

W² 10-15-1W
WILSON'S ADD.

ED BRAUN ET AL.

1486

MAR 26 '96 12:04 FR TCG

317 580 2910 TO 95707118

P.01/05

SPRINT SPECTRUM
9325 Delegates Row
Indianapolis, Indiana 46240
Phone: 317-580-2900
Fax: 317-580-2910

*To: Rick
FAX 317-745-9068
mpasos*

FAX COVER SHEET

TO:	Dave Helton	PHONE NUMBER:	317-570-7102
COMPANY:	Sprint Spectrum	FAX NUMBER:	317-570-7118
FROM:	Mike Alt	DATE:	March 26, 1996
	Extension 217		

NUMBER OF PAGES INCLUDING COVER SHEET: 5

MESSAGE: Dave, Here is the information I got from Diana. She received this from an internal document (from her FAA training in Kansas City). It states the FAA requires a 2C survey and NAD83 coordinates. If you need additional information, call me. Otherwise, I will be in your office sometime late this afternoon.

ASAC INFORMATION SHEET 91:003INFORMATION REGARDING SURVEY DATA SUBMITTED TO THE FAA.

FAA order 8260.19c requires proponents of certain proposed construction (located beneath instrument procedures) to provide the FAA with a site survey or a letter, from a licensed land surveyor, which certifies the site coordinates and surface elevation at the site. On October 15, 1992, the FAA started using North American Datum of 1983 (NAD 83). All site coordinates submitted to the FAA should be based on NAD 83. The FAA requires that the survey or letter contain an accuracy statement which meets accuracy tolerances required by the FAA. The most often requested tolerance is $\pm 50'$ in the Horizontal and $\pm 20'$ in the Vertical (2-C). When the site coordinates and/or site elevation can be certified to a greater accuracy than requested by the FAA, please do so.

In order to avoid FAA processing delays, the certified site survey or certifying letter should be attached to the 7460-1 when it is filed at the FAA's Regional office. It must be signed by the surveyor and contain a raised seal (if available).

The FAA accuracy codes and a sample accuracy statement are listed below.

ACCURACY CODES:HORIZONTALCODE TOLERANCE

1	$\pm 15'$
2	$\pm 50'$
3	$\pm 100'$
4	$\pm 250'$
5	$\pm 500'$
6	$\pm 1,000'$
7	$\pm 1/2$ NM
8	± 1 NM
9	\pm unknown

VERTICALCODE TOLERANCE

A	$\pm 3'$
B	$\pm 10'$
C	$\pm 20'$
D	$\pm 50'$
E	$\pm 125'$
F	$\pm 250'$
G	$\pm 500'$
H	$\pm 1,000'$
I	\pm unknown

2 C Survey

Date _____

Re: (CO site Name and or site ID,
Located (in/near) City Name State

I certify that the latitude of _____° _____' _____" and the longitude of _____° _____' _____" are accurate to within \pm _____ feet horizontally; and that the tower site elevation of _____' AMSL is accurate to within \pm _____ foot vertically. With a planned structure height of _____' AGL, the overall height would be _____' AMSL. The horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD 83) and are expressed as degrees, minutes and seconds, to the nearest hundredth of a second. The vertical datum (heights) are in terms of the National Geodetic Vertical Datum of 1929 and are determined to the nearest foot.

SEAL

Professional Surveyor No. _____

FIRST GROUP ENGINEERING, INC.

CONSULTING ENGINEERS

5714 WEST 74TH STREET
INDIANAPOLIS, INDIANA 46278
TELEPHONE (317) 290-9549
FAX (317) 290-9560

June 18, 1996

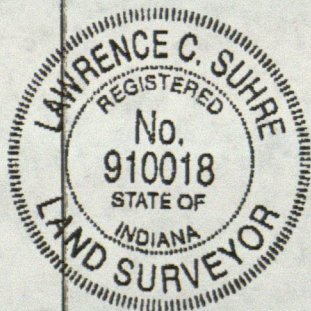
Mr. David Helton, Property Manager
Sprint Spectrum, LP
7930 Castleway Drive
Indianapolis, Indiana 46250

RE: County Road 100 N and State Road Site No. 207
Greenfield, Indiana

Dear Mr. Helton:

I certify that the latitude of 39° 46' 57.24" N and the longitude of 85° 47' 10.32" W are accurate to within ± 50 feet horizontally; and that the tower site elevation of 895.71 AMSL is accurate to within ± 1 foot vertically. With a planned structure height of 190' AGL, the overall height should be 1087.71' AMSL. The horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD 83) and are expressed as degrees, minutes and seconds, to the nearest hundredth of a second. The vertical datum (heights) are in terms of the National Geodetic Vertical Datum of 1929 and are determined to the nearest foot.

CERTIFIED BY:



Seal

Lawrence C. Suhre 6/21/96
Lawrence C. Suhre, P.E., L.S. Date

Profession Surveyor No. 910018

OT/96-7070.3

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Introduction and overall process

To understand the overall process an understanding of the FAA/FCC/Airspace studies process is necessary. Complete details of these processes are included in other sections of this document and a summary is given here as a starting point.

The FAA requires, based on certain parameters, that any structure erected within the vicinity of airports, heliports, other towers, landing systems, military installation etc, be approved by the FAA prior to construction. Based on the actual conditions approvals may be required or if no impact exists to airspace then no application/approval is required. Details of these issues is dealt with later. Specialized Air Space safety and research companies exist who can handle all aspects of these requirements.

The process for this is broken into three pieces - Phases I, II and III

Phase I consists of identify, and plotting on a color coded map, all known hazards within the search areas, together with all ceiling restrictions etc. This phase provides the initial information required to enable a worthwhile and meaningful search to be conducted for suitable real estate. Provision of this phase of the process is the contractual obligation of the main equipment vendors. The input information required for this process is provided in the form of initial RF search ring information, supplied by STV. This information is also used in the preliminary site acquisition process by Real Estate in identifying potential sites.

Using the information from Phase I the site selection process then selects an actual site and a detailed survey of the property is undertaken. (Requirements and accuracy of the survey together with accepted methods are dealt with in later sections). Upon completion of the survey Phase II can be started and this consists of a detailed site specific analysis of the site, by the Air Space company, to make determinations as to the need for application for FAA approval.

- If no approval is required an Opinion letter will be submitted to STV for record.
- If approval is required a report is issued and a Form 7460 is prepared for submission, via STV, to the FAA. This submission and any subsequent follow-up or negotiations constitutes Phase III of the process

A point worthy of note here, also discussed later, related to the application process and associated start of construction. In the event that it is decided to submit an application for approval, no construction activities can be started until an approval is received from the FAA. The approval process through the FAA takes between 70 and 90 days. It is therefore of great importance in determining the actual need for approval and the overall policy to be adopted by STV with regard to filing.

Responsibility for Phases II and III are considered to be with STV at both the MTA and Corporate levels. An anomaly in the ATT contract, concerning responsibilities, is being addressed at this time.

Discussions are currently underway to establish a National contract with an Air Space company for Phases II and III. Existing contracts will be dealt with separately

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Sprint Telecommunications Venture***Filing Procedures***

The cell site co-ordinates and height on the FAA/FCC filings shall always be accurate.

- 1.1. In instances where STV plans to locate on an existing tower:
 - 1.1.1. The tower height and location on the FAA filing must be verified by a STV contracted survey team(2C survey). An opinion letter must be generated or the appropriate FAA/FCC filing information should be verified and archived in the MTA as well as the corporate headquarters.
 - 1.1.2. If a discrepancy is found between the FAA/FCC filings and the survey information, then the MTA staff shall resolve the discrepancy. It is STV policy that all co-ordinates on FAA/FCC filings be accurate.
- 1.2. In instances where STV plans to erect its own structure:
 - 1.2.1. It is the policy of STV to do a 2C survey and determine the need to file with FAA/FCC. Every STV site should have either an opinion letter generated for it or the FAA 7460 and FCC 854 filings.
 - 1.2.2. A survey should also be conducted at the end of the construction to verify the location and height of the structure. All of the survey information should be filed locally at the MTA as well as a copy should be sent to the corporate headquarters to be filed in the central archiving location.
 - 1.2.3. If a temporary structure has to be erected that will exceed the FAA approved height for this location then the MTA shall notify the FAA of this situation. MTA will also send a copy to Kansas City for central archiving. No Antenna support structure shall be erected before the appropriate FAA/FCC approval.
 - 1.2.4. One person from each MTA should be the owner of the FAA/FCC compliance matters. It is recommended that this person be the only person allowed to sign-off on FAA/FCC filings. An alternate person should also be established within each MTA to take ownership of all FAA/FCC compliance matters in absence of the primary owner.

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Sprint Telecommunications Venture**2. Central Archiving System & Corporate Support**

- 2.1. A central archiving system will be developed at the Kansas City headquarters offices. This archiving system is meant to be a back up copy for the FAA and FCC compliance documentation. It is intended that the MTAs will keep an accurate and up-to-date copy of all their FCC/FAA compliance documentation locally.
- 2.2. The central archiving system will contain the following documentation:
 - 2C Survey information for all sites
 - Opinion letter
 - All FAA filings including but not limited to FAA 7460-2(all parts)
 - All FCC filings including but not limited to FCC form 854
 - Cell construction completion Check list form (will include final survey information)
- 2.3. The central archiving system will be updated regularly on a monthly basis to account for changes in the Network once the Networks are up and running. The updates should be more frequent (every two weeks?) before the launch to account for the rapid deployment of systems throughout STV managed markets.
- 2.4. A Hotline will also be set up to answer all legal questions regarding the FCC and FAA compliance. This Hotline will be supported by the STV legal department. This Hotline is meant to be used by the MTA personnel as a resource for answering legal questions that can not be answered readily in the MTAs. (The Hotline has not been set up yet)
- 2.5. The STV-Corporate engineering will also support the needs of the MTAs in the areas of co-ordination between the Infrastructure Vendor, Air Space Analysis vendor as well as the legal department on as needed basis. The central archiving system will also be developed and maintained by the Engineering Integration and Standards department.
- 2.6. It is recommended that the MTAs keep all of their FAA/FCC filings along with other local and state level regulatory compliance documents in a fire proof cabinet.

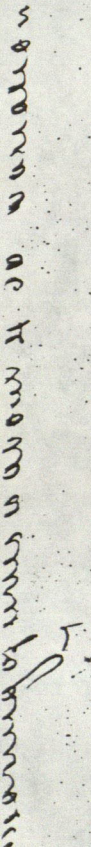
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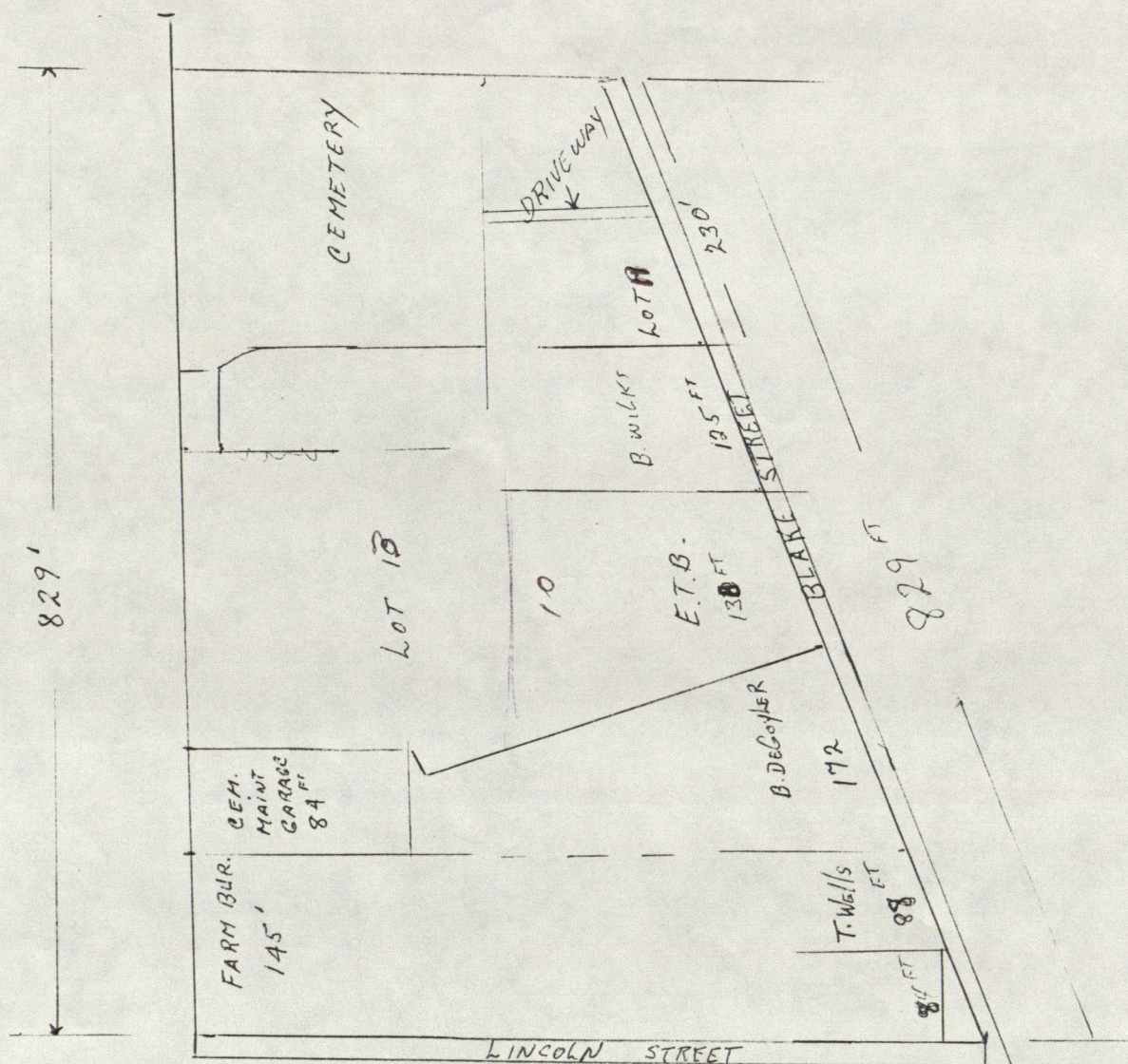
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Sprint Telecommunications Venture**3. Survey Requirements for FAA Compliance**

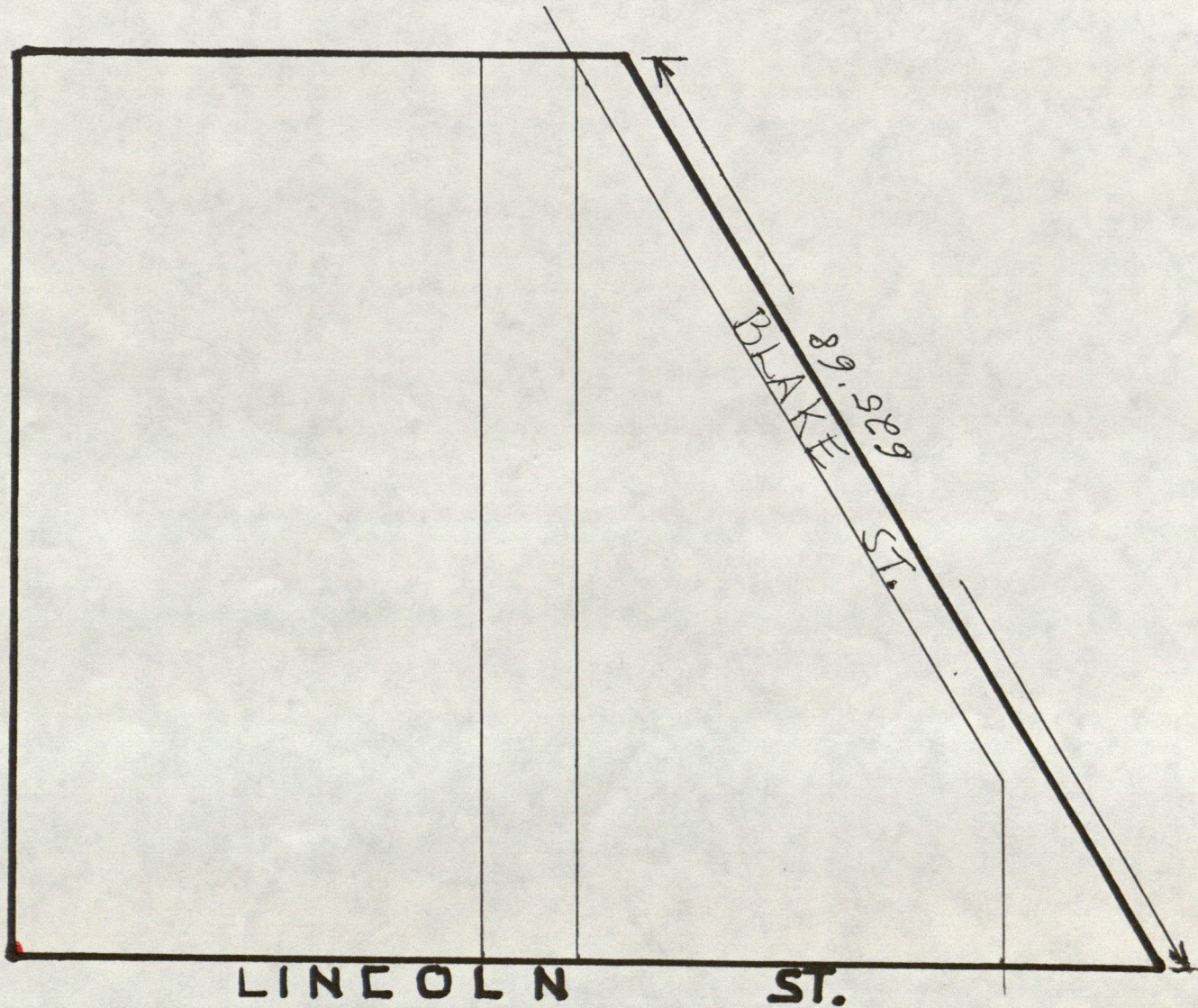
- 3.1. All surveys shall meet or exceed the FAA requirements for 2-C reporting. The acceptable tolerances for 2-C surveys are as follows:
 - 3.1.1. Height data on FAA filings shall be accurate to the nearest meter. This applies to the overall structure height. Remember the height of the structure means the height of the tower including the antennas, grounding rods, etc. Using an FAA official's quote it means: "Where the metal ends and the air begins"
 - 3.1.2. Latitude and longitude data shall be in NAD 83 datum. It must be accurate within one second. The owners may use surveying tools such as maps, GPS receivers with differential corrections to obtain this information.
- 3.2. A survey report must include the following information:
 - 3.2.1. The actual coordinates of the tower location in NAD 83.
 - 3.2.2. The tower base elevation AMSL (Above Mean Sea Level) and the height of the tower.
 - 3.2.3. A certified letter must be submitted with the survey.
 - 3.2.4. Legal description of the lease/purchase area.
 - 3.2.5. Other information defined by the site acquisition.
- 3.3. The above mentioned 2-C survey requirements are for the FAA compliance only. There will be additional requirements from the site acquisition manager for the 2-C survey. Additional information on 2-C surveys is provided as background information at the end of the document.
- 3.4. It is also recommended that the FAA filings should be accompanied by the Survey Information (with a certified surveyor's stamp). Doing so could help expedite our filing approval process.
- 3.5. In instances where a site is surrounded by taller structures, the MTAs may want to include Panoramic pictures showing the location of the proposed structure being shielded by surrounding structures to help expedite the FAA approval process.



See following Page for Description



Wilson's addition
Per plat



7-15-94

10:40

Ed Brauer

420 Blake

745-2703

How much will it cost.

Com.: 3-6-90

$\frac{308}{135}$

For

Stan

same

11-5-91

$\frac{317}{229-20}$

Peggy Wilks 410 Blake

? Degoyler Lizton 3-31-95

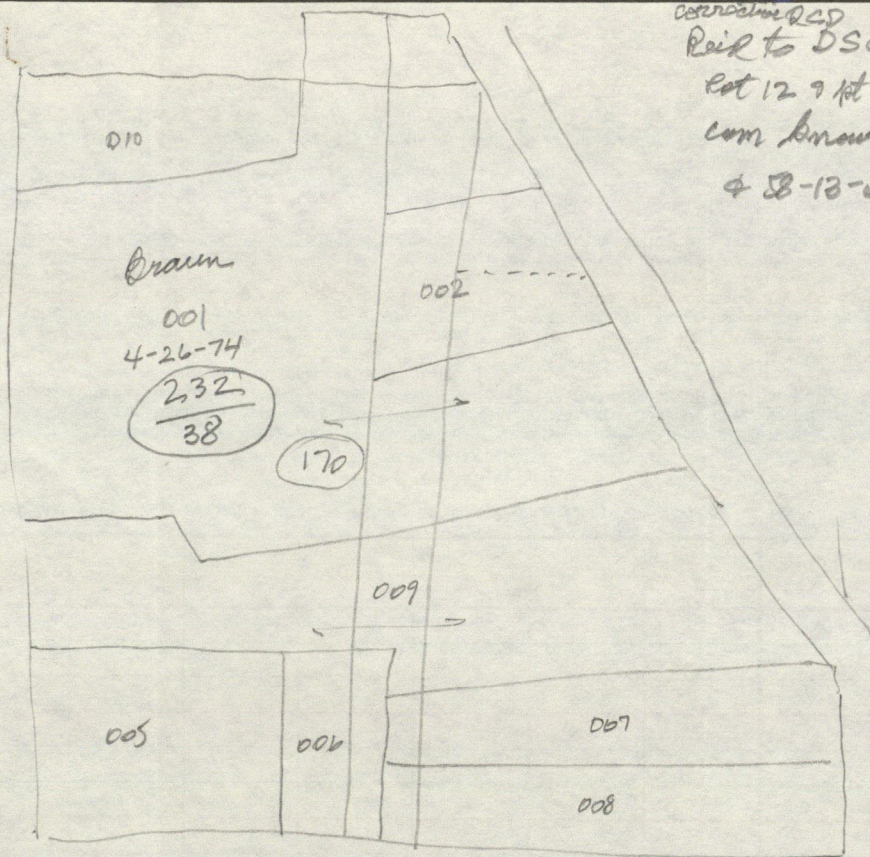
Tammy Wells 8-6-90

$\frac{310}{425}$

? Scott 8-14-95

Quit Claim Deed

Re Surveyed w/ me & Bouds



001
 Rail to DSC 24 Jan 1989
 Plot 12 & 1st Lot 13 under all,
 com known as Key No. 58-12
 4 58-12-01 $\frac{308}{135}$

V. Satoh to Edw. T. Braun et al. 232/38 26 Apr. 1974 Pt Lots 10, 11, &
 13 Wickson's Add., Danv. Bq. 241.00' N of SW cor. NW 1/4; S 89° 36' 30" E
 145.23'; S 22° 26' 30" E 27.48'; N 77° 20' 00" E 387.54' to point in R4
 C.R.; N 32° 22' 00" W on rail road 377.95'; N 87° 30' 00" W 110.98'
 to com. cor.; S on com. line 99.98'; S 82° 10' 00" W 194.26' on com.
 boundary; S on E side com. plot 50.33' to SW cor. plot; N 70° 00" W
 on E plot 24.00' to E com. pt. betw. 1/2 Sec. 10; S on sec. line
 207.67' to key.