Peterson & Associates

Jim S. Peterson Land Surveyor 8155 NW Mitchel Dr. Corvalls, Oregon 97330 (503) 757-1794

Mike Gardiner Chief, Branch of Cadastral Surveys P.O. Box 2965 Portland, Oregon 97208

February 28, 1989

Dear Mike,

I am currently working on a contract with the USFS (Neskowin Cadastral) in Sections 3, 4, and 5 of T6S, R10W. My problem is with the position of the East and West 1/4 corners of Section 4, and the closing corner of Sections 3 and 4. I have thus far been unable to recover evidence of the original position of these corners.

The original notes (Albert Wilson-1890) call for the closing corners on the North line of this township to be 1.50 chains to 2.63 chains East of the standard corners. The actual distances between closing and standard corners that I have tied are 489 ft., 734 ft., and 770 ft. (see diagram). It therefore seems that Wilson's ties to standard corners are fictitious, and should not be used to reestablish the lost closing dorner of Sections 3 and 4.

Section 5-41 of the 1973 Manual states that restoration of such closing corners should be made "by the method most nearly in harmony with the official plat", but does not elaborate further.

It seems to me that this closing corner should be reestablished at the intersection of the township line and a mean bearing line from the SW corner of Section 3. The mean bearing could be determined using the line between Sections 4 and 5, and the line between Sections 2 and 3. The line between Sections 5 and 6 might also be used to determine a mean bearing.

Wilson's notes also call for the last mile running North into the township line to be 78.80 to 79.60 chains long. The actual lengths of the lines I have tied are 4833 ft., 4732 ft., and 4881 ft. (see diagram). The 1/4 corners on these lines are very close to 40 chains from the Section corners to the South. Therefore to reset missing 1/4 corners based on the record does not seem appropriate. (Would you consider using topog calls to help position the northings of the 1/4 corners?)

Near the 1/4 corner of Sections 4 and 5 there is a blazed line due North of the SW corner of Section 4. The blazes found are on old growth snags. There is also a blazed line (dated to 1930) at approximately NO1°30'E from the SW corner of Section 4. At 40 chains from said corner there are 2 fir trees with cruiser's marks. We have also recovered double blazed lines in other areas (none of which I believe to be original).



some recent survey history:

1) In 1950 Mervin Whitmore (USFS employee) retraced the North line of this township. He recovered the standard corner of Sections 33 and 34 (among others). He searched for but did not find the closing corner of Sections 3 and 4. He did find a wood post at 9.52 chains East of the standard corner, and a blazed line to the South. I did not find the wood post, but did find the blazed line (not original) to the South. This point is almost exactly North of the SW corner of Section 3. I do not feel that the wood post was a perpetuation of the original corner. Virtually all of Wilson's North-South lines are run 1 to 2 degrees to the NE, not North.

2) In 1967 Longview Fiber subdivided Section 3 (done by a licensed surveyor). He reestablished the closing corner of Sections 3 and 4 as per the original record. Considerable logging has been done along the lines so determined.

I would very much appreciate any direction you could give me on proper procedures to follow in these cases.

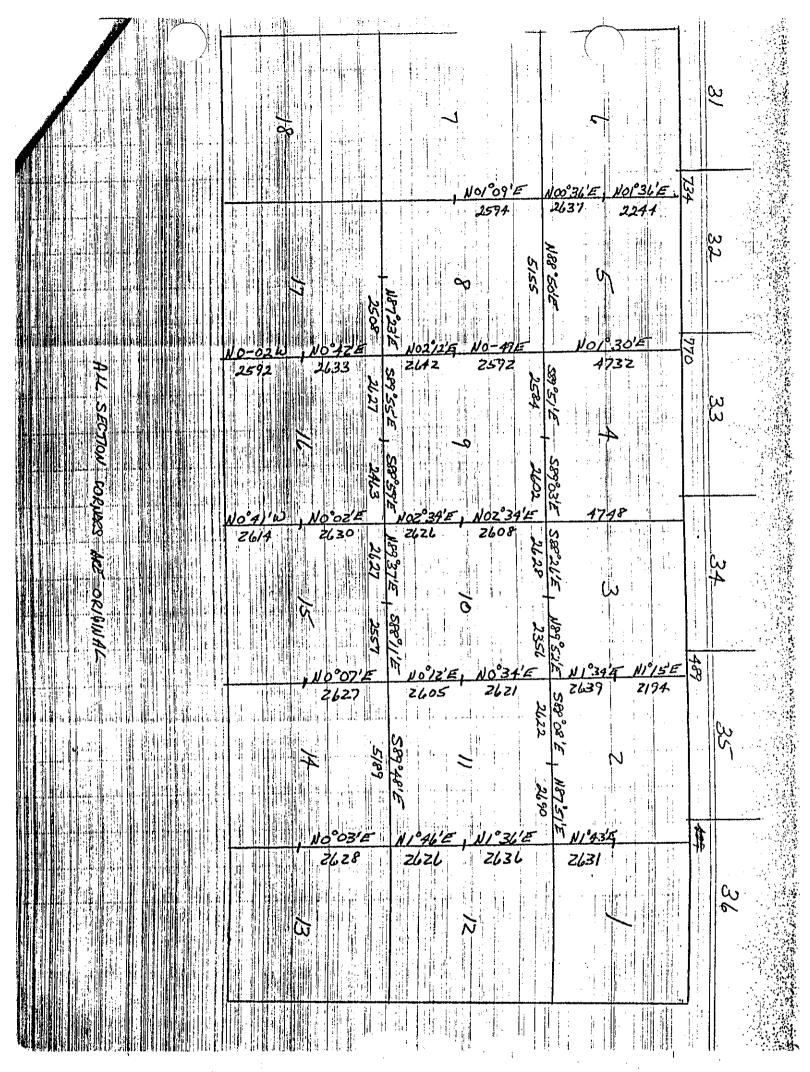
If I can provide you with any other information please contact me.

Thank you.

Sincerely

Jim S Peterson









United States Department of the Interior

BUREAU OF LAND MANAGEMENT OREGON STATE OFFICE P.O. BOX 2965 (825 NE MULTNOMAH STREET) PORTLAND, OREGON 97208



IN REPLY REFER TO:

9631 (942) Tillamook Co., OR

March 9, 1989



Mr. Jim S. Peterson Peterson & Associates 8155 NW Mitchel Drive Corvallis, OR 97330

Dear Mr. Peterson:

This is in reply to your letter of February 28, 1989, in which you have requested advice for reestablishing corners around section 4, T. 6 S., R. 10 W., Willamette Meridian, Oregon.

The situation at the closing corner of sections 3 and 4 was presented to this office in February of 1967 by Longview Fibre Company. The treatment of the closing corner and subdivision of section 3 by them was apparently based on an advisory letter from this office, copy enclosed.

You have pointed out some facts that could possibly warrant using non-standard procedures to restore the closing corner. However, it is important to remember that if this approach is taken, the procedure selected must be well justified and completely defendable. From our point of view, it would not be wise for us to now offer an opinion that is contrary to the 1967 BLM letter. This is especially valid because of the logging activities that have apparently taken place based on the former advice and the land ownership pattern.

Concerning the ½ section corner on the east and west boundaries of section 4, the 1967 BLM letter does not suggest using a restoration procedure that is non-standard. We therefore assume that the subdivision of section 3 by Longview Fibre Company was based on a position for the ½ section corner of sections 3 and 4 that was reestablished by a normal single proportion procedure.

The use of original topography calls to fix an original corner point, as you have proposed, is of course provided for by the Manual. However, the Manual is quite clear regarding which circumstances topography can be used for this purpose. It is the policy of our office to always use topography calls in corner search, use sometimes to substantiate a corner position, but use rarely to absolutely fix a corner point. We do not feel the Manual test for the

application of topography to fix a corner point is met in this situation. I faced with the case at hand, our office would in all probability utilize single proportionate measurement, which is intended to equally distribute measurement deficiencies and can be easily defended.

In summary, you have presented a situation where there is definitely a difference between the original survey and what you found on the ground. The various methods you mentioned to resolve the difference(s) might reestablish a position closely approximating the corner's original location, but can the selected method stand by itself when compared to other methods including proportioning? It is difficult for this office to recommend any method other than proportioning, since an argument can be made against it.

I apologize for not giving you a definite answer, and trust you can understand the reasons why. More often than not with these types of problems, it is the professional judgment of the surveyor that determines the final solution. (Then stand back and wait for the adverse opinions.)

Sincerely,

Havno M. Cardner

Wayne M. Gardner Chief, Branch of Cadastral Survey

Thike Sardner

1 Enclosure (as stated)

cc:

Larry Hunnemuler, Siuslaw National Forest, Corvallis



Peterson & Associates

Jim S. Peterson Land Surveyor 8155 NW Mitchel Dr. Corvallis, Oregon 97330 (503) 757-1794

Randy Zanon Siuslaw National Forest P.O. Box 1148 Corvallis, Oregon 97339

April 3, 1989

Dear Randy,

During our corner search last week we recovered the original 1/4 corner of Sections 3 and 4. However, we did not recover the original closing corner of Sections 3 and 4 or the 1/4 corner of Sections 4 and 5.

Our first problem is to restore the closing corner of Sections 3 and 4. As stated in my letter to the BLM (dated February 28, 1989) Wilson's ties to standard corners are fictitious and should not be used to restore this lost closing corner. Section 5-41 of the 1973 Manual considers this exact situation but does not provide an exact answer to the problem. The BLM's response (dated March 9, 1989) to my letter does allow that the facts I have presented "could possibly warrant using non-standard procedures to restore the closing corner", as long as the procedure selected is "well justified and completely defendable."

The bearing from the existing closing corner to the recovered 1/4 corner of Sections 3 and 4 is SI3°45'38"E. Therefore, I feel that the method used to restore the lost closing corner in 1967 does not at all fit the Manual's statement that restoration of such closing corners should be made "by the method most nearly in harmony with the official plat."

It is my opinion that the closing corner should be restored at the mean bearing of the closing lines on either side of the lost corner. Since all of the closing lines we have tied in this township indicate a high degree of consistency, I feel that this method would be the one "most nearly in harmony with the official plat." I believe that it would also stand the test of being "well justified and completely defendable."

The next problem is how to restore the 1/4 corner of Sections 4 and 5. Since we know that all other 1/4 corners established by Wilson, on a closing line in this township, were set at 40.00 chains (with the distance returned on the last half mile being fictitious) it is only reasonable to assume that this one was done the same way. It is very important to remember that these 1/4 corners were required to be set at 40.00 chains, throwing all of the error into the last half mile. This leaves only the problem of how long is 40.00 chains according to Wilson. I have averaged 12 half miles run by Wilson, and arrived at a length of 2617.9 feet.

I would welcome comments or discussions on the above procedures.

Jim S. Peterson

AUG 2 1989

Peterson & Associates

Jim S. Peterson Land Surveyor 8155 NW Mitchel. Dr. Corvallis, Oregon 97330 (503) 757-1794

Randy Zanon Siuslaw National Forest P.O. Box 1148 Corvallis. Oregon 97339

April 13, 1989

Dear Randy,

The time has come for me to state my position on the situation with the 1/4 corner of sections 5 and 6. I have researched, discussed, observed, etc, etc. and there doestn't seem to be any absolute evidence. So it is now time to make a decision based upon what has been found.

First of all, I can not accept the position of the brass cap (1973). It is impossible to say whether or not the fir uproot below the cap is the original BT. It does have a chopped face, but that is all that can be said about it. But since the roots from which the cap was set were assumed to be the origin of this uproot and they are actually spruce roots, the information used to set the cap is in error. As far as I can see nothing else need be said about the brass cap.

Now we have to decide what to do with the iron pipe. The decisions that have to be made are: 1) Is it the pipe found in 1940 by Neshim? 2) If the answer is yes, then is it in the same place it was in 1940? The iron pipe was assumed by Neshim to have been set by the State Highway. I have talked with the State people and they feel it unlikely that the Highway engineers would have actually set monuments to perpetuate the corners found. That taken with the fact that the state maps indicate they found corners but not that they set monuments makes it seem quite possible someone else set these monuments. We know that W. E. Anderson was in the area about the same time and could have been the one to do these perpetuations. Regardless of the origin of these pipes, we have observed a number of identical pipes at other corner positions that are definitely valid positions. One pipe we found is noted on a state map dated 1929. The size, length, and condition of these pipes are all almost identical, indicating that they were probably set by the same person at about the same time. Therefore it is my opinion that the pipe at the 1/4 corner is the one found by Neshim in 1940.

We have also recovered State right-of-way monuments from which this 1/4 corner was referenced. Based upon these monuments the brass cap is about 4 feet from the position as per the State's tie (the 1973 survey forced this because of the method used to establish their corner area). We have also tied right-of-way monuments at 3 other corners tied by the state. Two of the State's ties are very good, but the third appears to have an error in the tie, indication that errors were occassionally made by the State's crews.



It is impossible to say that the iron pipe is in the same position it was in 1940, but the reverse is also true. We know that the pipe has been in it's current position since 1973. I have talked with Hanna and Fultz (who were in the area in about 1965), but have not gotten any concrete evidence from either one. At this point I don't consider either of them to be a source of reliable information. I have computed from Hanna's survey and found that according to his data the iron pipe fits the State position, but I believe he computed his ties form State right-of-way monuments instead of making an actual tie to the pipe. Fultz has said he subdivided section 5 and set interior monuments (not recorded) but I have not seen any of his coordinate data yet.

We have tied to a Mervin Whitmore road post (1957) South of the 1/4 corner. The distance from the post to the brass cap is very close, but the bearing is about 6° off. This makes me think that Whitmore also computed his road position form State right-of-way monuments, since he would have run a much better bearing if he had actually come off the corner.

A couple of other factors to consider are: 1) The distance from the SW corner of Section 5 to the brass cap is 2617, and to the iron pipe is 2637. If you look at other lines run by Wilson over good ground, you will see that he is generally near 2630. 2) There is a down and rotted fir just above the iron pipe. We could not determine its origin, but it is in the right area to have been the BT Neshim found.

Based upon all of the above information, conflicting as it is, I have concluded that the iron pipe is the one found in 1940 and that it is still in the same position. Therefore I must accept it as the best available evidence of the postion of the original corner.

If you have any questions give me a call.

Jim S. Peterson

