

# CERTIFICATE OF SURVEY

## A Boundary Survey in Government Lot 2 of Section 21, T143N, R25W for Earl Dahlberg

Detail B: Situation Map of Gov't Lot 2, Section 21,  
Township 143 North, Range 25 West, 5th P.M.

### LEGEND

- Found BLM or USFS Monument
  - Found Landecker Monument
  - Other Found Iron Pipe
  - ⊙ Calculated position
  - ⊕ 5/8" Capped Rebar Set, Marked RLS #16089
  - ⊙ Found Capped Pipe
  - ⊕ Known BLM Monument Calculated Position
  - Cass County Monument (Gary Stevenson)
- Implied Section Breakdown From Mapped Fences (A least squares adjustment was used to best fit a line to the fences); errors were 3± feet.
  - Section Breakdown Using Midpoint on East Line for theoretical E1/4 (Landecker 1st try)
  - Section Breakdown Using 1973 Manual (Accepted by all surveyors since 1983)
  - Section Lines according to 1976 BLM survey
  - Mapped Fence Lines
  - Driveway
  - Abandoned Hwy 65

### SURVEYOR'S AFFIDAVIT

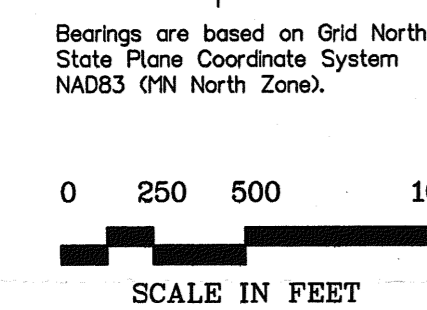
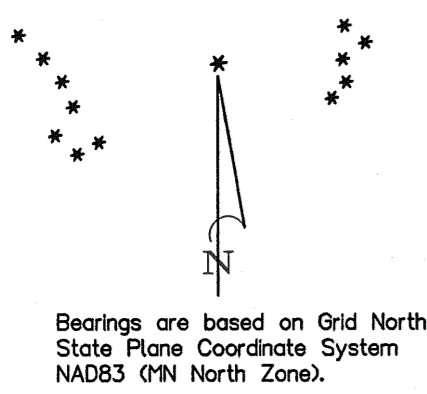
I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

LaVerne Leuelling  
Date: \_\_\_\_\_ Registration No. 16089

In 1913 John Curo of Cass County found all 4 GLO bearing trees and set a 4" Ash post for the Section Corner. The CCC recovered 1 of the GLO bearing trees in 1935 & placed a location tag on fence post at the intersection of 2 fences. In 1965 the USFS found a 2" pipe 250 feet east of the location tag. In 1976 the BLM monumented the 2" pipe, apparently being ignorant of the CCC tag. Gary Stevenson noted the error & in the presence of the BLM, monumented the current Corner position. The BLM then removed their 1976 monument.

In 1914 F.A. Donner found this corner & measured 2 miles southerly to a found S1/4 of Section 28. His distance was 10,582.3 feet.

BLM accepted the Forest Service monument which was directly traceable to the original GLO survey.



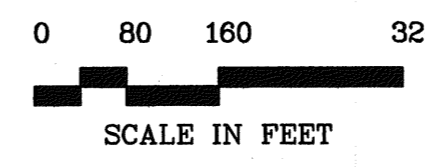
During their 1960 survey, the DNR assumed that a fence corner post represented the W1/4. As their fence post location calculates to within 1 foot of the current iron pipe at the W1/4, we have assumed the current monument represents essentially the same position.

BLM accepted the Forest Service monument which was directly traceable to the original GLO survey.

In 1900 the Corps of Engineers claimed to have found the 2 original GLO bearing trees for the S1/4. Its position was tied to other corners by an open ended stadia traverse. In 1914 F.A. Donner, working for Cass County could not find the S1/4. He set a post midway between the N1/4 of Section 21 & the S1/4 of Section 28. The County Road was then built along the resultant N-S 1/4 line in both sections. In 1976 the BLM accepted this position as the S1/4. Although they described the corner as being of "local origin" they accepted it as being "harmoniously related to existing local control." Gary Stevenson, who was then Cass County Surveyor, brought the 1900 survey to the attention of the BLM. The BLM returned to the site in 1983 to look for evidence from the 1900 survey. According to their running notes, they found one of the original GLO bearing trees and reset the S1/4 corner from it. In 1991, Walt Curo, a contractor for the U.S. Forest Service and Curt Krause of the Forest Service questioned the veracity of the running notes. In responding to Curo's letter, the BLM admitted that the

S1/4 was not set from an original bearing tree but from a stump that matched something (unspecified) in the 1900 record. The letter ended by telling Curo that it was not going to re-open the case. In essence the BLM S1/4 rested on an appeal to authority. While not advocating that the S1/4 be moved 25 years after the BLM reset it, I would like to offer the following opinions:  
1) F.A. Donner's corner was set by an unauthorized method, never sanctioned by any of the GLO manuals. There is also no evidence that he searched for the SE of Section 21 or the MC on Vermillion Lake, which would have been the needed corners to set the S1/4 "lost" & one of those had been found only 14 years earlier by the Corps. There is a good likelihood that his S1/4 search area was as much as 150 feet out of position.  
2) Several years ago Northern Lights also was involved in a retracement survey which, in part, involved searching for corners found and tied into by a Corps of Engineers stadia traverse. As a result of that experience, we have concluded that the Corps' stadia traverses were substantially below the accuracy standards of their time.

3) Like Walt Curo, I have also concluded that the 1983 BLM running notes are works of fiction regarding the south line of Section 21. The S1/4 was probably set at a pre-calculated position when their search did not turn up solid evidence. At best, the corner was possibly moved to the nearest found stump, of which there are many in the woods.



In 1965 the Cass County Highway Dept. found an iron pipe on what was presumed to be the north line of the south 242 feet of Gov't Lot 2. This is that pipe, although it is now flat on the ground.

In 1900 the Corps of Engineers found 1 GLO bearing tree at this MC. In his research Gary Stevenson calculated that the Corps' distance from the SE Section to this MC should have been 1462.09 feet. Stevenson set a Cass County monument 15.72 feet south of this position in 1985 (after the BLM was finished) & subsequently portioned the S1/16 between the SE 21 & the calculated MC position.

All of Government Lot 2, Section 21, Township 143 North, Range 25 West became Torrens property on March 1, 1911. (Certificate of Title No. 2590). The following 3 exceptions show the original date these parcels were created.

Exception 1 (Created 11-18-1946)  
Warranty Deed (Bk 2, pg. 303)

All that part of Lot Two (2) in Section Twenty one (21), Township one hundred and forty three (143), Range Twenty five (25) West of the Fifth Principal Meridian, described as follows:

Commencing at the Southwest corner of said Government Lot Two (2) thence run north two hundred and forty two (242) feet along the west line of said Government Lot Two (2), to a point, thence run East on a line parallel to the south line of said Government Lot Two (2), four hundred feet more or less to the shore of Little Vermillion Lake to a point which for purposes of this description shall be known as the Point of Beginning; thence retracing, run 400 feet more or less to a point on the west line of said Government Lot Two (2), four hundred feet more or less to the shore of Little Vermillion Lake to a point, thence run East on a line parallel to the south line of said Government Lot Two (2) a distance of four hundred and thirty (430) feet, more or less to the shore of said Little Vermillion Lake, thence run southwesterly, along the lakeshore to the Point of Beginning, containing one and one-half acres more or less, according to the Government Survey thereof.

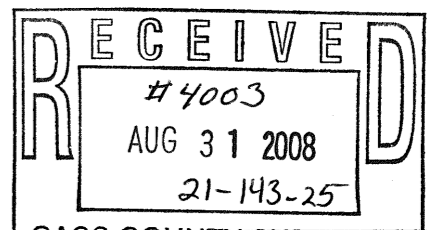
Exception 2 (Created 11-18-1946)  
Warranty Deed (Bk 2, pg. 304)

All that part of Lot Two (2) in Section Twenty one (21), Township one hundred and forty three (143), Range Twenty five (25) West of the Fifth Principal Meridian, described as follows:

Commencing, for the Point of Beginning, at the southwest corner of said Government Lot Two (2), thence run north along the west line of said Government Lot Two (2), a distance of two hundred and forty two (242) feet to a point, thence run East on a line parallel to the south line of said Government Lot Two (2) four hundred feet more or less to the shore of Little Vermillion Lake; thence southwesterly along the shoreline of said lake to the point of intersection with the south line of said Government Lot Two (2), thence run west along the south line of said Government Lot Two (2) to the Point of Beginning, containing two acres, more or less, according to the Government survey thereof.

Exception 3 (Created 8-16-1956)  
Warranty Deed (Bk 3, pg. 528)

All that part of Lot 2 Section Twenty one (21), Township One hundred and forty three (143), Range Twenty-five (25), described as follows to wit: commencing, at the Northeast corner of said Lot Two (2), as a point of beginning, thence West along the North line of said Lot 2 a distance of approximately 200 feet and across the County Road to a point, thence South 150 feet to a point, thence east 120 feet more or less to the shore of Little Vermillion Lake, thence Northwesterly along the lakeshore to the point of beginning.

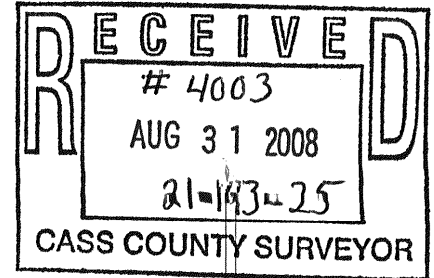


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# Northern Lights Surveying & Mapping, Inc.

## Dahlberg Survey Report



This drawing was prepared in order to show the existing disordered state of title and apparent boundaries within Government Lot 2, Section 21, Township 143 North, Range 25 West, of the 5<sup>th</sup> Principal Meridian. It is also intended to show how this disordered state came to be.

The section was created in 1872 by the original General Land Office survey. Settlement occurred only in the first decade of the Twentieth Century. Government Lot 2 was quickly brought into the torrens system. This occurred in 1911.

The first subsequent survey work in Section 21 took place in 1900. In that year, the United States Corps of Engineers performed a topographical survey relating to the creation of Pokegama Lake on a portion of the Mississippi River. Although boundaries and Section Subdivision were not their prime focus, they did traverse to and leave a record of their visits to several GLO corners in Section 21. Their field notes indicate the status of the Northeast, Southeast, South Quarter, the Meander Corner on the south side of Little Vermilion Lake on the east line of Section 21, and 2 Meander Corners on the north side of Big Vermilion Lake on the south and west lines of Section 21. They recovered all of these corners.

The Corps tied into these corners by means of open ended transit and stadia traverses. By those traverses, it is possible to calculate a bearing and distance between the various found corners. In the late 1990's, Northern Lights Surveying and Mapping performed a large retracement survey in Boy River, Minnesota where a similar Corps of Engineer stadia survey was performed. In that project, we concluded that calculations made from the Corps' field notes were quite unreliable and inaccurate, although the corner information was useful.

The second known surveys took place in 1913 and 1914. John Curo, of Cass County, visited and perpetuated the Northwest, Northeast, West Quarter and the Meander Corner on the west line of Section 21. He established both the N1/16 and S1/16 corners on the west section line. There is no indication that he ran the quarter or sixteenth lines in Section 21, although he mentioned a solid wire fence running east and west from a position approximately three feet south of the West Quarter. The fence belonged to James Ross who owned land in Section 20. Curo completed his survey by locating the first alignment for County Road #65.

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In 1914, Frank A. Donner, also working for Cass County, did attempt a partial subdivision of Section 21. He ran both the North-South and East-West Quarter lines. To do this he tied into Curo's West Quarter and the GLO North Quarter of Section 21. He did not recover any corners on the south line of Section 21, even though only fourteen years had elapsed since the Corps had recovered both the South Quarter and Southeast corners of Sections 21. Admittedly, the Corps had only found four bearing tree stump holes at the Southeast corner, so in the absence of a perpetuating post, the GLO evidence would have been hard to find. Since he needed to have the South Quarter before subdividing Section 21, Donner traversed to and found the GLO South Quarter of Section 28. He then placed the South Quarter of Section 21 (nearly) on line and at the midpoint between the two found GLO Quarter Corners.

Donner's method of restoring the South Quarter of Section 21 is not in accordance with the current BLM circular "Restoration of Lost and Obliterated Corners" nor the 1973 "Manual of Instructions". The 1909 "Restoration of Lost and Obliterated Corners" Circular called for missing quarter corners to be "re-established at proportionate distances between the corresponding section corners". Since there had been no physical Southwest Section corner in the GLO Survey, since there was no distance across Big Vermilion Lake along the south line of Section 20, and since the circular did not yet formally call for using Meander Corners for proportionate control; Donner had no monument to the west from which he could set the South Quarter of Section 21 by proportionate measurement. And being as the Southeast corner of Section 21 had only consisted of four shallow holes in the ground fourteen years before his survey, Donner would have had to go, at least, one mile to the east to find a controlling GLO corner. To have set the corner "properly" given what was available, Donner would have needed to set the South Quarter by running West (presumably astronomic west) at record distances from the nearest known GLO corner. Donner's methodology, while not correct, was not unreasonable and did utilize the nearest known GLO corners.

Donner ran the East-West Quarter line on a bearing of S87°E with a variation of 7°30'. This is a bearing that he calculated from Curo's 1913 survey of the West line of Section 21 and represented his effort to run the local East. In the 1909 circular, the GLO stated that "in a fractional section where no opposite corresponding corner has been or can be established, any required subdivision line of such section must be run from the proper original corner in the boundary line as nearly due east and west, or north and south, as the case maybe, to the water course,... as due parallelism to section lines will permit." While not in accordance with more recent manuals and circulars, Donner's East-West Quarter line was in accordance with those in Circulation at the time of his survey. His East-West Quarter was in no way dependent on the location of his North-South Quarter line and he indicated this by the fact that his North-South line was described as "temporary", but he makes no such reference to the East-West Quarter line.

Donner's drawing shows his distance from the West Quarter of Section 21 to the Center Quarter as 2658 feet and his distance from the North Quarter to the Center Quarter as 2679.5 feet. This would result in a theoretical CN1/16 which would lie 1339.75 feet from both the North Quarter and the Center Quarter. Donner also reported the distance from the West

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Quarter to the point where his East-West Quarter line crossed the road as 3,767 feet and the distance from the West Quarter to the shore of Little Vermilion Lake as 4,340 feet.

In our field inspection of Section 21 in 2008, we found that old fence lines were in place around the Southwest Quarter of the Northeast Quarter, along the line between Government Lots 1 and 2, along the line between Government Lots 2 and 3, between Government Lot 3 and the Northwest Quarter of the Southeast Quarter and along the west line of the Northwest Quarter of the Southeast Quarter. Road No. 137 had been built on the extension of the fence on the west side of the Southwest Quarter of the Northeast Quarter and the west side of the Northwest Quarter of the Southeast Quarter. Additionally, an iron pipe was found at the east end of the fence between Government Lots 1 and 2.

With one glaring discrepancy, the fences fit Donner's breakdown with a tolerance of around five feet, the fences are a near perfect fit for Donner's Quarter lines. The comparisons are shown on the drawing portion of this report. The big discrepancy is the fact that the fence intersection near the Center Quarter position is 1235.33 feet south of the fence intersection at the CN1/16 position. The distance from the first intersection to the pipe supposedly marking Donner's South Quarter is approximately 87 feet longer than Donner's record. It is our opinion that the fences and Road No. 137 were constructed along Donner's survey line and that they are a perpetuation of his 1914 survey. The discrepancy would appear to be the result of Donner mis-identifying his East-West intersection point with the North-South temporary Quarter line as station 26 + 58 when it should have been 25 + 58. His notes indicate that he broke for the day when he was at station 18 + 00, (running south from the North Quarter). This would explain how the CN1/16 could have been located in the right vicinity and the overall distance from the North Quarter to the South Quarter could be in agreement.

Many years transpired between the Donner survey and the next documented survey within Section 21. The U.S. Forest Service performed some maintenance work on a couple Section corners, but no one attempted a new subdivision in the section until after the Bureau of Land Management's Dependent resurvey in 1976. Real Estate, however, was sold and new houses were built in the intervening years. Three parcels were created in Government Lot 2 with which we are particularly concerned. In 1946, two parcels were created along the south line of Government Lot 2. In 1956, a third parcel was created along the north line of Government Lot 2. The two southerly parcels were essentially described as the Southerly 242 feet and the Northerly 160 feet of the Southerly 402 feet of Government Lot 2. The northerly parcel could be paraphrased as the Northerly 150 feet of Government Lot 2 lying east of the County Road. Buildings were constructed on all of them. In every one of these three instances, possession is compatible with the fences being construed to be the north and south lines of Government Lot 2.

In 1965, the Cass County Highway Department re-aligned County Road No. 65. In the course of that survey they located various fences, the fence corner near the Northeast corner of Section 21, and an iron pipe at the Northwest corner of the south 402 feet of Government

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Lot 2. Although the Highway Department did not subdivide Section 21, their field notes do confirm that the lines of possession that we located in 2008 were already in place in 1965.

In 1976, the Bureau of Land Management commenced a Dependent Resurvey of Township 143 North, Range 25 West which included Section 21. In that survey, they utilized the Northwest, West Quarter and Meander Corner on the west line of Section 21. These corners had been maintained by the U.S. Forest Service, the DNR and private surveyors for years and were traceable to the original GLO survey. The BLM also recovered Donner's cedar post at the South Quarter of Section 21, accepted it, and replaced it with a brass capped pipe. On the east line of the section, the BLM found pipes at the Northeast and Southeast corners. Forest Service records from the 1930's to 1973 indicated that both pipes were 250 to 350 feet east of the section line between Section 21 and Section 22.

Gary Stevenson, then Cass County Surveyor, with the assistance of U.S. Forest Service surveyors, placed a Cass County monument at the Northeast corner of Section 21 at the intersection of three fences. This monument was compatible with the GLO, Curo, a 1935 CCC record and with the 1965 Highway Department survey. This corner lay  $228\pm$  feet west of the 1976 BLM section corner. At this point, Stevenson had two corners in place that had been located in the course of the 1900 Corps of Engineers' survey, namely the Northeast section corner and the Meander Corner on the west line of the section. Using those two as a base, he proceeded to calculate positions for the Meander Corner on the east line and the Southeast and the South Quarter on the south line of Section 21.

In 1983, the BLM returned to the township and accepted the importance of Stevenson's research. They removed their Northeast section corner which is uncontroversial. They then went to the south line and searched at Stevenson's calculated positions for the South Quarter and the Southeast Corner. According to their official running notes, they recovered an original bearing tree at the South Quarter and the four bearing tree stump holes (exactly like the Corps 83 years earlier) at the Southeast Corner. The South Quarter moved  $150\pm$  feet to the west of Donner's post and the Southeast corner moved  $355\pm$  feet southwesterly of their 1976 corner.

In 1985, Gary Stevenson completed the remonumentation of Section 21 by placing a Witness Corner to the Meander Corner on the east section line. The Meander Corner was calculated from the Corps notes using the new BLM corner at the Southeast corner of the Section.

The 1983 BLM corrective survey was questioned almost immediately. Robert Jacobson placed an iron pipe as near to the position of Donner's post at the South Quarter as he could in order to perpetuate it after the BLM removed their 1976 monument. In 1989 the U.S. Forest Service hired Walt Curo to subdivide Section 28. Almost immediately, he and Forest Service Corner Retracement expert, Curt Krause, visited the South Quarter and Southeast corners of Section 21. After closely examining the terrain at the corners, Curo concluded that the BLM had found no physical evidence of the GLO corner at either location. In his opinion, the BLM had simply traversed to Stevenson's calculated position and set new corner

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monuments. He reasoned that the stump at the South Quarter in particular could not have completely disappeared. He wrote to the BLM on August 29, 1990 addressing his concerns.

On October 16, 1990 Stephen Kopach of the BLM responded to Curo. He denied Curo's charges, but gave no evidence of that the stump at the South Quarter with axe marks was definitely a GLO bearing tree. This sidestepped the fact that Curo and Krause had not seen any evidence of any spruce stump. At the Southeast corner, Kopach stated that the weather could have removed the evidence in the intervening six years, although it had not in the 83 years separating the Corps' survey from the corrective BLM survey. Kopach finished by resorting to authority, simply stating that Curo did not have any evidence that the BLM survey was fraudulent. Without such evidence, the BLM monuments would remain.

Curo was forced to capitulate and to accept the BLM monuments. His subdivision immediately resulted in trespasses in Section 28. In 2000, Landecker and Associates performed a survey in Government Lot 1 of Section 21. They used the monuments in place as of 1985. After a false start, they proceeded to subdivide Section 21 by doubling over the distance from the Southeast section corner to the S1/16 corner to produce a theoretical East Quarter in Little Lake Vermilion. This results in the same East Quarter as proportioning it between Stevenson's calculated Meander Corner and the Northeast of Section 21. A theoretical N1/16 corner on the east line of the section was calculated midway between the theoretical East Quarter and Northeast corner of Section 21. This methodology, in our opinion, is in conformance with both the 1985 monuments and the 1973 "Manual of Instructions". The solution was at odds with the occupation lines in the east half of Section 21.

In 2001, Roger Mustonen performed a survey for a Mr. Swenson. Swenson owned the parcel in the north 150 feet of Government Lot 2. According to the Landecker survey, almost all of Mr. Swenson's occupation lay within Government Lot 1 with only a portion of a cabin and a dock being in Government Lot 2. Mustonen mapped the situation, located the fence line, which we feel was intended to be the line between Government Lots 1 and 2, and suggested a revised boundary line to deal with the problem. In 2005, Terry Freeman of Landecker and Associates filed "Registered Land Survey No. 32" which incorporated Mustonen's suggested solution and which established the south line of the RLS as being the N1/16 line in conformance with the Landecker breakdown.

We are now dealing with the situation in the rest of Government Lot 2. In "RLS No. 32", Mr. Swenson gained over 170 feet on the road side of his lot and 44 feet at the shore inside what is now Government Lot 1. According to his legal description, he was entitled to a strip 150 feet wide, but only in Government Lot 2. Our analysis of the origin of the fence line which marks the north side of his occupation leads us to believe that the "RLS No. 32" was an equitable solution and we have no problem with it. This is especially true since the majority of Swenson's occupation falls within Tract A of RLS No. 32. If Mr. Swenson's original legal description were to be laid out according to the Landecker subdivision, he would gain 166± feet more of shore line giving him a total of 210± feet. According to his usage, he occupies a total of 175± feet of shore line of which 44 feet is in Government Lot 2. This would leave him with 131± feet in Government Lot 2. We would propose that Mr. Swenson's south line should be a line parallel to the north line of Tract A of "RLS No. 32"

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and be between 150 feet and 175 feet to the southwest. The exact amount would be open to negotiation between Mr. Swenson and his neighbor, Earl Dahlberg.

To date, no solution has been worked out for the southern 402 feet of Government Lot 2. If the fence line which follows Donner's East-West Quarter line is not used as the defacto South line of Government Lot 2, then the owner of the 160 foot parcel has a garage which falls 145 feet within Mr. Dahlberg's boundaries. The house of the owner of the 242 foot parcel would fall on the 160 foot wide parcel. The garage in question is 600± feet north of the south line of Government Lot 2 by the Landecker subdivision.

At this point, Mr. Dahlberg should take a full look at this survey and decide what his next course of action should be. It is probably fruitless to consider overturning the BLM survey despite our opinion that the 1983 survey was horribly disruptive and possibly fraudulent.