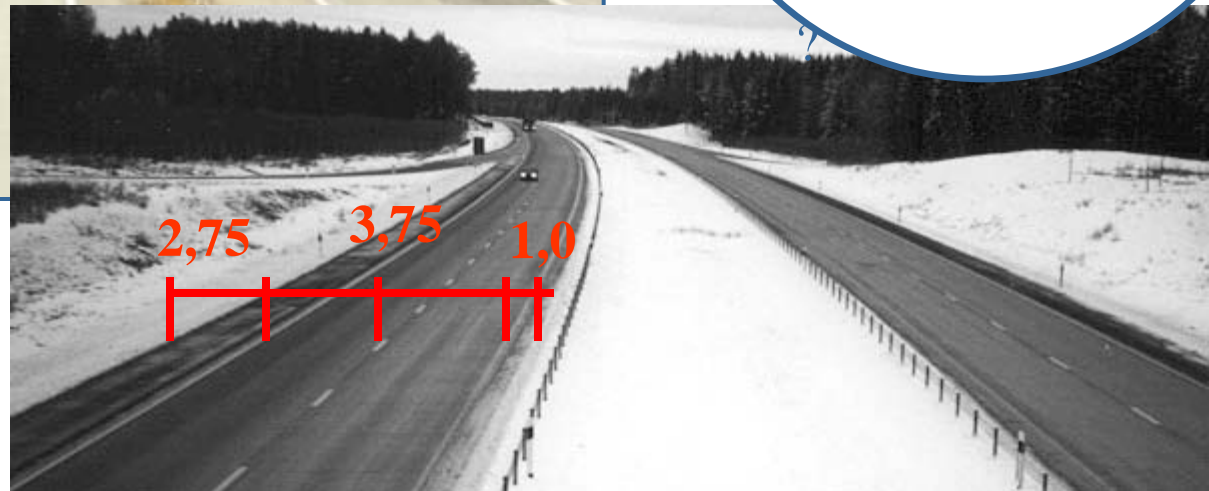


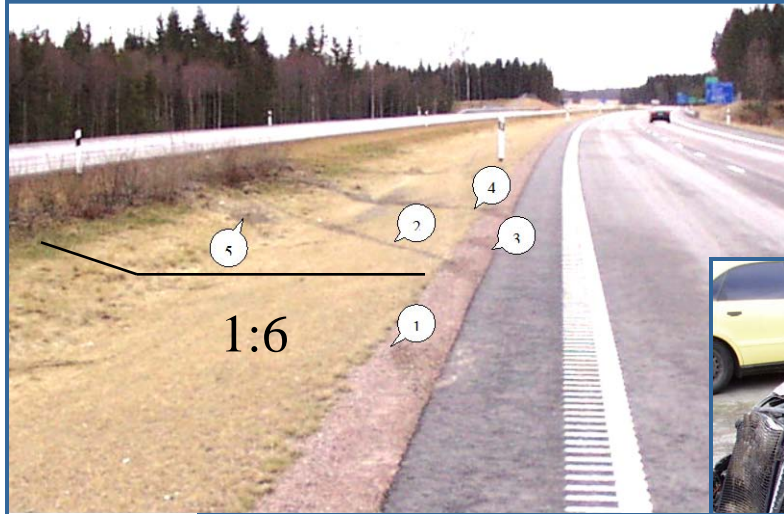
## First Swedish motorway Malmö-Lund 1953

- now more than 25 % of traffic load
- superior capacity, good traffic safety but ..



### Major changes:

- road side areas
- merge lanes
- medians
- bridge design
- "alternative cross-sections"



Early 90:ies wide medians



Today  
Median barriers

## ”Alternative 4-lane roads ” ?

Transport minister order in the 90:ies

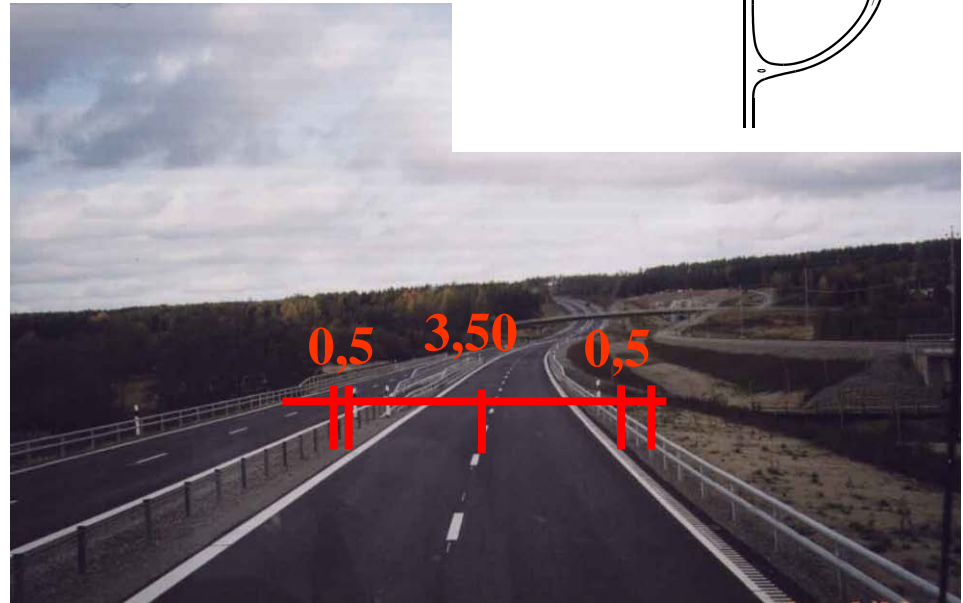
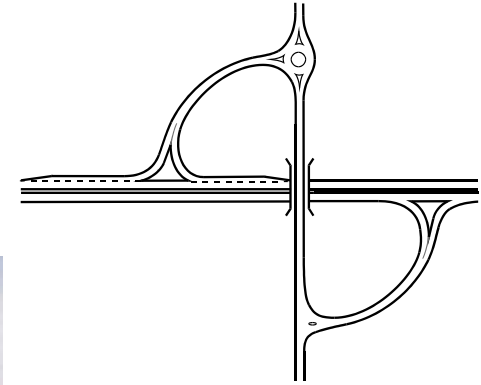
- less intrusion and costs
- high traffic safety

Method:

- narrow hard shoulders 0.5 m
- normal traffic lanes 3.5 m
- ”environmental median” 2,5 m
- guard-rails for less intrusion
- simpler interchanges
- not motorway-signed

Now:

- some 5 built
- some motorway-signed



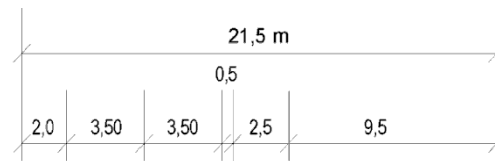
## **No success ....**

- **Some nasty emergency stopp accidents**
- **Traffic safety outcome a disappointment**
- **Simple interchanges not accepted**
- **Environmental median not accepted**
- **But a number of designs schemes with budget and right-of-way for 18.5 m**

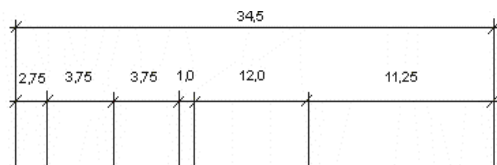


**Some 300 km 120 in 2008**

## Motorway cross-sections

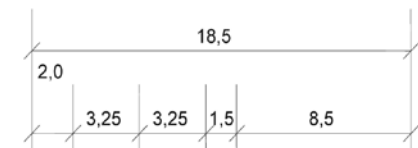


Vägbana Mittremsa Vägbana



> 12000 AADT

**1975**



Vägbana Mittremsa Vägbana

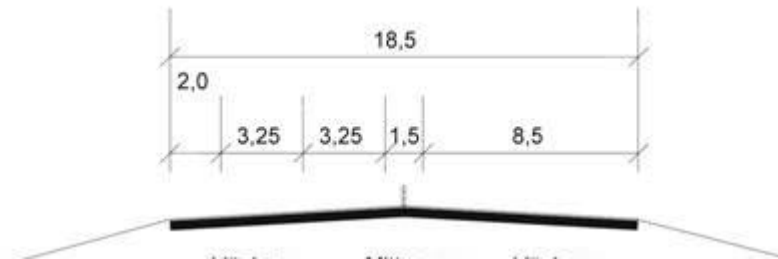
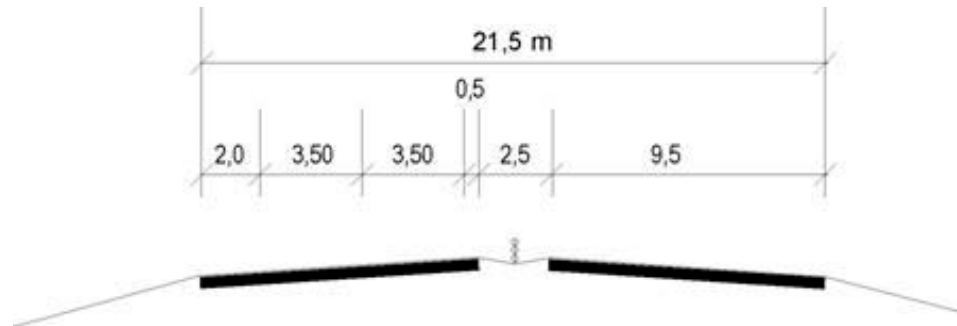
> 18000 AADT

**2004**

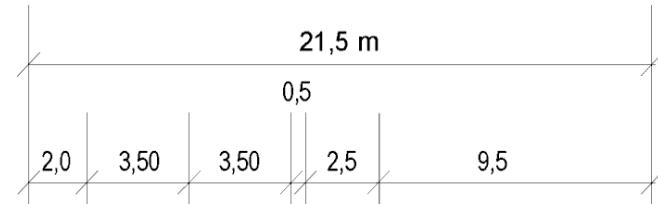
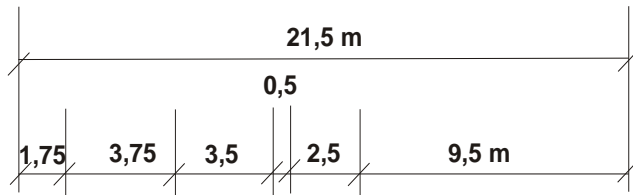
> 18000 AADT

**2008**

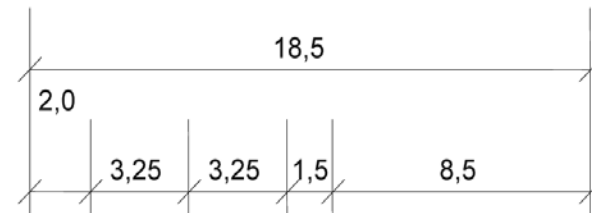
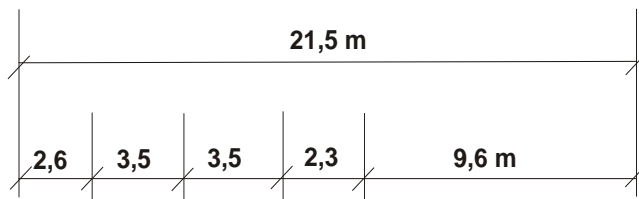
## Present guidelines



## Motorway cross-sections



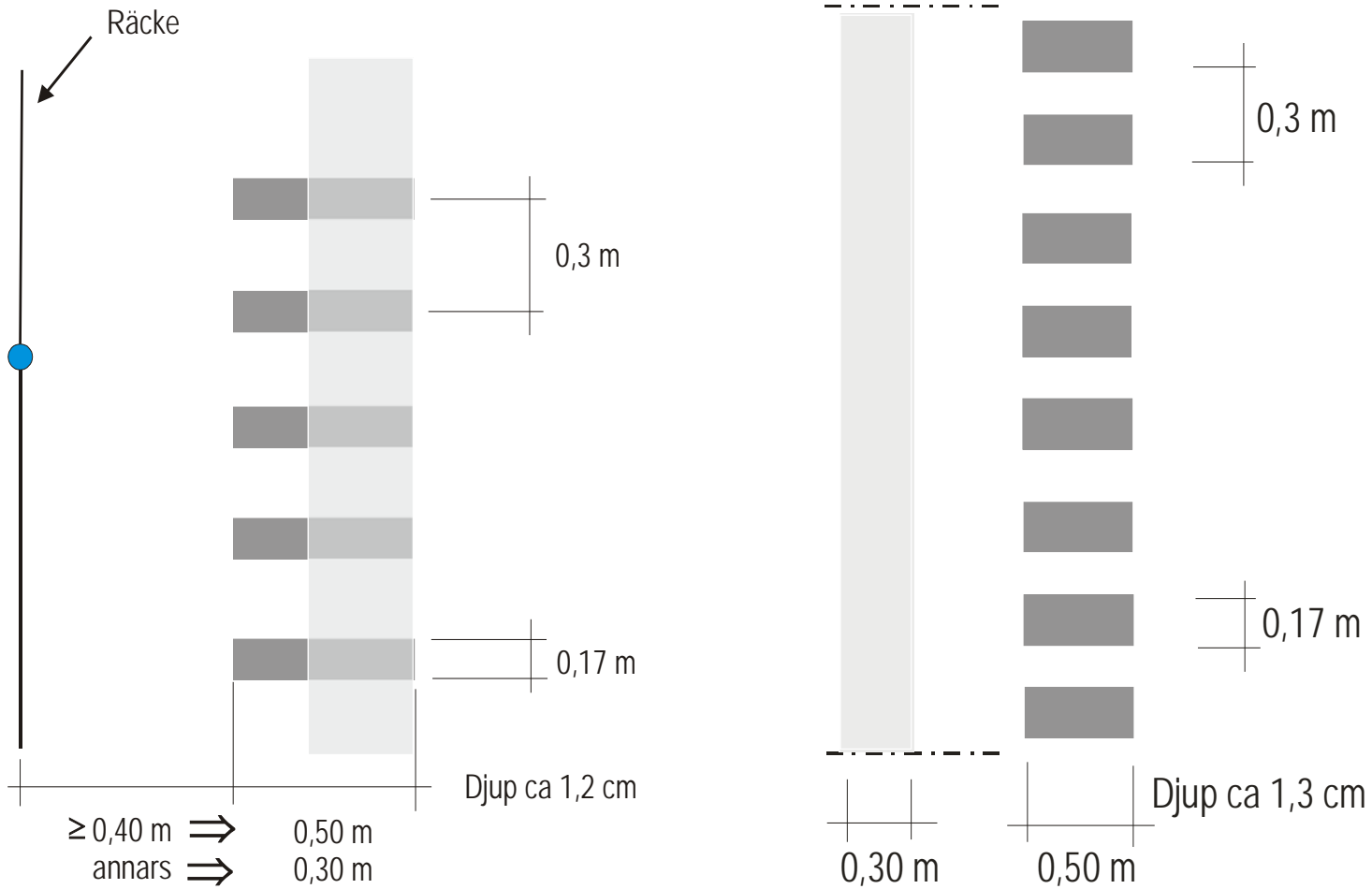
Vägbana      Mittremsa      Vägbana



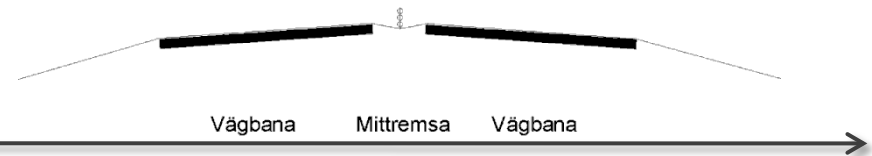
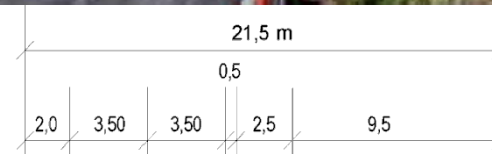
Vägbana      Mittremsa      Vägbana



## Motorway typesections



## E6 Case



**2008**

## E6 Case



2008