

11 AAC 53.120. Technical survey standards

The technical standards in this section control specific survey procedures.

(1) Mean high tide

(A) in the case of unoccupied and unimproved tide and submerged lands not seaward of an incorporated municipality, the line of mean high tide must be determined in accordance with (B) - (D) of this subsection and used as the landward boundary; in the case of occupied and improved tide and submerged land, either the original meander line established before statehood or the line of mean high tide, whichever is the higher, must be reestablished or determined and used as the landward boundary line;

(B) for tideland surveys abutting any U.S. survey made after the date of statehood or in any location where no upland survey exists, the line of mean high tide must be determined by using National Geodetic Survey bench marks (or any other bench marks that have been established from that source), and the tide table datum; the upland boundary need not follow this line exactly, but may follow in a "meander" or "average" line of mean high tide; each end of the boundary must be established on the elevation of mean high tide;

(C) if no National Geodetic Survey bench mark exists within one mile of the property being surveyed, the surveyor may, by using the tide tables for the immediate body of water and applying tidal readings he has taken, determine the line of mean high tide; and

(D) in some cases, such as salt or mud flat areas where the average grade of the beach is one percent or less, and where determining the elevation of the line of mean high tide could create a lengthy horizontal distance, the director may nevertheless require that the true line of mean high tide be established using the procedures of (B) of this paragraph, regardless of the distance from a known bench mark.

(2) Ordinary High Water Mark. This is to be determined by observing and marking the place on the bank or shore up to which the presence and action of water are so prolonged as to impress on the bank or shore a character distinct from that of the bank or shore with respect to vegetation and the nature of the soil.

(3) Vertical Control. Vertical control must be established by utilizing National Geodetic Survey bench marks or tidal readings, in accordance with survey instructions issued by the division.

(4) Horizontal Control. The latitude and longitude positions, as established by the National Geodetic Survey, must be used to coordinate the survey to all other surveys in the area and to the rectangular cadastral survey in accordance with the class of accuracy assigned under sec. 110 of this chapter to the type of survey. If no such officially recognized horizontal control exists within two miles of a survey, the latitude and longitude may be derived from a set (or sets) of celestial observations. These observations must be done as set out in the Manual of Survey Instructions (1973) prepared by the United States Department of the Interior, Bureau of Land Management. If this is done, a true copy of the field notes and calculations of the observations must be presented to the division, together with the survey plat.