SUBDIVISION AND DETERMINATION OF FOREST BOUNDARY IN SECTIONS 13 AND 14, T.5S., R.27E., W.M., MORROW COUNTY, OREGON.

Survey by: Douglas M. Ferguson, P.L.S. 848 D. Mitchell Ferguson, Surv. Tech. Rick Saul, Surv. Tech.

Reviewed by: Susan E. Newstetter, P.L.S. 2405

Drawn by: Kenneth H. Delano Jr., Surv. Tech. M. Chris Maynard

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

REFERENCES: JUG Field Books 2 and 3

HISTORY OF SURVEYS

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

1938 - Leonard Carter, GLO Public Land Surveyor, conducted a dependent resurvey along the east boundary of T.5S., R.27E., W.M., authorized by letter "E" 1676465 dated March 8, 1938 and Special Instructions dated March 23, 1938, Group 228.

NARRATIVE

This survey was performed under contract for the Umatilla National Forest for the purpose of marking and posting the Forest boundary in Sections 13 and 14, 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 corner search was conducted for the missing corners necessary for this project:

1/4 Section Corners: <u>S11</u>; <u>S12</u>; <u>S14</u>; S14|S13

Unfortunately no evidence was recovered at any of these

At 1/4 S11 the record was a post and two 10" fir BT's. The

search area at proportionate measure and surrounding area consists of dead, dying and rotten fir. I could find absolutely nothing and I believe the evidence has rotten away. I determined that this corner was lost and reestablished it's position by single proportionate measure from found section corners 1/2 mile east and west.

At 1/4 S12 the record was a post and 9" tamarack and 8" fir.

The search area for this corner falls in the south edge of a clear cut and I believe all evidence has been lost to logging. I re-established this corners position by single proportionate measure from section corners 1/2 mile east and

At 1/4 S14 the record was a stone 24"x9"x6" and two fir BTs.

I found several stones in the search area near record size, however I could find no marks nor could I find any evidence of the BT's. A fire has gone through the area and probably killed the BTs and they rotted away. However I cannot explain why I couldn't find the stone. Our measured distance across this section line finds it only short by 13.36 ft from record. With great reluctance I determined this corner was lost and re-established it's position by single proportionate measure between found section corners 1/2 mile east and west.

At 1/4 S14|S13 the record was a sandstone and two fir BTs, 8" and 30" diameters. In addition there was a topographical call to a creek 60 ft. north of the corner. My proportionate position placed the corner 30 ft. south of the creek. I searched both areas and those in between and could find nothing. The area is swampy and all the stones in the area are soft and falling apart. The original stone has either sunk in the swampy ground or the marks have worn off and I can't identify it. I found no trace of the original bearing trees. I had no choice except to determine this corner was lost and I re-established it's position by single proportionate measure between found section corners 1/2 mile north and south.

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 Edward W. Sanderson in 1881-82 under G.L.O. Contract No. 417

Exterior Section Lines

Center Section Lines

Subdivisional Lines

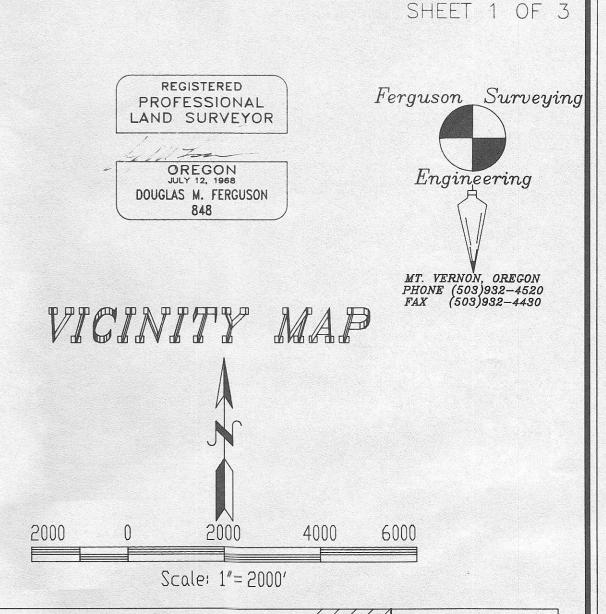
National Forest System Lands

Private Land

Marked Forest boundary with steel fence posts and Forest boundary signs at Maximum intervals of 300 feet.

Existing fence with long line showing direction

Existing road



In addition to searching for the above corners, I also conducted search for three different line trees. I recovered the remains of the record line tree south of 1/4 S15|S14. To perpetuate the line tree's position, I set a witness corner 10.0 feet north, on line, and established two bearing trees At the record call for the line tree south of section corner 11,12,13 and 14 I searched for the line tree however I failed

At the record call for a line tree north of section corner 13, 14, 23 and 24, I also searched for the line tree. In 1990 Dennis Gaylord, PLS 1636, tagged a tree he thought might be the line tree. However it does not have any hacks and I only see a scar on the NE face which could be caused by anything and is too low down on the tree. I tied this tree into my traverse and found it does not fit well in terms of bearing and distance; record was North 346.5 ft and this tree bears NO3'11'E, 324.05 ft. from the section corner. I do not believe that the tree Mr. Gaylord tagged was the bearing tree and I removed his tag.

to the line tree.

N.F.S.L.

PVT.

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.

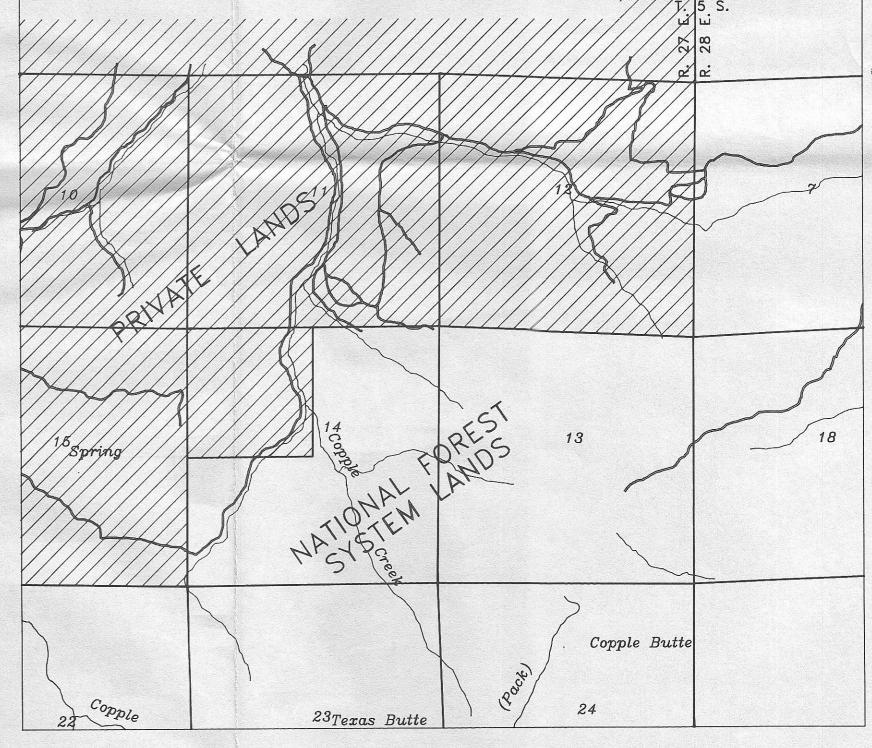
The basis of bearing for this survey was based on the positions of GPS points Jug 4 and Jug 5, established by the Umatilla National Forest in September 1991. The Umatilla National Forest provided me with the published Lambert positions (based on the 1983 State Plane Lambert/Oregon North Zone). I then 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.

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 4 and 5.

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



RECEIVED BY Morrow County Surveyor No. C-937-E 706-A

EXAMINED AND ACCEPTED FOR THE U.S. FOREST SERVICE DAY OF JUNE CERTIFY THAT THIS SURVEY WAS PERFORMED AT THE REQUEST OF THE UMATILLA NATIONAL FOREST SIGNATURE O. Stanley Cellina _DATE 6-18-92 FOREST SUPERVISOR