

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 21, Township 87 N, Range 14 W, of the Fifth Principal Meridian, BLACK HAWK County, Iowa.  
Previously recorded in Misc Book N/A, Page N/A, in County Recorder's Office.  
(Show reason for preparing this certificate): There is No Certificate for the corner on file with County Recorder, per Ia. Code 355.11(1)(a).

(Evidence and detailed procedures used in establishing the corner position(s) and monumentation found or placed.)  
Monument Description and Remarks: **N.E. CORNER:**  
CORNER RESET FOR COLD-IN-PLACE RECYCLE & H.M.A. RESURF. PROJECT LFM-503--7X-07.  
PRIOR TO RESURF. PROJECT, FOUND "MAG-NAIL" AND TEMP. REF. COR. LOCATION PER RTK GPS. AFTER 4" DEEP MILL & RECYCLE COURSE, NO SOUNDING REMAINED AND NO EXCAVATION DONE @ LOCATION. AFTER +3" H.M.A. RESURF. COURSE, RESET CORNER WITH 5/8" (#5) x ±8'L REBAR LOCATED @ ±0.6' NORTH OF HMA JOINT AT ± CENTERLINE INTERSECTION WITH LINCOLN RD. TO N/S.

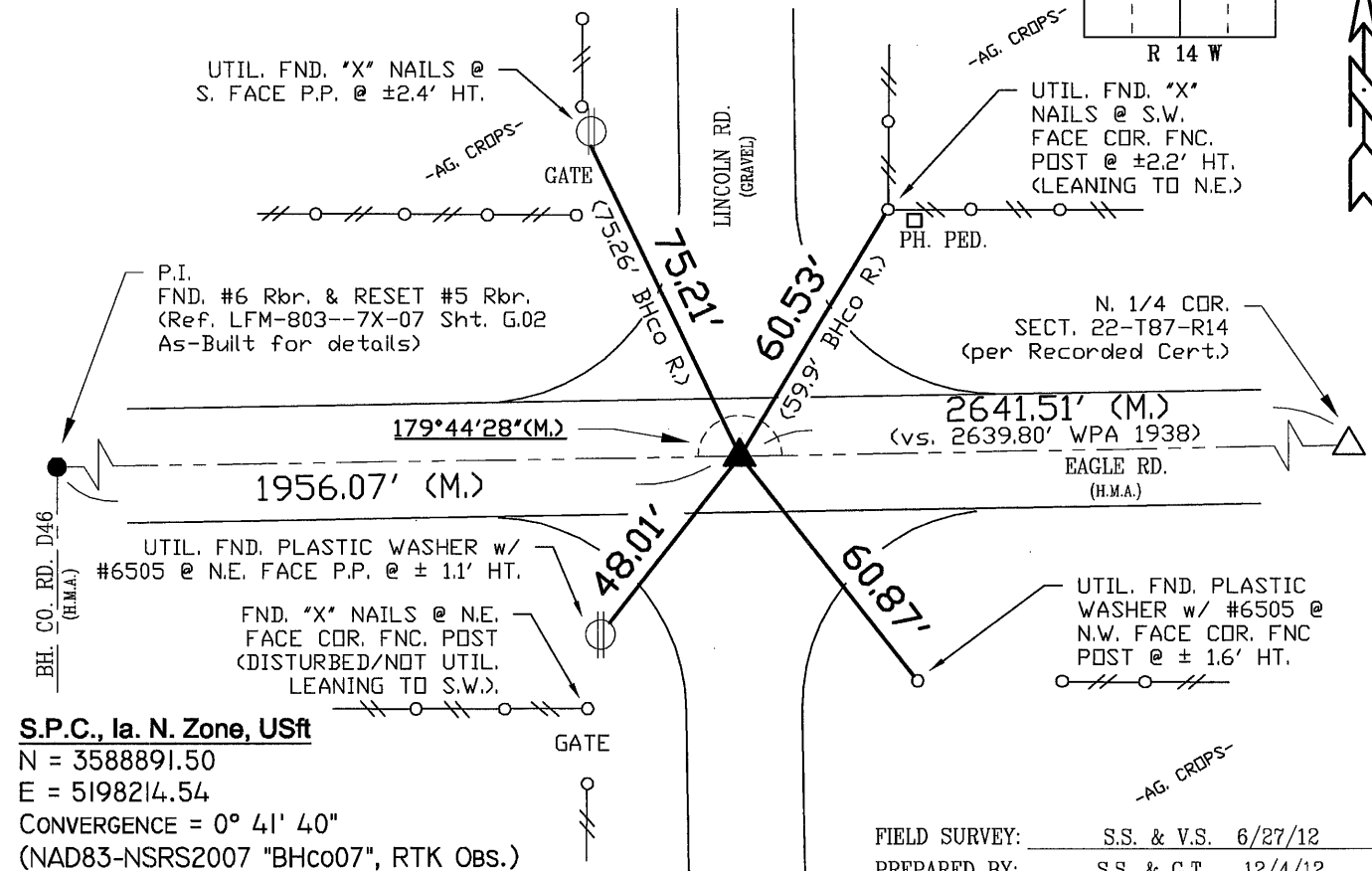
## PLAN VIEW

"NOT TO SCALE"

BHco Hist. Ties: BK. #1000 p. 21 T87-R14  
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 EITHER PRISM "OR" NON-PRISM MODE, WHILE UTILIZING "INDIRECT" MEASURE, WITH ALL DISTANCES PLUMB/HORIZ. (HD), UNLESS DENOTED.
- 2.) SECTION LINE MEASURE REFERS TO "LOCAL GROUND" DIST. AND INCLUDES ELLIPSOID (COMBINED) SCALE FACTOR FROM S.P.C. GRID INVERSE (AS OBSERVED), PER AVG. SCALE FACTOR @ G.P.S. MDN. #19 = 1.000080238400.



### S.P.C., Ia. N. Zone, USft

N = 3588891.50

E = 5198214.54

CONVERGENCE = 0° 41' 40"

(NAD83-NSRS2007 "BHco07", RTK OBS.)

FIELD SURVEY: S.S. & V.S. 6/27/12

PREPARED BY: S.S. & G.T. 12/4/12

## 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* 12/04/2012  
Geoffrey Allen Tinker (date)

License Number 15748

My license renewal date is December 31, 2012

Pages or sheets covered by this seal:

This Land Corner Certificate Only.

## LIST CORNERS TO BE INDEXED

Corner	Section	Township	Range
N.E. Cor.	21	87 N	14 W
N.W. Cor.	22	87 N	14 W
S.E. Cor.	16	87 N	14 W
S.W. Cor.	15	87 N	14 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  
"G" = per George Miller Survey (BHco Surveyor 1858-1860)  
"B" = 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

