

PREPARED BY
STEPHEN MICHAEL BRAIN, BRAIN ENGINEERING, INC., 1540 MIDLAND COURT NE, CEDAR RAPIDS, IOWA PH. (319) 294-9424

UNITED STATES PUBLIC LAND
SURVEY CORNER CERTIFICATE

LAND SURVEY MONUMENTS SITUATED IN SECTION 22, TOWNSHIP 90 NORTH
RANGE 11 WEST OF THE 5TH P.M., BLACK HAWK COUNTY, IOWA.

NO SCALE

N

E 1/4 CORNER

22

SET SPIKE IN 18" STUMP

1.58'

21.25'

30.68'

6.48'

SET "X" NAILS IN 36" OAK

SET "X" NAILS IN 24" OAK

SET "X" NAILS IN 6" MAPLE

Assume Incorrect due to N.E. Corner Error.
See Attached Field Record

PREVIOUSLY RECORDED IN BOOK _____ PAGE _____

MONUMENT DESCRIPTION AND HOW ESTABLISHED _____

PROBED AND DUG AT THE CORNER AND FOUND NOTHING

SET 1/2" REBAR WITH YPC #9647 IN LINE WITH THE FENCE TO THE NORTH AND FENCE TO THE WEST

LICENSED LAND SURVEYOR
STEPHEN MICHAEL BRAIN
9647
IOWA

I hereby certify that this land surveying document and the related survey work was performed by me or under my direct personal supervision and that I am a duly licensed Land Surveyor under the laws of the State of Iowa.
Signed _____ Date 9/21/10
Stephen Michael Brain, L.S.
My License Renewal Date is December 31, 2010
License Number 9647
Pages or sheets covered by this seal: 1/1

CORNERS TO BE INDEXED

CORNER	SECTION	TOWNSHIP	RANGE
E 1/4 CORNER	22	T90N	R11W
W 1/4 CORNER	22	T90N	R11W

NO SCALE

N

W 1/4 CORNER

22

SET "X" NAILS IN 10" TREE

12.60'

22.01'

9.92'

SET "X" NAILS IN 8" TREE

SET "X" NAILS IN 12" TREE

CREEK

PREVIOUSLY RECORDED IN BOOK _____ PAGE _____

MONUMENT DESCRIPTION AND HOW ESTABLISHED _____

FOUND CONCRETE MONUMENT 2" ABOVE SURFACE ON NORTH CREEK BANK

A.THERE IS NO CERTIFICATE FOR THE CORNER ON FILE WITH THE RECORDER OF THE COUNTY IN WHICH THE CORNER IS LOCATED

B.THE SURVEYOR IN RESPONSIBLE CHARGE OF THE LAND SURVEYING ACCEPTS A CORNER POSITION WHICH DIFFERS FROM THAT SHOWN IN THE PUBLIC RECORDS OF THE COUNTY IN WHICH THE CORNER IS LOCATED.

C.THE CORNER MONUMENT IS REPLACED OR MODIFIED IN ANY WAY.

D.THE REFERENCE TIES REFERRED TO IN AN EXISTING PUBLIC RECORD ARE NOT CORRECT.

BRAIN ENGINEERING, INC.
1540 MIDLAND COURT NE
CEDAR RAPIDS, IOWA 52402
(319) 294-9424

406210-15

9.00 RS

BLACK HAWK COUNTY ENGINEER'S LAND CORNER FIELD RECORD

BHCO 05-13

BLACK HAWK COUNTY ENGINEERS OFFICE
316 E. FIFTH STREET, ROOM 211 WATERLOO, IOWA 50703

PH.# (319) 833-3008
FAX.# (319) 833-3139
e-mail: surveyor@co.black-hawk.ia.us

Documentation of field research for the attempted recovery of land corner(s) as denoted, the Black Hawk County Engineer staff reports the following information regarding the location of the **E. 1/4 Corner** of Section **22**, Township **90**, Range **11**, of the 5th P.M., Black Hawk County, Iowa.

Monument located within the road Right-of-Way? ☐ Yes ☒ No Road Name: N/A

Black Hawk County documents of record utilized as references:

<input checked="" type="checkbox"/> W.P.A. Corner Ties: Book <u>1029</u> , Page <u>5</u> , Date <u>12-20-1939</u>	<u>N/A</u> BHco Corner Ties: Book _____, Page(s) _____
<input checked="" type="checkbox"/> W.P.A. Chaining Notes: Book <u>1048</u> , Page <u>50</u> , Date <u>N/A</u>	<u>N/A</u> BHco Transit Notes: Book _____, Page _____
<u>N/A</u> George Miller Surveys (1858-1860): Page _____	<u>N/A</u> BHco Road Plans: _____
<input checked="" type="checkbox"/> John Ball Surveys: (1866-1891): Page <u>497</u>	<u>N/A</u> Ia D.O.T. Land Corner Surveys (Strip Maps)
<u>N/A</u> Nathan Barber Surveys: (1908-1931): Page _____	<input checked="" type="checkbox"/> Plat of Survey (PLS #9647) File: <u>2012-1949</u>

- 1.) SECTION LINE MEASURE REFERS TO "LOCAL GROUND" DISTANCE AND INCLUDES ELLIPSOIDAL (COMBINED) SCALE FACTOR FROM S.P.C. GRID INVERSE (AS OBSERVED, PER TOPSURV V.8.2.3 SCALE FACTOR = 1.00009380479) - ?

LOCATION SKETCH

"NOT TO SCALE"

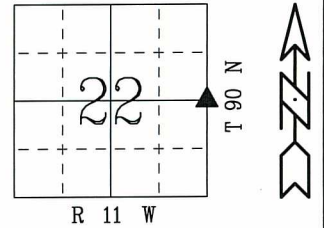
U.S. Historic Declination
Latitude: 42° 35' 42.27252297" N
Longitude: 092° 07' 17.12569055" W
Year Declination
1870 8° 16.0' E
1871 8° 12.0' E
<https://www.ngdc.noaa.gov/geomag-web/#ushistoric>

Remnant Fence
Exist. Wire dtd
in old trees
(locate trees)

PRELIMINARY

2653.2 (Ball 1871)
2638.5 WPA
(2625.48 PLS 9647)
yet ~~not~~ "not" from
N.E. COR WPA C.M.
2653.2 (Ball 1871)
2672.8 WPA
S.E. COR
SECT. 22
FND. Pinched Pipe 3/4" O.D.

N.E. COR
SECT. 22
WPA C.M.



Prorated WPA search area 13.75' North of #4 Rbr. per mile Measure vs. WPA. due to incorrect N.W. Cor. per PLS 9647.

Prorated 1871 Ball at equal split of N/S Mile, for reference only. (South of #4 Rbr.)

* There is AN Exist'g 30" Oak due S. (1/-) yet WPA calls 4' 30" as well?

LEGEND

- ☒ BHco GPS Monument
- ☒ Land Corner-Found
- ☐ Land Corner-Not Found
- ☐ Temporary Control Point

Description of fieldwork conducted and accessories recovered to estimate the location of this corner:

PROPORTIONATE W.P.A. RECORD MEASURE (N/S) PER BELOW 13.75' NORTH OF FND. #4 REBAR PER MILE MEASURE vs. WPA DUE TO INCORRECT N.W. COR. PER PLAT OF SURVEY (PLS#9647). FND. OLD REMNANT WIRE FENCE RUNNING DUE ± WEST THROUGH EXIST. ±18" TREE TO EXIST. WIRE FENCE CORNER POST AND DUE ± NORTH THROUGH EXIST. ±18" DIA. TREE. ALSO PROBED AREA PROPORTIONATE PER 1871 BALL SURVEY @ EQUAL SPLIT OF N/S MILE, MONUMENT NOT FND. (to DATE). Pending Additional Search Area and suggested tops of trees to support search area per WPA prorated estimate.

Calculations conducted to estimate the location of this corner:				RECORD MEAS:	FIELD MEAS.	EXCAVATION DIM'S.
				<u>2638.5'</u>	<u>(calc.)</u>	<u>@ LOC.'S</u>
				<u>5311.3'</u>	<u>5286.89'</u>	<u>±X.X'</u> N-S
FIELD MEASURE / RECORD MEAS. = SCALE						
<u>5286.89'</u> / <u>5311.5'</u> = <u>0.9954'</u>				<u>±X.X'</u> E-W		
SCALE x RECORD MEAS. (@ Fractional Dist.) = CALC'ED DIST. TO COR.				<u>±X.X'</u> Dp.		
<u>0.9954'</u> x <u>2638.5'</u> = <u>2626.37'</u>				<u>12/21/17</u>		
CALCULATIONS CHECKED BY: G.T. 04/10/18						

FIELD RESEARCH: G.T. & L.D. 12/19/17

PREPARED BY: L.D. 12/21/17

NOTE ▶ This record is not a U.S. Public Land Survey Corner Certificate and does not relieve a Land Surveyor of the requirements of Section 355.11 of the Code of Iowa, regarding further corner recovery and/or establishment.