0	516.1	2.408	150.2					2310	2310	8
Average						2.398	149.6	6.0	13.9	57.1			2250	7.7
4.5 - A		1249.3	735.8	1250.2	514.4	2.429	151.2					2420	2420	9
4.5 - B		1250.8	728.1	1251.6	523.5	2.389	149.1					2310	2314	9
4.5 - C		1251.6	735.3	1253.1	517.8	2.417	150.8					2340	2340	9
Average						2.412	150.5	4.7	13.9	66.1			2358	9
5.0 - A		1256.7	739.8	1257.6	517.8	2.427	151.4					2290	2290	10
5.0 - B		1258.7	742.7	1259.3	516.6	2.437	152.0					2190	2190	10
5.0 - C		1258.4	737.5	1259.1	521.6	2.418	150.5					2240	2240	9
Average						2.425	151.3	3.4	13.8	75.2			2240	9.7
5.5 - A		1263.8	742.6	1264.3	521.7	2.422	151.2					2210	2210	11
5.5 - B		1258.8	741.4	1259.4	518.0	2.430	151.6					2300	2300	10
5.5 - C			742.5	1259.5	517.0	2.435	152.0					2210	2240	10
Average						2.429	151.6	2.5	14.1	82.1			2240	10.3