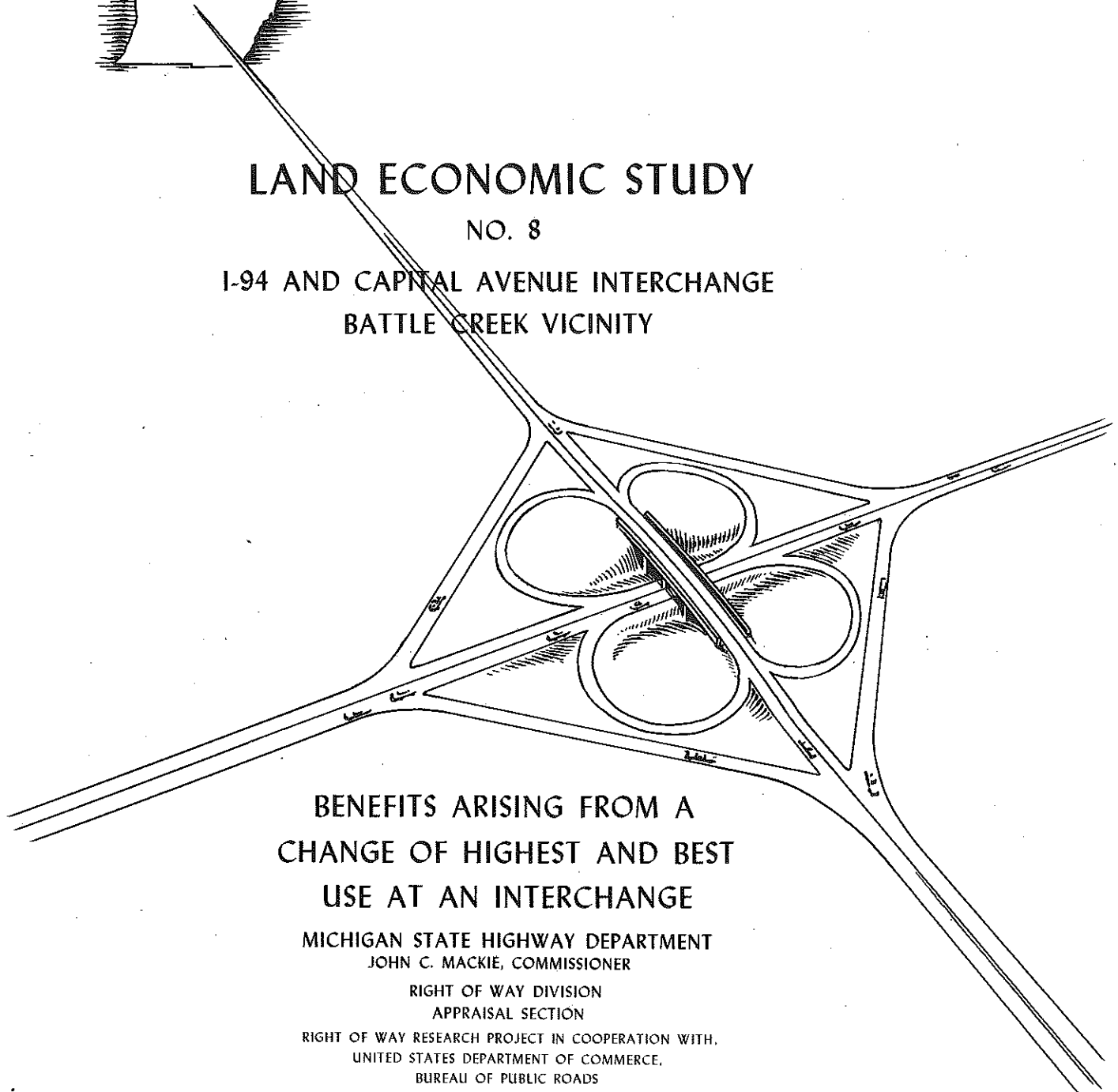


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LAND ECONOMIC STUDY

NO. 8

I-94 AND CAPITAL AVENUE INTERCHANGE BATTLE CREEK VICINITY



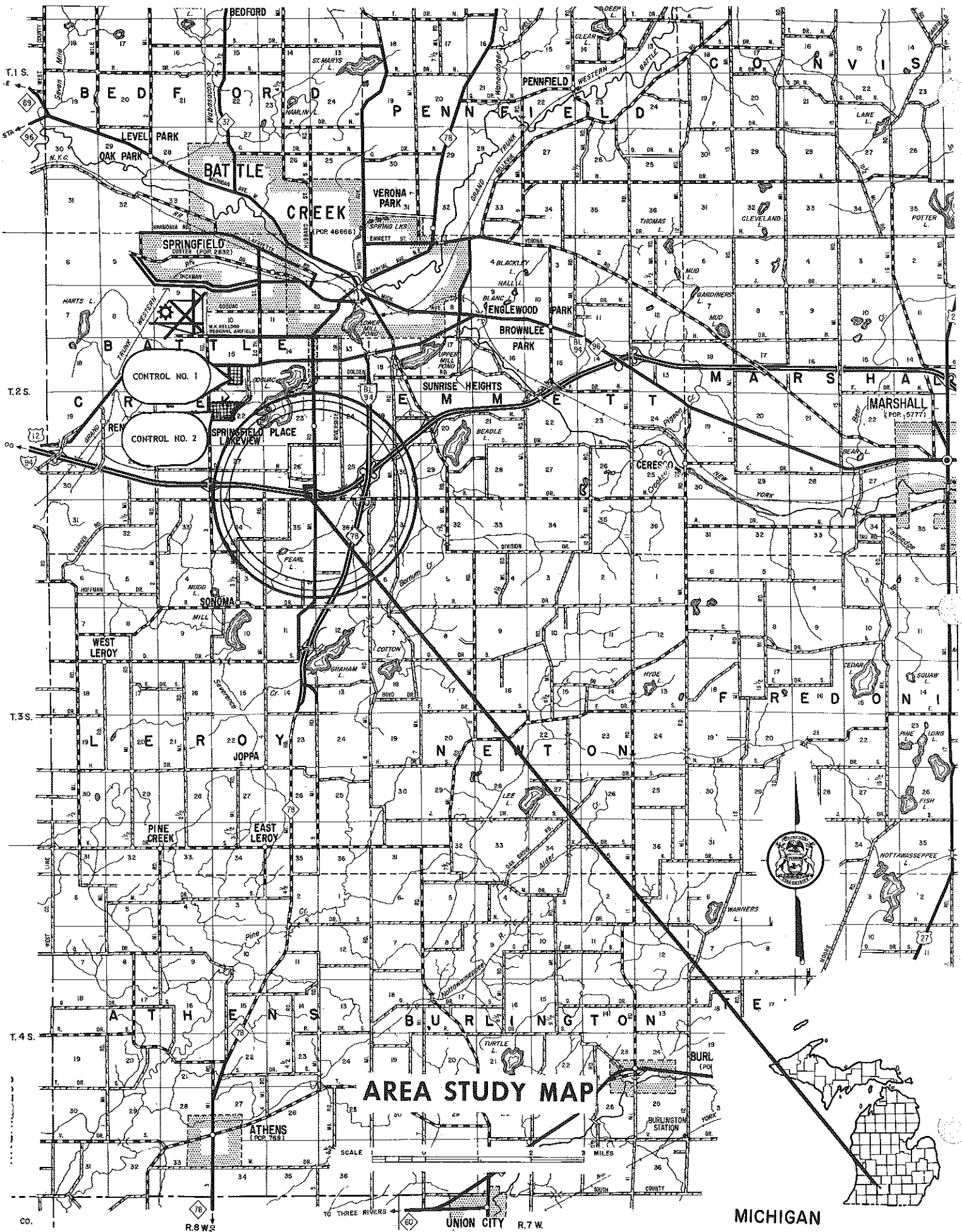
BENEFITS ARISING FROM A CHANGE OF HIGHEST AND BEST USE AT AN INTERCHANGE

MICHIGAN STATE HIGHWAY DEPARTMENT
JOHN C. MACKIE, COMMISSIONER

RIGHT OF WAY DIVISION
APPRAISAL SECTION

RIGHT OF WAY RESEARCH PROJECT IN COOPERATION WITH,
UNITED STATES DEPARTMENT OF COMMERCE,
BUREAU OF PUBLIC ROADS

MARCH 1961



AREA STUDY MAP

MICHIGAN

CO.

R.8.W.

UNION CITY R.7.W.

SCALE

TO THREE RIVERS

3 MILES

SEASIDE COUNTY

BURLINGTON STATION

BURLINGTON

ATHENS (POP. 753)

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A CHANGE OF HIGHEST AND BEST USE AT AN INTERCHANGE

This study demonstrates the importance of recognizing the possible change of highest and best use at an interchange of a freeway and a major road close to a city. The parcel considered lies at the Northwest corner of I-94 and Capital Avenue on the South side of Battle Creek.

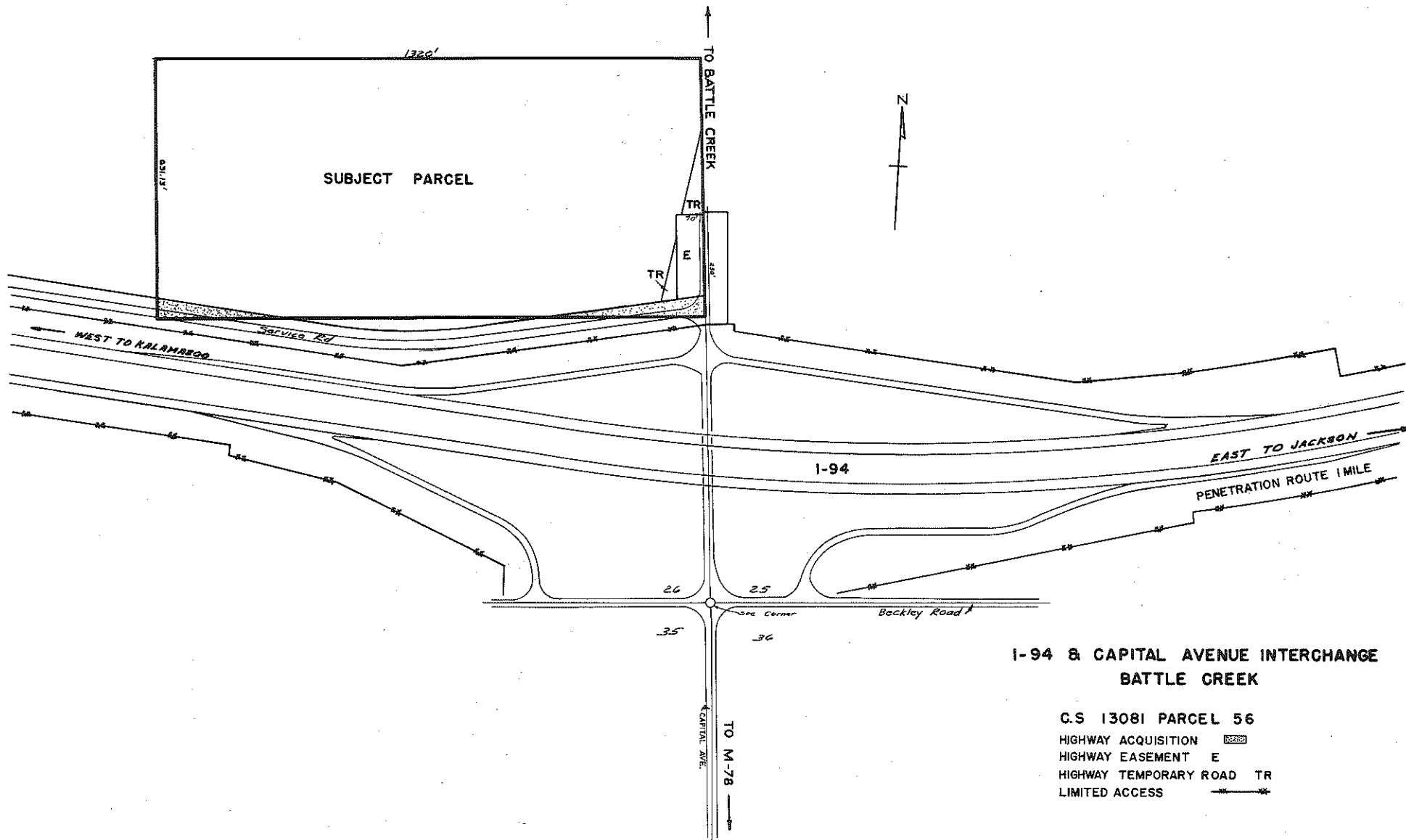
GENERAL AREA INFORMATION

The city of Battle Creek has a population of approximately 45,000 and the urban area immediately surrounding Battle Creek adds another 40,000 people. It is primarily an industrial community of varied enterprises, with cereals and grain-mill products comprising the major industry.

The area adjacent to the existing freeway was either vacant or residential prior to construction. In 1957 before the freeway was built, an unsuccessful attempt was made to rezone part of Capital Avenue to commercial use in the future interchange area. Approximately 2.3 miles north toward Battle Creek, at the intersection of old US-12 and Capital Avenue, the area had developed commercially with service stations, restaurants, and neighborhood stores.

ANALYSIS OF APPRAISALS AND SALES

The subject property, approximately 19 acres, was originally purchased by the Lakeview School District on December 10, 1954, (Liber 764 page 285) for \$12,000 or \$625 per acre.



At the time of the appraisal, the land was vacant. There was neither water or sewer. The highest and best use was potential subdivision. The property was appraised on this basis.

In May 1958, the property was appraised for the taking of .45 acre in fee for a service road, plus .16 acre additional land by easement and .13 acre for a temporary road which were not separated as specific items in the appraisal. The appraisers valued the property as potential subdivision land in both the before and after value.

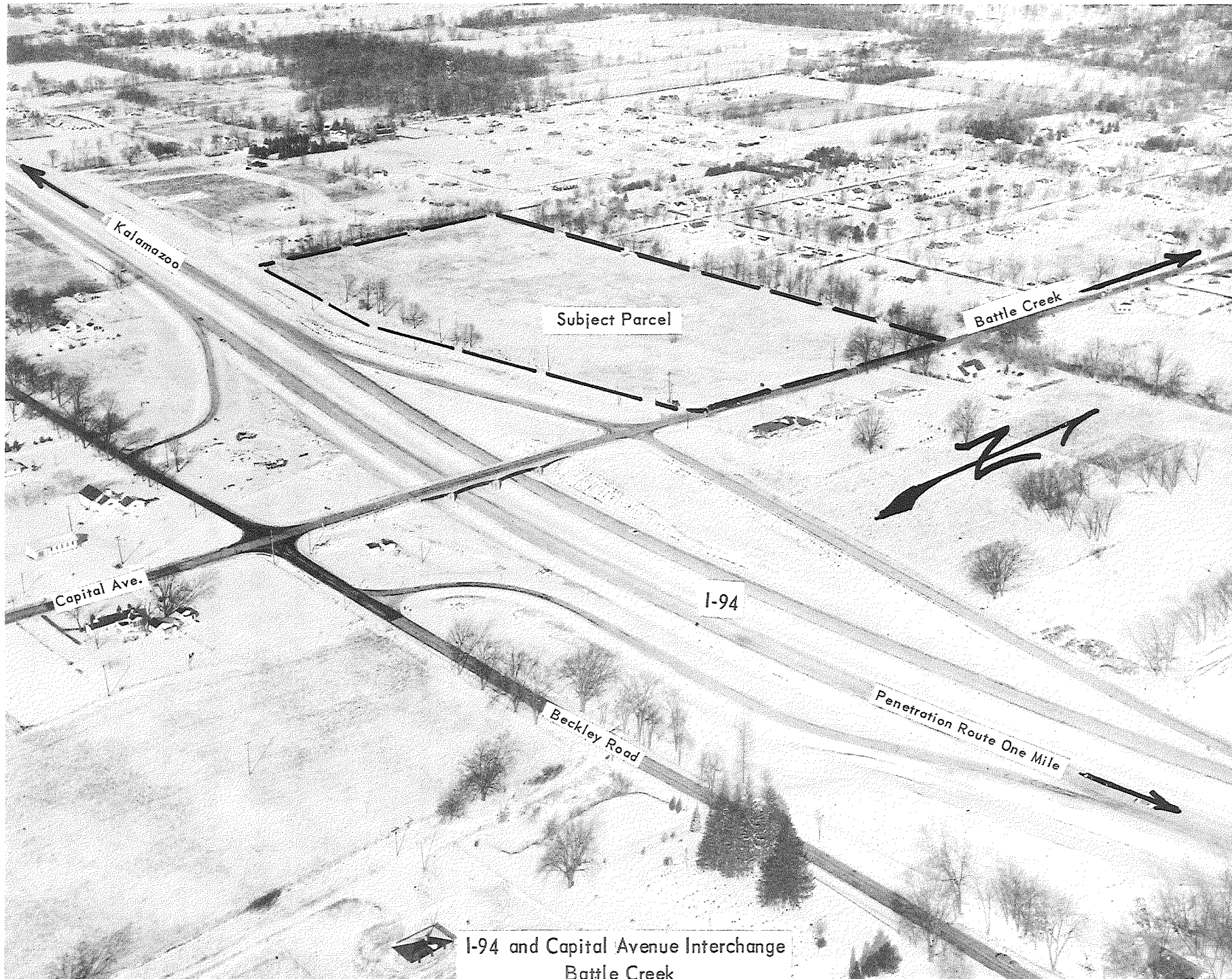
APPRAISER "A"

<u>Before Value</u>	<u>Price/Acre</u>	<u>Total</u>
16.26 acres	\$800	\$13,005
2.87 acres	(499 front feet @ \$14)	6,986
19.13 acres	\$1,045 (average)	\$19,991
Rounded to		\$20,000
<u>After Value</u>		
15.89 acres	\$800	\$12,712
2.79 acres	(451 front feet @ \$14)	6,314
18.68 acres	\$1,019 (average)	19,026
Rounded to		19,000
Estimated Compensation		1,000

APPRAISER "B"

<u>Before Value</u>		
19.13 acres @ \$850		\$16,250
No extra allowance for frontage		
<u>After Value</u>		
18.68 acres @ \$807		\$15,075
No extra allowance for frontage		
Estimated Compensation		1,175

Settlement was made with the Lakeview School District in March of 1959 for \$1,300 and as noted above, the appraiser's estimates of compensation were \$1,000 and \$1,175 respectively. Access and grade level were virtually the same with the only change being 48 feet less frontage, but counter balanced by a service road.



Kalamazoo

Subject Parcel

Battle Creek

Capital Ave.

I-94

Beckley Road

Penetration Route One Mile

I-94 and Capital Avenue Interchange
Battle Creek

On July 25, 1960 the Standard Oil Co. purchased the 18.68 acres (subject to highway easements) for \$66,010, plus brokerage and legal fees (Liber 801, Page 168). This amounts to \$3,533.73 per acre.

Thus, the highest and best use changed from potential residential to commercial use for a service station and a possible restaurant and motel.

A comparison with the appraisers' estimates and the sale price of \$3,534 per acre two years later is now made.

	<u>Before Value</u> <u>Per Acre</u>	<u>Increase</u> <u>Per Acre</u>	<u>Percent</u> <u>Increase</u>	<u>After Value</u> <u>Per Acre</u>	<u>Increase</u> <u>Per Acre</u>	<u>Percent</u> <u>Increase</u>
Appraiser A	\$ 1,045	\$ 2,489	238	\$ 1,019	\$ 2,515	247
Appraiser B	\$ 850	\$ 2,684	316	\$ 807	\$ 2,727	338

In a two year period, a 238 to 316 percent gain, as indicated by the before value, does not occur unless there is some dynamic force affecting real estate values.

As a test on real estate activity, the general area was surveyed to locate sales of acreage. The activity over the last two years by control sales indicates values of \$1,000 to \$1,200 per acre. As a measure of the trend in real estate value, Control 1 and Control 2 are noted. (See Area Map, page 2 and Control Sales, page 11). Control 1 sold November 17, 1958 for \$1,000 per acre. The township was bringing water into the general area. In November of 1959, Control 2 sold on a land contract with a release clause for \$1,180 per acre. Both Control 1 and 2 were as close to downtown Battle Creek as the subject parcel. Both

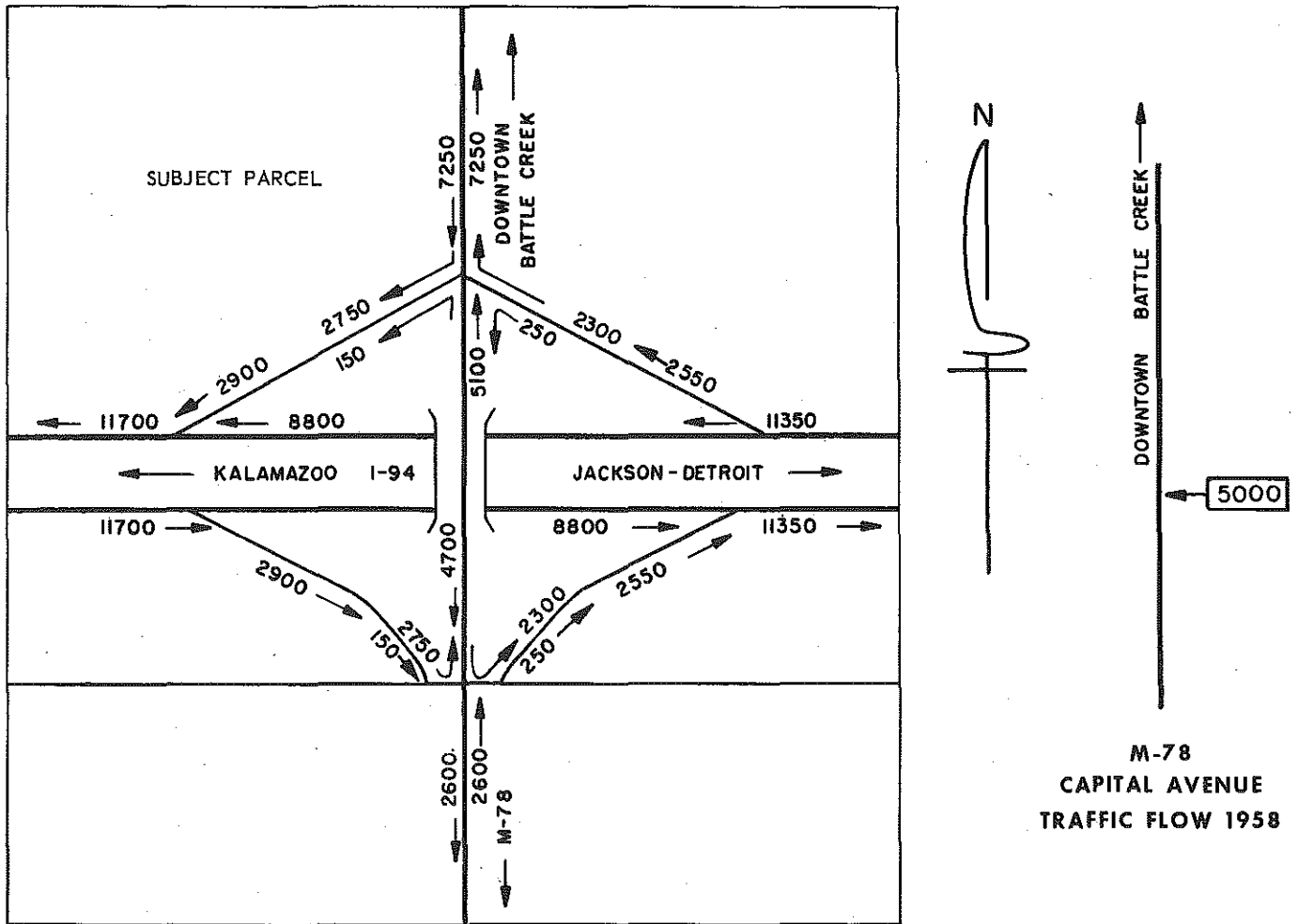
controls had water near by while subject parcel did not. Control 1 had some strip commercial potential, but the excessive quantity of strip commercial in the general area indicated commercial potential would contribute little to its value.

Control 2 indicates an increase of 20 percent in one year when compared with Control 1. There were no new sales of similar character in 1960 that would indicate any further increase.

What were the guide posts that could have been noted so that the highway impact on values would have been recognized?

- (1) Old US-12, which I-94 replaced, had a large amount of development with concentration at the intersection of US-12 and Capital Avenue.
- (2) Capital Avenue is the most direct free-access route to the city, and it is the nearest free-access interchange to a future limited-access penetration route into the city.
- (3) A study of the 1975 estimated traffic pattern movement indicates that 25 percent of the vehicles entering the interchange on I-94 will make a turning movement. The 1975 estimated traffic movement also indicates that most of the turning traffic will be moving to and from the north with the greatest concentration turning west. This points toward the northwest quadrant.

AVERAGE DAILY TRAFFIC MOVEMENT



**I-94 AND CAPITAL AVENUE
ESTIMATED TRAFFIC FLOW 1975**

- (4) An examination of the general area in 1958 would have noted the residential development throughout the area. This should have alerted an appraiser to an expanding demand for commercial property, and it logically follows that commercial concentration is most likely to occur at points of easy access to the residential area.

At this point the zoning is reviewed. In 1954 the area was zoned residential. In February 1958 the township recognizing that a change of highest and best use was imminent, set up an interim zoning which was called "Commercial Highway Interchange." In November 1960 the present code was completed, with the subject parcel and immediate area rezoned "Major Highway Interchange Business District." This zoning gave special emphasis to the highway service and retail business. Salvage and second-hand sale types of business are not permitted.

CONCLUSIONS:

It is obvious there has been a change of highest and best use which the appraiser failed to recognize in his appraisal.

Actually the benefits derived from the increase in value through the change of highest and best use far outweigh the value of the land taken or any damage that might have occurred due to taking of frontage. Therefore, the compensation should have been only of token nature.

The increase which occurred due to the interchange amounted to 238 percent based on its highest estimated before value (1958 appraisal) while nearby lands increased by only 20 percent.

Prepared by: Roger H. Ashley
Economic Survey Officer

CONTROL SALES
(See area map for Location)

CONTROL NO. 1

Sold November 17, 1958 (Liber 761 Page 327) to the Lakeview School Board. This parcel consisted of the West 960 feet of the East $\frac{1}{2}$ of the Southeast $\frac{1}{4}$ of Section 15, Town 2 South, Range 8 West, but excepting the approximate South 500 feet. The parcel had township water within one-fourth mile. It faced on Columbia Road which had some commercial development. Little or no commercial development has occurred near this parcel in the last two years. The parcel contained 45.40 acres and sold for \$45,400 or \$1,000 per acre.

CONTROL NO. 2

Sold November, 1959, on a Land Contract with a release clause. The sale price was \$1,180 per acre for approximately 72 acres. This parcel had water within one-fourth mile for which the purchaser was able to negotiate, prior to the purchase contract. This parcel was considered by the Lakeview School District in 1958, and could have been sold for \$1,000 per acre. The School District had money and was ready and able to buy.

The legal description of this sale is:

South $\frac{1}{2}$ of the Northwest $\frac{1}{4}$ west of the road of
Section 22, Town 2 South, Range 8 West.