

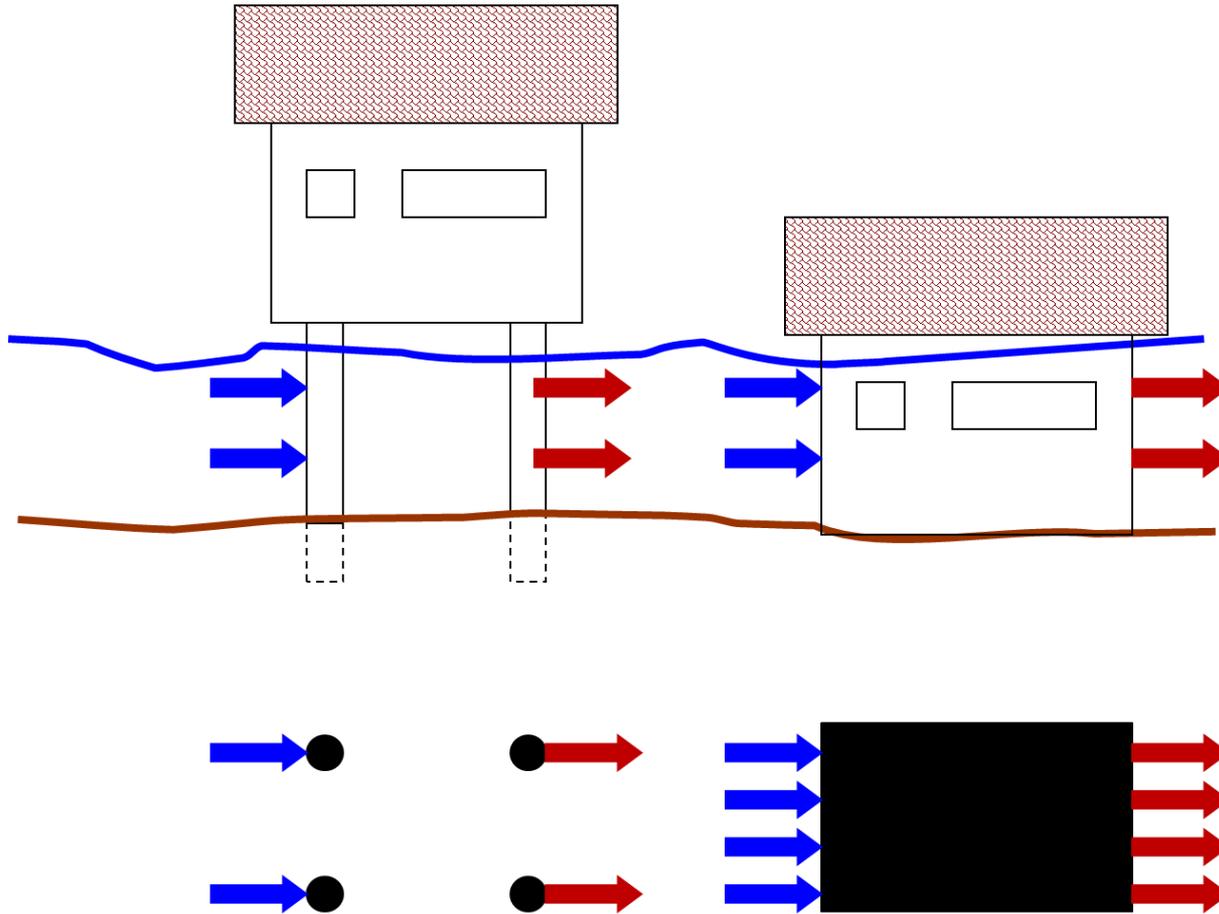
Fall 2018 Las Vegas

Constructability of Elevating Concrete Slabs on Grade

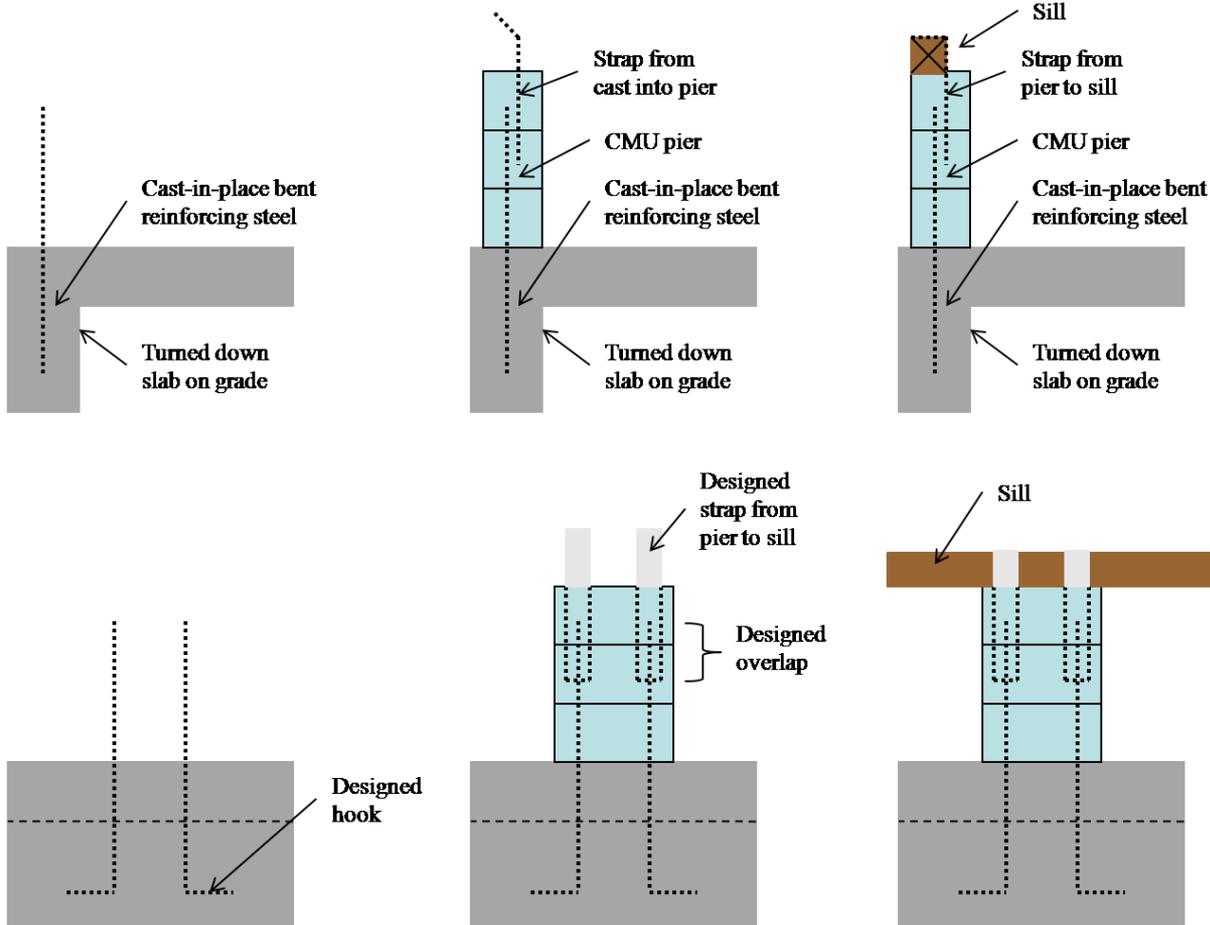
Dr. Tony Lamanna, DrTony@asu.edu



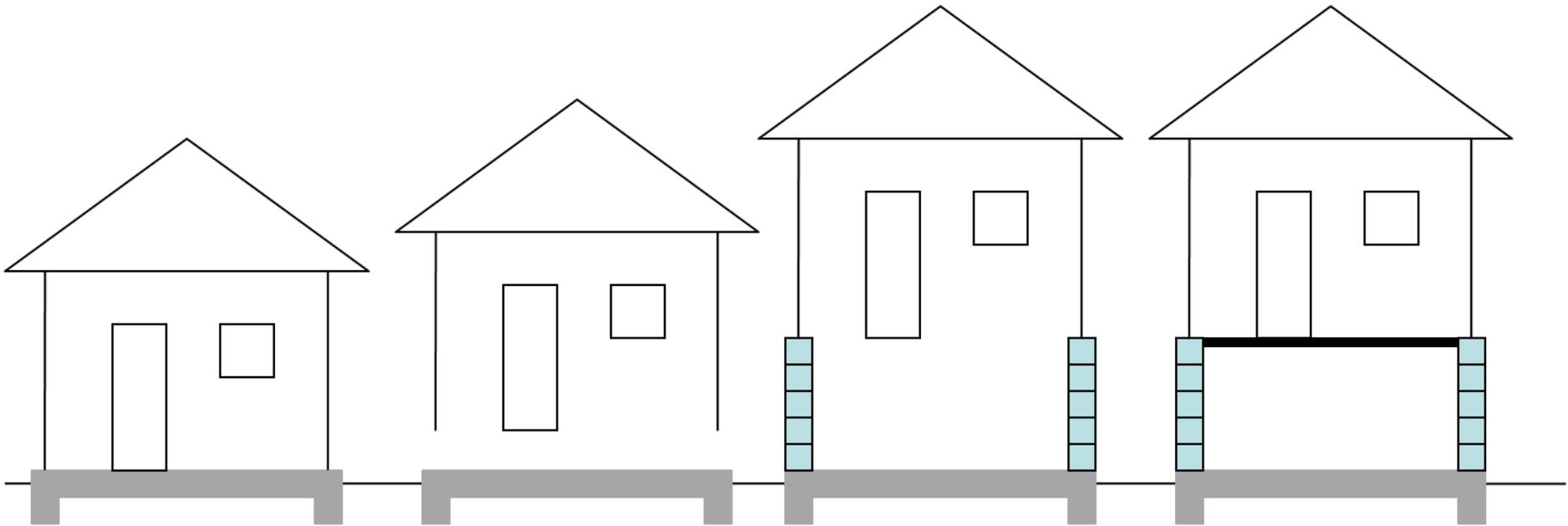
Lateral forces from moving floodwater



Typical foundation connections



Slab separation method



Slab separation method



Slab separation method



Slab separation method



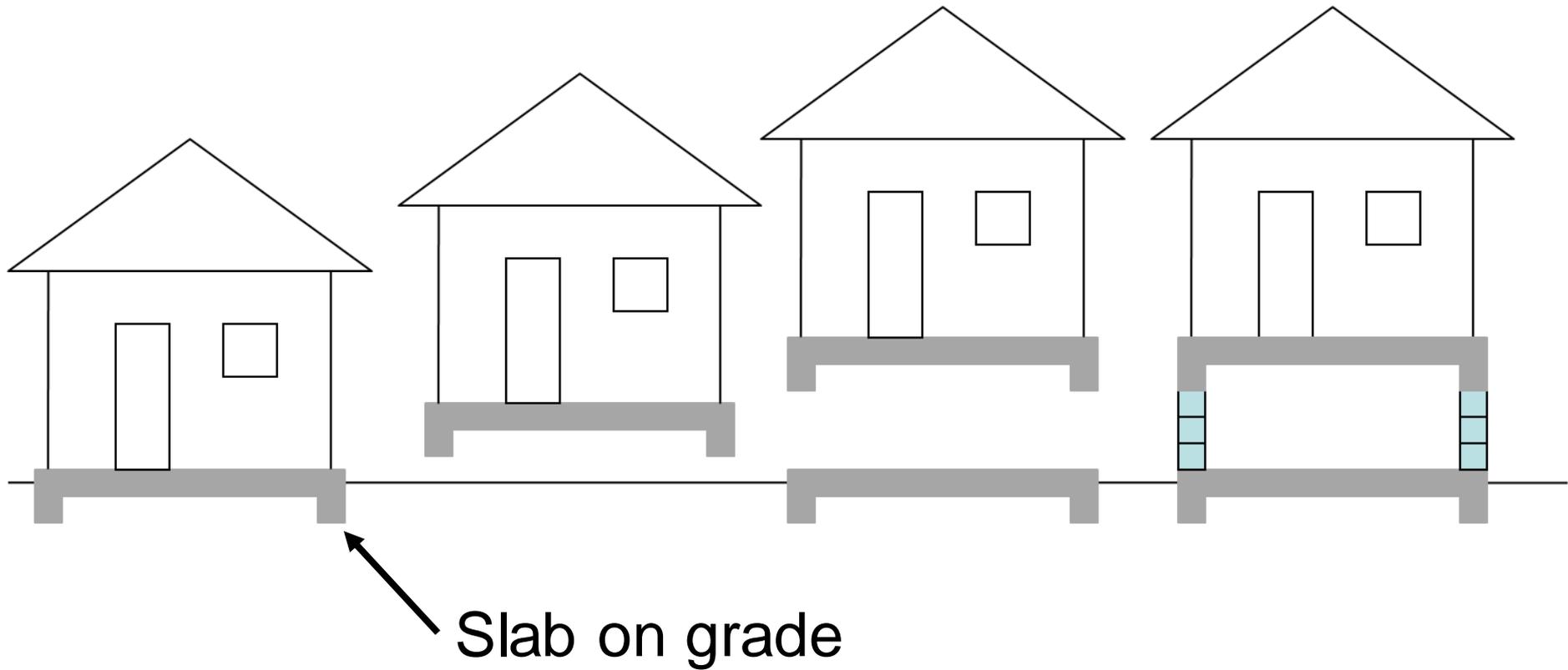


Slab separation method



The Concrete Convention
and Exposition

Slab elevation



Slab elevation



Slab elevation - FEMA

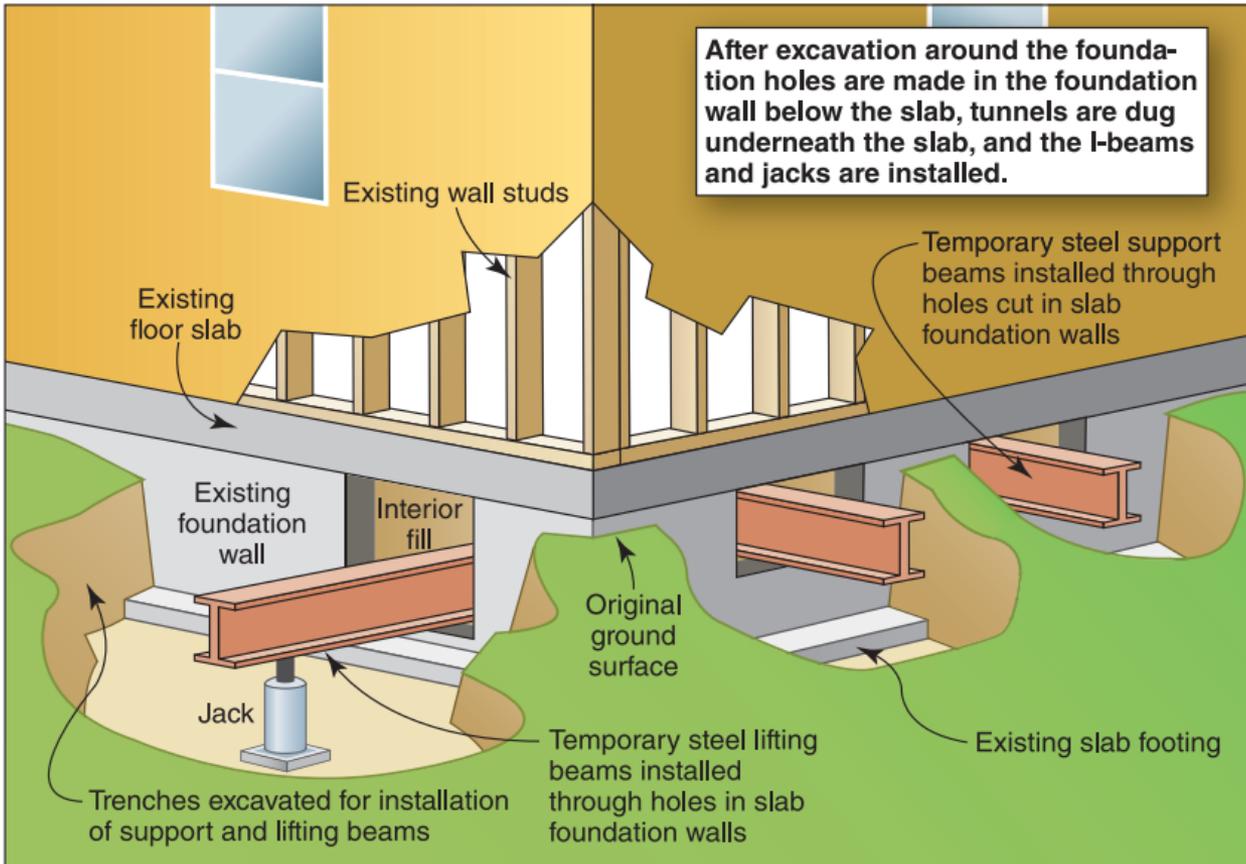


Figure 5-9a through 5-9d. Elevating a slab-on-grade home with the slab attached.

FEMA, Homeowner's Guide to Retrofitting, p. 5-13

Slab elevation – safety issues



http://media.nola.com/hurricane_katrina/photo/house-collapsejpg-594f2450adfab69.jpg

Slab elevation – unsupported spans



Slab elevation – unsupported spans



Slab elevation – bearing areas



Slab elevation – prestressing tendons



Slab elevation – hydraulic jack placement/slippage



Slab elevation – “crack repair”



Slab elevation – “crack repair” anchor stick-out





Questions?

We built that.

Del E. Webb
School of Construction



ASU Ira A. Fulton Schools of
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