Data Rekapitulasi Lalu Lintas Harian (LHR)

Jam	Golongan											
	1	**2**	**3**	**4**	**5a**	**5b**	**6a**	**6b**	**7a**	**7b**	**7c**	**8**
00.00 - 00.15	44	10	0	2	0	0	7	5	7	1	4	1
00.15 - 00.30	40	13	1	3	0	0	6	7	7	2	1	0
00.30 - 00.45	40	4	1	8	0	0	6	4	9	1	5	1
00.45 - 01.00	20	9	0	4	0	0	2	5	5	2	1	0
∑	144	36	2	17	0	0	21	21	28	6	11	2
01.00 - 01.15	26	7	1	0	0	0	3	6	2	0	0	0
01.15 - 01.30	16	2	0	2	0	0	1	2	5	1	2	0
01.30 - 01.45	16	2	0	4	0	1	1	9	6	1	3	0
01.45 - 02.00	12	1	1	1	0	0	8	6	4	2	2	0
∑	70	12	2	7	0	1	13	23	17	4	7	0
02.00 - 02.15	18	3	0	0	0	0	4	4	4	2	1	0
02.15 - 02.30	18	4	0	3	0	0	2	6	6	2	2	0
02.30 - 02.45	13	5	1	1	0	0	4	5	7	0	3	0
02.45 - 03.00	21	9	0	0	0	0	5	6	6	1	3	0
∑	70	21	1	4	0	0	15	21	23	5	9	0
03.00 - 03.15	21	4	0	1	0	0	4	8	3	0	4	0
03.15 - 03.30	19	3	0	4	0	0	7	4	8	1	1	0
03.30 - 03.45	20	3	0	3	0	0	7	6	5	3	0	1
03.45 - 04.00	25	3	0	6	0	0	8	4	9	1	0	1
∑	85	13	0	14	0	0	26	22	25	5	5	2
04.00 - 04.15	27	7	1	5	0	0	6	9	10	0	1	0
04.15 - 04.30	20	4	2	4	0	0	2	4	15	0	0	0
04.30 - 04.45	41	4	0	6	0	0	0	12	7	0	1	0
04.45 - 05.00	53	7	0	5	0	0	0	19	24	0	1	0
∑	141	22	3	20	0	0	8	44	56	0	3	0
05.00 - 05.15	67	9	1	4	0	0	0	9	20	1	2	0
05.15 - 05.30	73	9	1	5	0	0	0	26	16	1	2	8

Jam	Golongan											
	1	**2**	**3**	**4**	**5a**	**5b**	**6a**	**6b**	**7a**	**7b**	**7c**	**8**
05.30 - 05.45	91	9	1	4	0	0	1	6	17	1	2	2
05.45 - 06.00	134	13	1	12	0	0	0	11	13	1	1	2
∑	365	40	4	25	0	0	1	52	66	4	7	12
06.00 - 06.15	156	12	5	6	0	0	0	8	6	0	0	14
06.15 - 06.30	194	15	4	5	0	0	0	16	18	4	0	12
06.30 - 06.45	277	24	1	4	0	0	1	11	3	0	2	1
06.45 - 07.00	281	21	4	5	0	0	0	13	6	1	3	2
∑	908	72	14	20	0	0	1	48	33	5	5	29
07.00 - 07.15	236	18	2	10	0	0	3	8	7	0	0	2
07.15 - 07.30	299	25	1	13	0	0	5	13	4	1	0	3
07.30 - 07.45	272	17	2	14	0	0	2	12	3	0	0	2
07.45 - 08.00	220	27	3	14	0	0	2	22	5	0	3	2
∑	1027	87	8	51	0	0	12	55	19	1	3	9
08.00 - 08.15	213	17	2	19	0	0	1	20	4	0	4	1
08.15 - 08.30	175	18	3	17	0	0	4	17	2	0	1	1
08.30 - 08.45	178	32	3	9	0	0	4	19	3	0	0	1
08.45 - 09.00	145	17	5	19	0	0	1	34	7	0	3	1
∑	711	84	13	64	0	0	10	90	16	0	8	4
09.00 - 09.15	146	34	0	12	0	0	2	39	5	3	2	0
09.15 - 09.30	173	34	2	17	0	0	2	35	7	2	1	1
09.30 - 09.45	154	31	4	10	0	0	3	15	6	2	1	0
09.45 - 10.00	122	22	0	16	0	0	2	23	4	0	1	1
∑	595	121	6	55	0	0	9	112	22	7	5	2
10.00 - 10.15	121	23	2	7	0	0	0	22	10	0	4	1
10.15 - 10.30	156	34	2	16	0	0	3	29	13	1	2	1
10.30 - 10.45	135	35	2	14	0	0	0	30	11	0	2	0
10.45 - 11.00	148	34	2	20	0	0	3	33	13	1	1	1
∑	560	126	8	57	0	0	6	114	47	2	9	3

Jam	Golongan											
	1	**2**	**3**	**4**	**5a**	**5b**	**6a**	**6b**	**7a**	**7b**	**7c**	**8**
11.00 - 11.15	137	37	2	13	0	0	0	30	6	0	4	1
11.15 - 11.30	153	20	4	15	0	0	5	18	9	0	1	2
11.30 - 11.45	170	31	1	10	0	0	0	29	7	0	0	1
11.45 - 12.00	121	30	2	11	0	0	0	23	6	0	2	1
∑	581	118	9	49	0	0	5	100	28	0	7	5
12.00 - 12.15	142	27	0	9	0	0	1	15	4	0	2	0
12.15 - 12.30	187	43	1	8	0	0	1	23	7	1	1	0
12.30 - 12.45	153	26	1	21	0	0	1	26	12	0	1	0
12.45 - 13.00	168	29	0	8	0	0	2	16	6	3	5	0
∑	650	125	2	46	0	0	5	80	29	4	9	0
13.00 - 13.15	189	28	0	13	0	0	1	21	5	2	2	0
13.15 - 13.30	224	24	1	13	0	0	1	17	5	0	2	1
13.30 - 13.45	192	32	3	16	0	0	2	20	17	1	0	1
13.45 - 14.00	183	49	1	7	0	0	4	20	5	0	1	0
∑	788	133	5	49	0	0	8	78	32	3	5	2
14.00 - 14.15	268	31	1	7	0	0	1	12	9	0	1	0
14.15 - 14.30	229	29	0	12	0	0	2	12	6	1	2	0
14.30 - 14.45	201	43	0	19	0	0	1	19	6	0	2	0
14.45 - 15.00	225	49	1	10	0	0	2	14	9	2	2	1
∑	923	152	2	48	0	0	6	57	30	3	7	1
15.00 - 15.15	218	31	0	10	0	0	6	15	9	2	1	0
15.15 - 15.30	252	44	0	10	0	0	6	15	8	0	0	1
15.30 - 15.45	235	28	1	9	1	0	1	11	18	0	1	1
15.45 - 16.00	251	32	0	8	1	0	1	5	6	0	0	0
∑	956	135	1	37	2	0	14	46	41	2	2	2
16.00 - 16.15	353	26	1	2	0	0	4	22	22	0	2	2
16.15 - 16.30	304	46	0	7	0	0	4	28	22	2	2	2
16.30 - 16.45	349	35	0	7	0	0	4	22	26	0	0	4

Jam	Golongan											
	1	2	3	4	5a	5b	6a	6b	7a	7b	7c	8
16.45 - 17.00	336	40	0	10	0	0	0	24	18	0	2	0
∑	1342	147	1	26	0	0	12	96	88	2	6	8
17.00 - 17.15	344	30	1	10	0	0	0	15	6	0	0	2
17.15 - 17.30	303	34	0	8	0	0	3	6	10	0	0	1
17.30 - 17.45	265	35	0	13	0	0	2	7	8	0	2	0
17.45 - 18.00	247	34	1	8	0	0	2	5	2	0	0	0
∑	1159	133	2	39	0	0	7	33	26	0	2	3
18.00 - 18.15	216	27	2	7	0	0	2	10	5	1	2	0
18.15 - 18.30	239	38	0	8	0	0	2	6	10	2	2	0
18.30 - 18.45	190	35	0	8	0	0	0	4	5	0	3	0
18.45 - 19.00	184	28	0	8	0	0	0	4	10	1	3	2
∑	829	128	2	31	0	0	4	24	30	4	10	2
19.00 - 19.15	181	29	0	5	0	0	1	11	15	0	0	5
19.15 - 19.30	185	31	0	6	0	0	0	3	15	0	4	10
19.30 - 19.45	182	31	0	4	0	0	1	7	6	1	1	2
19.45 - 20.00	159	29	0	6	0	0	0	7	13	0	4	4
∑	707	120	0	21	0	0	2	28	49	1	9	21
20.00 - 20.15	131	29	0	6	0	0	1	6	8	1	0	2
20.15 - 20.30	142	22	1	11	0	0	0	17	7	1	1	8
20.30 - 20.45	129	33	0	4	0	0	0	6	5	0	1	0
20.45 - 21.00	135	24	0	7	0	0	0	5	8	0	0	0
∑	537	108	1	28	0	0	1	34	28	2	2	10
21.00 - 21.15	111	30	2	6	0	0	2	4	6	0	1	0
21.15 - 21.30	119	26	0	2	0	0	1	8	8	0	3	22
21.30 - 21.45	95	28	0	5	0	0	0	3	3	0	0	0
21.45 - 22.00	99	28	0	10	0	0	1	10	14	0	3	0
∑	424	112	2	23	0	0	4	25	31	0	7	22
22.00 - 22.15	93	13	0	5	0	0	0	7	4	0	1	0

Jam	Golongan											
	1	**2**	**3**	**4**	**5a**	**5b**	**6a**	**6b**	**7a**	**7b**	**7c**	**8**
22.15 - 22.30	101	21	0	3	0	0	0	3	11	0	2	0
22.30 - 22.45	69	15	0	4	0	0	0	4	6	0	2	0
22.45 - 23.00	74	9	0	3	0	0	1	5	6	2	2	0
∑	337	58	0	15	0	0	1	19	27	2	7	0
23.00 - 23.15	83	11	1	1	0	0	0	9	4	1	1	0
23.15 - 23.30	51	13	0	5	0	0	0	6	3	0	2	0
23.30 - 23.45	41	11	0	3	0	0	0	4	7	0	1	1
23.45 - 00.00	75	8	0	7	0	0	0	6	7	0	0	0
∑	250	43	1	16	0	0	0	25	21	1	4	1

Perhitungan Nilai PCI Masing-Masing Segmen

1. STA 21+900 – 22+000

a. Menghitung kerapatan (density)

Retak blok $= \frac{Ad}{As}\ x\ 100$

$= \frac{51{,}00}{700}\ x\ 100$

= 7,29 %

Pelepasn butir $= \frac{Ad}{As}\ x\ 100$

$= \frac{52{,}70}{700}\ x\ 100$

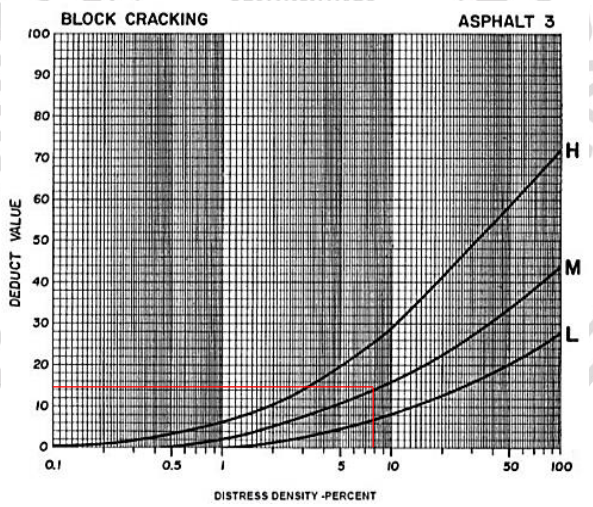
= 7,53 %

Tambalan $= \frac{Ad}{As}\ x\ 100$

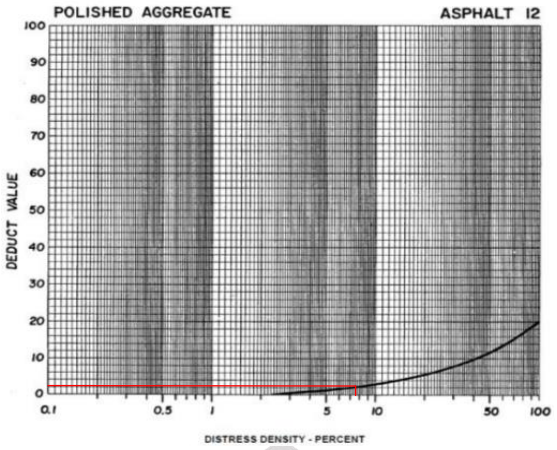
$= \frac{229{,}20}{700}\ x\ 100$

= 32,74 %

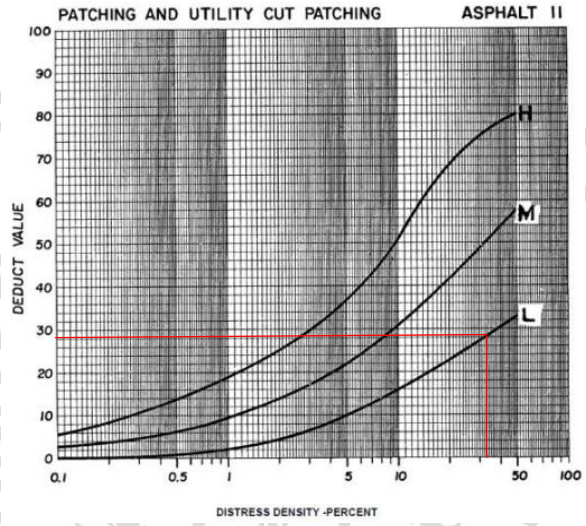
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 13



Deduct value = 2



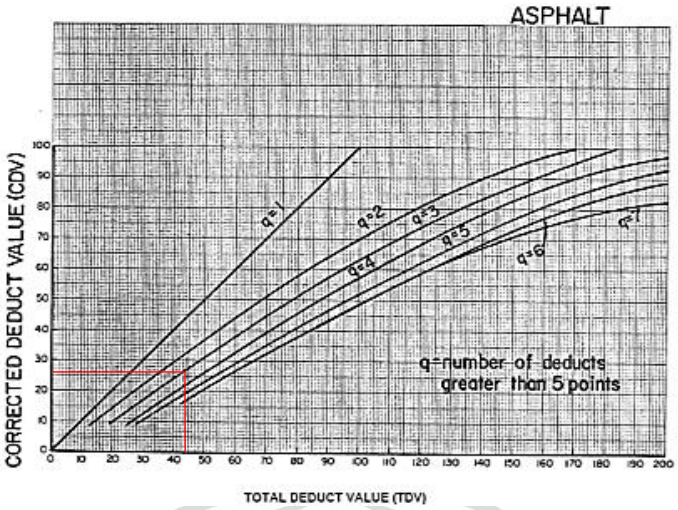
Deduct value = 29

c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$
$$= 7{,}52$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
29	13	2	44	3	26



e. Nilai PCI

PCI = 100 – CDVmaks
= 100 – 26
= 74 (*very good*)

2. STA 22+000 – 22+100

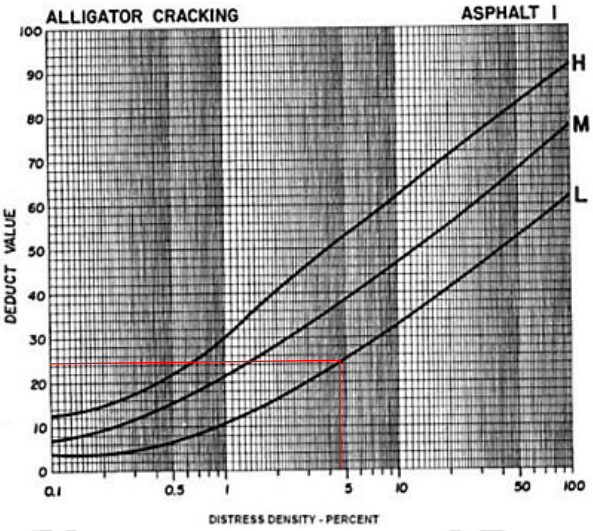
a. Menghitung kerapatan (*Density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$
$= \frac{32{,}40}{700} \; x \; 100$
= 4,63 %

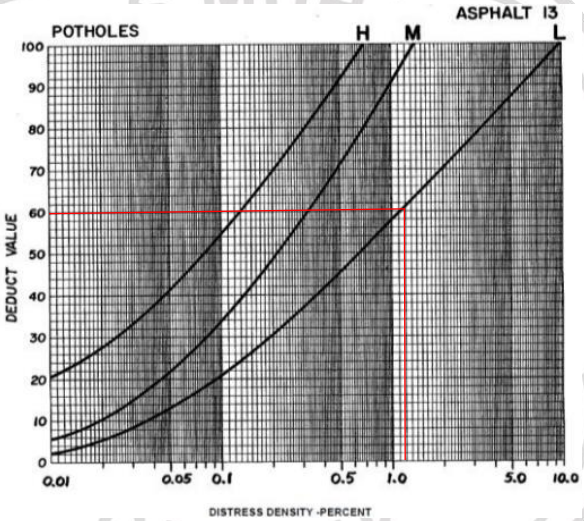
Lubang $= \frac{Ad}{As} \; x \; 100$
$= \frac{8{,}41}{700} \; x \; 100$
= 1,20 %

Tambalan $= \frac{Ad}{As} \; x \; 100$
$= \frac{296{,}10}{700} \; x \; 100$
= 42,30 %

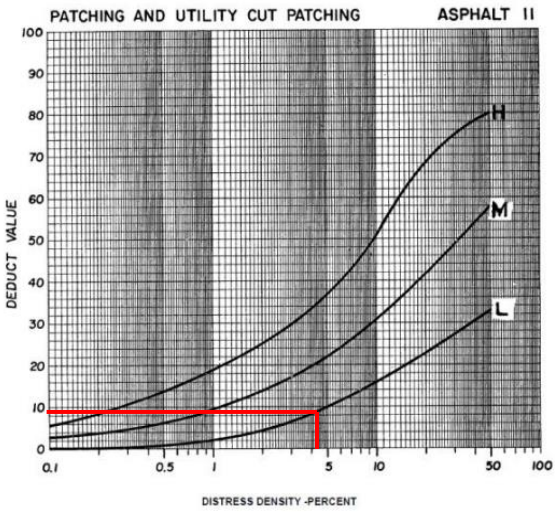
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 25



Deduct value = 60



Deduct value = 9

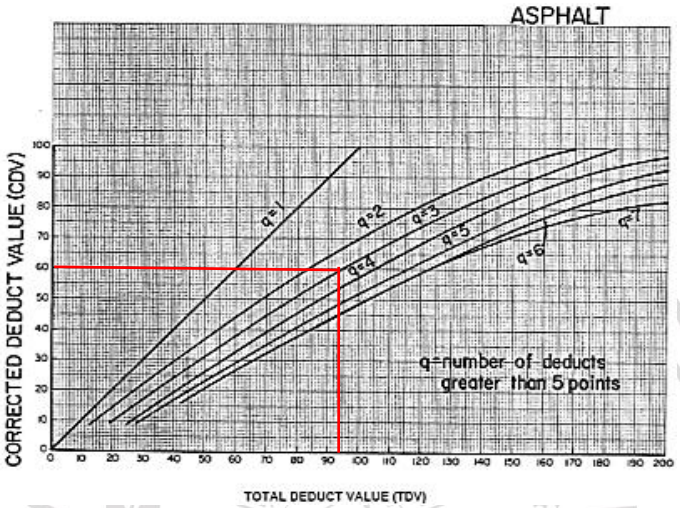
c. Nilai ijin maksimum (m)

m = $1 + \frac{9}{98}$ x $(100 - HDV_i)$

= 4,67

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
60	25	9	94	3	60



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 60

= 40 (*poor*)

3. STA 22+100 – 22+200

a. Menghitung kerapatan (*Density*)

Kegemukan = $\frac{Ad}{As}\ x\ 100$

= $\frac{23{,}80}{700}\ x\ 100$

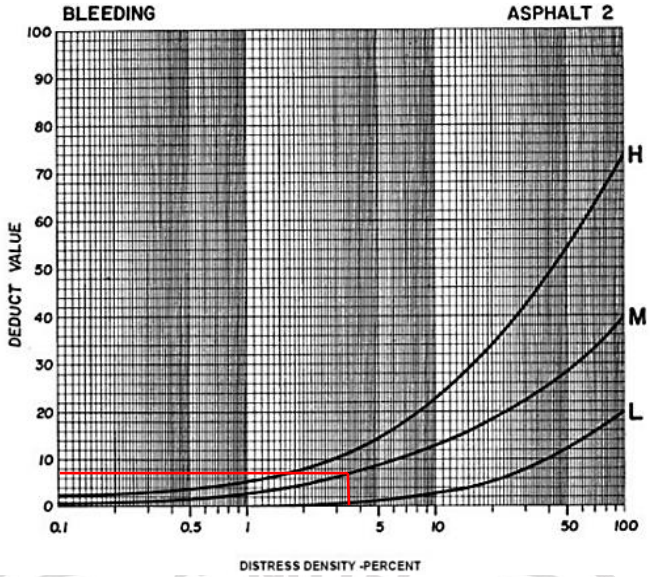
= 3,40 %

Tambalan = $\frac{Ad}{As}\ x\ 100$

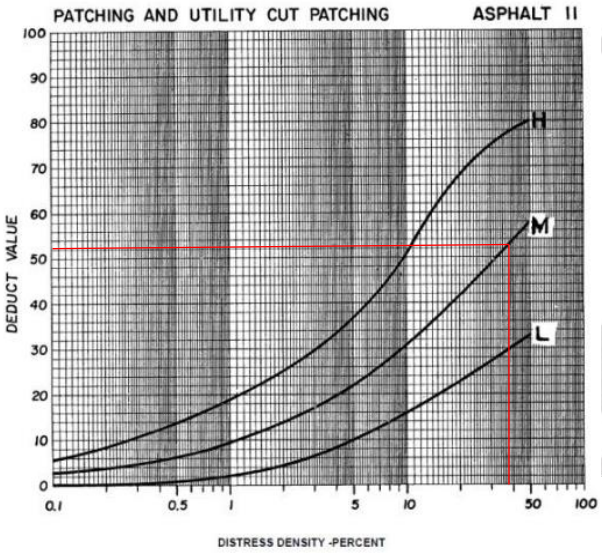
= $\frac{270{,}00}{700}\ x\ 100$

= 38,57 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 7



Deduct value =52

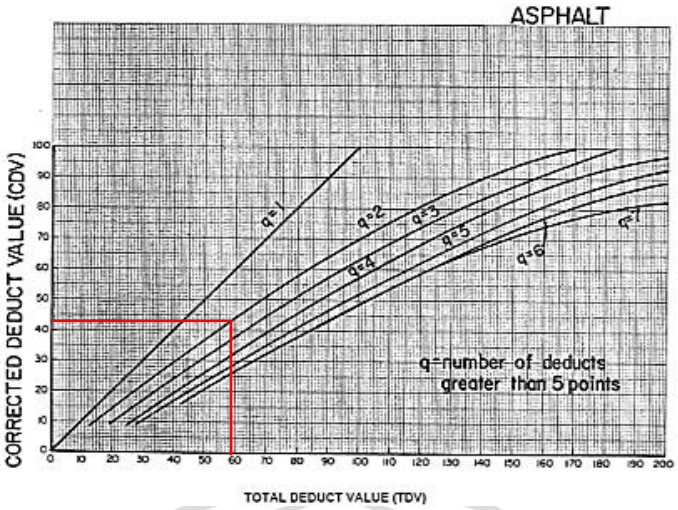
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 5{,}41$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value		TDV	q	CDV
52	7	59	2	43



e. Nilai PCI

PCI = 100 – CDVmaks
= 100 – 43
= 57 (*fair*)

4. STA 22+200 – 22+300

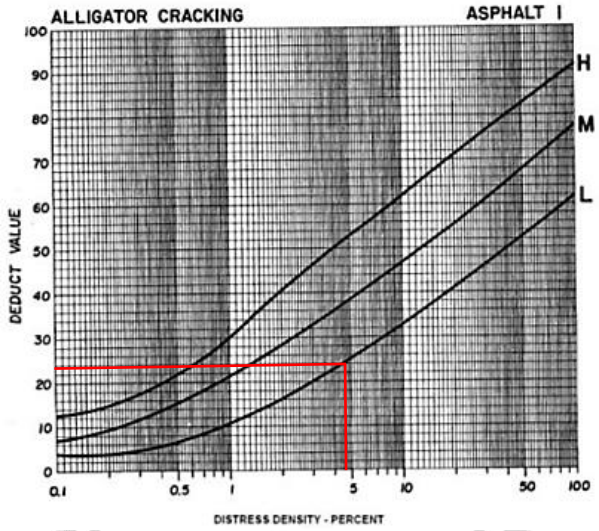
a. Menghitung kerapatan (*Density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$
$= \frac{34{,}40}{700} \; x \; 100$
= 4,91 %

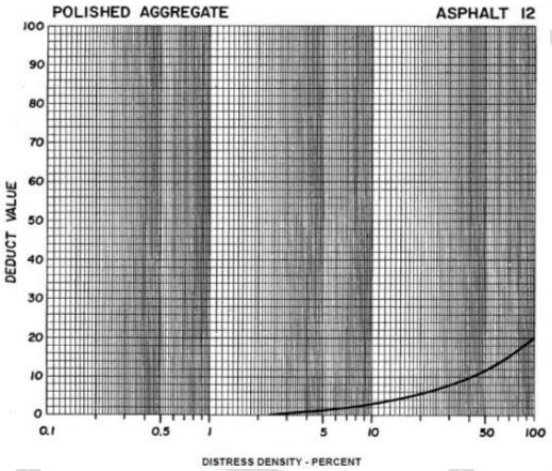
Pelepasan butir $= \frac{Ad}{As} \; x \; 100$
$= \frac{14{,}40}{700} \; x \; 100$
= 2,06 %

Tambalan $= \frac{Ad}{As} \; x \; 100$
$= \frac{236{,}70}{700} \; x \; 100$
= 33,81 %

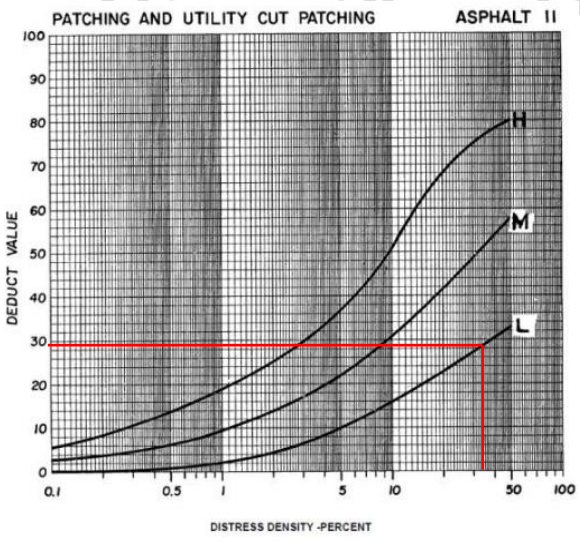
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 24



Deduct value = 0



Deduct value = 29

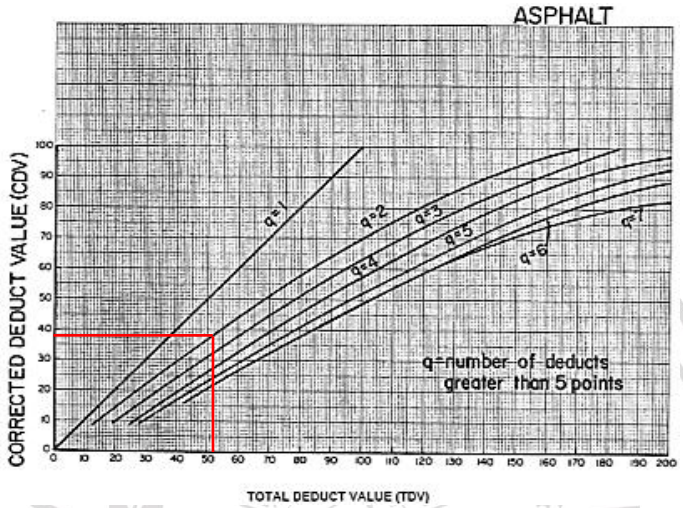
c. Nilai ijin maksimum (m)

m $= 1 + \frac{9}{98}$ x $(100 - HDV_i)$

$= 7{,}52$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
29	24	0	53	2	38



e. Nilai PCI

PCI $= 100 - CDV_{maks}$

$= 100 - 38$

$= 62$ (*good*)

5. STA 22+300 – 22+400

a. Menghitung kerapatan (*Density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{24{,}00}{700} \; x \; 100$

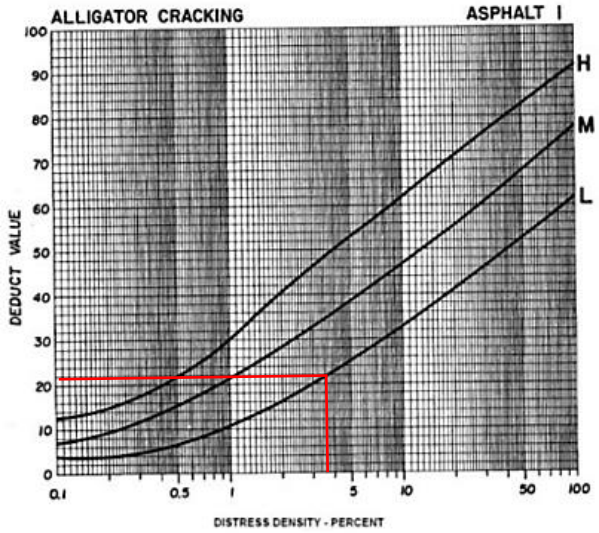
$= 3{,}43$ %

Tambalan $= \frac{Ad}{As} \; x \; 100$

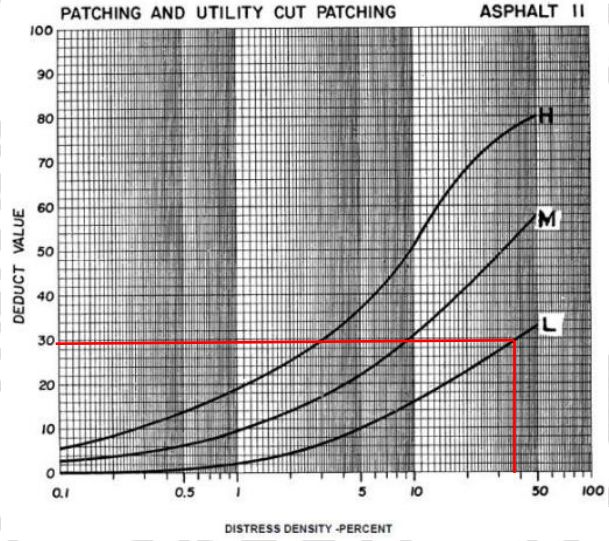
$= \frac{267{,}00}{700} \; x \; 100$

$= 38{,}14$ %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 22



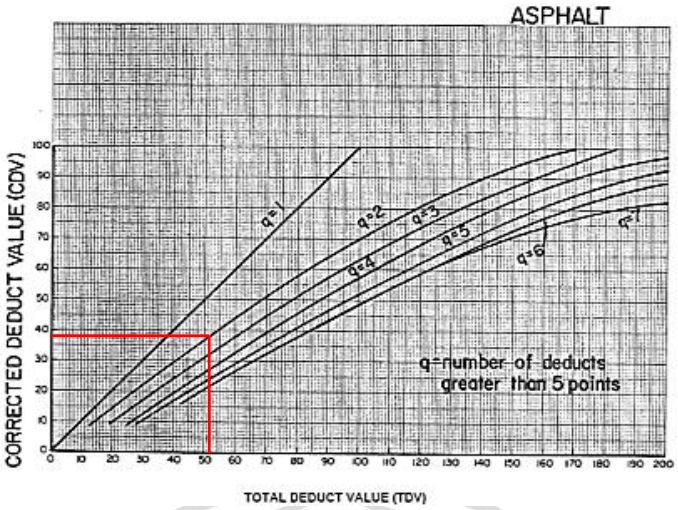
Deduct value = 29

c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$
$$= 7{,}52$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value		TDV	q	CDV
29	22	51	2	38



e. Nilai PCI

PCI = 100 – CDVmaks
= 100 – 38
= 62 (*good*)

6. STA 22+400 – 22+500

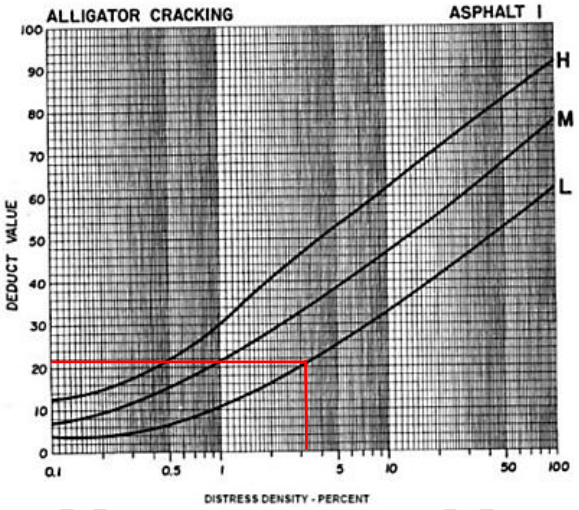
a. Menghitung kerapatan (*Density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$
$= \frac{23{,}80}{700} \; x \; 100$
= 3,40 %

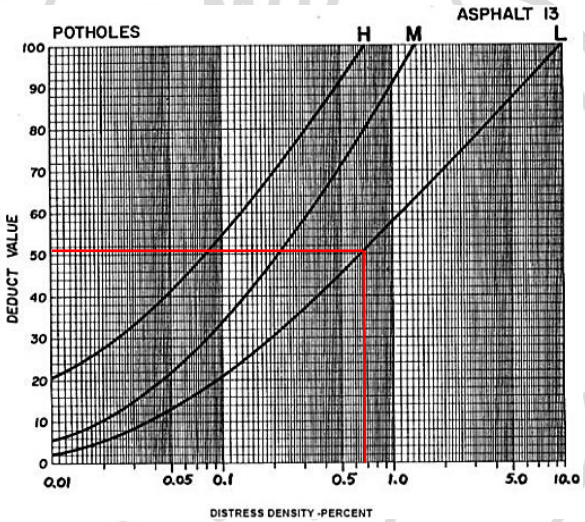
Lubang $= \frac{Ad}{As} \; x \; 100$
$= \frac{4{,}57}{700} \; x \; 100$
= 0,65 %

Tambalan $= \frac{Ad}{As} \; x \; 100$
$= \frac{208{,}50}{700} \; x \; 100$
= 29,79 %

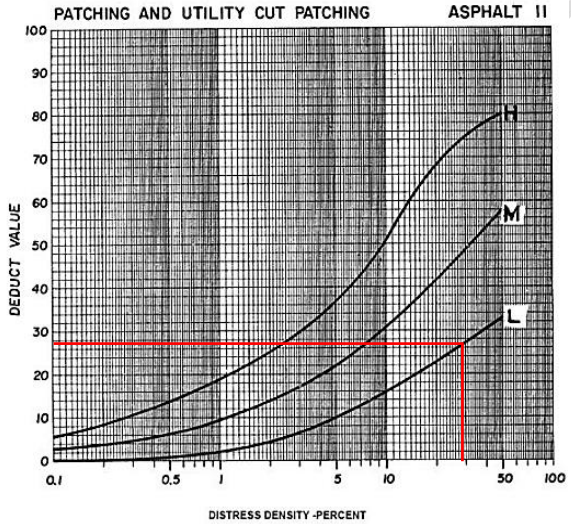
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 21



Deduct value = 51



Deduct value = 27

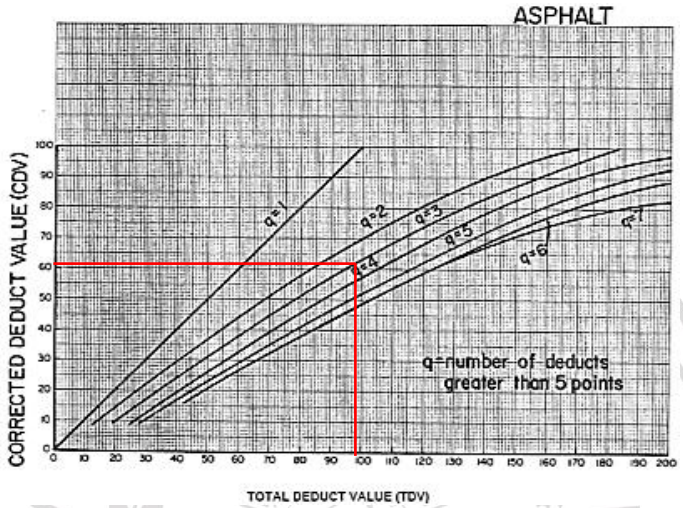
c. Nilai ijin maksimum (m)

m = $1 + \frac{9}{98}$ x ($100 - HDV_i$)

= 5,5

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
51	27	21	99	3	61



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 61

= 39 (*poor*)

7. STA 22+500 – 22+600

a. Menghitung kerapatan (*Density*)

Retak memanjang= $\frac{Ad}{As} \; x \; 100$

= $\frac{26,40}{700} \; x \; 100$

= 3,77 %

Pelepasan butir = $\frac{Ad}{As} \; x \; 100$

= $\frac{3,36}{700} \; x \; 100$

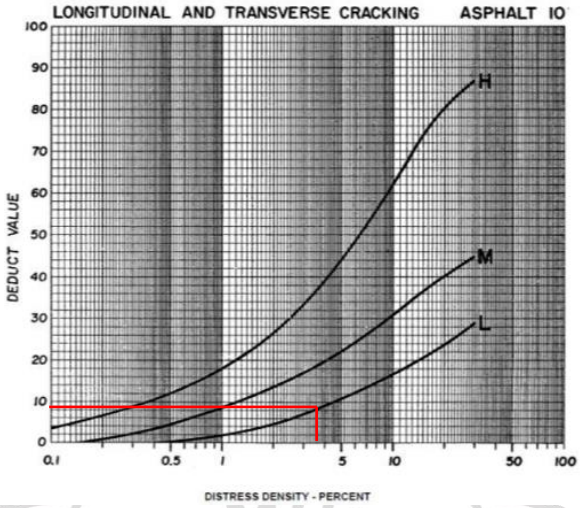
= 0,48 %

Tambalan = $\frac{Ad}{As} \; x \; 100$

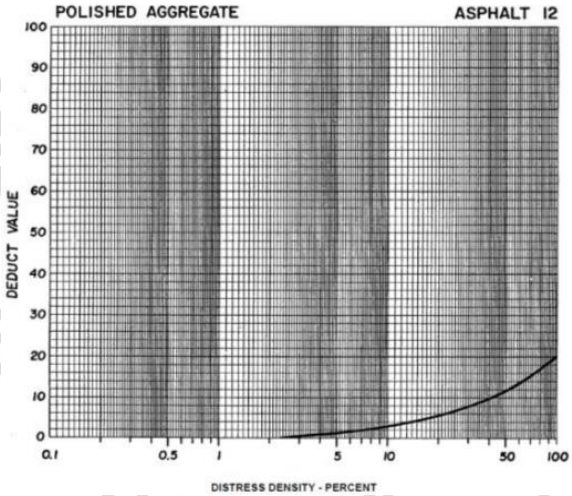
= $\frac{240,00}{700} \; x \; 100$

= 34,29 %

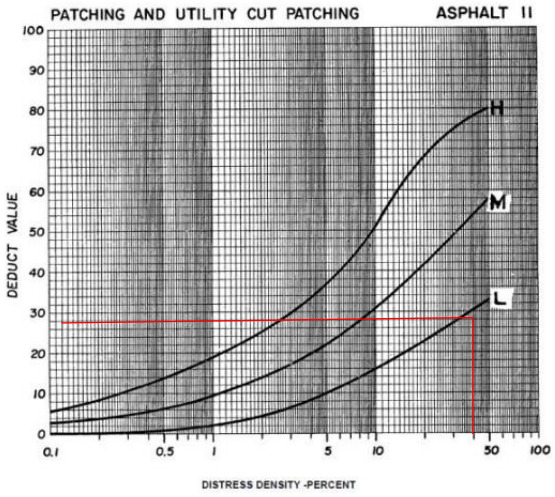
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 8



Deduct value = 0



Deduct value = 28

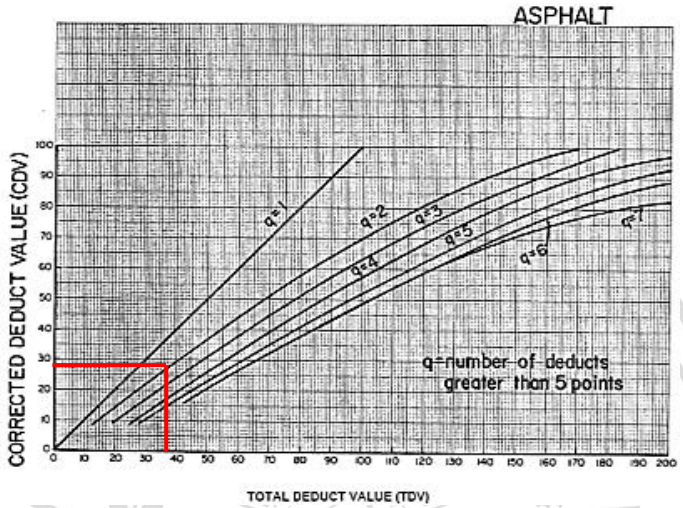
c. Nilai ijin maksimum (m)

m $= 1 + \frac{9}{98}$ x $(100 - HDV_i)$

$= 7{,}61$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
28	8	0	36	2	28



e. Nilai PCI

PCI $= 100 - CDV_{maks}$

$= 100 - 28$

$= 72$ (*very good*)

8. Segmen STA 22+600 – 22+700

a. Menghitung kerapatan (*Density*)

Retak blok $= \frac{Ad}{As} \; x \; 100$

$= \frac{22{,}60}{700} \; x \; 100$

$= 3{,}23$ %

Pelepasan butir $= \frac{Ad}{As} \; x \; 100$

$= \frac{17{,}96}{700} \; x \; 100$

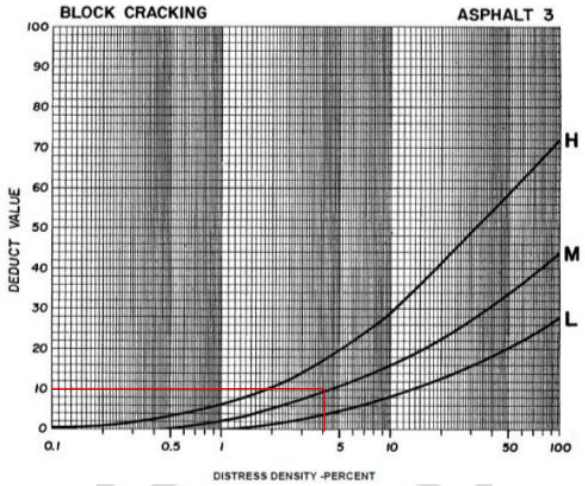
$= 2{,}57$ %

Tambalan $= \frac{Ad}{As} \; x \; 100$

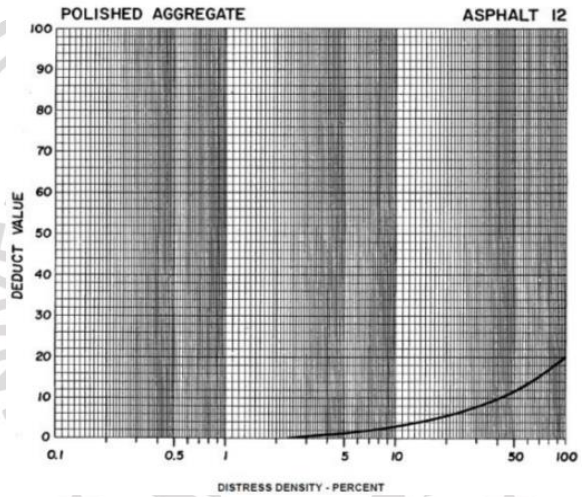
$= \frac{215{,}00}{700} \; x \; 100$

$= 30{,}71$ %

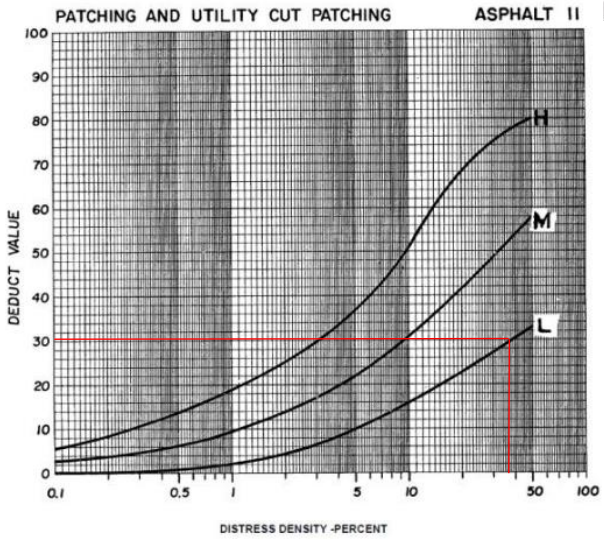
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 10



Deduct value = 0



Deduct value = 30

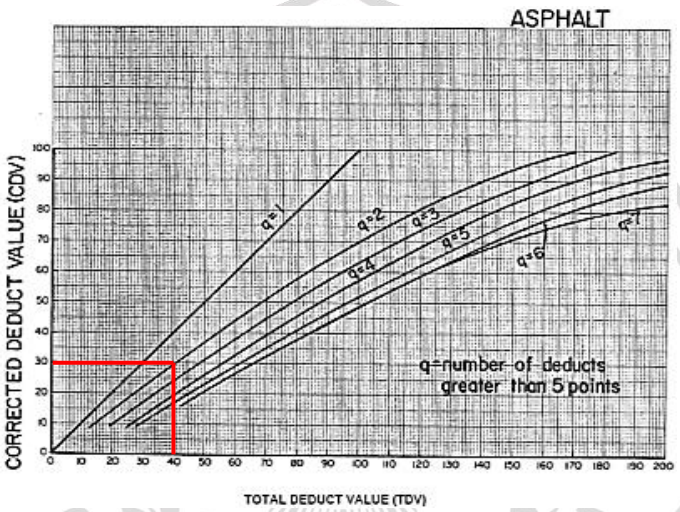
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 7{,}43$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
30	10	0	40	2	30



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 30

= 70 (*good*)

9. Segmen STA 22+700 – 22+800

a. Menghitung kerapatan (*Density*)

Retak memanjang $= \frac{Ad}{As} \; x \; 100$

$= \frac{7{,}30}{700} \; x \; 100$

= 1,04 %

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{4{,}80}{700} \; x \; 100$

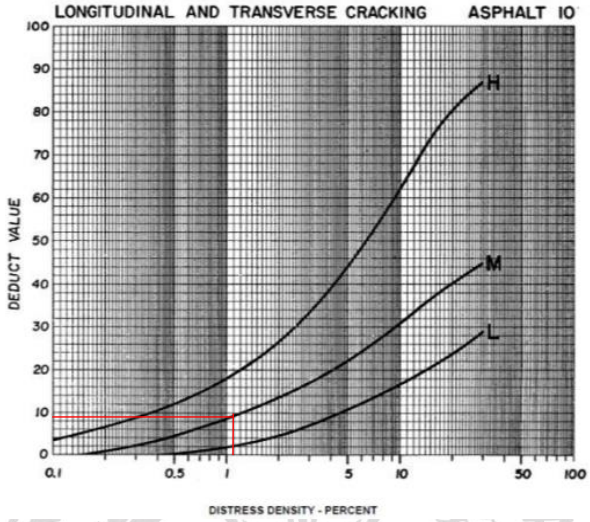
= 0,69 %

Pelepasan butir $= \frac{Ad}{As} \; x \; 100$

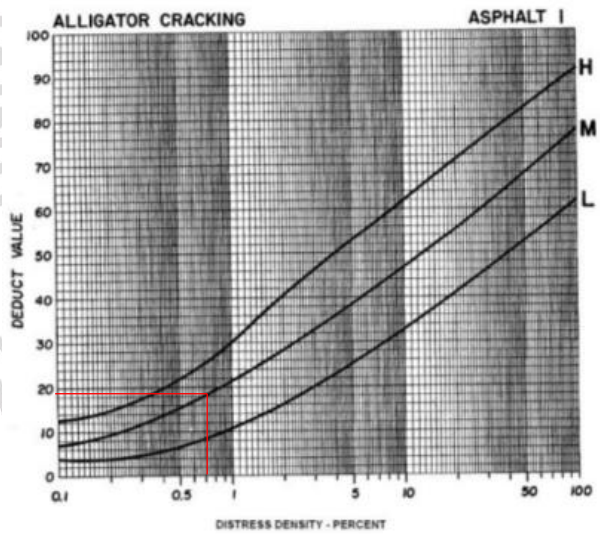
$= \frac{30{,}38}{700} \; x \; 100$

$= 4{,}34\ \%$

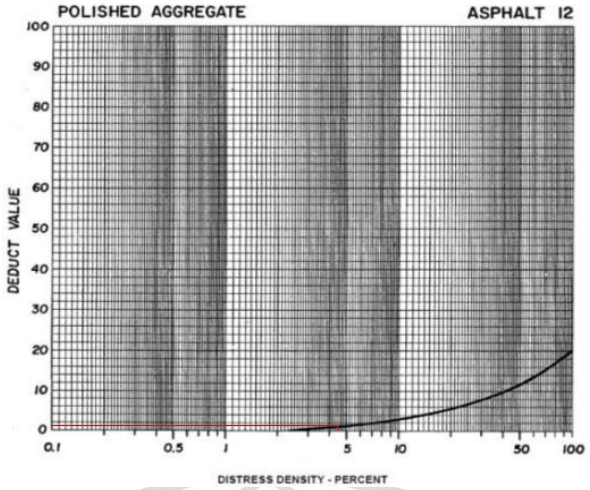
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 9



Deduct value = 19



Deduct value = 1

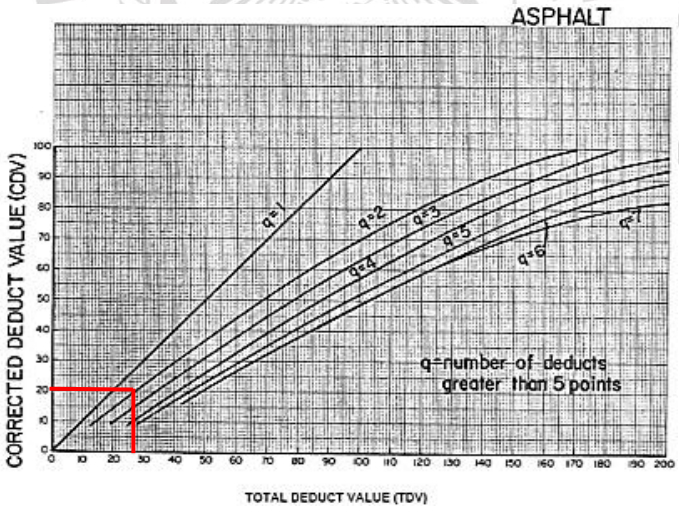
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 8{,}44$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
18	9	1	28	2	20



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 20

= 80 (*very good*)

10. Segmen STA 22+800 – 22+900

a. Menghitung kerapatan (*Density*)

Pelepasan butir $= \frac{Ad}{As} \; x \; 100$

$= \frac{30{,}80}{700} \; x \; 100$

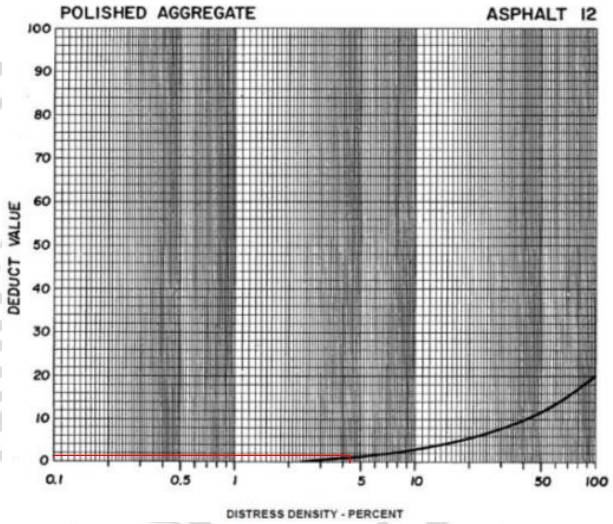
= 4,40 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

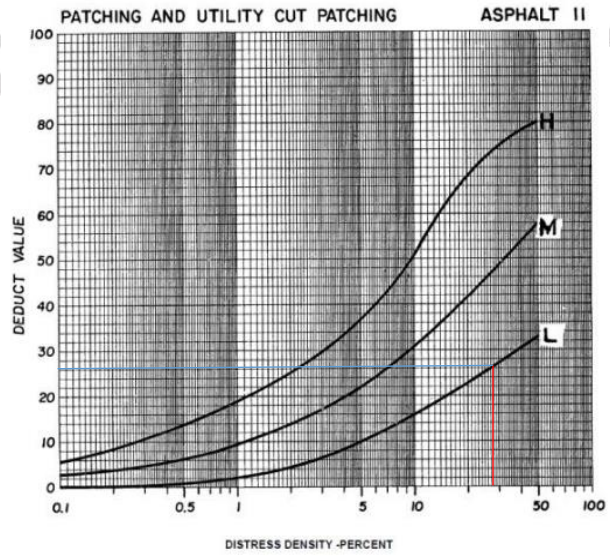
$= \frac{189{,}70}{700} \; x \; 100$

= 27,10 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 1



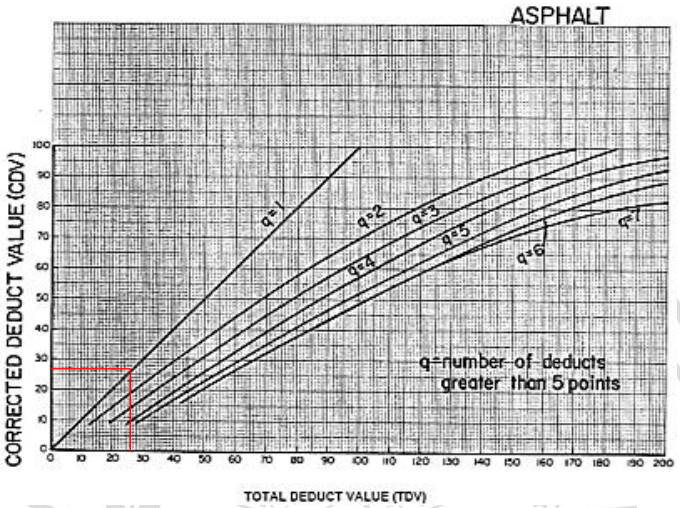
Deduct value = 26

c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$
$$= 7{,}8$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Iterasi	*Deduct value*		TDV	q	CDV
1	26	1	27	1	27



e. Nilai PCI

PCI = 100 – CDVmaks
= 100 – 27
= 73 (*very good*)

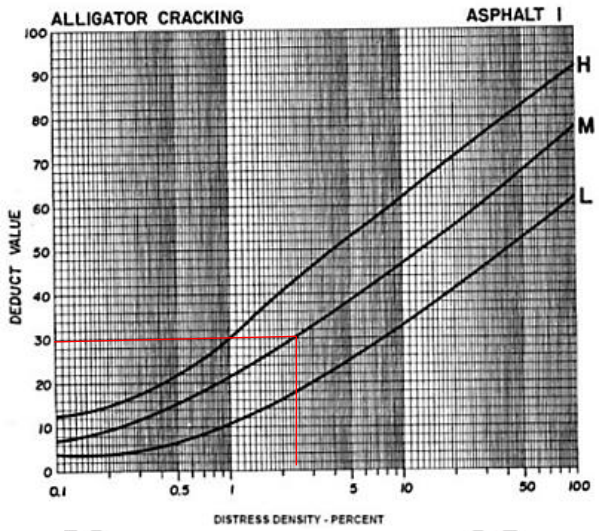
11. Segmen STA 22+900 – 23+000

a. Menghitung kerapatan (*Density*)

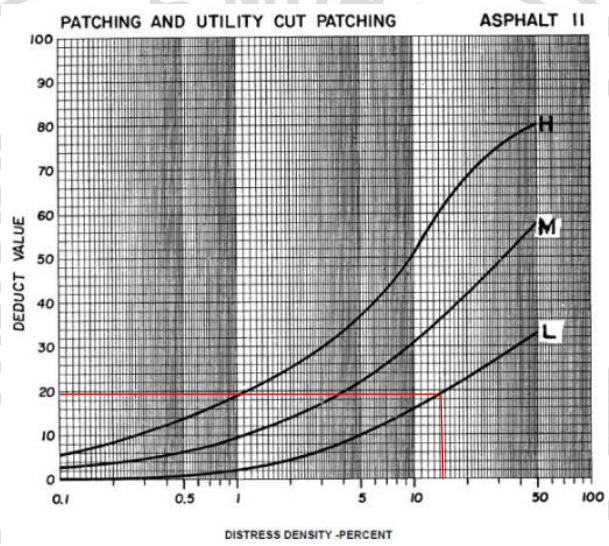
Retak buaya $= \frac{Ad}{As} \; x \; 100$
$= \frac{16{,}00}{700} \; x \; 100$
= 2,29 %

Tambalan $= \frac{Ad}{As} \; x \; 100$
$= \frac{105{,}00}{700} \; x \; 100$
= 15,00 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 30



Deduct value = 19

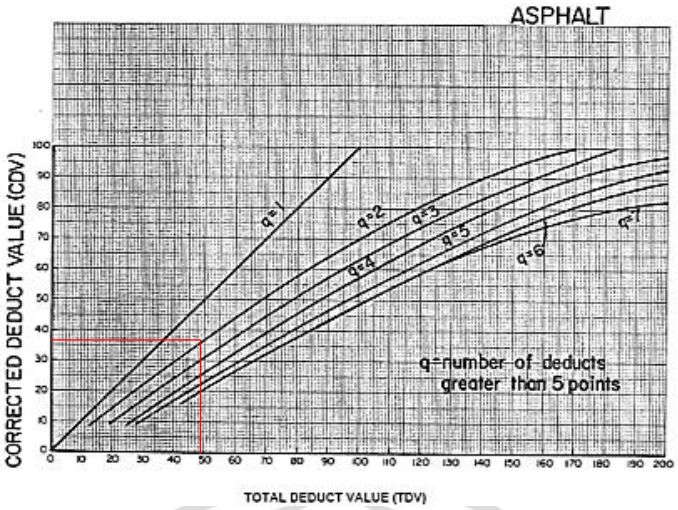
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 7{,}43$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value		TDV	q	CDV
30	19	49	2	36



e. Nilai PCI

PCI = 100 – CDVmaks
= 100 – 36
= 64 (*good*)

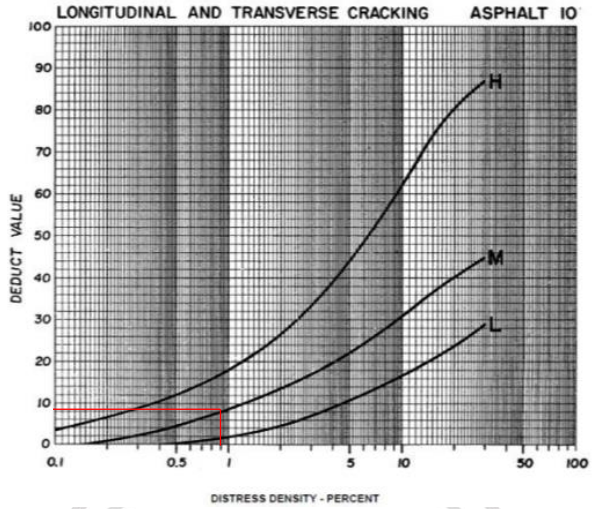
12. Segmen STA 23+000 – 23+100

a. Menghitung kerapatan (*Density*)

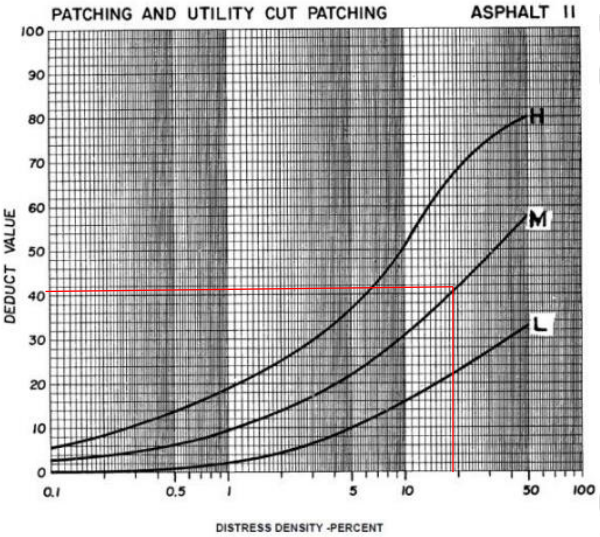
Retak memanjang $= \frac{Ad}{As} \; x \; 100$
$= \frac{6{,}20}{700} \; x \; 100$
= 0,89 %

Tambalan $= \frac{Ad}{As} \; x \; 100$
$= \frac{131{,}40}{700} \; x \; 100$
= 18,77 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 8



Deduct value = 41

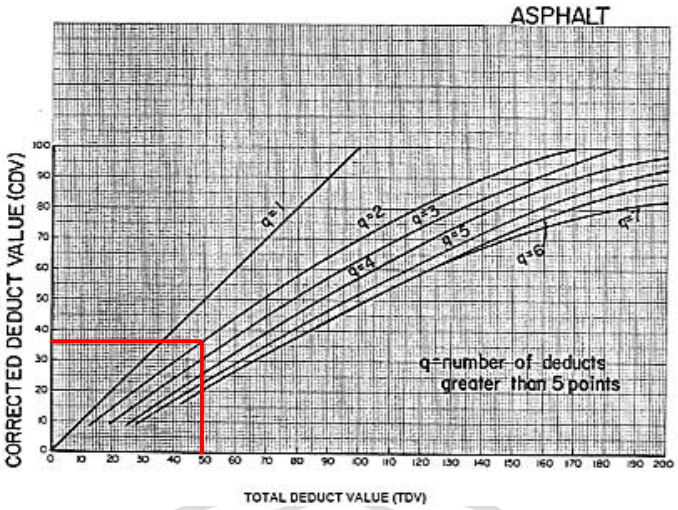
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 6{,}42$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value		TDV	q	CDV
41	8	49	2	36



e. Nilai PCI

PCI = 100 – CDVmaks
= 100 – 35
= 65 (*good*)

13. Segmen STA 23+100 – 23+200

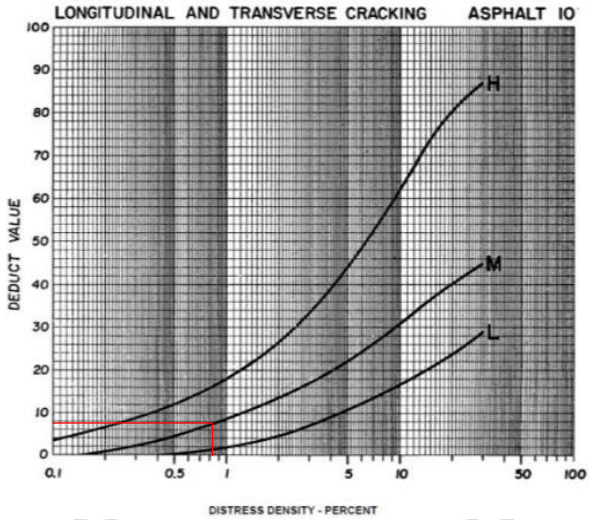
a. Menghitung kerapatan (*Density*)

Retak memanjang $= \frac{Ad}{As} \; x \; 100$
$= \frac{5{,}70}{700} \; x \; 100$
= 0,81 %

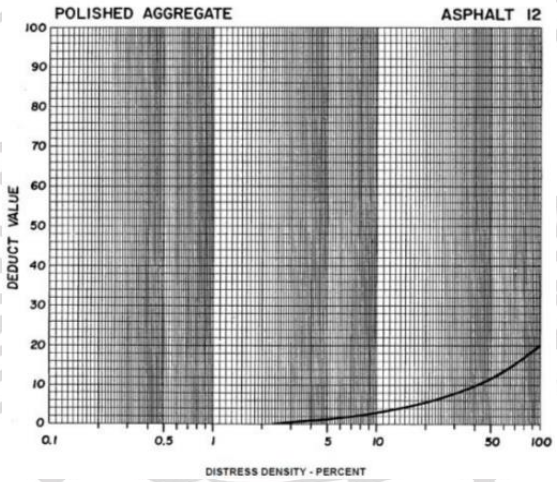
Pelepasan butir $= \frac{Ad}{As} \; x \; 100$
$= \frac{4{,}24}{700} \; x \; 100$
= 0,61 %

Lubang $= \frac{Ad}{As} \; x \; 100$
$= \frac{0{,}72}{700} \; x \; 100$
= 0,10 %

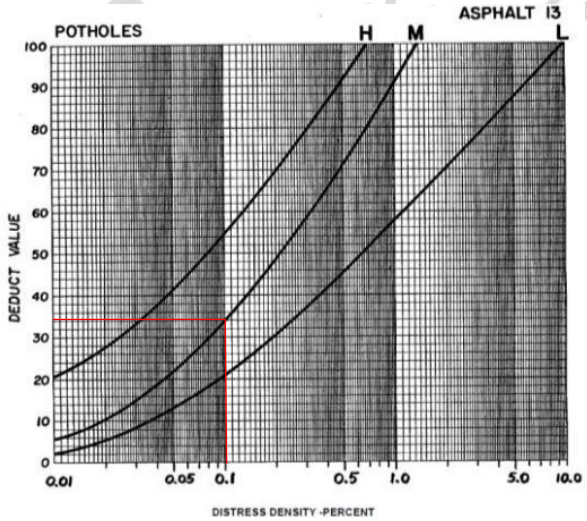
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 7



Deduct value = 0



Deduct value = 34

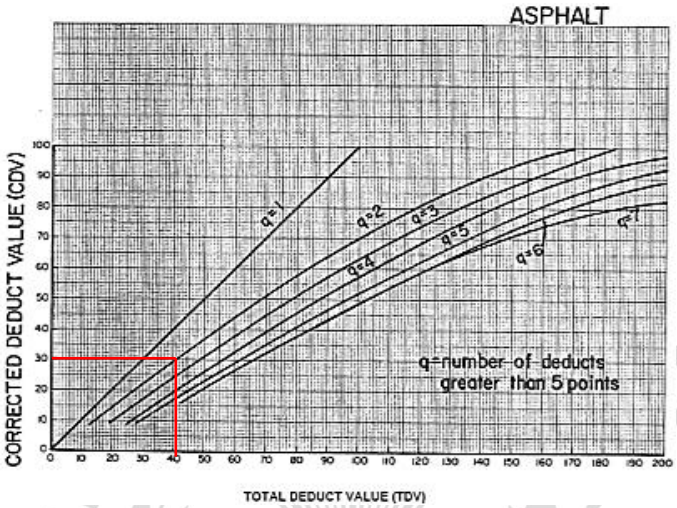
c. Nilai ijin maksimum (m)

m = $1 + \frac{9}{98}$ x (100 – HDV_i)

= 7,06

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
34	7	0	41	2	44



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 30

= 70 (*good*)

14. Segmen STA 23+200 – 23+300

a. Menghitung kerapatan (*Density*)

Retak memanjang = $\frac{Ad}{As}\ x\ 100$

= $\frac{4,00}{700}\ x\ 100$

= 0,57 %

Pelepasan butir = $\frac{Ad}{As}\ x\ 100$

= $\frac{16,87}{700}\ x\ 100$

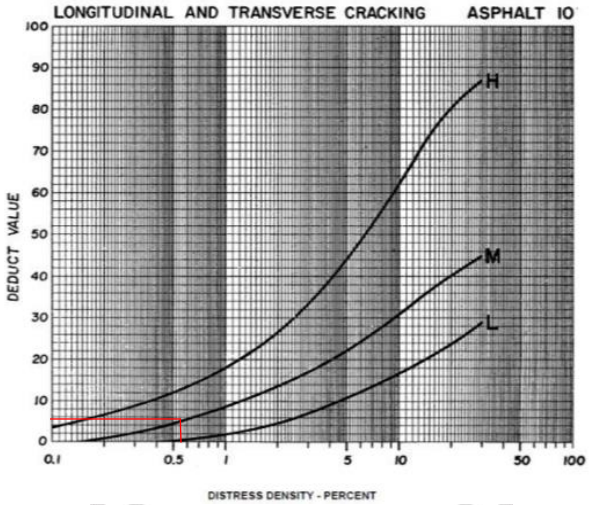
= 2,41 %

Kegemukan = $\frac{Ad}{As}\ x\ 100$

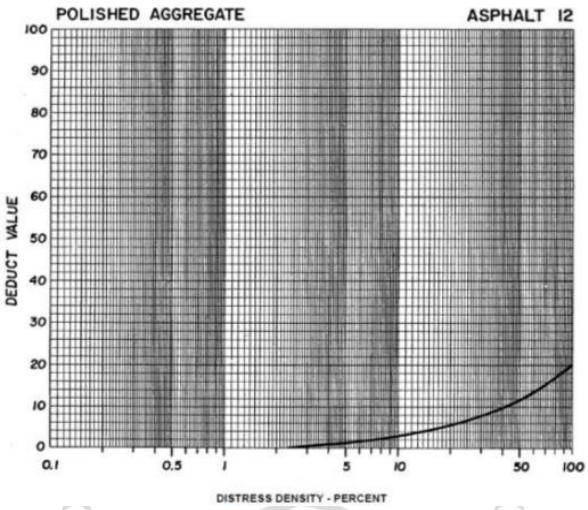
= $\frac{7,20}{700}\ x\ 100$

= 1,03 %

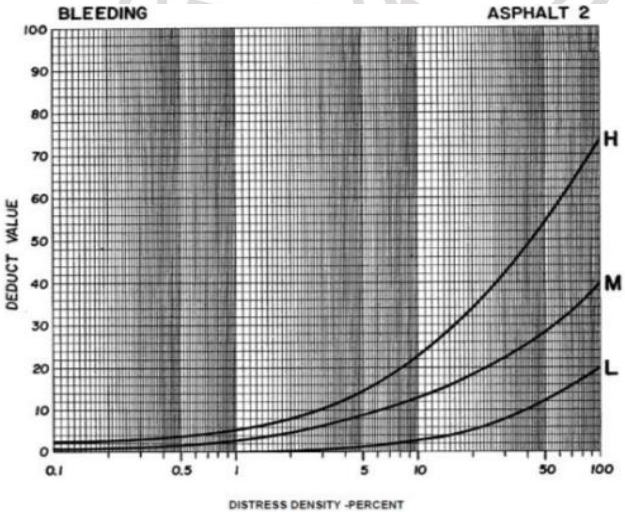
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 5



Deduct value = 0



Deduct value = 0

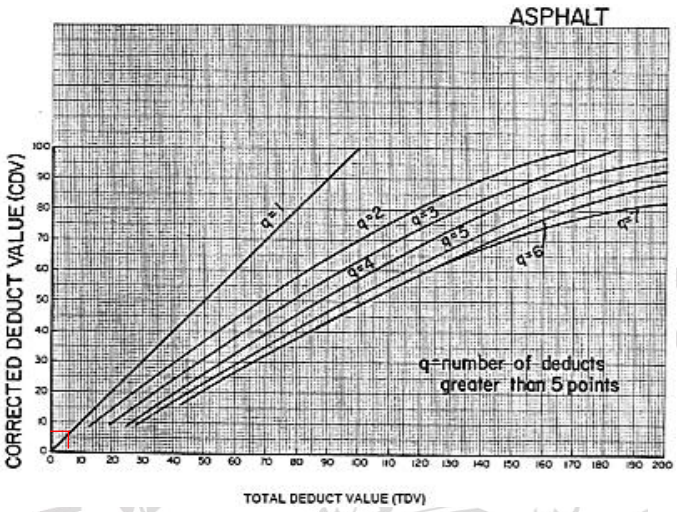
c. Nilai ijin maksimum (m)

$M = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 9{,}72$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
5	0	0	5	1	24



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 5

= 95 (*excellent*)

15. Segmen STA 23+300 – 23+400

a. Menghitung kerapatan (*Density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{8{,}40}{700} \; x \; 100$

= 1,20 %

Kegemukan $= \frac{Ad}{As} \; x \; 100$

$= \frac{1{,}80}{700} \; x \; 100$

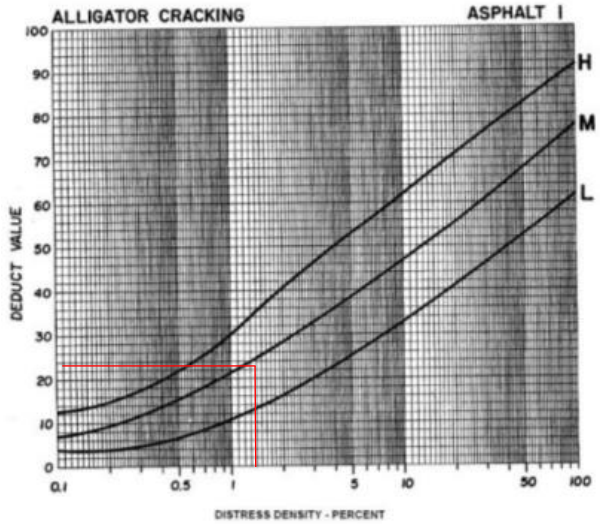
= 0,26 %

Lubang $= \frac{Ad}{As} \; x \; 100$

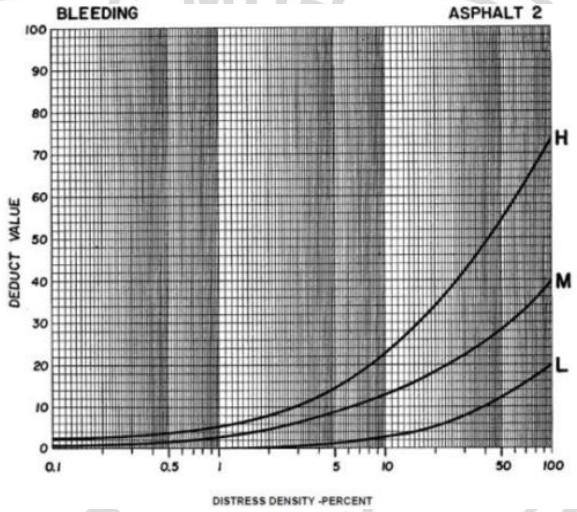
$= \frac{0{,}35}{700} \; x \; 100$

= 0,05 %

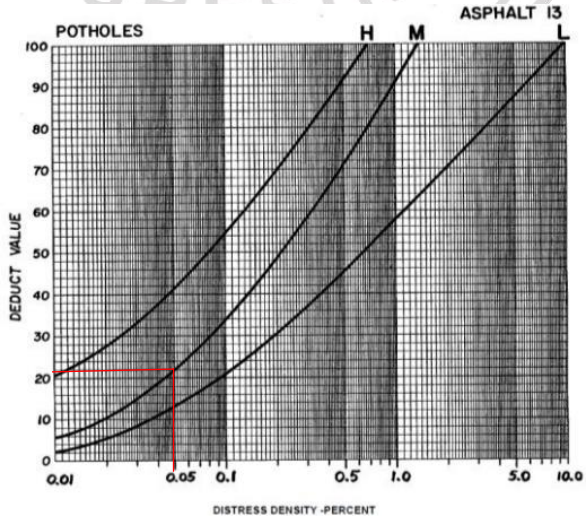
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 23



Deduct value = 0



Deduct value = 22

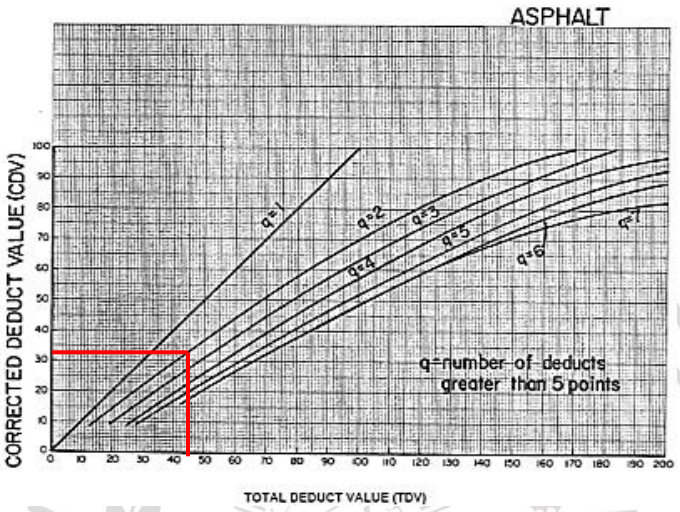
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 8{,}07$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
23	22	0	45	2	33



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 33

= 67 (*good*)

16. Segmen STA 23+500 - 23+600

a. Menghitung kerapatan (*Density*)

Retak memanjang $= \frac{Ad}{As} \; x \; 100$

$= \frac{10{,}20}{700} \; x \; 100$

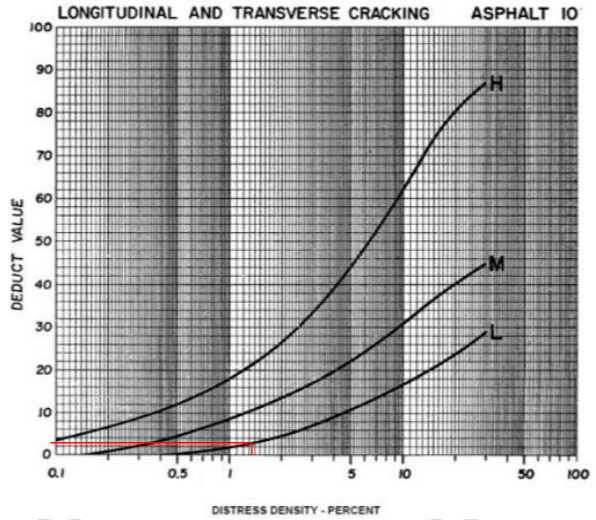
= 1,46 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

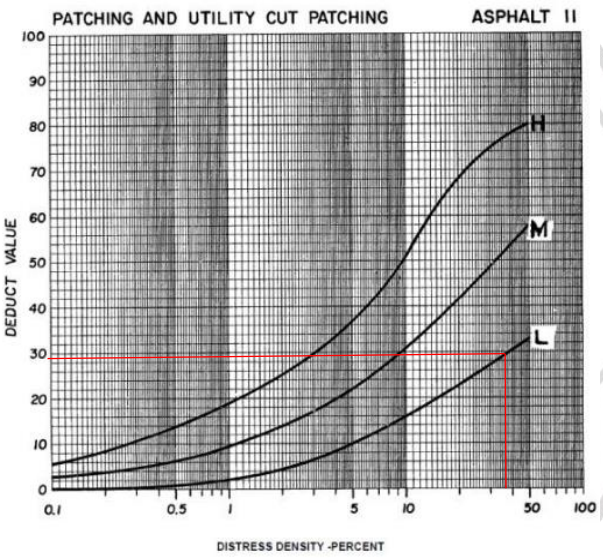
$= \frac{261{,}45}{700} \; x \; 100$

= 37,35 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 3



Deduct value = 29

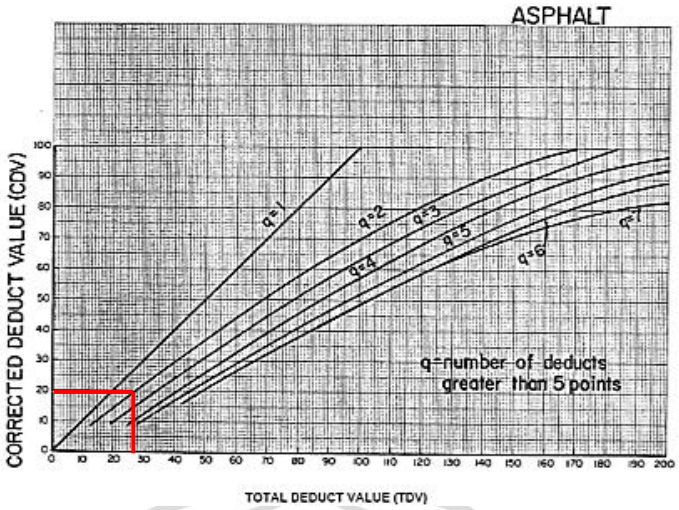
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 7{,}52$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value		TDV	q	CDV
29	3	32	2	23



e. Nilai PCI

PCI = 100 – CDVmaks
= 100 – 19
= 81 (*very good*)

17. Segmen STA 23+600 -23+700

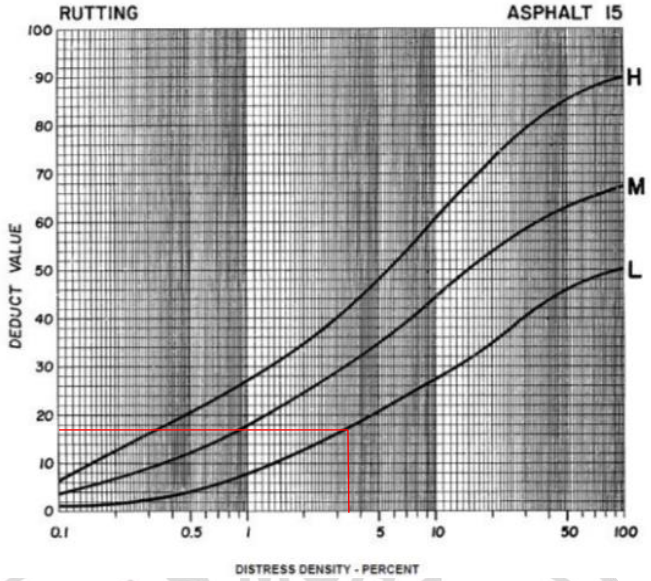
a. Menghitung kerapatan (*Density*)

Alur $= \frac{Ad}{As} \; x \; 100$
$= \frac{23{,}76}{700} \; x \; 100$
= 3,39 %

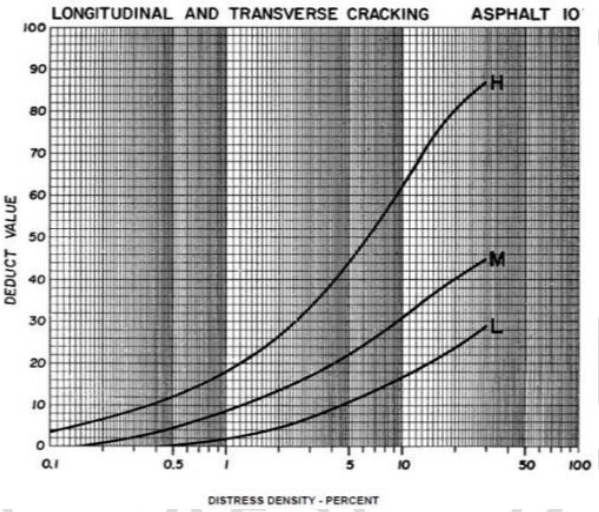
Retak memanjang= $\frac{Ad}{As} \; x \; 100$
$= \frac{3{,}5}{700} \; x \; 100$
= 0,5 %

Tambalan $= \frac{Ad}{As} \; x \; 100$
$= \frac{350}{700} \; x \; 100$
= 50,00 %

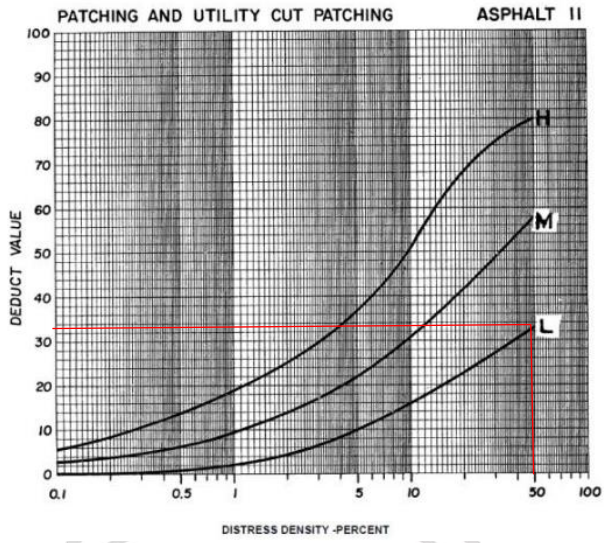
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 17



Deduct value = 0



Deduct value = 33

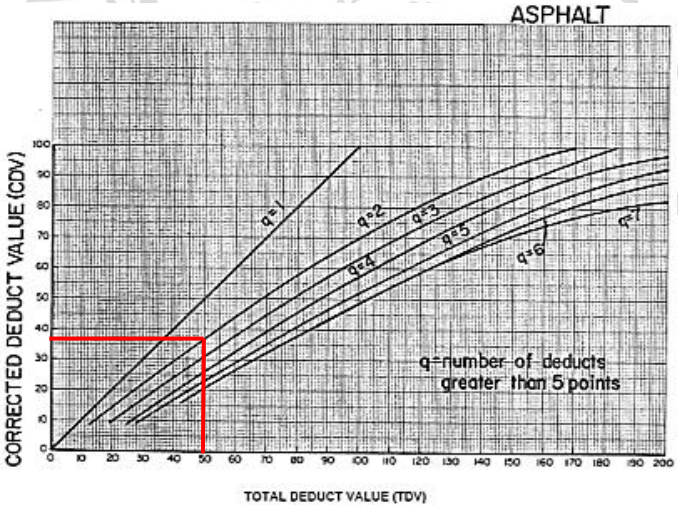
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 7{,}15$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
33	17	0	50	2	37



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 37

= 63 (*good*)

18. Segmen STA 23+700 – 23+800

a. Menghitung kerapatan (*Density*)

Alur $= \frac{Ad}{As} \; x \; 100$

$= \frac{25{,}94}{700} \; x \; 100$

= 3,71 %

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{20{,}40}{700} \; x \; 100$

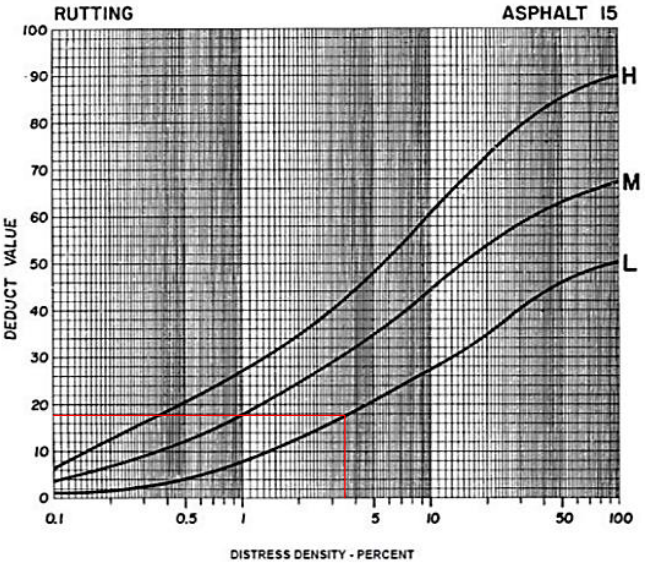
= 2,91 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

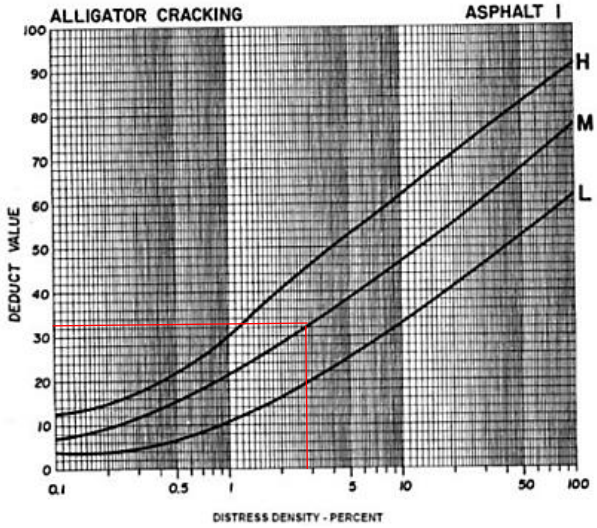
$= \frac{350}{700} \; x \; 100$

= 50,00 %

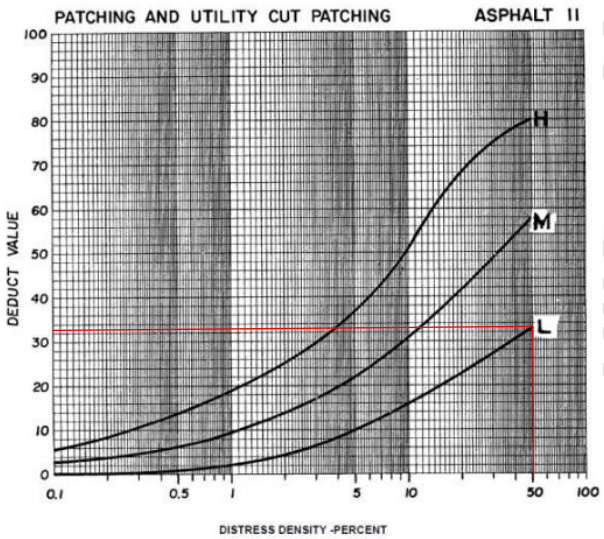
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 18



Deduct value = 33



Deduct value = 33

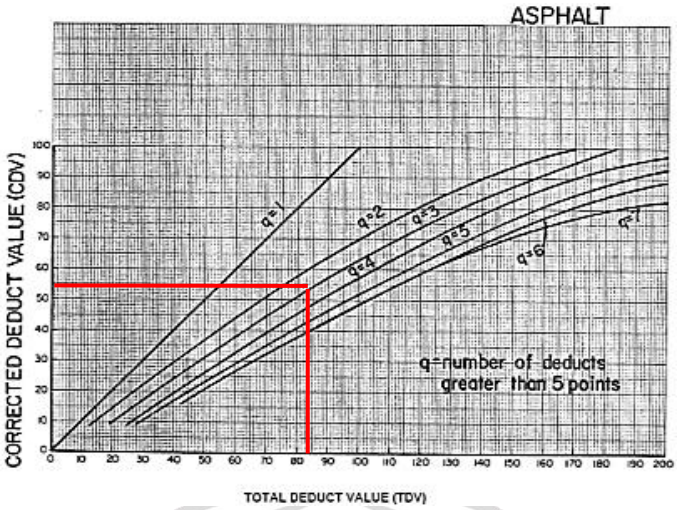
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 7{,}15$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
33	33	18	84	3	50



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 54

= 46 (*fair*)

19. Segmen STA 23+800 – 23+900

a. Menghitung kerapatan (*Density*)

Retak memanjang= $\frac{Ad}{As}\ x\ 100$

$= \frac{5{,}80}{700}\ x\ 100$

= 0,83 %

Retak buaya $= \frac{Ad}{As}\ x\ 100$

$= \frac{5{,}60}{700}\ x\ 100$

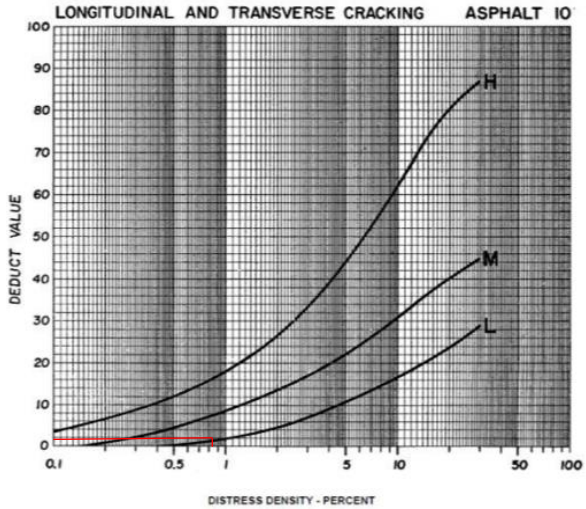
= 0,80 %

Tambalan $= \frac{Ad}{As}\ x\ 100$

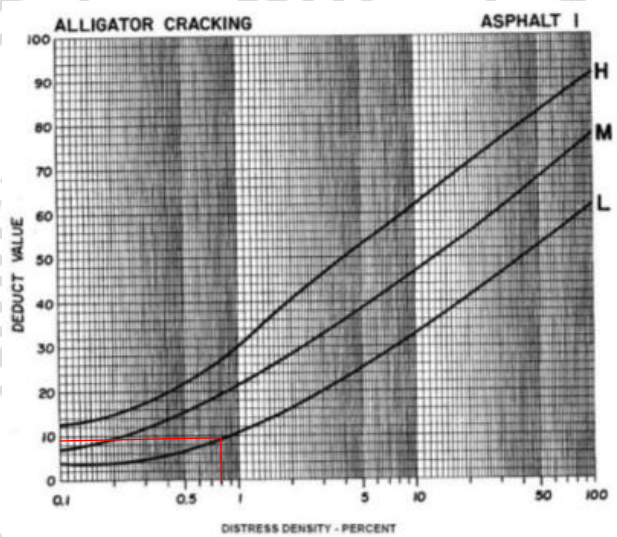
$= \frac{84}{700}\ x\ 100$

= 12,00 %

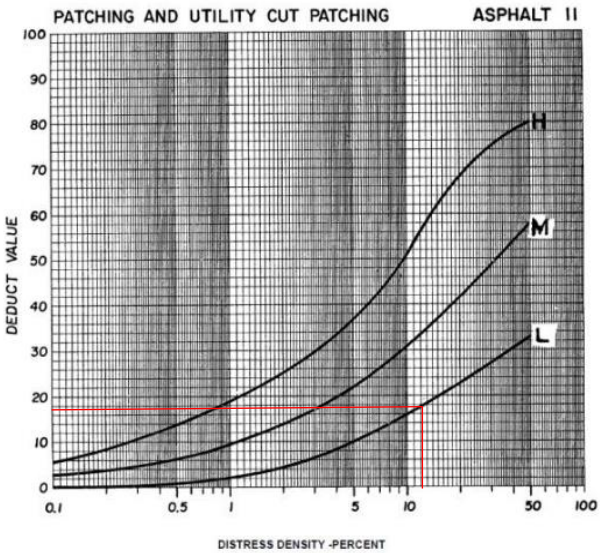
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 1



Deduct value = 9



Deduct value = 17

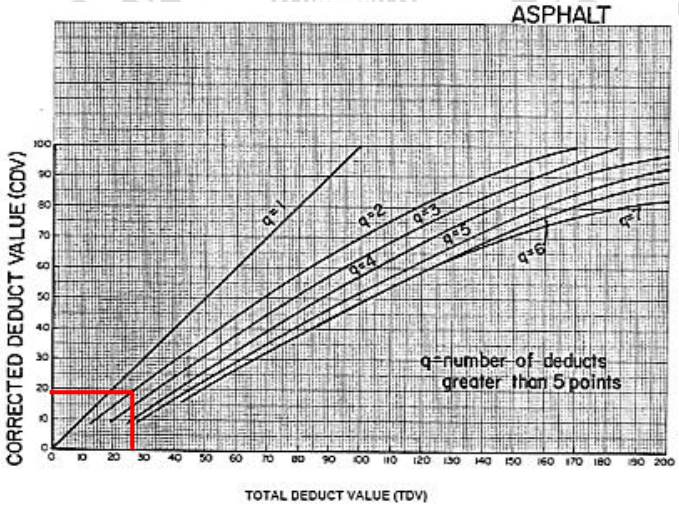
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 8{,}62$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
17	9	1	27	2	18



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 18

= 82 (*very good*)

20. Segmen STA 23+900 – 24+000

a. Menghitung kerapatan (*Density*)

Retak blok $= \frac{Ad}{As} \; x \; 100$

$= \frac{37,6}{700} \; x \; 100$

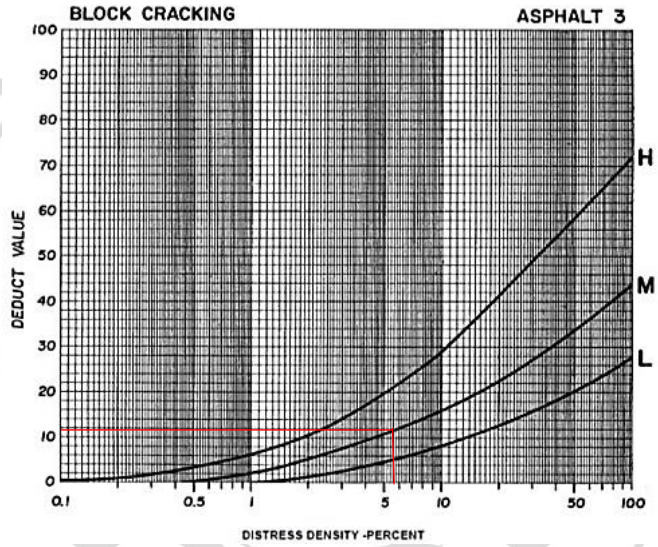
= 5,37 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

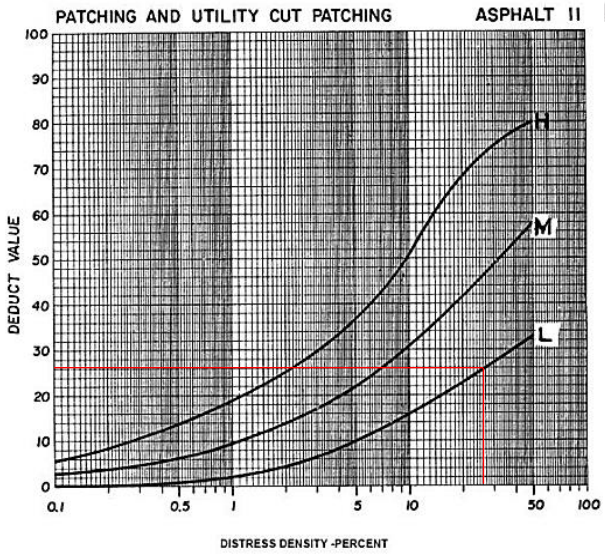
$= \frac{185,00}{700} \; x \; 100$

= 26,43 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 12



Deduct value = 26

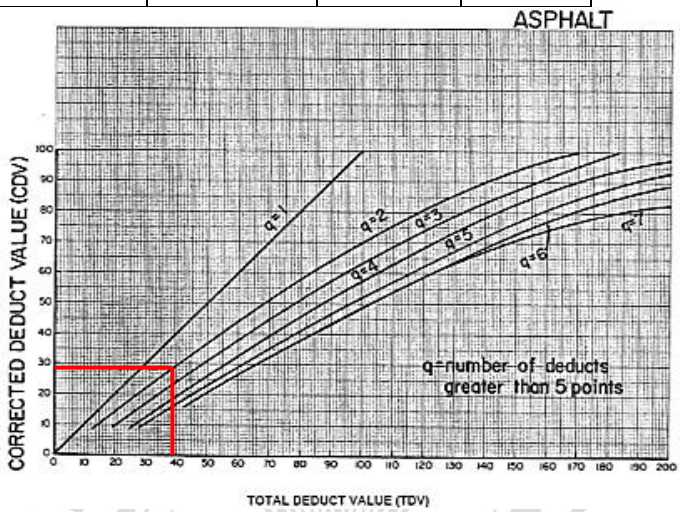
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 7{,}80$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value		TDV	q	CDV
26	12	34	2	29



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 29

= 71 (*very good*)

21. Segmen STA 24+000 – 24+100

a. Menghitung kerapatan (*Density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{20}{700} \; x \; 100$

= 2,86 %

Pelepasan butir $= \frac{Ad}{As} \; x \; 100$

$= \frac{14}{700} \; x \; 100$

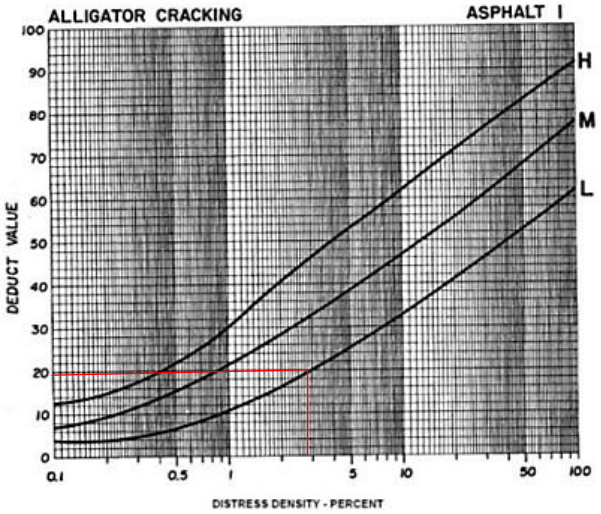
= 2,00 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

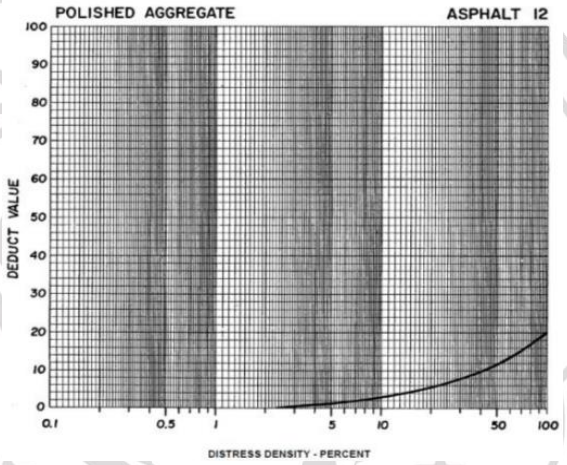
$= \frac{197{,}50}{700} \; x \; 100$

= 28,21 %

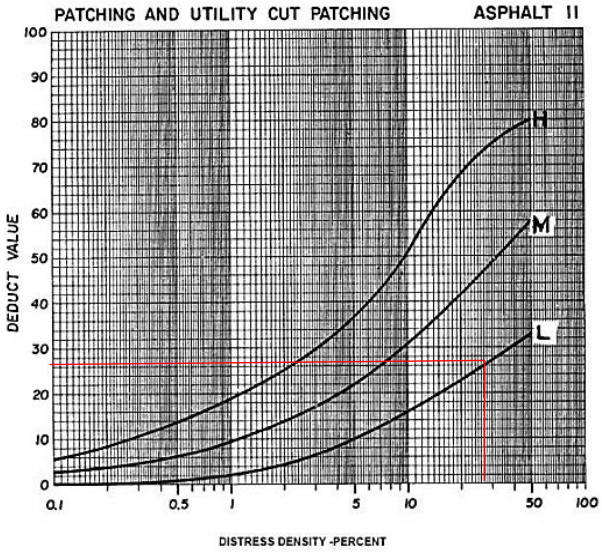
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 20



Deduct value = 0



Deduct Value = 26

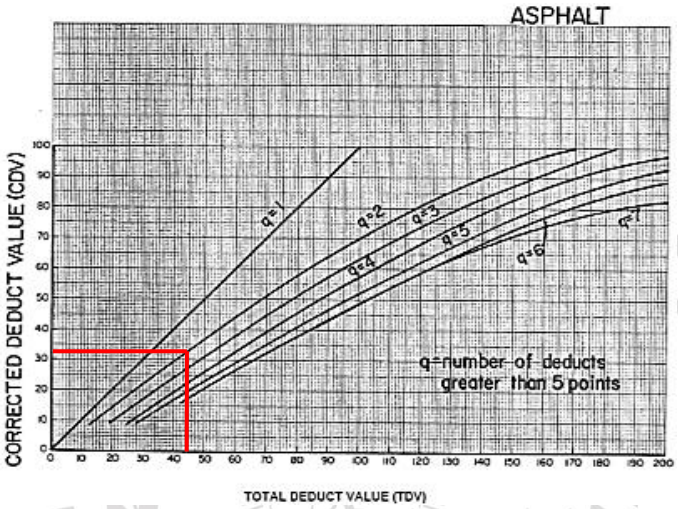
c. Nilai ijin maksimum (m)

m $= 1 + \frac{9}{98}$ x $(100 - HDV_i)$

$= 7{,}80$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
26	20	0	46	2	32



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 32

= 68 (*good*)

22. Segmen STA 24+100 – 24+200

a. Menghitung kerapatan (*Density*)

Retak buaya $= \frac{Ad}{As}\ x\ 100$

$= \frac{14{,}2}{700}\ x\ 100$

= 2,03 %

Pelepasan butir $= \frac{Ad}{As}\ x\ 100$

$= \frac{1{,}15}{700}\ x\ 100$

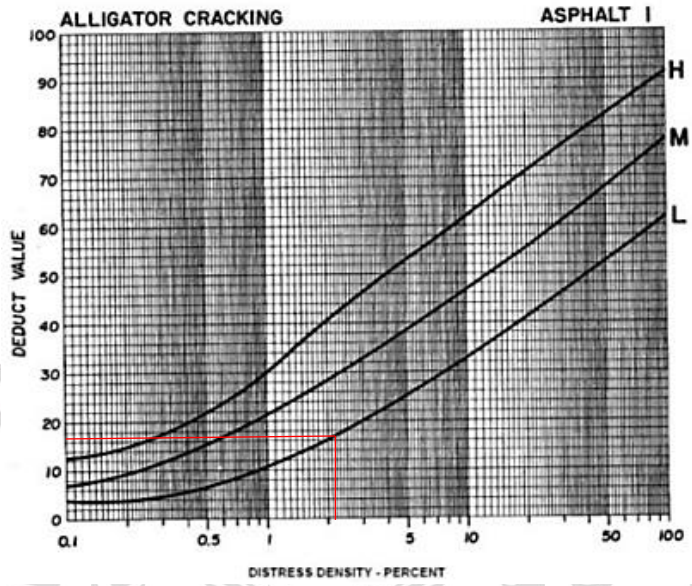
= 0,16 %

Tambalan $= \frac{Ad}{As}\ x\ 100$

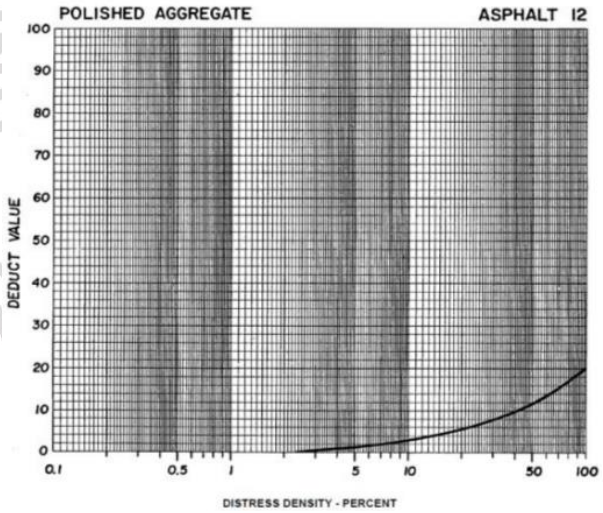
$= \frac{234{,}50}{700}\ x\ 100$

$= 33{,}5\ \%$

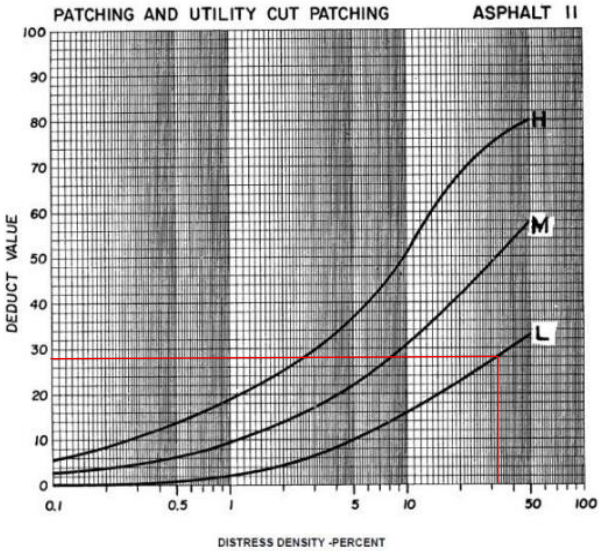
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 17



Deduct value = 0



Deduct value = 28

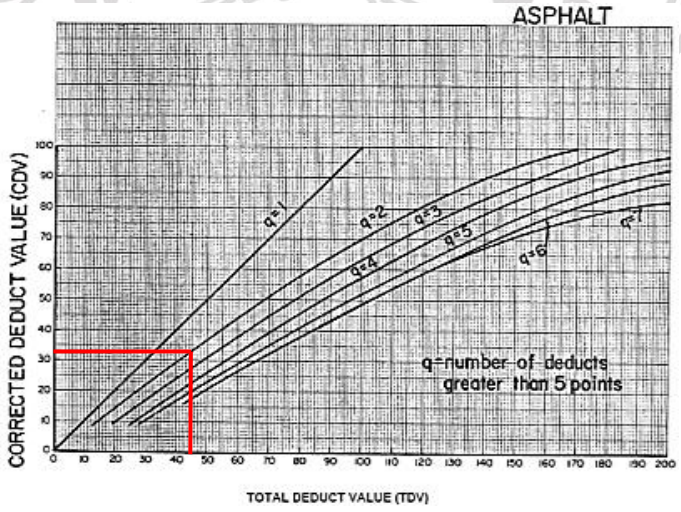
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 7{,}61$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
28	17	0	45	2	33



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 33

= 67 (*good*)

23. Segmen STA 24+200 – 24+300

a. Menghitung kerapatan (*Density*)

Alur $= \frac{Ad}{As} \; x \; 100$

$= \frac{3}{700} \; x \; 100$

= 0,43 %

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{18,20}{700} \; x \; 100$

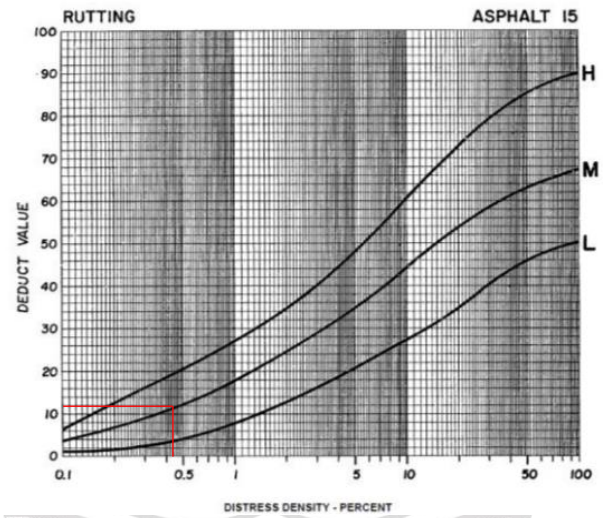
= 2,60 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

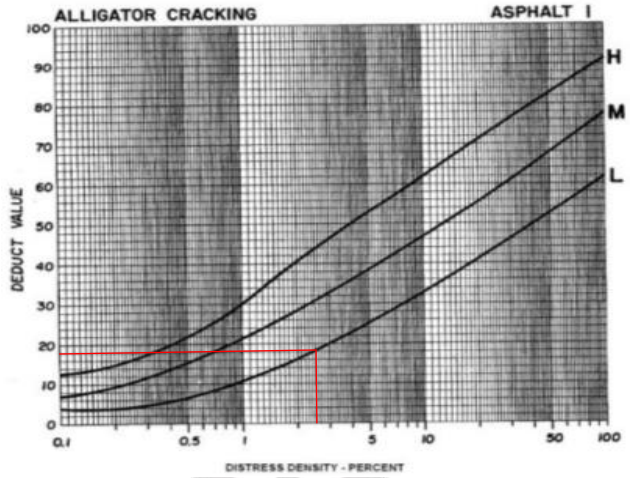
$= \frac{224}{700} \; x \; 100$

= 32 %

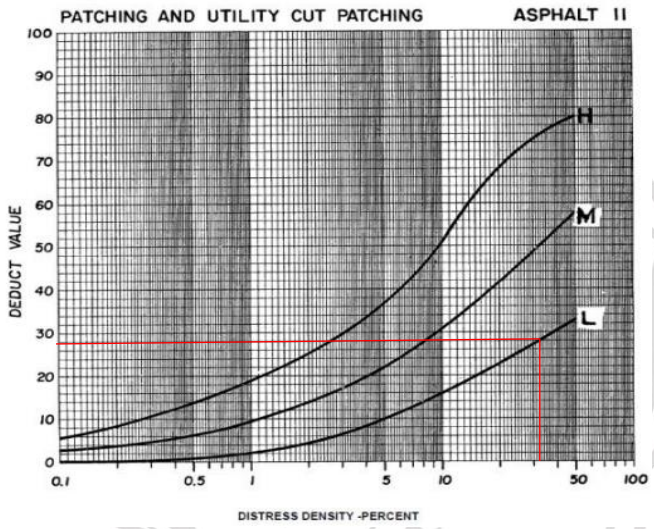
b. Menghitung nilai pengurang (*deduct value*)



Deduct Value = 12



Deduct value = 18



Deduct value = 28

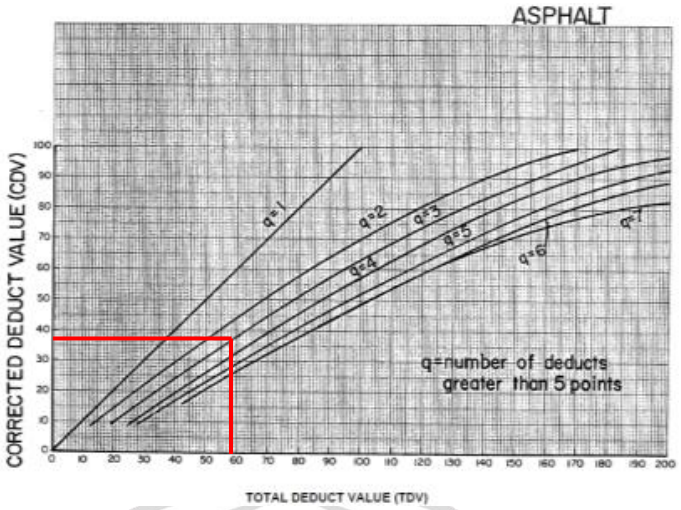
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 7{,}61$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value			TDV	q	CDV
28	18	12	58	3	36



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 36

= 64 (*good*)

24. Segmen STA 24+300 - 24+400

a. Menghitung kerapatan (*Density*)

Alur $= \frac{Ad}{As} \; x \; 100$

$= \frac{16}{700} \; x \; 100$

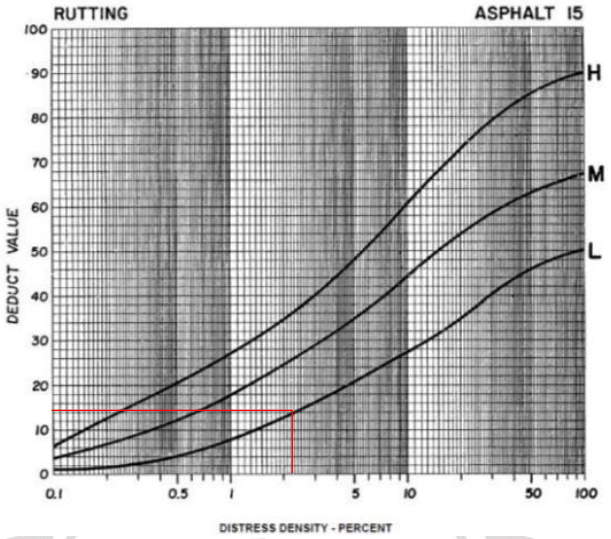
= 2,29 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

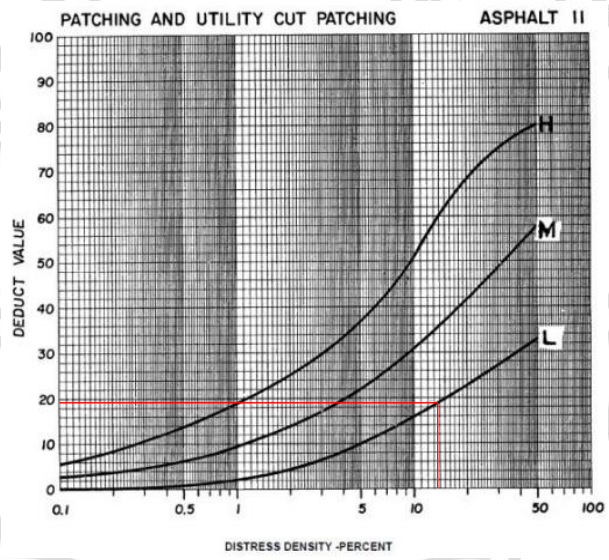
$= \frac{95}{700} \; x \; 100$

= 13,57 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 14



Deduct value = 19

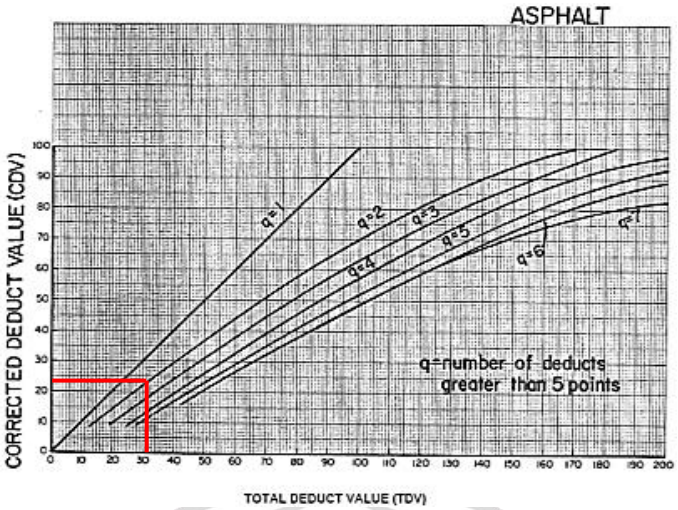
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 8{,}44$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value		TDV	q	CDV
19	14	33	2	21



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 23

= 77 (*very good*)

25. Segmen STA 24+400 – 24+500

a. Menghitung kerapatan (*density*)

Alur $= \frac{Ad}{As} \; x \; 100$

$= \frac{7,2}{700} \; x \; 100$

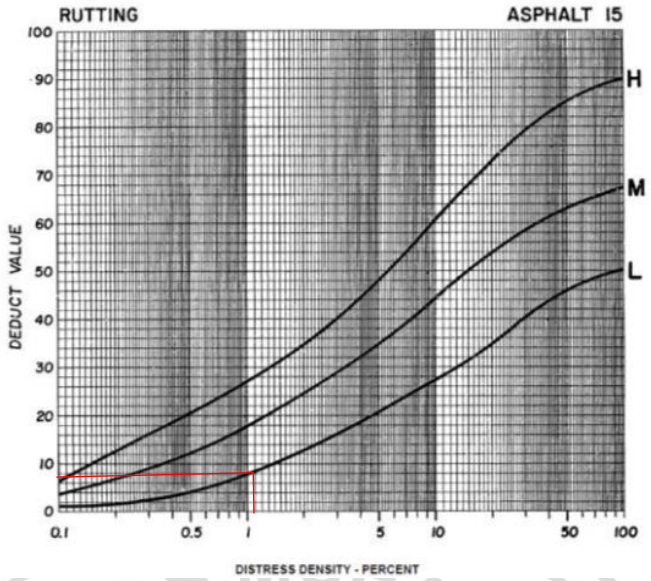
= 1,03 %

Retak memanjang $= \frac{Ad}{As} \; x \; 100$

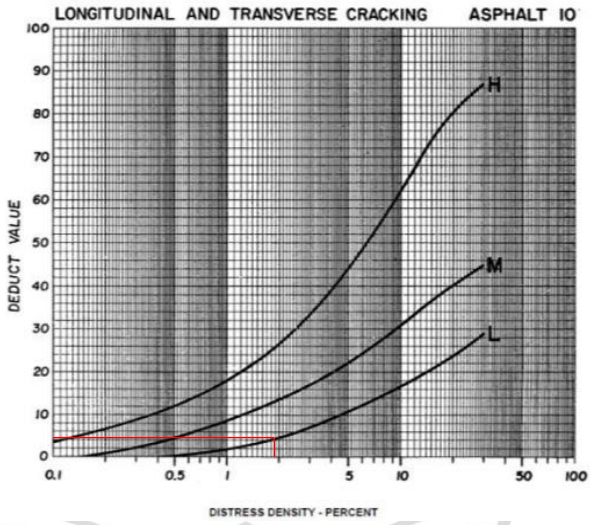
$= \frac{13}{700} \; x \; 100$

= 1,86 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 8



Deduct value = 4

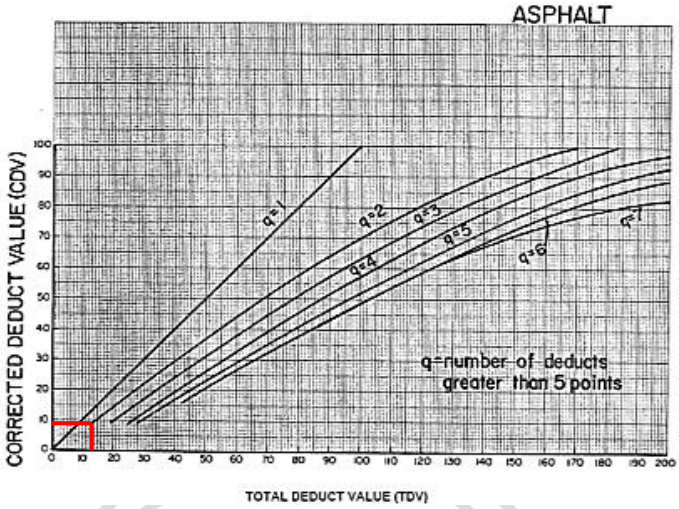
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 9{,}82$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct value		TDV	q	CDV
8	4	12	2	8



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 8

= 92 (*excellent*)

26. Segmen STA 0+300 – 0+400 (STA 24+500 – 24+600)

a. Menghitung kerapatan (*density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{40}{700} \; x \; 100$

= 5,71 %

Kegemukan $= \frac{Ad}{As} \; x \; 100$

$= \frac{12}{700} \; x \; 100$

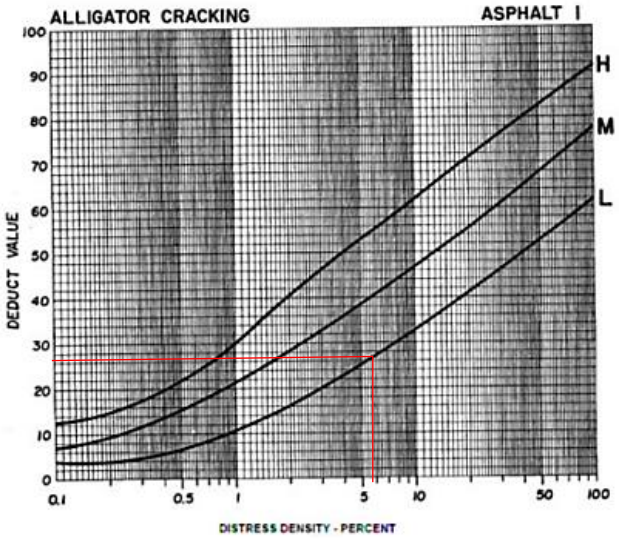
= 1,71 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

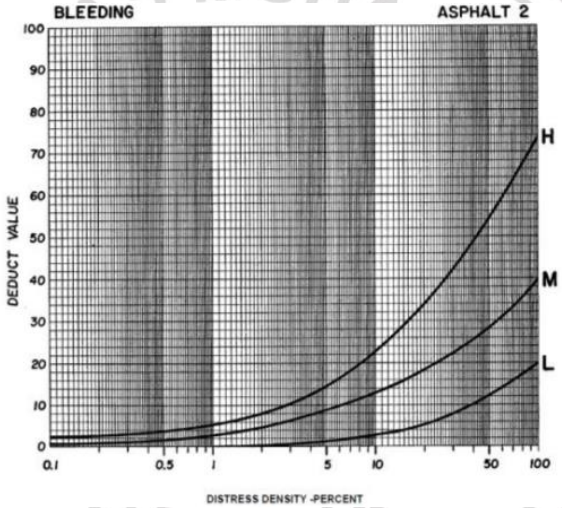
$= \frac{245}{700} \; x \; 100$

= 35 %

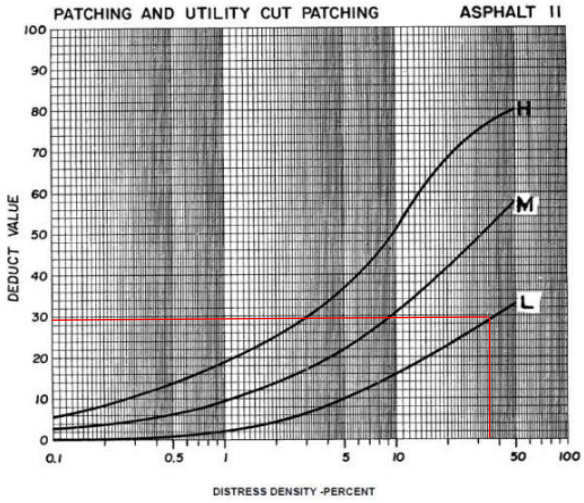
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 26



Deduct value = 0



Deduct value = 29

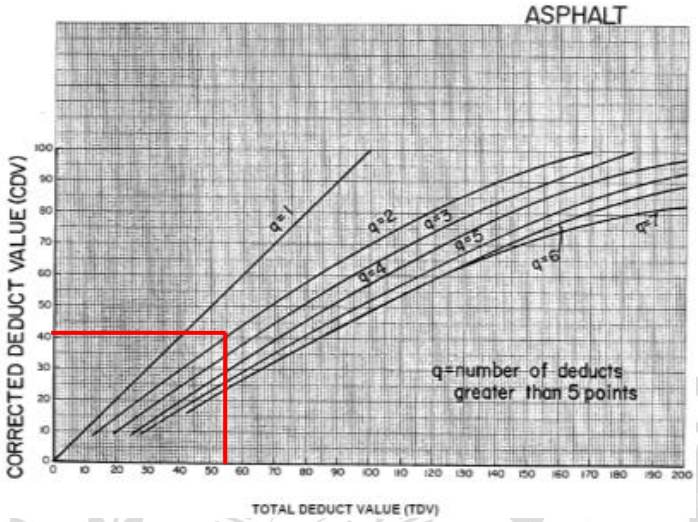
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 7{,}52$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct Value			TDV	q	CDV
29	26	0	55	2	41



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 41

= 59 (*good*)

27. Segmen STA 24+600 – 24+700

a. Menghitung kerapatan (*density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{30{,}50}{700} \; x \; 100$

= 4,36 %

Pelepasan butir $= \frac{Ad}{As} \; x \; 100$

$= \frac{2{,}26}{700} \; x \; 100$

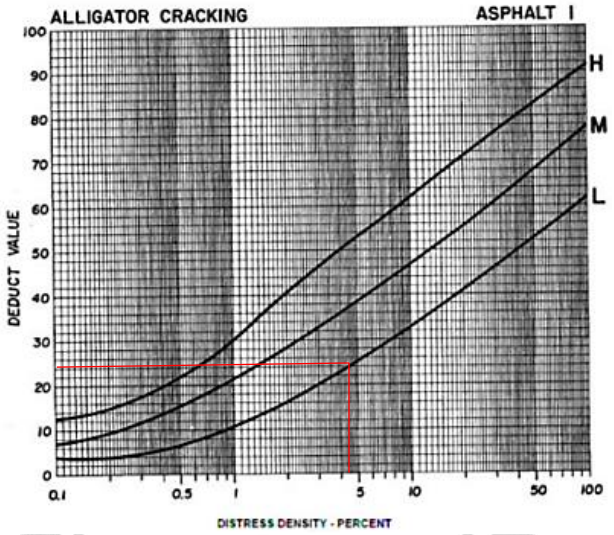
= 0,32 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

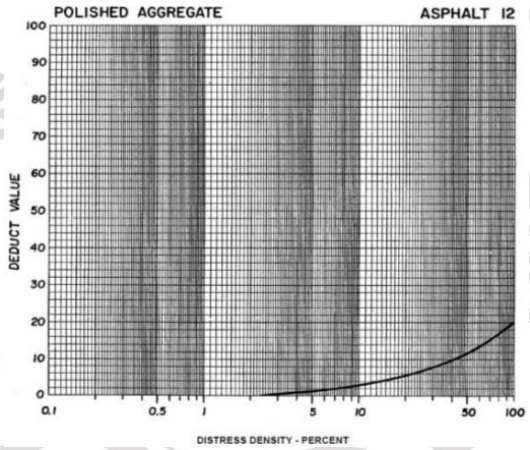
$= \frac{45}{700} \; x \; 100$

= 6,43 %

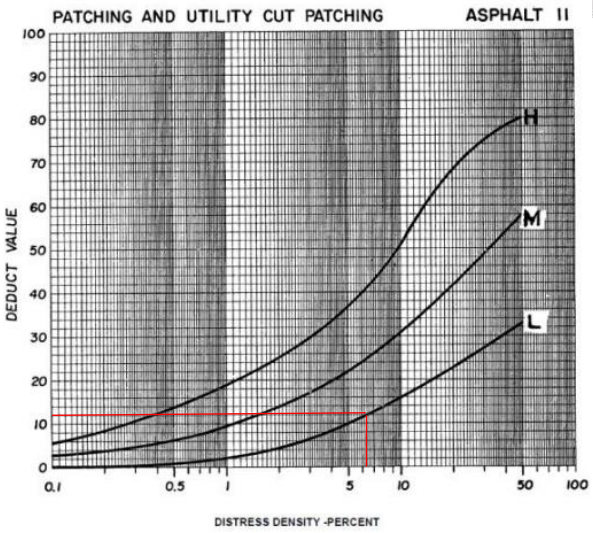
b. Menghitung nilai pengurang (*deduct value*)



Deduct value = 24



Deduct value = 0



Deduct value = 12

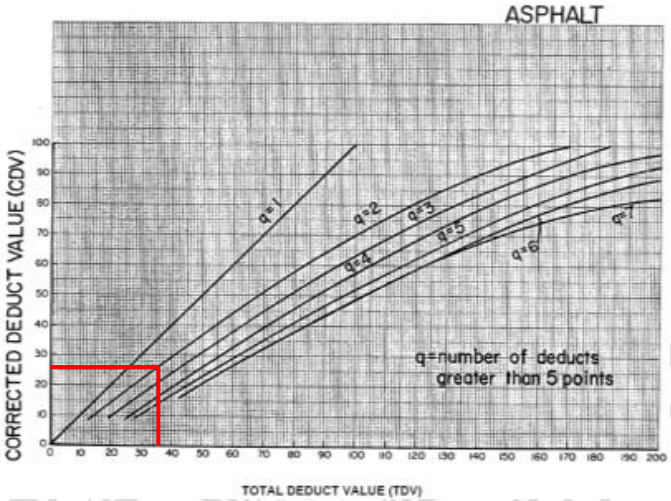
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 7{,}98$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct Value			TDV	q	CDV
23	12	0	36	2	22



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 25

= 75 (*very good*)

28. Segmen STA 24+700 + 24+800

a. Menghitung kerapatan (*density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{18{,}40}{700} \; x \; 100$

= 2,63 %

Kegemukan $= \frac{Ad}{As} \; x \; 100$

$= \frac{4{,}16}{700} \; x \; 100$

= 0,59 %

Lubang $= \frac{Ad}{As} \; x \; 100$

$= \frac{0{,}20}{700} \; x \; 100$

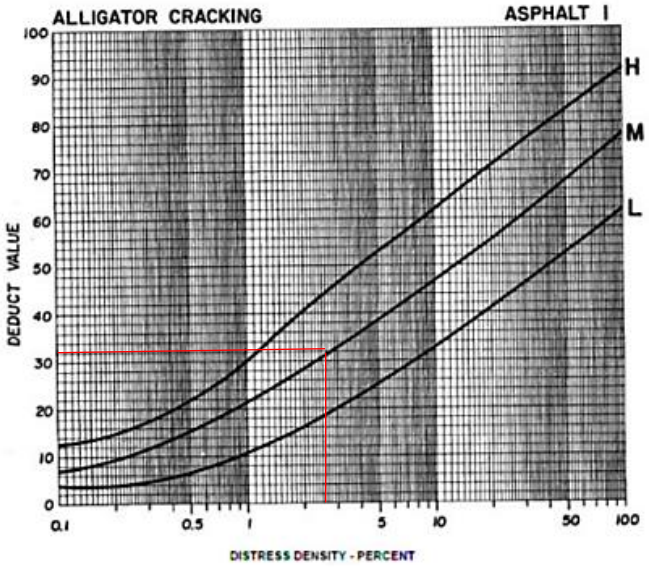
= 0,03 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

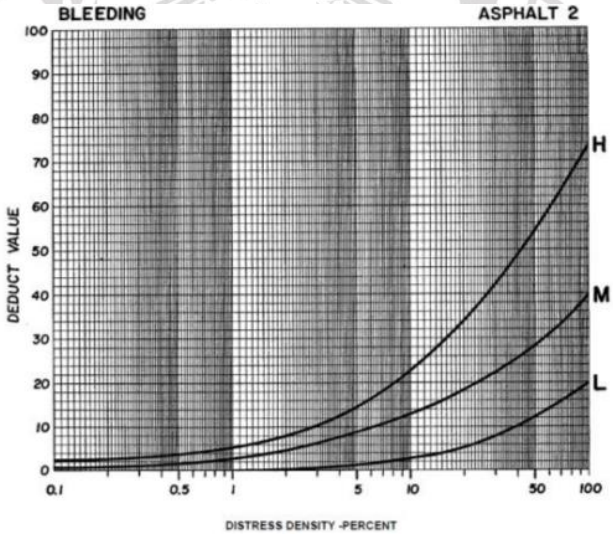
$= \frac{4}{700} \; x \; 100$

$= 0{,}57\ \%$

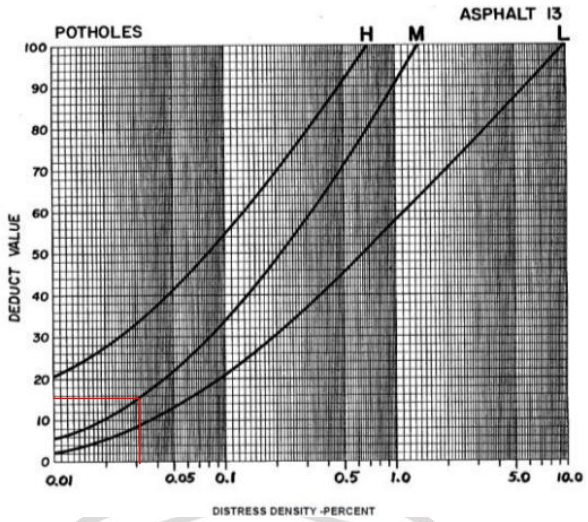
b. Menghitung nilai pengurang (*deduct value*)



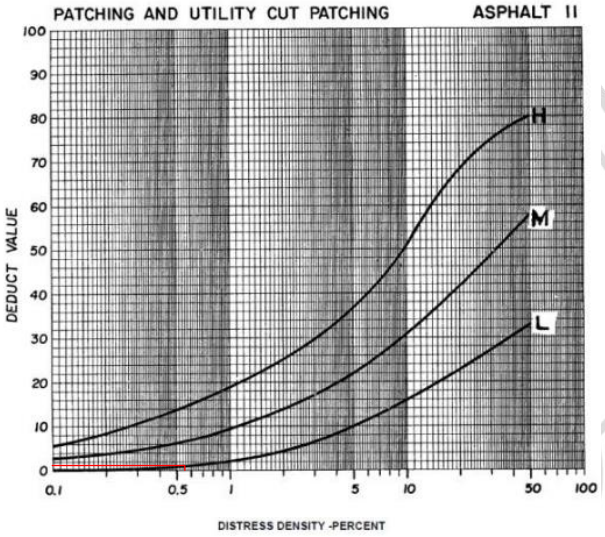
Deduct value = 32



Deduct value = 0



Deduct value = 16



Deduct value = 1

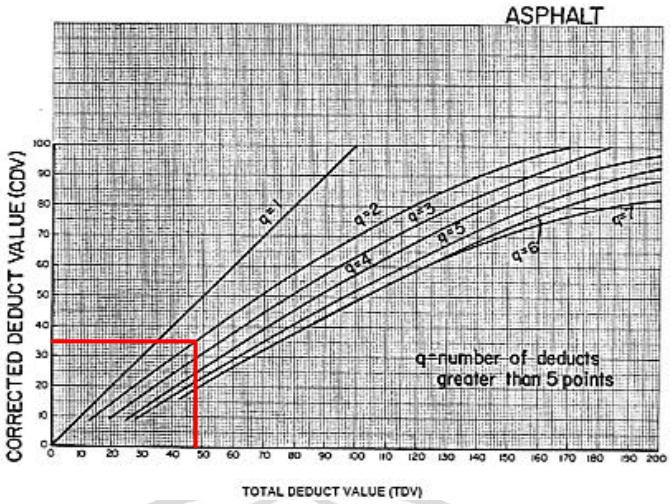
c. Nilai ijin maksimum (m)

$m = 1 + \frac{9}{98} \times (100 - HDV_i)$

$= 7{,}24$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct Value				TDV	q	CDV
32	16	1	0	49	2	35



e. Nilai PCI

PCI= 100 – CDVmaks

= 100 – 35

= 65 (*good*)

29. Segmen STA 24+800 – 24+900

a. Menghitung kerapatan (*density*)

Retak buaya $= \frac{Ad}{As} \; x \; 100$

$= \frac{13{,}36}{700} \; x \; 100$

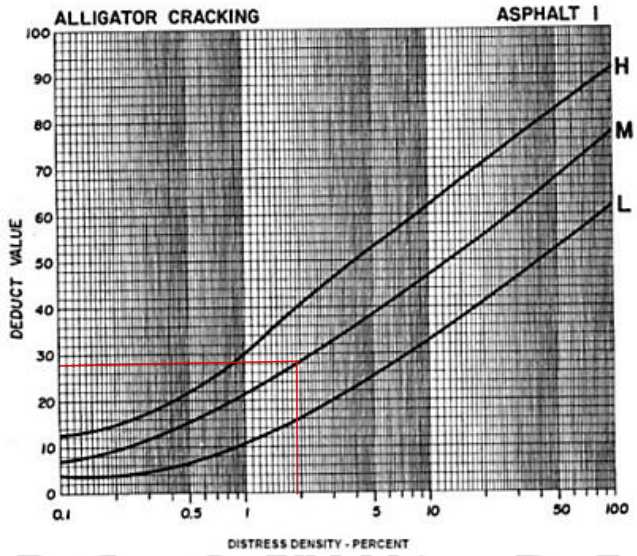
= 1,91 %

Tambalan $= \frac{Ad}{As} \; x \; 100$

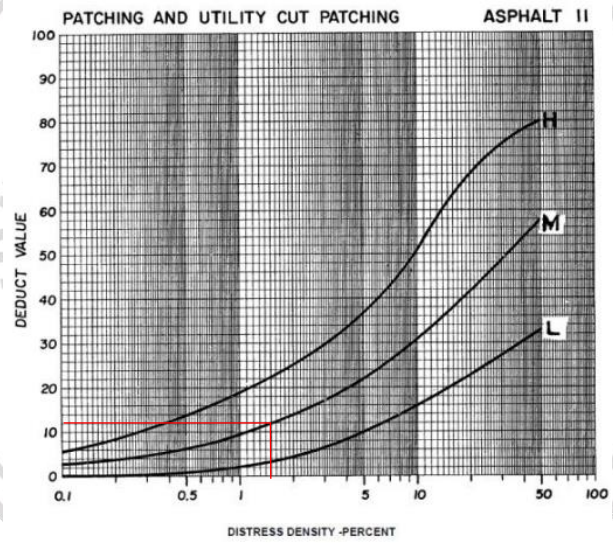
$= \frac{11}{700} \; x \; 100$

= 1,57 %

b. Menghitung nilai pengurang (*deduct value*)



Deduct Value = 28



Deduct Value = 12

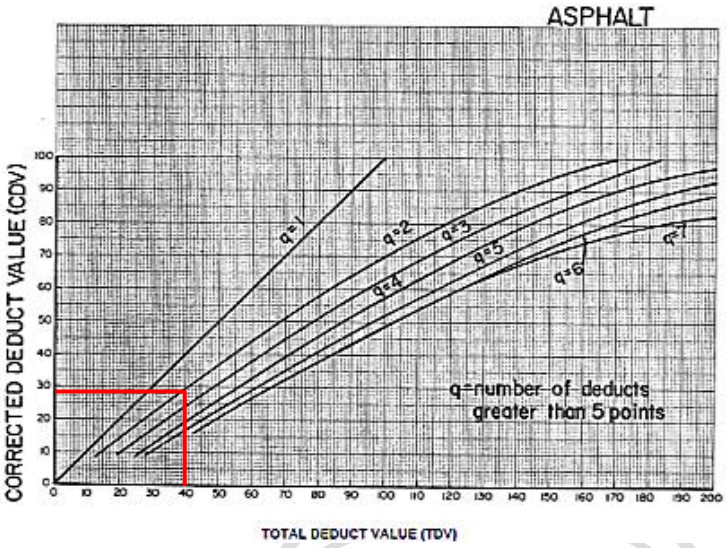
c. Nilai ijin maksimum (m)

$$m = 1 + \frac{9}{98} \times (100 - HDV_i)$$

$$= 7{,}61$$

d. Menentukan nilai pengurang terkoreksi maksimum (CDV)

Deduct Value		TDV	q	CDV
28	12	40	2	30



e. Nilai PCI

PCI = 100 – CDVmaks

= 100 – 29

= 71 (*very good*)

Perhitungan Analisis Lalu Lintas

Golongan 6a

$LHR_{2032} = LHR_{2022} \times (1+3{,}5\%)^{10}$
$= 12 \times (1+3{,}5\%)^{10}$
$= 17$

$ESA4_{TH-1} = (\sum LHR_{JK} \times VDF_{JK}) \times 365 \times DD \times DL \times R$
$ESA4_{2022-2032} = (17 \times 0{,}55) \times 365 \times 0{,}5 \times 100\% \times 10{,}02$
$ESA4_{2022-2032} = 17.017$

$ESA5_{TH-1} = (\sum LHR_{JK} \times VDF_{JK}) \times 365 \times DD \times DL \times R$
$ESA5_{2022-2032} = (17 \times 0{,}50 \times 365 \times 0{,}5 \times 100\% \times 10{,}02$
$ESA5_{2022-2032} = 15.470$

Golongan 6b

$LHR_{2032} = LHR_{2022} \times (1+3{,}5\%)^{10}$
$= 96 \times (1+3{,}5\%)^{10}$
$= 135$

$ESA4_{TH-1} = (\sum LHR_{JK} \times VDF_{JK}) \times 365 \times DD \times DL \times R$
$ESA4_{2022-2032} = (135 \times 5{,}30) \times 365 \times 0{,}5 \times 100\% \times 10{,}02$
$ESA4_{2022-2032} = 1.3111.890$

$ESA5_{TH-1} = (\sum LHR_{JK} \times VDF_{JK}) \times 365 \times DD \times DL \times R$
$ESA5_{2022-2032} = (135 \times 9{,}20) \times 365 \times 0{,}5 \times 100\% \times 10{,}02$
$ESA5_{2022-2032} = 2.277.244$

Golongan 7b

$LHR_{2032} = LHR_{2022} \times (1+3{,}5\%)^{10}$
$= 2 \times (1+3{,}5\%)^{10}$
$= 3$

$ESA4_{TH-1} = (\sum LHR_{JK} \times VDF_{JK}) \times 365 \times DD \times DL \times R$
$ESA4_{2022-2032} = (3 \times 11{,}80) \times 365 \times 0{,}5 \times 100\% \times 10{,}02$
$ESA4_{2022-2032} = 60.850$

$ESA5_{TH-1} = (\sum LHR_{JK} \times VDF_{JK}) \times 365 \times DD \times DL \times R$
$ESA5_{2022-2032} = (3 \times 18{,}20) \times 365 \times 0{,}5 \times 100\% \times 10{,}02$
$ESA5_{2022-2032} = 93.854$

Golongan 7c

$LHR_{2032} = LHR_{2022} \times (1+3{,}5\%)^{10}$

$= 6 \times (1+3{,}5\%)^{10}$

$= 8$

$ESA4_{TH-1} = (\sum LHR_{JK} \times VDF_{JK}) \times 365 \times DD \times DL \times R$

$ESA4_{2022\text{-}2032} = (8 \times 11{,}00) \times 365 \times 0{,}5 \times 100\% \times 10{,}02$

$ESA4_{2022\text{-}2032} = 170.174$

$ESA5_{TH-1} = (\sum LHR_{JK} \times VDF_{JK}) \times 365 \times DD \times DL \times R$

$ESA5_{2022\text{-}2032} = (8 \times 19{,}80) \times 365 \times 0{,}5 \times 100\% \times 10{,}02$

$ESA5_{2022\text{-}2032} = 306.314$

Perhitungan Analisa *Bankelman Beam*

1. STA 21+900 – 22+000

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,29}$ x 718,3
  = 731,28
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,29}$ x 483
  = 491,73
- D_o - D200 = 731,28 – 491,73
  = 239,6
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 731,28 x 1,04
  = 761 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 239,6 x 1,09
  = 261 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 761
  = 981,09 μm

2. STA 22+000 – 22+100

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,05}$ x 693,1
  = 709,96
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,05}$ x 373,8
  = 382,89
- D_o - D200 = 706,96 – 382,89
  = 327,07
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 709,96 x 1,04

= 738,36 μm

- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 327,07 x 1,09
  = 356,50 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 738,36
  = 952,48 μm

3. STA 22+100 – 22+200

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{44,25}$ x 414,7
  = 374,87
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{44,25}$ x 216,4
  = 195,62
- D_o - D200 = 374,87 – 195,62
  = 179,25
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 374,87 x 1,04
  = 389,86 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 179,25 x 1,09
  = 195,39 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 389,86
  = 502,93 μm

4. STA 22+200 – 22+300

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{44,25}$ x 407,9
  = 368,72
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{44,25}$ x 210,3
  = 190,10

- D_o - D200 = 368,72 – 190,10
  = 178,62
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 368,72 x 1,04
  = 383,47 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 178,62 x 1,09
  = 194,70 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 383,47
  = 494,68 μm

5. STA 22+300 – 22+400

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{38,09}$ x 572,1
  = 600,79
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{38,09}$ x 275,3
  = 289,10
- D_o - D200 = 600,79 – 289,10
  = 311,68
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 600,79 x 1,04
  = 624,82 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 311,68 x 1,09
  = 339,73 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 624,82
  = 806,02 μm

6. STA 22+400 – 22+500

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{38,42}$ x 572,8
  = 596,36
- D_{200} normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{38,42}$ x 271,2
  = 282,35
- D_o - D200 = 596,36 – 282,35
  = 314
- Ft $= \frac{MAPT}{T.\ Aspal}$
  $= \frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 596,36 x 1,04
  = 620,21 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 314,00 x 1,09
  = 342,26 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 620,21
  = 800,07μm

7. STA 22+500 – 22+600

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{41,69}$ x 365,2
  = 350,40
- D_{200} normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{41,69}$ x 154,0
  = 147,76
- D_o - D200 = 350,40 – 147,76
  = 202,64
- Ft $= \frac{MAPT}{T.\ Aspal}$
  $= \frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 350,40 x 1,04
  = 364,41 μm

- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 202,64 x 1,09
  = 220,88 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 364,41
  = 470,09 μm

8. STA 22+600 – 22+700
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,04}$ x 364,8
  = 347,10
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,04}$ x 149,2
  = 141,96
- D_o - D200 = 347,10 – 141,96
  = 205,14
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 347,10 x 1,04
  = 360,98 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 205,14 x 1,09
  = 223,60 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 360,98
  = 465,67 μm

9. STA 22+700 – 22+800
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{40,95}$ x 592,9
  = 579,15
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{40,95}$ x 297,2
  = 290,31
- D_o - D200 = 579,15 – 290,31
  = 288,84

- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 579,15 x 1,04
  = 602,31 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 288,84 x 1,09
  = 314,84 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 602,31
  = 776,98 μm

10. STA 22+800 – 22+900
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{38,01}$ x 552,9
  = 581,85
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{38,01}$ x 327,6
  = 344,75
- D_o - D200 = 581,85 – 344,75
  = 237,10
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 581,85 x 1,04
  = 605,12 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 237,10 x 1,09
  = 258,43 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 605,12
  = 780,61 μm

11. STA 22+900 – 23+000
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,75}$ x 363,3

= 339,93

- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,75}$ x 279,0
  = 261,05
- D_o - D200 = 339,93 – 261,05
  = 78,88
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 339,93 x 1,04
  = 353,53 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 78,88 x 1,09
  = 85,98 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 353,53
  = 456,05 μm

12. STA 23+000 – 23+100

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,96}$ x 460,3
  = 428,58
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,96}$ x 280,1
  = 260,80
- D_o - D200 = 428,58 – 260,80
  = 167,78
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 428,58 x 1,04
  = 445,73 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 167,78 x 1,09
  = 182,88 μm

- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 445,73
  = 574,99 μm

13. STA 23+100 – 23+200
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{39,90}$ x 563,6
  = 565,01
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{39,90}$ x 246,3
  = 246,92
- D_o - D200 = 565,01 – 246,92
  = 318,10
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 565,01 x 1,04
  = 587,61 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 318,10 x 1,09
  = 346,72 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 587,61
  = 758,02 μm

14. STA 23+200 – 23+300
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,50}$ x 595,7
  = 560,66
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,50}$ x 259,3
  = 244,05
- D_o - D200 = 560,66 – 244,05
  = 316,61
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$

= 1,10

- D_o terkoreksi = D_o x Ft. D_o
  = 560,66 x 1,04
  = 583,09 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 316,61 x 1,09
  = 345,11 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 583,09
  = 752,18 μm

15. STA 23+300 – 23+400

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{41,28}$ x 392,9
  = 380,72
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{41,28}$ x 104,7
  = 101,45
- D_o - D200 = 380,72 – 101,45
  = 279,26
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 380,72 x 1,04
  = 395,95 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 279,26 x 1,09
  = 304,40 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 395,95
  = 510,77 μm

16. STA 23+500 – 23+600

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{34,87}$ x 756,4
  = 867,68
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan

$= \frac{40}{34,87}$ x 427,3
= 490,16

- D_o - D200 = 867,68 – 490,16
  = 377,52
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 867,68 x 1,04
  = 902,39 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 377,52 x 1,09
  = 411,49 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 902,39
  = 1164,08 μm

17. STA 23+600 – 23+700

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{35,38}$ x 824,5
  = 932,17
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{35,38}$ x 486,2
  = 549,69
- D_o - D200 = 932,17 – 549,69
  = 382,48
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 932,17 x 1,04
  = 969,45 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 382,48 x 1,09
  = 416,90 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 969,45
  = 1250,59 μm

18. STA 23+700 – 23+800

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,58}$ x 466,00
  = 470,94
- D_{200} normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,58}$ x 243,8
  = 246,39
- D_o - D200 = 470,94 – 246,39
  = 224,56
- Ft $= \frac{MAPT}{T.\ Aspal}$
  $= \frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 470,94 x 1,04
  = 489,78 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 224,56 x 1,09
  = 244,77 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 489,78
  = 631,82 μm

19. STA 23+800 – 23+900

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{42,73}$ x 486,30
  = 455,23
- D_{200} normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{42,73}$ x 261,50
  = 244,79
- D_o - D200 = 455,23 – 244,79
  = 210,44
- Ft $= \frac{MAPT}{T.\ Aspal}$
  $= \frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 455,23 x 1,04
  = 473,44 μm

- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 210,44 x 1,09
  = 229,38 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 473,44
  = 610,74 μm

20. STA 23+900 – 24+000
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{37,94}$ x 810,60
  = 854,61
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{37,94}$ x 457,30
  = 482,13
- D_o - D200 = 854,61 – 482,13
  = 372,48
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 854,61 x 1,04
  = 888,80 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 482,13 x 1,09
  = 406,01 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 888,80
  = 1146,55 μm

21. STA 24+000 – 24+100
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{38,26}$ x 854,40
  = 893,26
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{38,26}$ x 479,10
  = 500,89
- D_o - D200 = 893,26 – 500,89
  = 392,37

- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 893,26 x 1,04
  = 928,99 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 392,37 x 1,09
  = 427,68 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 928,99
  = 1198,39 μm

22. STA 24+100 – 24+200

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{41,58}$ x 624,70
  = 600,96
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{41,58}$ x 310,30
  = 298,51
- D_o - D200 = 600,96 – 298,51
  = 302,45
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 600,96 x 1,04
  = 625,00 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 302,45 x 1,09
  = 329,67 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 625,00
  = 806,25 μm

23. STA 24+200 – 24+300

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{41,48}$ x 611,20
  = 589,39
- D_{200} normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{41,48}$ x 300,50
  = 289,78
- D_o - D200 = 589,39 – 289,78
  = 299,61
- Ft $= \frac{MAPT}{T.\ Aspal}$
  $= \frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 589,39 x 1,04
  = 612,97 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 299,61 x 1,09
  = 326,58 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 612,97
  = 790,73 μm

24. STA 24+300 – 24+400

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,89}$ x 648,00
  = 649,79
- D_{200} normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,89}$ x 353,70
  = 354,68
- D_o - D200 = 649,79 – 354,70
  = 295,11
- Ft $= \frac{MAPT}{T.\ Aspal}$
  $= \frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 649,79 x 1,04
  = 675,78 μm

- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 295,11 x 1,09
  = 321,67 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 675,78
  = 871,75 μm

25. STA 24+400 – 24+500

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,06}$ x 648,50
  = 616,74
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,06}$ x 362,60
  = 344,84
- D_o - D200 = 616,74 – 362,60
  = 271,90
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 616,74 x 1,04
  = 641,41 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 271,90 x 1,09
  = 296,37 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 541,41
  = 827,42 μm

26. STA 24+500 – 24+600

- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{39,82}$ x 474,40
  = 476,54
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{39,82}$ x 366,50
  = 368,16
- D_o - D200 = 476,54 – 368,16
  = 108,39

- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 476,54 x 1,04
  = 495,61 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 108,39 x 1,09
  = 118,14 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 495,61
  = 639,33 μm

27. STA 24+600 – 24+700
- D_o normal = $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,43}$ x 493,70
  = 465,43
- D_{200} normal= $\frac{40}{Beban\ tercatat}$ x lendutan
  = $\frac{40}{42,43}$ x 282,10
  = 265,94
- D_o - D200 = 465,43 – 265,94
  = 199,48
- Ft = $\frac{MAPT}{T.\ Aspal}$
  = $\frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 465,43 x 1,04
  = 484,04 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 199,48 x 1,09
  = 217,43 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 484,04
  = 624,41 μm

28. STA 24+700 – 24+800

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{39,46}$ x 472,10
  = 478,56
- D_{200} normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{49,46}$ x 329,80
  = 334,31
- D_o - D200 = 478,56 – 334,31
  = 144,25
- Ft $= \frac{MAPT}{T.\ Aspal}$
  $= \frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 478,56 x 1,04
  = 497,70 μm
- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 144,25 x 1,09
  = 157,23μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 297,70
  = 642,04 μm

29. STA 24+800 – 24+900

- D_o normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{41,70}$ x 499,10
  = 478,75
- D_{200} normal $= \frac{40}{Beban\ tercatat}$ x lendutan
  $= \frac{40}{41,70}$ x 251,00
  = 240,77
- D_o - D200 = 478,75 – 240,77
  = 237,99
- Ft $= \frac{MAPT}{T.\ Aspal}$
  $= \frac{41°}{37,3}$
  = 1,10
- D_o terkoreksi = D_o x Ft. D_o
  = 478,75 x 1,04
  = 497,90 μm

- D_0 - D_{200} terkoreksi = D_0 - D_{200} x Ft. D_{200}
  = 237,99 x 1,09
  = 259,40 μm
- D_0 penyesuaian ke BB = 1,29 x D_o terkoreksi
  = 1,29 x 497,90
  = 642,30 μm