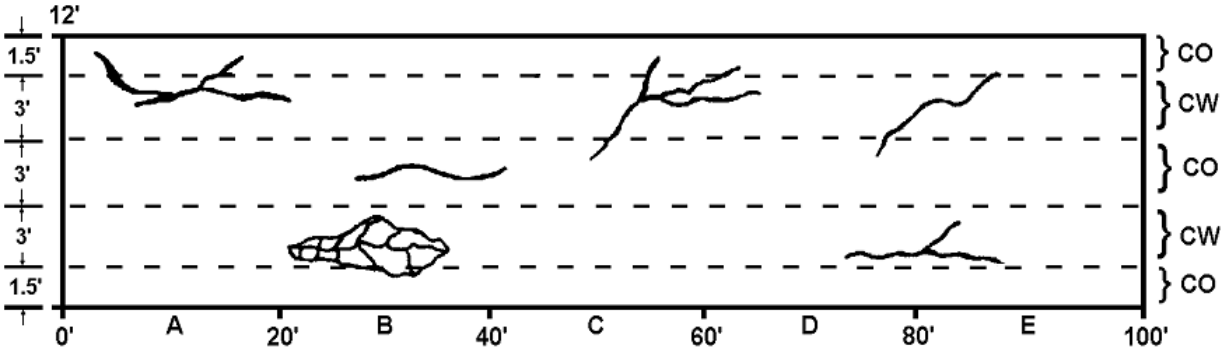


AREA DIMENSIONS

CW: **A = 21 ft^2 (1.95m^2)**
B = 30 ft^2 (2.79m^2)
C = 14 ft^2 (1.30m^2)
D = 16 ft^2 (1.49m^2)
E = 21 ft^2 (1.95m^2)

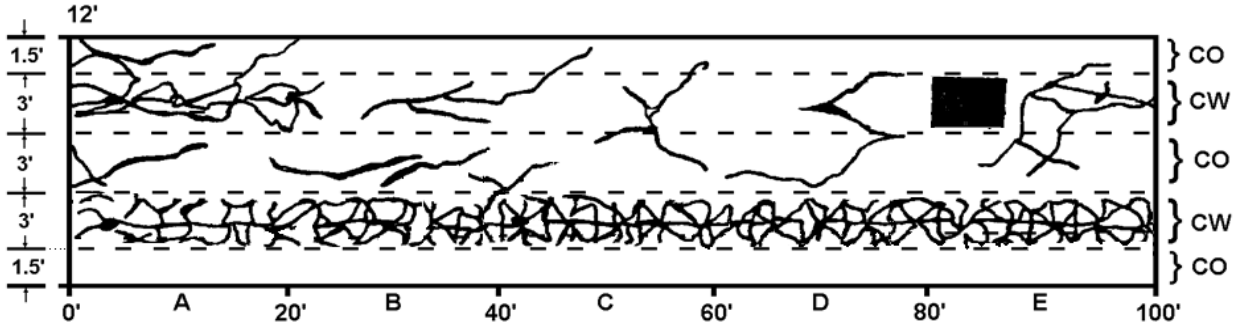
TOTAL = 102 ft^2 (9.48m^2)
÷ 600 ft^2 (55.74m^2)
= 17% of surface area

CO: **A = 4 ft^2 (0.37m^2)**
B = 15 ft^2 (1.39m^2)
C = 5 ft^2 (0.46m^2)
D = 3 ft^2 (0.28m^2)
E = 0 ft^2 (0m^2)

TOTAL = 27 ft^2 (2.51m^2)
÷ 600 ft^2 (55.74m^2)
= 5% of surface area

NOTE: **CW = Confined to Wheel Paths**
CO = Outside of Wheel Paths
Single Cracks considered 1 ft. (0.30m) in width
Alligator Cracks considered as affected area
Block Cracks considered 1 ft (0.30m) in width

FIGURE 3. CLASS II CRACKING ESTIMATES



AREA DIMENSIONS

CW: **A = 80 ft^2 (7.43m^2)**
B = 66 ft^2 (6.13m^2)
C = 61 ft^2 (5.67m^2)
D = 57 ft^2 (5.30m^2)
E = 84 ft^2 (7.80m^2)

TOTAL = 348 ft^2 (32.33m^2)
÷ 600 ft^2 (55.74m^2)
= 58% of surface area

CO: **A = 38 ft^2 (3.53m^2)**
B = 24 ft^2 (2.23m^2)
C = 15 ft^2 (1.39m^2)
D = 17 ft^2 (1.58m^2)
E = 14 ft^2 (1.30m^2)

TOTAL = 108 ft^2 (10.03m^2)
÷ 600 ft^2 (55.74m^2)
= 18% of surface area

NOTE: **CW = Confined to Wheel Paths**
CO = Outside of Wheel Paths
Single Cracks considered 1 ft. (0.30m) in width
Alligator Cracks considered as affected area
Block Cracks considered 1 ft (0.30m) in width

FIGURE 4. CLASS III CRACKING ESTIMATES

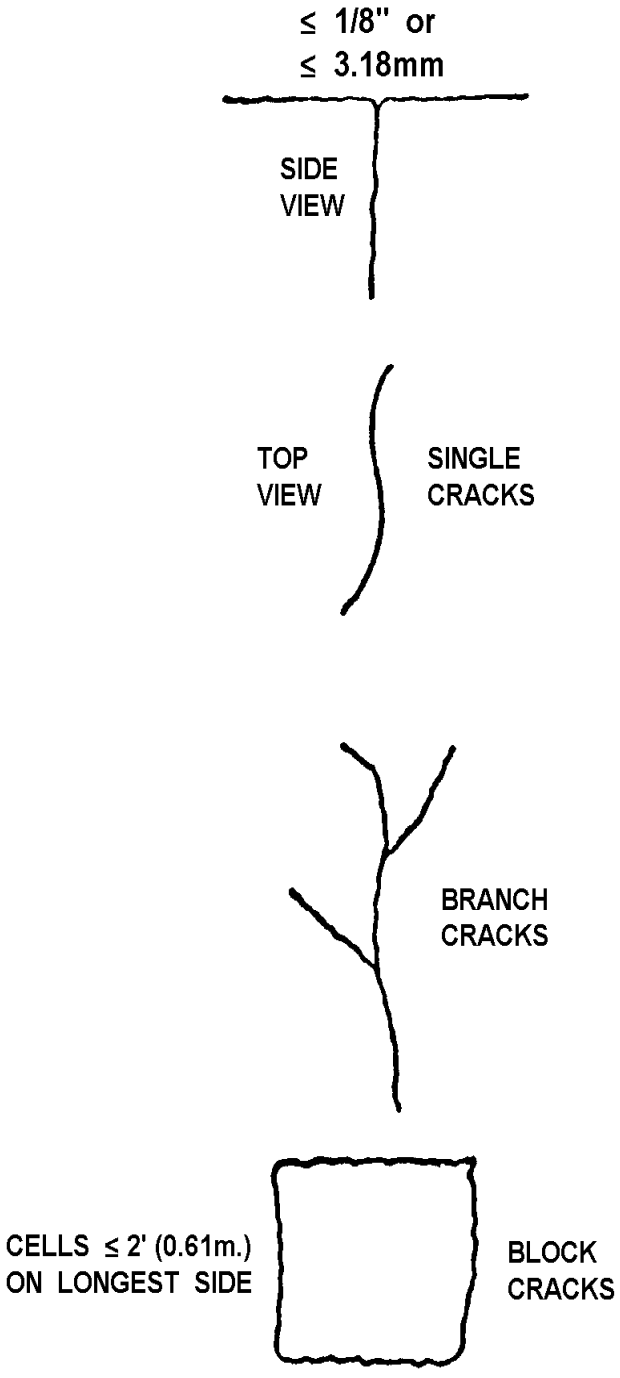


FIGURE 5. CLASS 1B CRACKING CLASSIFICATION

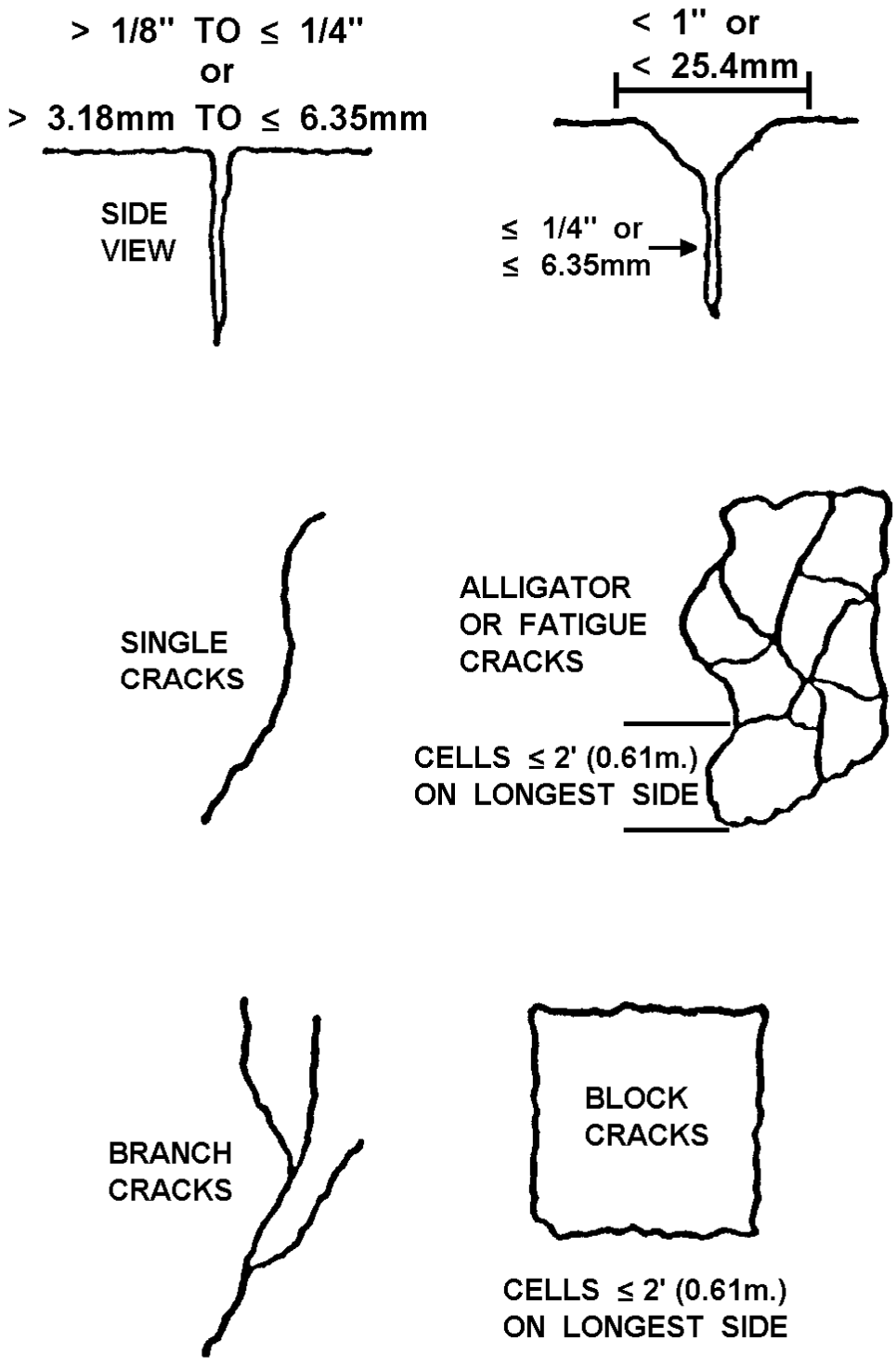


FIGURE 6. CLASS II CRACKING CLASSIFICATION

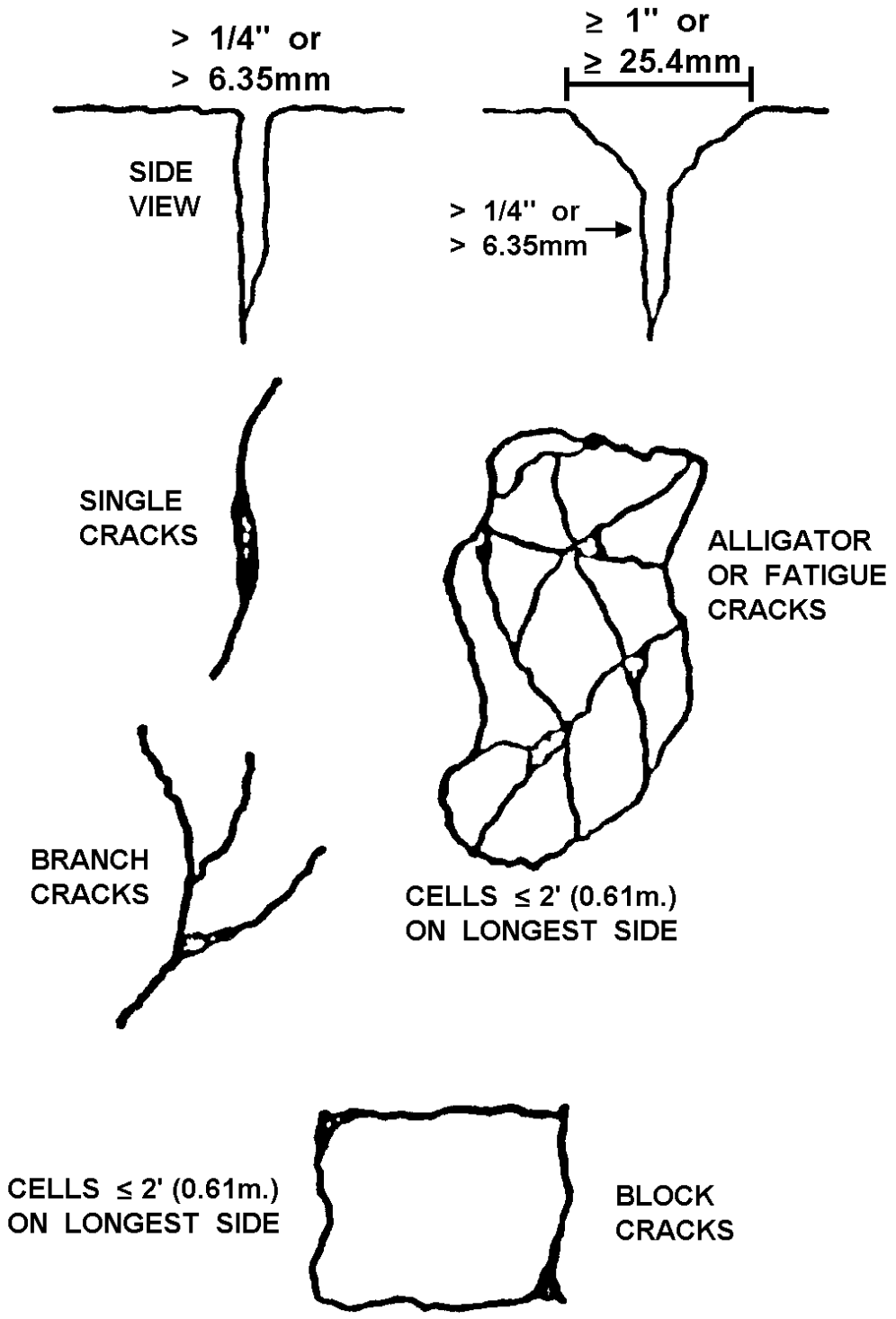


FIGURE 7. CLASS III CRACKING CLASSIFICATION

FIGURE 8. CLASS IB CRACKING

FIGURE 9. CLASS II CRACKING

FIGURE 10. CLASS III CRACKING

FIGURE 11. PATCHING

FIGURE 12. RAVELING

Rut Rating

Rut depths are collected using a profiler. The profiler measures rut depths at highway speeds and records the average rut depth. The rut depth is then assigned deduct values. Each ⅛ inch (3.18mm) of rut depth equals one (1) deduct point. See Table 6 on page 29.

Manual rut depths are required if the rated section cannot be surveyed by the profiler. However, at the rater's discretion there may be short sections from which automated rut data can be collected even though ride data would not be valid (due to speed, section length and accelerometer sensitivity). When manual rut measurements are necessary, three evenly distributed measurements per mile, using a six-foot straight edge and scale, are required. Measurements will be recorded to the nearest ⅛ inch (3.18 mm) as indicated in Table 6 (page 29). See Figures 13, 14 and 15 (pages 30 and 31) for examples of how manual rutting is measured.

Rut Depth Check on New Pavement

The rut depth for sections of new pavement must be less than 0.15 inches. If the rut depth is greater than or equal to 0.15 inches, rerun the section to confirm data.

Calculating Rut Rating

The Rut Rating is obtained by subtracting from ten (10) the deduct value associated with the Profiler rut depth or Manual rut depth. Rutting values are shown in Table 6 (page 29). A rut rating of 10 indicates a pavement with only minor rutting.

Rut Rating = 10 - Deduct Code
Example: Rut Depth 0.21 inches = Deduct of 2
Rut Rating = 10 – 2 = 8

A thorough calibration and verification must be completed to ensure the accuracy of the profiler rut depth. See Appendix C, ("**Profiler Calibration Instructions**") for information on the calibration process.

TABLE 6

PROFILER RUTTING VALUES

RUT DEPTH (IN)	RUT DEPTH (MM)	RANGE (IN)	RANGE (MM)	DEDUCT	RUT RATING
0	0	0.00 – 0.06	0.00 - 1.59	0	10
1/8	3.18	0.07 – 0.19	1.60 - 4.76	1	9
1/4	6.35	0.20 – 0.31	4.77 - 7.94	2	8
3/8	9.53	0.32 – 0.44	7.95 - 11.11	3	7
1/2	12.70	0.45 – 0.56	11.12 - 14.29	4	6
5/8	15.88	0.57 – 0.69	14.30 - 17.46	5	5
3/4	19.05	0.70 – 0.81	17.47 - 20.64	6	4
7/8	22.23	0.82 – 0.94	20.65 - 23.81	7	3
1	25.40	0.95 – 1.06	23.82 - 26.99	8	2
1 1/8	28.58	1.07 – 1.19	27.00 - 30.16	9	1
1 1/4 +	31.75	1.20 +	30.17 +	10	0

MANUAL RUTTING VALUES

RUT DEPTH (IN)	RUT DEPTH (MM)	DEDUCT	RUT RATING
0	0	0	10
1/8	3.18	1	9
1/4	6.35	2	8
3/8	9.53	3	7
1/2	12.70	4	6
5/8	15.88	5	5
3/4	19.05	6	4
7/8	22.23	7	3
1	25.40	8	2
1 1/8	28.58	9	1
1 1/4+	31.75	10	0

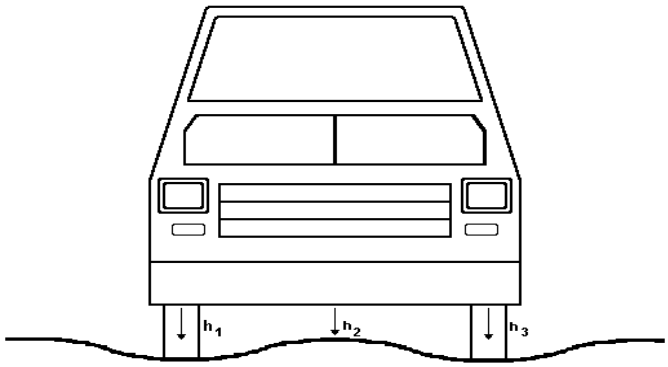


FIGURE 13. AUTOMATED RUT DEPTH METHOD

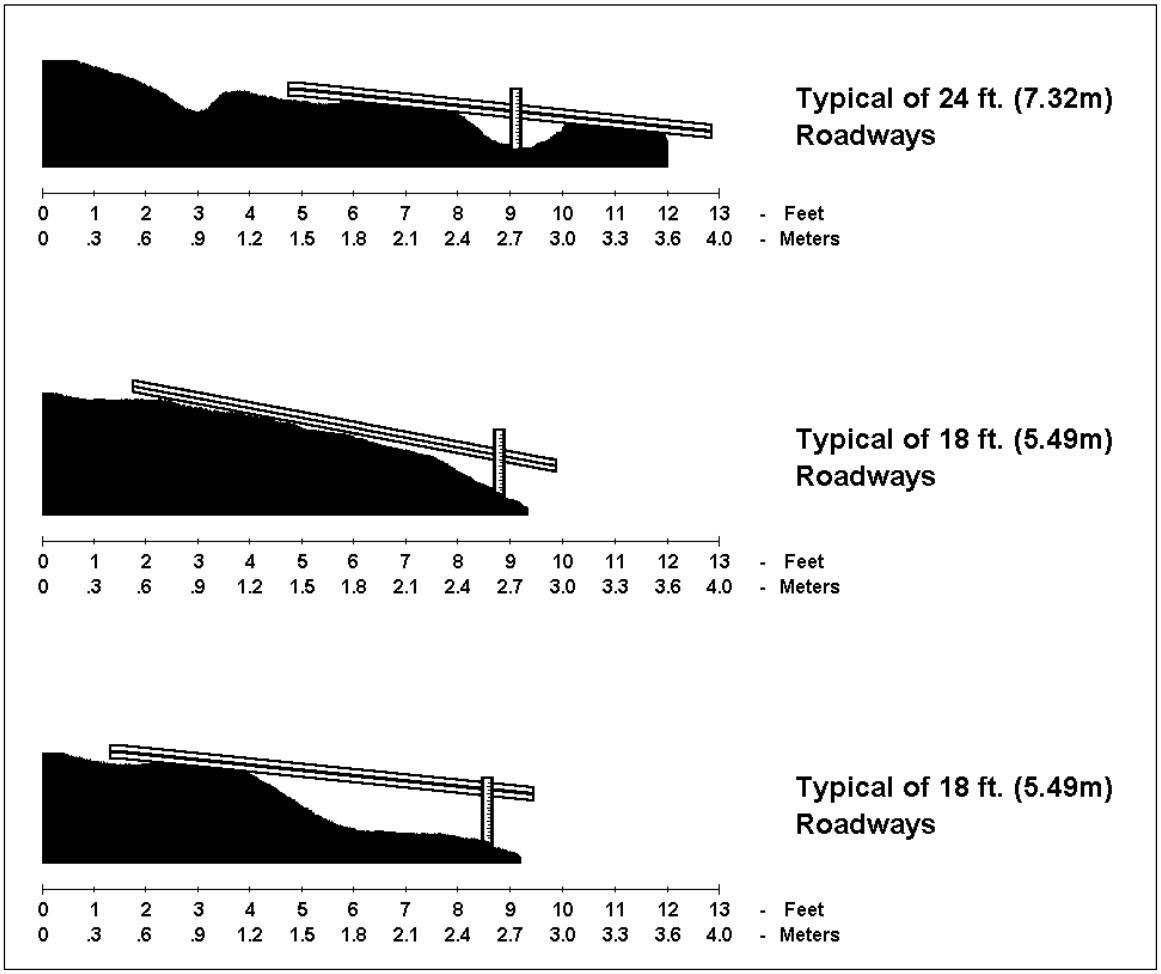


FIGURE 14. MANUAL RUT DEPTH METHODS