

COOPER E80 RAILROAD LIVE LOAD ON WALL TRACKS PARALLEL TO STRUCTURAL SECTION

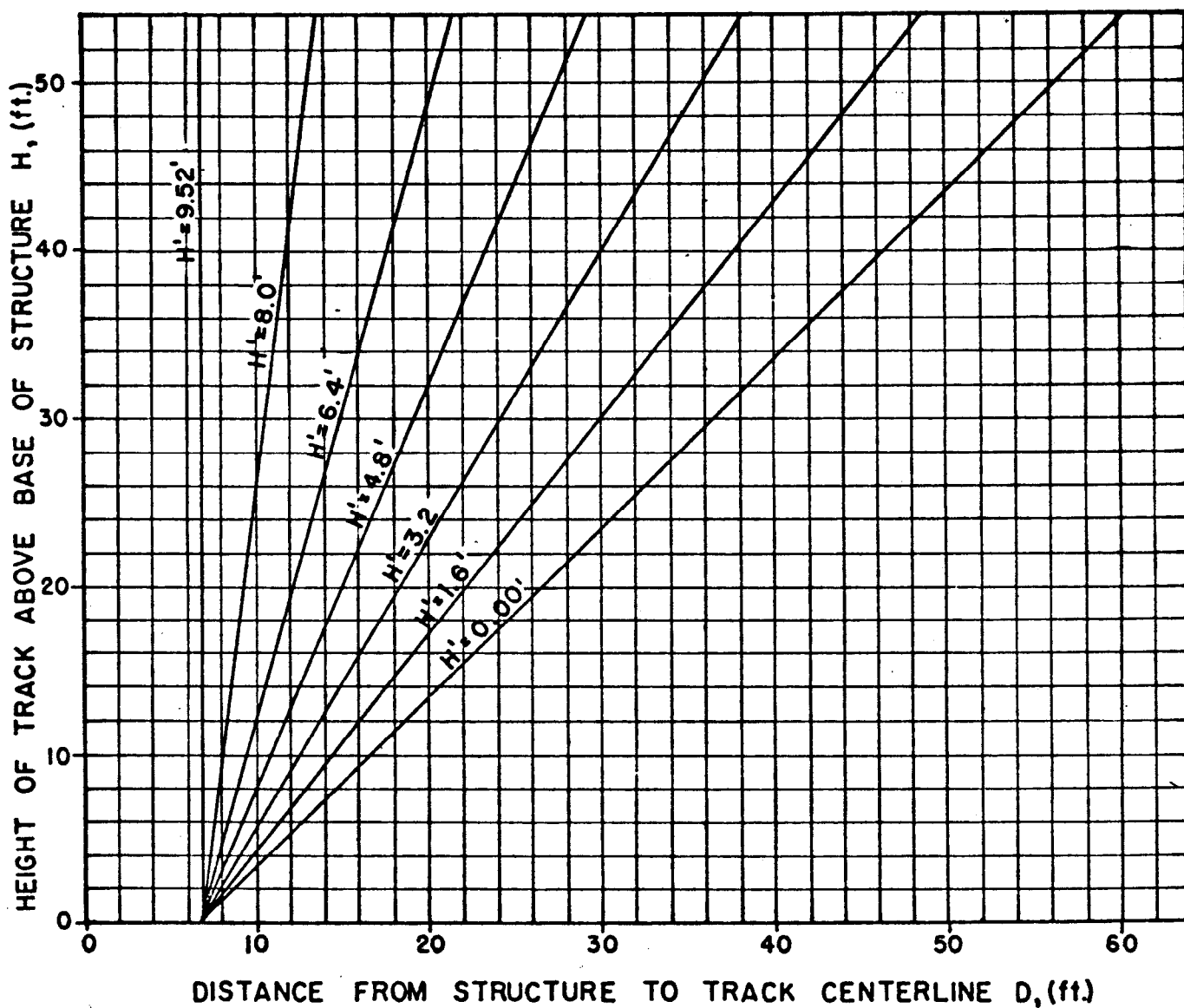
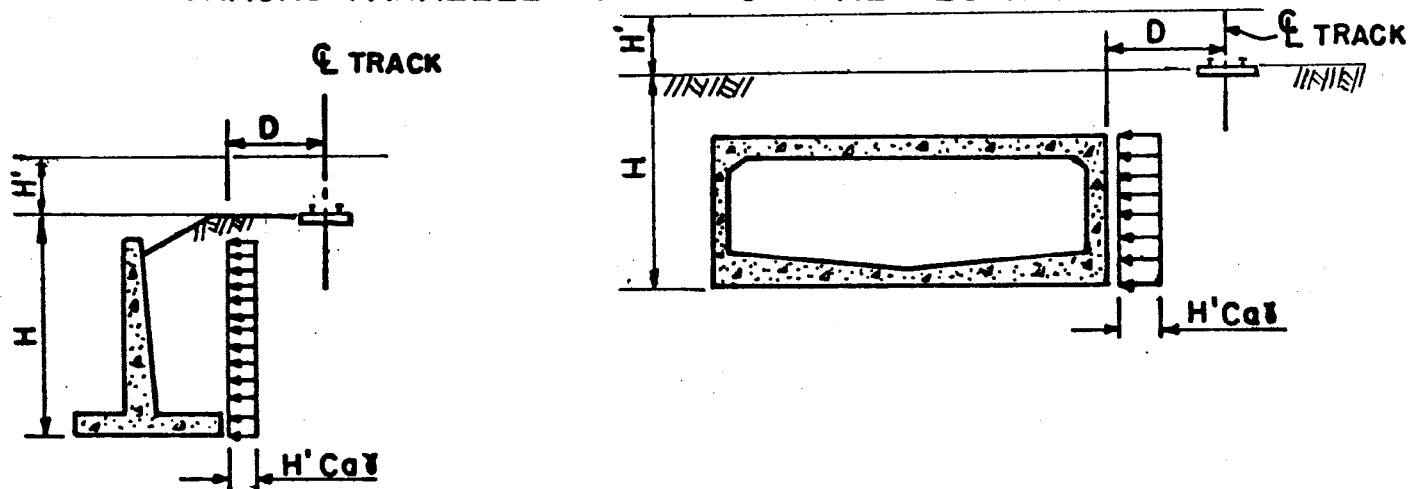


Figure H 374.2D

Calculation of L. L. SURCHARGE:

$$H' \text{ max.} = \frac{P}{s \times b \times \gamma} = \frac{80,000 \#}{5' \times 14' \times 120 \text{pcf}} = 9.52'$$

H' = live load surcharge

P = E80 axle load in lbs.

s = axle spacing in feet

γ = unit weight of backfill in lbs./ft.³

b = transverse distribution of axle load in feet

C_a = active earth pressure coefficient

Ratio side loads when other than E80 Railroad loads are appropriate.

It is necessary to consider the effect of only one track in computing the LL surcharge. The exceptional case of tracks closer than 7' can be generally ignored since the increase in surcharge is minor.

Impact loads are not applied to side walls (AREA).

Refer also to Figure H374.2C