

Example 20.1 (cont'd)

Calculations and Discussion

Code Reference

4. Design moments:

Positive and negative factored moments for the slab system in the direction of analysis are plotted in Fig. 20-14. The negative design moments are taken at the faces of rectilinear supports but not at distances greater than $0.175\ell_1$ from the centers of supports.

13.7.7.1

$$\frac{16 \text{ in.}}{2} = 0.67 \text{ ft} < 0.175 \times 18 = 3.2 \text{ ft} \text{ (Use face of support location)}$$

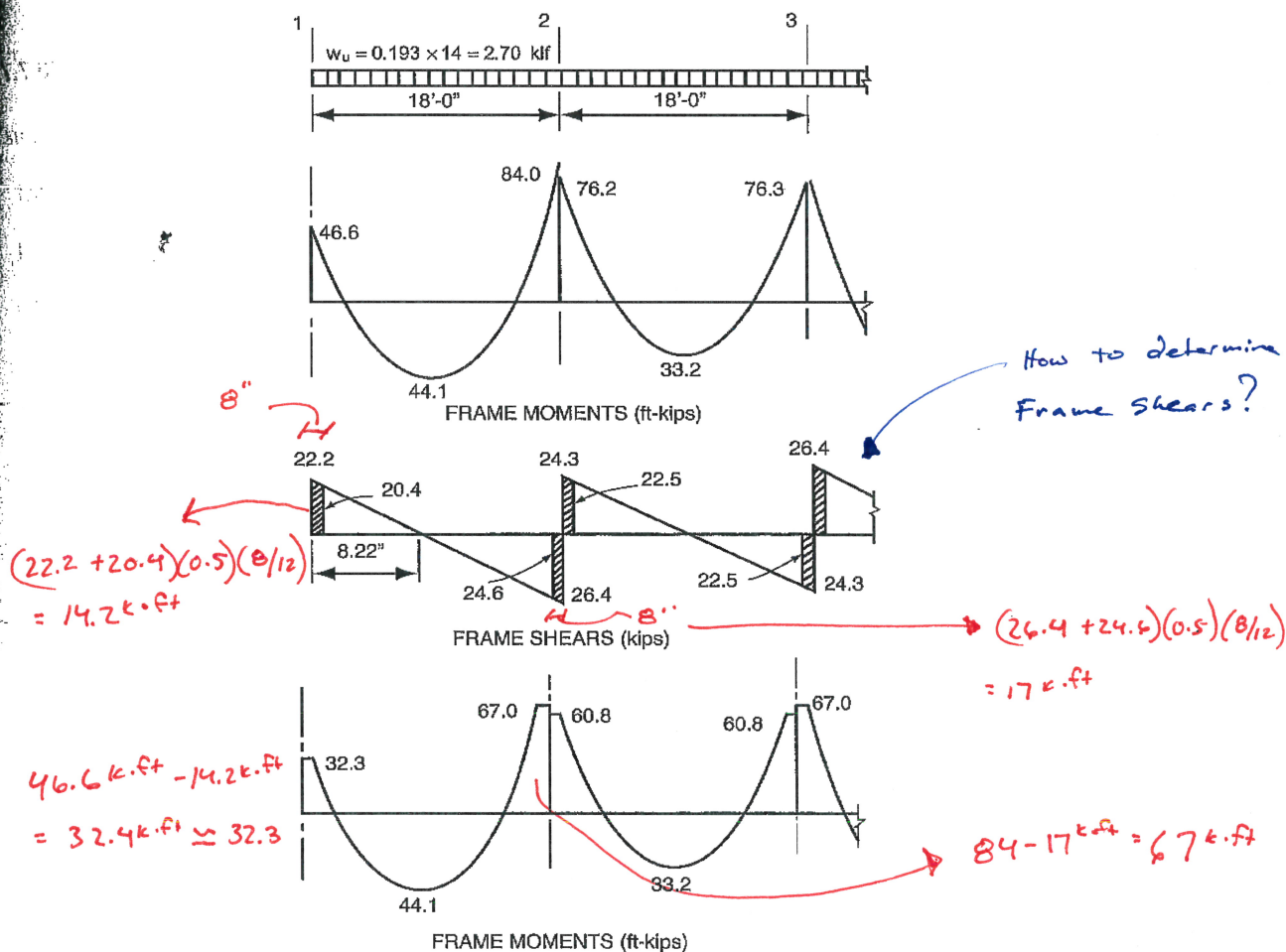


Figure 20-14 Positive and Negative Design Moments for Slab-Beam
(All Spans Loaded with Full Factored Live Load)

5. Total factored moment per span:

Slab systems within the limitations of 13.6.1 may have the resulting moments reduced in such proportion that the numerical sum of the positive and average negative moments need not be greater than:

13.7.7.4