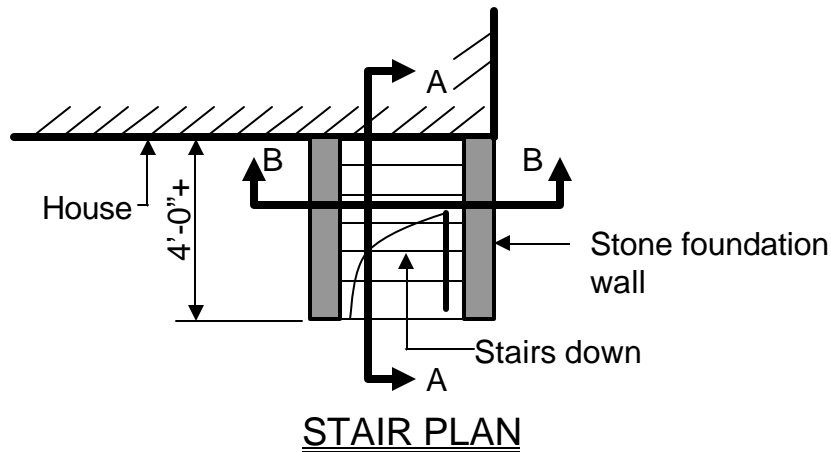


The Kennedy family own an older house located on 15 Second Street in Delhi. Their basement stairs is constructed within exterior foundation walls made of stone. These walls are in very bad condition, and there is real concern that they will cave-in. A plan view of the stairs is shown below, and photos are attached.



**REQUIRED:**

Working either individually or in PAIRS only, prepare the following:

1. Draw an as-built **plan** and **sections “A-A” and “B-B”** views of the stairs, (using AutoCAD) plotted at no smaller than  $\frac{3}{4}'' = 1'-0''$  scale. Be sure to ALL information, including ALL dimensions, sizes, materials and all other existing information.
2. Develop at least two (2) different possible “fixes” of the wall. One of the “fixes” can be a total replacement of the existing stone walls. For both of your two proposed “fixes”, prepare a **one-page written narrative**, including 3D sketches, explaining **HOW and WHY the fix would work**. Keep economy and ease of construction paramount. Be sure to include detailed step-by-step procedures of how to accomplish the fix.
3. For both “fixes”, prepare a **plan and sections “A-A” and “B-B” views of the proposed fixes** (using AutoCAD) plotted at no smaller than  $\frac{3}{4}'' = 1'-0''$  scale with enough information such that it can be actually constructed.



**Photo 1 – View from outside looking down stairs**



Badly deteriorated  
stone foundation  
walls

**Photo 2 – View from basement looking up stairs**



**Photo 3 – View looking down stairs**