

Office of the County Recorder St. Louis County, Minnesota Recorded on 01/23/2020 at 11:24AM

Document No. 01372060

Wendy Levitt County Recorder

By B Goodreau Deputy AFR 394768

Document: CERT LOCATION/GOVT CORNERS
Grantor: CERTIFICATE OF
Grantee: GOVT CORNER POST

Recording Fee: \$0.00 Well Certificate Fee: \$0.00

This page has been added by the St. Louis County Recorder/Registrar of Titles to add the recording information to the attached document.

index No._ <u>N-1</u> Office of the County Recorder St. Louis County, Minnesota

Recorded on: JAN 2 3 2020

1372060

Document No.

Wendy Levitt County Recorder

I hereby certify that the within instrument was filed in this office for record

B. Goodreau

STATE OF MINNESOTA, COUNTY OF ST. LOUIS. On 11/18/1985, a U.S. Forest Service crew, led by Wes Stone, set a 2 1/4" diameter, 3' long Brass Capped Aluminum Pipe (BCP) at a position calculated by LaVerne Levelling from George Faye 1912 coordinates. Mr. Faye had located 3 original George Stuntz GLO bearing trees and his post during a retracement survey for the Oliver Iron Mining Co. Because this Stuntz corner was junior to the earlier Howe range line, the U.S.F.S. stamped the monument as an Amended Corner & set a Closing Corner on the section line

CERTIFICATE OF LOCATION OF

GOVERNMENT CORNER

Section Corner common to Sections 18 & 19,

Township 57 North, Range 13 West, 4th P.M.

running to the Quarter Corner common to Sections 18 & 19. See "Statement of Evidence" for further details (on back) (reserved for recording data) See "Statement of Evidence" 13 W1/4 30 **T57N** R13\ Gov't Lot 4 Section 18 T57N, R13W Spruce SIR N26 E 23.45 S19 N1"29'46"E 894.25 AMENDED (2018)MONUMENT RLS 16089 1985 Amended Corner Stamping 13" Spruce N74°E 58.13' (1986)Brass Capped BCF <mark>1 74.52</mark> Aluminum Pipe CC 2615.69 1/4 <u> 18</u> BCP 19 Amended Corner N88'09'15"E 2690.21 <u>6</u>1 17" Tamarack W1/4 S35'W 8.06 (1986)<u>ئ</u> NE-NES0'26'42"W 2653.96 Section 24 T57N, R14W Gov't Lot 1 Section 19 Ties for the Closing Corner are on page 4 in a supplementary sketch. ■E1/4 24 drawn by: LL Bearings & distances are based on SLCTM 96

Coordinates derived by survey grade VRS-GPS

Closing Corner is on Property Line Amended Corner = original GLO corner

"SKETCH OF REFERENCE TIES"

(not to scale -

bearings are magnetic) Ties are measured to center of monument unless otherwise noted.

UNITS = ☐ Metric ⊠ English

Latitude (N):_

47'24'55.74297"

47'24'55.72<mark>3</mark>09' 92'02'51.61010"

(NAD 83)

Northing: 3,572,460.527 feet Easting: 4,856,898.761 feet

3,572,458.127 feet 4,856,824,280 feet

S. P. North Northing: 663,772.345 (NAD 83, feet) Easting: 2.885.257.158

<u>663,769.</u>316 2,885,182.709

Easting: 2,885,257.158

I hereby certify that this document and the data contained herein was prepared by me or under my direct supervision and that I am a Licensed Land Surveyor under the laws of the State of Minnesota. I further certify that this Certificate of Location of Government Corner is correct and complete to the best of my knowledge.

/- Ø- Z0≥0 License No. <u>16089</u>

Page 1 of 4

Statement of Evidence for the Section Corner common to Sections 18 & 19, T57N, R13W, of the Fourth Principal Meridian. Amended Monument

9/2/1878: The Howe brothers, while under contract with the General Land Office, set a 4' post intended to be common for Sections 13 & 24 in T57N, R14W and Sections 18 & 19, in T57N, R13W. 2 feature calls were noted within a quarter mile. They are listed below, along with the Howes' BTs:

4" Spruce 10" Birch N49'E S78'E 18" Aspen S69'W Swamp 8 link Stream (E'ly) N39'W \$78°E South North 29 links 27 links 24 links 50 links 12.50 chains 20 chains (19.14')(17.82') (15.84')(33.00') (825')(1320')

4/8/1881: Between the Town Corner corner common to T57N, R13 & 14W (SW of 31) and the E1/4 of Section 24, T57N, R14W (theoretically also the W1/4 of 18, T57N, R13W), George Stuntz found no evidence of the Howe corners during his retracement survey of the Howe range line. He therefore had set section & quarter corners every 40 chains along a new range line. 15 chains north of this corner, Mr. Stuntz encountered the Howe blazed line for the first time & thereafter began to follow it for alignment. At this corner, which was initially intended to control 4 sections, he set the following BTs:

7" Spruce 9" Tamarack 6" Tamarack 7" Tamarack Swamp E1/4 13, T57N, R14W (Howe) N21'E N66'W S42'W S50'E South (var. 5'E) North (var. 7'E) 24 links 12 links 37 links 44 links 1 chain 54.05 chains (15.84') (7.92') (24.42') (29.04') (66') (3567.30')

4/1912: During a retracement survey in T57N, R14W, George Faye working for the Oliver Iron Mining Co., had reason to retrace the lower 3 1/2 miles of the range lines between T57N, R14W & T57N, R13W. In that survey he recovered the bulk of both the Howe & the Stuntz GLO corners. Starting at the Howe section corner to Sections 13 & 24 (which he assigned the coordinates of 0,0), he traversed southerly, with a 1' transit and a steel tape, along a base line. From that base line he tied into both the Howe & Stuntz corners and assigned each of them coordinates. He also mentioned topographic features that he encountered along his base line. The coordinates for this Stuntz corner were (896.6'S, 4.3'E). For the most part, his base line fell to the west of both original range lines. At the north end of the line, it was near the Stuntz line. At this Stuntz corner common to Sections 18 & 19, he found the Stuntz post and replaced it with a new one. He noted the following bearing trees:

7" Spruce 12" Tamarack 10" Tamarack Rotted Tamarack Swamp NE 24 (Howe) E1/4 24 (Howe) Not Found N70"W S34"W S56"E North N0"45'W S7"16'E 12 links 37 links 44 links 16' (on 896.1' 1760.0' (7.92') (24.42') (29.04') base line)

Note: Mr. Faye's basis of bearings W1/4 19 (Stuntz) appears to have been Astronomic S1'06'E North. 2656.3'

9/21/1936: C.M. Flanagan, CCC forester, found a 3" x 3" replacement wood stake, presumedly set by George Faye. In 1936, he found the rotted original stake lying alongside the Faye stake. He also located 2 of George Stuntz' GLO bearing trees. As Mr. Flanagan described the corner as being common to 4 sections, his description of the BTs confirms that it was the Stuntz corner that he found. He also stated that the corner was on the north edge of an alder & cedar swamp.

10" Tamarack 7" Tamarack 4" Tamarack N66"W S42"W S87"E

12 links 37 links 23.5 links (7.92') (24.42') (15.51') (GLO) (GLO) Location Poster scribed "S13 BT" "R14 S24 BT"

Summer 1985: In a process that is completely explained on the Corner Certificate for the Howe Section Corner for 13 & 24, T57N, R14W, LaVerne Leueling, RLS 16089, with the assistance of Jim Colburn, Regional Office photogrammetrist for the U.S. Forest Service, developed state plane coordinates (NAD27, MN) for all of the corners tied into by George Faye. They also mapped (with an accuracy of 2'±) all of the feature calls mentioned by the 3 historical surveys.

11/18/1985: After searches along the town line had resulted in the recovery of evidence at 5 of the GLO corners tied into by Mr. Fay, Mr. Levelling tweaked the Faye coordinates to accommodate the the found corners. On this date, Wes Stone, Gary Doney & Laura Schanlaub, of the U.S. Forest Service visited this site to make one final search. After not recovering any additional physical evidence, they set a standard 3' long brass capped aluminum pipe at the pre-calculated position. They established the following new references:

Since the Stuntz work was junior to the Howe range line, the found original Stuntz GLO corner became an Amended Corner. A Closing Corner was set on the Howe line & it was the true SW of Section 18.

To CC 18/19 To 1/4 18/19 To W1/4 18 To W1/4 19 To NE 24 To E1/4 24 N87'41'17"E N87'39'49"E N2'30'52"W S0'01'25"E N0'44'50"W S6'11'08"E 75.00' 2688.40' 2638.33' 2654.03' 896.05' 1752.61' (Amended) (T57N,R13W) (Amended) (Amended) (Howe)

Statement of Evidence for the Section Corner common to Sections 18 & 19, T57N, R13W, of the Fourth Principal Meridian.

Amended Monument

9/11/1986: The Closing Corner was also a 36" x 2 1/4" Brass Capped Aluminum Pipe. It was placed on a 4 foot long Spruce pole. It was set at the time that true line was run. The CC ties were:

10" Cedar S11**"**E Spruce Note: The bearing for the Cedar was later N79'W 5.92 ft. 48.88 ft. found to be reversed. Blazed, scribed "BT" & painted red.

Point #2180 = CC SPCS 27 (MN North) Y = 335,715.201 ft. X = 2,260,643.388 ft.

Converted to SPCS 83 Y = 663,772.079 ft. X = 2,885,259.108 ft.

Page 3 of 4

One tree has Section Corner tag.

From the Closing Corner to Sections 18 & 19, T57N, R13W (true SW 18):

To CC W1/4 19 To E1/4 24 S3.43'51"E S3.44'01"E 2652.74' 1749.14' To CC W1/4 18 To NE 24 N4'08'33"W N4'03'07"V 2639.66' 895.19' S3'43'51"E 2652.74' (Howe) (Amended) (Howe)

See Superior National Forest Photo Project fieldbook 8, pages 20 & 36. See Superior National Forest Photo Project fieldbook 23, page 23 for CC.

1989: John Zakovich, draftsman for the West Cadastral Zone of the Superior National Forest, prepared a certificate of survey for T57N, R13W. It was never signed or recorded, but the original was kept in the Forest Supervisor's Office in Duluth, Minnesota. It showed:

894.16 ft. (SPCS 27) 2653.70 ft. (SPCS 27) 2688.62 ft. (SPCS 27) 74.76 ft. (SPCS 27) N1'02'34"E S0'01'49"W N87'39'27"E To NE 24, T57N, R14W: To W1/4 19, T57N, R13W: To S1/4 18, T57N, R13W: To CC 18/19, T57N, R13W: N87'39'27"E

2017 through 2020: LaVerne Levelling, the Superior National Forest and the St. Louis County Surveyor's Office entered into an informal agreement to complete corner certificates related to the 1980's era remonumentation work. St. Louis County agreed to provide the necessary field work while LaVerne Leuelling would draft the corner certificates and provide the final certification. The Superior National Forest agreed to provide necessary supplies.

Winter 2017: LaVerne Leuelling re—adjusted the 1985 project, using recent RTK GPS observations made by the St. Louis County Surveyor's Office & Northern Lights Surveying Co. All of the measurements made during the 1985 project were utilized.

Amended Corner

SPCS (Harn 1996, MN North) Y = 663,769.394 ft. X = 2,885,184.656 ft. Geodetic SLCTM 96 3,572,458.188 ft. "24'55.72360"N 92'02'51.58178"W 4,856,826.228 ft.

A simultaneous re-adjustment of Faye's retracement around found corners produced a residual of 2.2'. This figure was well within the expected tolerances for Mr. Faye's time & technology.

Closing Corner

Geodetic SPCS (Harn 1996, MN North) SLCTM 96 Y = 663,772.419 ft. X = 2,885,259.594 ft. 47°24'55.74338"N 3,572,460.581 ft. 4,856,901.198 ft. 92°02'50.59157"W

To NE 24, T57N, R14W: To W1/4 19, T57N, R13W: To S1/4 18, T57N, R13W: N0*44'50"E S0*01'25"W N87*39'49"E 896.05 ft. (SPCS 83) 2654.03 ft. (SPCS 83) 2688.40 ft. (SPCS 83) To CC 18/19, T57N, R13W: N87°41'17"E 75.00 ft. (SPCS 83)

1/25/2018: Dylan Otto & Zach Neunsinger, working for the St. Louis County Surveyor's Office & with LaVerne Leuelling, found 2 Forest Service ties and the slightly leaning (NW) BCP. They made a survey grade GPS observation over the pipe and established a new tie.

17" Tamarack 13" Spruce 3" Spruce N74°E 58.13' \$35*W 8.06 N26°E 23.45' (1986) (1986) Old nails & tags present New nail & disk (2018) tag, nail & disk

894.14 ft. (SPCS 83) 2653.62 ft. (SPCS 83) 2689.87 ft. (SPCS 83) To NE 24, T57N, R14W: N1'00'45"E To W1/4 19, T57N, R13W: To S1/4 18, T57N, R13W: S0'02'20"E N87'40'13"E To CC 18/19, T57N, R13W: Not found

N1°29'46"E 894.25 ft. (SLCTM 96) S0°26'42"W 2653.96 ft. (SLCTM 96) N88'09'15"E 2690.21 ft. (SLCTM 96) To NE 24, T57N, R14W: To W1/4 19, T57N, R13W: To S1/4 18, T57N, R13W:

SPCS 83 (Harn, MN North) Y = 663,769.316 ft. X = 2,885,182.709 ft. Geodetic Lat. = 47°24'55.72309"N Long. = 92°02'51.61010"W SLCTM 96 N = 3,572,458.127 ft. E = 4,856,824.280 ft. Point #74

See St. Louis County fieldbook VA-0039, pages 112 & 113.

12/20/2019: Measurements made on all of the St. Louis County GIS aerial photography placed this Corner 71 feet (1.08 chains) north of the north edge of a large swamp.

Statement of Evidence for the Section Corner common to Sections 18 & 19, T57N, R13W, of the Fourth Principal Meridian. Closing Comer

1/25/2018: On the same day, Dylan Otto & Zach Neunsinger found the blown—over USFS CC BT with an Attention sign & 2 tags. They also found 2 steel sign posts with boundary signs. From the 3 reference objects they narrowed the search area to a 2' by 2' hole in the ice, but were unable to find the BCP. No bearing & distance was given to the BT, so we don't know which one was found.

Steel Sign Post Steel Sign Post (SSP)

East 3'±

North $5'\pm$

(1986)

(1986)

See St. Louis County fieldbook VA-0039, page 114.

On 11/6/2019: The St. Louis County Surveyor's Office reset the Forest Service BCP at the intersection of the line common to Sections 18 & 19 (as monumented) and the Howe range line (as monumented). The BCP was found lying on the ground in wet tag alder by Matt Brunner & Tom Mariucci. When they dug the hole at the intersection coordinates, they encountered the pointed stake upon which the BCP had been impaled in 1986. They found three USFS references and established a fourth. A VRS—GPS observation was made over the BCP.

10" Cedar N11*W

Steel Sign Posts (SSP)

(1986)

3" Birch

49.05 ft.

North East 4.80 ft. 4.90 ft.

(1986)

N57°E 10.71 ft. (2019)

(1986)leans northerly

new nail & disk

N3'45'59"W

To NE 24, T57N, R14W: To E1/4 24, T57N, R14W: To S1/4 18, T57N, R13W:

892.90 ft. (SPCS 83) 1748.93 ft. (SPCS 83) 2615.36 ft. (SPCS 83) 74.51 ft. (SPCS 83) S3*45'59"E N87*40'13"E

To AM 18/19, T57N, R13W:

S87'40'13"W

To NE 24, T57N, R14W:

N316'57"W

To E1/4 24, T57N, R14W: To S1/4 18, T57N, R13W:

893.01 ft. (SLCTM 96) 1749.15 ft. (SLCTM 96) 2615.69 ft. (SLCTM 96) S3°16'57"E N88°09'15"E

To AM 18/19, T57N, R13W:

S88'09'15"W 74.52 ft. (SLCTM 96)

SPCS 83 (Harn, MN North) Y = 663,772.345 ft. X = 2,885,257.158 ft.

Geodetic Lat. = 47'24'55.74297"N

2019 Closing Corner Stamping Long. = $92^{\circ}02'50.52701"W$

SLCTM 96 N = 3,572,460.527 ft. E = 4,856,898.761 ft.

Point #826

See St. Louis County fieldbook VA-0013 page 55.

