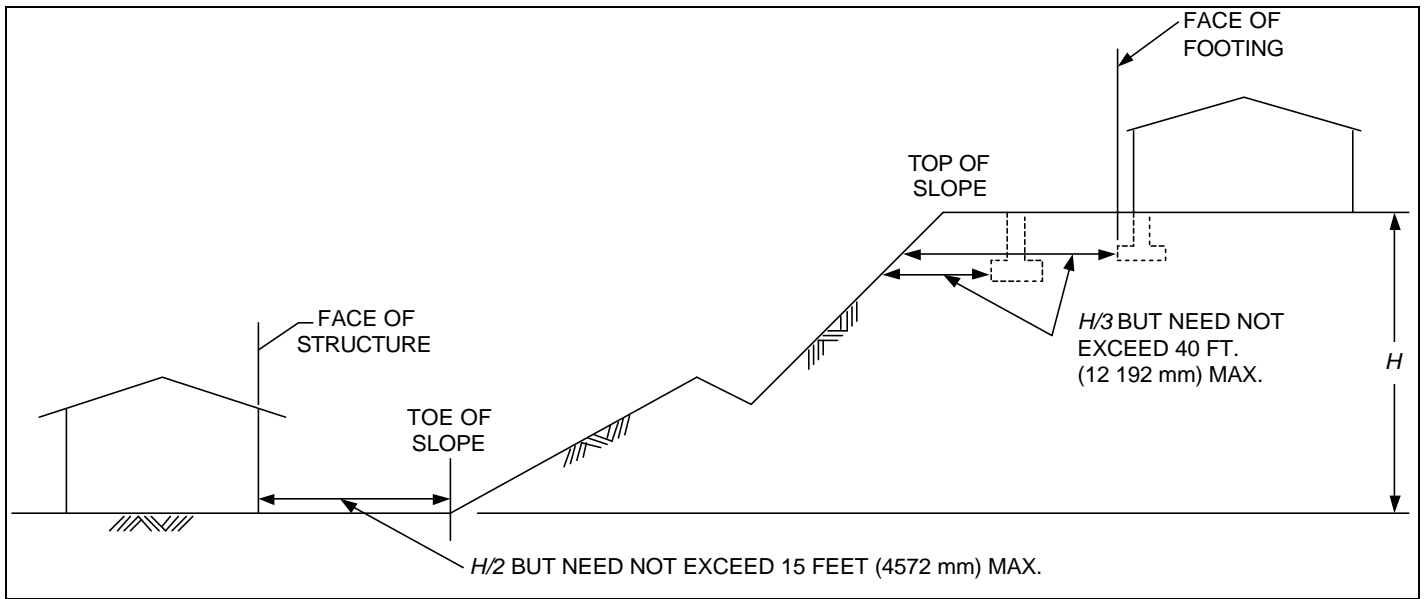


## FOOTINGS ON OR ADJACENT TO SLOPES

The placement of buildings and structures on or adjacent to slopes steeper than 3 horizontal to 1 vertical shall be in accordance with this section. Clearance and setback requirements according to this section are illustrated below. *Setback distances are measured to the soil bedrock contact plane or slope face if it is an approved compacted fill.*



**FIGURE 18-I-1 SETBACK DIMENSIONS**

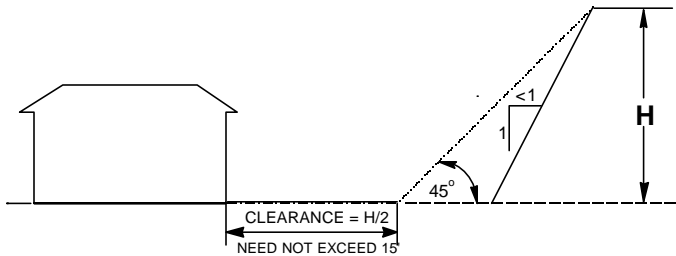
**Section 91.1806.5.6** Alternate setback and clearance. Recommendations by a licensed geotechnical engineer may be used if a foundation investigation report addressing the reduced setback has been approved by the Department.

The diagram shows a building on a slope with a 1:3 slope. A horizontal dimension line labeled 'D' indicates the setback distance from the toe of the slope to the building. The text below the diagram states: Distance "D" = H/3.

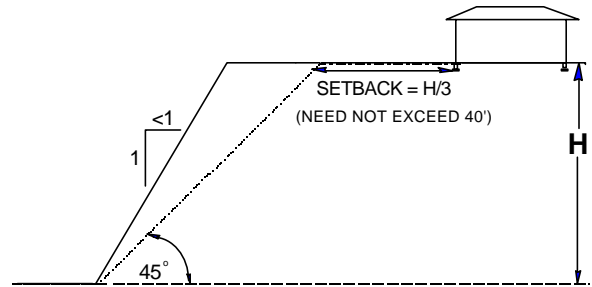
**Section 91.1806.5.2** Building clearance from ascending slopes. Steeper than 3 horizontal to 1 vertical, buildings are required to be set back from slopes a distance of one-half of the slope height from the toe of the slope to the building.

The diagram shows a building on a slope with a 1:3 slope. A horizontal dimension line labeled 'CLEARANCE = H/2' indicates the distance from the toe of the slope to the building. Below this line, it says 'NEED NOT EXCEED 15''. The text above the diagram states: Steeper than 3 horizontal to 1 vertical, buildings are required to be set back from slopes a distance of one-half of the slope height from the toe of the slope to the building.

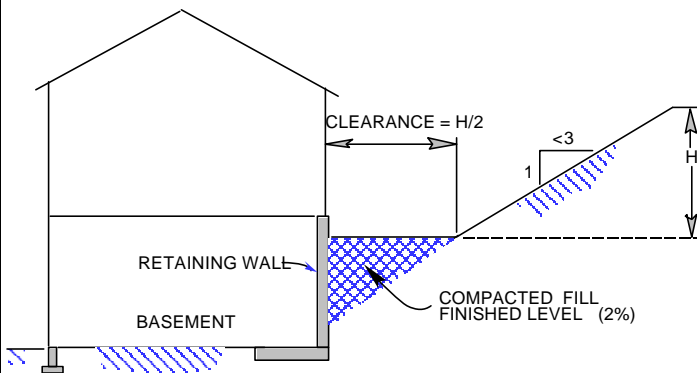
**Section 91.1806.5.2** Building clearance from ascending slopes  
 Where the slope is steeper than 1 horizontal to 1 vertical, the toe of the slope shall be assumed to be at the intersection of a horizontal plane drawn from the top of the foundation and a plane drawn tangent to the slope at an angle of 45 degrees to the horizontal.



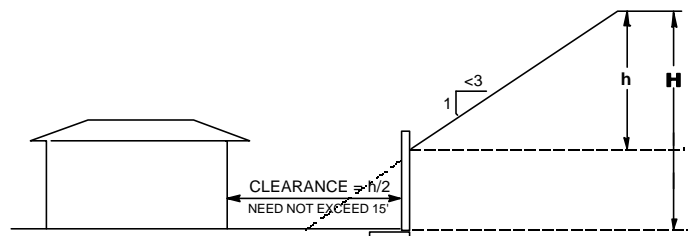
**Section 91.1806.5.3** Footing setback from descending slope surface. Where the slope is steeper than 1 horizontal to 1 vertical, the required setback shall be measured from an imaginary plane 45 degrees to the horizontal, projected upward from the toe of the slope.



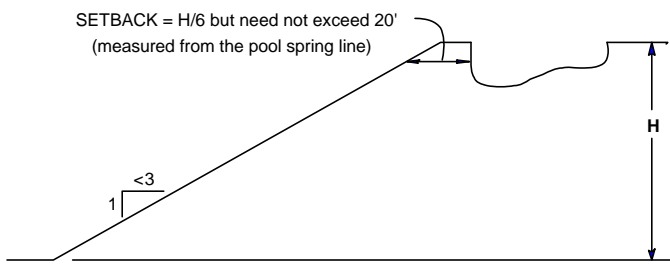
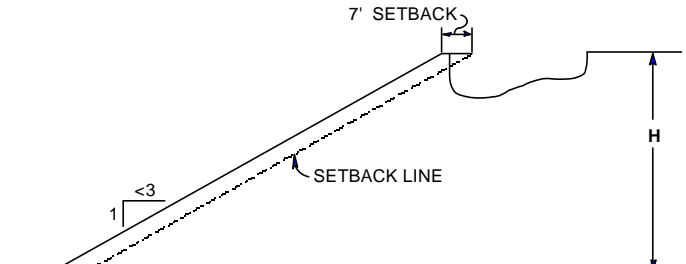
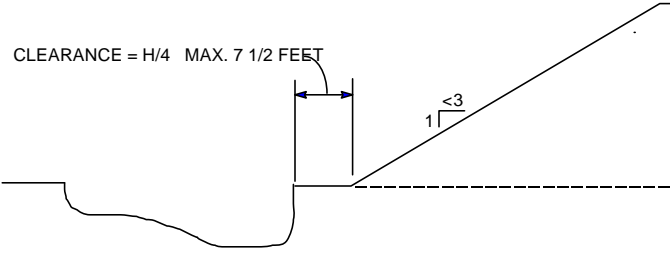
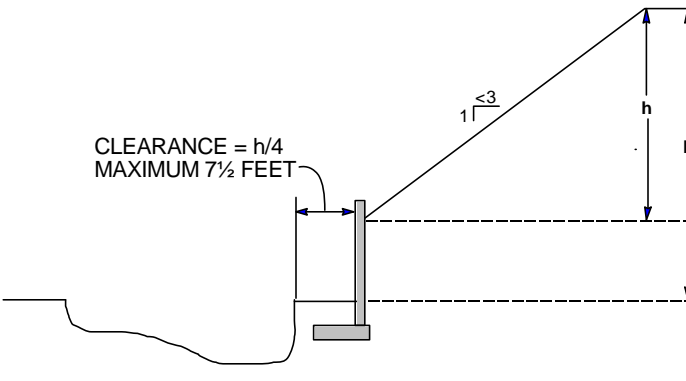
Approved compacted fill against a retaining wall may be used to provide building clearance.



**Section 91.1806.5.2** Building clearance from ascending slopes. Where a retaining wall is constructed at the toe of the slope, the height of the slope shall be measured from the top of the retained earth behind the wall to the top of the slope.



The following illustrations show a variety of conditions for pools adjacent to a slopes steeper than 3 horizontal to 1 vertical but less than 1 horizontal to 1 vertical.

<p><b>Section 91.1806.5.4 Pools.</b> The setback between pools regulated by this code and slopes shall be equal to one-half the building footing setback distance required by this section.</p>  <p>SETBACK = <math>H/6</math> but need not exceed 20'      (measured from the pool spring line)</p>	<p>That portion of the pool within a horizontal distance of 7 feet from the top of the slope shall be capable of supporting the water in the pool without soil support.</p> <p>When the pool is located within the 7' setback area, a free standing design is required.</p>  <p>7' SETBACK</p> <p>SETBACK LINE</p>
<p>Pools at the toe of ascending slopes have one half the required clearance for buildings.</p>  <p>CLEARANCE = <math>H/4</math> MAX. 7 1/2 FEET</p>	<p>Pool clearance may be provided by a retaining wall used to reduce the slope height</p>  <p>CLEARANCE = <math>h/4</math>      MAXIMUM 7 1/2 FEET</p>

**NOTE:** The pool clearance dimension is measured to the outside of the pool shell not the inside finished surface.