

**AGENDA**  
**SPECIAL MEETING**

**7:30 P.M.**

TROY CITY PLANNING COMMISSION

March 26, 1991

1. ROLL CALL
2. MINUTES - Regular Meeting of March 12, 1991

**STUDY ITEMS**

3. BOARD OF ZONING APPEALS REPORT
4. CURRENT DEVELOPMENT REPORT
5. PROPOSED ZONING ORDINANCE TEXT AMENDMENT - Setbacks From Major Thoroughfares in R-1 Districts
6. ACCELERATION/DECELERATION AND PASSING LANE REQUIREMENTS

**POTENTIAL REGULAR MEETING AGENDA ITEMS**

(April 9, 1991 & Beyond)

1. (Tabled Item) SPECIAL USE REQUEST AND SITE PLAN REVIEW - Proposed Church - South Side Square Lake, West of Dequindre - Section 12
2. SITE PLAN REVIEW - Proposed Commercial Building (Inacomp) - West Side of John R, North of 14 Mile Road - Section 35
3. SITE PLAN REVIEW - Proposed Office Building - Northwest Corner of Livernois and Regents - Section 27
4. SPECIAL USE REQUEST - Incidental Seating in B-1 District - North Side of Wattles, West of John R - Section 14
5. SPECIAL USE REQUEST AND SITE PLAN REVIEW - Automotive Service Facility - South Side of Maple, West of Dequindre - Section 36
6. PROPOSED REZONING - West Side of Livernois, North of <sup>Long</sup> Square Lake - Section 9 - R-1B to O-1
7. PROPOSED STREET EASEMENT VACATION - South of Hartland, East of Kilmer - Section 22
8. PROPOSED ZONING ORDINANCE TEXT AMENDMENT - Setbacks From Major Thoroughfares in R-1 Districts

TO: Troy City Planning Commission  
FROM: Laurence G. Keisling, Planning Director  
SUBJECT: Special Meeting Agenda - March 26, 1991

1. ROLL CALL  
(Resolution to excuse)
2. MINUTES - Regular Meeting of March 12, 1991

### STUDY ITEMS

3. BOARD OF ZONING APPEALS REPORT
4. CURRENT DEVELOPMENT REPORT
5. PROPOSED ZONING ORDINANCE TEXT AMENDMENT - Setbacks From Major Thoroughfares in R-1 Districts

Section 10.60.03 of the Zoning Ordinance was placed in the Ordinance in order to assure that residential structures constructed in R-1 Districts abutting major thoroughfares would have larger setbacks (50 feet minimum) than structures constructed abutting other streets. This requirement was intended to protect future residents by providing greater spatial separation between their homes and major thoroughfares. The Ordinance language is also intended to provide that this minimum setback will be measured from the ultimate or planned right-of-way line of any major thoroughfare, whether or not the ultimate right-of-way has as yet been acquired. The current language of this Section reads as follows:

10.60.03 SETBACKS FROM MAJOR THOROUGHFARES:

Whenever a lot or acreage parcel abuts a major thoroughfare of at least 120 feet of right-of-way width, existing or proposed, the yard setback abutting said major thoroughfare shall be a minimum of fifty feet. This requirement shall not apply to subdivisions for which Tentative Approval was granted prior to January 1, 1976.

*LAW*  
As you are probably aware, the Legal Department has indicated that the Courts would generally not support Ordinance language requiring setbacks from future rights-of-way, if such a requirement is challenged. In a recent right-of-way condemnation case, however, the Court went one step further in reviewing the language of Section 10.60.03. It was Judge

March 26, 1991 Agenda

Sosnick's determination that, if the ultimate right-of-way of 120 feet or more was not in place, we could not even require the 50 foot setback minimum from the current right-of-way. Under this interpretation, we could potentially only require a setback of 25-40 feet for a residence, in relation to the existing right-of-way of a planned major thoroughfare, which may only be 66 feet in total width. We are, therefore, proposing that the text of Section 10.60.03 be revised as indicated on the enclosed proposal, in order to assure that at least a 50 foot setback could be required from the existing right-of-way of a planned major thoroughfare, if not from the ultimate right-of-way of that thoroughfare.

6. ACCELERATION/DECELERATION AND PASSING LANE REQUIREMENTS

As indicated in the enclosed memorandum from John Robbins, Transportation Engineer, the City Council is presently considering proposals to modify and clarify the standards or requirements related to the provision of acceleration/deceleration and left-turn or passing lanes. The major concerns relate to the development of standards which would properly and reasonably indicate those situations under which these types of road improvements will be required. We are also interested in assuring that the requirements take into consideration potential as well as present conditions, land uses, etc.

Following discussion of this matter at their regular meeting of March 18, 1991, the City Council referred the matter to the Planning Commission for review and comment. It is intended that this matter will ultimately become the subject of a Joint City Council-Planning Commission meeting, now scheduled for June 4, 1991. John Robbins, our Transportation Engineer, will be present at the Study Meeting in order to discuss this matter with you.

Respectfully submitted,

  
Laurence G. Keisling  
Planning Director

LGK/eb

## PROPOSED ZONING TEXT AMENDMENT

### SETBACKS FROM MAJOR THOROUGHFARES

#### 10.60.03 SETBACKS FROM MAJOR THOROUGHFARES

Whenever a lot or acreage parcel abuts a major thoroughfare ~~of at least 120 feet of right-of-way width, existing or proposed,~~ as established by the Master Thoroughfare Plan adopted in accordance with Act 285, Public Acts of 1931 as amended, the yard setback abutting said major thoroughfare shall be ~~a minimum of fifty feet,~~ at least fifty (50) feet from the existing or proposed right-of-way line, whichever is greater. This requirement shall not apply to subdivisions for which Tentative Approval was granted prior to January 1, 1976.

February 19, 1991

TO: Frank Gerstenecker, City Manager

FROM: John E. Robbins, Transportation Engineer

SUBJECT: Proposed Engineering Design Standards Revision  
for Acceleration/Deceleration and Left Turn  
Passing Lane Widening

The current Engineering Design Standards for lane widening as approved by Council Resolution #87-49 and dated January 19, 1987 is somewhat ambiguous and subject to various interpretations.

As example, on two lane highways there is a requirement that there must be 8,000 vehicles per day before the ordinance takes affect. It does not specify if this relates to a two-way or one-way street. In the case of a four or more lane highway, it does not indicate if it relates to a standard pavement cross section or a boulevard cross section.

More importantly, neither of these values relate to the future traffic, only what exists today. In theory, a development could be approved on a major street (highway) with volumes less than required and, when developed, generate enough traffic to exceed the ordinance value. This certainly does not produce the desired results for improving traffic flow.

The development traffic values, in accordance with the ordinance, are based on the anticipated traffic. These values are given in published information from the Institute of Transportation Engineers and applied to the development size, parking spaces, employees, etc. to determine the generated traffic. The peak hour traffic generation of the development does not necessarily relate to the peak hour traffic on the street or highway. The ordinance relates to the 24 hour street traffic volume. While some generation rates coincide with peak street traffic, others do not.

An example would be a medical office building. The AM peak generated traffic is 2.773 trips per 1,000 GFA; the AM peak based on adjacent street traffic between 7-9AM (which is not necessarily the peak hour) is 1.663 trips per 1,000 GFA. Another example would be a church. The hourly trip rate per 1,000 GFA weekdays is 0.108 between 7-9AM, 0.641 between 4-6PM, 1.0 for weekday AM peak hour of the generator (church), 1.107 for the PM peak, 4.903 on Saturdays, and 8.359 on Sunday. In this case, the peak hour value would be 8.359 trips per 1,000 GFA. Therefore, a church of 2,393

February 19, 1991

TO: Frank Gerstenecker

RE: Proposed Engineering Design Standards Revision for  
Acceleration/Deceleration and Left Turn Passing Lane Widening

PAGE 2

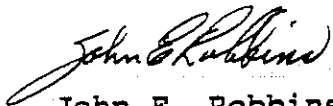
square feet of GFA would fall under the ordinance if the street traffic exceeded 8,000 or 30,000 vehicles per day on Sunday. The ordinance, through the trip tables, does not speak to the number of cars in the parking lot, seating capacity, etc. It relates only to the projected traffic that can be generated based on the gross floor area. Generally this ordinance is applied to new developments and only rarely to an existing development.

The ambiguity of the language can cause confusion. I am therefore suggesting that the requirements for lane widening be subject to the number of parking spaces, not generation rates or volumes, and that it apply only to the major roads as listed.

The Michigan Department of Transportation standards for driveway permits require lane widening at all new developments with more than 25 parking spaces.

The proposed changes are attached for your review and recommendation.

Respectfully submitted,

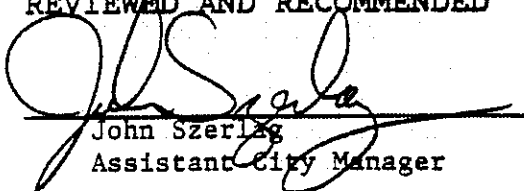


John E. Robbins, P.E.  
Transportation Engineer

JER/ct

cc: John Szerlag, Assistant City Manager  
Neall Schroeder, City Engineer

REVIEWED AND RECOMMENDED



John Szerlag  
Assistant City Manager

**REQUIRED ACCELERATION/DECELERATION/LEFT TURN LANES**

**PROPOSED  
REVISED ENGINEERING DESIGN STANDARDS**

**March 8, 1991**

PROPOSED ENGINEERING DESIGN STANDARDS REVISION FOR  
WIDENING LANES/ACCEL-DECEL AND LEFT TURN PASSING LANES

1. Widening Lanes

- Review* { 1. Any property which will contribute traffic flow to the public thoroughfare system by land use change, new or existing street and drive improvements or on-site development, shall be required to provide for this traffic in an approved manner. The following will be applied to determine the appropriate improvement:

- a. Standards for Acceleration/Deceleration Lanes on the following streets:

Adams	Livernois
Big Beaver	Long Lake
Chicago	Maple
Coolidge	Maplelawn
Corporate	New King
Crooks	Rankin
Cunningham	Rochester
Dequindre	Stephenson
Fourteen Mile	South Boulevard
Golfview	Square Lake
John R	Tower
Kirts	Troy Center
Lakeview	Wattles

- i. A twelve foot (12') wide acceleration and deceleration lane is required when at least one of the following conditions exist:

- 1) A driveway serves a parking lot of 25 or more parking spaces.
- 2) Development is such that the drive thru design (such as gasoline stations) generates more than 20 peak hour trips at the peak hour of the generator.
- 3) Any street opening. A street opening is defined as any public/private street connection to any of the streets listed above.

- b. A left turn passing lane shall be provided on any street listed above when those streets consist of a two lane wide, two way facility.
- c. These standards shall not apply to boulevarded pavements six (6) lanes or more in width, unless the development served has a parking lot of more than 100 parking spaces.
- d. All construction shall be in accordance with the Engineering Standards of the City of Troy and the plan sketch which is attached hereto.

2. Sites at locations having limited right-of-way:

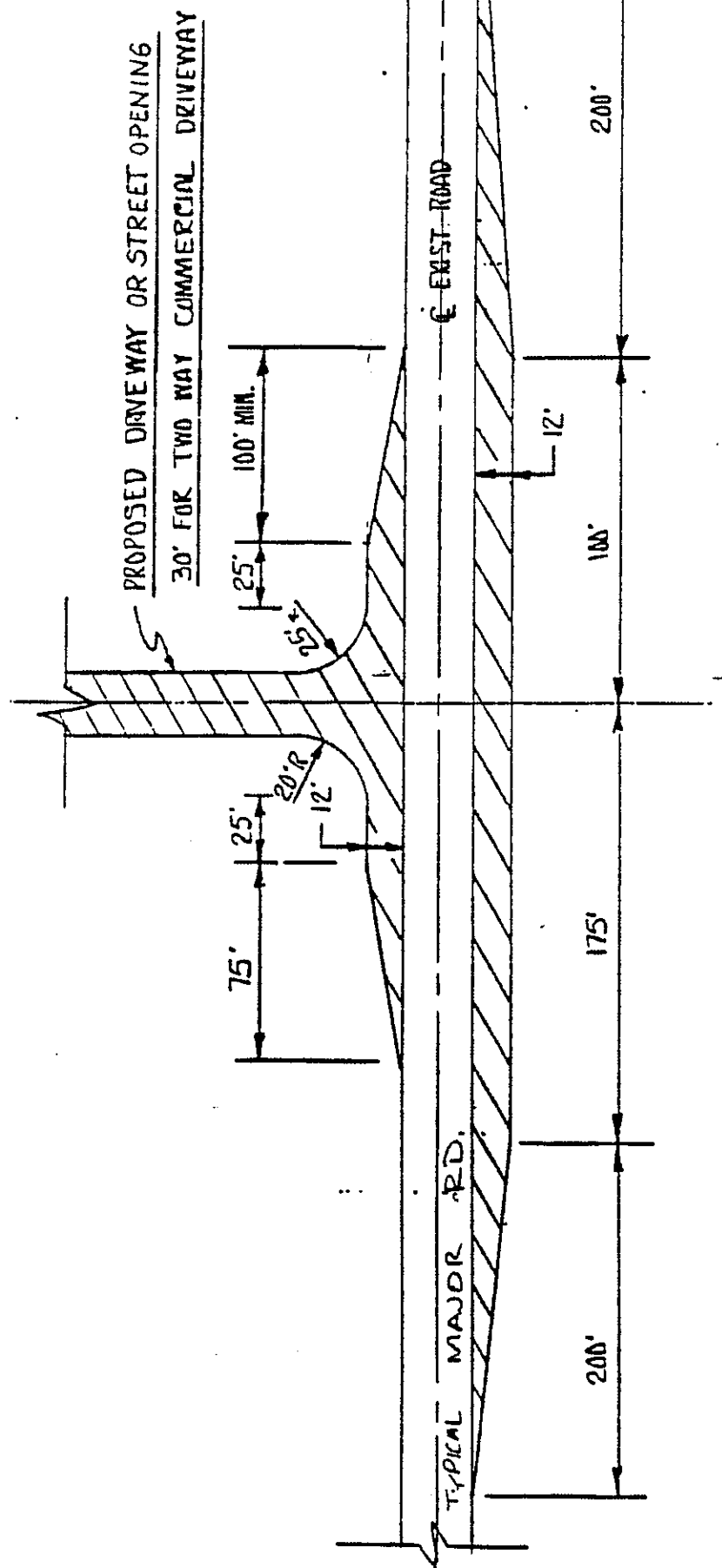
- a. In situations where sufficient public right-of-way does not exist for construction of standard acceleration/deceleration lanes or left turn passing lanes, the owner or builder will:



- i. Complete the improvement in the configuration complying hereto so as to accommodate traffic, said improvement to be treated as an extension of the private driveway and situated in part or entirely, upon private property:

OR

- ii. Dedicate right-of-way to the City sufficient to accommodate the improvement which will be constructed at the cost of the developer in a configuration complying hereto.
- b. In situations where required improvements extend beyond the ownership of the subject site(s) and public right-of-way is insufficient, the owner will deposit the cost of providing these lanes with the City Treasurer. These funds will be used at a later date when right-of-way becomes available to place the required lanes. As an alternative, these funds may be used at a later date as a contribution toward an adjacent larger project. If deemed appropriate by the City Manager and City Assessor, an agreement to be in favor of a future special assessment project for road improvements may be substituted for the cash deposit.
3. Required improvements to the thoroughfare system may include widening lanes, turning lanes, acceleration/deceleration lanes, passing lanes, realigned pavements, base drainage, storm drainage, signing and all other items necessary to the construction of a durable pavement.
  4. Required improvements may be caused to extend beyond the limits of the site of developing property in order to provide for adequate capacity and safety.
  5. The City Manager or his designee may require improvements to precede site development where construction traffic would be detrimental to the capacity of the street and detrimental to the safety of the traveling public.
  6. Site improvement plans are to be submitted to the Engineering Department illustrating the following:
    - a. All improvements required by these Standards.
    - b. Proposed treatment of drive entrances and exits to and from public streets and highways which comply with the attached typical drawing of acceleration, deceleration and left turn passing lanes.
    - c. Public right-of-way throughout the extension of proposed improvements and that proposed for dedication, if any.
  7. Concrete shall be used for widening lanes if existing pavement is concrete.
  8. Full depth asphalt pavement may be used in other locations with the approval of the City Engineer.
  9. These requirements apply to all streets listed in 1,a above.



**EXISTING  
ENGINEERING DESIGN STANDARDS**  
with Revisions Highlighted

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Capital Letters = New Language  
Lower Case Letters = Existing Language

## WIDENING LANES

1. Any property which will contribute to traffic flow to the public thoroughfare system by land use change, new or existing street and drive improvements or on-site development, shall be required to provide for this traffic in an approved manner. The following standards will be applied to determine the appropriate improvement:

### ~~a. Standards for Two (2) Lane Highways.~~

#### ~~1) Right Turn Lanes, 2-Lane Highways~~

~~Right turn acceleration and deceleration lanes will be installed on the major thoroughfare when all of the following conditions are met:~~

- ~~i. The daily traffic volume on the major thoroughfare exceeds 8,000 vehicles.~~
- ~~ii. The 85th percentile speed on the major thoroughfare equals or exceeds 40 mph.~~
- ~~iii. Peak hour trips generated by the site are equal to or greater than 20 as contained in the table of Trip Generation Rates below.~~

#### ~~2) Left Turn Passing Lanes, 2-Lane Highways~~

~~Left turn passing lanes will be installed on the major thoroughfare when all of the following conditions are met:~~

- ~~i. The daily traffic volume on the major thoroughfare exceeds 8,000 vehicles.~~
- ~~ii. The 85th percentile speed on the major thoroughfare equals or exceeds 40 mph.~~
- ~~iii. Peak hour left turns into the site equal or exceed 20 as contained in the table of Trip Generation Rates below. A passing lane will also be required when the peak hour left turns into the site equal or exceed 10 and the daily traffic volume exceeds 20,000.~~

### ~~b. Standards for Highways of Four (4) or More Lanes.~~

~~Right turn acceleration and deceleration lanes will be installed on major thoroughfares having 4 or more lanes of pavement when all of the following conditions are met:~~

- ~~1) The daily traffic volume on a major thoroughfare exceeds 30,000 vehicles.~~

~~2) The 85th percentile speed on the major thorough equals or exceeds 40 mph.~~

~~3) Peak hour trips generated by the site are equal to greater than 20 as contained in the trip table of Trip Generation Rates below.~~

a. STANDARDS FOR ACCELERATION/DECELERATION LANES ON THE FOLLOWING STREETS:

ADAMS	LIVERNOS
BIG BEAVER	LONG LAKE
CHICAGO	MAPLE
COOLIDGE	MAPLELAWN
CORPORATE	NEW KING
CROOKS	RANKIN
CUNNINGHAM	ROCHESTER
DEQUINDRE	STEPHENSON
FOURTEEN MILE	SOUTH BOULEVARD
GOLFVIEW	SQUARE LAKE
JOHN R	TOWER
KIRTS	TROY CENTER
LAKEVIEW	WATTLES

i. A TWELVE FOOT (12') WIDE ACCELERATION AND DECELERATION LANE IS REQUIRED WHEN AT LEAST ONE OF THE FOLLOWING CONDITIONS EXIST:

- 1) A DRIVEWAY SERVES A PARKING LOT OF 25 OR MORE PARKING SPACES.
- 2) DEVELOPMENT IS SUCH THAT THE DRIVE THRU DESIGN (SUCH AS GASOLINE STATIONS) GENERATES MORE THAN 20 PEAK HOUR TRIPS AT THE PEAK HOUR OF THE GENERATOR.
- 3) ANY STREET OPENING. A STREET OPENING IS DEFINED AS ANY PUBLIC/PRIVATE STREET CONNECTION TO ANY OF THE STREETS LISTED ABOVE.

b. A LEFT TURN PASSING LANE SHALL BE PROVIDED ON ANY STREET LISTED ABOVE WHEN THOSE STREETS CONSIST OF A TWO LANE WIDE, TWO WAY FACILITY.

c. THESE STANDARDS SHALL NOT APPLY TO BOULEVARDED PAVEMENTS SIX (6) LANES OR MORE IN WIDTH, UNLESS THE DEVELOPMENT SERVED HAS A PARKING LOT OF MORE THAN 100 PARKING SPACES.

d. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE ENGINEERING STANDARDS OF THE CITY OF TROY AND THE PLAN SKETCH WHICH IS ATTACHED HERETO.

2. Sites at Locations Having Limited Right-of-Way:
  - a. In situations where sufficient public right-of-way does not exist for construction of standard acceleration/deceleration lanes or LEFT TURN passing lanes, the owner or builder will:
    - i. Complete the improvement in the configuration complying hereto so as to accommodate traffic, said improvement to be treated as an extension of the private driveway and situated in part or entirely, upon private property:  
  
OR
    - ii. Dedicate right-of-way to the City sufficient to accommodate the improvement which will be constructed at the cost of the developer in a configuration complying hereto.
  - b. In situations where required improvements extend beyond the ownership of the subject site(s) and public right-of-way is insufficient, the owner will deposit the cost of providing these lanes with the City Treasurer. These funds will be used at a later date when right-of-way becomes available to place the required lanes. As an alternative, these funds may be used at a later date as a contribution toward a AN ADJACENT larger project. If deemed appropriate by the City Manager and City Assessor, an agreement to be in favor of a future special assessment project for road improvements may be substituted for the cash deposit.
3. Required improvements to the thoroughfare system may include ~~ultimate alignment~~, widening lanes, turning lanes, ACCELERATION/ DECELERATION LANES, passing lanes, realigned pavements, base drainage, storm drainage, signing and all other items necessary to the construction of a durable pavement.
4. Required improvements may be caused to extend beyond the limits of the site of developing property in order to provide ~~both~~ FOR ADEQUATE capacity and safety.
5. The City Manager or his designee may require improvements to precede site development where construction traffic would be detrimental to the capacity of the street and detrimental to the safety of the traveling public.

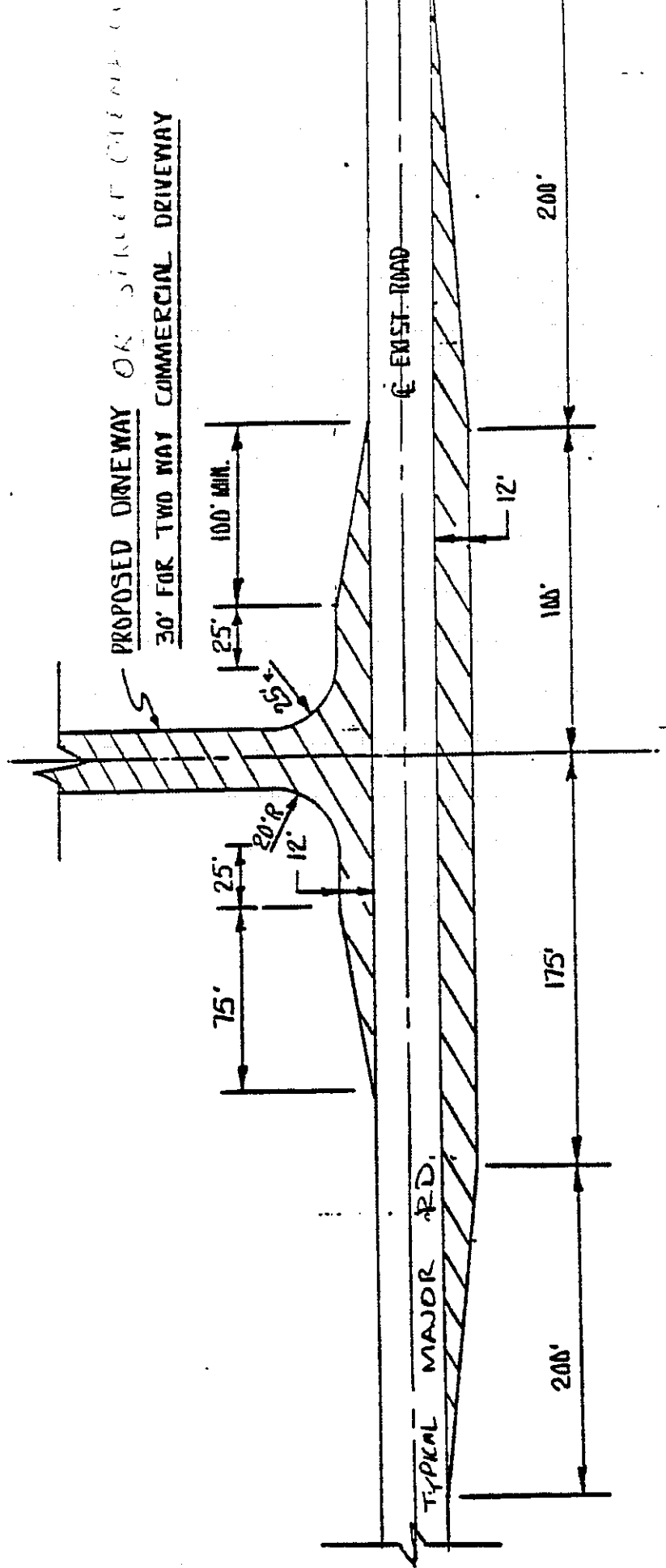
6. Site improvement plans are to be submitted to the Engineer Department illustrating the following:
  - a. All improvements required by these Standards.
  - b. Proposed treatment of drive entrances and exits to and from public streets and highways which comply with the attached typical drawing of acceleration, deceleration and LEFT TURN passing lanes.
  - c. Public right-of-way throughout the extension of proposed improvements and that proposed for dedication, if any.
7. Concrete shall be used for widening lanes if existing pavement is concrete.
8. Full depth asphalt pavement may be used in other locations with the approval of the City Engineer.
9. These requirements apply to all ~~thoroughfares within the corporate limits of the City of Troy~~ STREETS LISTED IN 1.a. ABOVE.
10. ~~The following Trip Generation Rate Table will be used for purposes of calculating trips for proposed sites.~~

USE	UNIT	PEAK HOURS			
		AM-IN	AM-OUT	PM-IN	PM-OUT
OFFICE	1,000 s.f.*	3.00	.40	.50	2.6
SHOPPING CENTER	1,000 s.f.*				
Under	50,000 s.f.	.91	.80	5.77	5.81
50,000 -	99,999 s.f.	1.4	1.3	3.2	3.4
100,000 -	199,999 s.f.	.9	.8	2.9	3.1
200,000 -	299,999 s.f.	.4	.2	2.1	2.2
300,000 -	399,999 s.f.	1.6	.7	3.1	3.3
400,000 -	499,999 s.f.	.3	.2	1.9	1.9
500,000 -	999,999 s.f.	.38	.23	1.59	1.65
1,000,000 -	1,249,999 s.f.			1.4	1.9
Over	1,250,000 s.f.	.36	.13	1.10	1.41
CONVENIENCE STORE	1,000 S.F.*			30	30
FAST FOOD RESTAURANT	1,000 s.f.*	15	15	40	40
APARTMENTS AND CONDO	DWELLING UNIT	0.4	0.60	0.5	0.2
HOTEL-MOTEL	ROOM	0.2	0.5	0.5	0.3
SINGLE FAMILY	DWELLING UNIT	.21	.55	.63	.37
LIGHT INDUSTRIAL	EMPLOYEE	.71	.13	.27	.55
BAR/RESTAURANT	1,000 s.f.*			11	10
MEDICAL OFFICE	1,000 s.f.*	.64	.21	2.0	3.5
DRIVE-IN BANK	1,000 s.f.*			16	16

\*FLOOR AREA IS (G.F.A.)



FOR RESIDENTIAL STREETS ALSO



1

R-1D

SPECIAL USE REQUEST

Proposed Church



DEQUINDRE

SQUARE LAKE

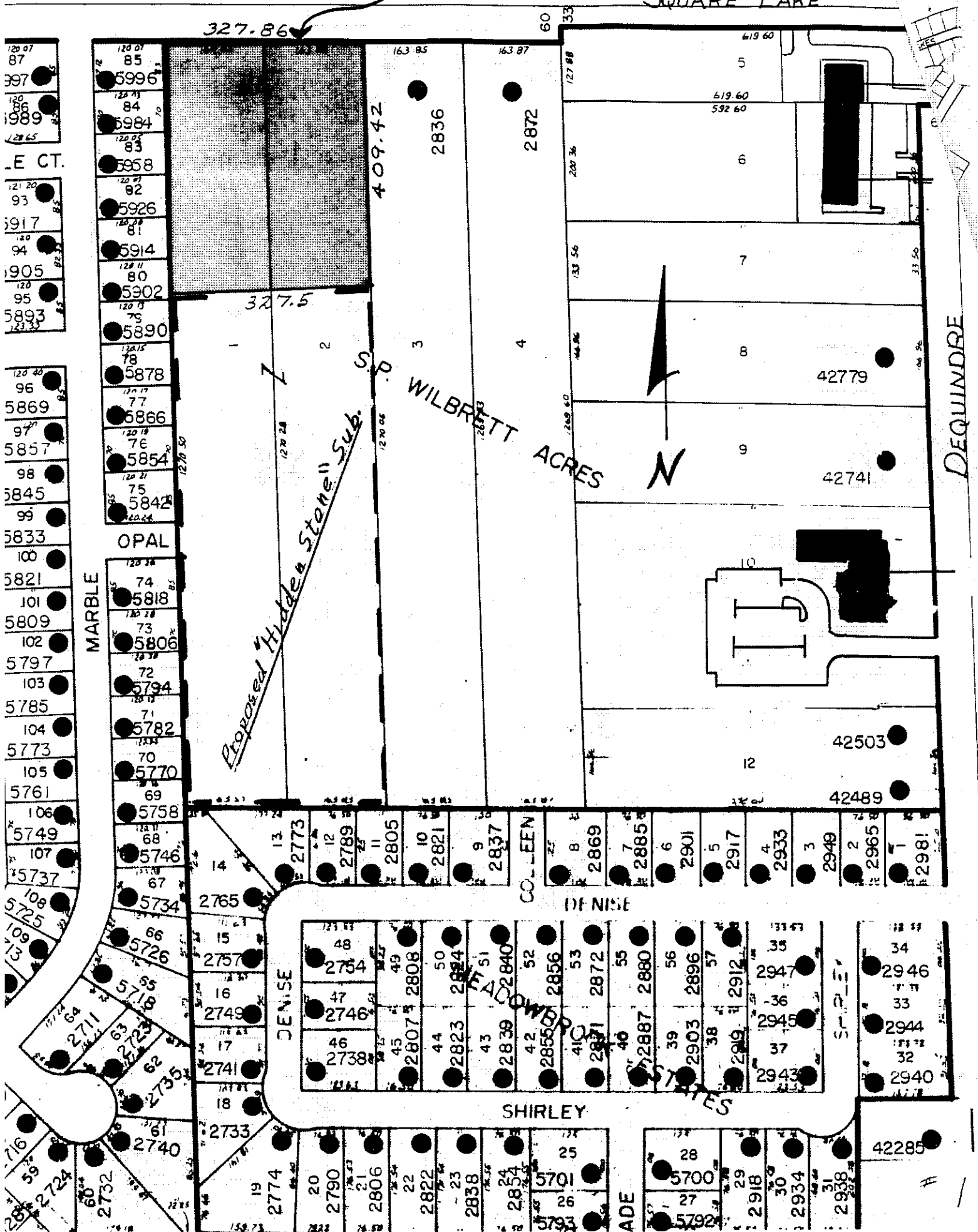
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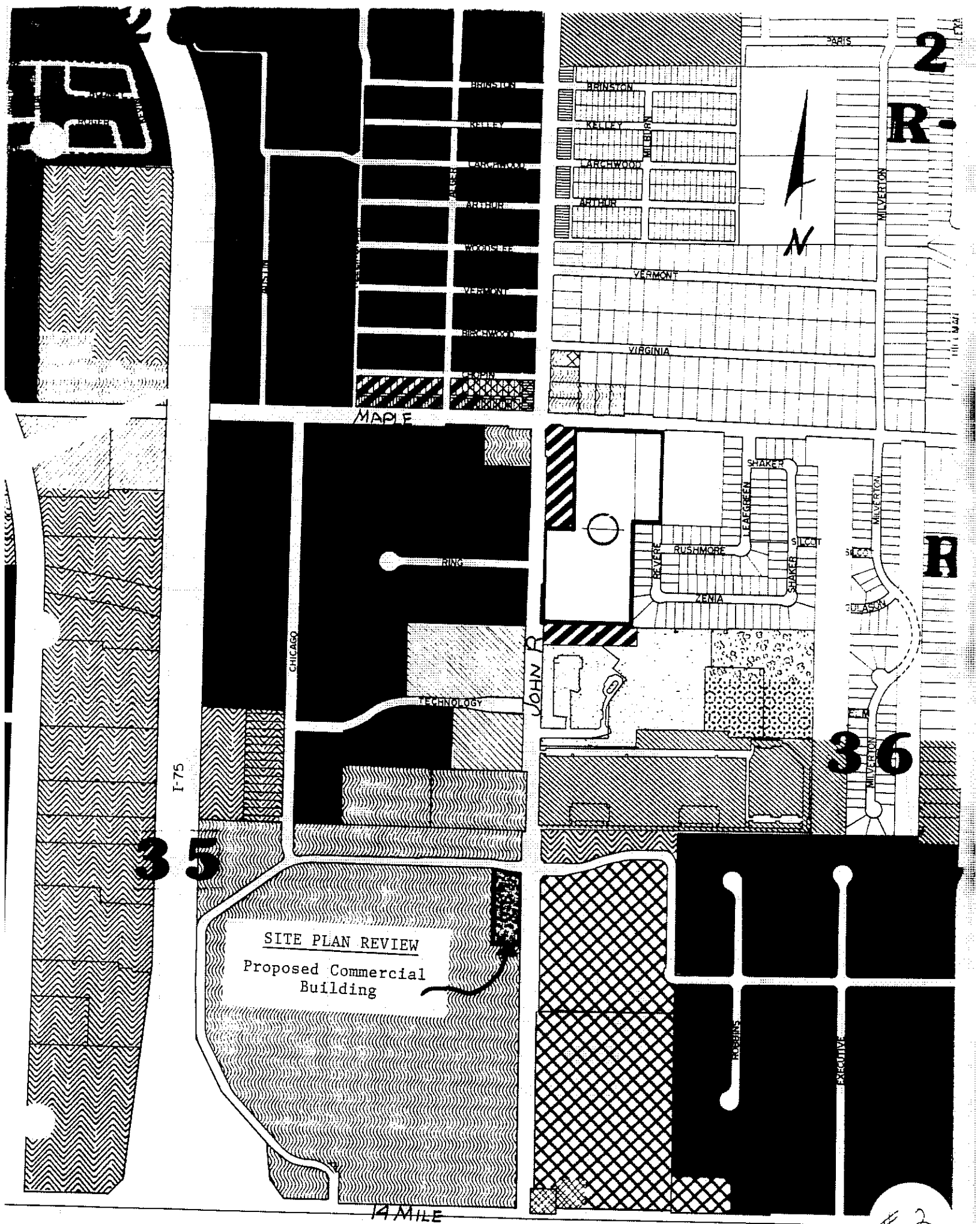
R-1C

LONG

Proposed Church

SQUARE LAKE





2

R-

PARIS

MILVERTON

N

VERMONT

VIRGINIA

MAPLE

RINK

TECHNOLOGY

JOHN R

SHAKER

LEAF GREEN

RUSHMORE

ZENIA

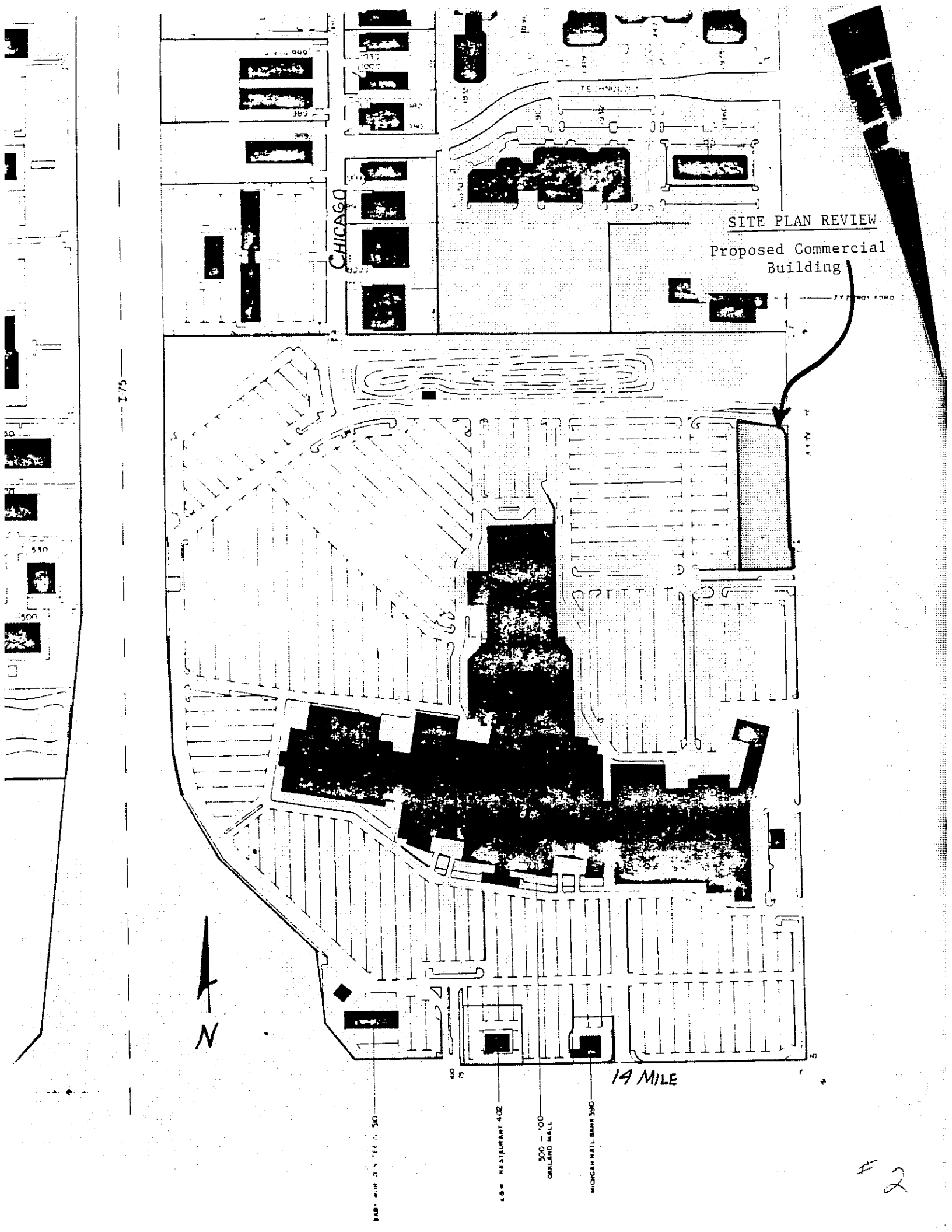
36

SITE PLAN REVIEW  
Proposed Commercial  
Building

14 MILE

# 2

R



SITE PLAN REVIEW  
Proposed Commercial  
Building

CHICAGO

1/4 MILE

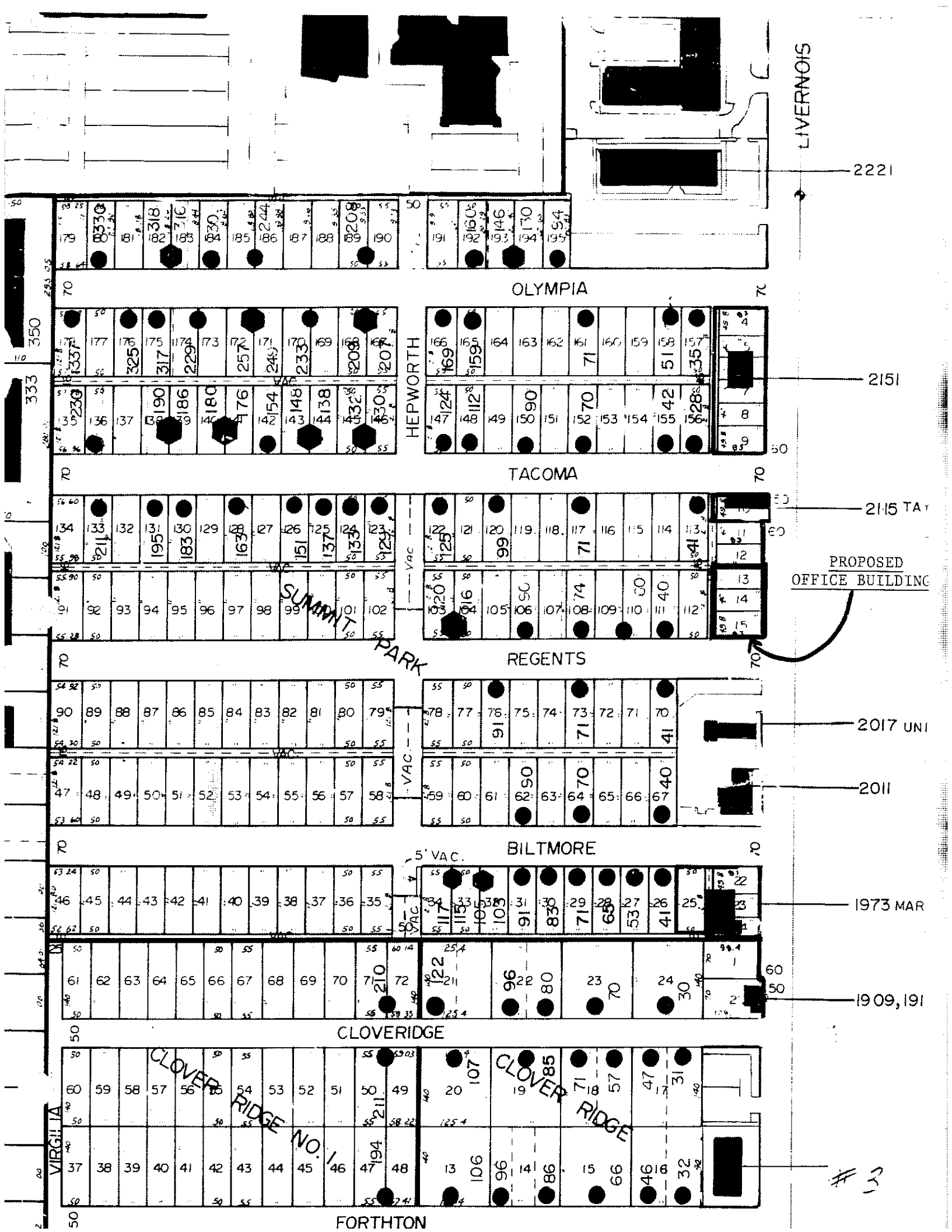
BARB HILL 300 - 100

RESTAURANT 402

500 - 100  
OAKLAND MALL

WICKEN METL BARR 350

# 2



LIVERNOIS

2221

OLYMPIA

2151

TACOMA

2115 TAY

PROPOSED  
OFFICE BUILDING

REGENTS

2017 UNI

2011

BILTMORE

1973 MAR

1909, 191

CLOVERIDGE

CLOVER  
RIDGE  
NO. 1

CLOVER  
RIDGE

FORTHTON

# 3

# MAPLE

## SPECIAL USE REQUEST

Automotive Service Facility

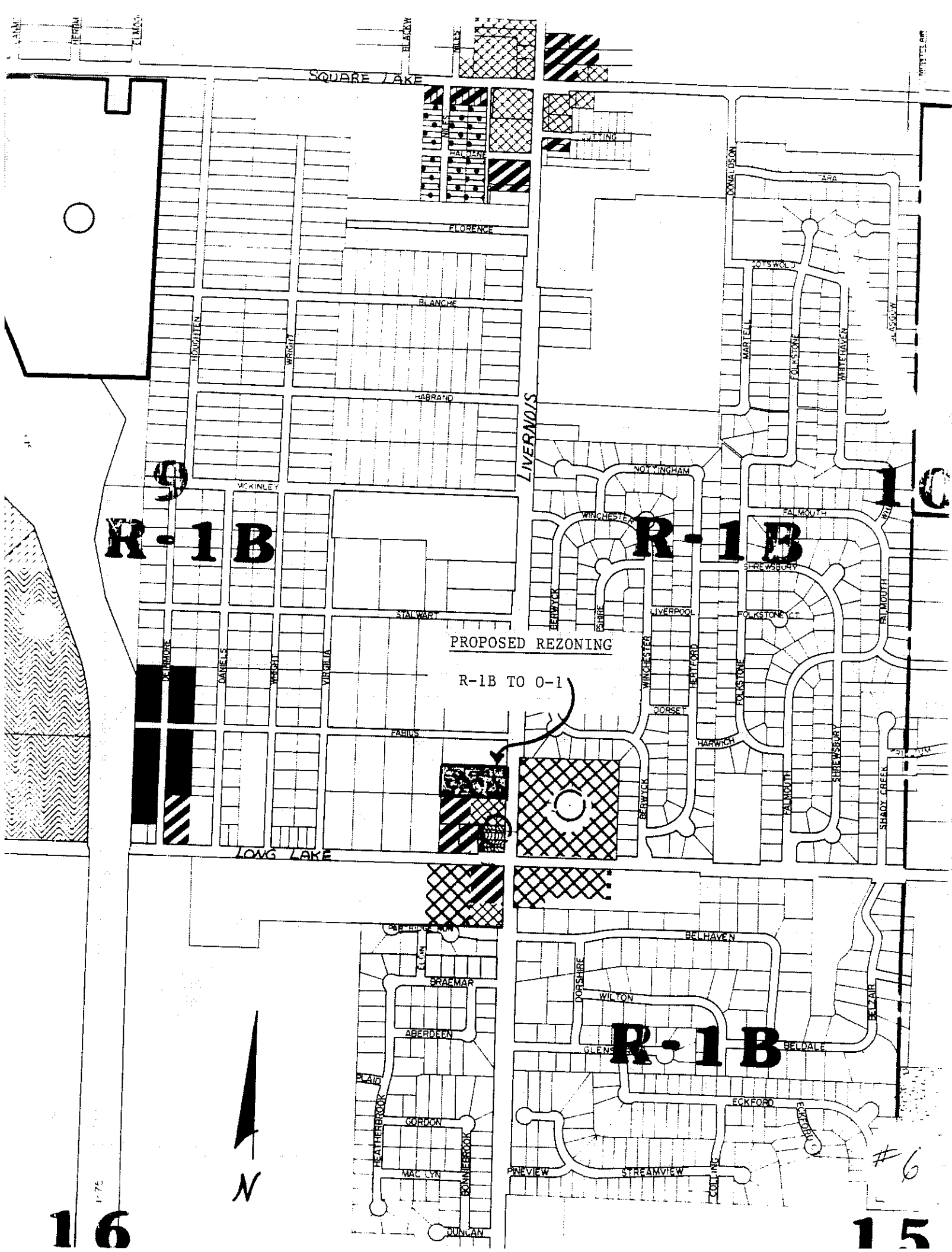
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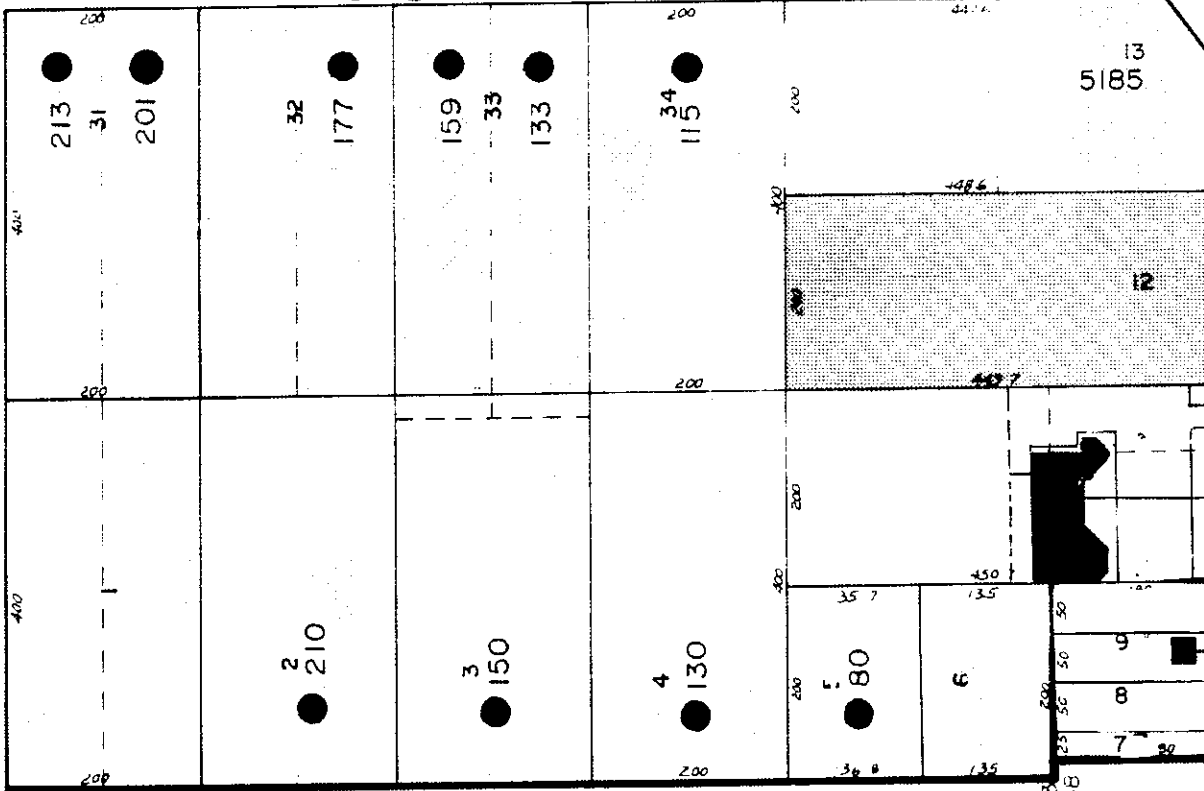
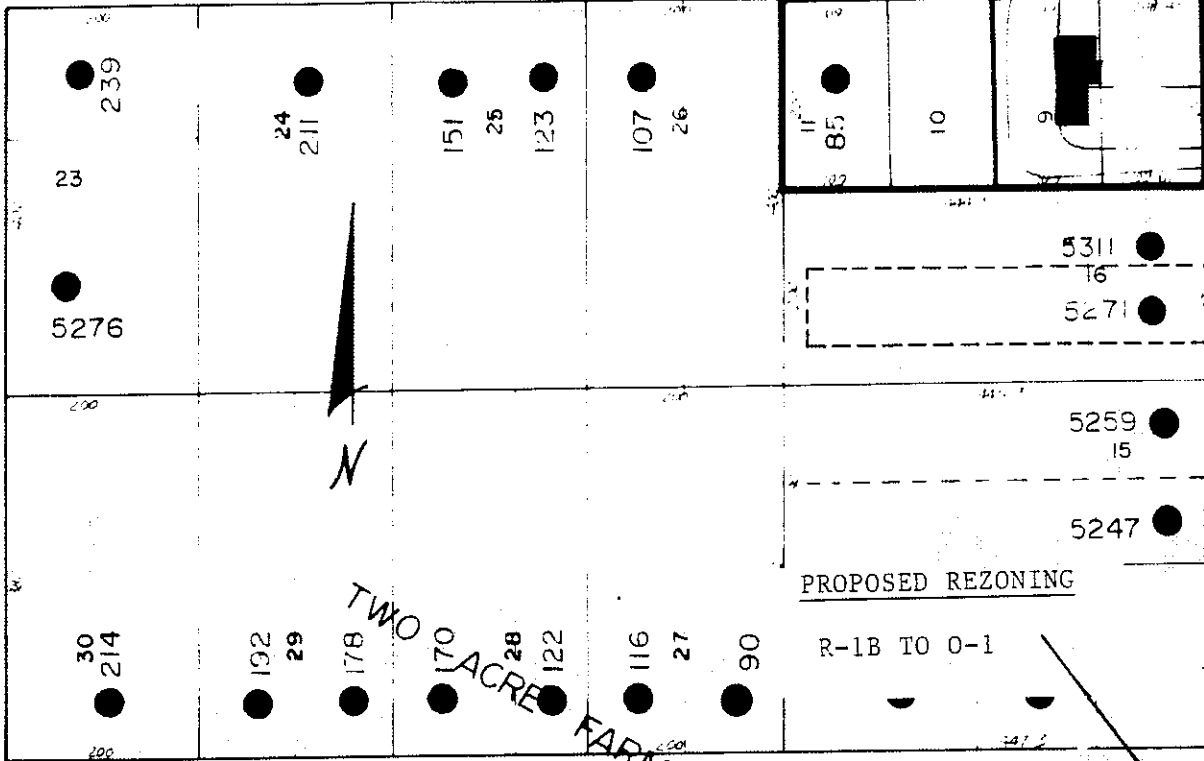
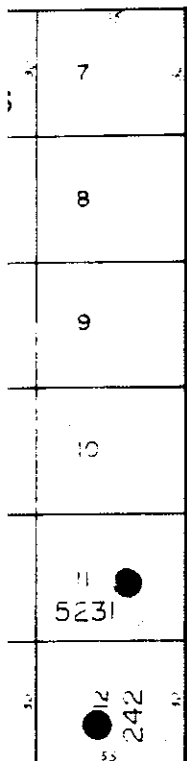
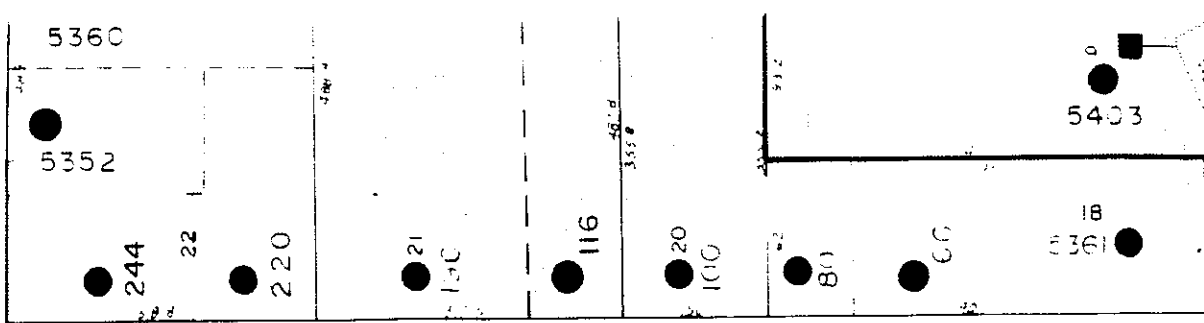
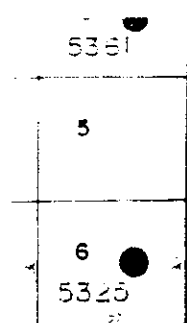
DASHWOOD

DEQUINDRE

N







STALWART

VIRGILIA

FABIUS

LONG LAKE

LIVERNOIS

#6

**C-F**

**R-1C**

**22**

PROPOSED STREET EASEMENT  
VACATION

**R-1E**

N

BIG BEAVER

I-75

**27**

**R-1E**

STEPHENSON

7

