

## MAP OF SURVEY

SURVEY EAST LINE OF SECTION 3 & SUBDIVISION OF SECTION 10, T17S, R31E, WM

## NARRATIVE OF SURVEY

## Purpose of Survey

The purpose of the survey was to establish section lines and subdivide Sections 3, 10, 16 & 17, T17S, R31E, WM, into aliquote parts to delineate Forest Service lands from private by monumenting all found controlling corners, monument new corners established by survey and marking the property lines with steel fence posts set at a maximum interval of 250 feet with Property Boundary Signs attached.

## Survey History

The subdivision of T17S, R31E, was surveyed by S. W. Lackland, US Deputy Surveyor, under Joint Contract No. 384 dated March, 1881. In 1975, Joseph Miles, PE 3735, on Grant County Map of Survey No. 360 described the NE corner of Section 3. Robert Baggett, PLS 598 and Grant County Surveyor, monumented this corner in August, 1981 as shown on Grant County Map of Survey No. 779. The NW corner of Section 17 was set by me in June, 1986, as shown on Grant County Map of Survey No. 935.

In 1979, the Bureau of Land Management did a survey which set all the section, quarter and exterior sixteenth corners for Sections 11, 15 and other adjacent sections. It was recorded as Grant County Map of Survey No. 752 in February, 1983, however, this survey was suspended in July, 1986, because I found some original corner evidence that was not found in 1979. See the Survey Evaluation below for additional details.

## Survey Method

The survey method used was random closed traverse that included all the found and monumented corners. Property lines were posted by offsets from the random traverse to the true line. A solar observation was taken to establish a basis for bearings. Horizontal angles were measured to the right and doubled. The horizontal distance was measured from both ends of the line and averaged if the difference was less than 0.10 foot, otherwise, the distance was checked to determine the cause of the discrepancy.

### Equipment Used

The instrument used was an OMNI Total Station with a built-in data collector. Data was transferred to a TRS-80 Model 100 computer with a FICDISC disk drive which reduced the data, balanced the traverse, if within the survey standards specified in the contract and Oregon state law, and executed all computations. Traverse data and computations were printed out on an Epson MX 100 printer. The data and all point coordinates have been saved on disk or cassette tape. A staff compass and 75' steel tape were used to determine the distance and bearing to most of the BTs.

## Survey Evaluation

While I was doing the research for this current survey, I found the NE corner of Section 16 as monumented by the BLM did not relate well to other found evidence. On checking the BLM plat, it was found the distance from the SE corner of Section 16 to the NE corner was about 3 chains short. Neither of the quarter corners to the east and south of the NE corner had been found by the BLM surveyors. I decided to search for and found the two quarter corner stones firmly set and clearly marked with 1/4. The finding of these two corners further substantiated that the section corner was in error. The original notes called for a 16x12x5 in stone with a 40" pine bearing S15°E, 29 links and a 38" pine bearing S8°W, 388 links for the NE corner of Section 16. One of the two bearing trees was still standing and alive, but it was difficult to determine which one it was because their bearing and size being nearly the same and the section scribing was not clear. The two possible locations of the missing BT fell in relatively undisturbed areas using the distances of record, but no evidence whatsoever could be found of that missing BT. At about 290 links, S15°E, from the BT was a fence corner with a guy wire. This fence corner checked very well with all other found evidence to be the probable section corner position. If this position was the true corner, then the second bearing tree location falls in the road which was an old railroad grade. I told Phillip Griffin, BLM surveyor working in the area, that I believed the original corner stone would be found with the guy-wire wrapped around it and buried alongside the fence corner. Mr. Griffin found the stone as suggested and monumented the corner at that point. The BLM remonumented all the corners that were affected by these findings, but they have not submitted a new map of record at the time of preparing this map. Therefore, the BLM distances between their monuments were not available to place on this map.

The north quarter corner of Section 16 presented another problem. The original field notes state that "A pine 36 in. dia. bears S21°W, 158 lks dist." This tree was found dead and down with a good scribed blaze. However, when this BT is carefully inspected it was found the scribed blaze faces northwesterly rather than northeasterly. When the distances were compared to the adjacent found corners and topographic calls found in the original field notes, they support a S21°E bearing to the bearing tree instead of the S21°W. The distance difference along the section line between these two bearings is about 75 feet. I have found it to be a common error for the early surveyors to have recorded the wrong compass quadrant. Based on all the facts found, I used the the S21°E bearing to set the corner monument.

### LEGEND

### 1/4 Corners Set by Found Evidence

Section &amp; 1/4 Corners Previously Set

**C1/4 Corners Set by Survey**

1/16 Corners Previously Set

1/16 Corners Set by Survey

### Posted National Forest Boundary Lines

NF Boundary Not Posted This Survey

### Section Lines

Center Section Lines

### Projected Lines

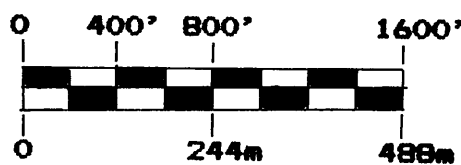
### Legal Subdivision of USFS Property

**Record Bearing & Distance in Parentheses**

Certified Corner Record Index No.  
See Corner Restoration Records

Monuments Set by This Survey are 2" Aluminum Pipes with 3 1/4" Aluminum Caps

Basis for Bearings  
Solar Observation  
Assumed Magnetic Declination  $18^{\circ} 30'E$



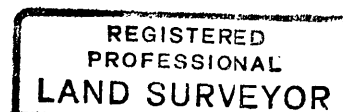
NARRATIVE OF SURVEY continued

The CERTIFIED RECORDS OF LAND CORNER MONUMENTATION as recorded in the office of the Grant County Surveyor indexed on these maps and as shown on Map 2 the Proof of Recording for each corner set by this portion of the survey are hereby made a part of this narrative to provide detailed corner information. All recorded documents for this project contain the Forest Service contract number as shown in the CERTIFICATION as a cross reference and identifier for this survey.

Respectfully submitted this 9<sup>th</sup> Day of March,  
1987.

## CERTIFICATION

I, Leland Lee Myers, a Professional Land Surveyor registered in the State of Oregon, office located at 587 E. Auburn St., P.O. Box 98, Sumpter, OR 97877, do hereby certify that I did perform this survey October 17 to November 19, 1986, as a contractor at the request of the USDA-Forest Service by Rail Cadastral Survey Contract No. 53-04H1-5-0125N. and that the information shown hereon is correct to the best of my knowledge.



*Leland Lee Myers*  
OREGON  
JULY 9, 1961  
LELAND LEE MYERS  
699

