**Collocated LINE and AREA Sources – Readme**

The LINE source was added to AERMAP v.24142 and is an elongated AREA source with simplified definition parameters. AERMAP should extract the same elevation for a LINE source and a collocated equivalent AREA source if the two sources are defined correctly. The figure below illustrates the collocated LINE and equivalent AREA sources with different orientations, lengths, and widths modeled in the testcase.

In AERMOD, the LINE source is defined by the two endpoints (black dots in the figure) of the line and the line width. These same parameters are required by AERMAP. Based on the orientation of the LINE source, AERMAP will extract the elevation at the red dot calculated using the two endpoints and the width of the line.

In AERMOD, the AREA source is defined by a single point, length, width, and angle. However, in AERMAP, only the single point at which the elevation will be extracted needs to be defined. The point specified should also be the location of the red dot of the equivalent AREA source.

