

# A PORTION OF "JUG CADASTRAL"

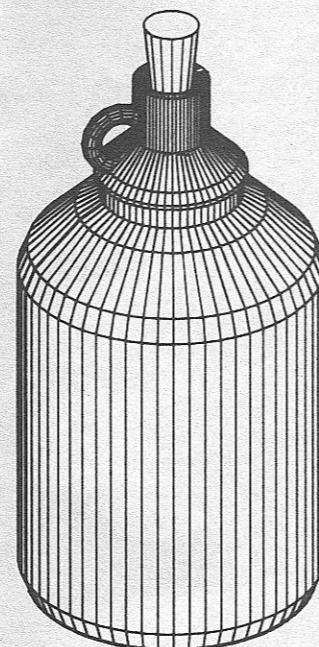
## SUBDIVISION AND DETERMINATION OF FOREST BOUNDARY IN SECTIONS 19 AND 20, T.5S., R.27E., W.M., MORROW COUNTY, OREGON.

Survey by: Douglas M. Ferguson, P.L.S. 848  
D. Mitchell Ferguson, Surv. Tech.  
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Reviewed by: Susan E. Newstetter, P.L.S. 2405

Drawn by: Kenneth H. Delano Jr., Surv. Tech.

For: U.S.D.A. Forest Service  
Umatilla National Forest.



### HISTORY OF SURVEYS

1879 - Everett A. Thatcher originally surveyed the west boundary of T.5S., R.27E., W.M., under G.L.O. Contract Number 325.

1881 - Edward W. Sanderson conducted the original subdivision of T.5S., R.27E., W.M., under G.L.O. Contract Number 417.

1886 - Fayette S. Munro, PLS 1832, remonumented certain original points, from evidence, under contract with the Umatilla National Forest.

### NARRATIVE

This survey was performed under contract for the Umatilla National Forest for the purpose of marking and posting the Forest boundary in Sections 19 and 20, T.5S., R.27E., W.M.

In order to perform this survey, the control survey was run through all of the controlling corners. In addition where corner search was required, the exterior section lines were retraced to assure the footsteps of the original surveyor were being followed.

Extensive search was conducted for the missing corners necessary for this project:

1/4 section corners S19|S20; S20|21; and S20|S29

Unfortunately no evidence was recovered at any of these corners.

At 1/4 S19|S20 the record was a 6" Fir corner tree and two fir BT's. Three different search areas were determined due to the fact that the overall distance on the section line was long by 87 feet. An extensive search was conducted in all three areas and those in between however no evidence was recovered. The search areas are a mass of down rotten wood. There is a location poster in the area, approximately 15 feet east of the proportion position, dated 11/12/56, RLG & TJD. However no evidence was found near or around this location poster. I declared this corner lost and re-established it's position by single proportion measurement based on the remonumented section corners (from original evidence) 1/2 mile north and south.

At 1/4 S20|S21 the record was a post and two small BT's. Again three different search areas were determined due to the fact that the north line of Section 20 is 306.74 feet shorter than record leading to a Z variation from cardinal along the east line of Section 20. To compound the problem the east line of Section 20 is 148.94 feet longer than record. Obviously some type of stubbing was going on in this area. Again we extensively searched all three areas, and those in between, which consisted mainly of rotten, dead and dying white fir. I believe all of the evidence has long since rotted away. I declared this corner lost and re-established it's position by single proportion measurement from the previously re-monumented, from original evidence, section corners 1/2 mile to the north and 1/2 mile to the south.

At 1/4 S20 the record was a 10" Fir corner tree and 2 small S29

Fir BT's. Three search areas were again determined and extensively searched. We did open two trees (one dead and one alive) in the hopes we had found the corner tree. However no evidence was found. Again the search areas consist of rotten, dead and dying firs. In addition, it appears a fire went through the area around 100 years ago. I believe the evidence has long since rotted away. I declared this corner lost and re-established it's position by single proportion measurement from the remonumented section corners (from original evidence) 1/2 mile east and west.

At section corner S17|S18, all four original bearing trees S19|S20

were recovered. However when their actual positions were tied and compared to the record there was quite a discrepancy. The record positions determine from the southeast BT and southwest BT fit together rather well, however the records from the northwest BT and northeast BT put the corner location in two different places, approximately 13 feet apart. I took the best fit from the southeast and southwest BT's and re-monumented the corner.

In reading Fayette Munro's record for the corners he remonumented from original evidence I found he was also faced with the same type of problem, i.e. record bearing and distance from recovered original bearing trees had some large discrepancies when compared to the found bearing trees.

At the recovered corner tree at section corner S19|S20 I set S30|S29

a witness corner, 10.0 feet north, on line, from the corner tree. All new bearing trees were taken to the original corner tree.

The positions for GLO Lots 1 and 2 in S19 were computed based on parenthetical distances determined from the original GLO plat.

The "Certified Record of Land Corner Monumentation" forms as referenced to this Map of Survey and the notes shown on the Map should be considered a substantial part of this Narrative as they contain the detailed information as to the evaluation of evidence and monumentation work performed.

The bearings for this survey are based on the positions of GPS points Jug 1 and Jug 2, established by the Umatilla National Forest in September 1991. The Umatilla National Forest provided me with the published Lambert positions (based on the 1983 State Plane Lambert/Oregon North Zone). I then reduced these positions to our local grid, utilizing the proper scale factors and bearing switch. A tie is shown to each of these GPS points from the nearest corner. The published positions are identified at each GPS point along with our final finding of their positions, shown in state plane coordinates. It should be noted that Jug 2 has been run over by a Cat sometime in the past. However we believe we were able to identify it's original position based on the bent over rebar. But it may have been disturbed, i.e. the ground shifted, as evidenced by the difference in the computed position and where we actually found it.

After all of the traverse loops in these two sections were computed, balanced and adjusted, the coordinates were rotated to the bearing (on our local grid) between Jug 1 and 2.

Positional control for this survey was provided by a closed traverse network. A Lietz SDM3E semi-total station was used to obtain measurements and field set monuments from the survey control. An HP Vectra QS/20 (IBM compatible 386) utilizing Wildsoft software was used to perform the computations and the Map was prepared utilizing AutoCad v.10. Field notes and computations are on file in the office of Ferguson Surveying and Engineering, Mt. Vernon, Oregon 97865.

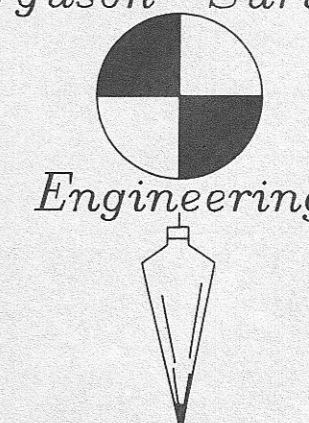
I, Douglas M. Ferguson, Registered Professional Land Surveyor, in the State of Oregon, hereby certify that this Map, notes and records hereon or referenced, are a correct representation of the survey I performed during the months of February-April 1992 for the U.S. Forest Service in accordance with the Statutes of the State of Oregon and the articles of my Contract Number 53-04R3-2-6.

DOUGLAS M. FERGUSON, PLS 848  
President, Ferguson Surveying and Engineering

### LEGEND

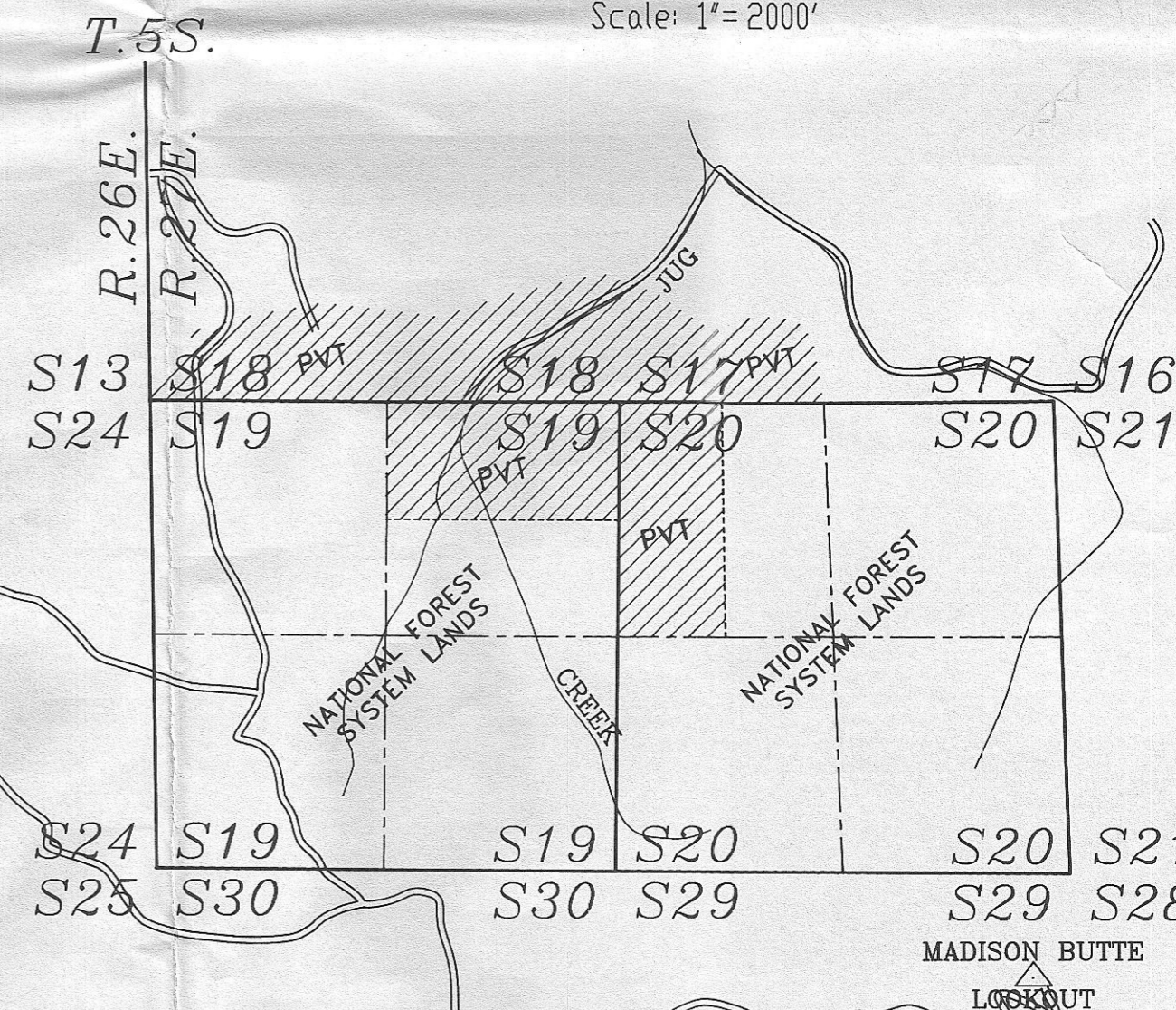
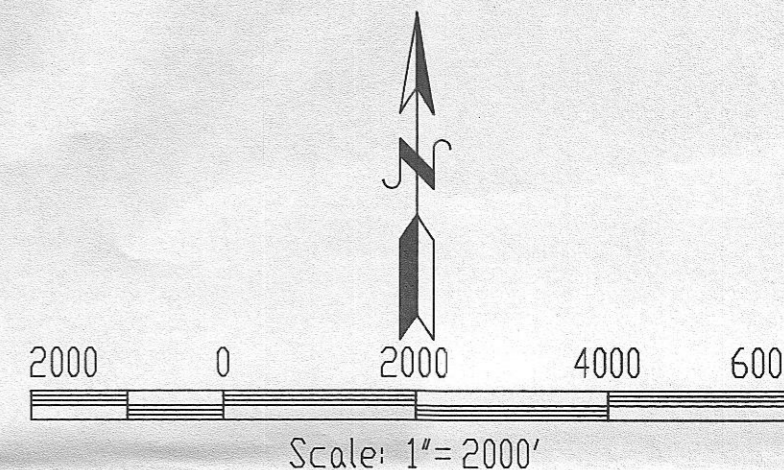
- Set 2-1/2' x 30' aluminum pipe with 3-1/2' aluminum cap, stamped as shown in the 'Monumentation' Section
- ⊙ Found acceptable evidence, set monument as described above
- Found monument of record, as described in the 'History' and notes at each corner.
- [ ] Record bearing and distance as reported by Everett A. Thatcher in 1879 under G.L.O. Contract No. 325
- ( ) Record bearing and distance as reported by Edward W. Sanderson in 1881-82 under G.L.O. Contract No. 417
- Exterior Section Lines
- - - Center Section Lines
- - - - Subdivisional Lines
- N.F.S.L. National Forest System Lands
- PVT. Private Land
- PVT. N.F.S.L. Marked Forest boundary with steel fence posts and Forest boundary signs at Maximum intervals of 300 feet.
- x-x-x Existing fence with long line showing direction
- ~ ~ ~ Existing road

Ferguson Surveying



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### VICINITY MAP



RECEIVED BY  
Morrow County Surveyor  
Date 7/9/92  
Rec'd By DL  
No. C-936-E

705-A  
REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON  
JULY 12, 1988  
DOUGLAS M. FERGUSON  
848

EXAMINED AND ACCEPTED FOR THE U.S. FOREST SERVICE  
THIS 17TH DAY OF JUNE, 1992  
SIGNATURE Dennis J. Gaylord  
C.Q.B.

I CERTIFY THAT THIS SURVEY WAS PERFORMED AT THE REQUEST OF THE UMATILLA NATIONAL FOREST  
SIGNATURE O. Stanley Cullen DATE 6-18-92  
FOR FOREST SUPERVISOR