



1:2:2.7 $\Rightarrow$ Double Surface Treatment $\Rightarrow T_A = 0$

① DBST $\Rightarrow T_A = 0$
 $T_A = 32$ cm. Base = ?
 above subbase CBR = 25%
 $\therefore$ Base $u_n = \frac{11}{25} \times 2 = 0.88$ cm.
 subbase $u_n = 20$ cm. $\Rightarrow T_A = \frac{20}{2} = 10$ cm.

② continuous subbase
 $T_A = 18$ cm.
 subbase = ? $\therefore$ T_A on subbase = $18 - 10 = 8$ cm.
 Selected CBR = 8%
 $\therefore$ subbase $u_n = 8 \times 2.7 = 21.6$ cm.
 subbase $u_n = 20$ cm. $\Rightarrow T_A = \frac{20}{2.7} = 7.4$ cm.

③ continuous Selected
 $T_A = 32$
 base = $T_A = 0$
 subbase $T_A = 7.4$
 $\therefore$ Selected $T_A = 32 - 10 - 7.4 = 14.6$ cm.
 subgrade CBR = 2%

DBST	$T_A = 0$
base 20 cm	$T_A = 10$
subbase 20 cm	$T_A = 7.4$
selected 35 cm	$T_A = 13$
Subgrade CBR = 2%	

30.4
32 OK

$\therefore$ Selected $u_n = 14.6 \times 2.7 = 39.4$ cm.
 subbase $u_n = 35$ cm $\Rightarrow T_A = \frac{35}{2.7} = 13$

example Asphalt Concrete T_A



① uncompressible Asp Con

$$\begin{aligned} & \uparrow T_A = 7.2 \text{ cm.} \\ & \text{base CBR} = 80\% \\ & \text{Asphalt subgrade} \geq 7.2 \text{ cm.} \\ & \text{min } 15 \text{ cm } \underline{7.5 \text{ cm}} \end{aligned}$$

② on base

$$\begin{aligned} & \left\{ \begin{array}{l} \text{Asp Con } 7.5 \text{ cm. } T_A = 7.5 \checkmark \\ \text{base} = 15 \text{ cm. } T_A = 2.5 \checkmark \\ \text{sub} = 15 \text{ cm. } T_A = 5.6 \checkmark \\ \text{select} = 35 \text{ cm. } T_A = 13 \end{array} \right. T_A = 11 \\ & \begin{array}{l} \text{subgrade } T_A = 7.5 \\ \uparrow \therefore \text{unsub } T_A \text{ base} = 11 - 7.5 \\ = 3.5 \text{ cm.} \\ \text{subgrade CBR} = 20\% \\ \therefore \text{base min} = 3.5 \times 2 = 7 \text{ cm.} \\ \text{in } 15 \text{ cm. } \Rightarrow T_A = \frac{15}{2} = 7.5 \end{array} \end{aligned}$$

③ on subbase

$$\begin{aligned} & \begin{array}{l} \uparrow T_A \text{ do } 7.5 \\ T_A \text{ base } 7.5 \\ \therefore \text{unsub } T_A \text{ sub} = 18 - 7.5 - 7.5 = 3 \text{ cm.} \\ \text{Selected CBR} = 8\% \end{array} \\ & T_A = 18 \end{aligned}$$

$$\therefore \text{subbase min } 3 \times 2.7 = 8.1 \text{ cm.} \\ \text{in } 15 \text{ cm. } \Rightarrow T_A = \frac{15}{2.7} = 5.6$$

④ on selected

$$\begin{aligned} & \begin{array}{l} \uparrow \left\{ \begin{array}{l} \text{do } 7.5 \\ \text{base } 7.5 \end{array} \right\} \\ T_A = \left\{ \begin{array}{l} \text{sub } 5.6 \\ \text{selected } T_A = 32 - 7.5 - 7.5 - 5.6 = 11.4 \end{array} \right\} \\ \text{Subgrade CBR} = 2\% \end{array}$$

$$\therefore \text{selected min} = 11.4 \times 2.7 = 30.8 \\ \text{in } 35 \text{ cm. } \Rightarrow T_A = \frac{35}{2.7} = 13$$

ALD 2
ALD 1
Average Least
Dimension