

**VILLAGE OF DOWNERS GROVE**  
**Report for the Village**  
**2/7/2023**

<b>SUBJECT:</b>	<b>SUBMITTED BY:</b>
Neighborhood Traffic Study 8	Andy Sikich Public Works Director

### SYNOPSIS

An ordinance has been prepared concerning traffic controls, parking, speed limits and pedestrian/bicycle safety improvements per Neighborhood Traffic Study Area 8, generally bounded by Woodward Avenue on the west, 63rd Street on the north, Main Street/Lemont Road on the east and 75th Street on the south.

### STRATEGIC PLAN ALIGNMENT

The goals for 2021-2023 include *Top Quality Infrastructure* and *Exceptional Municipal Services*.

### FISCAL IMPACT

The FY23 Budget has sufficient funding to pay for changes to signage by in-house personnel. Any additional permanent improvements will be included in future projects.

### RECOMMENDATION

#### UPDATE & RECOMMENDATION

This item was originally discussed at the January 10<sup>th</sup>, 2023 Village Council meeting. Please see the below answers to Council inquires.

*How was the study area selected? Why is it larger than previous study areas?*

The study area was selected in response to resident inquiries and concerns about traffic associated with Downers Grove South and Kingsley Elementary, and pedestrian access to parks. The study area limits were selected because:

- School traffic impacts the major streets in the entire area
- There are no logical breakpoints within the street network

The street system is curvilinear, which increases the land area involved as opposed to the grid system prevalent in the previous study areas.

*Why are Norfolk Street and 71<sup>st</sup> Street recommended to be designated bike routes?*

- Norfolk Street was previously identified in the [2013 Bicycle and Pedestrian Plan](#) as a bike route.
- 71<sup>st</sup> Street is being recommended as a bike route to provide network connectivity between Dunham and Woodward. This is as part of a capital improvement project to be completed in 2023 using federal funding through the Surface Transportation Program (STP).

## UPDATE & RECOMMENDATION

*How can speeding concerns of the residents be addressed on Bolson Drive?*

The study recommends using an incremental approach to address speeding issues, such as:

- **Education and Enforcement:** Use speed feedback signs and coordinate with District 99 on communication efforts to encourage parents and students to reduce speeds throughout the neighborhood. Provide targeted enforcement during peak travel periods.
- **Striping and Signage:** Add pavement markings, such as centerline, edge lines and dedicated bike lanes, to visually narrow the roadway, and add signage to warn of pedestrian crossings, park zones and school zones.
- **Physical Measures/Devices:** These are the most costly to implement, and can be the most intrusive to the neighborhood. These include horizontal deflections, such as curb extensions, center medians and chicanes, and vertical deflections, such as speed humps and raised intersections.

Staff recommends implementing the Education and Enforcement steps and monitoring results. Additional actions can be taken if the Education and Enforcement steps do not address the speeding issues.

## BACKGROUND

### Neighborhood Traffic Study Area 8

In 2010, the Village began a process of studying traffic on a neighborhood by neighborhood basis. The most recent study (see attached) focused on Area 8, which is generally bounded by Woodward Avenue on the west, 63rd Street on the north, Main Street/Lemont Road on the east and 75th Street on the south. KLOA, Inc. was selected as the consultant to perform this study and began work in April 2022.

In November 2022, the Transportation and Parking Commission (TaP) reviewed the Neighborhood Traffic Study Area 8 report. The purpose of the study is to address traffic issues on a neighborhood basis to improve safety. The area was selected based on resident concerns of speeding, cut-through traffic and conflicts between pedestrian and motorists, arising from having a mix of uses including residential, commercial, schools, and public parks.

The scope of the study included an inventory of existing conditions and significant data collection, which occurred during the spring of 2022 and included:

- Existing land uses
- Physical operating characteristics of the roadways (e.g. lanes, speed limits, etc.)
- Existing traffic control devices
- Existing pedestrian and bicycle facilities
- Existing daily traffic volumes and vehicles speeds
- Existing peak hour vehicle, pedestrian and bicycle counts for certain intersections

The study includes recommendations that are categorized depending upon their relative ease of implementation and cost. The Transportation and Parking Commission voted 6 to 1 to approve the study's recommendations. Currently, ninety existing intersections within the study area have no traffic control, and

twelve intersections have only yield sign control. Under the recommended plan, all non-signalized intersections will be under some form of stop control.

The specific amendments include stop signs at the following intersections:

<b>Change</b>	<b>Intersection</b>
Convert Two-Way Stop to All-Way Stop	Carpenter Street at Palmer Street
	Oxnard Drive at Stonewall Avenue
	Springside Avenue at 71 <sup>st</sup> Street
	Norfolk Street at Powell Street
Replace Yield Sign with All-Way Stop Control	Saratoga Avenue at 67 <sup>th</sup> Street
Replace No Control with All-Way Stop Control	Concord Drive at Stonewall Avenue
	Saratoga Avenue at 68 <sup>th</sup> Street
Replace Yield Sign with Stop Sign Control	Eleven various locations
Replace No Control with Stop Sign Control	Eighty-eight locations including cul-de-sacs

The specific recommended amendments regarding speed limits include the following:

<b>Change</b>	<b>Location</b>
Install Park Zone with 20 MPH speed limit	Dunham Road along O'Brien Park
	Stonewall Avenue along Stonewall & Concord Park
	Springside Avenue along Concord Square Park
	Concord Avenue along Concord Square Park
	Springside Avenue along Ruth K. Powers Park
	Saratoga Avenue along Mar-Duke Farm
	Dexter Road along Dunham Place Park
Install School Zone with 20 MPH speed limit	Powell Street between Norfolk Street and Palmer Street
Reduce speed limit from 30 MPH to 25 MPH	Dunham Road from Bolson Drive to Lemont Road

### Implementation

Installation of signage can be performed by Public Works forces within a few weeks of Village Council approval. Striping improvements will be performed as part of future projects, or under the Village's striping maintenance contract as budget allows. Improvements such as the curb extensions for the intersection of Norfolk Street and Powell Street will be performed as part of future capital projects within the area.

### **ATTACHMENTS**

Ordinance  
Neighborhood Traffic Study 8  
Draft Meeting Minutes – TAP Commission November 9, 2022

VILLAGE OF DOWNERS GROVE  
COUNCIL ACTION SUMMARY

INITIATED: Village Attorney DATE: February 7, 2023  
(Name)

RECOMMENDATION FROM: \_\_\_\_\_ FILE REF: \_\_\_\_\_  
(Board or Department)

**NATURE OF ACTION:**

**STEPS NEEDED TO IMPLEMENT ACTION:**

- Ordinance
- Resolution
- Motion
- Other

Motion to Adopt "AN ORDINANCE AMENDING CERTAIN TRAFFIC CONTROL, PARKING AND SPEED PROVISIONS AND PEDESTRIAN/BIKE SAFETY IMPROVEMENTS", as presented.



**SUMMARY OF ITEM:**

Adoption of this ordinance shall amend certain traffic control, parking and speed provisions and pedestrian/bike safety improvements related to Neighborhood Traffic Study Area 8.

**RECORD OF ACTION TAKEN:**

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ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE AMENDING CERTAIN TRAFFIC CONTROL, PARKING AND SPEED PROVISIONS AND PEDESTRIAN/BIKE SAFETY IMPROVEMENTS

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County, Illinois, as follows: (Additions are indicated by redline/underline; deletions by ~~strikeout~~):

Section 1. That Section 14.36 is hereby amended to read as follows:

Sec 14.36 Speed Limits on Certain Streets; Twenty Miles Per Hour

It is hereby determined and declared that twenty miles per hour (20 mph) is a reasonable and safe absolute maximum speed limit for vehicles on the following street(s):

- .....
Concord Drive, at Concord Square Park
.....
Dexter Road, at Dunham Place Park
.....
Dunham Road, at O'Brien Park
.....
Saratoga Avenue, at Mar-Duke Farm Park
.....
Springside Avenue, at Concord Square Park
.....
Springside Avenue, at Ruth K. Powers Park
.....
Stonewall Avenue, at Stonewall & Concord Park
.....

Section 2. That Section 14.37 is hereby amended to read as follows:

Sec 14.37 Thirty Miles Per Hour

It is hereby determined and declared that thirty miles per hour (30 mph) is a reasonable and safe absolute maximum speed limit for vehicles on the following streets:

- .....
Dunham Road, Bolson Road to Main Street/Lemont Road
.....

**Section 3. That Section 14.63 is hereby amended to read as follows:**

**Sec 14.63 Isolated Yield Right-Of-Way Signs**

On the basis of traffic investigations at the below named intersections, it is found that traffic conditions warrant preference to traffic as indicated and that the enumerated streets should be designated as "yield right of way entrances".

.....

~~Barrett Street. At the northwest and southeast corners of the intersection of 67th Street and Barrett Street, regulating northbound and southbound traffic on Barrett Street.~~

.....

~~Brunette Drive. At the southeast corner of the intersection of Brunette Drive and Bolson Drive, regulating the eastbound traffic on Brunette Drive.~~

.....

~~Cambridge Road. At the southeast corner of the intersection of Cambridge Road and Concord Drive, regulating northbound traffic on Cambridge Road.~~

.....

~~Carpenter Street. At the northwest and southeast corners of the intersection of Carpenter Street and Saylor Street, regulating northbound and southbound traffic on Carpenter Street.~~

.....

~~Powell Street. At the northwest and southeast corners of the intersection of Palmer Street and Powell Street, regulating northbound and southbound traffic on Powell Street.~~

.....

~~Powell Street. At the northwest and southeast corners of the intersection of 67th Street and Powell Street, regulating northbound and southbound traffic on Powell Street.~~

.....

~~Oxford Street. At the northeast and southwest corners of the intersection of Oxford Street and Carpenter Street, regulating both eastbound and westbound traffic on Oxford Street.~~

.....

~~Oxnard Drive. At the southeast corner of the intersection of Oxnard Drive and Bolson Drive, regulating northbound traffic on Oxnard Drive.~~

.....

~~Saratoga Avenue. At the northwest and southeast corners of the intersection 67th Street and Saratoga Avenue, regulating northbound and southbound traffic on Saratoga Avenue.~~

.....

~~Springside Avenue. At the southeast corner of Brunette Drive regulating northbound traffic on Springside Avenue.~~

.....

~~Stonewall Avenue. At the southeast corner of the intersection of Stonewall Avenue and Bolson Drive, regulating northbound traffic on Stonewall Avenue.~~

.....

**Section 4. That Section 14.67 is hereby amended to read as follows:**

**Sec 14.67 Crosswalks Designated**

(a) Pedestrian crosswalks are hereby designated at the locations listed below on the following streets:

.....

Concord Drive. Across Concord Drive on the east side of Stonewall Avenue.

.....

Prentiss Drive. Across Prentiss Drive on the west side of Springside Avenue.

.....

Springside Avenue. Across Springside Avenue on the north and south sides of Prentiss Drive.

.....

Stonewall Avenue. Across Stonewall Avenue on the north side of Concord Drive.

.....

68<sup>th</sup> Street. Across 68<sup>th</sup> Street on the east and west sides of Powell Street.

.....

71<sup>st</sup> Street. Across 71<sup>st</sup> Street on the east and west sides of Barrett Street.

.....

71<sup>st</sup> Street. Across 71<sup>st</sup> Street on the east and west sides of Powell Street.

.....

**Section 5. That Section 14.71 is hereby amended to read as follows:**

**Sec 14.71 School Crosswalks Designated**

The crosswalks within the Village designated hereby as "school crossings" are as follows:

.....

Palmer Street. Across Palmer Street on the west side of Barrett Street.

.....

**Section 6. That Section 14.80 is hereby amended to read as follows:**

**Sec 14.80 Isolated Stop Signs**

There shall be erected in conspicuous places as hereinafter designated, signs lettered with the word "Stop", which signs shall be so located as to direct vehicular traffic on the specified streets to come to a full stop before proceeding into or across the intersecting streets:

.....

Adelia Street. At the northeast and southwest corners of the intersection of Adelia Street and Carpenter Street, regulating both eastbound and westbound traffic on Adelia Street.

.....

Adelia Street. At the northeast corner of the intersection of Adelia Street and Saratoga Avenue, regulating westbound traffic on Adelia Street.

.....

Alamance Place. At the southwest corner of the intersection of Alamance Place and Ticonderoga Road, regulating the eastbound traffic on Alamance Place.

.....

Baker Place. At the northeast corner of the intersection of Baker Place and Springside Avenue, regulating westbound traffic on Baker Place.

.....

Barrett Street. At the northwest corner of the intersection of Barrett Street and Klein Avenue, regulating southbound traffic on Barrett Street.

.....

Barrett Street. At the southeast corner of the intersection of Palmer Street and Barrett Street, regulating northbound traffic on Barrett Street.

.....

Barrett Street. At the northwest and southeast corners of the intersection of 67th Street and Barrett Street, regulating northbound and southbound traffic on Barrett Street.

Barrett Street. At the northwest and southeast corners of the intersection of 68th Street and Barrett Street, regulating northbound and southbound traffic on Barrett Street.

.....

Bateman Street. At the northwest corner of the intersection of Bateman Street and Hawkins Avenue, regulating southbound traffic on Bateman Street.

Bateman Street. At the northeast corner of the intersection of Bateman Street and Powell Street, regulating westbound traffic on Bateman Street.

Bates Place. At the northwest corner of the intersection of Bates Place and Loomes Avenue, regulating southbound traffic on Bates Place.

.....

Bolson Drive. At the southeast corner of the cul-de-sac intersection of Bolson Drive and Bolson Drive, regulating northbound traffic on Bolson Drive.

.....

Borman Place. At the southwest corner of the intersection of Borman Place and Devereux Road, regulating the eastbound traffic on Borman Place.

.....

Brighton Street. At the northwest corner of the intersection of Brighton Street and Hastings Avenue, regulating southbound traffic on Brighton Street.

.....

Brunette Drive. At the southwest corner of the intersection of Brunette Drive and Bolson Drive, regulating the eastbound traffic on Brunette Drive.

.....

Bunker Hill Circle. At the northeast corner of the intersection of Bunker Hill Circle and Bunker Hill Circle, regulating westbound traffic on Bunker Hill Circle.

.....

Bunker Hill Circle. At the northwest corner of the intersection of Bunker Hill Circle and Concord Drive, regulating southbound traffic on Bunker Hill Circle.

.....

Cambridge Road. At the southeast corner of the intersection of Cambridge Road and Concord Drive, regulating northbound traffic on Cambridge Road.

.....

Camden Court. At the southeast corner of the intersection of Camden Court and Camden Road, regulating northbound traffic on Camden Court.

.....

Camden Place. At the northwest corner of the intersection of Camden Place and Camden Road, regulating southbound traffic on Camden Place.

.....

Camden Road. At the southeast corner of the intersection of Camden Road and Concord Drive, regulating northbound traffic on Camden Road.

.....

Camden Road. At the southeast corner of the intersection of Camden Road and Concord Drive, regulating northbound traffic on Camden Road.

.....

Carol Street. At the northeast and southwest corners of the intersection of Carol Street and Carpenter Street, regulating both eastbound and westbound traffic on Carol Street.

.....

Carol Street. At the northeast corner of the intersection of Carol Street and Saratoga Avenue, regulating westbound traffic on Carol Street.

.....

Carpenter Street. At the northwest corner of the intersection of Carpenter Street and 67<sup>th</sup> Street, regulating southbound traffic on Carpenter Street.

.....

Carpenter Street. At the southeast corner of the intersection of Carpenter Street and 68<sup>th</sup> Street, regulating northbound traffic on Carpenter Street.

.....

Concord Court. At the northwest corner of the intersection of Concord Court and Concord Drive, regulating southbound traffic on Concord Court.

.....

Concord Place. At the southeast corner of the intersection of Concord Place and Concord Drive, regulating northbound traffic on Concord Place.

.....

Creekside Road. At the southeast corner of the intersection of Creekside Road and Robey Avenue, regulating northbound traffic on Creekside Road.

.....

Devereux Road. At the southwest corner of the intersection of Devereux Road and Ticonderoga Road, regulating the eastbound traffic on Devereux Road.

.....

Dickson Avenue. At the northeast corner of the intersection of Dickson Avenue and Springside Avenue, regulating westbound traffic on Dickson Avenue.

.....

Essex Place. At the southwest corner of the intersection of Essex Place and Penner Avenue, regulating the eastbound traffic on Essex Place.

.....

Foster Place. At the northwest corner of the intersection of Foster Place and Valley View Drive, regulating southbound traffic on Foster Place.

.....

Grace Court. At the southwest corner of the intersection of Grace Court and Barrett Street, regulating the eastbound traffic on Grace Court.

.....

Graham Avenue. At the southwest corner of the intersection of Graham Avenue and Devereux Road, regulating the eastbound traffic on Graham Avenue.

.....

Hall Place/Hall Street. At the northeast and southwest corners of the intersection of Hall Place/Hall Street and Devereux Road, regulating both eastbound and westbound traffic on Hall Place/Hall Street.

.....

Hatch Street. At the northeast and southwest corners of the intersection of Hatch Street and Camden Street, regulating both eastbound and westbound traffic on Hatch Street.

.....

Hathaway Lane. At the northwest corner of the intersection of Hathaway Lane and Brookwood Drive, regulating southbound traffic on Hathaway Lane.

.....

Hathaway Lane. At the southeast corner of the intersection of Hathaway Lane and Whidden Avenue, regulating northbound traffic on Hathaway Lane.

.....

Hawkins Avenue. At the southwest corner of the intersection of Hawkins Avenue and Camden Road, regulating the eastbound traffic on Hawkins Avenue.

.....

Hawkins Avenue. At the northeast corner of the intersection of Hawkins Avenue and Powell Street, regulating westbound traffic on Hawkins Avenue.

.....

Hillcrest Road. At the northwest corner of the intersection of Hillcrest Road and Palmer Street, regulating southbound traffic on Hillcrest Road.

.....

Hobart Avenue. At the northeast corner of the intersection of Hobart Avenue and Foster Road, regulating westbound traffic on Hobart Avenue.

.....

Hobart Avenue. At the southeast corner of the intersection of Hobart Avenue and Valley View Drive, regulating northbound traffic on Hobart Avenue.

.....

Hughes Avenue. At the northeast corner of the intersection of Hughes Avenue and Powell Street, regulating westbound traffic on Hughes Avenue.

.....

Kelly Place. At the northwest corner of the intersection of Kelly Place and Richards Avenue, regulating southbound traffic on Kelly Place.

.....

Klein Avenue. At the northeast corner of the intersection of Klein Avenue and Powell Street, regulating westbound traffic on Klein Avenue.

.....

Lamb Court. At the southeast corner of the intersection of Lamb Court and Andrus Avenue, regulating northbound traffic on Lamb Court.

.....

Lexington Lane. At the northeast corner of the intersection of Lexington Lane and Springside Avenue, regulating westbound traffic on Lexington Lane.

.....

Meade Place. At the northwest corner of the intersection of Meade Road and Meade Place, regulating southbound traffic on Meade Place.

.....

Meade Road. At the northwest corner of the intersection of Meade Road and Concord Drive, regulating southbound traffic on Meade Road.

.....

Monmouth Place. At the northeast corner of the intersection of Monmouth Place and Camden Road, regulating westbound traffic on Monmouth Place.

.....

Nash Street. At the northwest corner of the intersection of Nash Street and Breasted Avenue, regulating northbound traffic on Nash Street.

.....

Newport Road. At the northeast corner of the intersection of Newport Road and Cambridge Road, regulating westbound traffic on Newport Road.

.....

Northbridge Place. At the southwest corner of the intersection of Northbridge Place and Penner Avenue, regulating the eastbound traffic on Northbridge Place.

.....

O'Neill Road. At the northwest corner of the intersection of O'Neill Road and Hawkins Avenue, regulating southbound traffic on O'Neill Road.

.....

Otto Place. At the northwest corner of the intersection of Otto Place and Loomes Avenue, regulating southbound traffic on Otto Place.

.....

Oxford Street. At the northeast and southwest corners of the intersection of Oxford Street and Carpenter Street, regulating both eastbound and westbound traffic on Oxford Street.

.....

Oxnard Drive. At the southeast corner of the intersection of Oxnard Drive and Bolson Drive, regulating northbound traffic on Oxnard Drive.

.....

Oxnard Drive. At the southeast corner of the intersection of Oxnard Drive and Oxnard Drive, regulating northbound traffic on Oxnard Drive.

.....

Parker Avenue. At the northwest corner of the intersection of Parker Avenue and Robey Avenue, regulating southbound traffic on Parker Avenue.

.....

Penner Avenue. At the southeast corner of the intersection of Penner Avenue and Concord Drive, regulating northbound traffic on Penner Avenue.

.....

Penner Place. At the northwest corner of the intersection of Penner Place and Penner Avenue, regulating southbound traffic on Penner Place.

.....

Pinewood Drive. At the northeast corner of the intersection of Pinewood Drive and Claremont Drive, regulating westbound traffic on Pinewood Drive.

.....

Plymouth Road. At the northwest corner of the intersection of Plymouth Road and Concord Drive, regulating southbound traffic on Plymouth Road.

.....

Plymouth Road. At the southeast corner of the intersection of Plymouth Road and Dickson Avenue, regulating northbound traffic on Plymouth Road.

.....

Powell Street. At the northwest and southeast corners of the intersection of Palmer Street and Powell Street, regulating northbound and southbound traffic on Powell Street.

.....

Powell Street. At the northwest and southeast corners of the intersection of 67th Street and Powell Street, regulating northbound and southbound traffic on Powell Street.

.....

Prideham Street. At the northwest corner of the intersection of Prideham Street and Breasted Avenue, regulating southbound traffic on Prideham Street.

.....

Revere Road. At the northwest corner of the intersection of Revere Road and Concord Drive, regulating southbound traffic on Revere Road.

.....

Richards Avenue. At the southwest corner of the intersection of Richards Avenue and Dexter Road, regulating the eastbound traffic on Richards Avenue.

.....

Saratoga Avenue. At the northwest and southeast corners of the intersection Palmer Street and Saratoga Avenue, regulating northbound and southbound traffic on Saratoga Avenue.

.....

Saratoga Avenue. At the northwest and southeast corners of the intersection 67th Street and Saratoga Avenue, regulating northbound and southbound traffic on Saratoga Avenue.

.....

Saylor Street. At the northeast and southwest corners of the intersection of Carpenter Street and Saylor Street, regulating eastbound and westbound traffic on Saylor Street.

.....

Saylor Street. At the southwest corner of the intersection of Powell Street and Saylor Street, regulating the eastbound traffic on Saylor Street.

.....

Saylor Street. At the northeast corner of the intersection of Saylor Street and Saratoga Avenue, regulating westbound traffic on Saylor Street.

.....

Selig Place. At the northeast corner of the intersection of Selig Place and Devereux Road, regulating westbound traffic on Selig Place.

.....

Springside Avenue. At the southeast corner of the intersection of Springside Avenue and Brunette Drive, regulating northbound traffic on Springside Avenue.

.....

Springside Avenue. At the southeast corner of the intersection of Springside Avenue and Dexter Road, regulating northbound traffic on Springside Avenue.

.....

Springside Place. At the northeast corner of the intersection of Springside Place and Springside Avenue, regulating westbound traffic on Springside Place.

.....

Stonewall Avenue. At the southeast corner of the intersection of Stonewall Avenue and Bolson Drive, regulating northbound traffic on Stonewall Avenue.

.....

Stonewall Avenue. At the northwest corner of the intersection of Stonewall Avenue and Brighton Street, regulating southbound traffic on Stonewall Avenue.

.....

Sturbridge Place. At the southwest corner of the intersection of Sturbridge Place and Penner Avenue, regulating the eastbound traffic on Sturbridge Place.

.....

Taylor Street. At the northeast corner of the intersection of Taylor Street and Hathaway Lane, regulating westbound traffic on Taylor Street.

.....

Taylor Street. At the southwest corner of the intersection of Taylor Street and Springside Avenue, regulating the eastbound traffic on Taylor Street.

.....

Terrace Drive. At the northeast corner of the intersection of Terrace Drive and Hillcrest Drive, regulating westbound traffic on Terrace Drive.

.....

Terrace Drive. At the northwest corner of the intersection of Terrace Drive and Palmer Street, regulating southbound traffic on Terrace Drive.

.....

Ticonderoga Road. At the northeast corner of both of the intersections of Ticonderoga Road and Camden Road, regulating westbound traffic on Ticonderoga Road.

.....

Valley Forge Place. At the southwest corner of the intersection of Valley Forge Place and Ticonderoga Road, regulating the eastbound traffic on Valley Forge Place.

.....

Waterfall Place. At the northwest corner of the intersection of Waterfall Place and Valley View Drive, regulating southbound traffic on Waterfall Place.

.....

Wellington Place. At the southwest corner of the intersection of Wellington Place and Stair Street, regulating the eastbound traffic on Wellington Place.

.....

Wells Street. At the northwest corner of the intersection of Wells Street and Breasted Avenue, regulating southbound traffic on Wells Street.

.....

Wells Street. At the northwest corner of the intersection of Wells Street and Brookwood Drive, regulating southbound traffic on Wells Street.

.....

Wells Street. At the southwest corner of the intersection of Wells Street and Wells Street, regulating the eastbound traffic on Wells Street.

.....

Whidden Avenue. At the northeast corner of the intersection of Whidden Avenue and Prideham Street, regulating westbound traffic on Whidden Avenue.

.....

White Place. At the southwest corner of the intersection of White Place and Camden Road, regulating the eastbound traffic on White Place.

.....

Willard Place. At the southwest corner of the intersection of Willard Place and Dexter Road, regulating the eastbound traffic on Willard Place.

.....

67<sup>th</sup> Place. At the southwest corner of the intersection of Powell Street and 67<sup>th</sup> Place, regulating the eastbound traffic on 67<sup>th</sup> Place.

.....

68<sup>th</sup> Place. At the southwest corner of the intersection of Powell Street and 68<sup>th</sup> Place, regulating the eastbound traffic on 68<sup>th</sup> Place.

.....

~~Stonewall Avenue. At the northwest and southeast corners of the intersection of Stonewall Avenue and Oxnard Road, to direct traffic proceeding northerly or southerly on Stonewall Avenue to come to a full stop before proceeding across or into Oxnard Road.~~

.....

~~Powell Street. At the southeast and northwest corners of the intersection of Powell Street and Norfolk Street to direct traffic proceeding northerly and southerly on Powell Street to come to a full stop before proceeding into or across Norfolk Street.~~

.....

**Section 7. That Section 14.80.1 is hereby amended to read as follows:**

**Sec 14.80.1 All-Way Stop Signs**

There shall be erected in conspicuous places at the following intersections signs lettered with the words "All-Way Stop", which signs shall be so located as to direct all traffic to come to a full stop before proceeding into the intersection:

.....

Carpenter Street at Palmer Street.

.....

Concord Drive at Stonewall Avenue.

.....

Norfolk Street at Powell Street.

.....

Oxnard Drive at Stonewall Avenue.

.....

Saratoga Avenue at 67<sup>th</sup> Street.

.....

Saratoga Avenue at 68<sup>th</sup> Street.

.....

Springside Avenue at 71<sup>st</sup> Street.

.....

**Section 8.** That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

**Section 9.** That this ordinance shall be in full force and effect from and after its passage and publication in the manner provided by law.

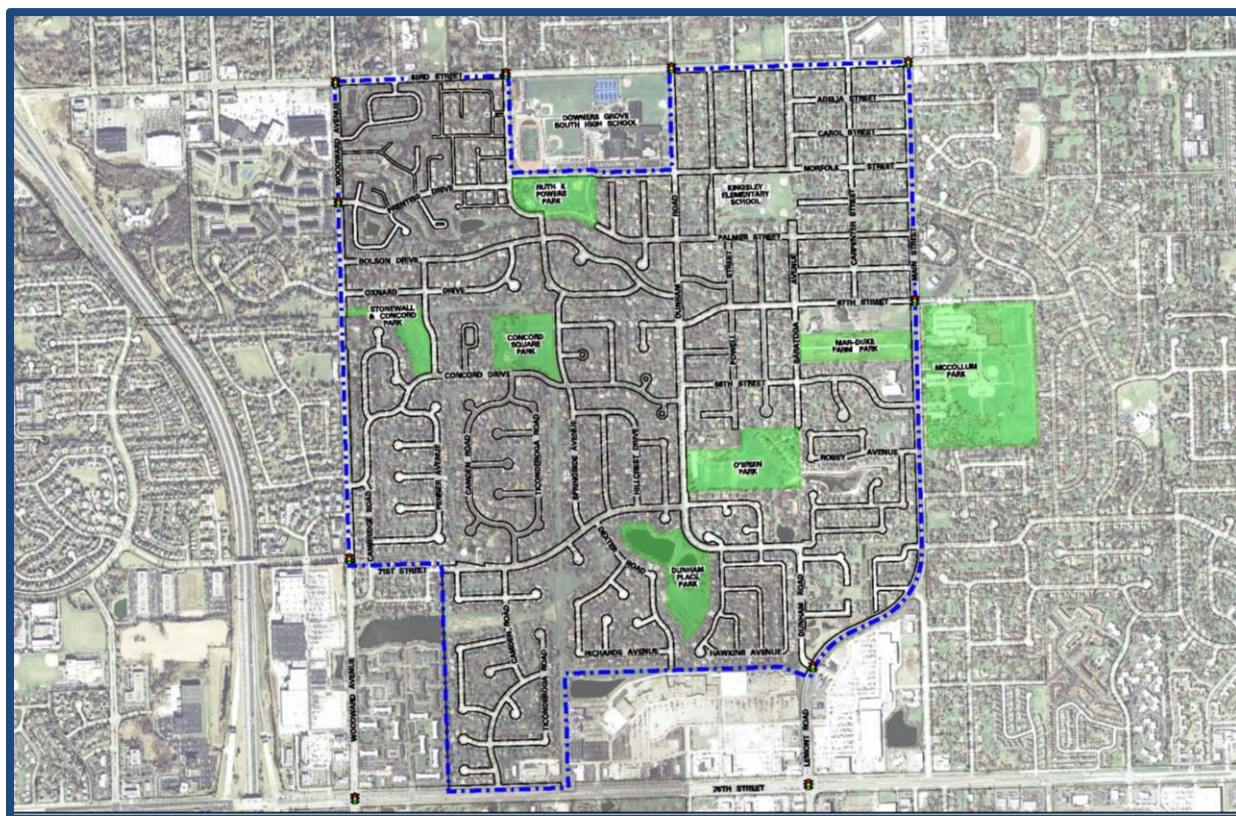
\_\_\_\_\_  
Mayor

Passed:  
Published:  
Attest: \_\_\_\_\_  
Village Clerk

# Neighborhood Traffic Study

## Area Number 8

Downers Grove, Illinois



Prepared For:



November 30, 2022

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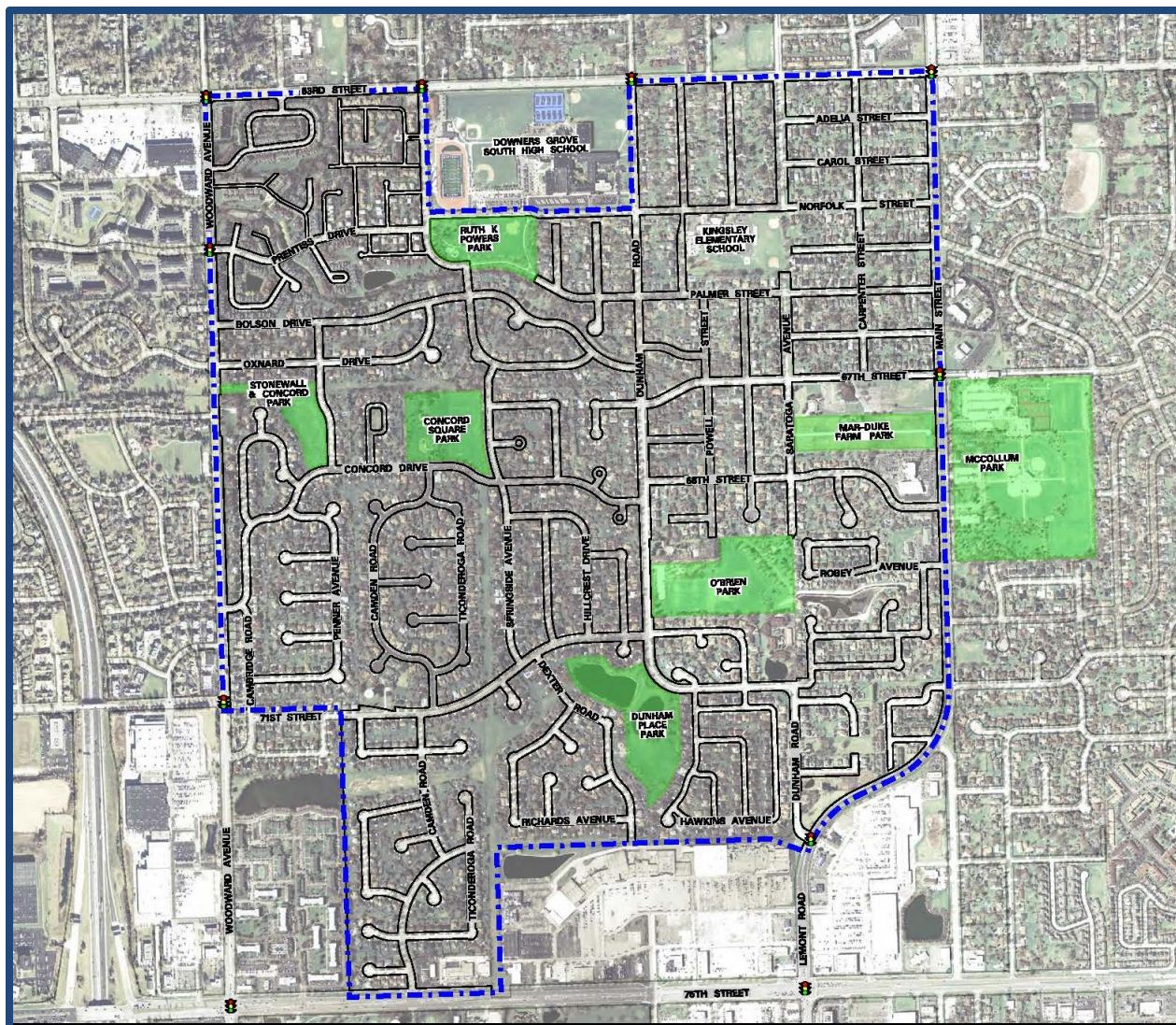
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# 1. Introduction

The Village of Downers Grove has retained Kenig, Lindgren, O’Hara, Aboona, Inc. (KLOA, Inc.) to conduct the neighborhood traffic study for Area Number 8. Located in the southwest portion of the Village of Downers Grove, the neighborhood is generally bounded by 63<sup>rd</sup> Street on the north; Main Street/Lemont Road and commercial uses on the east; 75<sup>th</sup> Street, commercial uses, and the Village of Woodridge on the south; and Woodward Avenue and the Village of Woodridge on the west. The neighborhood contains multiple north-south, east-west, and diagonal roads. Primarily consisting of single-family and multi-family homes, the neighborhood also contains Downers Grove South High School (DGSHS), Kingsley Elementary School, and six parks. Office and commercial uses border the neighborhood along Main Street/Lemont Road and 75<sup>th</sup> Street. In addition, the multiple-family homes and some single-family homes located in the northeast quadrant of the 75<sup>th</sup> Street/Woodward Avenue intersection are within the Village of Woodridge. **Figure 1** and the following page show the location of the neighborhood (all of the figures for this study are provided in the Appendix).

The purpose of the neighborhood study was to (1) thoroughly examine the existing vehicular, pedestrian, and bicycle operations within the neighborhood, (2) identify operational issues and safety concerns, (3) analyze potential mitigation measures, and (4) develop recommendations to address operational issues, calm traffic conditions, and increase vehicular and pedestrian safety.



Neighborhood 8 Study Area

## 2. Existing Neighborhood Conditions

Transportation conditions were inventoried to obtain a database for evaluating the existing operations within the neighborhood and along the roadways bordering the neighborhood. The components of existing conditions that were inventoried within the neighborhood included the following:

- Existing land uses
- Physical and operating characteristics of the roadways (i.e., number of lanes, speed limits, traffic control, etc.)
- Existing traffic control devices
- Existing pedestrian and bicycle facilities
- Existing daily traffic volumes and vehicle speeds
- Existing morning and evening peak hour volumes

### Study Area and Existing Land Uses

The neighborhood is generally bounded by 63<sup>rd</sup> Street on the north; Main Street/Lemont Road and commercial uses on the east; 75<sup>th</sup> Street, commercial uses, and the Village of Woodridge on the south; and Woodward Avenue and the Village of Woodridge on the west. Located in the southwestern portion of the Village, single-family and multi-family homes are the predominant land uses within the neighborhood with some commercial and office land uses located along Main Street/Lemont Road and 75<sup>th</sup> Street. The neighborhood contains six parks (see insert). In addition, DGSHS is located in the northern section of the neighborhood generally bounded by 63<sup>rd</sup> Street, Dunham Road, Norfolk Street, and Springside Avenue. Kingsley Elementary School is located in the northeast section of the neighborhood on the south side of Norfolk Street between Saratoga Avenue on the east and Powell Street on the west. Lastly, the multi-family homes and some single-family homes in the northeast quadrant of the 75<sup>th</sup> Street/Woodward

#### Neighborhood Parks

- *O'Brien Park* is located on the east side of Dunham Road just north of Andrus Avenue.
- *Mar-Duke Park* is bounded by Main Street and Saratoga Avenue approximately halfway between 67<sup>th</sup> Street and 68<sup>th</sup> Street.
- *Concord Square Park* is located in the northwest quadrant of the Concord Drive/Springside Avenue intersection.
- *Stonewall and Concord Park* is located on the west side of Stonewall Avenue north of Concord Drive.
- *Dunham Place Park* is located in the southwest quadrant of the Dunham Road/71<sup>st</sup> Street intersection.
- *Ruth K. Powers Park* is located in the southeast quadrant of the Springside Avenue/Norfolk Street intersection.

Avenue intersection are located in the Village of Woodridge.

## Existing Roadway System

The four external roadways that border the neighborhood are described below.

*63<sup>rd</sup> Street* is an east-west, minor arterial road that has two lanes in each direction. Separate left-turn lanes are provided on 63<sup>rd</sup> Street at its signalized intersections with Main Street, Dunham Road, Springside Avenue, and Woodward Avenue. 63<sup>rd</sup> Street is under the jurisdiction of the DuPage County of Division of Transportation (DuDOT), has a posted speed limit of 40 mph, and has an Annual Average Daily Traffic (AADT) volume of 18,900 vehicles (Illinois Department of Transportation [IDOT] 2021).

*Main Street/Lemont Road* is a north-south, minor arterial road that has two lanes in each direction north of Valley View Road and two lanes in each direction divided by a median south of Valley View Road. Main Street extends north of Pinewood Drive and Lemont Road extends south of Pinewood Drive. Separate left-turn lanes are provided on Main Street/Lemont Road at its signalized intersections with 63<sup>rd</sup> Street, Dunham Road, and 75<sup>th</sup> Street (dual left-turn lanes). The Main Street/67<sup>th</sup> Street intersection is under traffic signal control. Main Street/Lemont Road is under the jurisdiction of DuDOT, has a posted speed limit of 40 mph, and has an AADT volume of 13,800 vehicles (IDOT 2021).

*75<sup>th</sup> Street* is an east-west, major arterial road that has three lanes in each direction divided by a median. Separate left-turn lanes are provided on 75<sup>th</sup> Street at most intersections including its signalized intersections with Lemont Road and Woodward Avenue, both of which have dual left-turn lanes, and its unsignalized intersection with Devereux Road. 75<sup>th</sup> Street is under the jurisdiction of DuDOT, has a posted speed limit of 40 mph, and has an AADT volume of 22,000 vehicles (IDOT 2021).

*Woodward Avenue* is a north-south, minor arterial road that has two lanes in each direction north of Providence Drive and two lanes in each direction divided by a median south of Providence Drive. Separate left-turn lanes are provided on Woodward Avenue at many intersections including its signalized intersections with 63<sup>rd</sup> Street, Prentiss Drive, 71<sup>st</sup> Street, and 75<sup>th</sup> Street (dual left-turn lanes) and its unsignalized intersection with Cambridge Road. Woodward Avenue is under the jurisdiction of the Village of Woodridge, has a posted speed limit that varies between 30 and 35 mph, and has an AADT volume of 12,300 vehicles (IDOT 2021).

### Internal Neighborhood Roadways

Excluding the arterial roadways that border the neighborhood, the following summarizes the physical and operating characteristics of the neighborhood roadways.

- All the roadways within the neighborhood are classified as local roads except the following, as shown in **Figure 2**:
  - Dunham Road is classified as a major collector road
  - Springside Avenue is classified as a minor collector road
  - Prentiss Drive is classified as a minor collector road
  - 71<sup>st</sup> Street is classified as a minor collector road

- All the neighborhood roads provide one lane in each direction.
- Exclusive turn lanes are provided at the following intersections:
  - Exclusive left-turn lanes are provided on the southbound, northbound, and westbound approaches of the Dunham Road/Norfolk Street intersection.
  - Exclusive left-turn lanes are provided on Dunham Road at its signalized intersection with 63<sup>rd</sup> Street.
  - An exclusive left-turn lane is provided on Dunham Road at its signalized intersection with Lemont Road.
  - Exclusive left-turn lanes are provided on Prentiss Drive at its signalized intersection with Woodward Avenue.
- Pavement markings in the neighborhood include parking lines/boxes along Prentiss Drive, the north side of Concord Drive between Springside Avenue and Baker Hill Circle, the east side of Dunham Road between 67<sup>th</sup> Street/Bradley Court and 71<sup>st</sup> Street/Andrus Avenue, the west side of Dunham Road along DGSHS, and the east side of Springside Avenue between 63<sup>rd</sup> Street and Bolson Drive. Centerlines are provided along the entire length or sections of Dunham Road, Prentiss Drive, Norfolk Street, Springside Avenue, Concord Drive, Bolson Drive, 68<sup>th</sup> Street, Foster Road, Hobart Avenue, and Valley View Drive.
- The posted speed limit on most of the neighborhood roads is 25 miles per hour except Dunham Road/71<sup>st</sup> Street, which has a posted speed limit of 30 mph between Bolson Drive and Lemont Road, and Nash Street, which has a posted speed limit of 20 mph. Further, 20 mph advisory speed signs are provided along the curved sections of Concord Drive and Bolson Drive and a 15-mph advisory speed sign is provided along the curved section of Foster Road. In addition, Norfolk Street within the vicinity of Kingsley Elementary School has a 20-mph school speed zone that is in effect on school days when children are present. **Figure 3** illustrates the speed limits in the neighborhood.
- Parking is generally provided on one or both sides of the roadways although parking is regulated on several of the roads.

## Existing Intersection Traffic Control

**Figure 4** shows the existing intersection traffic control within the neighborhood and the following provides a summary of the existing traffic control at intersections within the neighborhood:

- Five intersections are under traffic signal control
- Eleven intersections are under all-way stop sign control
- Fifty-eight intersections are under two-way or one-way stop sign control
- Twelve intersections are under two-way or one-way yield sign control

The rest of the intersections have no intersection traffic control. At most of the two-way or one-way stop sign-controlled intersections, a “Cross Traffic Does Not Stop” plaque is located below the stop signs.

## Pedestrian and Bicycle Facilities and Traffic Control Devices

### Sidewalk System

Sidewalks are generally located on one side of all the roads in the neighborhood and in many cases on both sides of the road. In addition, high visibility and standard crosswalks are provided at many intersections within the neighborhood, particularly in proximity to DGSHS, Kingsley Elementary School, and the six parks.

### Bike Routes

The 2013 *Village of Downers Grove Bicycle and Pedestrian Plan* designates the following roads as bike routes that extend through the neighborhood:

- Dunham Road/71<sup>st</sup> Street between 63<sup>rd</sup> Street and Lemont Road
- Springside Avenue between Prentiss Drive and Concord Drive
- Concord Drive between Springside Avenue and Camden Road
- Ticonderoga Road between Camden Road/Concord Drive and 71<sup>st</sup> Street
- Camden Road between 71<sup>st</sup> Street and Devereux Road
- Devereux Road between Camden Drive and 75<sup>th</sup> Street
- 67<sup>th</sup> Street between Main Street and Dunham Road
- Bolson Drive between Dunham Road and Springside Avenue
- Prentiss Drive between Springside Avenue and Woodward Avenue

Bike lanes are located on both sides of Dunham Road/71<sup>st</sup> Street between 67<sup>th</sup> Street/Bradley Court and Lemont Road. Bike route signs are installed along 67<sup>th</sup> Street, Bolson Drive, Prentiss Drive, and sections of Dunham Road and Springside Avenue designating them as bike routes.

In addition, the *Village of Downers Grove Bicycle and Pedestrian Plan* recommends that Norfolk Street be designated as a signed bike route between Springside Avenue and Barrett Street.

## Pedestrian and Bicycle Traffic Control Devices, Signage, and Pavement Markings

The following summarizes and **Figure 5** illustrates the pedestrian and bicycle traffic control devices, signage, and pavement markings located within the neighborhood:

- Dedicated school crossing signs are provided at the following intersections or locations which include School Advance Crossing Assemblies (S1-1, W16-9P), School Crossing Assemblies (S1-1, W16-7P), and/or SCHOOL pavement markings on the roads:
  - 63<sup>rd</sup> Street with Dunham Road
  - 63<sup>rd</sup> Street with Springside Avenue
  - 63<sup>rd</sup> Street with Stonewall Avenue
  - Main Street with Norfolk Street
  - Norfolk Street with Powell Street
  - Norfolk Street with Barrett Street
  - Palmer Street with Powell Street
  - Palmer Street with Saratoga Street
  - On Palmer Street, Barrett Street, and Saratoga Avenue north of Norfolk Street
- A school zone with warning signs and a reduced (20 mph) speed limit is located along Norfolk Street within proximity to Kingsley Elementary School.
- School crossing guards are stationed at the Norfolk Street/Powell Street and Norfolk Street/Barrett Street intersections, which are adjacent to Kingsley Elementary School.
- The traffic signals at the 63<sup>rd</sup> Street/Springside Avenue, 63<sup>rd</sup> Street/Dunham Road, and Woodward Avenue/Prentiss Drive intersections have pedestrian signals on all legs of each intersection. Pedestrian signals are provided on (1) the south leg of the Main Street/67<sup>th</sup> Street intersection and (2) the west leg of the Lemont Road/Dunham Road intersection
- High visibility and standard crosswalks are provided at many intersections within the neighborhood, particularly in proximity to DGSHS, Kingsley Elementary School, and the six parks.
- Pedestrian advanced crossing assemblies (W11-2, W16-9P) and pedestrian crossing assemblies (W11-2, W16-7P) are located at the midblock pedestrian crossings on Main Street just north of 67<sup>th</sup> Street. In addition, flashing beacons are provided on two of the pedestrian advanced crossing assemblies (W11-2, W16-9P).
- Bike lanes are located on both sides of Dunham Road/71<sup>st</sup> Street between 67<sup>th</sup> Street/Bradley Court and Lemont Road.
- Bike Route signs are located on 67<sup>th</sup> Street, Bolson Drive, Prentiss Drive, and sections of Dunham Road and Springside Avenue.

## Existing Daily Traffic Volumes and Speed Surveys

In order to determine the existing traffic volumes and speeds along the neighborhood roadways, KLOA, Inc. conducted daily machine traffic counts and speed surveys at 48 locations within the neighborhood. Of the total 48 locations, approximately 31 were conducted along the north-south roadways and 19 were conducted along the east-west roadways. The traffic counts and speed surveys were generally conducted in May 2022 for a minimum of two days and were broken down by direction and by hour. In addition, updated traffic counts and speed surveys were performed in fall of 2022 at five of the locations.

**Figure 6** shows the two-way daily traffic volumes and **Figure 7** shows the average and 85<sup>th</sup> percentile speeds observed on the roadways. The average speed is the sum of the observed speeds of all the vehicles divided by the total vehicles on that segment of the road. Average speeds are used to determine the speeds at which motorists are typically traversing a roadway section, whereas the 85<sup>th</sup> percentile speed represents the speed at or below which 85 percent of vehicles on a roadway section travel under free flow conditions.

## Existing Morning and Afternoon/Evening Peak Period Traffic Volumes

In addition to the daily traffic counts and speed surveys, KLOA, Inc. conducted manual peak period vehicle, pedestrian, and bicycle counts at the following 18 intersections within the study area:

1. Dunham Road with Norfolk Street
2. Dunham Road with Palmer Street
3. Dunham Road and 67<sup>th</sup> Street/Bradley Court
4. Dunham Road with Concord Drive
5. Dunham Road with 71<sup>st</sup> Street/Andrus Avenue
6. Dunham Road with Foster Road and access road
7. Springside Avenue with Norfolk Street
8. Springside Avenue with Bolson Drive
9. Springside Avenue with Concord Drive
10. Powell Street with Norfolk Street
11. Powell Street with Palmer Street
12. Carpenter Street with Norfolk Street
13. Carpenter Street with Palmer Street
14. Woodward Avenue with Prentiss Drive
15. Woodward Avenue with Concord Drive
16. Barrett Street with Norfolk Street
17. Stonewall Avenue with Concord Drive
18. Camden Road with 71<sup>st</sup> Street

The counts were conducted for one day at each intersection on Tuesday or Wednesday, April 26 or 27, 2022 during the morning (7:00 A.M. to 9:00 A.M.) and afternoon/evening (2:00 P.M. to 6:00 P.M.) peak periods. In addition, a pedestrian traffic count was performed at the midblock crosswalk on Main Street just north of 67<sup>th</sup> Street on Saturday, June 11, 2022 from 12:00 P.M. to 4:00 P.M. **Figure 8** illustrates the existing weekday morning, afternoon, and evening peak hour vehicle volumes and **Figure 9** illustrates the pedestrian peak hour volumes at the intersections within proximity to DGSHS and Kingsley Elementary School as well as the Main Street midblock pedestrian crossing. It should be noted that the bike volumes at all the intersections were very low.

### 3. Evaluation of Existing Conditions

To determine how the roadway system is currently functioning, KLOA, Inc. examined the existing operating characteristics within the neighborhood. The purpose of this evaluation was to identify and quantify the current operations and ascertain how the neighborhood's infrastructure and land uses contribute to the existing conditions. This was accomplished by reviewing and analyzing the existing traffic volumes, the speed surveys, and the crash data as well as the physical characteristics of the neighborhood and its transportation system. The evaluation provides the basis to thoroughly analyze and develop recommendations pertaining to the operation and design of the internal roadways.

#### Neighborhood Factors that Contribute to Traffic Volume and Travel Speed

It is important to note that traffic volumes and speeds on neighborhood roads are influenced by several factors, including:

- Roadway functional classification
- Location and directional orientation of roadway with respect to adjacent arterial roadways
- Roadway width
- Number of travel lanes
- Roadway surface
- Posted speed limits
- Spacing between traffic control devices
- Vertical grade (i.e., hills)
- Horizontal alignment (i.e., curves)
- Driver behavior

Many of these attributes are fixed within the neighborhood's infrastructure and are generally difficult and/or costly to modify. While communities strive to keep traffic volumes within typical ranges for the respective road classifications and operating speeds at or below the posted speed limit, it is often difficult to achieve given the above factors.

## Review of the Daily Traffic Volumes



### Daily Volumes

According to *Residential Streets*, local residential roads typically have a daily volume between 400 and 1,500 vehicles while residential collector roads typically have a daily volume exceeding 1,500 vehicles.

Figure 6 summarizes the average weekday traffic volumes by direction. **Table 1** summarizes the average weekday traffic volumes within the neighborhood, categorized by functional classification, and compares the volumes with the national residential road volume ranges as published in *Residential Streets*, Third Edition (see insert).

As can be seen from Table 1, the collector roads (Dunham Road, Springside Avenue, Prentiss Drive, and 71<sup>st</sup> Street) carry the highest volume of traffic. This is expected given that collector roads link the local neighborhood roads and land uses to the external or arterial roadway system. Further, many of the collector roads extend the length of the neighborhood or between collector and/or arterial roads and serve many homes and other land uses within the neighborhood. In addition, Norfolk Street between Dunham Road and Springside Avenue carries a higher volume of traffic, which is due to the fact that this section of Norfolk Street extends along DGSHS and provides primary access to the school parking lots, student drop-off/pick-up areas, and the bus loading zone. It should be noted that Norfolk Street between Dunham Road and Springside Avenue is a private road serving DGSHS.

To determine if the Year 2022 traffic volumes reflected pre-Covid conditions, the 2022 daily traffic volumes were compared to previous daily traffic counts performed at 15

locations in the neighborhood between 2010 and 2018. The following summarizes the results of the comparison of the daily traffic volumes:

- The 2022 daily traffic volumes were higher at six of the locations and were lower at nine of the locations.
- Of the nine locations where the previous daily traffic volumes were higher than the 2022 daily traffic volumes, the daily traffic volumes were less than 20 percent higher at six locations and over 20 percent higher at only three locations.

The results of the comparison of the traffic volumes showed that many of the 2022 daily traffic volumes were higher than the pre-Covid traffic volumes and the percent decrease in traffic was generally not significant. Further, even if the 2022 daily volumes are increased to represent pre-Covid conditions, all the daily traffic volumes are still generally well within the national standard volume ranges for the respective roadway classification.

Table 1

## AVERAGE WEEKDAY (24-HOUR) TRAFFIC VOLUMES BY STREET CLASSIFICATION

Street	Section	Existing Volume	Within Typical Volume
<b>Collector Streets</b>		<b>1,500 – 7,500</b>	
71 <sup>st</sup> Street	Ryan Road – Binder Road	1,649	Yes
71 <sup>st</sup> Street	Camden Road – Springside Avenue	2,402	Yes
Dunham Road	Norfolk Street – Palmer Street	4,523	Yes
Dunham Road	Palmer Street – Saylor Street	4,097	Yes
Dunham Road	Concord Drive – O’Brien Park Access	4,588	Yes
Dunham Road	O’Brien Park Access – 71 <sup>st</sup> Street	3,956	Yes
Dunham Road	Stanford Avenue – Crystal Avenue	3,626	Yes
Prentiss Drive	Stair Street – Nash Street	2,120	Yes
Springside Avenue	63 <sup>rd</sup> Street – Norfolk Street	1,979	Yes
Springside Avenue	Prentiss Drive – Bolson Drive	1,004	Yes
Springside Avenue	Bolson Drive – Brunette Drive	548	Yes
Springside Avenue	Lexington Lane – Concord Drive	548	Yes
Springside Avenue	71 <sup>st</sup> Street – Dickson Avenue	327	Yes

Table 1, continued

## AVERAGE WEEKDAY (24-HOUR) TRAFFIC VOLUMES BY STREET CLASSIFICATION

Street	Section	Existing Volume	Within Typical Volume
<b>Local Streets</b>		<b>0 – 1,500</b>	
67 <sup>th</sup> Street	Saratoga Avenue – Carpenter Street	912	Yes
68 <sup>th</sup> Street	Barrett Street – Saratoga Avenue	659	Yes
Adelia Street	Saratoga Avenue – Carpenter Street	131	Yes
Barrett Street	63 <sup>rd</sup> Street – Norfolk Street	242	Yes
Barrett Street	67 <sup>th</sup> Street – 68 <sup>th</sup> Street	108	Yes
Barrett Street	Andrus Avenue – Dunham Road	134	Yes
Binder Road	Hawkins Avenue – Graham Avenue	74	Yes
Bolson Drive	Springside Avenue – Brunette Drive	739	Yes
Bolson Drive	Woodward Avenue – Stonewall Avenue	641	Yes
Bolson Drive	Stonewall Avenue – Oxnard Drive	612	Yes
Bradley Court	Terminus – Dunham Road	135	Yes
Cambridge Road	71 <sup>st</sup> Street – Concord Drive	666	Yes
Camden Road	Devereux Road – Hatch Street	1,049	Yes
Carpenter Street	Adelia Street – Carol Street	657	Yes
Carpenter Street	Norfolk Street – Oxford Street	563	Yes
Concord Drive	Plymouth Road – Dunham Road	1,107	Yes
Concord Drive	Stonewall Avenue – Meade Road	662	Yes
Concord Drive	Camden Road – Springside Avenue	1,042	Yes
Devereux Road	Graham Avenue – Camden Road	878	Yes
Dexter Road	71 <sup>st</sup> Street – Springside Avenue	714	Yes
Hastings Avenue	Woodward Ave – Brighton Street	243	Yes
Hillcrest Drive	71 <sup>st</sup> Street – Dickson Avenue	86	Yes
Loomes Avenue	Bates Place – Otto Place	166	Yes
Nash Street	Breasted Avenue – Prentiss Drive	321	Yes

Table 1, continued

## AVERAGE WEEKDAY (24-HOUR) TRAFFIC VOLUMES BY STREET CLASSIFICATION

Street	Section	Existing Volume	Within Typical Volume
<b>Local Streets</b>		<b>0 – 1,500</b>	
Norfolk Street	Barrett Street – Saratoga Avenue	990	Yes
Oxnard Drive	Stonewall Avenue – Bolson Drive	153	Yes
Powell Street	Norfolk Street – Palmer Street	454	Yes
Powell Street	Palmer Street – Saylor Street	126	Yes
Powell Street	Dunham Road – Hawkins Avenue	532	Yes
Palmer Street	Powell Street – Barrett Street	557	Yes
Penner Avenue	Newport Road – Concord Drive	215	Yes
Plymouth Road	71 <sup>st</sup> Street – Dickson Avenue	106	Yes
Saratoga Avenue	Adelia Street – Carol Street	265	Yes
Saratoga Avenue	67 <sup>th</sup> Street – 68 <sup>th</sup> Street	131	Yes
Stonewall Avenue	Bolson Drive – Oxnard Drive	615	Yes
Ticonderoga Road	Camden Road – Camden Road	216	Yes
Valley View Drive	Foster Road – Creekside Road	474	Yes

## Review of the Travel Speed Surveys

Most of the roads within the neighborhood are regulated by a 25-mph neighborhood speed limit. It should be noted that Dunham Road/71<sup>st</sup> Street has a posted speed limit of 30 mph between Bolson Drive and Lemont Road and that some sections of roads have a posted speed limit of 20 mph. In addition, Norfolk Street within the vicinity of Kingsley Elementary School has a 20-mph school speed zone that is in effect on school days when children are present. Figure 7 summarizes the average and 85<sup>th</sup> percentile speeds by direction. **Table 2** summarizes the 85<sup>th</sup> percentile speeds within the neighborhood, categorized by functional classification, and indicates if the speeds were within normal ranges (five mph or less of the posted speed limit).

The results of the speed surveys show that the observed average speeds at most of the surveyed locations within the neighborhood exceeded the posted speed limit. Likewise, the observed 85<sup>th</sup> percentile speeds exceeded the posted speed limit by five mph or greater. The increased speeds within the neighborhood are likely due in part to the long stretches of free flow conditions along many of the roadways, the grid system within the eastern portion of the neighborhood which lacks any horizontal curves, and the traffic traveling to and from DGSHS. Further, the reduced traffic volumes on several of the roadways due to the Covid 19 pandemic likely contributed to the higher travel speeds. Various studies have shown that overall travel speeds trended to increase during the pandemic. Many of the recommendations outlined in the next section were developed to address the higher travel speeds observed within the neighborhood.

### Travel Speeds

- Travel speeds are primarily influenced by the road's characteristics which are generally costly to modify.
- The Village's roadway system adds to higher speeds with long free-flow conditions.
- Courts typically only uphold tickets when they are 8 to 10 mph over the speed limit.

As such, 85<sup>th</sup> percentile speeds within five (5) mph of the posted speed limit are typically considered reasonable.

Table 2  
85<sup>TH</sup> PERCENTILE SPEEDS BY STREET CLASSIFICATION

Street	Section	Existing 85 <sup>th</sup> Percentile Speeds		Within Typical Range
		NB/EB	SB/WB	
<b>Collector Streets</b>				
71 <sup>st</sup> Street	Ryan Road – Binder Road	42	39	No
71 <sup>st</sup> Street	Camden Road – Springside Avenue	39	35	No
Dunham Road	Norfolk Street – Palmer Street	34	34	No
Dunham Road	Palmer Street – Saylor Street	37	36	No
Dunham Road	Concord Drive – O’Brien Park Access	40	35	No
Dunham Road	O’Brien Park Access – 71 <sup>st</sup> Street	33	28	Yes
Dunham Road	Stanford Avenue – Crystal Avenue	33	33	Yes
Prentiss Drive	Stair Street – Nash Street	32	33	No
Springside Avenue	63 <sup>rd</sup> Street – Norfolk Street	36	35	No
Springside Avenue	Prentiss Drive – Bolson Drive	25	25	Yes
Springside Avenue	Bolson Drive – Brunette Drive	34	33	No
Springside Avenue	Lexington Lane – Concord Drive	32	25	No
Springside Avenue	71 <sup>st</sup> Street – Dickson Avenue	38	36	No

Table 2, continued  
85<sup>TH</sup> PERCENTILE SPEEDS BY STREET CLASSIFICATION

Street	Section	Existing 85 <sup>th</sup> Percentile Speeds		Within Typical Range
		NB/EB	SB/WB	
<b>Local Streets</b>				
67 <sup>th</sup> Street	Saratoga Avenue – Carpenter Street	34	33	No
68 <sup>th</sup> Street	Barrett Street – Saratoga Avenue	35	36	No
Adelia Street	Saratoga Avenue – Carpenter Street	27	28	Yes
Barrett Street	63 <sup>rd</sup> Street – Norfolk Street	35	35	No
Barrett Street	67 <sup>th</sup> Street – 68 <sup>th</sup> Street	30	33	No
Barrett Street	Andrus Avenue – Dunham Road	29	30	Yes
Binder Road	Hawkins Avenue – Graham Avenue	33	31	No
Bolson Drive	Springside Avenue – Brunette Drive	37	33	No
Bolson Drive	Woodward Ave – Stonewall Ave	34	35	No
Bolson Drive	Stonewall Avenue – Oxnard Drive	35	38	No
Bradley Court	Terminus – Dunham Road	29	28	Yes
Cambridge Road	71 <sup>st</sup> Street – Concord Drive	37	38	No
Camden Road	Devereux Road – Hatch Street	35	34	No
Carpenter Street	Adelia Street – Carol Street	34	34	No
Carpenter Street	Norfolk Street – Oxford Street	34	34	No
Concord Drive	Plymouth Road – Dunham Road	31	29	No
Concord Drive	Stonewall Avenue – Meade Road	32	31	No
Concord Drive	Camden Road – Springside Avenue	27	31	No
Devereux Road	Graham Avenue – Camden Road	33	30	No
Dexter Road	71 <sup>st</sup> Street – Springside Avenue	35	34	No
Hastings Avenue	Woodward Ave – Brighton Street	24	24	Yes
Hillcrest Drive	71 <sup>st</sup> Street – Dickson Avenue	36	34	No
Loomes Avenue	Bates Place – Otto Place	32	29	No
Nash Street	Breasted Avenue – Prentiss Drive	29	30	Yes
Norfolk Street	Springside Avenue – Dunham Road	25	26	Yes

Table 2, continued  
85<sup>TH</sup> PERCENTILE SPEEDS BY STREET CLASSIFICATION

Street	Section	Existing 85 <sup>th</sup> Percentile Speeds		Within Typical Range
		NB/EB	SB/WB	
<b>Local Streets</b>				
Norfolk Street	Barrett Street – Saratoga Avenue	34	35	No
Oxnard Drive	Stonewall Avenue – Bolson Drive	33	30	No
Powell Street	Norfolk Street – Palmer Street	38	33	No
Powell Street	Palmer Street – Saylor Street	32	30	No
Powell Street	Dunham Road – Hawkins Avenue	30	31	No
Palmer Street	Powell Street – Barrett Street	34	34	No
Penner Avenue	Newport Road – Concord Drive	34	34	No
Plymouth Road	71 <sup>st</sup> Street – Dickson Avenue	44	41	No
Saratoga Avenue	Adelia Street – Carol Street	36	34	No
Saratoga Avenue	67 <sup>th</sup> Street – 68 <sup>th</sup> Street	36	36	No
Stonewall Avenue	Bolson Drive – Oxnard Drive	32	34	No
Ticonderoga Road	Camden Road – Camden Road	33	35	No
Valley View Drive	Foster Road – Creekside Road	30	30	No

## Intersection Capacity Analyses

To determine how the intersections in the neighborhood are operating, weekday morning, afternoon, and evening peak hour capacity analyses were performed at the 18 intersections where vehicle, pedestrian, and bicycle counts were performed. The capacity analyses were performed based on the existing intersection geometrics and traffic control as well as the peak hour vehicle, pedestrian, and bicycle volumes. Synchro/Sim Traffic 11 computer software was used to evaluate the operation of the intersections (see insert). The results of the existing intersection capacity analyses are presented in **Tables 3 and 4**.

The following presents the results of the capacity analyses:

- The signalized intersection of Woodward Avenue with Prentiss Drive is operating at an overall Level of Service (LOS) B during all three peak hours. Further, all the intersection movements are operating at LOS C or better during the peak hours.
- All the all-way stop sign-controlled intersections are operating at an overall LOS C or better during all three peak hours. Further, all the movements and/or approaches are operating at LOS C or better during the peak hours, except the northbound left-turn movement at the Dunham Road/Norfolk Street intersection, which operates at LOS D during the morning peak hour.
- All the critical movements at the two-way and one-way stop sign-controlled intersections operate at LOS C or better during all three peak hours except the westbound approach at the Springside Avenue/Norfolk Street intersection, which operates at LOS F during the weekday morning peak hour.

The lower level of service on a few approaches/movements at the Dunham Road/Norfolk Street and Springside Avenue/Norfolk Street intersections is due to the proximity of the intersections to DGSHS and the surging of traffic associated with the start and end of school. Both intersections experience some additional delays and queueing during the morning and afternoon peak hours. However, it is important to note that the lower level of service and the additional congestion only last for approximately 15 to 20 minutes before and after school and is inherent with most schools, given the fixed start and end of the school day. As such, all the intersections generally operate well with limited delay and queueing.

### Intersection Level of Service

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter grade from A to F based on the average control delay experienced by vehicles passing through the intersection. Control delay is that portion of the total delay attributed to the traffic signal or stop sign control operation and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Level of Service A is the highest grade (best traffic flow and least delay), Level of Service E represents saturated or at-capacity conditions, and Level of Service F is the lowest grade (oversaturated conditions, extensive delays).

Table 3  
CAPACITY ANALYSIS RESULTS – WOODWARD AVENUE WITH PRENTISS DRIVE – SIGNALIZED

	Peak Hour	Eastbound		Westbound		Northbound		Southbound		Overall
		L	T/R	L	T/R	L	T/R	L	T/R	
<b>Existing Conditions</b>	<b>Weekday Morning</b>	C 26.9	C 20.4	C 29.0	B 17.2	A 6.5	B 14.2	A 6.8	B 10.3	B 16.0
		C – 25.0		C – 26.1		B – 14.0		B – 10.1		
	<b>Weekday Afternoon</b>	C 25.4	A 0.5	C 29.4	B 18.9	A 5.9	B 11.1	A 5.8	B 12.3	B 13.5
		B – 14.1		C – 27.1		B – 10.8		B – 12.0		
	<b>Weekday Evening</b>	C 26.3	A 0.3	C 26.7	B 19.0	A 5.6	A 9.8	A 5.4	B 11.6	B 11.8
		B – 16.3		C – 24.2		A – 9.5		B – 11.3		
Letter denotes Level of Service    L – Left Turn    R – Right Turn Delay is measured in seconds.    T – Through										

Table 4  
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS

Intersection	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Dunham Road with Norfolk Street</b>						
• Overall	C	20.0	B	12.4	B	10.8
• Eastbound Left Turn	C	15.4	B	11.4	B	10.2
• Eastbound Through	C	19.7	B	12.3	A	9.3
• Westbound Approach	C	19.7	B	12.1	A	9.9
• Northbound Through	C	19.2	B	11.8	A	9.9
• Northbound Left Turn	D	26.7	B	11.5	B	10.1
• Southbound Through	C	18.2	B	14.4	B	12.4
• Southbound Left Turn	B	14.2	B	10.4	A	8.8
<b>Dunham Road with Palmer Street</b>						
• Overall	C	16.5	B	11.0	A	9.0
• Eastbound Approach	A	9.5	A	8.8	A	7.9
• Westbound Approach	A	9.7	A	9.1	A	8.0
• Northbound Approach	C	20.3	A	9.9	A	8.7
• Southbound Approach	B	12.1	B	12.2	A	9.3
<b>Dunham Road with 67<sup>th</sup> Street and Bradley Court</b>						
• Eastbound Approach	C	17.6	B	13.9	B	11.7
• Westbound Approach	C	16.2	B	14.7	B	11.6
• Northbound Left Turn	--	--	A	8.0	A	7.7
• Southbound Left Turn	A	8.6	A	7.8	A	7.6
<b>Dunham Road with Concord Drive</b>						
• Eastbound Approach	C	16.0	B	13.2	B	11.1
• Northbound Left Turn	A	7.8	A	8.1	A	7.8
LOS = Level of Service Delay is measured in seconds						

Table 4, continued

## CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS

Intersection	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Dunham Road with 71<sup>st</sup> Street and Andrus Avenue</b>						
• Overall	B	10.9	A	9.9	A	8.8
• Eastbound Approach	B	10.9	A	9.2	A	8.7
• Westbound Approach	A	8.4	A	8.1	A	7.7
• Northbound Approach	B	11.6	A	9.1	A	8.8
• Southbound Approach	B	10.2	B	10.5	A	8.9
<b>Dunham Road with 71<sup>st</sup> Street and Access Drive</b>						
• Overall	A	9.1	A	8.9	A	8.2
• Eastbound Approach	A	8.4	A	8.8	A	7.8
• Westbound Approach	A	8.1	A	8.0	A	7.7
• Northbound Approach	A	10.0	A	9.4	A	8.7
• Southbound Approach	A	7.5	A	7.8	A	7.7
<b>Springside Avenue with Norfolk Street</b>						
• Westbound Approach	F	90.9	B	13.5	B	10.9
• Southbound Left Turn	A	9.3	A	7.7	A	7.6
<b>Springside Avenue with Prentiss Drive</b>						
• Eastbound Approach	C	16.7	B	11.4	B	10.5
• Northbound Left Turn	A	7.8	A	7.8	A	7.6
<b>Springside Avenue with Bolson Drive</b>						
• Overall	A	8.5	A	7.6	A	7.3
• Eastbound Approach	A	8.9	A	7.6	A	7.3
• Westbound Approach	A	7.8	A	7.4	A	7.0
• Northbound Approach	A	8.6	A	7.4	A	7.3
• Southbound Approach	A	8.0	A	7.7	A	7.4
LOS = Level of Service Delay is measured in seconds						

Table 4, continued

## CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS

Intersection	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Springside Avenue with Concord Drive</b>						
• Overall	A	7.2	A	7.5	A	7.3
• Eastbound Approach	A	7.4	A	7.5	A	7.4
• Westbound Approach	A	7.2	A	7.6	A	7.4
• Northbound Approach	A	7.0	A	7.1	A	6.9
• Southbound Approach	A	7.2	A	7.7	A	7.2
<b>Concord Drive with Woodward Avenue</b>						
• Westbound Approach	C	16.5	C	18.9	C	18.2
• Southbound Left Turn	B	11.6	A	9.6	A	9.2
<b>Concord Drive with Stonewall Avenue</b>						
• Southbound Approach	A	9.1	A	9.0	A	8.9
• Eastbound Left Turn	A	7.4	A	7.3	A	7.3
<b>71<sup>st</sup> Street with Camden Road (South Leg)</b>						
• Northbound Approach	A	9.1	A	9.3	A	9.3
• Westbound Left Turn	A	7.5	A	7.6	A	7.6
<b>71<sup>st</sup> Street with Camden Road (North Leg)</b>						
• Southbound Approach	A	9.4	A	9.7	A	9.7
• Eastbound Left Turn	A	7.4	A	7.6	A	7.5
<b>Norfolk Street with Powell Street</b>						
• Northbound Approach	B	12.0	B	10.7	A	9.9
• Southbound Approach	B	14.3	B	10.9	B	10.3
• Eastbound Left Turn	A	7.9	A	7.5	A	7.4
• Westbound Left Turn	A	7.7	A	7.5	A	7.4
LOS = Level of Service Delay is measured in seconds.						

Table 4, continued

## CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS

Intersection	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Norfolk Street with Carpenter Street</b>						
• Overall	A	8.4	A	7.5	A	7.6
• Eastbound Approach	A	8.3	A	7.6	A	8.3
• Westbound Approach	A	8.5	A	7.4	A	7.2
• Northbound Approach	A	8.3	A	7.6	A	7.3
• Southbound Approach	A	7.9	A	7.5	A	7.3
<b>Norfolk Street with Saratoga Avenue</b>						
• Southbound Approach	A	9.9	A	9.4	A	9.0
• Eastbound Left Turn	A	7.9	A	7.5	A	7.4
<b>Palmer Street with Powell Street</b>						
• Southbound Approach	B	10.6	A	9.5	A	9.1
• Eastbound Left Turn	A	7.7	A	7.5	A	7.4
<b>Palmer Street with Carpenter Street</b>						
• Eastbound Approach	B	10.2	A	9.8	A	9.2
• Westbound Approach	B	10.2	A	9.8	A	9.3
• Northbound Left Turn	A	7.5	A	7.4	--	--
• Southbound Left Turn	A	7.3	--	--	A	7.2
LOS = Level of Service Delay is measured in seconds.						

## Traffic Crash History

GIS traffic crash data for the neighborhood roads was obtained by the Village of Downers Grove for review and consideration when developing recommended traffic volume and/or speed mitigation measures in this study. The crash data is summarized in **Figures A** through **C** (located in the Appendix), which show the locations of the crashes for each year from January 2018 to December 2020. Based on the data, the following observations were made on the intersections internal to the neighborhood:

- The overall number of crashes along the internal neighborhood roads was limited. Excluding the crashes that occurred along the arterial roadways bordering the neighborhood (63<sup>rd</sup> Street, Main Street/Lemont Road, 75<sup>th</sup> Street, and Woodward Avenue), the neighborhood internal roads averaged just under 15 crashes per year over the three-year period.
- Excluding the crashes that occurred along the arterial roadways bordering the neighborhood, very few intersections or specific locations within the neighborhood had more than one crash per year.

Excluding the crashes that occurred along the arterial roadways bordering the neighborhood, the section of road with the highest number of crashes over the three-year period was Prentiss Drive between Woodward Avenue and Springside Avenue. This section of Prentiss Drive experienced four crashes in each of the three years. However, the number of crashes was likely due to the fact that during the three-year period, no traffic control was provided at any of the intersections along Prentiss Drive except the Prentiss Drive/Woodward Avenue and Prentiss Drive/Springside Avenue intersections. Stop sign control has since been installed on all the approaches to Prentiss Drive that previously had no traffic control. Stop sign control results in safer intersection operations as it defines which movements at an intersection have the right-of-way. While four crashes per year along the entire length of Prentiss Drive is not significant, the Village should monitor Prentiss Drive to see if the number of crashes decreases.

## Preliminary On-Street Parking Review

As part of the study, KLOA, Inc. preliminarily observed the on-street parking conditions within the neighborhood. Other than the additional on-street parking that occurs within proximity to or associated with DGSHS, Kingsley Elementary School, and the larger parks in the neighborhood, the neighborhood experiences limited on-street parking, similar to most neighborhoods. While the schools and parks have higher on-street parking demands, this is expected and typical of these types of uses. The Kingsley Elementary School on-street parking demand generally only occurs for approximately 15 to 20 minutes before and after school and the on-street parking demand associated with the parks generally occurs on evenings and weekends, when traffic volumes on the area roads are lower. Further, parking restrictions have been installed along most of the roads within walking distance of DGSHS prohibiting school parking. On-street DGSHS parking is generally limited to (1) the east side of Springside Avenue along the school and Ruth K. Powers Park and (2) along the west side of Springside Avenue along Concord Square Park.

## Review of Downers Grove South High School Transportation Operations

The DGSHS campus is bounded by 63<sup>rd</sup> Street on the north, Dunham Road on the east, Norfolk Street on the south, and Springside Avenue on the west and is located in the northern portion of the neighborhood. Currently, the school has an enrollment of approximately 2,800 students in ninth through twelfth grade. The following briefly summarizes the transportation operations of the high school:

- Parking for the school is provided via several parking lots located on the south and west sides of the campus with primary access provided via Norfolk Street. In addition, student parking is generally permitted on the east side of Springside Avenue between 63<sup>rd</sup> Street and Bolson Drive and the west side of Springside Avenue along Concord Square Park.
- Bus loading occurs in the southeast parking lot with primary access via Norfolk Street and secondary access via Dunham Road.
- Campus student drop-off/pick-up primarily occurs via two drop-off/pick-up areas on the south and west sides of the campus with access provided via Norfolk Street.

As such, primary access to the campus is provided via Norfolk Street with limited secondary access via Dunham Road, although the campus has frontage on four different roads. As a result, field observations and the capacity analyses have shown that Norfolk Street and its intersections with Dunham Road and Springside Avenue experience a considerable amount of congestion before and after school, which results in additional delay and queuing. Further contributing to the congestion in the area is (1) the heavier pedestrian activity and (2) the drop-off/pick-up activity that occurs along the area roadways. However, it is important to note that the additional congestion only occurs for approximately 20 minutes before and after school. This is inherent with most schools given the fixed start and end times of the school day. In addition, the after-school peak period occurs in the afternoon and does not overlap with the evening commuter peak period (4:00 P.M. to 6:00 P.M.), further minimizing the impact of the school operations on the area roadway conditions.

A comprehensive transportation study of the high school was performed by Sam Schwartz Consulting, LLC in 2019/2020. The study developed several recommendations to enhance conditions for all modes of transportation, of which many have been implemented and/or are in the planning stages. One of the recommendations that has not been implemented or currently in the planning stages is to provide additional access to the campus via a right-turn in/right-turn out access drive on 63<sup>rd</sup> Street. This recommendation would help to alleviate the congestion of school traffic and, as a result, enhance the existing conditions along Norfolk Street and its intersections with Dunham Road and Springside Avenue as it provides for alternative access to the campus.

## Review of Kingsley Elementary School Transportation Operations

Kingsley Elementary School is located on the south side of Norfolk Street bounded by Powell Street on the west and Saratoga Avenue on the east and is located in the northeast section of the neighborhood. Currently, the school has an enrollment of approximately 365 students in prekindergarten through sixth grade. The following briefly summarizes the transportation operations of the elementary school:

- Staff parking is provided via a parking lot located on the west side of the school campus with access provided via Powell Street. In addition, many parents/caregivers park on the area roadways and walk their students to and from school. Most parent/caregiver parking occurs along Powell Street and Barrett Street north of Norfolk Street.
- Primary bus loading occurs along the south side of Norfolk Street between Barrett Street and Saratoga Avenue.
- Student drop-off/pick-up occurs along the south side of Norfolk Street just west of Barrett Street. To expedite the drop-off/pick-up activity, several staff members assist with the loading of students and the management of the operations. The queue of vehicles can extend along Norfolk Street to Powell Street and along the west side of Powell Street between Norfolk Street and Palmer Street. The longer queues typically occur in the afternoon when parents arrive early for student pick-up.

In addition, crossing guards are located at the Norfolk Street/Barrett Street and Norfolk Street/Powell Street intersections before and after school.

Field observations and the results of the capacity analyses show that overall the school operations function well with limited impact on the area roadway system. Some limited congestion occurs in the area, primarily along Norfolk Street, which can be attributed to the pedestrian activity and drop-off/pick-up activity associated with the school. However, the additional congestion and the parent/caregiver parking on the area roadways only occurs for approximately 15 to 20 minutes before and after school. This is inherent with most schools given the fixed start and end times of the school day. In addition, the after-school peak period occurs in the afternoon and does not overlap with the evening commuter peak period (4:00 P.M. to 6:00 P.M.), further minimizing the impact of the school operations on the area roadway conditions.

## 4. Detailed Evaluation and Recommendations

This section of the study provides the detailed evaluation of the internal roadways, pedestrian and bicycle facilities, and traffic control devices within the neighborhood and includes a thorough analysis of traffic operations, vehicular and pedestrian/bicycle circulation, and overall safety along the internal neighborhood roadways. Recommendations were developed for the following components of the neighborhood transportation system:

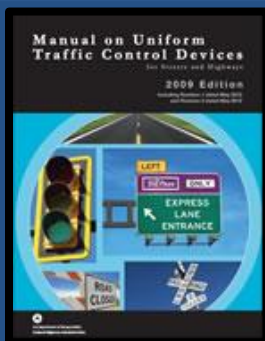
- Intersection traffic control devices
- Pedestrian and bicycle facilities
- Travel speeds and traffic volumes on the neighborhood roads

### Basis of Recommendation

The recommendations developed in this section were based primarily on accepted engineering practices, conformity with the 2009 *Manual on Uniform Traffic Control Devices* (MUTCD), existing Village criteria, and input from Village staff. Further, many recommendations include the use of traffic calming measures and devices. The following provides a summary of the MUTCD and the purposes and types of traffic calming measures/devices.

### MUTCD

The MUTCD defines the standards used to install and maintain traffic control devices including all signs, signals, markings, and other devices used to regulate, warn, or guide traffic on all public streets, highways, bikeways, and private roads open to public traffic. While the MUTCD provides guidelines with specific benchmarks, many of the criteria are subjective and are left to engineering judgment and practices.



The MUTCD defines the standards used to install and maintain traffic control devices including all signs, signals, markings and other devices used to regulate, warn, or guide traffic, on all public streets, highways, bikeways, and private roads open to public traffic.

## Purposes and Types of Traffic Calming Measures/Devices

Traffic calming is defined as the installation of measures designed to reduce traffic speeds and/or traffic volumes in the interest of street safety, livability, and other public purposes. The primary purposes of traffic calming measures/devices are as follows:

- To reduce speed/volume of traffic by increasing motorists' awareness and/or restricting traffic flow.
- To enhance overall safety by better organizing the access and circulation of all modes of transportation.

Traffic calming measures/devices have many different forms and can be implemented incrementally from measures/devices with lower costs and reduced design, coordination, and implementation efforts to measures/devices with higher costs and greater design, coordination, and implementation efforts. **Tables 5 to 8** and the following summarize the two general traffic calming categories:

- *Non-Physical Measures/Devices* generally provide a non-invasive form of traffic calming that are inexpensive and easy to implement, and that can also be easily removed if the measure/device is unsuccessful. As such, these measures/devices are typically implemented before physical measures. Non-physical traffic calming measures include education, community involvement, and enforcement (Level 1 measures/devices) and signage and pavement markings (Level 2 measures/devices).
- *Physical Measures/Devices* consist of physical modifications to the roadway design and are more costly to implement and require more design, coordination, and implementation efforts (Level 3 measures/devices). As such, physical measures/devices are often only considered after non-physical measures/devices have been determined to be unsuccessful. Physical measures/devices include horizontal deflections and vertical deflections.

Table 5  
TRAFFIC CALMING MEASURES/DEVICES

Options	Examples
<b>Non-Physical Measures/Devices – Level 1 and 2 Measures/Devices</b>	
Education and Enforcement	Education, Community Involvement Efforts, Targeted Police Enforcement, Radar Speed Trailers, Patrol Decoy
Advisory Signing	Enhanced Speed Limit Signs, Neighborhood Signs, Speed Radar Signs, School/Park Zones
Pavement Markings	Parking Lines/Boxes, Bike Lanes/Sharrows, Edge/Centerlines, Speed Limit Markings
<b>Physical Measures/Devices - Level 3 Measures/Devices</b>	
Horizontal Deflections	Curb Extensions, Median Islands, Traffic Circles, Chokers/Neck-Downs
Vertical Deflections	Speed Humps/Lumps, Speed Tables, Raised Crosswalks, Raised Intersections

Table 6  
NON-PHYSICAL MEASURES/DEVICES




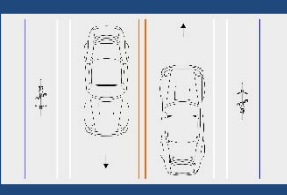
	<p><i>Education and Community Involvement Efforts</i> include yard sign campaigns, radar gun loan programs, and self-policing that further educates/informs both residents and motorists.</p>
	<p><i>Speed Limit Signage/Markings</i> include oversized speed limit signs, yellow-framed speed limit signs, and/or speed limit pavement markings that further reinforce speed limits.</p>
	<p><i>Speed Monitors and Enforcement</i> includes portable/permanent speed monitors, targeted police enforcement, and patrol decoys that further reinforce/enforce speed limits.</p>
	<p><i>Pavement Markings</i> include edge lines, parking boxes, and centerlines that delineate the travel lanes and provide the perception of a narrower roadway.</p>
	<p><i>Sharrow Markings</i> reinforce the shared-lane environment of posted bicycle routes and provide the perception of a narrower roadway.</p>
	<p><i>Buffered Bike Lanes</i> provides a dedicated lane for bicyclists that make the movements of both motorists and bicyclists more predictable, leading to safer roads. They also provide the perception of a narrower roadway.</p>

Table 7

## PHYSICAL MEASURES/DEVICES – HORIZONTAL DEFLECTIONS

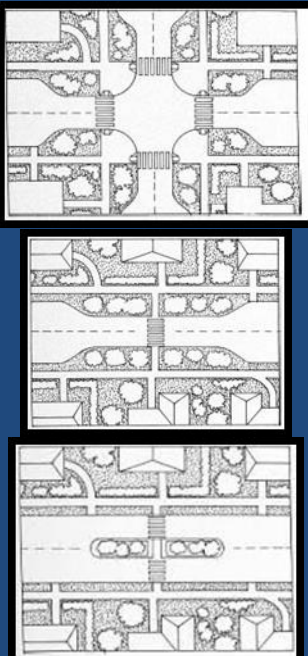
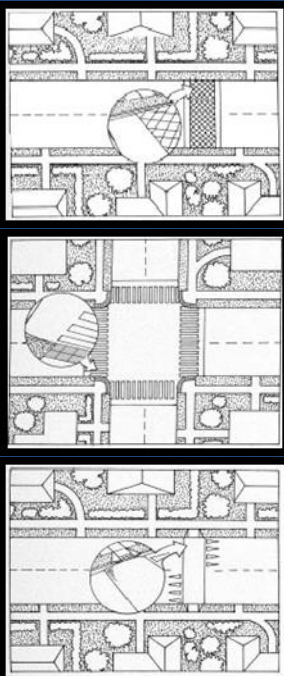
	<ul style="list-style-type: none"> <li>• <b>Includes curb extensions, median islands, and chokers</b></li> <li>• <b>Advantages:</b> <ul style="list-style-type: none"> <li>○ Effective at reducing speeds, particularly in proximity to measure</li> <li>○ Enhance pedestrian circulation and safety by reducing the crossing distance, improving the visibility of pedestrians, and enhancing pedestrian sight lines</li> </ul> </li> <li>• <b>Disadvantages:</b> <ul style="list-style-type: none"> <li>○ More expensive</li> <li>○ May hinder bike circulation</li> <li>○ May reduce on-street parking</li> </ul> </li> </ul>
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Table 8

## PHYSICAL MEASURES/DEVICES – VERTICAL DEFLECTIONS

	<ul style="list-style-type: none"> <li>• <b>Includes speed humps/lumps, raised crosswalks, and raised intersections</b></li> <li>• <b>Advantages:</b> <ul style="list-style-type: none"> <li>○ Effective at reducing speeds, particularly in proximity to measure</li> <li>○ Raised crosswalks/intersections enhance pedestrian safety/circulation as they provide more defined pedestrian crossings</li> </ul> </li> <li>• <b>Disadvantages:</b> <ul style="list-style-type: none"> <li>○ More expensive</li> <li>○ Increase emergency response times</li> <li>○ Require additional signage/stripping</li> <li>○ Noise and aesthetic issues/concerns</li> <li>○ May hinder bike circulation</li> <li>○ May reduce on-street parking</li> </ul> </li> </ul>
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## Intersection Traffic Control

Development of the intersection traffic control plan involves a comprehensive evaluation of each intersection along with the existing overall operating conditions of the neighborhood (see Chapter 3). Any intersection traffic control plan must consider typical issues, such as the functional classification of the roadways, through trips, speeding, traffic calming, circulation, and land-use impacts. As such, a systematic approach was employed that examined the neighborhood from the inside (each individual intersection) and outside (the overall neighborhood). The intersection traffic control plan was generally based on the warrants and/or requirements in the MUTCD and the physical and operating characteristics of the roadway system, including the following:

- The functional classification of the roadway system
- The existing intersection traffic control
- The existing traffic volumes
- The pedestrian activity
- The existing crash data
- The land uses in the area
- Intersection sight distance

**Figure 10** illustrates the recommended traffic control plan and **Table 9** summarizes the recommended modifications.

Table 9

### RECOMMENDED INTERSECTION TRAFFIC CONTROL MODIFICATIONS

Modifications	Intersections
Convert two-way or one-way stop sign control to all-way stop sign control	<ul style="list-style-type: none"> <li>• Stonewall Avenue with Oxnard Drive</li> <li>• Springside Avenue with 71<sup>st</sup> Street</li> <li>• Powell Street with Norfolk Street</li> <li>• Carpenter Street with Palmer Street</li> </ul>
Replace yield sign control with all-way stop sign control	<ul style="list-style-type: none"> <li>• Saratoga Avenue with 67<sup>th</sup> Street</li> </ul>
Add all-way stop sign control at intersections with no control	<ul style="list-style-type: none"> <li>• Saratoga Avenue with 68<sup>th</sup> Street</li> <li>• Stonewall Avenue with Concord Drive</li> </ul>
Replace yield sign control with stop sign control	<ul style="list-style-type: none"> <li>• Carpenter Street with Oxford Street</li> <li>• Carpenter Street with Saylor Street</li> <li>• Barrett Street with 67<sup>th</sup> Street</li> <li>• Powell Street (N. Leg) with Palmer Street</li> <li>• Powell Street (S. Leg) with Palmer Street</li> <li>• Powell Street with 67<sup>th</sup> Street</li> <li>• Brunette Drive with Bolson Drive</li> <li>• Oxnard Drive with Bolson Drive</li> <li>• Stonewall Avenue with Bolson Drive</li> <li>• Springside Avenue with Brunette Drive</li> <li>• Cambridge Road with Concord Drive</li> </ul>

Table 9, continued

RECOMMENDED INTERSECTION TRAFFIC CONTROL MODIFICATIONS

Modifications	Intersections
Add two-way stop sign control at intersections with no intersection traffic control	<ul style="list-style-type: none"> <li>• Barrett Street with 68<sup>th</sup> Street</li> <li>• Camden Road with Hatch Street</li> <li>• Devereux Road with Hall Street</li> </ul>
Add one-way stop sign control at intersections with no intersection traffic control	<ul style="list-style-type: none"> <li>• Carpenter Street with 67<sup>th</sup> Street</li> <li>• Saratoga Avenue with Palmer Street</li> <li>• Barrett Street with Palmer Street</li> <li>• Powell Street with Saylor Street</li> <li>• Powell Street with 67<sup>th</sup> Place</li> <li>• Parker Avenue with Robey Road</li> <li>• Creekside Road with Robey Avenue</li> <li>• Hobart Avenue with Valley View Drive</li> <li>• Foster Road with Hobart Avenue</li> <li>• Stonewall Avenue with Brighton Street</li> <li>• Brighton Street with Hasting Avenue</li> <li>• Prideham Street with Breasted Avenue</li> <li>• Nash Street with Breasted Avenue</li> <li>• Stair Street with Wellington Place</li> <li>• Springside Ave with Lexington Ave</li> <li>• Springside Avenue with Dickson Avenue</li> <li>• Plymouth Road with Dickson Avenue</li> <li>• Plymouth Road with Concord Drive</li> <li>• Camden Avenue with Concord Drive</li> <li>• Camden Avenue with Ticonderoga Road</li> <li>• Revere Road with Concord Drive</li> <li>• Penner Avenue with Concord Drive</li> <li>• Meade Road with Concord Drive</li> <li>• Hillcrest Drive with Terrace Drive</li> <li>• Camden Road with Hawkins Avenue</li> <li>• Devereux Road with Ticonderoga Road</li> <li>• Devereux Road with Graham Avenue</li> <li>• Dexter Road with Springside Avenue</li> <li>• Dexter Road with Richards Avenue</li> <li>• Powell Street with Klein Avenue</li> <li>• Powell Street with Hughes Avenue</li> <li>• Powell Street with Bateman Street</li> <li>• Powell Street with Hawkins Avenue</li> <li>• Bateman Street with Hawkins Avenue</li> <li>• Oneill Road with Hawkins Avenue</li> <li>• Cambridge Road with Newport Road</li> </ul>
All cul-de-sac roads will be under stop sign control at their respective intersecting cross road.	

Based on the evaluation, it has been determined that the following intersections should be under all-way stop sign control:

- *Dunham Road with 71<sup>st</sup> Street and Andrus Avenue.* This intersection should continue to operate under all-way stop sign control, given that it is an intersection of two collector roads.
- *Dunham Road with Norfolk Street.* This intersection should continue to operate under all-way stop sign control to maintain this established location and due to the intersection's proximity to DGSHS and Kingsley Elementary School.
- *Dunham Road with Palmer Street.* This intersection should continue to operate under all-way stop sign control to maintain this established location and due to the intersection's proximity to Kingsley Elementary School.
- *Dunham Road with 71<sup>st</sup> Street, Foster Road, and private access road.* This intersection should continue to operate under all-way stop sign control to maintain this established location and the unique design of the road (two of the four legs are collector roads).
- *Springside Avenue with Bolson Drive.* This intersection should continue to operate under all-way stop sign control to maintain this established location and due to the intersection's proximity to DGSHS and Ruth K. Powers Park.
- *Springside Avenue with Concord Drive.* This intersection should continue to operate under all-way stop sign control to maintain this established location and due to the intersection's proximity to Concord Square Park.
- *Saratoga Avenue with Norfolk Street.* The is intersection should continue to operate under all-way stop sign control to maintain this established location and due to the intersection's proximity to Kingsley Elementary School.
- *Carpenter Street with Norfolk Street.* This intersection should continue to operate under all-way stop sign control to maintain this established location, to reduce the uninterrupted flow along Carpenter Street, and due to the intersection's proximity to Kingsley Elementary School.
- *Camden Road with Devereux Road.* This intersection should continue to operate under all-way stop sign control to maintain this established location and to reduce the uninterrupted flow of traffic along both roads.
- *Springside Avenue with 71<sup>st</sup> Street.* This intersection should be converted from one-way stop sign control to all-way stop sign control given that it is an intersection of two collector roads.
- *Stonewall Avenue with Oxnard Drive.* This intersection should be converted from two-way stop sign control to all-way stop sign control given the proximity of the intersection to Stonewall and Concord Park.

- *Stonewall Avenue with Concord Drive.* This intersection that has no traffic control should be converted to all-way stop sign control given the proximity of the intersection to Stonewall and Concord Park.
- *Saratoga Avenue with 67<sup>th</sup> Street.* This intersection should be converted from two-way yield sign control to all-way stop sign control given the proximity of the intersection to Mar-Duke Park.
- *Saratoga Avenue with 68<sup>th</sup> Street.* This intersection that has no traffic control should be converted to all-way stop sign control given the proximity of the intersection to Mar-Duke Park.
- *Powell Street with Norfolk Street.* This intersection should be converted from two-way stop sign control to all-way stop sign control given the proximity of the intersection to Kingsley Elementary School.
- *Carpenter Street with Palmer Street.* This intersection should be converted from two-way stop sign control to all-way stop sign control to reduce the uninterrupted flow of traffic along both roads.

The following intersections currently have yield sign control and should be converted so that the approaches under yield sign control are under stop sign control:

- Carpenter Street with Oxford Street
- Carpenter Street with Saylor Street
- Powell Street (N. Leg) with Palmer Street
- Powell Street (S. Leg) with Palmer Street
- Powell Street with 67<sup>th</sup> Street
- Brunette Drive with Bolson Drive
- Oxnard Drive with Bolson Drive
- Stonewall Avenue with Bolson Drive
- Springside Avenue with Brunette Drive
- Cambridge Road with Concord Drive
- Barrett Street with 67<sup>th</sup> Street

The following two-way intersections have no traffic control and should be converted to two-way stop sign control:

- *Barrett Street with 68<sup>th</sup> Street.* The Barrett Street approaches should be under stop sign control at their intersection with 68<sup>th</sup> Street, which currently has no traffic control.
- *Camden Road with Hatch Street.* The Hatch Street approaches should be under stop sign control at their intersection with 68<sup>th</sup> Street, which currently has no traffic control.
- *Devereux Road with Hall Street.* The Hull Street approaches should be under stop sign control at their intersection with 68<sup>th</sup> Street, which currently has no traffic control.

The following T-intersections have no traffic control and should be converted to one-way stop sign control so that the road with only one intersection leg is under stop sign control:

- Carpenter Street with 67<sup>th</sup> Street
- Saratoga Avenue with Palmer Street
- Barrett Street with Palmer Street
- Powell Street with Saylor Street
- Powell Street with 67<sup>th</sup> Place
- Parker Avenue with Robey Road
- Creekside Road with Robey Avenue
- Hobart Avenue with Valley View Drive
- Foster Road with Hobart Avenue
- Stonewall Avenue with Brighton Street
- Brighton Street with Hasting Avenue
- Prideham Street with Breasted Avenue
- Nash Street with Breasted Avenue
- Stair Street with Wellington Place
- Springside Avenue with Lexington Avenue
- Springside Avenue with Dickson Avenue
- Plymouth Road with Dickson Avenue
- Plymouth Road with Concord Drive
- Camden Avenue with Concord Drive
- Camden Avenue with Ticonderoga Road
- Revere Road with Concord Drive
- Penner Avenue with Concord Drive
- Meade Road with Concord Drive
- Hillcrest Drive with Terrace Drive
- Camden Road with Hawkins Avenue
- Devereux Road with Ticonderoga Road
- Devereux Road with Graham Avenue
- Dexter Road with Springside Avenue
- Dexter Road with Richards Avenue
- Powell Street with Klein Avenue
- Powell Street with Hughes Avenue
- Powell Street with Bateman Street
- Powell Street with Hawkins Avenue
- Bateman Street with Hawkins Avenue
- O'Neill Road with Hawkins Avenue
- Cambridge Road with Newport Road

In addition, all roads that end with a cul-de-sac will be under stop sign control at their respective intersecting cross road.

## Speed Limits and Posted Speed Limit Signs

Most of the roads within the neighborhood are regulated by a 25-mph neighborhood speed limit except for the following roads:

- Dunham Road/71<sup>st</sup> Street has a posted speed limit of 30 mph between Bolson Drive and Lemont Road and Nash Street has a posted speed limit of 20 mph.
- Sections of Concord Drive and Bolson Drive have 20 mph advisory speed signs and a section of Foster Road has a 15 mph advisory speed sign due to horizontal curves along these roads.
- Norfolk Street within the vicinity of Kingsley Elementary School has a 20-mph school speed zone that is in effect on school days when children are present.

The following neighborhood speed limit modifications are recommended in order reduce the travel speeds in the neighborhood, provide better uniformity throughout the neighborhood, and to enhance pedestrian and bicycle safety.

- The posted speed limit on Dunham Road/71<sup>st</sup> between Bolson Drive and Lemont Road should be reduced from 30 mph to 25 mph. While this section of road is classified as a major collector road, the section of road (1) extends through a residential neighborhood, (2) provides driveway access to residential homes, (3) is an existing bicycle route with bike lanes, and (4) the northern section of the road currently has a 25 mph posted speed limit.
- Install 20 mph park zone speed limits along the following sections of roads in the neighborhood:
  - Dunham Road along O'Brien Park
  - Stonewall Avenue along Stonewall and Concord Park
  - Springside Avenue along Concord Square Park
  - Concord Drive along Concord Square Park

Park zone speed limits reduce the speed limit to 20 mph at locations with higher pedestrian activity, particularly children. The Village has already established park zones around several parks in the Village.

- Install 20 mph school speed limit signs on Powell Street between Norfolk Street and Palmer Street.

In addition, KLOA, Inc. examined both the type and locations of the existing speed limit signs within the neighborhood as a means to help mitigate travel speeds through the neighborhood. **Figure 11** illustrates the proposed modifications to the posted speed limit signs in the neighborhood, which consist of installing new signs, replacing signs, relocating signs, and adding yellow borders to existing speed limit signs.

## Pedestrian Facilities and Traffic Control Devices

The neighborhood contains O'Brien Park, Mar-Duke Park, Concord Square Park, Stonewall and Concord Park, Dunham Place Park, and Ruth K. Powers Park and McCollum Park is located just east of the neighborhood. In addition, DGSHS and Kingsley Elementary School are located in the northern section of the neighborhood. To safely accommodate pedestrians, numerous pedestrian facilities and warning devices are provided within the neighborhood, which are highlighted in the existing conditions section of the report and illustrated in Figure 6.

In addition, KLOA, Inc. reviewed and evaluated the pedestrian crossings in the neighborhood to enhance pedestrian safety and circulation, compliance with the MUTCD, and overall consistency throughout the neighborhood. The recommended modifications to the pedestrian facilities and warning devices are shown in **Figure 12** and are summarized below and in **Table 10**:

- At the intersection of 68<sup>th</sup> Street with Powell Street:
  - Add high visibility, ladder style crosswalks on all legs of the intersection:
  - Install pedestrian advanced crossing assemblies (W11-2, W16-9P) on 68<sup>th</sup> Street in advance of the pedestrian crossings.
  - Install pedestrian crossing assemblies (W11-2, W16-7P) on 68<sup>th</sup> Street at the pedestrian crossings.
- At the uncontrolled pedestrian crossings on Springside Avenue at its intersection with Prentiss Drive:
  - Install high visibility, ladder style crosswalks on all three legs of the intersection and along Norfolk Street at Springside Avenue.
  - Install pedestrian advanced crossing assemblies (W11-2, W16-9P) on Springside Avenue in advance of the pedestrian crossings.
  - Install pedestrian crossing assemblies (W11-2, W16-7P) on Springside Avenue at the pedestrian crossings.
- At the uncontrolled pedestrian crossings on 71<sup>st</sup> Street at its intersections with Powell Street/Court and with Barrett Street:
  - Install pedestrian advanced crossing assemblies (W11-2, W16-9P) on 71<sup>st</sup> Street east of Barrett Street and on 71<sup>st</sup> Street west of Powell Street/Court.
  - Install pedestrian crossing assemblies (W11-2, W16-7P) on 71<sup>st</sup> Street at the pedestrian crossings at both intersections.

Table 10

## PEDESTRIAN FACILITIES AND TRAFFIC CONTROL DEVICES RECOMMENDATIONS

Location	Recommendation Description
Springside Avenue at Prentiss Drive	<ul style="list-style-type: none"> <li>• Install high visibility, ladder style crosswalk on all legs</li> <li>• Install pedestrian crossing assemblies (W11-2, W16-9P) on Springside Avenue in advance of the pedestrian crossings</li> <li>• Install pedestrian crossing assemblies (W11-2, W16-7P) on the north and south legs of Springside Avenue</li> </ul>
68 <sup>th</sup> Street at Powell Street	<ul style="list-style-type: none"> <li>• Install high visibility, ladder style crosswalk on both legs of 68<sup>th</sup> Street</li> <li>• Install pedestrian advance crossing assemblies (W11-2, W16-9P) on 68<sup>th</sup> Street in advance of the pedestrian crossings</li> <li>• Install pedestrian crossing assemblies (W11-2, W16-7P) on the east and west legs of 68<sup>th</sup> Street at Powell Street</li> </ul>
71 <sup>st</sup> Street at Powell Street/Court 71 <sup>st</sup> Street at Barrett Street	<ul style="list-style-type: none"> <li>• Install pedestrian advance crossing assemblies (W11-2, W16-9P) on 71<sup>st</sup> Street east of Barrett Street and west of Powell Street/Court.</li> <li>• Install pedestrian crossing assemblies (W11-2, W16-7P) on the east and west legs of 71<sup>st</sup> Street at Powell Street/Court and at Barrett Street</li> </ul>
On Norfolk Street east of Dunham Road On Norfolk Street west of Saratoga Avenue On Powell Street west of Palmer Street	<ul style="list-style-type: none"> <li>• Install school advanced crossing assemblies (S1-1, W16-9P)</li> </ul>
On Palmer Street at Barrett Street	<ul style="list-style-type: none"> <li>• Install school crossing assemblies (S1-1, W16-7P) on the east and west legs of Palmer Street at Barrett Street</li> </ul>
Entire Neighborhood	<ul style="list-style-type: none"> <li>• Refresh crosswalks as needed</li> </ul>
Saratoga Avenue with 67 <sup>th</sup> Street Saratoga Avenue with 68 <sup>th</sup> Street Stonewall Avenue at Concord Drive Springside Avenue with 71 <sup>st</sup> Street	<ul style="list-style-type: none"> <li>• Install high visibility, ladder style crosswalks</li> </ul>
Springside Avenue with Prentiss Drive Springside Avenue with Bolson Drive Dunham Road with 71 <sup>st</sup> Street	<ul style="list-style-type: none"> <li>• Replace standard crosswalks with high visibility, ladder style crosswalks</li> </ul>
Main Street with 67 <sup>th</sup> Street Lemont Road with Dunham Road	<ul style="list-style-type: none"> <li>• The Village should work with DuDOT to install countdown pedestrian traffic signals and ladder style crosswalks on all four legs at these two signalized intersections.</li> </ul>
Powell St with Norfolk St	<ul style="list-style-type: none"> <li>• Remove school crossing assemblies (S1-1, W16-7P) on the east and west legs of Norfolk Street</li> </ul>

- For the uncontrolled pedestrian crossings on Palmer Street at its intersection with Barrett Street:
  - Install school crossing assemblies (S1-1, W16-7P) on the east and west legs of Palmer Street at Barrett Street.
- Install school advanced crossing assemblies (S1-1, W16-9P) at the following locations:
  - On south side of Norfolk Street east of Dunham Road
  - On the north side of Norfolk Street west of Saratoga Avenue
  - On the east side of Powell Street north of Palmer Street
  - On the south side of Palmer Street east of Barrett Street
- Install high visibility, ladder style crosswalks on all legs at the following intersections:
  - Saratoga Avenue with 67th Street (south and west legs)
  - Saratoga Avenue with 68<sup>th</sup> Street (all four legs)
  - Stonewall Avenue at Concord Drive (north and east legs)
  - Springside Avenue with 71<sup>st</sup> Street (north and west legs)
- Replace standard crosswalks with high visibility, ladder style crosswalks at the following intersections:
  - Springside Avenue with Prentiss Drive
  - Springside Avenue with Bolson Drive
  - Dunham Road with 71<sup>st</sup> Street
- Remove school crossing assemblies (S1-1, W16-7P) on the east and west legs of Norfolk Street at its intersection with Powell Street.
- The Village should work with DuDOT to install countdown pedestrian traffic signals and ladder style crosswalks on all four legs at the signalized intersections of Main Street with 67<sup>th</sup> Street and Lemont Road with Dunham Road.

## Bicycle Facilities

The 2000 Village of Downers Grove bikeway plan currently designates several neighborhood roads as bike routes that extends through the neighborhood. In addition, the *Village of Downers Grove, Bicycle and Pedestrian Plan*, dated March 2013, recommends that Norfolk Street between Springside Avenue and Barrett Street be designated as a neighborhood bike route. In addition, bike lanes are provided along the southern section of Dunham Road and a few bicycle route signs are located on several of the neighborhood roads. Enhancing the visibility of the bike routes through the Village may increase the comfort level of bicyclists, encourage more people to ride, and more effectively alert motorists to the potential presence of bicyclists. **Figure 12, Table 11**, and the following summarize the recommendations for the bicycle facilities in the neighborhood, many of which are from the *Village of Downers Grove, Bicycle and Pedestrian Plan*:

- Designate 71<sup>st</sup> Street between Dunham Road and the Village limits as a bike route and add sharrows along both sections of the road as proposed by the Village of Downers Grove.
- Install additional bike route signs along the existing bike routes on Dunham Road, Springside Avenue, Concord Drive, Camden Road, and Devereux Road.
- Install bike route signs along 71<sup>st</sup> Street.
- *Per the Village of Downers Grove Bicycle and Pedestrian Plan*, consider designating Norfolk Street between Springside Avenue and Barrett Street as a neighborhood bike route and installing appropriate bike route signs.

Table 11  
BICYCLE FACILITIES RECOMMENDATIONS

Location	Recommendation Description
71 <sup>st</sup> Street between Dunham Road and the Village limits	<ul style="list-style-type: none"> <li>• Designate as neighborhood bike route as proposed by the Village of Downers Grove</li> <li>• Add sharrows on 71<sup>st</sup> Street as proposed by the Village of Downers Grove</li> <li>• Add bike route signs</li> </ul>
Dunham Road Springside Avenue Concord Drive Camden Road Devereux Road	<ul style="list-style-type: none"> <li>• Install additional bike route signs on current posted bike routes</li> </ul>
71 <sup>st</sup> Street between Dunham Road and the Village limits	<ul style="list-style-type: none"> <li>• Install bike route sign on these new bike routes</li> </ul>
Norfolk Street between Springside Avenue and Barrett Street	<ul style="list-style-type: none"> <li>• <i>Per the Village of Downers Grove Bicycle and Pedestrian Plan</i>, consider designating this section of Norfolk Street as a neighborhood bike route and installing appropriate bike route signs.</li> </ul>

## Pavement Markings and Signage

Based on field observations, the following summarizes additional recommendations concerning the neighborhood signage and pavement markings:

- Several of the regulatory and warning signs in the neighborhood were partially obstructed from view by overgrown trees and bushes. Village staff should inspect all sign locations within the neighborhood during late Spring/early Summer to identify trees located within the right-of-way in need of trimming.
- Stop lines are supplemental pavement markings that enhance the visibility of the stop sign control, which can improve compliance and reduce crash potential. When used in combination with crosswalks, they indicate the point at which vehicles should stop to provide adequate separation from pedestrians in the crosswalk. The following stop bar modifications are recommended:
  - Refresh existing stop bars that have become faded
  - Relocate the stop bars on the stop sign approaches where high visibility, ladder style crosswalks are recommended to be installed
  - Install stop bars on the approaches where new stop signs are recommended or existing stop sign approaches that do not have stop bars
- Refresh all pavement markings that have become faded including parking boxes/lines, centerlines, bike lanes, stop bars, etc.

## Education

Based on field observations and discussions with Village staff, educational materials are recommended to be developed that explain the following topics:

- Village policies regarding vehicular speeds and volumes on neighborhood streets
- State of Illinois “Stop for Pedestrians in the Crosswalk” law
- Laws related to traffic movements and cell phone use within school zones/bus loading areas
- Navigating the City’s website for neighborhood transportation data, studies, and information

## Enforcement

Police enforcement of the posted traffic regulations is a critical component of the neighborhood traffic improvement plan, particularly considering the high travel speeds in the neighborhood. Recommendations include to continue and/or expand the speed enforcement efforts to target some of the local roads that experience higher travel speeds and those roads where reduced speed limits are recommended (Dunham Road) and reduced park zone speed limits are recommended (Dunham Road, Springside Avenue, Stonewall Avenue, and Concord Drive).

## Traffic Calming Measures

Speeding and cut-through traffic are generally two of the major concerns expressed by residents in any neighborhood. As discussed previously, the traffic volumes within the neighborhood are generally within an acceptable range for residential roads and consistent with traffic patterns on other neighborhood roads within the Village. However, the results of the speed surveys show that the observed average speeds at most of the surveyed locations within the neighborhood exceeded the posted speed limit and the observed 85<sup>th</sup> percentile speeds exceeded the posted speed limit by five mph or greater. As also discussed previously, the increased speeds within the neighborhood are likely due in part to the long stretches of free flow conditions along some of the roadways, the grid system within the eastern portion neighborhood which lacks any horizontal curves, the traffic traveling to and from DGSHS, and the reduced traffic volumes on some of the roadways due to the Covid 19 pandemic.

As such, many of the roads are experiencing some higher travel speeds. The various recommendations made as part of the study, which include many traffic calming measures/devices, will help to mitigate the speeds in the neighborhood. In addition, KLOA, Inc. examined locations that would be appropriate for additional traffic calming measures/devices and developed additional traffic calming recommendations for the Village to consider. The review was based on the existing traffic volumes, speed surveys, and roadway characteristics. Before any physical measures/devices are implemented, a thorough evaluation will need to be conducted to examine the impact of the measures/devices including emergency vehicle access and response times, diversion of traffic to other neighborhood roads, drainage impacts, costs, and long-term maintenance. **Table 12** outlines the traffic calming recommendations for the various roads in the neighborhood and includes recommendations already summarized in the study.

Consideration should be given to installing horizontal deflection measures (curb extensions, median islands, chokers/neck-downs, chicanes, etc.) and/or permanent or temporary radar feedback signs, if the recommended measures are not effective in reducing the travel speeds. Roadways or sections of roadways that may need additional measures include:

- Dunham Road
- Springside Avenue
- Camden Road
- Cambridge Road
- Prentiss Drive
- 67<sup>th</sup> Street
- 68<sup>th</sup> Street
- 71<sup>st</sup> Street

Table 12  
POTENTIAL TRAFFIC CALMING MEASURES

Traffic Calming Measure	Locations
<p><i>Speed Monitors and Police Enforcement.</i> Continue use of portable electronic speed monitors, install permanent speed monitors, and/or enhance targeted police enforcement to increase awareness and enforce speed limits.</p>	<ul style="list-style-type: none"> <li>• Neighborhood-wide</li> </ul>
<p><i>Speed Limit Signage.</i> Install additional speed limit signs and/or yellow-framed speed limit signs to further reinforce the speed limits.</p>	<ul style="list-style-type: none"> <li>• Neighborhood-wide</li> </ul>
<p><i>Reduce Speed Limit from 30 to 25 mph</i></p>	<ul style="list-style-type: none"> <li>• Dunham Road/71<sup>st</sup> Street between Bolson Drive and Lemont Road</li> </ul>
<p><i>School Zone 20 mph Speed Limit:</i> Install school zone 20 mph speed limit to reduce the speeds at this higher pedestrian location</p>	<ul style="list-style-type: none"> <li>• Powell Street between Norfolk Street and Palmer Street</li> </ul>
<p><i>Park Zone 20 mph Speed Limit.</i> Install park zone 20 mph speed limits to reduce the speeds at these higher pedestrian locations.</p>	<ul style="list-style-type: none"> <li>• Dunham Road along O'Brien Park</li> <li>• Stonewall Avenue along Stonewall &amp; Concord Park</li> <li>• Springside Avenue along Concord Square Park</li> <li>• Concord Avenue along Concord Square Park</li> </ul>
<p><i>Centerline Pavement Markings.</i> Install centerlines to give motorists the perception of a narrower roadway.</p>	<ul style="list-style-type: none"> <li>• 71<sup>st</sup> Street between Dunham Road to Village limits</li> <li>• Prentiss Drive (replace yellow dash centerline with double yellow centerline)</li> </ul>
<p><i>Sharrows.</i> As proposed by the Village, install sharrows along both directions of the road to provide shared vehicle/bicyclist lanes and to make movements of vehicles and bicyclists more predictable, leading to safer roads.</p>	<ul style="list-style-type: none"> <li>• 71<sup>st</sup> Street between Dunham Road and the Village limits</li> </ul>
<p><i>Edge/Parking Lines.</i> Install edge/parking lines along both sides of the road to provide the perception of a narrower roadway.</p>	<ul style="list-style-type: none"> <li>• 71<sup>st</sup> Street between Dunham Road and the Village limits</li> </ul>
<p><i>Curb Extensions.</i> Consider installing curb extensions to enhance pedestrian circulation and safety and give motorists the perception of a narrower roadway.</p>	<ul style="list-style-type: none"> <li>• Norfolk Street at Powell Street</li> </ul>

## 5. Conclusion

This study summarizes the results and findings of the neighborhood traffic study for Area Number 8. The neighborhood is generally bounded by 63<sup>rd</sup> Street on the north; Main Street/Lemont Road and commercial uses on the east; 75<sup>th</sup> Street, commercial uses, and the Village of Woodridge on the south; and Woodward Avenue and the Village of Woodridge on the west. Overall, the objective of the study was to thoroughly examine the existing traffic operations within the neighborhood, identify operational deficiencies, and recommend modifications and/or improvements to enhance both vehicular and pedestrian operations. The study addressed the primary traffic concerns within any neighborhood: vehicular volume, vehicular speed, and overall vehicular and pedestrian safety. The recommendations developed in the study were based primarily on accepted engineering practices, conformity with the 2009 MUTCD, existing Village criteria, and input from Village staff.

The matrix in **Table 13** summarizes the recommendations of the Neighborhood 8 Traffic Study and includes the level of difficulty and general cost range to implement each project.

Table 13  
 DOWNERS GROVE NEIGHBORHOOD 8 - RECOMMENDATION MATRIX

Transportation Component	Location	Recommendation Description	Ease of Implementation Effort	Cost
Traffic Control	Stonewall Ave with Oxnard Dr Springside Ave with 71 <sup>st</sup> St Powell St with Norfolk St Carpenter St with Palmer St	<ul style="list-style-type: none"> <li>Convert two-way or one-way stop sign control to all-way stop sign control</li> </ul>	Low	Low
Traffic Control	Saratoga Ave with 67 <sup>th</sup> St	<ul style="list-style-type: none"> <li>Replace yield sign control with all-way stop sign control</li> </ul>	Low	Low
Traffic Control	Saratoga Ave with 68 <sup>th</sup> St Stonewall Ave with Concord Dr	<ul style="list-style-type: none"> <li>Add all-way stop sign control at intersections with no traffic control</li> </ul>	Low	Low
Traffic Control	Carpenter St with Oxford St Carpenter St with Saylor St Barrett St with 67 <sup>th</sup> St Powell St (N. Leg) with Palmer St Powell St (S. Leg) with Palmer St Powell St with 67 <sup>th</sup> St Brunette Dr with Bolson Dr Oxnard Dr with Bolson Dr Stonewall Ave with Bolson Dr Springside Ave with Brunette Dr Cambridge Rd with Concord Dr	<ul style="list-style-type: none"> <li>Replace yield sign control with stop sign control</li> </ul>	Low	Low
Traffic Control	Barrett St with 68 <sup>th</sup> St Camden Rd with Hatch St Devereux Rd with Hall St	<ul style="list-style-type: none"> <li>Add two-way stop sign control on Barrett St at 68<sup>th</sup> St, Hatch St at Camden St, and Hall St at Devereux Rd at these intersections that have no traffic control</li> </ul>	Low	Low
Traffic Control	Carpenter St with 67 <sup>th</sup> St Saratoga Ave with Palmer St Barrett St with Palmer St Powell St with Saylor St Powell St with 67 <sup>th</sup> Pl Parker Ave with Robey Rd Creekside Rd with Robey Ave Hobart Ave with Valley View Dr Foster Rd with Hobart Ave Stonewall Ave with Brighton St Brighton St with Hasting Ave Prideham St with Breasted Ave Nash St with Breasted Ave	<ul style="list-style-type: none"> <li>Add one-way stop sign control on the road with only one intersection leg at these T-intersections that have no traffic control</li> </ul>	Low	Low

Table 13 (Continued)  
 DOWNERS GROVE NEIGHBORHOOD 8 - RECOMMENDATION MATRIX

Transportation Component	Location	Recommendation Description	Ease of Implementation Effort	Cost
Traffic Control	Stair St with Wellington Pl Springside Ave with Lexington Ave Springside Ave with Dickson Ave Plymouth Rd with Dickson Ave Plymouth Rd with Concord Dr Camden Ave with Concord Dr Camden Ave with Ticonderoga Rd Revere Rd with Concord Dr Penner Ave with Concord Dr Meade Rd with Concord Dr Hillcrest Dr with Terrace Dr Camden Rd with Hawkins Ave Devereux Rd with Ticonderoga Rd Devereux Rd with Graham Ave Dexter Rd with Springside Ave Dexter Rd with Richards Ave Powell St with Klein Ave Powell St with Hughes Ave Powell St with Bateman St Powell St with Hawkins Ave Bateman St with Hawkins Ave Oneill Rd with Hawkins Ave Cambridge Rd with Newport Rd	<ul style="list-style-type: none"> <li>Add one-way stop sign control on the road with only one intersection leg at these T-intersections that have no traffic control</li> </ul>	Low	Low
Traffic Control	All roads that end with a cul-de-sac	Install stop sign control at their respective intersecting cross road	Low	Low
Pedestrian Facilities	Springside Ave at Prentiss Dr	<ul style="list-style-type: none"> <li>Install high visibility, ladder style crosswalk on all legs</li> <li>Install pedestrian crossing assemblies (W11-2, W16-9P) on Springside Ave in advance of the pedestrian crossings</li> <li>Install pedestrian crossing assemblies (W11-2, W16-7P) on the north and south legs of Springside Ave</li> </ul>	Low	Low

Table 13 (Continued)  
 DOWNERS GROVE NEIGHBORHOOD 8 - RECOMMENDATION MATRIX

Transportation Component	Location	Recommendation Description	Ease of Implementation Effort	Cost
Pedestrian Facilities	68 <sup>th</sup> St at Powell St	<ul style="list-style-type: none"> <li>Install high visibility, ladder style crosswalk on both legs of 68<sup>th</sup> St</li> <li>Install pedestrian advance crossing assemblies (W11-2, W16-9P) on 68<sup>th</sup> St in advance of the pedestrian crossings</li> <li>Install pedestrian crossing assemblies (W11-2, W16-7P) on the east and west legs 68<sup>th</sup> St at Powell St</li> </ul>	Low	Low
Pedestrian Facilities	71 <sup>st</sup> Street at Powell Street/Court 71 <sup>st</sup> Street at Barrett Street	<ul style="list-style-type: none"> <li>Install pedestrian advance crossing assemblies (W11-2, W16-9P) on 71<sup>st</sup> Street east of Barrett Street and west of Palmer Street/Court</li> <li>Install pedestrian crossing assemblies (W11-2, W16-7P) on the east and west legs of 71<sup>st</sup> Street at Powell Street/Court and at Barrett Street</li> </ul>	Low	Low
Pedestrian Facilities	On Palmer Street at Barrett Street	<ul style="list-style-type: none"> <li>Install school crossing assemblies (S1-1, W16-7P) on the east and west legs of Palmer Street at Barrett Street</li> </ul>	Low	Low
Pedestrian Facilities	On Norfolk St at Powell St	<ul style="list-style-type: none"> <li>Remove school crossing assemblies (S1-1, W16-7P)</li> </ul>	Low	Low
Pedestrian Facilities	On Norfolk St east of Dunham Rd On Norfolk St west of Saratoga Ave On Powell St north of Palmer St On Palmer St east of Barrett St	<ul style="list-style-type: none"> <li>Install school advanced crossing assemblies (S1-1, W16-9P)</li> </ul>	Low	Low
Pedestrian Facilities	Entire Neighborhood	<ul style="list-style-type: none"> <li>Refresh all crosswalks as needed</li> </ul>	Low	Low
Pedestrian Facilities	Saratoga Ave with 67 <sup>th</sup> St Saratoga Ave with 68 <sup>th</sup> St Stonewall Ave at Concord Dr Springside Ave with 71 <sup>st</sup> St	<ul style="list-style-type: none"> <li>Install high visibility, ladder style crosswalks on approaches with sidewalk ramps</li> </ul>	Low	Low
Pedestrian Facilities	Springside Ave with Prentiss Dr Springside Ave with Bolson Dr Dunham Rd with 71 <sup>st</sup> St	<ul style="list-style-type: none"> <li>Replace standard crosswalks with high visibility, ladder style crosswalks</li> </ul>	Low	Low
Pedestrian Facilities	Main Street with 67 <sup>th</sup> Street Lemont Road with Dunham Road	<ul style="list-style-type: none"> <li>The Village should work with DuDOT to install countdown pedestrian traffic signals and ladder style crosswalks on all four legs at these two signalized intersections.</li> </ul>	Low	Low

Table 13 (Continued)  
 DOWNERS GROVE NEIGHBORHOOD 8 - RECOMMENDATION MATRIX

Transportation Component	Location	Recommendation Description	Ease of Implementation Effort	Cost
Bicycle Facilities	71 <sup>st</sup> Street between Dunham Rd and the Village limits	<ul style="list-style-type: none"> <li>Designate as neighborhood bike route</li> <li>Add sharrows on 71<sup>st</sup> St</li> </ul>	Low	Low
Bicycle Facilities	Dunham Rd Springside Ave Concord Dr Camden Rd Devereux Rd	<ul style="list-style-type: none"> <li>Install additional bike route signs on current posted bike routes</li> </ul>	Low	Low
Bicycle Facilities	71 <sup>st</sup> St between Dunham Rd and the Village limits	<ul style="list-style-type: none"> <li>Install bike route signs</li> </ul>	Low	Low
Bicycle Facilities	Norfolk St between Springside Ave and Barrett St	<ul style="list-style-type: none"> <li>Consider designating this section of Norfolk St as a neighborhood bike route and install appropriate bike route signs.</li> </ul>	Low	Low
Striping & Signage	Neighborhood-wide	<ul style="list-style-type: none"> <li>Inspect all traffic sign locations and trim trees within Village right-of-way to improve visibility of signs</li> </ul>	Low	Low
Striping & Signage	Neighborhood-wide	<ul style="list-style-type: none"> <li>Refresh all pavement markings including parking boxes/lines, centerlines, bike lanes, stop bars, etc.</li> </ul>	Low	Low
Striping & Signage	Neighborhood-wide	<ul style="list-style-type: none"> <li>Install stop lines at new stop sign-controlled locations and existing stop sign control approaches that do not have stop bars</li> </ul>	Low	Low
Traffic Speeds	71 <sup>st</sup> St between Dunham Rd and the Village limits	<ul style="list-style-type: none"> <li>Install centerline pavement markings</li> </ul>	Low	Low
Traffic Speeds	Prentiss Ave	<ul style="list-style-type: none"> <li>Replace yellow dash centerline with double yellow center line</li> </ul>	Low	Low
Traffic Speeds	Dunham Rd/71 <sup>st</sup> St – South Section	<ul style="list-style-type: none"> <li>Reduce posted speed limit from 30 mph to 25 mph</li> </ul>	Low	Low
Traffic Speeds	Dunham Rd along O'Brien Park Stonewall Ave along Stonewall & Concord Park Springside Ave along Concord Square Park Concord Ave along Concord Square Park	<ul style="list-style-type: none"> <li>Install Park Zone with 20-mph speed limit</li> </ul>	Low	Low
Traffic Speeds	Powell St between Norfolk St and Palmer St	<ul style="list-style-type: none"> <li>Install School Zone with 20-mph speed limit</li> </ul>	Low	Low

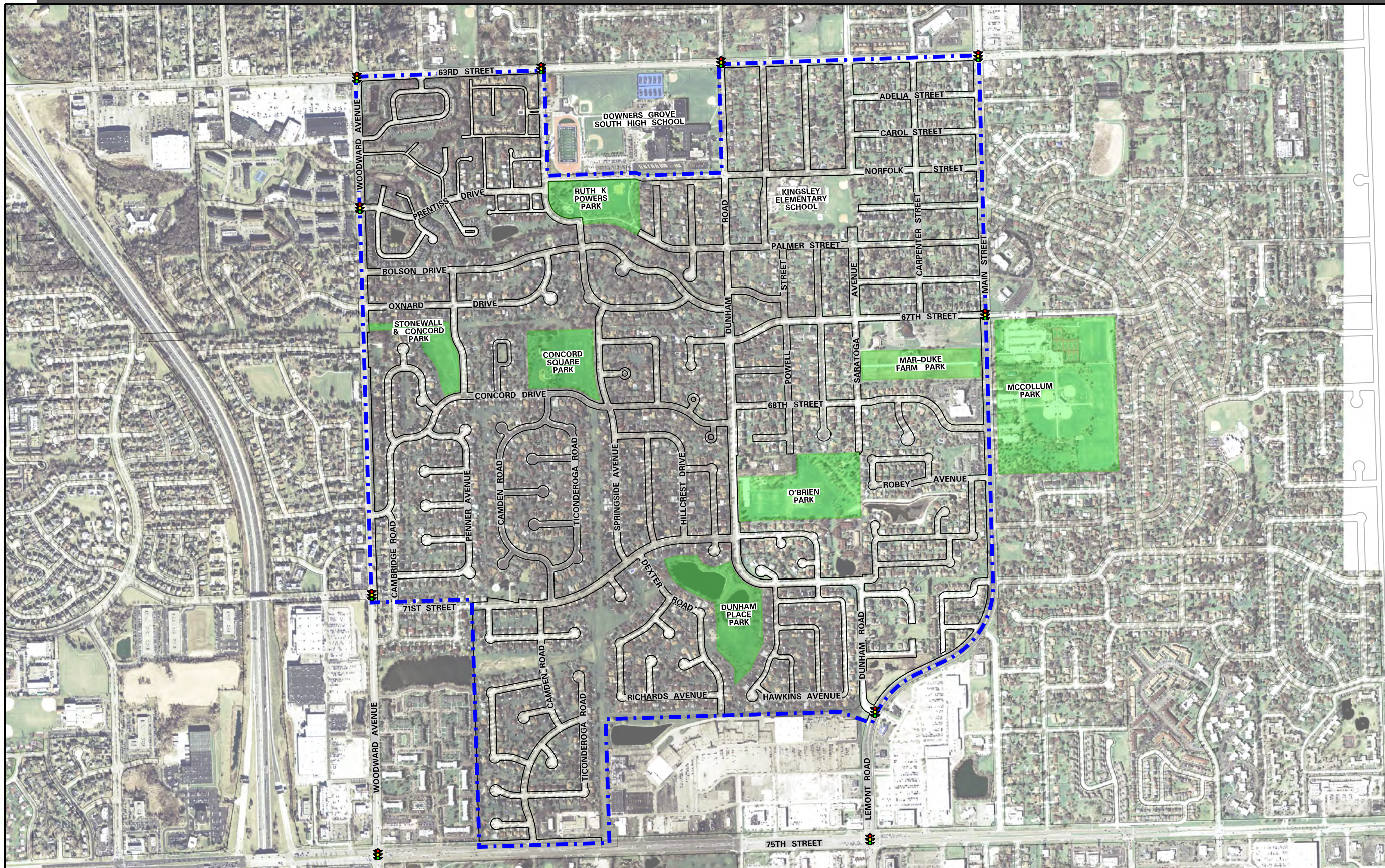
Table 13 (Continued)  
 DOWNERS GROVE NEIGHBORHOOD 8 - RECOMMENDATION MATRIX

Transportation Component	Location	Recommendation Description	Ease of Implementation Effort	Cost
Traffic Speeds	Neighborhood-wide (see Figure 11)	<ul style="list-style-type: none"> <li>• Install new neighborhood speed limit signs</li> <li>• Install new speed limit signs with yellow borders</li> <li>• Replace 30 mph speed signs with 25 mph signs with yellow borders on Dunham Rd/71<sup>st</sup> St</li> <li>• Install new Park Zone and School Zone 20-mph speed limit signs</li> </ul>	Low	Low
Traffic Speeds	71 <sup>st</sup> St between Dunham Rd and the Village limits	<ul style="list-style-type: none"> <li>• Consider installing edge/parking lines on both sides of the road</li> </ul>	Low	Low
Traffic Speeds	Norfolk St at Powell St	<ul style="list-style-type: none"> <li>• Consider installing curb extensions</li> </ul>	High	High
Traffic Speeds	Neighborhood-wide	<ul style="list-style-type: none"> <li>• Targeted speed enforcement and use of speed radar trailer</li> </ul>	Low	Low
Education		<ul style="list-style-type: none"> <li>• Develop materials to explain Village policies regarding vehicular speeds and volumes on neighborhood roads</li> <li>• Develop materials to explain State of Illinois “Stop for Pedestrians in the Crosswalk” law</li> <li>• Develop materials to assist with navigating the Village’s website for neighborhood transportation data, studies, and information</li> </ul>	Low	Low
<p><b>KEY:</b>  <u>Ease of Implementation</u>  <i>High</i> – Recommendation is anticipated to require an extensive level of any or all the following: outside agency and/or stakeholder involvement, outside engineering assistance, and/or construction assistance. The timeframe to implement the recommendation is anticipated to require more than one year.  <i>Medium</i> - Recommendation is anticipated to require a moderate level of any or all the following: outside agency and/or stakeholder involvement, outside engineering assistance, and/or construction assistance. The timeframe to implement the recommendation is anticipated to require less than one year.  <i>Low</i> – Completed by internal Village staff.  <u>Cost</u>  <i>High</i> – Greater than \$10,000  <i>Medium</i> – Less than \$10,000  <i>Low</i> – Can be implemented with normal Department operations.</p>				

# Appendix

Figures  
Crash Data

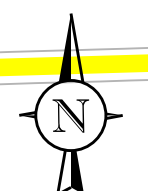
## Figures



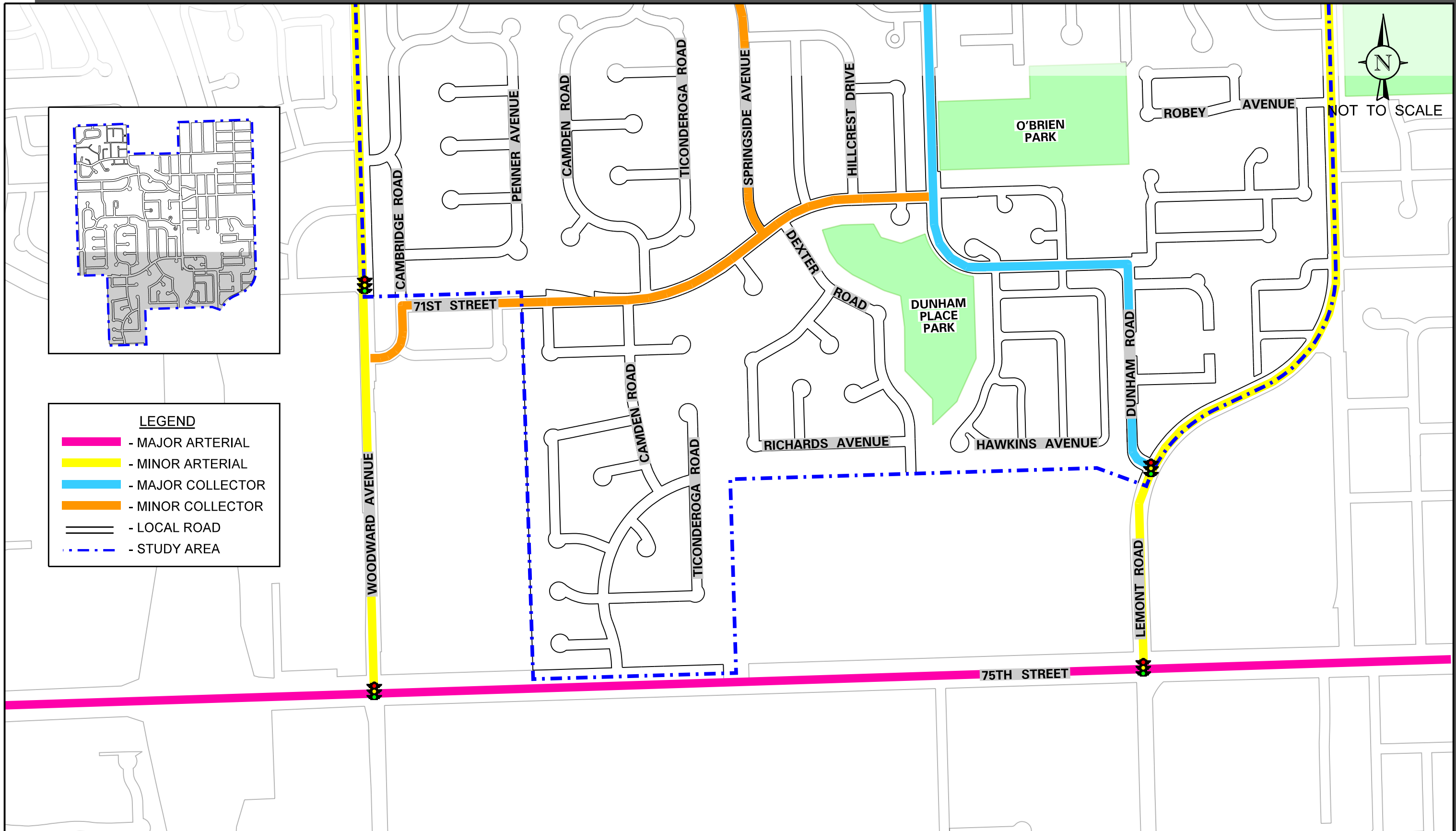
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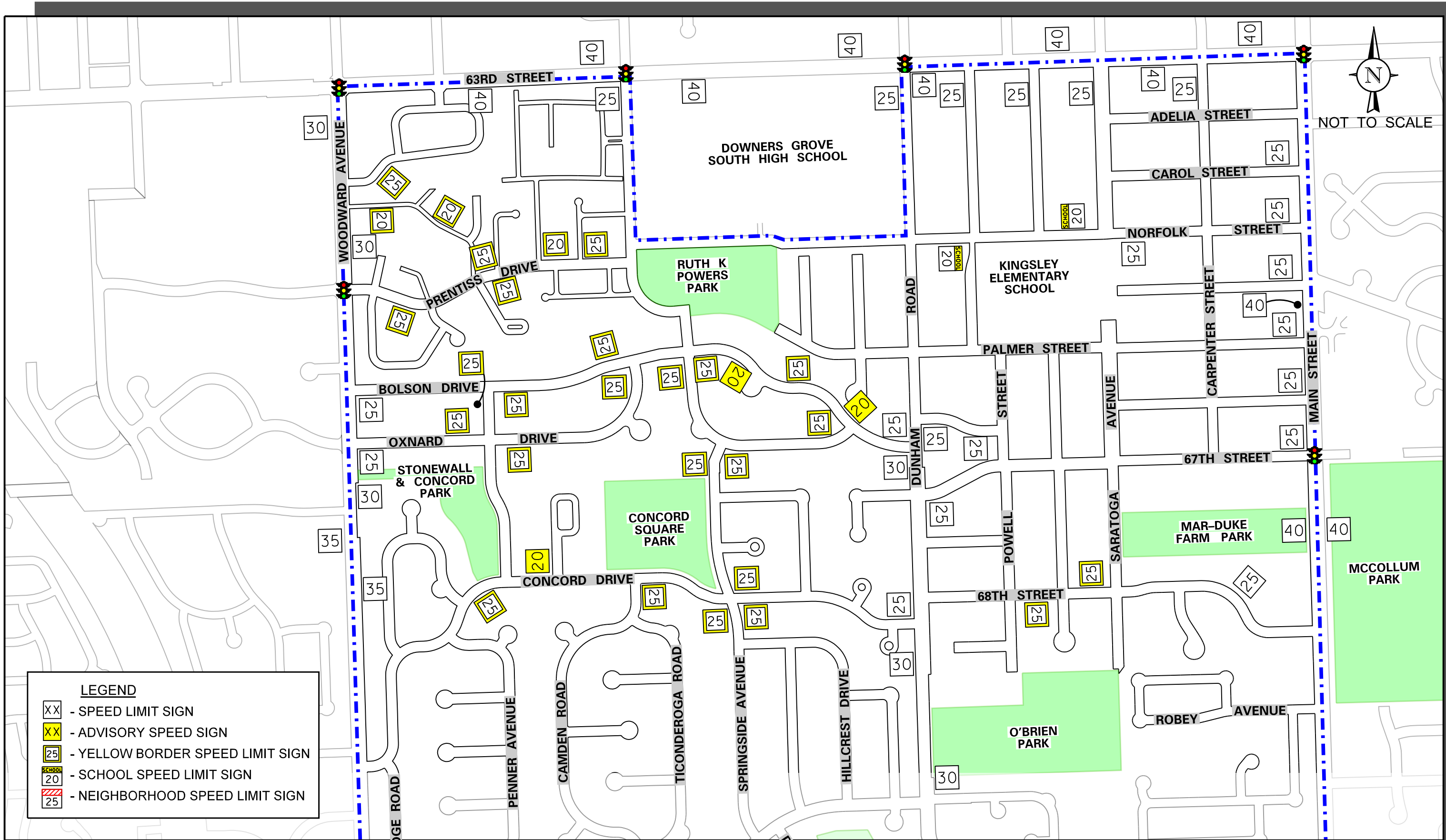
NEIGHBORHOOD 8 TRAFFIC STUDY  
DOWNERS GROVE, ILLINOIS

NEIGHBORHOOD 8 STUDY AREA



NOT TO SCALE





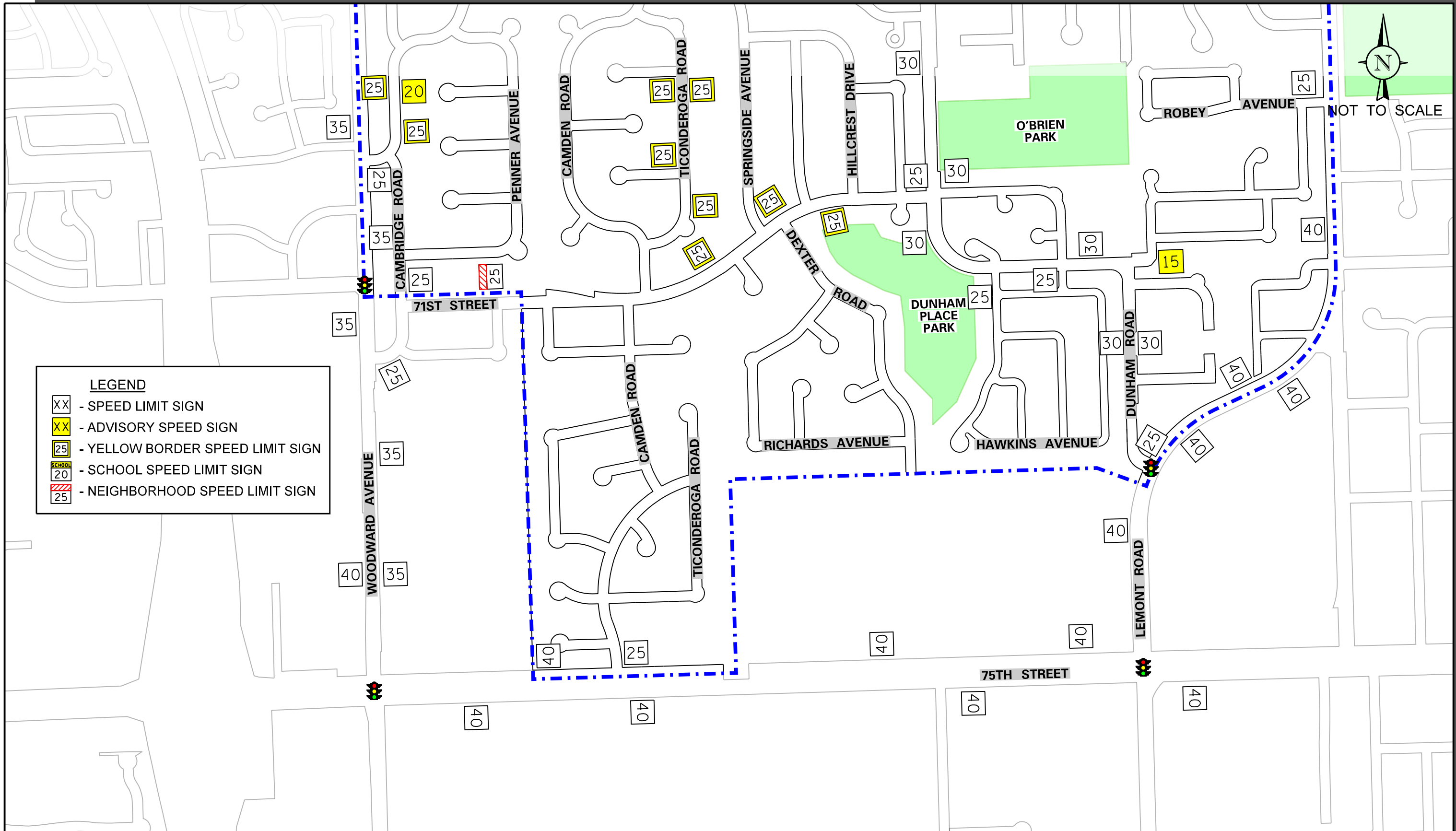
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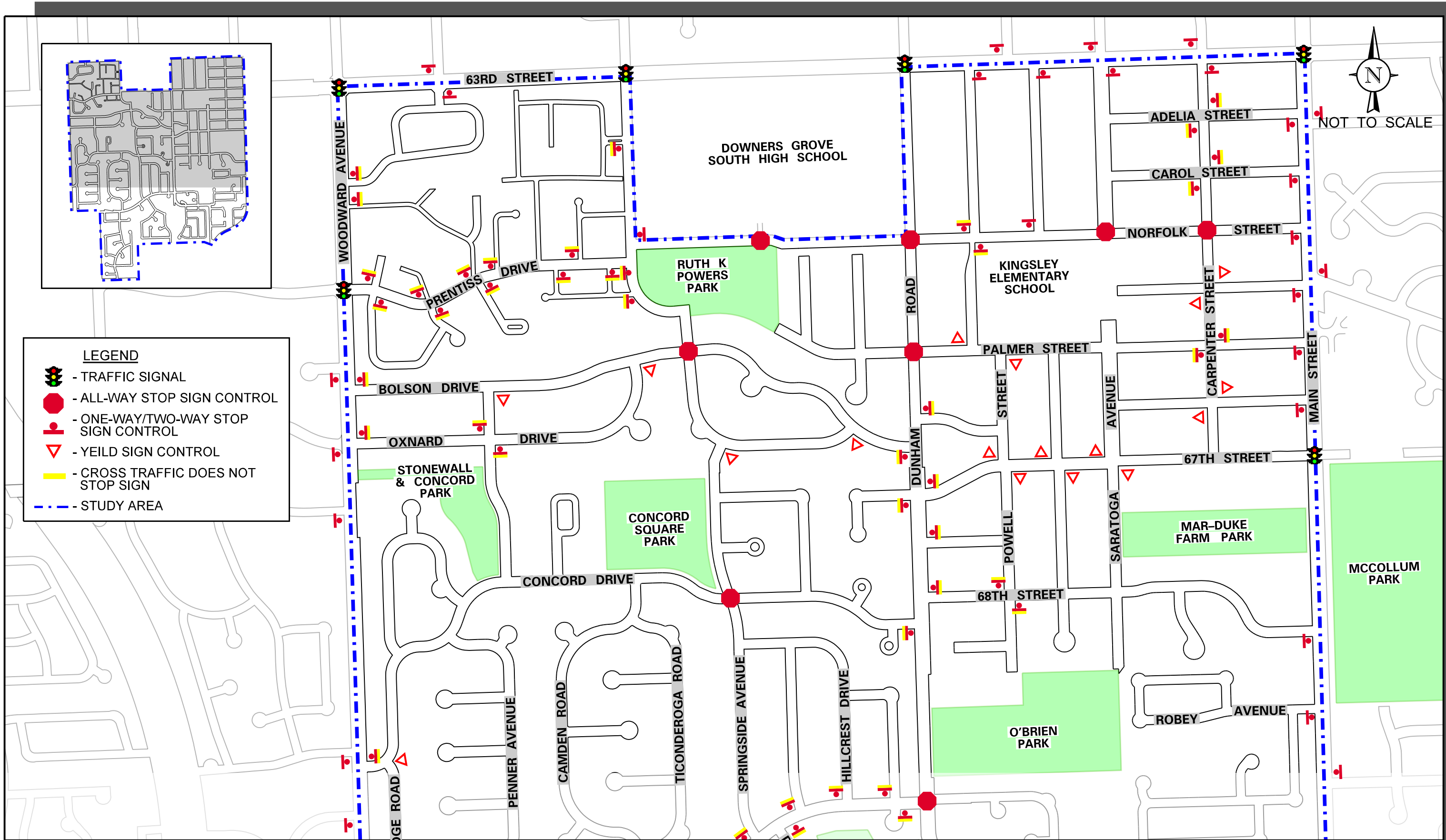
- XX - SPEED LIMIT SIGN
- XX - ADVISORY SPEED SIGN
- 25 - YELLOW BORDER SPEED LIMIT SIGN
- SCHOOL 20 - SCHOOL SPEED LIMIT SIGN
- 25 - NEIGHBORHOOD SPEED LIMIT SIGN

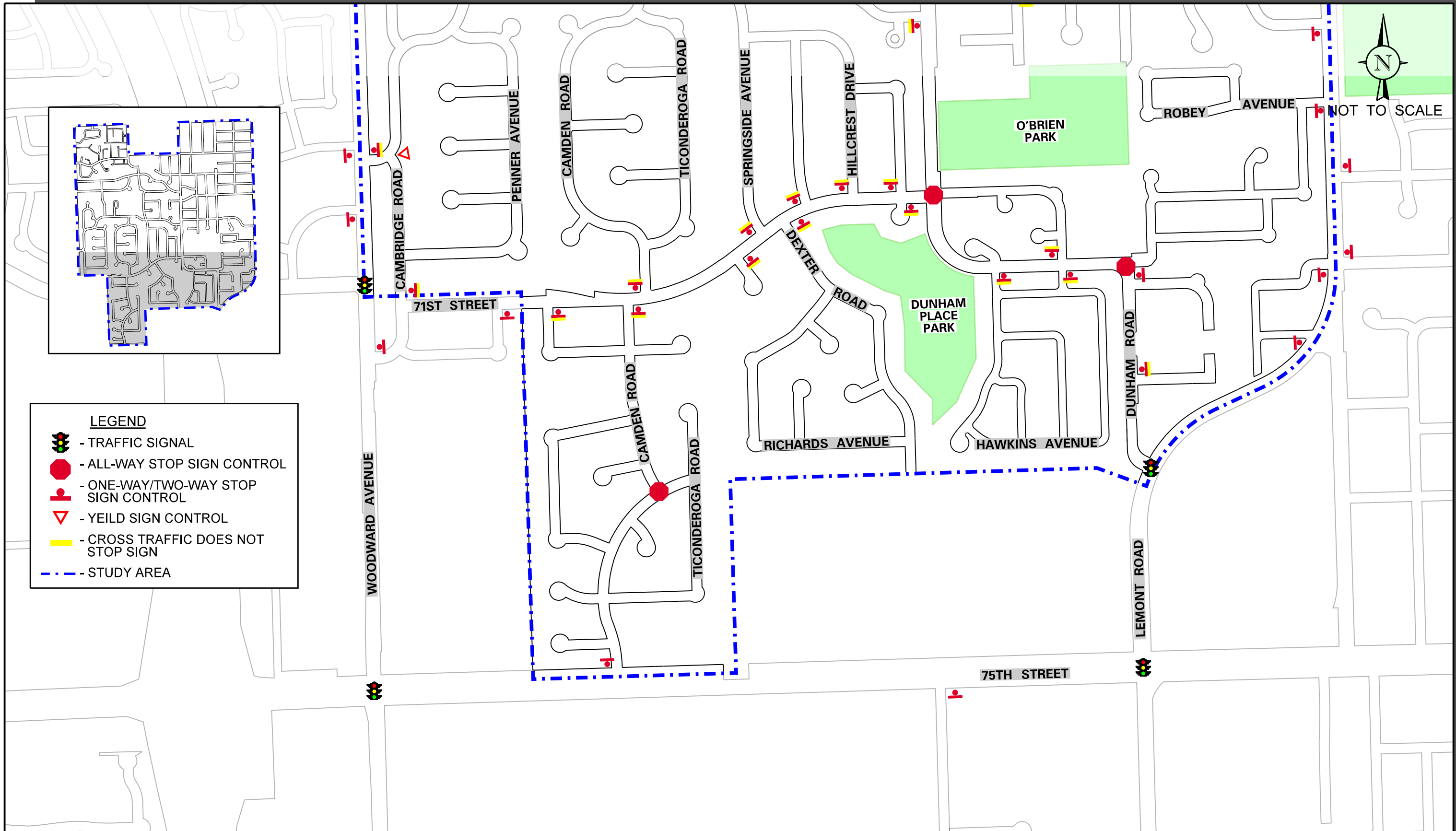
NEIGHBORHOOD 8 TRAFFIC STUDY  
DOWNERS GROVE, ILLINOIS

EXISTING POSTED SPEED REGULATIONS







**KLOA**  
Kenig, Lindgren, O'Hara, Aboona, Inc.  
Job No: 22-120 Figure: 3A

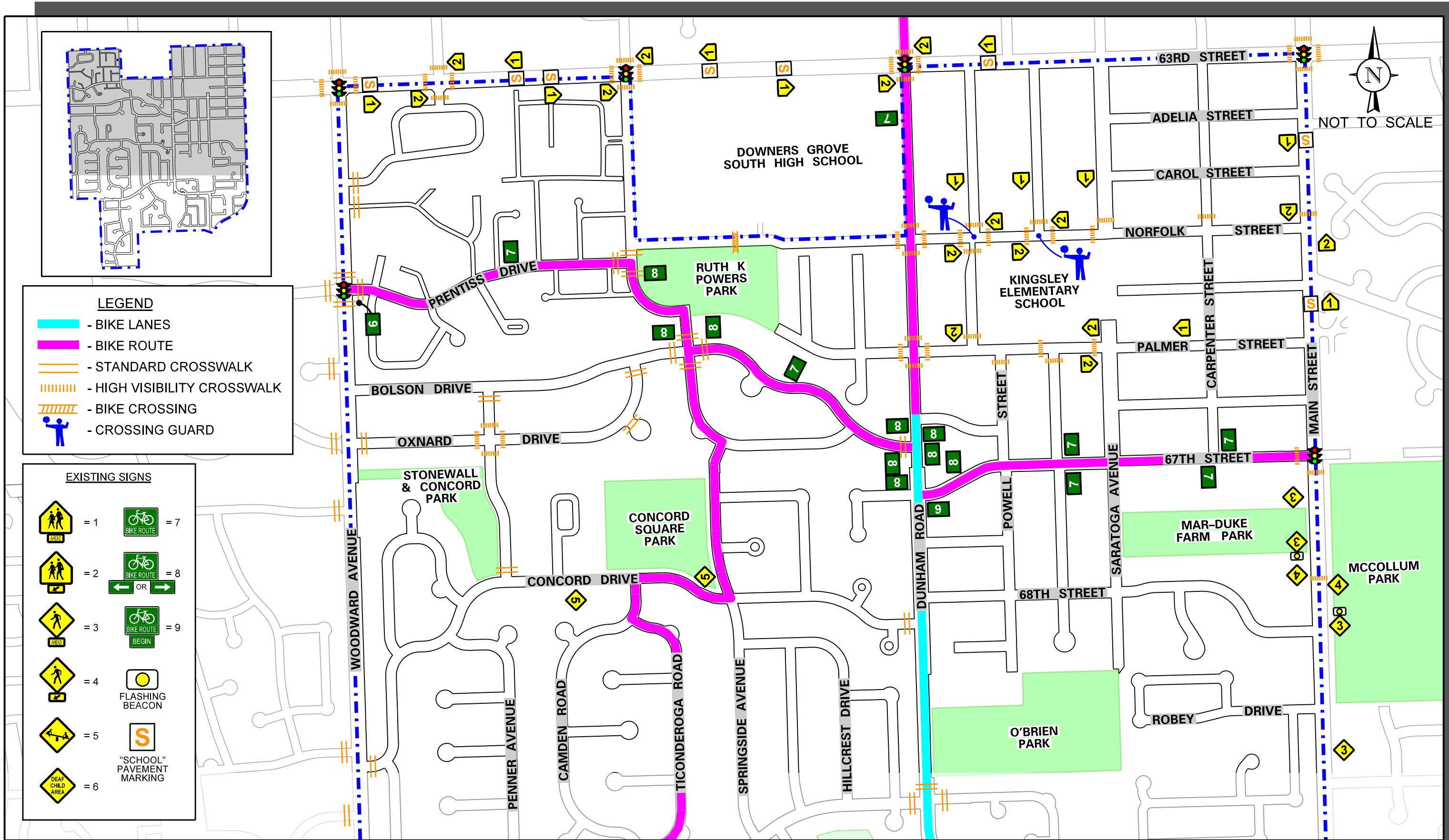






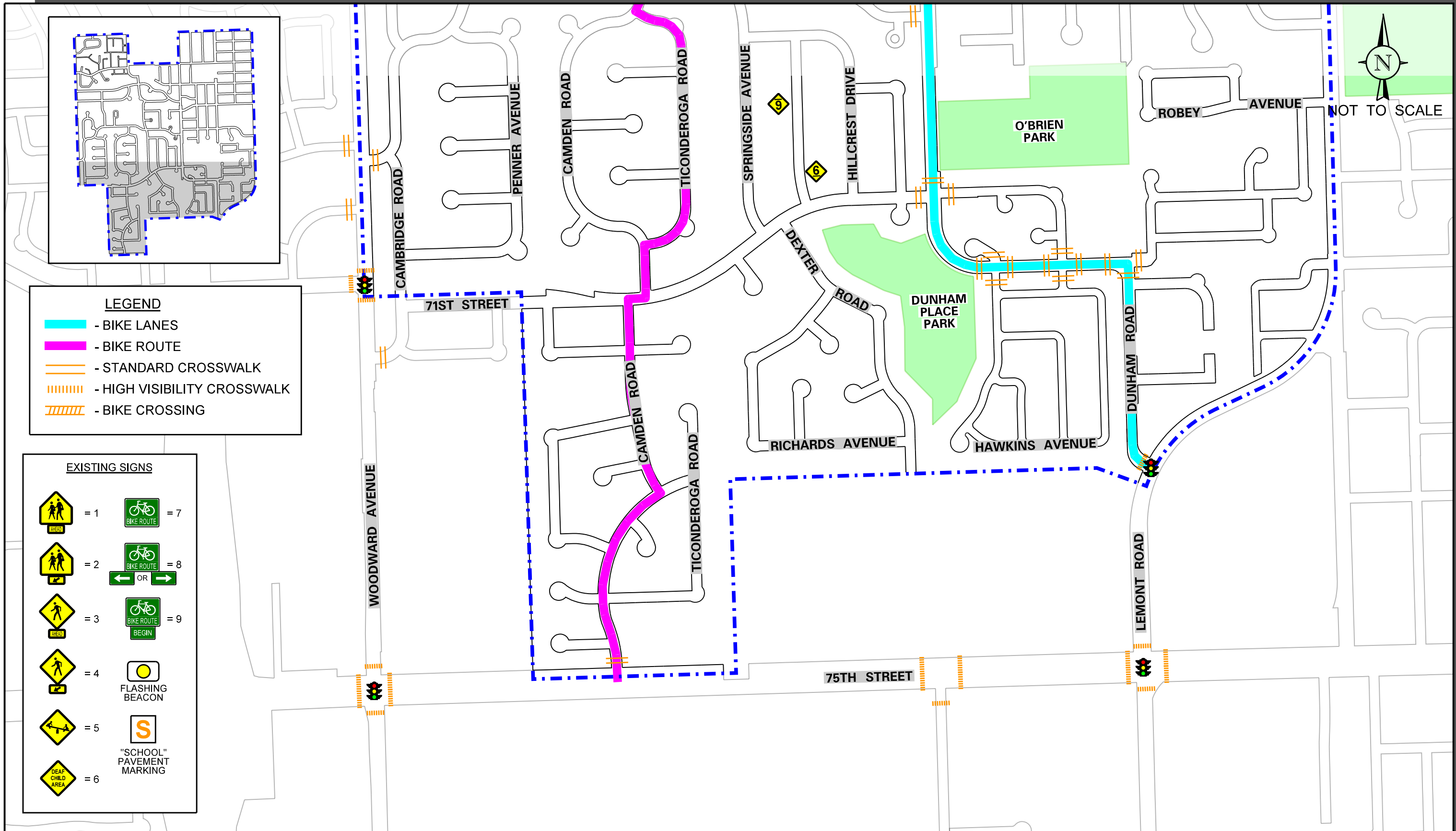
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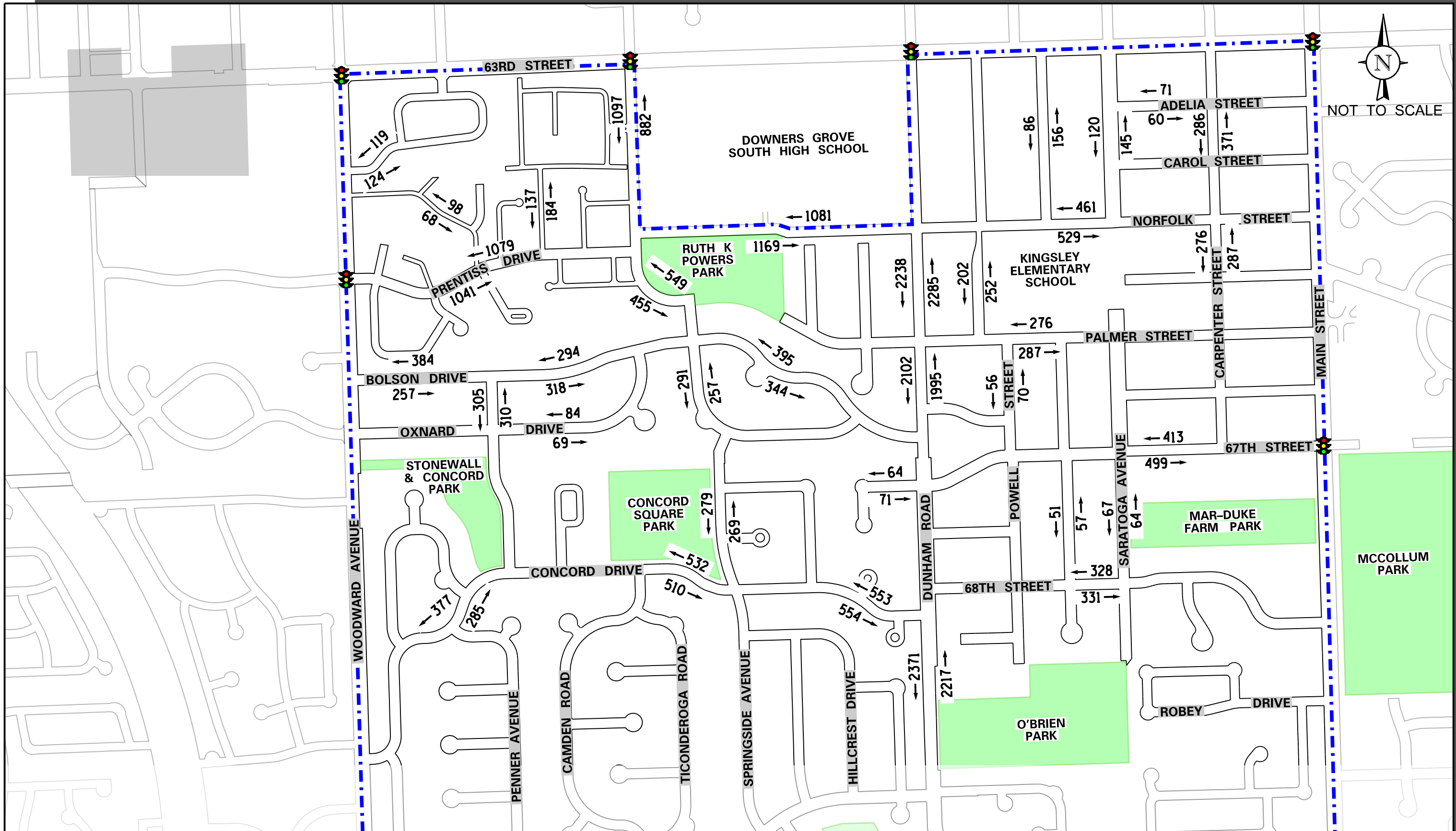
-  - TRAFFIC SIGNAL
-  - ALL-WAY STOP SIGN CONTROL
-  - ONE-WAY/TWO-WAY STOP SIGN CONTROL
-  - YIELD SIGN CONTROL
-  - CROSS TRAFFIC DOES NOT STOP SIGN
-  - STUDY AREA



NEIGHBORHOOD 8 TRAFFIC STUDY  
DOWNERS GROVE, ILLINOIS

EXISTING PEDESTRIAN AND BICYCLE SIGNAGE AND PAVEMENT MARKINGS



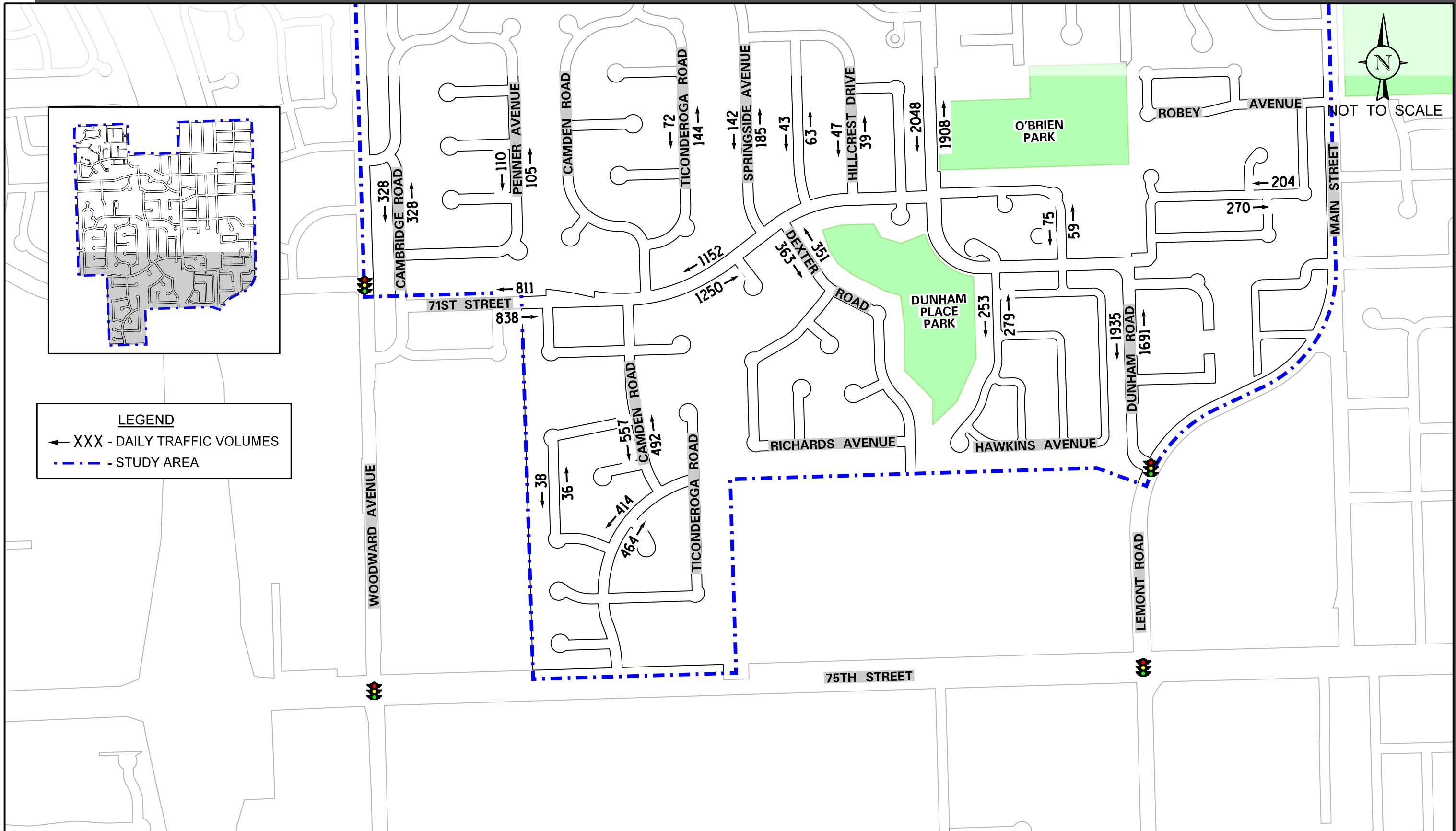


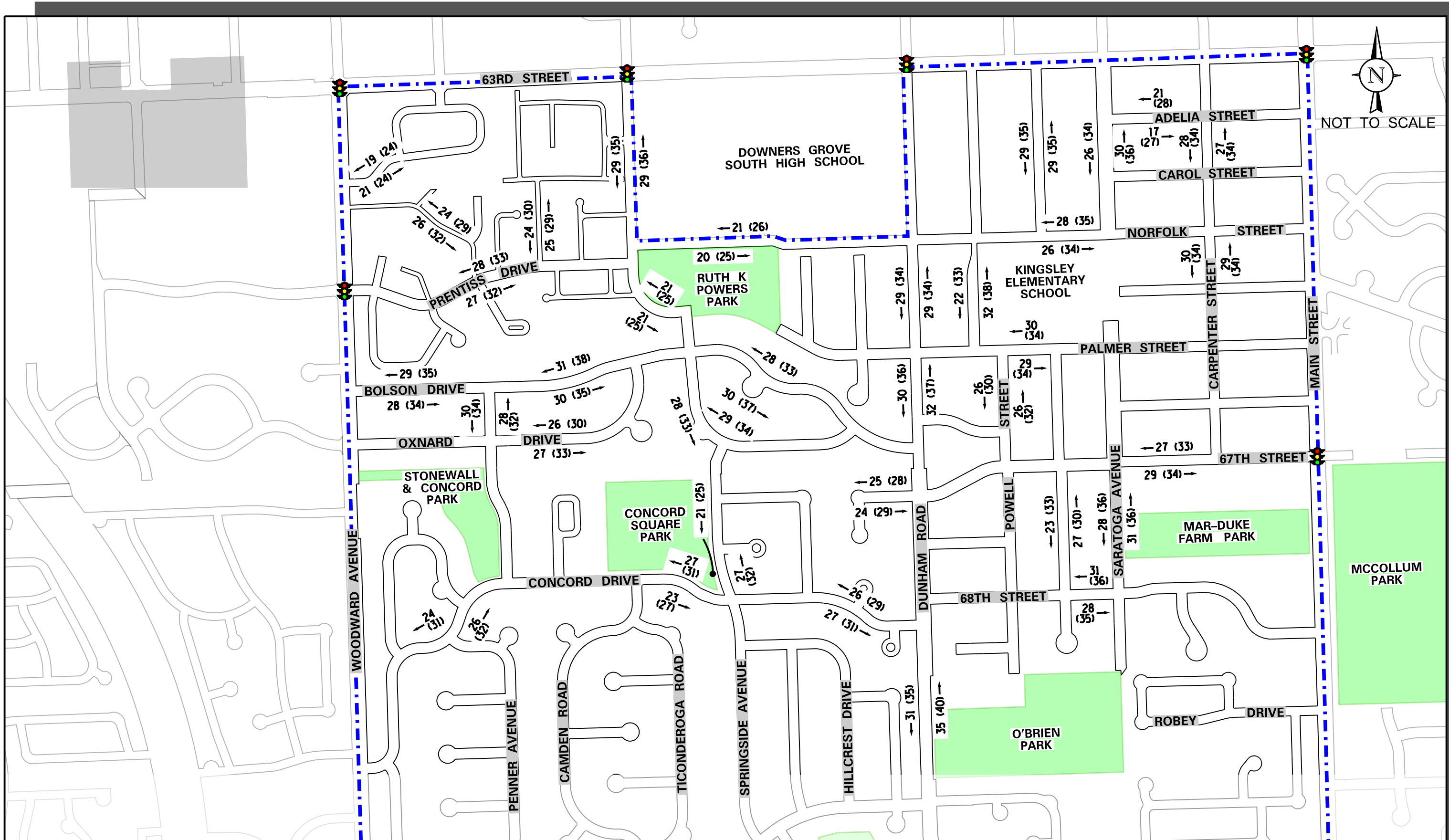
NEIGHBORHOOD 8 TRAFFIC STUDY  
DOWNERS GROVE, ILLINOIS

EXISTING DAILY TRAFFIC VOLUMES



Job No: 22-120 Figure: 6A





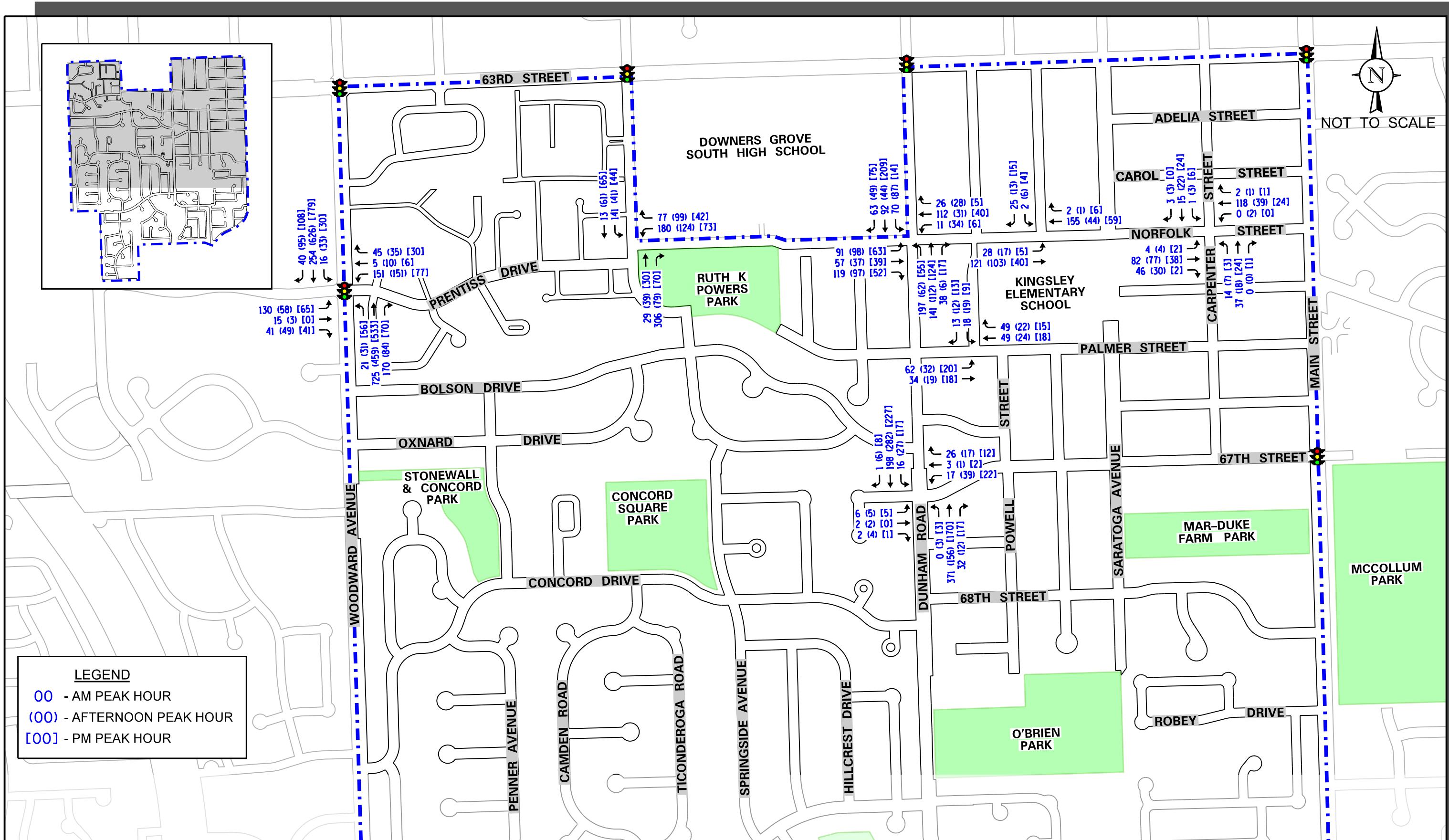
NEIGHBORHOOD 8 TRAFFIC STUDY  
DOWNERS GROVE, ILLINOIS

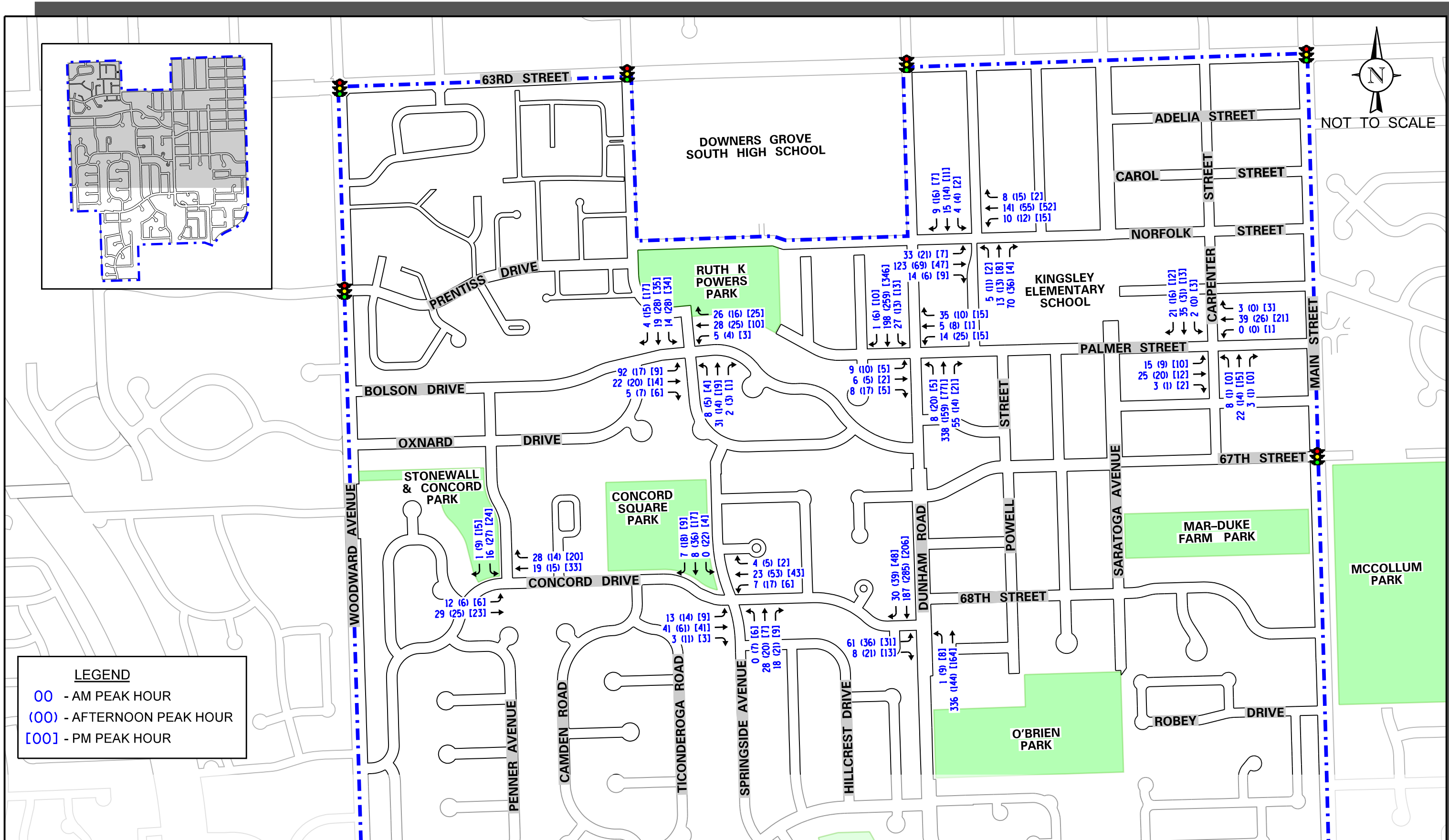
EXISTING AVERAGE AND 85TH PERCENTILE SPEEDS



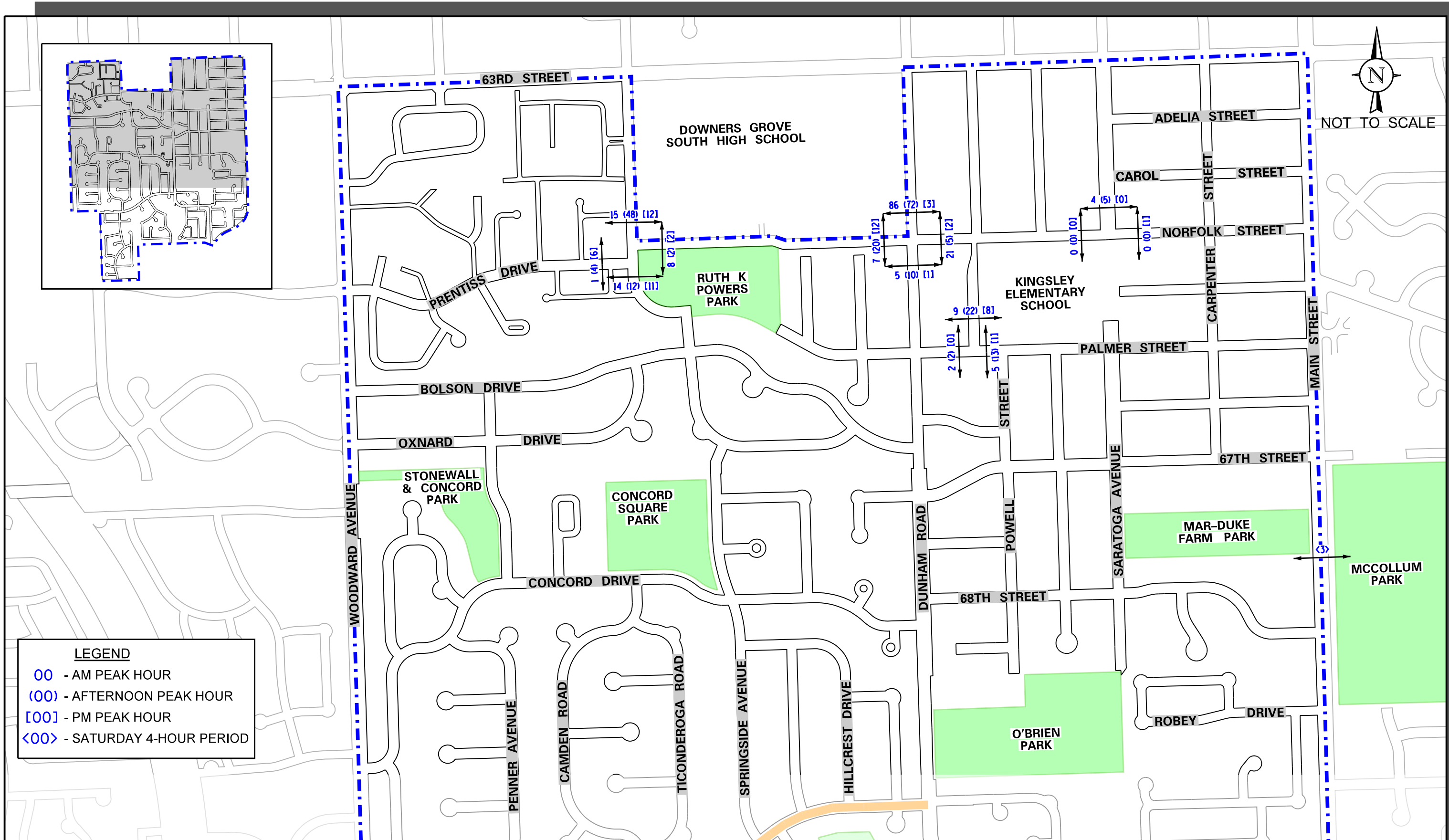
Job No: 22-120 Figure: 7A





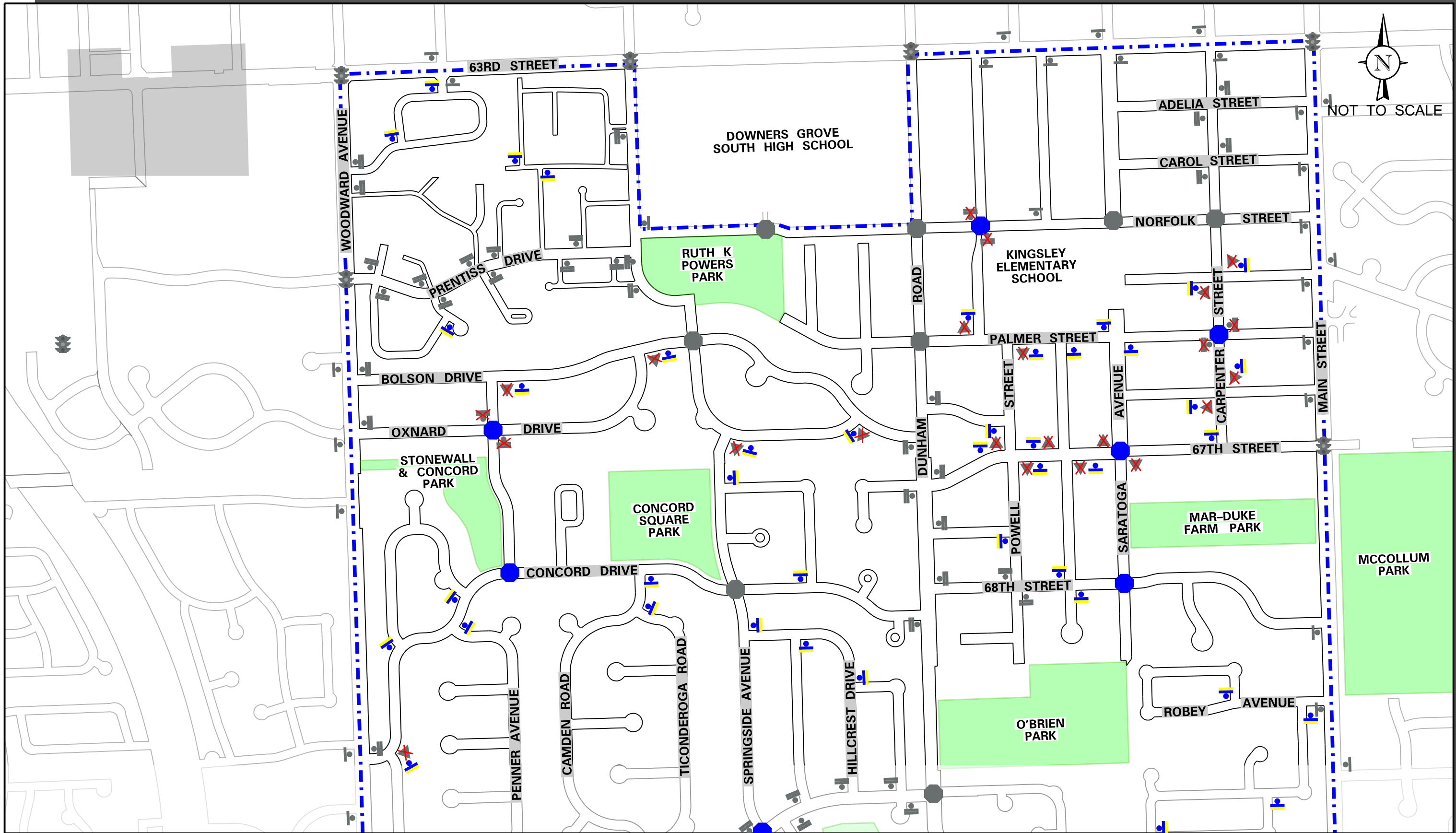






**LEGEND**

- 00 - AM PEAK HOUR
- (00) - AFTERNOON PEAK HOUR
- [00] - PM PEAK HOUR
- <00> - SATURDAY 4-HOUR PERIOD

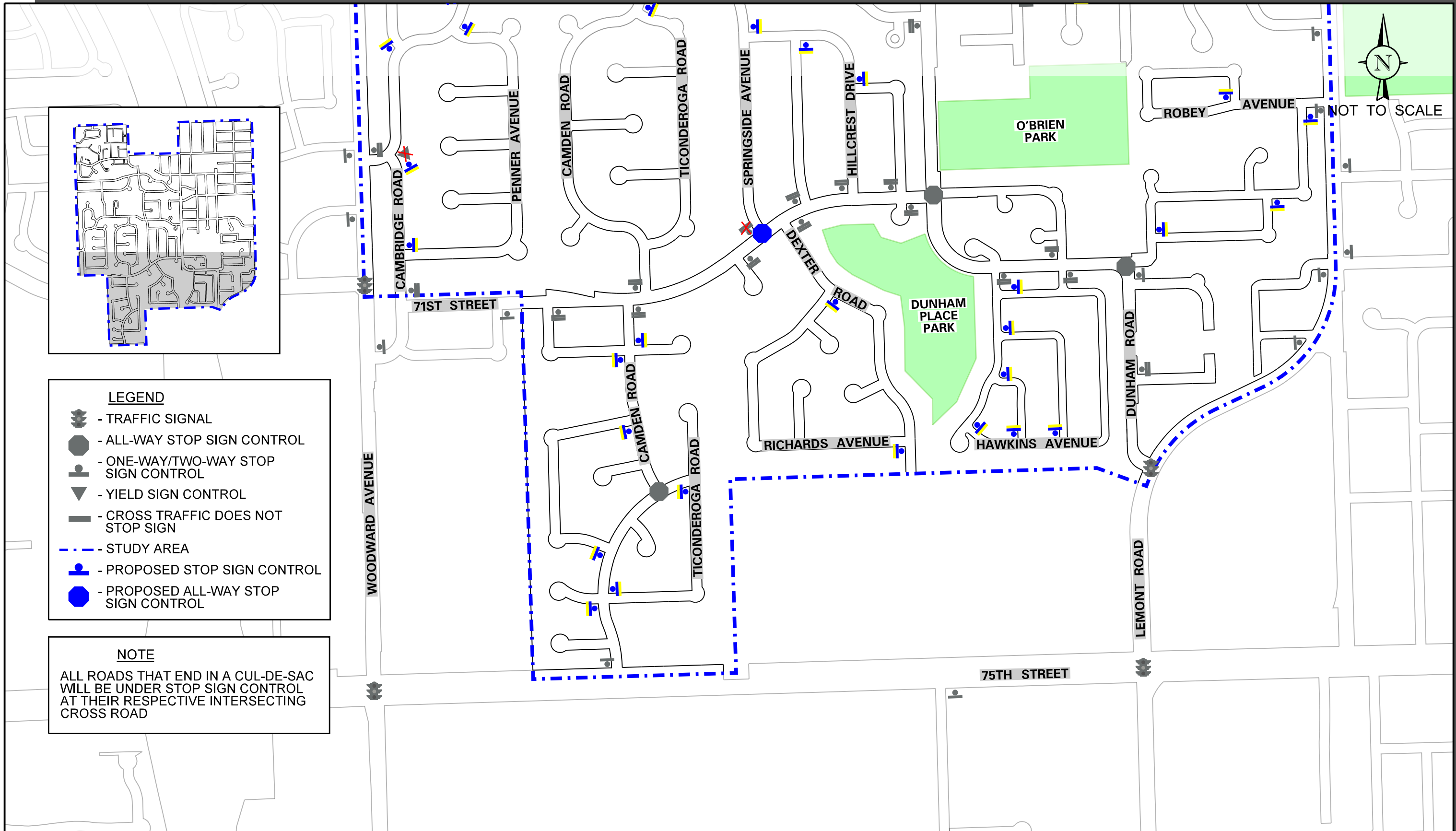


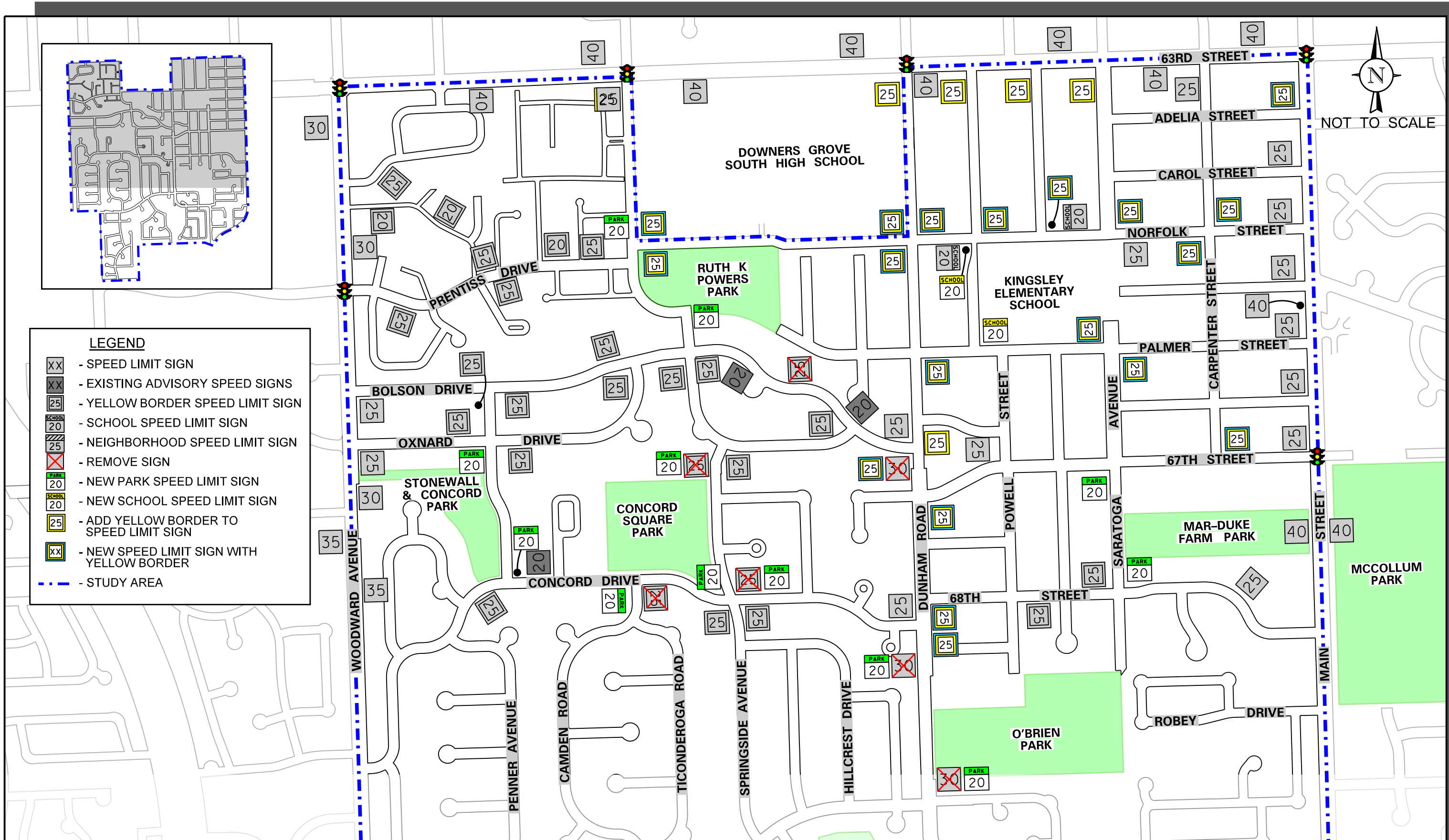
NEIGHBORHOOD 8 TRAFFIC STUDY  
 DOWNERS GROVE, ILLINOIS

RECOMMENDED INTERSECTION TRAFFIC CONTROL



Job No: 22-120 Figure: 10A

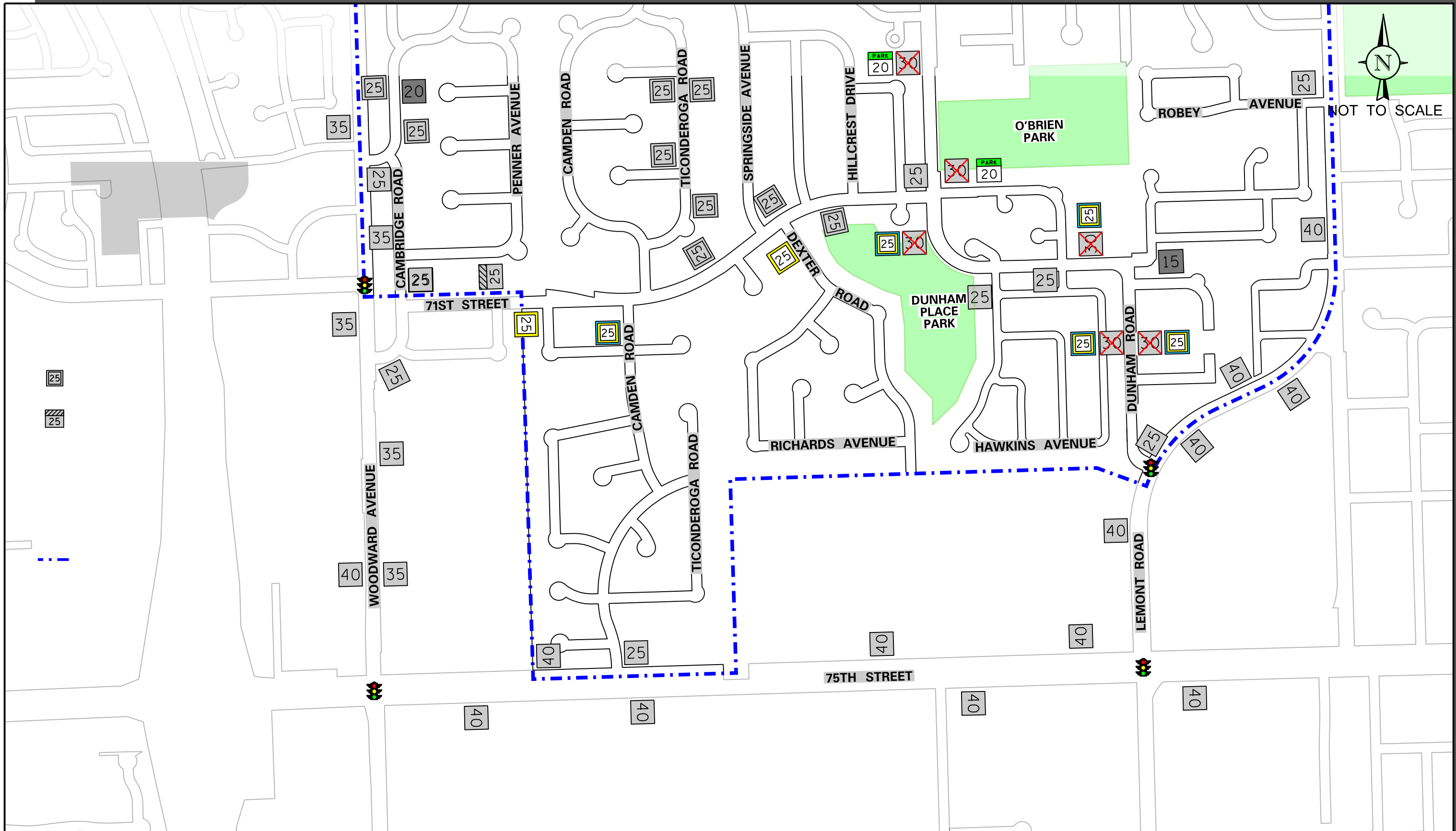


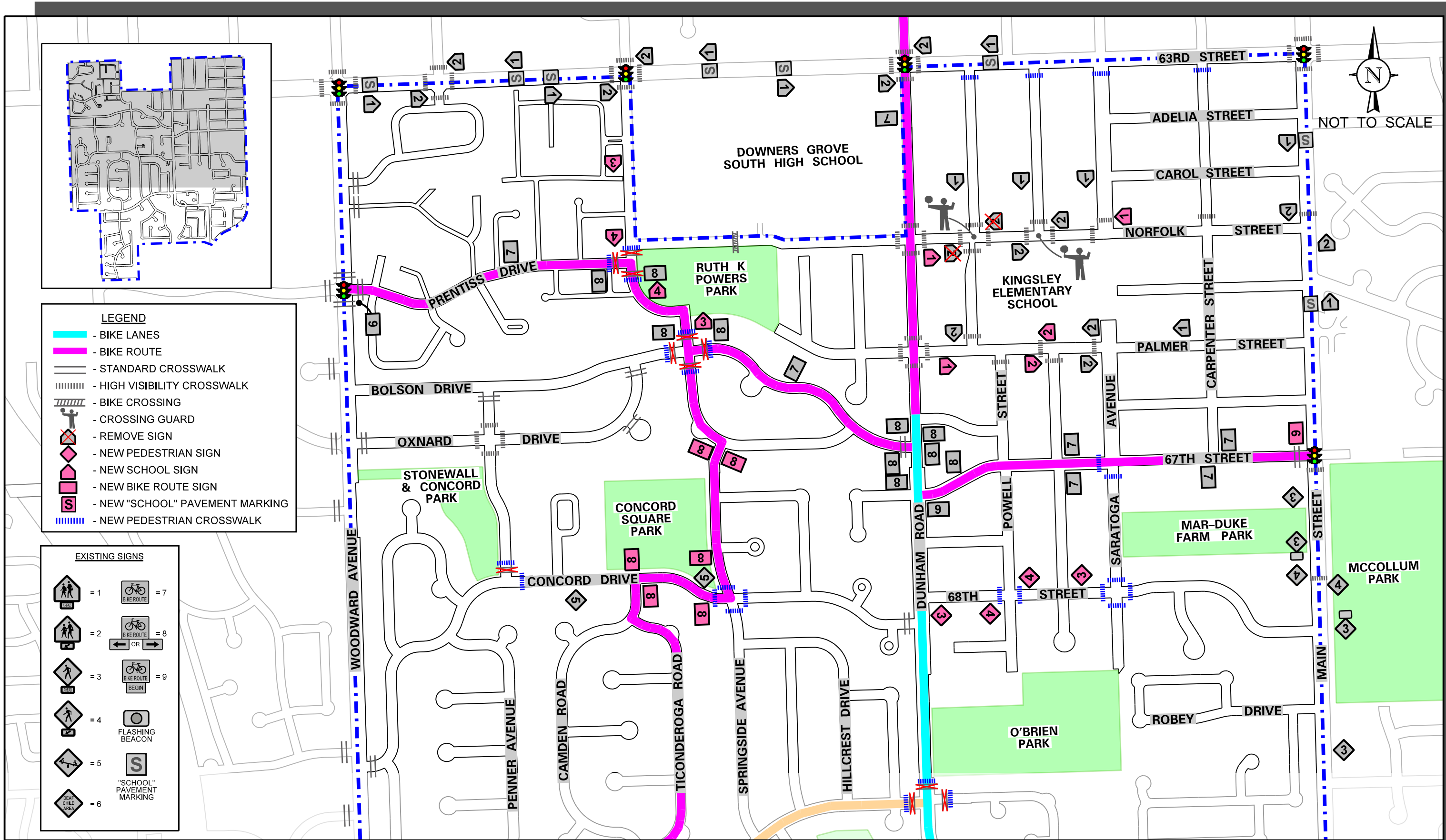


NEIGHBORHOOD 8 TRAFFIC STUDY  
DOWNERS GROVE, ILLINOIS

RECOMMENDED MODIFICATIONS TO POSTED SPEED REGULATIONS

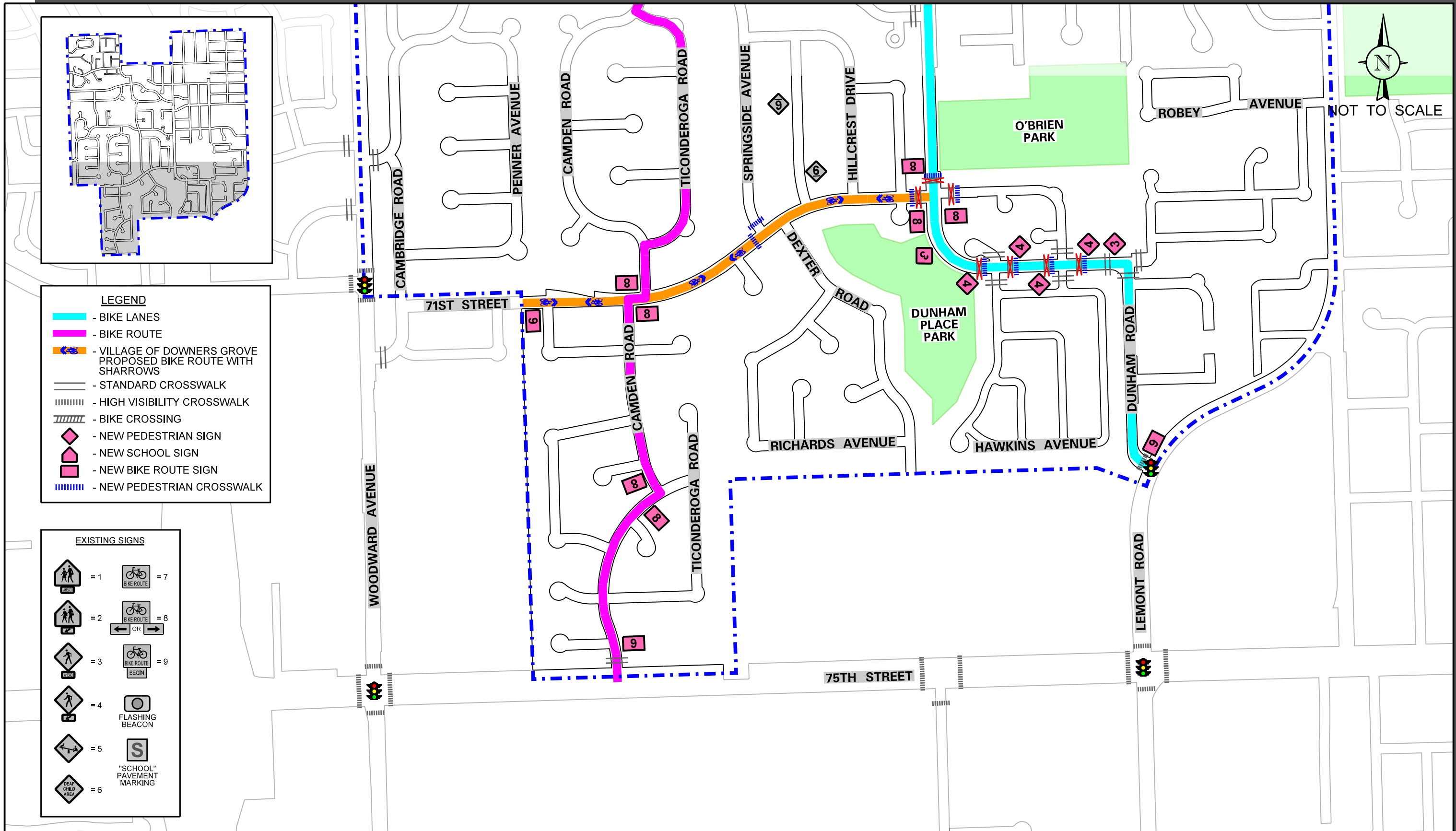






NEIGHBORHOOD 8 TRAFFIC STUDY  
DOWNERS GROVE, ILLINOIS

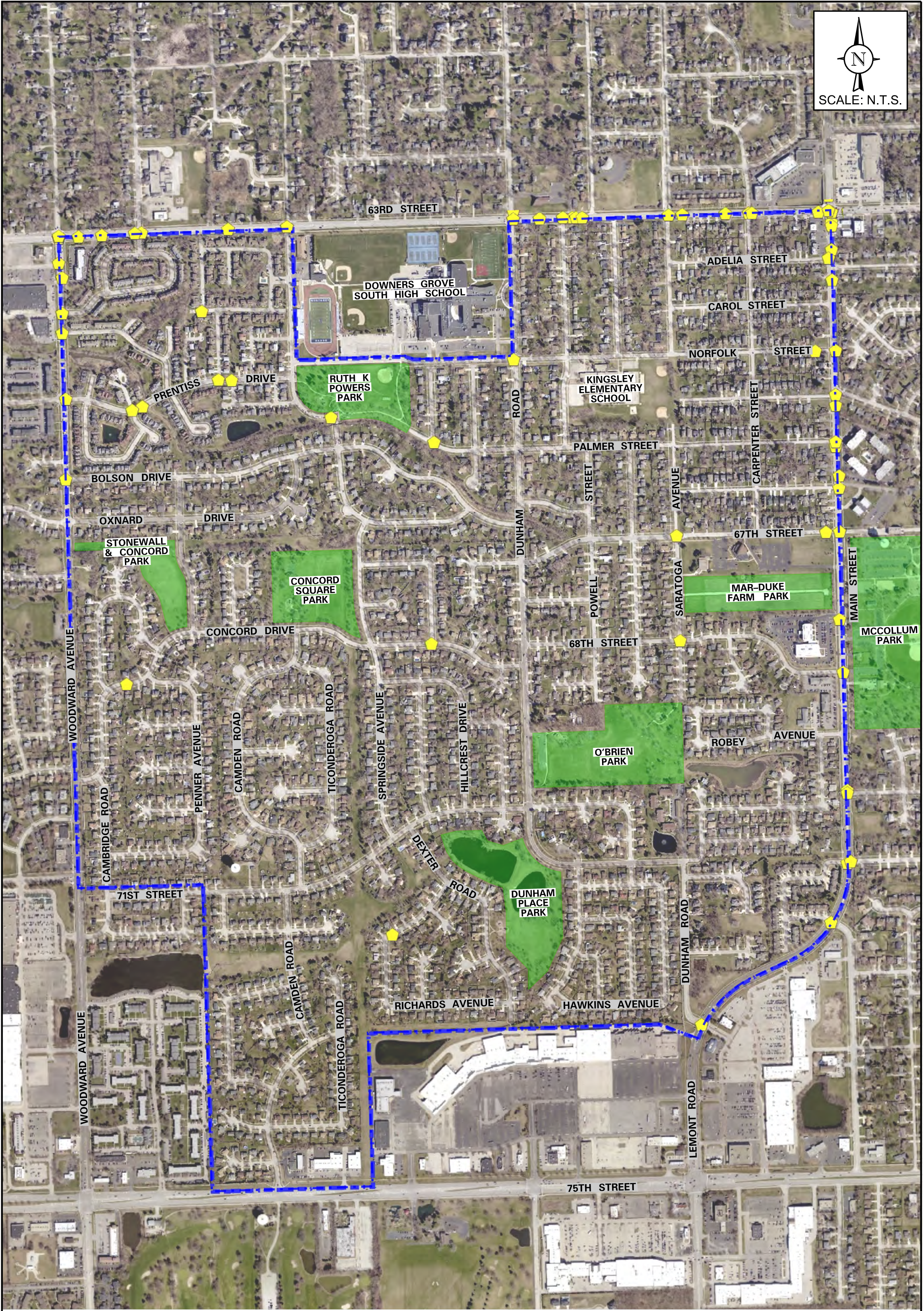
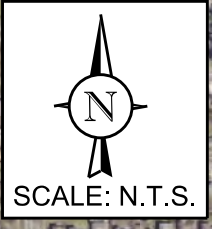
RECOMMENDED PEDESTRIAN AND BICYCLE SIGNAGE AND PAVEMENT MARKINGS

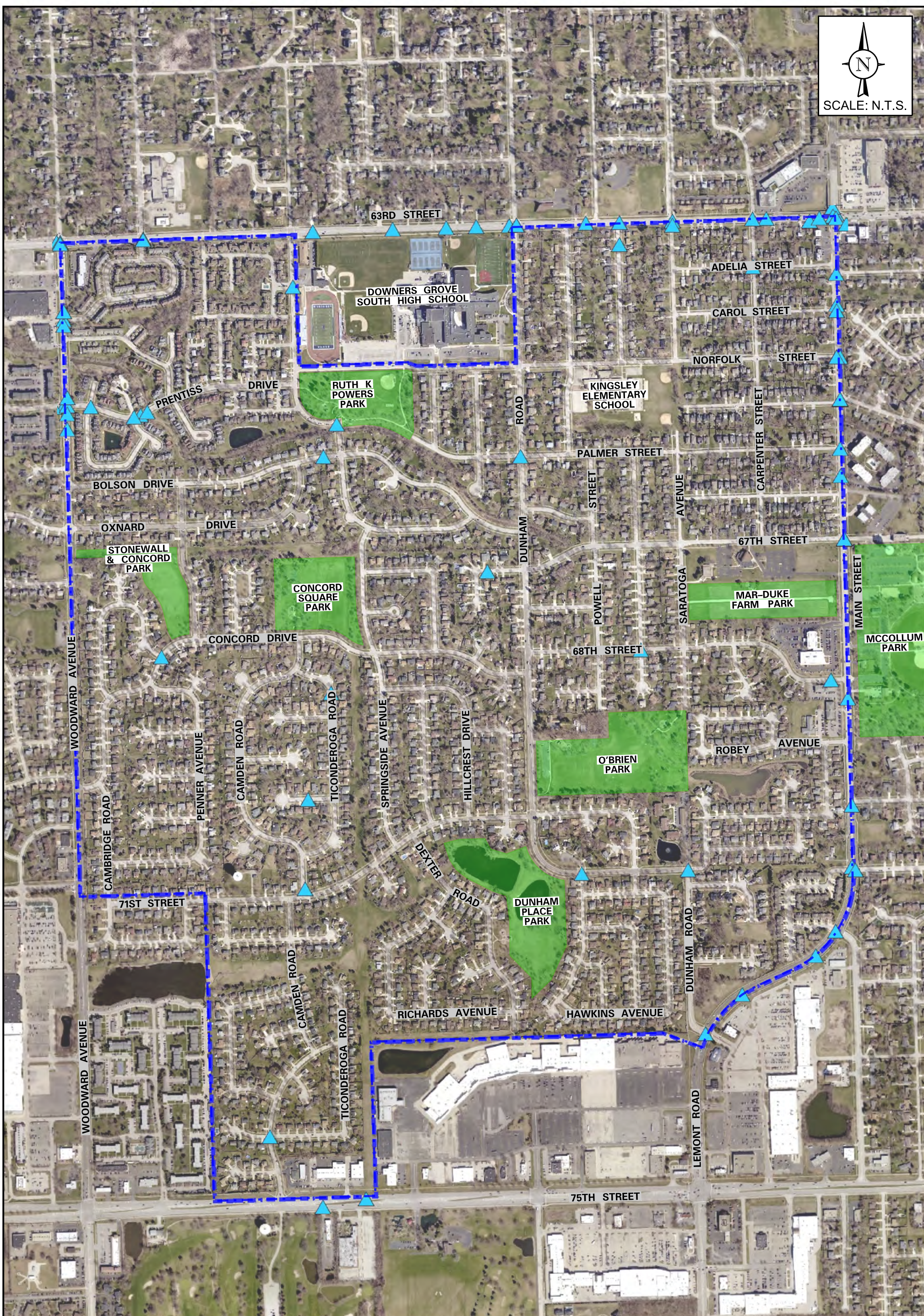
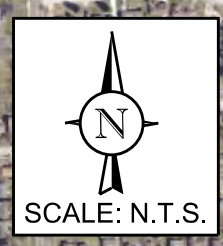


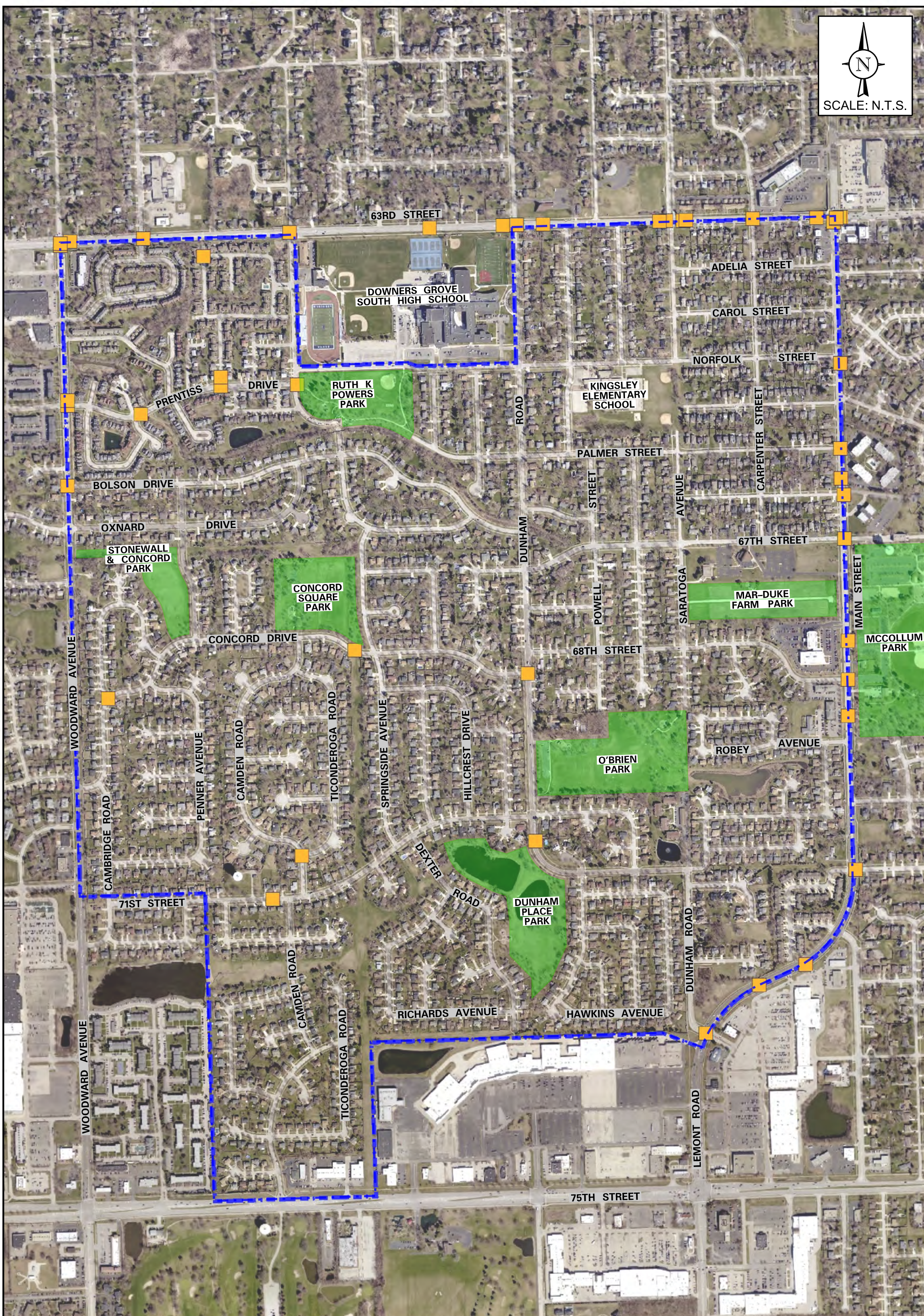
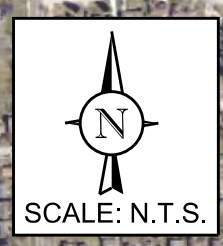
NEIGHBORHOOD 8 TRAFFIC STUDY  
DOWNERS GROVE, ILLINOIS

RECOMMENDED PEDESTRIAN AND BICYCLE SIGNAGE AND PAVEMENT MARKINGS

## Crash Data







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**TRANSPORTATION AND PARKING COMMISSION**  
**Minutes – November 9, 2022**  
**Council Chambers – Village Hall**  
**801 Burlington Avenue, Downers Grove**

Commissioner Novak called the November 9, 2022 meeting of the Transportation and Parking Commission to order at 7:00 P.M. and led the recitation of the Pledge of Allegiance.

**ROLL CALL**

**Present:** Chairman Carter, Commissioners Novak, Lincoln, O’Malley, Shiliga, Heverin, McDonough

**Absent:**

**Staff:** Community Development Stan Popovich, Transportation Manager Mike Tuman, and CSO Supervisor Jim Hartleb

**Visitor Roster:** Michael & Andrea Meyer, Doug Conderman, Bill & Cathy Steinhaus, Bob Bohaty, Janice Fellows, Haran Rashes, Kevin Gryl, Emily Friel, Roy & Donna Clavey, Robert Falli, Dave Straub, Andrew Agustin, Mary Bower, Holly Fiala, Connie Ivan, Fred Schaefflein, Sue & Jerry Prybycien, Tom & Debbie Lackey, Joseph Avram, Rich Bennema, Connie Ivan

A quorum was established.

Chairman Carter reviewed the procedures to be followed for the meeting, explaining that the Commission will forward a recommendation to the Village Council for approval.

**APPROVAL OF OCTOBER 12, 2022 MINUTES**

**COMMISSIONER NOVAK MOVED TO ACCEPT MEETING MINUTES AS IS.  
 COMMISSIONER MCDONOUGH SECONDED THE MOTION.**

**ALL IN FAVOR. THE MOTION PASSED UNANIMOUSLY BY VOICE VOTE 7:0.**

**PUBLIC COMMENT ON NON-AGENDA ITEMS**

No public comment on non-agenda items.

**File #13-22 Neighborhood Traffic Study #8**

Public Works Transportation Manager Mike Tuman introduced Neighborhood Traffic Study #8 which encompasses a large neighborhood in the south portion of the Village.

Michael Werthmann from KLOA Inc. presented summary information from the draft report.

**Purpose of Study:**

**DRAFT**

To analyze existing transportation operations and perform a comprehensive review of the whole neighborhood to establish consistency within the neighborhood, and within the Village. A request for a change involves looking at the whole neighborhood and how overall transportation conditions can be improved for every mode of transportation. Also looked at mitigating existing transportation issues within the neighborhood.

**Study Area:**

Bounded by 63rd St on the north; Main St and some commercial uses on the east; 75th St and some commercial uses on the south; and Woodward Ave on the west. Neighborhood is mostly made up of single family and multi-family homes. There are other uses within the neighborhood including some commercial and office uses on the border of the neighborhood, particularly on the south side and some along Main St. Downers Grove South High School is located to the north, Kingsley Elementary School, and six parks are also located within the neighborhood. This contributes to a number of activities and uses within the neighborhood adding to traffic volumes.

Comprehensive evaluation of existing conditions in the neighborhood through extensive field investigation and observation of the transportation system. Inventoried all signs and striping. Observed operations in the neighborhood of two schools multiple times. Performed daily traffic counts and speed surveys at forty-eight locations in the neighborhood during two weekdays last spring. Vehicle, pedestrian, and bicycle counts at eighteen intersections. Collected and reviewed various transportation data, most importantly including historical crash data in the neighborhood.

Study considers issues such as adequacy of traffic control at intersections, pedestrian and bicycle safety, facilities and accommodations within the neighborhood, roadway traffic volumes, and vehicle speeds within the neighborhood.

**Project Findings:**

- Traffic volumes are within the national standards.
- Roads and intersections are all operating at good levels of service and are generally operating well. With the two schools, particularly the high school, there is some spot congestion at the intersections around the school. This is inherent with all schools given fixed start and end times. The congestion only lasts for about 20 minutes in the morning and 20 minutes in the afternoon. Outside of that, both schools function well.
- Crash data on internal neighborhood streets indicates very few accidents over the past three years (2018, 2019, 2020). The neighborhood averaged less than 15 accidents per year, and very few intersections had more than one accident per year in any location.
- Speeds generally are higher than expected above posted speed limits

**Preliminary Recommendations:**

- Provide some form of traffic control: either a two-way stop, one-way stop, all-way stop or traffic signal at all of the intersections within the neighborhood. Yield signs are confusing to most people. The number of intersections under all-way stop sign control is proposed to increase from eleven to seventeen.
- Additional signage and striping recommended to further mitigate speeds in the neighborhood.
- Reduce the posted speed limit on Dunham Rd from 30 mph to 25 mph so the entire section of Dunham is 25 mph.

## DRAFT

- Establish 20 mph park zones along several of the parks.
- Install 20 mph school speed limit signs on Powell St. between Norfolk & Palmer.
- Install new speed limit signs and/or add yellow borders along the existing speed limit signs. Look to see where speed limit signs can be added in the neighborhood for reinforcement.
- Pedestrian Enhancements: Look to add and replace crosswalks within the neighborhood with high visibility ladder style crosswalks at several intersections, many where all-way stops are going and around higher pedestrian activity areas such as parks and schools. Add school and park signs at select intersections. Work with DuPage County to install countdown pedestrian traffic signals at all of the traffic signals that border the neighborhood.
- Bicycle Enhancements: Designate 71st St. as a neighborhood bike route, adding sharrow pavement markings on both sides of the road. Install more bike route signs on the designated bike routes. Consider designating Norfolk St. between Springside Ave. & Barrett St. as the neighborhood bike route.
- Install Traffic Calming Measures: Double yellow centerline pavement markings on Prentiss Dr. & 71st St. Install curb extensions at Norfolk St. & Powell St. by Kingsley School. Install edge of pavement lines along both sides of 71st St. Use of speed monitors and enforcement.

**Next Step:**

Compile and evaluate comments received at the TaP meeting. Produce a revised study and present to the Village Council, then implement recommendations as approved by the Village Council.

Staff received 30 responses to resident notification letters or posting of the agenda with 27 in favor or requesting additional items for consideration, and 3 opposed due to unnecessary and excessive proliferation of signs.

A specific request was for an All-Way stop to be included for the intersection of Carpenter St at Palmer St. Staff reviewed this request and agrees that this location should be recommended for an All-Way stop.

Many residents were concerned about enforcement to address speeding within the study area. Several resident concerns were in regards to the County roadways, and Village staff will work with County to address concerns.

There were several speed concerns submitted about Bolson Dr. on a segment that was not included in the original data collection effort. Additional traffic counts are being performed and that data will be included in the final report.

**CHAIRMAN CARTER OPENED DISCUSSION AMONGST THE COMMISSION**

Chairman Carter: There had been discussion at the high school about doing a right-in, right-out on 63rd St but he did not see that in this study. Mr. Tuman stated that this study focused on the residential areas within the boundary limits. The recommendations from the previous safety study have either been implemented or continue to be pursued by District 99 and the Village.

## DRAFT

Commissioner Heverin: Asked when the studies were conducted and what the time period was. Mr. Werthmann stated most of the counts were conducted over three weeks in May 2022.

Commissioner Lincoln: Asked how the 15 crashes per year in the neighborhood compares to other neighborhoods in the Village. Mr. Werthmann stated that for over 100 intersections in the neighborhood, the number of crashes is very low.

### **CHAIRMAN CARTER OPENED UP THE PUBLIC COMMENT PERIOD**

#### **PUBLIC COMMENT ON FILE #13-22**

Jerry Prybycien of 6611 Springside

- Concerned about speeding, and stop signs, especially after South High gets out of school.
- Parking on streets is not patrolled.
- Requests enforcement.

Bob Falli of Camden Rd

- Requests speed and stop sign enforcement at Camden & Devereux.

Andrew Agustin of 7116 Dexter

- Concern: Traffic light at Main St & Dunham. Requests lower speed limit and flashing warning light, and signal warning sign. Concerned about LED signal lights and snow coverage on signal lights.

Kevin Gryl of 1850 Bolson Dr

- Requests speed enforcement on Bolson, 1800 block to Woodward.
- Requests timing of traffic signal at 63rd & Springside be adjusted

Haran Rashes of 1042 Pinewood

- Requests speed enforcement on Main Street and pedestrian crossing at Dunham.

Joey Avram of 6801 Powell

- Requests perpendicular crosswalks at 68th & Powell.

Kelly Burton of 63rd & Powell

- Concerned about crashes at 63rd & Powell or Middaugh. Requests left turn lanes.

Debbie Martin 6538 Main St

- Requests slowing of traffic on Palmer, 68th & Main St, and lower speed limit on Main St.

Holly Fiala of 1027 Claremont

- Concerned about S-curve location and hazard for pulling out from Claremont onto Main.

Michael Meyer of 1016 Claremont

- Concerned about S-curve on Main St and pedestrian safety crossing Main St.
- Requests pedestrian activated crossing for Main St crossing to McCollum Park and lower speed limit on Main St.

## DRAFT

Connie Ivan of 7206 Ticonderoga

- Concerned about Devereux & 75th by Access Medical Center. Requests no parking from Borman to 75th St.
- Requests change to LED street lights for better visibility at night at the corner of 75th & Deveraux.

Sue Prybycien of 6611 Springside

- Not in favor of more signage.

Rich Bennema of 1825 Sturbridge

- Opposed to all excessive signage and requests limited and targeted adjustments, if anything.
- Requests review and analysis of past improvements prior to placing more signage.

### **CHAIRMAN CARTER CLOSED THE PUBLIC COMMENT**

### **CHAIRMAN CARTER OPENED DISCUSSION AMONGST THE COMMISSION**

Commissioner McDonough: Asked if Village is allowed to add enhancements to County ROW or traffic signals. Mr. Tuman answered this is not allowed but we will discuss requests with county staff.

Commissioner Shiliga: Supports changes. Asked what is expected outcome when moving from yield to stop signs. Mr. Tuman reported that stop signs provide positive right-of-way control. Mr. Werthmann indicated it provides benefits to pedestrians and bicyclists.

Commissioner Novak: Discussed stop signs are safer than yield signs for pedestrians and bicyclists, and that costs of signage is less expensive than other options.

Commissioner Heverin: Asked if the entire traffic study is recommended, what is the number of total new stop signs. Mr. Tuman reported that the preliminary count is 68.

Commissioner O'Malley: Asked about potentially splitting the neighborhood into smaller zones to determine needs. Mr. Tuman stated that recommendations in the study are specific to locations, even though the study area was larger than previous studies.

Commissioner Lincoln: Asked about intent to convert all yields to stops. Concerned about the cost of additional stop signs. Asked about Main St. pedestrian crossing concerns and bike routes. Mr. Tuman indicated conversion to stops from yields is the way the Village is progressing, and will discuss Main St. concerns with the County.

Commissioner Carter: Concerned about resident requests for enforcement. Does not know that several stop signs are the answer to their concerns. Interested in County issues including LED signal heads and Main Street pedestrian crossing.

DRAFT

Commissioner Heverin: Asked how communication with PD occurs regarding resident concerns. Mr. Tuman explained that concerns are discussed at staff level and coordination meetings.

Commissioner Lincoln: Existing crosswalk on Main St to the park is a concern and would like to see it addressed with the County. Inclined to vote for the plan as a whole, but concerned about the size of the plan and has some reservations about signage at cul-de-sacs.

Commissioner Novak: Points out that TaP Commission is a recommending body and Council makes final vote on what is implemented. Mentioned that it's presently difficult to fully staff police patrols.

Chairman Carter called for a motion.

**WITH RESPECT TO FILE #13-22, COMMISSIONER SHILIGA MOVED TO MAKE A MOTION TO RECOMMEND THE PROPOSED TRAFFIC CONTROL MODIFICATIONS IN NEIGHBORHOOD TRAFFIC STUDY #8 INCLUDING THE ADDITION OF AN ALL-WAY STOP AT CARPENTER ST. & PALMER ST. TO VILLAGE COUNCIL. SECONDED BY COMMISSIONER HEVERIN.**

**IN FAVOR: CHAIRMAN CARTER & COMMISSIONERS: LINCOLN, O'MALLEY, SHILIGA, HEVERIN, MCDONOUGH**

**NOT IN FAVOR: COMMISSIONER NOVAK**

**THE MOTION PASSED 6:1.**

**DISCUSSION OF OLD BUSINESS**

Chairman Carter was presented a certificate of recognition for over 10 years of service on the Transportation and Parking Commission as he is stepping down.

**COMMUNICATIONS**

No communications at this time.

**COMMISSIONER MCDONOUGH MOVED TO ADJOURN THE MEETING. COMMISSIONER NOVAK SECONDED THE MOTION. ALL IN FAVOR.**

**Chairman Carter adjourned the meeting at 8:30 P.M.**

Respectfully submitted,

/s/ Andrea Banke  
Recording Secretary