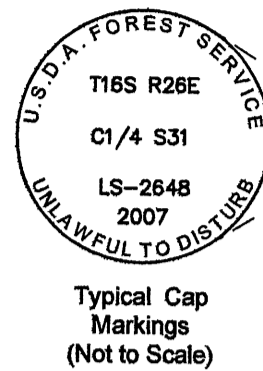


# Record of Survey

## Willow Pine Cadastral Survey

### Ochoco National Forest

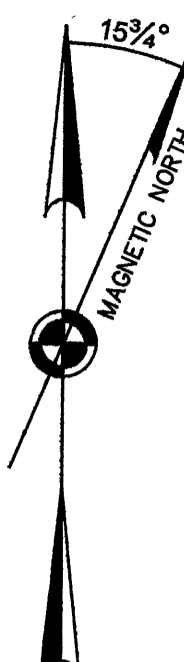


### LEGEND

- ⊗ Found standard BLM (Grp. 359) monument, a 2 1/2 ins. diam. iron post with a 3 3/4 ins. diam. brass cap, as described in the Records of the Grant County Surveyor, unless labeled otherwise then Monument Record filed separately with the Grant County Surveyor.
- ⊗ Cadastral monument of record NOT recovered this survey.
- Found monument set by Palmer (MS 62), a 2 1/2 ins. diam. galvanized post with a 2 1/2 ins. diam. brass cap. Monument Record filed separately with the Grant County Surveyor.
- Found monument set by Cook (MS 350), a 2 1/2 ins. diam. galvanized post with a 2 1/2 ins. diam. brass cap. See Narrative and Monument Record filed separately with Grant County Surveyor.
- ⊕ Positioned in compliance with the BLM Manual of Survey Instructions, 1973, at proportionate positions and intersection points. Set a 3 3/4" aluminum cap on 2 1/2" diam. by 30" long aluminum post, with clear DEEP-1 magnet (see Note 9) at base, unless noted otherwise. Monument Record filed separately with the Grant County Surveyor.
- ( ) Record calls, in chains, from GLO Contract Nos. 189 & 206, approved October 26, 1874.
- (1) Record informational calls, in chains, from BLM Group No. 359, accepted May 1, 1962.
- (2) Record informational calls, in chains, from MS 62.
- (3) Record informational calls from MS 350.

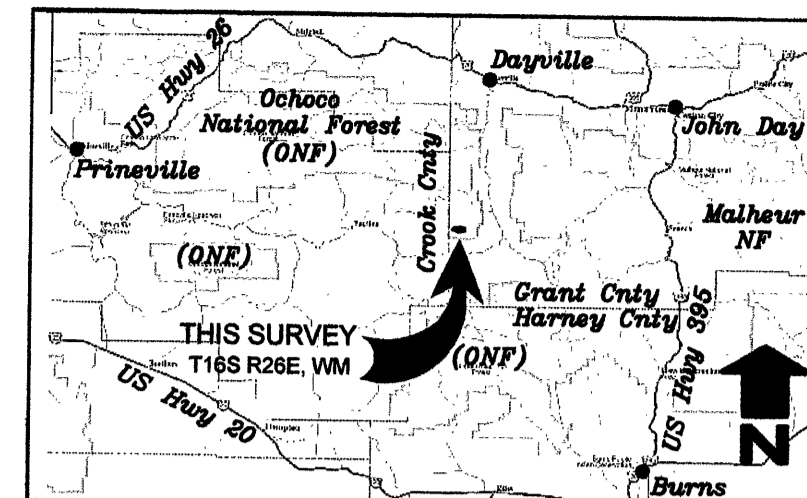
Survey line Posted - USFS signs (////// NFSL side) and Blazed.

National Geophysical Data Center 2007



### REFERENCE MATERIAL

- Deed References:**  
n/a
- County Surveys:**  
Map of Survey No. 58  
Map of Survey No. 62  
Map of Survey No. 350
- Other Material:**
- GLO Field Notes and Plat of Contract No. 189, by Jasper W. Wilkins, and Contract No. 206, by Alonzo Gesner, approved October 26, 1874.
  - BLM Field Notes and Plat of Group No. 359, by C. Albert White, approved May 1, 1962.
  - Monument Records filed with the Grant County Surveyor.
  - No Title Report was supplied or utilized for this survey.



### VICINITY MAP

Based on DeLorme XMap 4.5  
Scale: 1" = ± 30 miles

### NARRATIVE

**Purpose:**  
This survey was performed under Deschutes National Forest Contract No. AG-04GG-D-07-0045, dated September 20, 2007. Maria D. Gonzalez, USFS, is the Contracting Officer (CO), William B. Ham, LS, USFS, is the Contracting Officers Representative (COR), and Walter F. Miller, LS, USFS, is the Alternate COR. The CORs provided technical support and consultation.

The purpose of this survey is to reestablish lines of cadastral survey and subdivide sections shown hereon, not to establish deed lines, except as lines of ownership may follow cadastral lines. No Title Report, deeds, or legal descriptions were supplied or employed in support of this survey. This survey posted and marked portions of Ochoco National Forest (ONF) Boundary as delineated by ONF within said contract. Ownership shown hereon is as depicted on the Grant County Assessor's Map and is shown for informational purposes only.

**History:**  
The west boundary of Township 16 South, Range 26 East, WM, OR, was originally surveyed by Jasper W. Wilkins, under Contract No. 189, Field Notes approved December 1, 1873. The south boundary and subdivision of said township was originally surveyed by Alonzo Gesner, under Contract No. 755, approved October 26, 1874.

Portions of the 3rd Standard Parallel South and the south, east and west boundaries, and a portion of the subdivisional lines of said township were resurveyed by C. Albert White, BLM Cadastral Surveyor, under Group No. 359, accepted May 1, 1962, and filed with the Grant County Surveyor (GCS) as Map of Survey (MS) No. 58.

Portions of Township 16 South, Range 26 East, including secs. 30, 31 and 32, were resurveyed and secs. subdivided by Marcellus A. Palmer, LS 350, in 1964, for the Ochoco National Forest, and filed with the GCS as MS 62.

Portions of sec. 32 was resurveyed and subdivided by George J. Cook, LS 540, in 1974, for the Ochoco National Forest, and filed with the GCS as MS 350.

**Procedure:**  
On MS 62 Palmer monumented positions described as the center-quarter and the center-north sixteenth of sec. 31. On MS 350 Cook monumented a position described as the center-east sixteenth of sec. 32. Said three monuments are found by this survey significantly out of proper position as determined by ties to exterior sec. cors. The methodology shown on the Palmer and Cook records establishing these three erroneously monumented corners are correct. The actual field locations of these monuments reflect obvious blunders in positioning. The blunders are random and inexplicable. There are no recorded recovery and use of the erroneously monumented positions by subsequent surveys. There are no signs of occupation, i.e., fences, roads or other improvements, indicating use of the erroneously monumented positions. This survey does NOT accept the three erroneously monumented positions. This survey monuments the proper positions of said three cors. as shown hereon. Palmer monumented the center-west sixteenth of sec. 31 based on the erroneous position of the center-quarter. Palmer's monument for the center-west sixteenth is NOT accepted by this survey. The proper center-west sixteenth cor. position is calculated and shown hereon. The found monument set by Palmer is marked AM. These findings have been reviewed and discussed with Forest Service Land Surveyors and BLM Cadastral Surveyors, who concur with the resolution shown hereon.

The Certified Record of Land Corner Monumentation for the center-quarter cor. of sec. 32, filed with the Grant County Surveyor, correctly describes positioning at the intersection point of opposite quarter-section cors. MS 62 does not reflect the method used to establish the point adequately. The position monumented by Palmer is ACCEPTED. All other recovered monuments were accepted as undisturbed except by the ravages of time.

This survey was performed as defined in the Department of Interior, Bureau of Land Management, Manual of Survey Instructions '73 (Manual), USFS Cadastral Survey Specifications, Oregon Revised Statutes (ORS), and followed the "Standards and Guidelines for Cadastral Surveys using Global Positioning System Methods, Version 1.0, March 31, 2001, as adopted by the US DOI Bureau of Land Management and USDA Forest Service". Lines shown as Posted were posted with six foot galvanized channel posts, with National Forest boundary signs attached, at intervals less than 250 feet.

This survey was performed by a combination of NAVSTAR GPS and conventional ground survey methods. Trimble and Ashtech dual frequency carrier-phase receivers were used to establish control and monument positioning. A Nikon Total Station (3 sec. angular, 2mm+2ppm EDM) and TDS data collector were utilized for conventional ground surveys. All monumented positions are within closed GPS networks, a conventional closed traverse, or with benefit of redundant measurements. Trimble Geomatics Office software was used for least squares adjustment, at the two sigma level, of survey data.

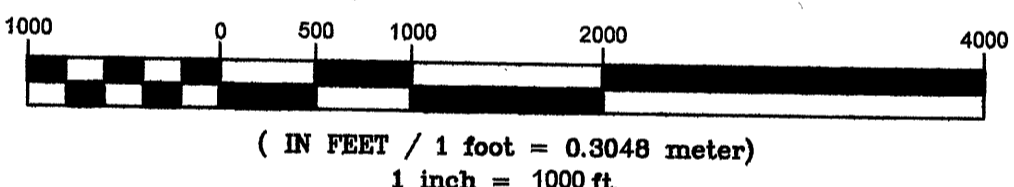
The geographic position shown hereon was derived by static GPS methods and is controlled by observation data uploaded to the U.S. National Geodetic Survey (NGS) Online Positioning User Service (OPUS), which utilized Continuously Operating Reference Stations (CORS'96, epoch 2002); REDMOND (REDM), GOLDENDALE (GOBS) and SENECA 1 (ORS1).

**Basis of Bearing:** The Basis of Bearing was derived from GPS observations. Plane Coordinates were calculated on a false meridian, and zero convergence angle, at the center-quarter cor. of sec. 32, and then converted to ground bearing and distances with a project scale factor of 1.0002356212.

### NOTES

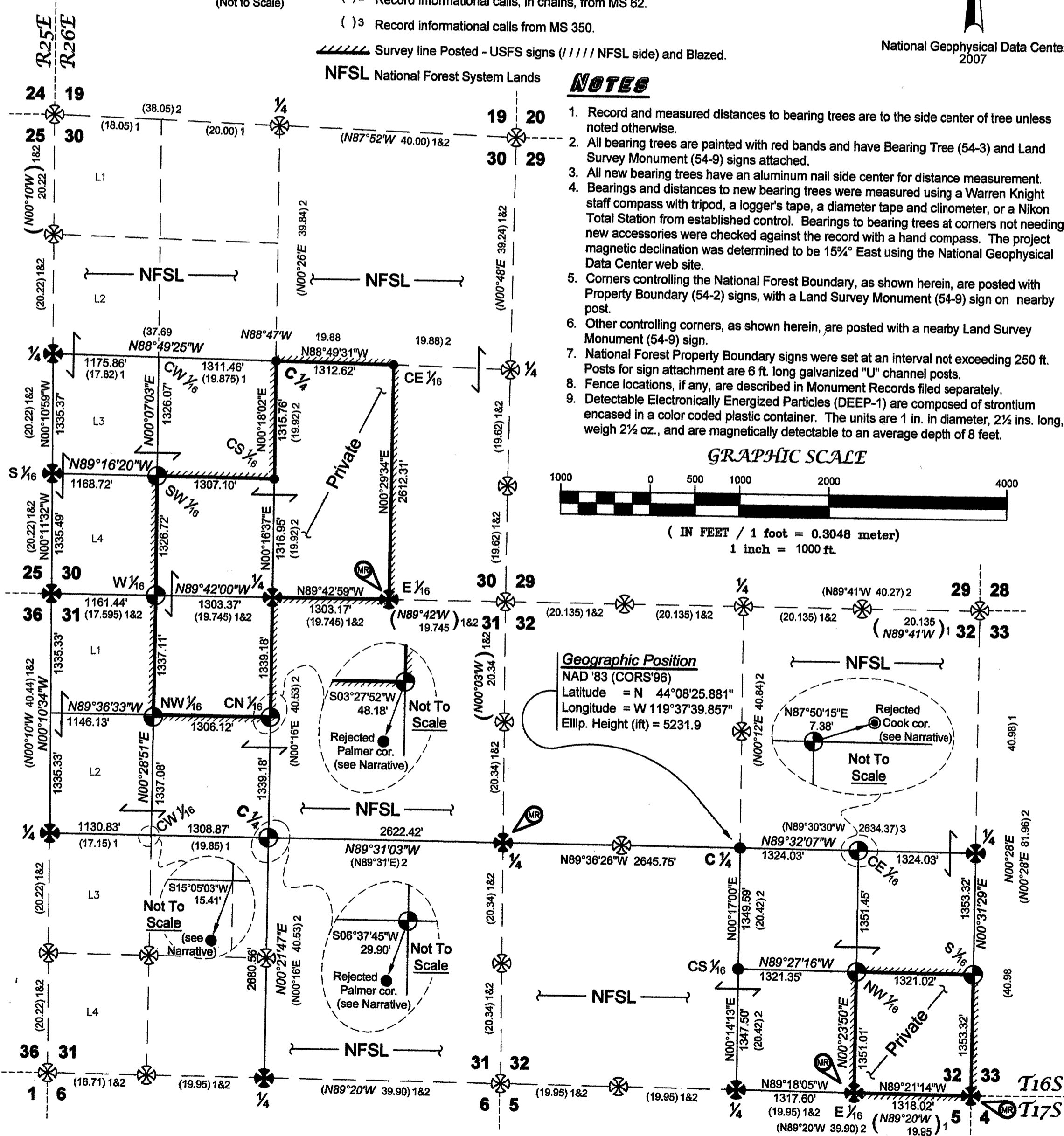
1. Record and measured distances to bearing trees are to the side center of tree unless noted otherwise.
2. All bearing trees are painted with red bands and have Bearing Tree (54-3) and Land Survey Monument (54-9) signs attached.
3. All new bearing trees have an aluminum nail side center for distance measurement.
4. Bearings and distances to new bearing trees were measured using a Warren Knight staff compass with tripod, a logger's tape, a diameter tape and clinometer, or a Nikon Total Station from established control. Bearings to bearing trees at corners not needing new accessories were checked against the record with a hand compass. The project magnetic declination was determined to be 15 1/2° East using the National Geophysical Data Center web site.
5. Corners controlling the National Forest Boundary, as shown herein, are posted with Property Boundary (54-2) signs, with a Land Survey Monument (54-9) sign on nearby post.
6. Other controlling corners, as shown herein, are posted with a nearby Land Survey Monument (54-9) sign.
7. National Forest Property Boundary signs were set at an interval not exceeding 250 ft. Posts for sign attachment are 6 ft. long galvanized "U" channel posts.
8. Fence locations, if any, are described in Monument Records filed separately.
9. Detectable Electronically Energized Particles (DEEP-1) are composed of strontium encased in a color coded plastic container. The units are 1 in. in diameter, 2 1/2 ins. long, weigh 2 1/2 oz., and are magnetically detectable to an average depth of 8 feet.

### GRAPHIC SCALE



### Geographic Position

NAD '83 (CORS'96)  
Latitude = N 44°08'25.881"  
Longitude = W 119°37'39.857"  
Ellip. Height (ft) = 5231.9



RECEIVED AND FILED  
FEB 19 2008  
OFFICE OF COUNTY SURVEYOR  
Grant County, Oregon  
Attest: [Signature]

REGISTERED PROFESSIONAL LAND SURVEYOR  
Ron Walter  
OREGON  
JANUARY 18, 1994  
RON C. WALTER  
2648  
Renewal Date: June 30, 2008

<b>Ochoco National Forest Willow Pine Cadastral Survey</b>		
LOCATED WITHIN Sections 30, 31 and 32 Township 16 South, Range 26 East Willamette Meridian, Grant County, Oregon		
<b>Wallowa Associates</b> 303 S.E. Alamo Street Enterprise, Oregon 97828 (541) 426-9049		
SCALE 1" = 1000'	SHEET No. 1 of 1	DATE OF SURVEY Beginning: October 4, 2007 Ending: October 20, 2007
DRAWN BY RCW DATE 12/07	CHECKED RCW	PROJECT No. WA F402-02 / 1723