



**Sidwell Supervisor Martha Nunley and Daniel L. Nelson, Executive Director of the Board of Election Commissioners review an election district map.**

## MAPPING SYSTEM AIDS DU PAGE ELECTIONS

The election process in DuPage County, Illinois has been greatly improved as a result of a new mapping program instituted by Daniel L. Nelson, Executive Director of the DuPage Board of Election Commissioners.

DuPage County is one of Chicago's collar counties with a population of over 653,000 and 300,923 registered voters. Unlike many counties, the administration of all election activities in DuPage is the responsibility of Mr. Nelson's office.

There are numerous problems associated with having an election. Not the least of these is determining who is eligible to vote in special elections and assigning the correct voting district. To help overcome these problems, Mr. Nelson's office had a series of detailed maps prepared by The Sidwell Company.

### Township street maps show election district boundaries

The first series consists of election district maps. These are based on detailed township street maps that were developed as part of the complete county-wide tax mapping project Sidwell prepared for the County. The maps are continually updated with new streets and show the 589 precincts in the County and the applicable congressional, legislative, representative and county board boundaries. The various boundaries are printed in different colors and the maps are distributed to each township where they are posted in each polling place.

The recent enactment of the Consolidated Election law created a special need for accurate records. When the Board of Election Commissioners assumed responsibility for all elections, they found that the

existing boundary maps being used by each taxing body were often outdated. Most of the maps were drawn at different scales and some did not even exist.

### Boundaries of each tax unit on transparent overlay to township street map

The solution was the creation of two additional map series. First, tax unit boundary maps were prepared to show the geographic limits of each tax levy classification. These include corporate limits, fire protection boundaries and mosquito abatement, park and school districts. Each boundary map is shown in color on a clear overlay matched to a current township street map.

### Tax code boundaries on transparent overlay to county tax map

A second detailed set of maps shows specific tax code boundaries. These are also prepared as color coded overlays, however, they are formatted to match the County's 1" = 200', quarter-sectional tax maps. This combination shows both the limits of each specific tax code (there are 944 possible code combinations) and the location of individual parcels which are affected.

Keeping the various maps in the system up to date is a constant but necessary task. Information regarding boundary changes are provided by Mr. Jay Bennett, the DuPage County Clerk. In addition, the Clerk's office utilizes the tax code information to extend the taxes for each of the County's 250,480 real estate parcels.

Although election district and tax code information is continually changing, Mr. Nelson notes that the mapping system has provided an efficient, systematic method of keeping track of each change.

## COLOR vs. BLACK AND WHITE

Few of us prefer black and white TV or movies over color. However, the use of color aerial film over black and white can actually influence the accuracy of topographic mapping.

### Color may hamper height measurement

According to the 4th Edition of the Manual of Photogrammetry, a phenomenon called chromostereopsis can result in a person seeing a set of different colored objects at different heights even though no height difference exists.

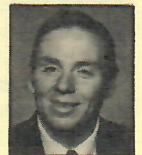
Tests show that some people see colors at the red end of the spectrum as being closer while others see blue closer. Because of this condition, a stereoplotter operator's ability to accurately measure differences in height, may be hampered.

### Color photography more costly

Because of the above problem and the higher cost of color aerial photography, most mapping photography is black and white. Color and infrared photography can be obtained if desired.

In all fairness, it should be noted that color aerial film does have distinct advantages for photographic interpretation.

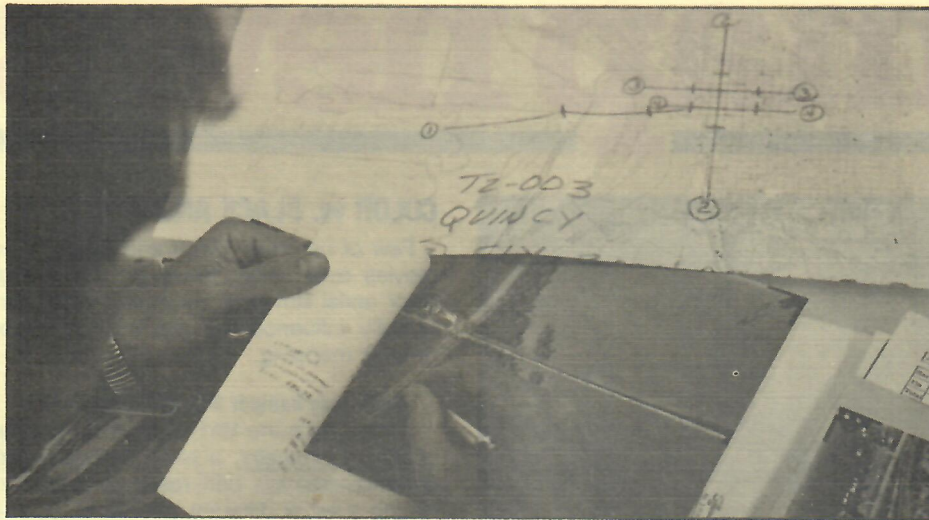
## DAVE SQUIRES ON NACO PROGRAM



Mr. David Squires, Sidwell's Senior Customer Engineer, was a featured speaker at the 47th Annual Conference of the National Association of Counties held in Baltimore, Maryland. Dave was part of a three man records symposium who presented a program to county clerks and recorders entitled, "Entering the 21st Century."

Using slides and overhead visuals, Dave traced the history of mapping from early land surveys to the use of aerial photography and the development of accurate property maps. Parcel numbering systems were discussed as a means of identifying property and computerizing county tax records.

Dave's presentation concluded with a look at the state-of-the-art mapping and data base management services provided by interactive computer graphics. With the new systems, maps and all map related records can be stored in the computer. CRT screens are used to display the information by combining layers of map detail at any desired scale.



### SIDWELL MAPPING USED FOR BRIDGE ALIGNMENT

Plans for a new 3500' long highway bridge spanning the Mississippi River at Quincy, Illinois have been aided by Sidwell's photogrammetric services. The mapping, prepared for Booker and Associates, St. Louis, Missouri, is part of a plan to relocate west bound traffic on U.S. Route 24 crossing the river.

#### A separate bridge will be built for west bound traffic

The existing bridge is narrow and badly in need of repairs to the decking. Studies showed, however, that removing the old bridge and constructing a new four lane bridge would not be the most economical solution. Instead, a smaller (35' wide) bridge will be built four blocks north of the present one and used exclusively to carry west bound traffic. The existing two lane bridge will be resurfaced and used to carry only east bound traffic from Missouri into Illinois. The maps prepared by Sidwell covered the bridge approaches on both sides of the river at a scale of 1" = 20' showing a two-foot contour interval.

#### Sidwell maps combine contour information with aerial photo

Sidwell's Topo Plan mapping was selected because it contains contour information combined with an orthographic aerial photo base. This feature makes the maps ideal for both engineering studies and presentations at public hearings.

The same aerial flight was used to prepare additional mapping for the City of Quincy's consultant. It was used to prepare plans for utility relocation in connection with the new bridge construction.

#### City and state cooperation eliminates duplication of efforts

The new bridge at Quincy will be a cooperative effort between the City and the State of Illinois and Missouri Departments of Transportation. Mr. Frank Illingworth, Booker's Deputy Manager of the Fairview Heights, Illinois, office noted the cooperation between the City and State Highway Departments resulted in a savings by combining aerial flights and mapping services.

### NEW HANDBOOK DESCRIBES MAP PRODUCTS

A new handbook describing the many aerial photography and map products available through Sidwell's Customer Service Department is now available. The booklet contains photo illustrations and descriptions of each photo and map product, including scales, coverages and availability.

Photo products include contact prints, photo enlargements, photo mosaics and Aer-O-Maps. Available maps include prints of county tax maps, village street maps, commercial atlases and tax map lease atlases.

To obtain your copy of the handbook, write Dept. MN. c/o Sidwell Company.



### SIDWELL TO INTRODUCE NEW SERVICE AT IAAO

Sidwell's newest service—SIGNET™, Sidwell Interactive Graphics Network, will be introduced at the International Association of Assessing Officers Conference in Kansas City, October 3-6.

If you are one of the more than 2000 assessment officials who are expected to attend the conference, you are invited to stop by Sidwell's educational exhibit to see computer-drawn map samples. Knowledgeable representatives will be on hand to answer your questions about computer graphics and to provide the latest information on aerial photography and tax mapping systems.

Be sure to register for our Monday drawing while at the exhibit.

### DERREL OWENS ADDRESSES BUILDING OFFICIALS



The use of county tax maps and aerial photography was the topic of a presentation given to the Suburban Building Officials Conference by Sidwell representative; Derrel Owens.

Northern Illinois building and zoning officials who attended the luncheon meeting, were shown a film strip explaining the preparation of tax maps and the use of the permanent parcel numbering system for coding building and property records.

### NEW PEORIA COUNTY ATLAS PUBLISHED

Realtors, banks, lawyers and others who depend on up-to-date property information can now obtain the 1982 Peoria County Tax Map Atlas. The new atlas replaces the present outdated commercial atlas and shows complete county-wide parcel information for both *subdivided* and *meets and bounds* parcels. Recent parcel splits and consolidations, dimensions and permanent parcel numbers are clearly shown.

The complete atlas consists of over 1000 maps, an alphabetical subdivision index in two handy 11" x 17" volumes.

For more information, contact Mr. Derrel Owens, c/o The Sidwell Company.

### FOR FURTHER INFORMATION ON ANY SIDWELL MAPPING SERVICES . . .

Write to The Sidwell Company, 28W240 North Avenue, West Chicago, IL 60185 or phone (312) 231-0206