BUREAU OF LAND MANAGEMENT

Areas

With John Farnsworth

2009



CADASTRAL SURVEY

Areas

As land values increase, it becomes important to report more accurate acreage. John Farnsworth is going to explain how this edition of the Manual addresses that issue.

I am going to be discussing an area in Chapter 9 that deals with more accurate calculation of areas. But first, I want to take an overall look at the areas of GLO and BLM plats. You have to understand that these areas are calculated at the mean ground elevation of the survey. So if you are using projection based on sea-level distances you will not be able to duplicate the areas shown on the GLO or BLM plat. For instance, the 640-acre section could have four or five tenths of an acre difference at 6,000 feet elevation as compared to a computation at sea-level elevation.

Now this Manual has a procedure of showing more exact acreage in sections. This is done by creating a tabular list on the plat that shows more accurate acreage after a resurvey is performed. I want to emphasize what would be after a resurvey. We are not going to go back to use this procedure to re-calculate acreage on original GLO plats because we do not have better measurements to utilize for that calculation. In this procedure, and after it has been done and shown on the plat, the aliquot parts are still determined in a future field survey by the same section subdivision procedure.

So let us go ahead and look at a plat of one of these surveys. This is the entire plat of a survey and you can see on the right hand side though maybe not very well, the land and lines of a survey. In the upper left hand corner, we have a tabular box. Let me zoom into this a little closer. This is the entire tabular listing that shows aliquot parts and acreages for all of the government areas on this plat. We will zoom in even a little bit closer than that. You can see for Section 9 on the left, you have a listing of the aliquot parts and on the right you have the more accurate acreage calculation. So for instance, in the top one, in the northeast of the northwest quarter is 40.40 acres.

This northeast of the northwest is still an aliquot part and will still be subdivided and surveyed by the same section subdivision procedures. This more exact acreage reporting determined after dependent resurvey can be now displayed on BLM plats at the discretion of a BLM State Office Cadastral Chief.

By avoiding the creation of a new lot from aliquot parts, these aliquot parts can still be further subdivided by the normal section subdivision methods. Subdivision of a lot requires creation of a supplemental plat or a field survey. This more exact acreage reporting determined after dependent resurvey can be now displayed on BLM plats at the discretion of a BLM State Office Cadastral Chief. By avoiding the creation of a new lot from aliquot parts, these aliquot parts can still be further subdivided by the normal section subdivision methods. Subdivision of a lot requires creation of a supplemental plat or a field survey.

