

Some posts are easier to work with
than others.....







SURVEY

















Meanwhile, on the edge of the
Thorntown Reserve.....







BOONE COUNTY
Section
Corners
SURVEYORS OFFICE











Sometimes a rock is just a rock.

Sometimes it is something more...









Whatever you do, don't excavate
in the roadway without a proper
Utility Locate!



TV
OK









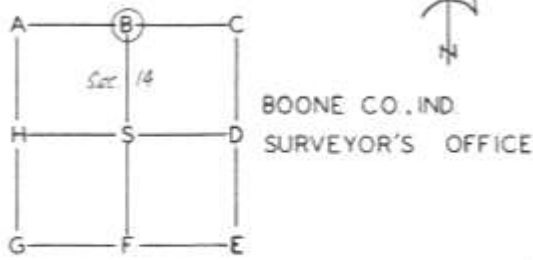
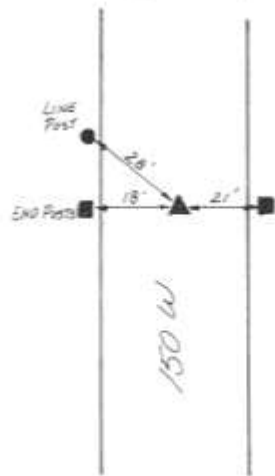
Once upon a hot Friday afternoon in the
company of skeptical farmers.....

SECTION 11 TOWNSHIP 19 NORTH RANGE 1 WEST

LINE	NUMBER	SECTION	TYPE	MEASURE	BEARING	AREA
1	12	11	Aspen	12	N 25° W	1.05
2	15	11	Buck	15	S 23° W	2.27
3	18	11	Aspen	18	S 70° E	1.17
4	21	11	Balm	21	S 53° E	2.27
5	24	11	Buck	24	S 65° E	2.23
6	27	11	Balm	27	S 73° W	2.07
7	30	11	Willow	30	S 77° W	2.04
8	33	11	Aspen	33	S 76° E	2.11
9	36	11	Buck	36	S 75° W	2.15
10	39	11	Aspen	39	S 75° W	2.11
11	42	11	Buck	42	S 75° W	2.11
12	45	11	Aspen	45	S 75° W	2.11
13	48	11	Buck	48	S 75° W	2.11
14	51	11	Aspen	51	S 75° W	2.11
15	54	11	Buck	54	S 75° W	2.11
16	57	11	Aspen	57	S 75° W	2.11
17	60	11	Buck	60	S 75° W	2.11
18	63	11	Aspen	63	S 75° W	2.11
19	66	11	Buck	66	S 75° W	2.11
20	69	11	Aspen	69	S 75° W	2.11
21	72	11	Buck	72	S 75° W	2.11
22	75	11	Aspen	75	S 75° W	2.11
23	78	11	Buck	78	S 75° W	2.11
24	81	11	Aspen	81	S 75° W	2.11
25	84	11	Buck	84	S 75° W	2.11
26	87	11	Aspen	87	S 75° W	2.11
27	90	11	Buck	90	S 75° W	2.11
28	93	11	Aspen	93	S 75° W	2.11
29	96	11	Buck	96	S 75° W	2.11
30	99	11	Aspen	99	S 75° W	2.11
31	102	11	Buck	102	S 75° W	2.11
32	105	11	Aspen	105	S 75° W	2.11
33	108	11	Buck	108	S 75° W	2.11
34	111	11	Aspen	111	S 75° W	2.11
35	114	11	Buck	114	S 75° W	2.11
36	117	11	Aspen	117	S 75° W	2.11
37	120	11	Buck	120	S 75° W	2.11
38	123	11	Aspen	123	S 75° W	2.11
39	126	11	Buck	126	S 75° W	2.11
40	129	11	Aspen	129	S 75° W	2.11
41	132	11	Buck	132	S 75° W	2.11
42	135	11	Aspen	135	S 75° W	2.11
43	138	11	Buck	138	S 75° W	2.11
44	141	11	Aspen	141	S 75° W	2.11
45	144	11	Buck	144	S 75° W	2.11
46	147	11	Aspen	147	S 75° W	2.11
47	150	11	Buck	150	S 75° W	2.11
48	153	11	Aspen	153	S 75° W	2.11
49	156	11	Buck	156	S 75° W	2.11
50	159	11	Aspen	159	S 75° W	2.11
51	162	11	Buck	162	S 75° W	2.11
52	165	11	Aspen	165	S 75° W	2.11
53	168	11	Buck	168	S 75° W	2.11
54	171	11	Aspen	171	S 75° W	2.11
55	174	11	Buck	174	S 75° W	2.11
56	177	11	Aspen	177	S 75° W	2.11
57	180	11	Buck	180	S 75° W	2.11
58	183	11	Aspen	183	S 75° W	2.11
59	186	11	Buck	186	S 75° W	2.11
60	189	11	Aspen	189	S 75° W	2.11
61	192	11	Buck	192	S 75° W	2.11
62	195	11	Aspen	195	S 75° W	2.11
63	198	11	Buck	198	S 75° W	2.11
64	201	11	Aspen	201	S 75° W	2.11
65	204	11	Buck	204	S 75° W	2.11
66	207	11	Aspen	207	S 75° W	2.11
67	210	11	Buck	210	S 75° W	2.11
68	213	11	Aspen	213	S 75° W	2.11
69	216	11	Buck	216	S 75° W	2.11
70	219	11	Aspen	219	S 75° W	2.11
71	222	11	Buck	222	S 75° W	2.11
72	225	11	Aspen	225	S 75° W	2.11
73	228	11	Buck	228	S 75° W	2.11
74	231	11	Aspen	231	S 75° W	2.11
75	234	11	Buck	234	S 75° W	2.11
76	237	11	Aspen	237	S 75° W	2.11
77	240	11	Buck	240	S 75° W	2.11
78	243	11	Aspen	243	S 75° W	2.11
79	246	11	Buck	246	S 75° W	2.11
80	249	11	Aspen	249	S 75° W	2.11
81	252	11	Buck	252	S 75° W	2.11
82	255	11	Aspen	255	S 75° W	2.11
83	258	11	Buck	258	S 75° W	2.11
84	261	11	Aspen	261	S 75° W	2.11
85	264	11	Buck	264	S 75° W	2.11
86	267	11	Aspen	267	S 75° W	2.11
87	270	11	Buck	270	S 75° W	2.11
88	273	11	Aspen	273	S 75° W	2.11
89	276	11	Buck	276	S 75° W	2.11
90	279	11	Aspen	279	S 75° W	2.11
91	282	11	Buck	282	S 75° W	2.11
92	285	11	Aspen	285	S 75° W	2.11
93	288	11	Buck	288	S 75° W	2.11
94	291	11	Aspen	291	S 75° W	2.11
95	294	11	Buck	294	S 75° W	2.11
96	297	11	Aspen	297	S 75° W	2.11
97	300	11	Buck	300	S 75° W	2.11
98	303	11	Aspen	303	S 75° W	2.11
99	306	11	Buck	306	S 75° W	2.11
100	309	11	Aspen	309	S 75° W	2.11

CORNER STONE RECORD

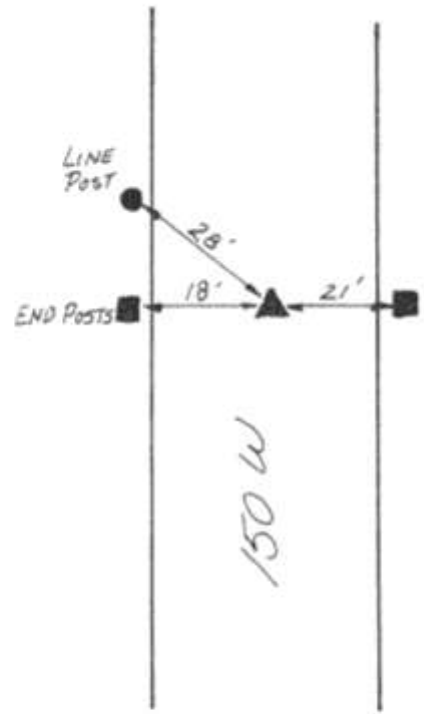
CORNER NE^c NW
 TOWNSHIP CENTER SEC 14, T 19, N, R 1W
 DATE CHECKED 7/1968
 BY J.R. & HAROLD (NO STONE)



TOWNSHIP _____ SEC. 14, T. 14, N. R. _____

DATE CHECKED 7/1968

BY J.R. HAROLD (NO STONE)



BOONE CO., IND.
SURVEYOR'S OFFICE











Once upon a lovely day in the woods....











SM
UR
VE
Y

Stone found leaning.

Question: what to do?

Answer: stand it up in what appears to be its original position and orientation.

Stone found leaning.

Question: what to do?

Answer: stand it up in what appears to be its original position and orientation.

Next question? Is that OK?

Answer: Yep. I think it is the right thing to do.

Justification: Check out this corner.....















Ever hear of a crosslaying?

Ever hear of a crosslaying?

No? Neither had I.

Ever hear of a crosslaying?

No? Neither had I.

Until the Summer of 2014....



















Meanwhile, up where the Second
Principal Meridian crosses the
Boone/Clinton line.....













And back at the corner of a field,
amidst the glacial deposits...











Documentation

Tie Card

- Signed by C.S. (prima facie)
- Signed and stamped by L.S.
- Dates
- Summarizes history
- Summarizes evidence
- Defines monumentation
- State Plane Coordinates
- Reference ties
- Graphical representation

SECTION CORNER RECORD BOONE COUNTY SURVEYOR'S OFFICE

NE 100-450

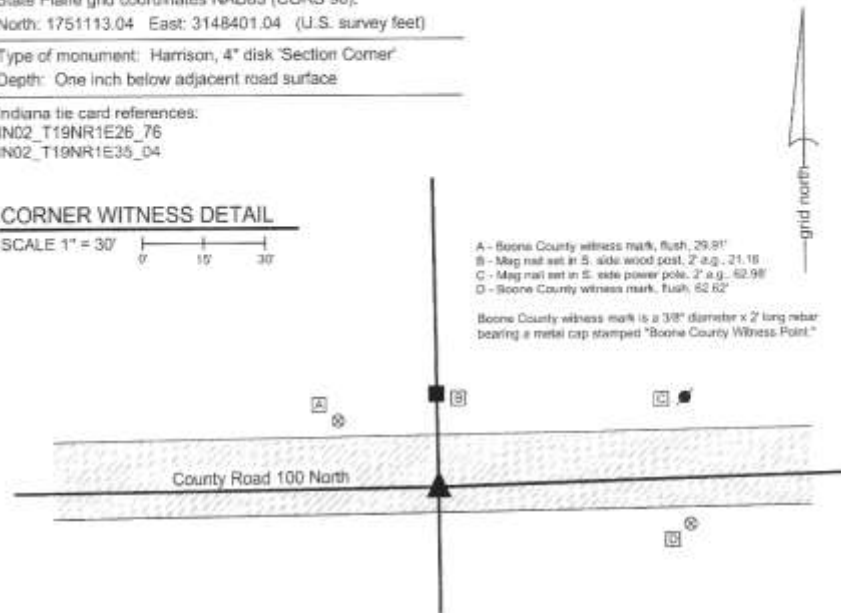
State Plane grid coordinates NAD83 (CORS 96):
North: 1751113.04 East: 3148401.04 (U.S. survey feet)

Type of monument: Harrison, 4" disk 'Section Corner'
Depth: One inch below adjacent road surface

Indiana tie card references:
IN02_T19NR1E26_76
IN02_T19NR1E35_04

CORNER WITNESS DETAIL

SCALE 1" = 30'

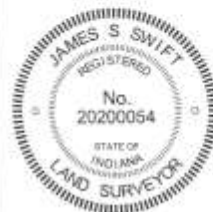


A - Boone County witness mark, flush, 29.81'
B - Mag nail set at S. side wood post, 2' a.g., 21.16'
C - Mag nail set in E. side power pole, 2' a.g., 62.98'
D - Boone County witness mark, flush, 62.62'

Boone County witness mark is a 3/8" diameter x 2" long rebar bearing a metal cap stamped "Boone County Witness Point."

The Harrison monument was set over a stone found. A BCS record of September 17, 1867 states "Reestablished from the trees. Set a Rock 16.13 by 8-1/2 "+" on top." A BCS tie card dated July, 1968 states "no stone found." A BCS tie card dated August 2, 2006 shows the corner as a Harrison monument with no documentation of source. This corner was excavated on September 28, 2011. Prior to excavation a Harrison monument was found in a hole in the asphalt 1 inch below grade. Excavation revealed a railroad rail found 8 inches below grade, directly below the Harrison monument. The 1968 tie card does not mention the rail, but it is most likely that the rail was set in association with the creation of that document. Further excavation revealed a stone found at 13 inches below grade, south and east of the rail. The stone is fully embedded in the clay layer below the road. With the top 9 inches of the stone exposed, it measures 13 inches E-W by 6 1/2 inches N-S. The stone is generally vertical, though leaning slightly to the south. An etched "+" is clearly visible on the top of the stone, on the sloping west side of the top. The full height of the stone was not measured, but with 9 inches exposed, it remained stable in the clay, indicating more depth. With the found mark and two matching dimensions, this was accepted as being the stone called for in the 1867 record. The top, high point of the stone was held as marking the corner. The stone is in line with the old end post at the north edge of the road. The stone is 3.1 feet south and 3.3 feet east of the position of the found Harrison monument and railroad rail, both of which were removed during excavation. The stone was left in place and a new Harrison monument was set directly over the top, high point of the stone, slightly east of the etched "+" on the top, sloping west side of the stone.

This corner was originally established as a wood post in June, 1822.



Kenneth E. Hedge
Kenneth E. Hedge, County Surveyor

James S. Swift
James S. Swift, IN LS 20200054

March 1, 2012, revised February 14, 2014

Center
Twp

Section 26
T19N, R1E

Section 35
T19N, R1E

Photographic documentation is for informational purposes.

Not necessary but useful and interesting.

Supports the primary document.

BOONE COUNTY SURVEYOR'S OFFICE

NE 100-450

PHOTOGRAPHIC DOCUMENTATION

Date of photography: September 28, 2011

View of the stone as first exposed.



View of the stone more fully exposed.



View from the south showing the found stone, and the old post on the north side of the road.



View of the stone as with dust washed off.

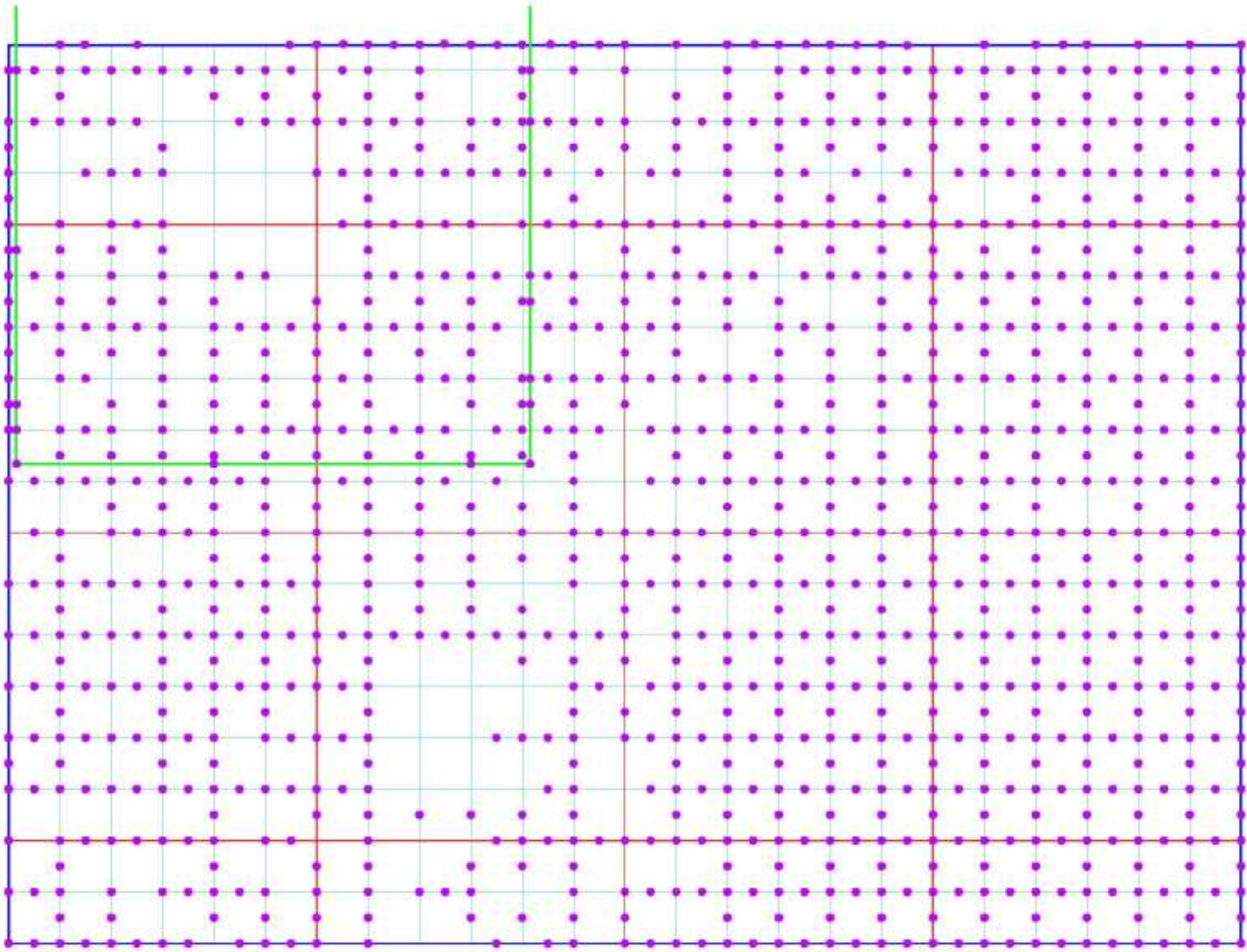


View showing the found stone and a shovel set temporarily in the position of the rail, as found.

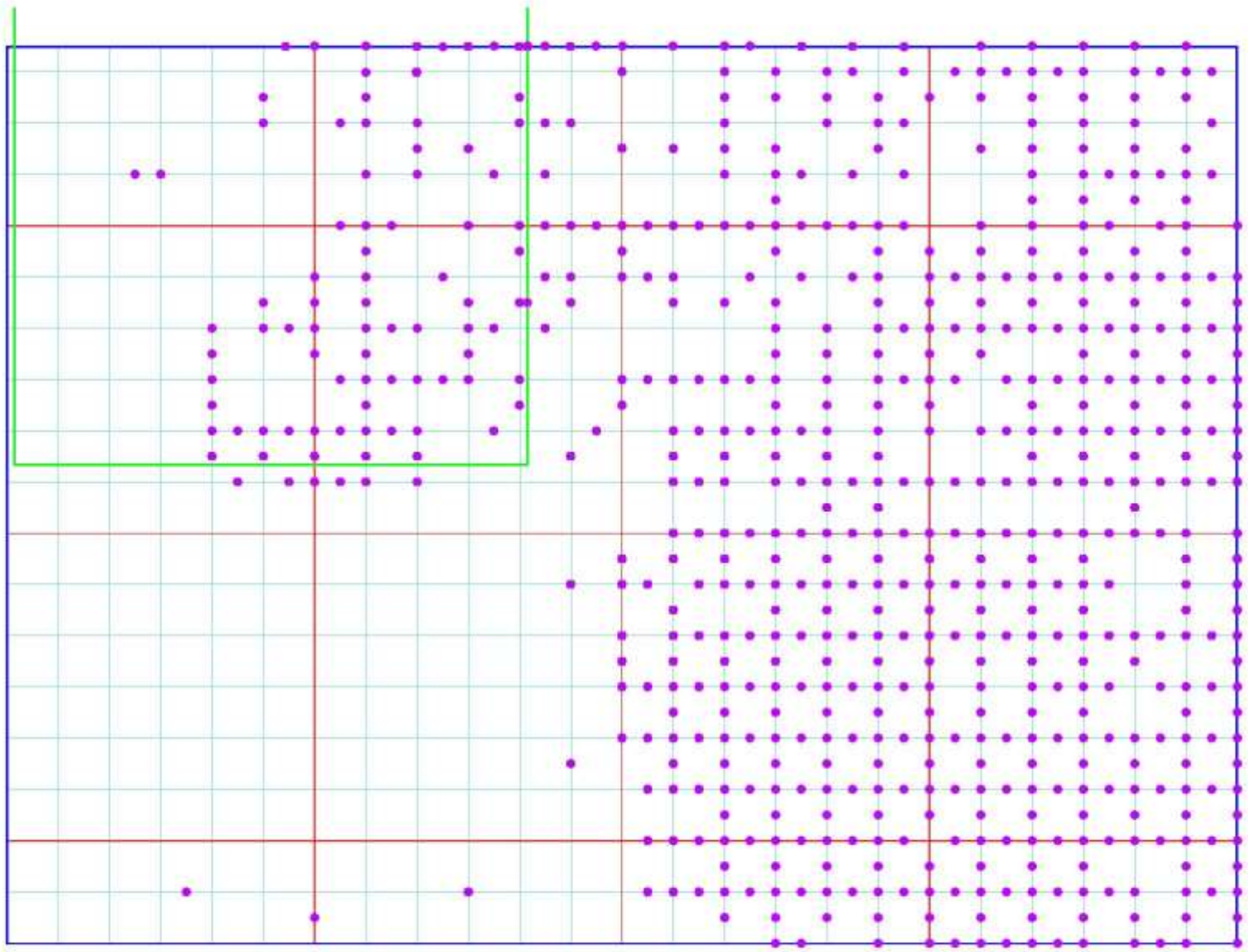


For details and documentation, refer to related sheet "Section Corner Record."

Progress



Boone County – preliminary evidence found for corner



Boone County – final monumentation complete

Progress

Corners found or monumented to date: 746
(approximately half of total original corners in the county)

Total which reference to stone or similar monument: 53%
Not including State Highways: 62%

Percentage of corners where hydraulic excavation equipment was committed and a stone was found: 73%

Note: the map on the previous page shows double corners as one dot, hence shows fewer dots than 746 corners.

Acknowledgements and Note on Sources:

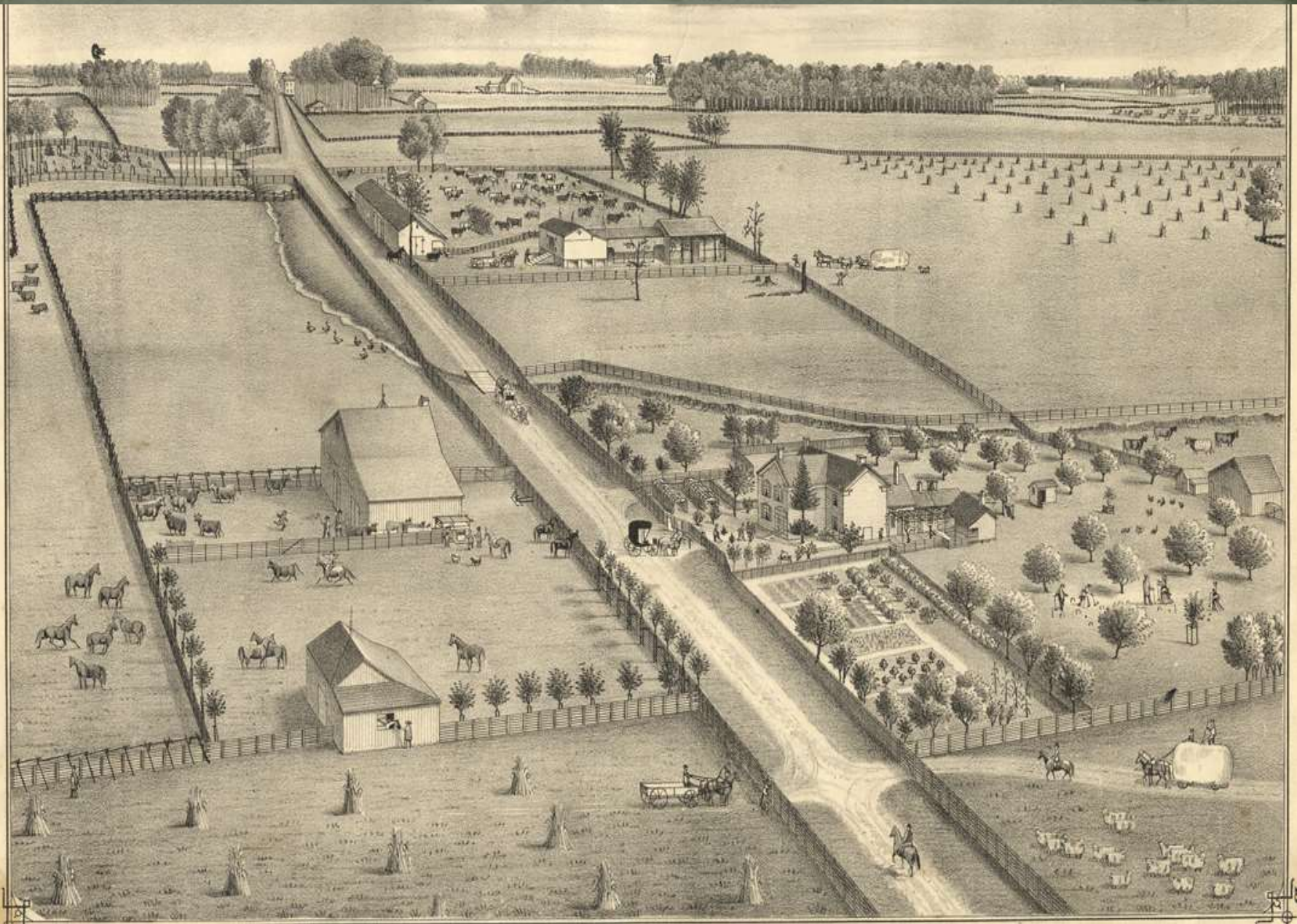
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Many useful maps and images may be found at the Library of Congress website, www.loc.gov

A special thanks is offered to the contributors to the Wikipedia Commons. Numerous images were used from this shared resource, as noted in the source notes attached to those images.

A special thanks is also offered to the Kappler Project at Oklahoma State University for making available, and referencing, images of the treaties between the United States of America and various native tribes.

The author also wishes to thank the Indiana Society of Professional Land Surveyors for the opportunity to share this presentation and the Boone County Surveyors Office for providing the resources and time to create this presentation.



James S. Swift, PS
jswift@co.boone.in.us
swiftjs@zoho.com

Kenneth E. Hedge
Boone County Surveyor
khedge@co.boone.in.us

Boone County Surveyor's
Office
116 W. Washington St.
Lebanon IN 46052
765-483-4444

USEFUL LINKS:
Boone County, Indiana
www.boonecounty.in.gov

Library of Congress (maps)
www.loc.gov

Royce Land Cession Maps
<http://memory.loc.gov/ammem/amlaw/lwss-ilc.html>

Indian Treaty References
<http://digital.library.okstate.edu/kappler/>