

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

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SLSI 9-94  
BHCO 03-09

UNITED STATES PUBLIC LAND SURVEY CORNER CERTIFICATE OF  
Land Survey Monuments situated in Section 18, Township 90 N,  
Range 11 W, of the Fifth Principal Meridian, BLACK HAWK County, Iowa.  
Previously recorded in MISC. Book 319, Page 977, in County Recorder's Office.

(Show reason for preparing this certificate): The corner monument has been Replaced or Modified, per Ia. Code 355.11(1)(c)  
(Evidence and detailed procedures used in establishing the corner position(s) and monumentation found or placed.)

Monument Description and Remarks: N.E. COR.  
CORNER RESET & TIES UPDATED FOR H.M.A. RESURF. PROJECT LFM-1307--7X-07. PRIOR TO  
RESURF. PROJECT, FOUND 1/2" (#4) REBAR PER CURRENT RECORD AND TEMP. REF. COR.  
LOCATION PER RTK GPS (I&RTN). AFTER 2" DP. MILL, NO SOUNDING REMAINED @ ± RTK  
REFERENCE LOCATION, w/ NO FURTHER EXCAVATION. PVMNT. RESURFACED w/ +3.5" (2"  
INT. & 1.5" SURF.) H.M.A. PAVING. AFTER H.M.A. RESURFACE, RESET CORNER WITH 6" L.  
MAG SPIKE w/ MTL. WASHER (PLS #15748) LOCATED @ ± CENTERLINE H.M.A. JOINT AND  
ALIGNED WITH CENTERLINE OF PILOT GROVE ROAD.

Project Point #: 1009

### PLAN VIEW

BHco Hist. Ties: BK. #1003 p.18 90-11  
FIELD BOOK: Ties per Topcon 7003i #Z0115

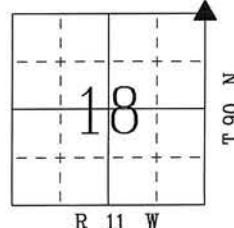
(Show a minimum of three reference ties to durable physical objects, relevant monuments and physical conditions that will enable recovery of the corner.)

1.) TIES PER EDM MEASURE  
IN NON-PRISM MODE, WHILE  
UTILIZING "INDIRECT"  
MEASURE, WITH ALL  
DISTANCES PLUMB/HORIZ.  
(HD), AS DENOTED.

2.) SECTION LINE MEASURE  
REFERS TO "LOCAL GROUND"  
DIST. AND INCLUDES ELLIPSOIDAL  
(COMBINED) SCALE FACTOR FROM  
S.P.C. GRID INVERSE (AS  
OBSERVED), PER AVG. SCALE  
FACTOR = 1.000097017623

RES. ENTR.  
(P.C.C.)

RES. #8005



-AG. CROPS-

FND. RED PLASTIC DISK MARKED  
"SURVEY WITNESS POINT" LOC.  
S.E. FACE P.P. @ ±3.2' HT.

179°59'45" (M.)

2640.19' (M.)  
(vs. 2640.5' WPA 1941)

N. 1/4 COR.  
SECT. 18-T90-R11  
(per Updated Cert.)

-AG. CROPS-

S.P.C., Ia. N. Zone, USft  
N = 3689429.35  
E = 5276542.50  
CONVERGENCE = 0° 53' 41"  
(NAD83-NA2011 IARTN OBS.)

PILOT GROVE RD.  
(GRAVEL)

PHONE  
PED. ROAD  
SGN.

FND. "X" NAILS @ S.W.  
FACE P.P. @ ±2.5' HT.

CEDAR-WAPSI RD.  
(H.M.A.)

2639.83' (M.)  
(vs. 2623.6 WPA 1941)

N. 1/4 COR.  
SECT. 17-T90-R11  
(per Updated Cert.)

FND. RED PLASTIC DISK MARKED  
"SURVEY WITNESS POINT" LOC.  
N.W. FACE 12"Ø POST @ ± 3.5' HT.

PILOT GROVE RD.  
(GRAVEL)

FIELD SURVEY: S.S. & G.T. 06/20/14  
PREPARED BY: S.S. 10/21/14

### CERTIFICATION

I hereby certify that this land surveying document was prepared 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.

*Geoffrey Allen Tinker* 10/22/2014  
Geoffrey Allen Tinker (date)  
License Number 15748  
My license renewal date is December 31, 2014  
Pages or sheets covered by this seal:  
This Land Corner Certificate Only.

### LIST CORNERS TO BE INDEXED

Corner	Section -	Township -	Range
N.E. Cor.	18	90 N	11 W
N.W. Cor.	17	90 N	11 W
S.E. Cor.	7	90 N	11 W
S.W. Cor.	8	90 N	11 W

### INDEX OF ABBREVIATIONS

(M) = "Measured" Dimension  
(P) = "Platted" Dimension  
(R) = "Record" Dimension  
(C) = "Calculated" Dimension  
(IGS) = Iowa Geodetic Survey  
(WPA) = Works Progress Admin. Survey  
"φ" = per George Miller Survey (BHco Surveyor 1858-1860)  
"δ" = per John Ball Survey (BHco Surveyor 1866-1891)  
"N" = per Nathan Barber Survey (BHco Surveyor 1908-1931)  
"NP" = Reflectorless EDM Meas.  
"MLM" = Indirect Measure  
"CM" = Concrete Monument  
"SM" = Survey Marker Spike/Tag  
"PK" = PK/MAG Nail Brand Style

