

193C—11.6(542B) Measurements.

11.6(1) Measurements shall be made with instruments and methods capable of attaining the required accuracy for the particular problem involved.

11.6(2) Measurements as placed on the plat shall be in conformance with the capabilities of the instruments used.

11.6(3) The unadjusted closure for all closed traverse surveys shall be not greater than 1 in 5,000 and, for subdivision boundaries, 1 in 10,000.

11.6(4) In a closed traverse, the sum of the measured angles shall agree with the theoretical sum by a difference not greater than 30 seconds times the square root of the number of angles.

11.6(5) The unadjusted error of field measurements shall not be greater than 1 in 5,000.

11.6(6) The relative positional tolerance at the 95 percent confidence level shall be as follows:

a. For subdivision boundaries: $\pm(0.13 \text{ feet} + 1:10,000)$

b. For all other land surveying: $\pm(0.26 \text{ feet} + 1:5,000)$

11.6(7) Bearings or angles on any property survey plat shall be shown to the nearest one minute; distance shall be shown to the nearest one-tenth foot.