

James O. Steambarge

116 IBLA 185

This case involves the reestablishment of original corners where blunders in the original survey leave many unanswered questions and several possible solutions. There is a significant blunder in measurement along the north boundary of the section. The record closes and all indications are that a second blunder in the meander line compensated for the first or the meander line was deliberately altered by the original surveyor to achieve closure.

The central issue is BLM's procedures for reestablishing the two meander corners and the $\frac{1}{4}$ section corner on the line between section 27 and 28 where it is clear that the record for the line contains at least one major blunder.

The following statement, from the 1970 field notes, explains the procedure used to reestablish the line between sections 27 and 28:

"Fractional sec. 27 and a portion of fractional sec. 28 have been inundated by the waters of Lake Pend Oreille. To determine the proportionate position of the $\frac{1}{4}$ sec. cor. of secs. 27 and 28, which is needed to subdivide sec. 28, the positions of the meander cors. of secs. 27 and 28 were determined by adjusting the record meander lines. The $\frac{1}{4}$ sec. cor. position was then determined by single proportion between those meander cor. positions. The notes of the calculations are as follows."

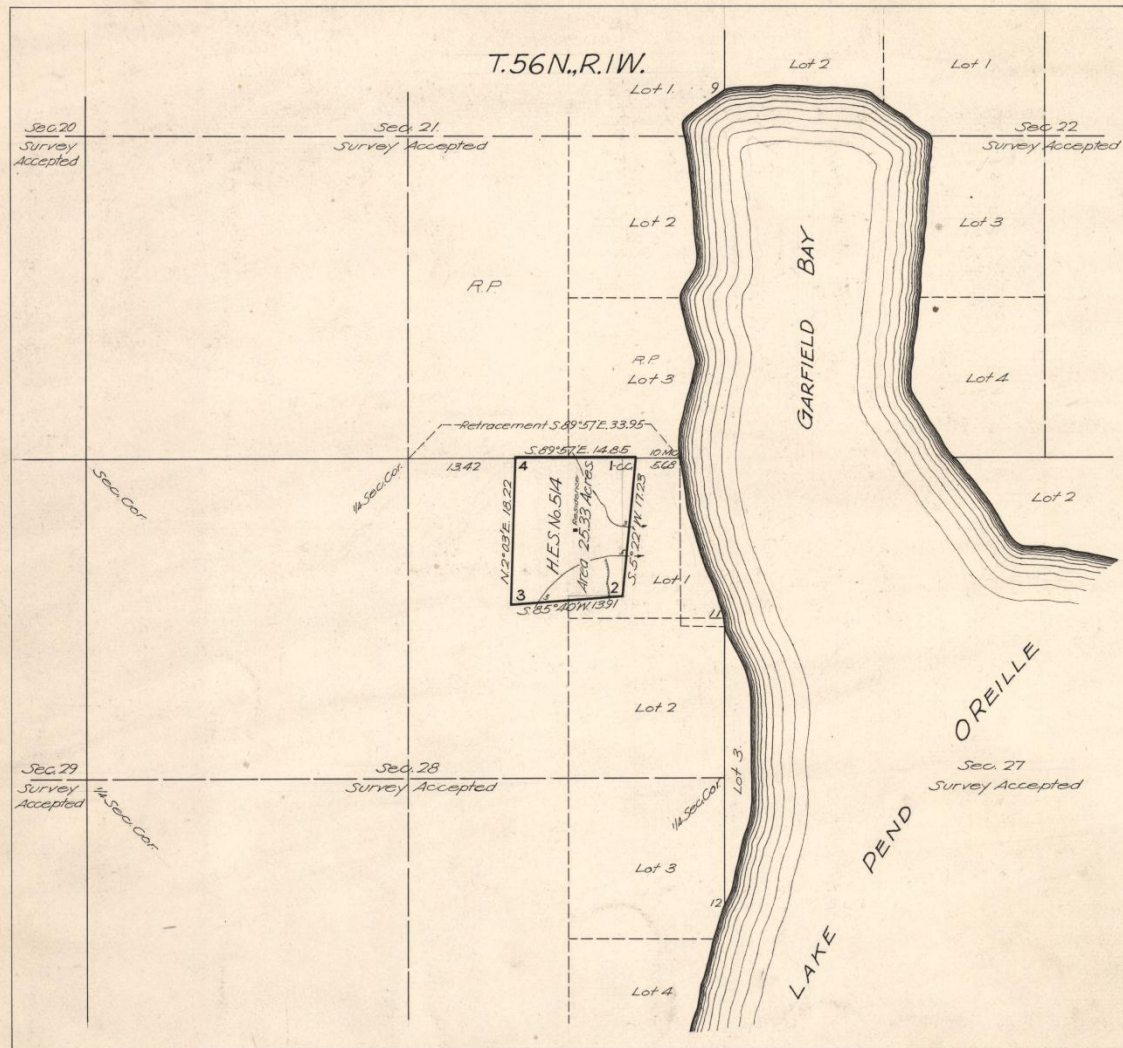
A complete set of plats and field notes for the township is available at: <http://www.glorerecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1>



Sec. 28

29

Survey accepted March 18, 1919.
G.L.O.



Plat of
**HOMESTEAD
ENTRY SURVEY**
No. 514 **PATENTED**
in the
**PEND OREILLE
NATIONAL FOREST**
in
Sec. 28 surveyed T.56N., R.1W.
of the
BOISE MERIDIAN
IDAHO

This plat of Homestead Entry Survey No. 514 State of Idaho is strictly conformable to the field notes thereof on file in this office, which have been examined and approved.

U.S. Surveyor General's Office
Boise, Idaho. May 31, 1918.

Edward Hedden

U.S. Surveyor General

SCALE 10 chains to 1 inch.

Surveys Designated	By whom Surveyed	Inst. Cont. Group		When Surveyed		Date of Approval
		No.	Date	Began	Completed	
Subdivisions	Oscar Sennentob	178	June 10, 1896	Oct. 24, 1896	Nov. 12, 1896	April 19, 1897
H.E.S. No. 514	Harold Townsend Surveyor Draftsman, Forest Service.	514	Feb. 28, 1917	May 3, 1917	May 8, 1917	May 31, 1918

Areas in Acres	
H.E. Survey No. 514	Conflicts
In Section	
In Section	
In Section	
Total	25.33

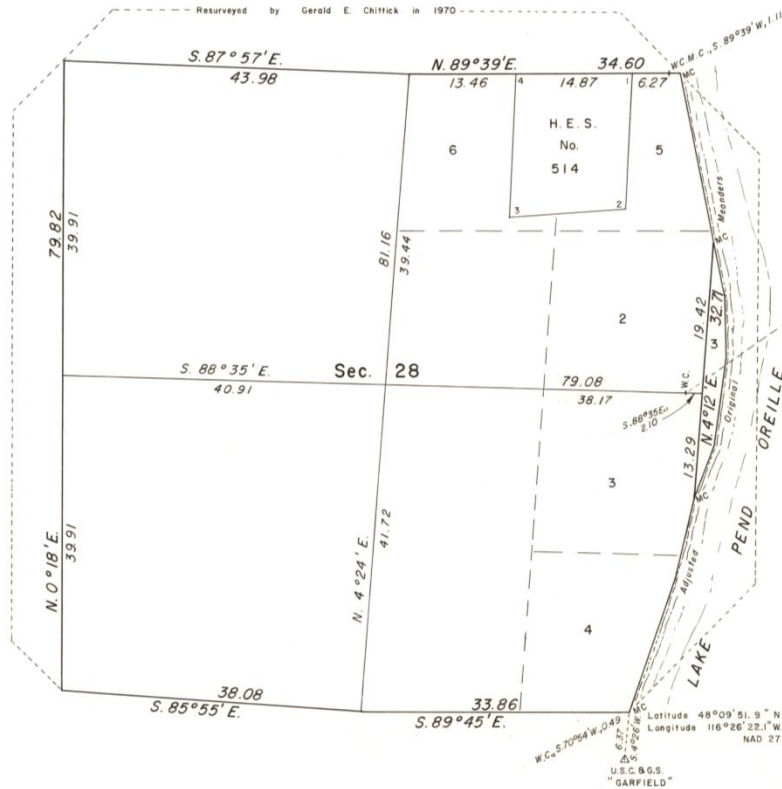
Act of

Act of June 11, 1906	Act of August 11, 1916
List No. 1-1912	Dated March 27, 1912
Latitude 48° 11' N.	Observations at
Longitude 116° 27' W.	Corner No. 2
Mean Mag. Decl. 22° 53' E.	

On One Sheet

TOWNSHIP 56 NORTH, RANGE 1 WEST OF THE BOISE MERIDIAN, IDAHO.
CORRECTIVE DEPENDENT RESURVEY

Original corners 1 and 4 of HES 514 were recovered on line between the 1/4 sec. cor. and the original MC recovered in the lake.



Sec. 27

A history of surveys is contained in the field notes.

This plat represents the corrective dependent resurvey of a portion of the subdivisional lines designed to restore the corners in their true original locations according to the best available evidence, and the correction of the subdivision of section 28, T. 56 N., R. 1 W., Boise Meridian, Idaho.

The lottings and areas are as shown on the plat approved April 19, 1897 and the plat accepted November 25, 1975.

Survey executed by Ronald J. Brown, Cadastral Surveyor, beginning October 6, 1987, and completed November 18, 1987, pursuant to Special Instructions dated September 17, 1987, for Group No. 750, Idaho.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Boise, Idaho December 12, 1988

This plat is strictly conformable to the approved field notes, and the survey, having been correctly executed in accordance with the requirements of law and the regulations of this Bureau, is hereby accepted.

For the Director
Deane E. Khan
Chief Cadastral Surveyor for Idaho

JAMES O. STEAMBARGE

IBLA 89-195

Decided October 4, 1990

Appeal from a decision of the Acting Idaho State Director, Bureau of Land Management, dismissing protest against dependent resurvey. I Group 750.

Affirmed.

1. Rules of Practice: Appeals: Burden of Proof--Surveys of Public Lands: Dependent Resurveys

One challenging a resurvey after the official filing of the plat of resurvey has the burden of establishing by a preponderance of the evidence that the resurvey was fraudulent or grossly erroneous.

2. Surveys of Public Lands: Dependent Resurveys

Where there was no evidence that an old fence was built to a corner established by the original survey, and there was no proof that the old fence started or ended at established corners of the original survey, it was properly determined that the fence did not perpetuate an original corner location.

3. Surveys of Public Lands: Dependent Resurveys

Where location of a corner cannot be determined from evidence of original accessories, and original topographic calls are ambiguous, proportionate measurement is a suitable means to determine the corner.

APPEARANCES: Walter G. Robillard, Esq., Norcross, Georgia, for appellant; Robert S. Burr, Esq., Office of the Field Solicitor, U.S. Department of the Interior, Boise, Idaho, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE ARNESS

James O. Steambarge has appealed a December 12, 1988, decision of the Acting Idaho State Director, Bureau of Land Management (BLM), dismissing his protest against the dependent resurvey of secs. 20, 28, 29, 30, 31, 32, and 33, T. 56 N., R. 1 W., Boise Meridian, Idaho. The protest was directed against findings made by the survey establishing the location of the centerline of sec. 28.

Sec. 28, the east boundary of which is formed generally by a meander along Lake Pend Oreille, was originally surveyed in 1896 by U.S. Deputy Surveyor Oscar Sonnenkalb. The 1896 survey created sec. 28 and established part of the legal description of land owned by Steambarge. Some subdivisional lines and meanders of Lake Pend Oreille were retraced in a survey conducted in 1904, as shown on an official plat of survey approved January 29, 1906. Homestead entry survey No. 514, completed in sec. 28 in 1917 and approved May 31, 1918, relocated portions of subdivisional lines of sec. 28, including the meander corner common to secs. 21 and 28 on Lake Pend Oreille. In 1970 a dependent resurvey was requested by the United States Forest Service (FS) to define boundaries of the Kaniksu National Forest. Portions of the 1970 dependent resurvey, including sec. 28, were suspended on May 21 and September 17, 1987. In 1988, a corrective dependent resurvey of sec. 28 was approved. ^{1/}

The northern boundary of Steambarge's property is determined by the east-west centerline of sec. 28; his protest and this appeal focus on the location of the centerline by the original survey and later efforts to locate monuments establishing the original line. While the locations of quarter section corners and monumented meander corners are disputed, these disputes are only important as they relate to the location of the centerline of sec. 28. Also in dispute between BLM and Steambarge is the significance and location of a fence which the dependent resurvey places about 350 feet north of the centerline of sec. 28. Steambarge contends that this fence is on the centerline and defines the boundary between public land and his property.

The following corners on the south line of sec. 28 are not disputed: the corner common to secs. 28, 29, 32, and 33; the quarter section corner common to secs. 28 and 33; the meander corner common to secs. 28 and 33; and the center corner of sec. 28. On the north line of sec. 28, the corner common to secs. 20, 21, 28, and 29, and the quarter section corner common to secs. 21 and 28 are not in dispute.

The parties dispute the location of the east quarter corner of sec. 28 and three meander corners beginning with the northeast meander corner common to secs. 21 and 28 and running south to the third meander corner on the lakeshore. Steambarge contends that location of the "[e]ast 1/4 corner of Section 28 and the resultant mid-section line is inconsistent with the evidence, and cannot be substantiated, either by the evidence or by accepted rules of survey that should have been relied on by the BLM" (Steambarge's Statement of Reasons (SOR) at 9). ^{2/} The centerline of sec. 28, Steambarge

^{1/} In 1984 a private survey was completed for Mary Craig, owner of land in the northeast quarter of the southeast quarter of sec. 28 according to a staff study entitled "Report of investigation, Group 750, Idaho (Oct. 6, 1987 - Nov. 10, 1988" (Brown Memorandum) at 2). Field notes of the Craig survey do not appear in the record.

^{2/} Although Steambarge's SOR bears no page numbers it has been paginated for convenience of reference.

observes, was determined by the resurvey by drawing a line between the west and east quarter corners of sec. 28. He states that:

The west terminus of the [center] line [of sec. 28] is determined by a proportioned corner that is inconsistent with the written record; and the east terminus of the line is the east 1/4 corner that was established from proportioned points using meander lines from a questionable meander corner and one erroneous meander corner.

Id. at 7. The "erroneous" meander corner is the meander corner common to secs. 28 and 21; the "questionable" meander corner is the meander corner common to secs. 28 and 33. Steambarge characterizes this latter point as "questionable." What is questioned is the location of this monument in the water of Lake Pend Oreille. It is apparently this circumstance (although there are others, which will be later discussed), which is also true of the monument found at the northeast meander corner of sec. 28, that makes their location "questionable."

Lake Pend Oreille formed much of the eastern boundary of sec. 28 in 1896. The lake is no longer at the elevation that it was in 1896 however, for a dam authorized in 1950 has considerably raised the elevation of the water. In Swanson v. United States, 789 F.2d 1368 (9th Cir. 1986), the court made these findings concerning the water level of the lake:

Before 1950, Lake Pend Oreille in Idaho was a navigable water of the United States with an ordinary high water level of 2051 feet above mean sea level. In 1950 Congress passed the Flood Control Act, Pub. L. No. 81-516, 64 Stat. 163, 170 (1950). Under its authority, the United States Army Corps of Engineers constructed the Albeni Falls Dam and Reservoir Project at the west end of lake Pend Oreille. The purposes of the Project were to provide for flood control, navigation, conservation, recreation and power generation as a part of a comprehensive plan for improvement of the Columbia River system. The new dam caused the lake to rise to a mean high water level of 2062.5 feet.

The level of the lake in 1896 is unknown. Records of water levels kept by the Army in this century indicate that the lake level was subject to seasonal and annual fluctuations before it was dammed, but that the average level after the dam was built was higher than before. Both meander corner monuments recovered by the 1970 dependent resurvey of sec. 28 were found in the lake: the monument at the northeast meander corner was in 15 feet of water; the southeast meander corner monument was in 12 feet of water. Between these two riparian monuments, the two other meander corner monuments were not found nor was the east section quarter monument recovered. Thus, the northern and southern monuments marking the meander of the east boundary of sec. 28 were found: three monuments located between those two points are missing.

The meander corner common to secs. 28 and 21 was established by the 1896 survey: the surveyor's field notes report that he marked this corner

with "a slatestone, 20 x 8 x 8 ins, 15 ins. in the ground, for meander cor. of fractl secs. 21 and 28, marked M.C. on E. face, with two grooves on S face." Two other surveys have purported to find this corner established in the 1896 survey. The first to do so, a 1917 homestead survey, describes the monument found as "a slate stone 9 x 6 x 5 ins. above ground, marked and witnessed as described by the Surveyor General." The field notes of the 1970 dependent resurvey report finding the meander corner monument under water, being "a slate stone, 18 x 8 x 8 ins., mkd. MC on E. face with 2 grooves on S. face." The 1988 corrective resurvey did not disturb the findings of the 1970 dependent resurvey concerning the location of this meander corner.

While conceding that the monument recovered in 1970 "looks like the original" and is "marked like the original," Steambarge charges that BLM assumes, without corroborating evidence, that the monument found under water lies in its original undisturbed position. He argues that BLM erred in refusing "to accept a second generation bearing tree that was conclusively proven, because it was not set by them, but it is in official U.S. records of the U.S. Forest Service" (Steambarge Reply at 4).

[1] The monument recovered by the 1970 resurvey corresponds to the monument described by the 1896 survey. The 1917 homestead survey, however, reports a stone markedly different. The dimensions of the stone reported found in 1917 cannot be explained unless it is concluded that the monument found in 1917 was different than the monument set by Sonnenkalb in 1896. We must conclude, therefore, that the 1917 survey did not locate the original meander corner set by Sonnenkalb. Although Steambarge challenges the meander corner found by the 1970 resurvey as "questionable," he has provided no evidence to show that the monument found is not the 1896 monument, nor has he shown that the location should be otherwise than located by BLM.

While the 1970 plat of survey of this meander corner was suspended in 1987, it was not later resurveyed. The 1987 surveyor found that the 1970 survey was correct insofar as concerned the location of the meander corners found. Steambarge is not, therefore, protesting the 1987 survey prior to acceptance when he questions these corners, but is challenging the 1970 officially accepted survey after the fact. As we stated in Crow Indian Agency, 78 IBLA 7 (1983), while an individual timely protesting the acceptance of a dependent resurvey need only show that "the resurvey is not an accurate retracement and reestablishment of the lines of the original survey," one who challenges a resurvey after it has been approved must show by a preponderance of evidence that the resurvey "is fraudulent or grossly erroneous." Id. at 11. Accord, First American Title Insurance Co., 100 IBLA 270 (1987); Peter Paul Groth, 99 IBLA 104 (1987). Steambarge has not carried this burden by characterizing the meander corner as "questionable."

Accordingly, we find that the bearing tree identified by Steambarge using field notes from the 1917 homestead survey was not marked in reference to the meander corner monument set in 1896. Because the bearing tree

identified by Steambarge was not marked in reference to that meander corner monument, BLM properly rejected the tree as evidence of the original meander corner of secs. 28 and 21. We find that BLM has established the location of the disputed meander corner of secs. 28 and 21. We conclude, therefore, that the monument identified under 15 feet of water in 1970 was the monument set in 1896 in its original location marking the meander corner of secs. 21 and 28. Appellant has offered no proof to show otherwise.

The decision of December 12, 1988, here under review, states that, notwithstanding diligent search for two meander corners of secs. 27 and 28 on Lake Pend Oreille and the quarter section corner common to secs. 27 and 28, no original or collateral evidence was found identifying the original positions of these corners (Decision at 2). Finding those two meander corners and the quarter section corner lost because there was no evidence of the original monuments or their accessories, the dependent resurvey used proportionate measurement to establish the east quarter corner of sec. 28. When resorting to use of proportionate measurement to establish the quarter corner, the surveyor adjusted the meander lines consistent with section 5-43 of the Manual of Surveying Instructions (1973) (Manual), using the northeast meander corner common to secs. 21 and 28 and the southeast meander corner common to secs. 28 and 33 as controls.

Steambarge disputes the location of the quarter corner by this means and denies that the east quarter section corner of sec. 28 is lost. He contends instead that the east quarter section corner of secs. 27 and 28 is an obliterated corner (SOR at 19). He does not, however, offer proof that he has identified monuments or accessories of the meander corners or the quarter corner that were not found by the 1970 survey, nor does he provide any proof to show that the common quarter section corner of secs. 27 and 28 was found by his surveyor. He states that

[t]his meander line, when plotted from the original field notes, has an inherent error of approximately 5 chains. Using the meander corner on the south line of section 28 as the controlling point, when the meander courses along the water body are plotted in a northerly direction, the final closure to the meander corner on the north line of section 28 is approximately 5 chains west. The original meander line follows in close proximity to the actual shore line except for the final course.

If the same courses were run southerly from the meander corner on the north line, as identified and accepted by Steambarge, then the entire meander line falls well into the water body, and never touches land.

(SOR at 7). Steambarge continues "that the error can be isolated and positioned with a degree of certainty as being the first course south from the north meander corner of sections 21 and 28." Id. He does not dispute that the decision to proportion and adjust the apparent error would have been proper assuming the five-chain error could not be so defined. But because

he claims to have isolated an error in the first course of the meander south from the northeast meander corner of secs. 21 and 28 he states that Departmental authority is consistent in requiring the surveyor to place "the entire blunder where it occurred" (SOR at 9). The authorities dictate, he contends, that "[a]ll discrepancies in measurement should be carefully verified with the object of placing each difference where it properly belongs. Whenever it is possible to do so, the manifest errors in measurement are removed from general average difference and placed where the blunder is made." Id.

Notwithstanding his criticism of the two meander corners found by BLM, Steambarge's position directly concerns only the location of the quarter corner of secs. 27 and 28. The 1970 resurvey revealed that the 1896 field notes for the meander of the east boundary of sec. 28 could not be reconciled with the recovered meander corners common to secs. 21 and 28 and secs. 28 and 33. Nor was it possible to find the two meander corners reported to have been set by the 1896 survey between sec. 28 and fractional sec. 27 and the quarter corner common to sec. 28 and fractional sec. 27. It was therefore determined that those corners were lost. Acting on this premise, BLM recomputed the meanders making minor revisions in reported distances to conform to the present elevated shoreline so as to achieve closure. ^{3/} The meander corners for fractional sec. 27 were then recomputed using distances reported by the 1896 survey, and the line between them was proportioned to establish the east quarter corner of sec. 28.

[2] Steambarge correctly contends that there was an error in the north section line of the 1896 survey of sec. 28. He is also correct in contending that, if the location of an error can be identified, it cannot be distributed along the length of the line where it occurred. The location and nature of the perceived error has been the subject of much speculation by both parties. While he has advanced other arguments concerning the meander corners and their effect on the location of the center line, Steambarge's argument is founded ultimately on a contention that a wire sheep fence found about 350 feet north of the east-west section line surveyed in 1987 is the actual east-west section line. Relying on this fence, Steambarge contends that east quarter section corner was not lost but obliterated. ^{4/}

^{3/} Because the common meander corner for secs. 21 and 28 was located 4.02 chains further east than shown on the 1896 plat (mainly due to an error of 3.98 chains in the running of the original survey line between the common section corner of secs. 20, 21, 28, and 29 and the north quarter section corner of sec. 28, discovered in the course of the 1970 dependent resurvey) the effect of BLM's recomputations was to locate all of lot 3 of fractional sec. 27 under the raised water level of the lake.

^{4/} In his reply, Steambarge takes issue with BLM's assertion that his assignment of error to the first course of the meander was made on the strength of his reliance on the fence as the property boundary, stating: "Using the meander plottings, with the distinctive protrusion of the 'lip' into section 27, we placed the features on the photograph, and were able to discern that the first course is in error the approximately 350 feet recited

An old fence line runs east and west approximately 350 feet north of the east-west centerline of sec. 28, as surveyed by the 1970 dependent resurvey, as corrected in 1988 (Decision at 2). Steambarge states the old fence line has been in existence since 1935 and marked the northline of private property owned by a predecessor in interest. He contends the fence marks the centerline of sec. 28 and the boundary between his property and the National Forest, and that the east quarter corner of sec. 28 ought therefore to be located along the fence line.

In Stoddard Jacobsen v. BLM (On Reconsideration), 103 IBLA 83 (1988), aff'd, CA No. 88-513-HDM (D. Nev. Oct. 12, 1989), we found that "the proper standard for BLM to apply in the course of a resurvey is to consider a corner existent (or found) if such a conclusion is supported by substantial evidence." Id. at 86. The standard adopted by Stoddard Jacobsen (On Reconsideration), was derived from Manual section 5-5, dealing with lost corners, which provides that "[i]f there is some acceptable evidence of the original location of the corner, that position will be employed."

There is no reason why this language would not apply with equal authority to determination of an "obliterated corner." An obliterated corner is defined as

one at whose point there are no remaining traces of the monument or its accessories, but, whose location has been perpetuated, or the point for which may be recovered beyond reasonable doubt by the acts and testimony of interested landowners, competent surveyors, other qualified local authorities, or by some acceptable record evidence.

(Manual section 5-9).

For either an existent corner or an obliterated corner there must be some evidence of the original corner location. Consistent with our decision in Stoddard Jacobsen, supra, we hold that a corner is shown to be obliterated if there is substantial evidence of a perpetuated corner location. Accord Boise Cascade Corp., 115 IBLA 327 (1990).

The Manual provides guidance concerning evidence that must be present to support a finding that a corner is obliterated, such as acts and testimony of interested landowners, competent surveyors, or other qualified local authorities, or witnesses, or record evidence. Id. at 5-9. The question to

fn. 4 (continued)

by the BLM. We then considered the fence as supportive evidence." Except, however, for the fence, there would be no reason to assume that Sonnenkalb took an erroneous bearing to the 'lip,' but a correct bearing thereafter. Without some evidence that the fence controls placement of the east quarter corner, therefore, there is no support for this solution to the meander problem. As pointed out in footnote 3, above, there is no complete solution to the meander problem because of the distance error appearing in the north section line of the 1896 survey.

be answered here is whether substantial evidence exists that the old fence in sec. 28 perpetuated the east-west section line so as to locate the quarter corner of sec. 28 along the line. Subsidiary to this question we must decide whether Steambarge has shown, by a preponderance of the evidence before us, that BLM erred when it determined that the east quarter corner of sec. 28 was lost. Boise Cascade Corp., supra.

No evidence has been offered by Steambarge to support his assertion that the old fence in sec. 28 perpetuated the east quarter corner location. There is no evidence about who built the fence. Nor is there a showing of what purpose the fence served. Even assuming that the homesteader Sam Miller built the fence, as Steambarge asserts, the record contains no statements from Miller or his successor Noble Leach about the fence. There is a statement, admittedly conjectural, reported from Leach's son on the subject. While Steambarge asserts that FS accepted the fence as a boundary line between Federal and private land (SOR at 20), no foundation is provided for such a conclusion, which is inconsistent with the location of markers erected by FS to establish the boundary of the National Forest. Because the old fence was not constructed so as to enclose all Sam Miller's homestead, further doubt is cast on the notion that the fence was constructed to mark the homestead's limits.

Steambarge argues, however, that since the fence along the south boundary of Miller's land followed the south section line, it may be assumed that a similar fence was constructed by him along the north boundary. This assumption, he contends, is buttressed by a 1935 Forest Service map showing the fence forms the boundary of the Miller property, together with a statement from Forest Service employee Frank Wratnai that the fence was generally believed to mark the boundary of the Miller property, and, therefore, the east-west centerline of sec. 28. Finally, Steambarge points out that using the fence to solve the meander problem, the east quarter corner will be placed exactly 19 chains south of the meander corner common to secs. 28 and 27, and 13 chains north of the south meander corner, exactly as reported by the 1896 survey.

Aside from the fact that there is nothing to show who built the fence or why, BLM points out that the fence does not coincide with the Miller property, but extends instead from a bluff overlooking the lake to a cliff west of the bluff. This circumstance, BLM suggests, indicates that the fence was used to keep sheep from wandering onto patented lands. Concerning the alleged beliefs of Forest Service officials about the purpose and location of the fence, BLM observes that, contrary to any such suggestion, the Forest Service maintains boundary markers only a few feet from the east-west boundary established by the BLM survey; one was placed in 1941, the other in 1961. But there is another fallacy in Steambarge's reliance on the fence as property boundary. Consistent with his theory, the fence should have begun at the east quarter corner. But the fence extends east, past the point where Steambarge would locate the east quarter corner of sec. 28. The fence as built, therefore, contradicts any notion that it marked a property boundary of private land entirely located in sec. 28.

This Board has refused to find a corner obliterated where there was no evidence that an ancient fence was built "to an accepted corner established by the original survey or no evidence was submitted that the fence started or terminated at established corners of the original survey." Alfred Steinhaurer, 1 IBLA 168, 171 (1970). Steambarge has not shown that the old fence in sec. 28 perpetuated the original east quarter corner location or that BLM's determination that the corner was lost is in error. His argument on this point is insufficient, without supporting evidence, to establish that the old fence was a property boundary of any land. Boise Cascade Corp., supra. We conclude, therefore, that BLM correctly concluded the corner was lost.

[3] Appellant contends that BLM erroneously proportioned the quarter section corner common to secs. 28 and 29, on the west boundary of sec. 28, having found it to be a lost corner. The quarter corner described in the original field notes was 40 chains from the corner common to secs. 20, 21, 28, and 29. The 1970 resurvey placed the quarter section corner 39.91 chains from the common corner of secs. 20, 21, 28, and 29. While appellant does not claim that he has found the original quarter section corner monument, he states that the proportioned point is inconsistent with topographical references in the field notes. The original survey notes describe the quarter section corner at issue in this manner: "37.50 [chains] Brow of rocky ledge, course NW and SW-Descend. 40.00 [chains] 150 ft. below last top, on S. Slope; set a slate stone, 14 x 8 x 6 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face."

Steambarge contends that the corner set by BLM's resurvey lies on the east slope, not the south slope described in the 1896 field notes, and that there is no visible ridge to the north of the corner. The field notes of the resurvey contradict this assertion, however, reporting the existence of a ridge bearing northwest and southeast at 30 chains from the common corner of secs. 28, 29, 32, and 33. The top of the ridge is placed in the 1896 survey notes at 20 chains from the corner common to secs. 20, 21, 28, and 29.

There is no evidence that use of proportionate measurement was an error in this instance; Manual section 5-16 authorizes proportionate measurement in such cases, stating pertinently:

The determination of the original corner point from even fragmentary evidence of the original accessories, generally substantiated by the original topographic calls, is much stronger than determination from topographical calls alone. In questionable cases it is better practice, in the absence of other collateral evidence to turn to the suitable means of proportionate measurement.

Neither Steambarge nor BLM has found evidence of the original quarter corner accessories. Use of topographic calls alone to determine the quarter section corner, consistent with Manual section 5-16, would require that the calls define a small area, such as the old fence, that is not susceptible of more than one reasonable interpretation. Boise Cascade Corp., supra at 333.

These requirements are not met, given the lack of evidence concerning the location of this corner. We find that BLM correctly relied on proportionate measurement to determine the corner location, and conclude that Steambarge has not shown error, by a preponderance of evidence, in BLM's determination that the quarter section corner common to secs. 28 and 29 is lost. We conclude, therefore, that BLM correctly located the east and west quarter corners and intervening center line of sec. 28.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

Franklin D. Arness
Administrative Judge

ADMINISTRATIVE JUDGE BURSKI CONCURRING:

While in agreement with both the legal principles enunciated and the conclusions reached in the lead opinion, I believe that further analysis of the factual construct of the instant appeal may be warranted, particularly with regards to the interrelationship between appellant's argument relating to the "blunder" in the meander and the use of the wire fence as a control for determining the axis of the E/W centerline. In order to put appellant's arguments in a logical framework, it is necessary to briefly review the relevant facts limned in the lead opinion.

It is difficult to understand the problems besetting this appeal unless one first understands the fundamental quandary inherent in resurveying the 1896 survey run by Oscar Sonnenkalb. The field notes of the 1896 survey disclose that Sonnenkalb first established the common section corner for secs. 20, 21, 28, and 29, and then surveyed the north line of sec. 28.

The field notes report that he located the 1/4 corner for secs. 21 and 28 a distance of 40 chains from the common corner. He then continued east 34.56 chains where he set the common meander corner for secs. 21 and 28. Thereafter, he surveyed the west section line of sec. 28 and then the south section line of sec. 28, establishing a common meander corner for secs. 28 and 33, a distance of 73.60 chains from the common section corner for secs. 28, 29, 32, and 33.

The field notes recite that Sonnenkalb next surveyed the fractional section line between secs. 27 and 28 by proceeding 21 chains south of the meandered corner of secs. 27 and 28 (actually, this would be the meandered corner for secs. 21 and 28) and then east a distance of 5.44 chains to the bank of Lake Pend Oreille, which placed him due south of the true section corner for secs. 27 and 28, where he set a meander corner for secs. 27 and 28. According to the field notes, Sonnenkalb then surveyed the line between fractional secs. 27 and 28 a distance of 32 chains, in the process purportedly establishing the E 1/4 corner for sec. 28, and then established another meander corner for secs. 27 and 28. Finally, Sonnenkalb surveyed the meandered east section line of sec. 28 and the east boundaries of lot 3, sec. 27, proceeding south from the meander corner for secs. 21 and 28 to the meander corner for secs. 28 and 33. As submitted, the field notes indicate that closure was obtained.

The essential inconsistency in this survey became manifest in 1970 when a dependent resurvey of sec. 28 attempted to retrace the Sonnenkalb survey. While, as indicated in the lead opinion, there are a number of disputes as to the proper location of various corners, everyone agrees that the 1970 survey correctly recovered both the common section corner for secs. 20, 21, 28, and 29, as well as the N 1/4 corner for sec. 28. However, while Sonnenkalb had reported a distance of 40 chains between these two corners, they were, in fact, located 43.98 chains apart. In other words, the N 1/4 corner of sec. 28 was approximately 260 feet further east than Sonnenkalb

believed. 1/ The 1970 resurvey recovered the common meander corner for secs. 21 and 28 a distance of 34.60 chains from the recovered N 1/4 corner of sec. 28, a minor deviation from the 34.56 chains Sonnenkalb had reported. Thus, assuming that BLM correctly relocated this corner, Sonnenkalb would have been almost 4 chains further east than he thought he was when he established the meander corner. 2/ Even if we were to accept appellant's location of the common meander corner (which would move the corner 46 feet west of the BLM location), Sonnenkalb's error would still be in excess of three chains. 3/

The importance of this discrepancy is that since Sonnenkalb was, at a minimum, 200 feet further east than he assumed when he began his survey of the meander line, it was a physical impossibility for him to correctly survey the meander and achieve closure. The fact that he did achieve closure can be explained only by two possible hypotheses. First, that he made an error in his survey of the meander that just coincidentally managed to cancel out his error along the north section line. The other possibility is that, in transcribing his field notes, Sonnenkalb intentionally altered his actual courses and distances for the meander line in order to achieve paper closure.

Both appellant and BLM subscribe to the first theory. Thus, BLM, while indulging in speculation as to whether or not Sonnenkalb altered his field notes to achieve closure, consistently argues that he did, in fact, survey the meander line. Because, in BLM's view, the source of the meander error could not be isolated to a specific course or distance, BLM proportioned the error throughout the meander. While appellant agrees that proportioning is proper if the source of the error cannot be isolated (SOR at 8), appellant strongly contends that the error can be isolated.

Appellant contends that an error occurred in the first course of the meander. Sonnenkalb had reported that, from the common meander corner for secs. 21 and 28, he had proceeded S. 14°30'E. for a distance of 21.70 chains. Appellant suggests that, in actuality, Sonnenkalb was going

1/ The N 1/4 corner was also located approximately 2 degrees off line as well.

2/ Since Sonnenkalb had deviated from true east in his survey of the north section line of sec. 28, he would not have been the full 4.04 chains further east that might be indicated from the 1970 survey returns. He would, however, in addition to being further east also have been south of his presumed point.

3/ There is another error in the south section line of sec. 28, which, while not as great as the error in the north section line, must also be factored in. The 1987 corrective resurvey discovered the original S 1/4 corner of sec. 28, which had not been located during the 1970 resurvey. Rather than being located 40 chains due east of the common section corner for secs. 28, 29, 32, and 33, it was located 38.08 chains S. 85°55' E.

The common meander corner for secs. 28 and 33 was located 33.86 chains S. 89°45' E of the S 1/4 corner. The effect of this was to move the meander corner south and west of the location as shown on the Sonnenkalb plat.

S. 1°25'35"E. for a distance of 16.12 chains. Appellant notes that this solution would place the meander corners for secs. 27 and 28 onshore, as opposed to the BLM resurvey which, by proportioning the error along the entire meander, ended up placing both of these corners and virtually all of lot 3, sec. 27, within the bed of Lake Pend Oreille. It would also, and this is not by accident, place the E 1/4 corner at the wire fence where appellant contends that it should be. There are, however, numerous problems with appellant's theory.

First, it posits an error of 13 degrees in course and over 5 chains in distance without any explanation of how such an error could have occurred. This is a particularly telling point since course 1 was surveyed along the "base of [a] bluff" on an "open beach," which would make it the least likely place for an error in the magnitude posited by appellant to occur. ^{4/}

Second, it places the north meander corner for secs. 27 and 28 where it could not possibly be according to Sonnenkalb's field notes. As noted above, that corner had been set prior to the running of the meander line. The field notes state that this corner was set 21 chains south and 5.44 chains east of the common meander corner for secs. 21 and 28. The field notes also aver that Sonnenkalb tied the meander line to this meander corner at the end of the first course. Appellant's theory, therefore, is not premised on the existence of a single error by Sonnenkalb in the first course of the meander but on two totally different errors which, in some unexplained but miraculous fashion, not only cancelled each other out but also served to eliminate the error in the north section line of sec. 28. The likelihood of a single surveyor committing two totally independent, yet reinforcing errors, the effect of which was, by happenstance, to nullify yet a third error seems infinitesimal.

Moreover, contrary to appellant's assertions on appeal, the change in course 1 which he advocates would not solve the problem of the meander, as it should if, indeed, Sonnenkalb's error had been caused by faulty bearings and distances in course 1. Appellant's solution puts the meander line for courses 4 and 5, considerably west of the shoreline elevation at 2051 feet. ^{5/} See Exh. 1, prepared by SEA - Northwest Consultants. In

^{4/} Sonnenkalb's field notes for the survey of sec. 28 are replete with references to "the steep and very rough character of the mountain slopes, [and] the dense high undergrowth and the fallen timber" which "offer exceptional difficulties." See Sonnenkalb's Field Notes at 62, 64, 67, 69. Indeed, the difficult nature of much of the terrain was doubtless responsible for the chaining error on the north section line. There seems little question that the survey of the meander line, particularly the first course, was the easiest part of the entire survey, yet this is where appellant argues the error was made.

^{5/} Indeed, in his field notes, Sonnenkalb reported that he had surveyed the east section line of sec. 28 "along [the] brow of [a] rocky bluff."

See Sonnenkalb's Field Notes at 70. Appellant's solution places the meander line, not the section line, along the cliffs. Appellant would locate the section considerably further inland.

addition, appellant's proposed solution requires a major change not merely in course 1 but also in courses 6 and 7. These two courses were returned by Sonnenkalb as having a total distance of 27.80 chains. The solution which appellant proffers requires that these two courses cover a total of 33.59 chains.

It seems obvious that, far from solving an inherent inconsistency by placing the error where it occurred, appellant's solution starts from an a priori assumption that the error occurred in the first course and, after selecting a solution which supports the assertion that the fence line was the locus of the E/W section line, requires numerous other deviations from the record in order to achieve closure.

While appellant disputes this point, it is obvious that the locus of the meander corner for appellant's purpose was determined from the fence line in the first instance. Thus, Exhibit 1 prepared by SEA - Northwest Consultants, clearly notes that the ultimate location of the meander corner was a function of the existing shoreline and the fence line. In effect, for purposes of ascertaining where the meander corner should be located, appellant assumed that the fence line was the E/W axis along which the E 1/4 corner should be located and then presupposed that the north meander corner for secs. 27 and 28 should be located 19 chains north of this line (the distance reported by Sonnenkalb) and that the south meander corner for those sections should be located 13 chains south of this line (also as reported by Sonnenkalb). Appellant then located the meander corners so that they would both fit the present shoreline and result in placement of the E 1/4 corner of sec. 28 at a point along the fence.

There are, however, numerous solutions which would both preserve the reported distances in the Sonnenkalb survey of the line between secs. 27 and 28 and which also would match the present shoreline, but which would not result in placement of the E 1/4 corner along the wire fence. Thus, if one locates the northern common meander corner for secs. 27 and 28 directly east of control point ML-3 on Exh. 1 (which would place the meander corner on the present bank of Lake Pend Oreille) and proceed the record distances on a bearing of S. 7°W. one will establish the southern common meander corner for these two sections on the bank of Lake Pend Oreille and establish the E 1/4 corner precisely along the axis where BLM located it.

Admittedly, this necessitates a deviation of 7 degrees in the record bearing for the fractional section line. But it also diminishes the deviation which appellant posits in the bearing for course 1 of the meander by approximately 6 degrees, 6/ results in a distance for course 1 of approximately 21 chains (a deviation from the record distance of .70 chains, as

6/ In fact, if one uses the common meander corner for secs. 27 and 28 which appellant advocates, as opposed to the one reestablished by BLM, placement of the common meander corner for secs. 27 and 28 east of control point ML-3 lessens the deviation by nearly 8 degrees, which is a correction greater than the change required in the section line.

opposed to appellant's deviation of over 5 chains), and makes the combined distance covered by the final two courses a total of 28.8 chains (a deviation of 1 chain from Sonnenkalb's record distance, as opposed to the deviation of over 5 chains advocated by appellant). In other words, this solution, which would result in placing the E/W axis exactly where BLM contends it should be, would also result in far fewer deviations from the Sonnenkalb record than the solution advocated by appellant.

It is clear that the only reason that appellant located the northern common meander corner where he did was to coincide with his argument that the fence line should be used as the axis along which the E/W centerline should be located. In effect, appellant assumed his ultimate conclusion (that the fence line was the axis of the E/W centerline) as a basis for determining the meander corners which he then relied upon as supporting his ultimate conclusion that the fence line was the situs of the E/W centerline. This is classic circular logic. ^{7/}

Thus, appellant's allegation that the fence line represented the axis of the E/W centerline must stand or fall of its own weight. The lead opinion correctly notes that the record, read in its entirety, does not support appellant's assertion the wire fence is properly utilized as a control for the E/W centerline. Not only is there no certainty as to who constructed it, but the fact, as shown by appellant's own submissions, that it extends almost 200 feet past the point where appellant seeks to locate the E 1/4 corner for sec. 28 and almost totally traverses unpatented lot 3 of sec. 27 (as located by appellant), totally undercuts any reliance on a theory that the individual who constructed the fence did so to mark his boundary lines. Yet, absent some evidence to support such a determination, there is no basis on which to conclude that the fence is a faithful perpetuation of the centerline.

Similarly, appellant's attempt to rely on the general acceptance of this fence as a boundary line by Forest Service officials is contradicted by the two Forest Service markers, one erected in 1941, which locate the boundary of Forest Service land virtually along the centerline as reestablished by BLM in 1987. Nor can appellant derive any support from his purported location of the common meander corners for secs. 27 and 28, since, as shown above, these locations are, themselves, dependent upon the assumption that the fence line marked the E/W centerline which is, in essence,

^{7/} There is, however, an even more fundamental fallacy in appellant's theory. As noted above, the two meander corners for secs. 27 and 28 were not set during the survey of the meander; they were purportedly established prior to running the meander line and were merely recovered during its survey. See Sonnenkalb's Field Notes at 69-71, 90-91. The "blunder" which appellant seeks to allocate to the first course of the meander simply could not have initially occurred there since the meander did not establish the corner in question.

assuming the precise point in controversy. I think the lead opinion is clearly correct in rejecting appellant's theory.

But, while I am in complete agreement with the lead opinion to the extent which it rejects appellant's location of the E 1/4 corner, I must admit that I am less than sanguine about accepting BLM's proportionate solution. As I indicated above, both BLM and appellant necessarily accept the fact that the problems inherent in the 1896 survey were the result of inadvertent errors. For my part, however, I think that the record demonstrates an almost overwhelming likelihood that, insofar as the reported meanders and the fractional section line between secs. 27 and 28 are concerned, the 1896 survey is properly deemed to have been fraudulent.

I have already commented on the implausibility that two discrete errors relating to the location of the north meander corner for secs. 27 and 28 would occur which would not only reinforce each other but actually eliminate another unknown error in the north section line so that the survey would close. A close reading of Sonnenkalb's field notes disclose other unexplained discrepancies. Thus, with the exception of the two meander corners for secs. 27 and 28 and the E 1/4 corner for sec. 28, every time Sonnenkalb monumented a corner he marked bearing trees. See, e.g., Sonnenkalb's Field Notes at 60, 61, 63, 64, 65, 66, 68. The sole exception to this consistent practice occurred in monumenting the two common meander corners for secs. 27 and 28 and the E 1/4 corner for sec. 28. This deviation from his standard practice could not be explained by the absence of suitable trees since he noted in his field notes that land surveyed contained "pine, fir, [and] tamarack." See Sonnenkalb's Field Notes at 71.

Moreover, there is another, practical, inconsistency alluded to by BLM with regards to Sonnenkalb's returns. If one stands at the point of the common meander corner for secs. 21 and 28 and looks south, the lip of the cliff is clearly discernible, jutting to the east. It would be obvious to a trained surveyor that this lip extended, at its maximum easterly point, no more than 3 to 4 chains east of the common meander corner. Assuming, as Sonnenkalb would have on the basis of his just-completed survey of the north section line of sec. 28, that the common meander corner was a distance of 5.44 chains from the true section corner, there would have been no reason to expect that any part of the "lip" protruded into sec. 27, and therefore, Sonnenkalb would not have proceeded south to survey the common meander corners for secs. 27 and 28, since he would have concluded that they would not exist. The fact that Sonnenkalb reported that he did so necessarily contradicts the physical realities of the situation as he would have perceived them.

It seems almost compellingly clear that what actually happened was that, after completing his survey, Sonnenkalb discovered that the survey of sec. 28 would not close. From our present perspective, the reason for this is obvious: Sonnenkalb had made an error of almost 4 chains in his survey of the north section line. Hindsight, of course, is always 20/20.

Sonnenkalb, with no way of knowing where he made the error, was faced with the unpalatable choice of either redoing the entire survey, until he discovered his error, or altering his field notes to show that he had obtained closure. Given the fact that his report is filled with references to the difficult nature of the topography, it is obvious that the first option would not have commended itself to him. Accordingly, I think it likely that he proceeded to alter his field notes in the area most susceptible to changes, the meander line.

Assuming he had accurately surveyed the meander in the first instance, Sonnenkalb's returns would have shown that he recovered the common meander corner for secs. 28 and 33 almost 4 chains west of that corner as established by the survey of the south section line for sec. 28. If he decided to adjust his meander line, therefore, he would have been forced to bow his survey returns in an easterly direction, i.e., into Lake Pend Oreille. I think it almost a certainty that this is what Sonnenkalb did.

If the foregoing is correct, BLM is, of course, accurate in its conclusion that the source of the error cannot be located, since the various adjustments which Sonnenkalb could have made in order to show closure are almost infinite. My problem, however, is that I do not see how a survey line which is intentionally altered in the field notes is any different than a totally fraudulent survey. True, Sonnenkalb probably did actually traverse the meander. But the record which he left of the survey of the meander line is as essentially false as it would have been had he completed his survey in a local saloon. And, if it is the case that the survey returns for the meander line were "cooked," then it is equally clear that the E 1/4 corner is not recoverable through a dependent resurvey since the line which BLM is attempting to retrace was never actually run.

While the record before the Board shows that BLM was also concerned with whether these two meander corners and the 1/4 corner were ever actually set, it chose not to consider the line to be fraudulent. It appears from the record that BLM elected not to conduct an independent resurvey because of the existence of patented lands in the E 1/2 of sec. 28 (other than appellant's land) which might be adversely affected by an independent resurvey. In this regard, I would note that, as approved, the dependent resurvey locates virtually all of lot 3, sec. 27, within the bed of Lake Pend Oreille. Lot 3, sec. 27 is unpatented lands. In effect, therefore, BLM has seen fit to have the Federal Government absorb any loss resultant from the errors in the original survey. An independent resurvey would, in all likelihood, result in reestablishment of lot 3 above the banks of Lake Pend Oreille to the arguable detriment of third parties.

There is support for BLM's approach in the Manual of Surveying Instructions, 1973 (Manual). Therein, at § 6-19, the Manual notes that "[e]ven where the record survey proves to be badly distorted, the extent of private ownership may dictate that the resurvey be of the dependent type." While I personally might come to a different conclusion as to this issue, I

cannot say that BLM's approach is clearly unsupported by principles of survey. Accordingly, I join in the lead opinion's affirmation of the actions of BLM with respect to the instant resurvey. 8/

James L. Burski
Administrative Judge

8/ Appellant's position, however, would not be significantly enhanced even if an independent resurvey were ordered. While it is true that special care is taken in an independent resurvey to protect the bona fide rights of occupants, the simple fact of the matter is that appellant purchased the land in 1986, pursuant to a metes and bounds description based on the 1970 survey. To the extent that any changes have occurred since that time (such as the reestablishment of the original S 1/4 corner of sec. 28), they have actually increased the amount of land within appellant's boundaries. Appellant has, in short, already obtained the full benefit of his bargain and has no legitimate basis for complaint.