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### VILLAGE OF DOWNERS GROVE Report for the Village Council Meeting

SUBJECT:	SUBMITTED BY:
Adoption of Traffic Control Amendments in Neighborhood Traffic Study Area 4	Nan Newlon Director of Public Works

#### **SYNOPSIS**

An ordinance has been prepared to amend sections of the Municipal Code concerning the modification to traffic control on various streets within the Neighborhood Traffic Study Area 4, bounded by Ogden Avenue, Main Street, Fairview Avenue and Warren/Rogers Avenue.

#### STRATEGIC PLAN ALIGNMENT

The goals for 2011-2018 identified *Top Quality Infrastructure*.

#### **FISCAL IMPACT**

N/A

#### RECOMMENDATION

Approval on the July 7, 2015 active agenda.

#### **BACKGROUND**

The Village initiated this fourth neighborhood-wide traffic study in the Fall of 2014. (<u>Final Draft Report</u>). The purpose of the study was to address traffic and pedestrian issues on a neighborhood basis to improve safety. Historically, concerns have been expressed by residents within this area related to speeding, cut-through traffic and conflicts between pedestrian and motorists issues, arising from having a mix of uses including residential, commercial, grade schools, public parks and a commuter rail station.

The scope of the study included significant data collection which occurred during the Fall of 2014 and included:

- traffic counts on all streets within the study area
- pedestrian counts,
- intersection peak hour counts,
- historical accident reports,
- parking observations, and
- intersection measurements.

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Residents in the neighborhood were kept informed of the progress by means of mailings and postings on the Village's web site. A brochure highlighting the specific goals for the study was developed and included information about the operation of traffic controls and general traffic management information. A neighborhood meeting was held March 19, 2014 at the Public Works Building for the purpose of presenting the preliminary recommendations and soliciting comments from residents of the neighborhood. Approximately 20 people attended the meeting and comments from the meeting were evaluated and the final recommendations were revised accordingly.

The study includes recommendations that were classified as short-term, mid-term, and long-term improvements, depending upon their complexity and cost. The Transportation and Parking Commission voted unanimously to approve the study's short-term recommendations which consist of traffic control amendments to:

- STOP and Yield signs,
- cross-walk markings,
- the addition of the park zone.

Under the recommended plan, 105 of 107 non-signalized intersections will be under stop sign control. Currently 6 intersections have yield control and 17 intersections have no traffic control. In most cases, a stop sign will be provided at least every other cross road along the local roads. This will help to deter cutthrough traffic and reduce neighborhood speeding. In addition, four intersections are planned to be upgraded to all-way stop control, and 1 intersection will be converted from all-way stop control to 2-way stop control.

The specific amendments include:

### 1. STOP and Yield Signs

- Replace 4-way STOP with 2-way STOP on Highland and Chicago
- Replace 2-way STOP with 4-way STOP at:
  - o Highland and Franklin
  - o Highland and Warren
  - Stanley and Grant
  - o Douglas and Chicago
- Replace YIELD with STOP at:
  - o Sherman at Elm
  - Lincoln at Stanley
  - o Lincoln at Sterling
  - o Linden at Franklin
  - o Douglas at Sherman
  - o Douglas at Austin
- Replace No Control with 1-way STOP at:
  - o Highland Ct at Highland Ave
  - Sherman at Highland
  - o Bryan at Lincoln
  - o Statton at Lincoln
  - Birch at Elm
  - o Prospect at Lincoln
  - Debolt at Prairie
  - Gierz at Linden
  - Wilson at Linden

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- o Sterling at Sherman
- Otis at Douglas
- o Lincoln at Douglas
- o Indianapolis at Douglas
- o Elm at Warren
- Replace No Control with 2-way STOP on Prospect at Sherman

#### 2. Park Zone Speed Limit

- Install 20 MPH Park Zone speed limit sign on south side of Prairie Avenue east of Bryan Place
- Install 20 MPH Park Zone speed limit sign on east side of Washington Street north of Franklin Street

#### 3. Other Short-Term Recommendations

The neighborhood has several dedicated school crossings and school and park zones. The study found that these traffic control devices are generally well distributed and located appropriately; however, they recommended the following changes to enhance pedestrian safety:

### Douglas/Chicago

- Install school crossing warning signs on north side of Chicago Avenue east of Douglas Road, the south side of Chicago Avenue west of Douglas Road and the west side of Douglas Road north of Chicago Avenue.
- Remove school crossing warning signs on Chicago Avenue.
- Install high-visibility crosswalks on north, south and west legs of the intersection.

#### Douglas Road

• Replace school crossing warning sign on Douglas Road south of Wilson Street with signs meeting current standards.

#### Fairview/Lincoln

- Relocate the northbound school crossing sign on Fairview Avenue further south.
- Replace southbound school crossing sign on Fairview Avenue and relocate to the south side of the intersection.
- Replace eastbound school crossing sign on Lincoln Street.

#### Fairview/Prairie

- Relocate southbound school crossing sign on Fairview Avenue further north.
- Replace school crossing signs on Fairview Avenue.

#### Warren Avenue

 Remove In-Street Pedestrian Crossing sign located between Washington Street and Highland Avenue.

#### 4. Proposed Long-Term Improvements

Following implementation of the short-term recommendations, follow-up traffic speed and volume counts will be conducted. If there are streets or areas where higher than average speeding or cut-through

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traffic persist, staff will work with the neighborhood residents and the TAP Commission with respect to further recommendations.

### **A**TTACHMENTS

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#### **AN ORDINANCE AMENDING TRAFFIC PROVISIONS**

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County,

Illinois, as follows: (Additions are indicated by shading/underline; deletions by strikeout):

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

#### 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):

Bates Place, throughout its length.

Blackburn Avenue, between 75th and 73rd Streets.

Braemoor Drive, throughout its length.

Breasted Avenue, throughout its length.

Brookbank Road, between Gilbert Street and Maple Avenue.

Clyde Drive, throughout its length.

Cumnor Road, at Whitlock Park.

Elm Street, at Wallingford Park.

Elm Street, at Washington Park.

Fairview Avenue "frontage" Road south of 75th Street to Florence Avenue.

Forest Avenue, between Franklin Street and Prairie Avenue.

Franklin Street, at Prince Pond.

Franklin Street, at Washington Park.

Grand Avenue, between 75th and 73rd Streets.

Hartford Road, throughout its length.

Hathaway Lane, throughout its length.

Linden Place, between Chicago Avenue and Austin Street.

Linscott Avenue. at Prince Pond.

Loomes Avenue, throughout its length.

Mistwood Court, throughout its length.

Mistwood Lane, throughout its length.

Mistwood Place, throughout its length.

Nash Street, throughout its length.

Park Avenue, at Randall Park.

#### Prairie Avenue, at Washington Park.

Prideham Street, throughout its length.

Randall Road, at Randall Park.

Sheldon Street, between Fairview Avenue and Cumnor Road.

Stair Street, throughout its length.

Stockley Road, throughout its length.

Trent Road, throughout its length.

Turvey Road, throughout its length.

Venard Road, at Doerhoefer Park.

Washington Street, between 59th Street and 61st Street.

#### Washington Street, at Washington Park.

Webster Place, throughout its length.

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Wells Street, throughout its length.

Widden Avenue, throughout its length.

York Road, throughout its length.

59th Place, throughout its length.

60th Place, throughout its length.

73rd Street, from Blackburn Avenue to Fairview Avenue.

73rd Street, from Fairmount Avenue to Hartford Road.

74th Street. from Fairview Avenue to Grand Avenue.

74th Street, from Hartford Road to York Road.

75th Street "frontage" Road, from Grand Avenue to Blackburn Avenue.

(Ord. No. 905, § 1; Ord. No. 1428, § 1; Ord. No. 1581, § 5; Ord. No. 2071 § 4; Ord. No. 2333, § 1; Ord. No. 2550, § 1; Ord. No. 2682, § 1.)

NOTE: For state law authorizing Village to determine maximum speed limits, see Ill. Comp. Stat., ch. 625, § 5/11-604.

#### Section 2. That Section 14.63 is hereby amended to read as follows:

#### 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".

Austin Street. At the northeast and southwest corners of the intersection of Austin Street and Douglas Road, regulating both eastbound and westbound traffic on Austin 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.

Belden Avenue. At the southeast corner of the intersection of Belden Avenue and Curtiss Street, regulating northbound traffic on Belden Avenue.

Brookside Lane. At the northeast corner of the intersection of Venard Road and Brookside Lane, regulating eastbound traffic on Brookside Lane.

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

Burlington Avenue. At the northwest corner of the intersection of Burlington Avenue and Washington Street, regulating westbound traffic on Burlington Avenue.

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

Centre Circle. At the northwest corner of the intersection of Centre Circle and Brook Drive, regulating southbound traffic on Brook Drive.

Claremont Court. At the northwest and southeast corners of the intersection of Claremont Court and Claremont Drive, regulating southbound and northbound traffic on Claremont Court.

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

Coralberry Lane. At the northeast corner of the intersection of Coralberry Lane and Downers Drive, regulating westbound traffic on Coralberry Lane.

Douglas Road. At the northwest corner of the westerly intersection of Sherman Street and Douglas Road and the southeast corner of the easterly intersection of Sherman Street and Douglas Road, regulating northbound and southbound traffic on Douglas Road.

Douglas Road. At the northwest and southeast corners of the intersection of Douglas Road and 40th Street, regulating northbound and southbound traffic on Douglas Road.

Drove Avenue. At the northeast corner of the intersection of Belle Aire Lane and Drove Avenue,

regulating westbound traffic on Drove Avenue.

Elizabeth Lane. At the northeast and southwest corners of the intersection of Elizabeth Lane and Knottingham Lane, regulating both eastbound and westbound traffic on Elizabeth Lane.

Fairmount Avenue. At the southeast and northwest corners of the intersection of Fairmount Avenue at 62nd Street, regulating northbound and southbound traffic on Fairmount Avenue.

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

Farley Place. At the southwest corner of the intersection of Farley Place and Park Avenue, regulating eastbound traffic on Farley Place.

Hillcrest Road. At the southeast corner of the intersection of Hillcrest Road and 61st Street, regulating northbound traffic on Hillcrest Road.

Lincoln Street, at the northwest and southwest corners of Stanley Avenue and Lincoln Street, regulating westbound and eastbound traffic on Lincoln Street.

Linden Place. At the southeast and northwest corners of the intersection of Linden Place and Franklin Street, regulating southbound and northbound traffic respectively on Linden Place.

Lyman Avenue. At the southwest and northwest corners of the intersection of Lyman Avenue at 62nd Street, regulating northbound and southbound traffic on Lyman Avenue.

Lyman Avenue. At the southeast corner of the southerly intersection of Lyman Avenue and 72nd Street, regulating northbound traffic on Lyman Avenue.

Lyman Avenue. At the northwest and southeast corners of the intersection of Lyman Avenue and Claremont Drive, regulating southbound and northbound traffic on Lyman Avenue.

Meadowcrest Drive. At the northwest corner of the intersection of Meadowcrest Drive and Claremont Drive, regulating southbound traffic on Meadowcrest Drive.

Meadowcrest Drive. At the northwest and southeast corners of the intersection of Meadowcrest Drive and Valley View Drive, regulating northbound and southbound traffic on Meadowcrest Drive.

Middaugh Avenue. At the northwest and southeast corners of the intersection of Middaugh Avenue and Blanchard Street, regulating both northbound and southbound traffic on Middaugh Avenue.

Osage Avenue. At the northwest and southeast corners of Osage Avenue and Claremont Drive, regulating southbound and northbound traffic on Osage Avenue.

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

Parkview Drive. At the northwest corner of Parkview Drive and Claremont Drive, regulating southbound traffic on Parkview Drive.

Pershing Avenue. At the northwest corner of Pershing Avenue and Warren Avenue, regulating southbound traffic on Pershing Avenue.

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

Pershing Avenue. At the northwest and southeast corners of the intersection of Grant Avenue and Pershing Avenue regulating northbound and southbound traffic on Pershing Avenue.

Saratoga Avenue. At the northwest and southeast corners of the intersection of 39th Street and Saratoga Avenue and 67th Street and Saratoga Avenue, regulating northbound and southbound traffic on Saratoga Avenue.

Sherman Street. At the northeast corner of the intersection of Sherman Street and Elm Street regulating westbound traffic on Sherman Street.

Sherman Street. At the northeast corner of Saratoga Avenue and Sherman Street, regulating-westbound traffic on Sherman Street.

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

Stonewall Avenue. At the northwest corner of Stonewall Avenue and Warren Avenue, regulating southbound traffic on Stonewall Avenue.

Stonewall Avenue. At the northwest and southeast corners of the intersection of Stonewall Avenue and Oxnard Drive, regulating both northbound and southbound traffic on Stonewall Avenue; and at the southeast corner of the intersection of Stonewall Avenue and Bolson Drive, regulating northbound traffic on Stonewall Avenue.

Summit Street. At the northeast corner of the intersection of Summit Street and Carpenter Street, regulating westbound traffic on Summit Street.

Summit Street. At the southwest and northeast corners of the intersection of Summit Street and Fairmount Avenue, regulating both eastbound and westbound traffic on Summit Street; and at the southwest and northeast corners of the intersection of Summit Street and Park Avenue, regulating both eastbound and westbound traffic on Summit Street.

Summit Street. At the southwest and northeast corners of the intersection of Summit Street and Benton Avenue, regulating both eastbound and westbound traffic on Summit Street.

Summit Street. At the southwest corner of the intersection of Summit Street and Blodgett Avenue, regulating eastbound traffic on Summit Street.

Thatcher Road, At the northeast corner of the intersection of Hitchcock Avenue and Thatcher Road regulating northbound traffic on Thatcher Road.

Venard Road. At the northwest corner of the intersection of Venard Road and 35th Street, regulating southbound traffic on Venard Road.

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

Woodward Avenue. At the northwest corner of Woodward Avenue and Warren Avenue, regulating southbound traffic on Woodward Avenue.

40th Street. At the southwest and northeast corners of the intersection of 40th Street, Sterling Road, Glendenning Road and Earlston Road regulating eastbound and westbound traffic on 40th Street at such intersections.

60th Street. At the northeast and southwest corners of the intersection of 60th Street and Grand Avenue, regulating eastbound and westbound traffic on 60th Street.

62nd Place. At the northeast and southwest corners of the intersection of 62nd Place and Carpenter Street, regulating westbound traffic on 62nd Place.

65th Street. At the northeast and southwest corners of the intersection of 65th Street and Fairmount Avenue, regulating both eastbound and westbound traffic on 65th Street.

68th Street. At the northeast corner of the intersection of 68th Street and Fairmount Avenue, regulating westbound traffic on 68th Street.

72nd Street. At the southwest corner of the northerly intersection of 72nd Street and Lyman Avenue, regulating eastbound traffic on 72nd Street.

In compliance with such "yield right-of-way" signs, the driver of each vehicle approaching a yield right-of-way sign shall reduce the speed of such vehicle to not more than twenty miles per hour, and shall yield the right of way to vehicles which have entered the intersections or which are approaching so closely on such streets as to create an immediate hazard. (Ord. No. 1028, § 2; Ord. No. 1032, §§ 1, 2, 3; Ord. No. 1673, § 3; Ord. No. 1718, § 3; Ord. No. 1720, § 3; Ord. No. 1723, § 3; Ord. No. 1761, § 3; Ord. No. 1781, § 5; Ord. No. 1818, § 3; Ord. No. 1963, § 3; Ord. No. 2023, § 4; Ord. No. 2025, § 1; Ord. No. 2049, § 2; Ord. No. 2092, § 2; Ord. No. 2095, § 2; Ord. No. 2104, § 5; Ord. No. 2123, § 2; Ord. No. 2348, § 4; Ord. No. 2381, § 2; Ord. No. 2429, § 3; Ord. No. 2460, § 2; Ord. No. 2498, §§ 2, 3; Ord. No. 2570, § 3; Ord. No. 2726, § 2; Ord. No. 2750, § 2; Ord. No. 2948, § 2; Ord. No. 2995, § 2; Ord. No. 3049, §§ 2, 3; Ord. No. 3117, § 3; Ord. No. 3222, § 3; Ord. No. 3328, § 2; Ord. No. 3346, § 4.)

#### Section 3. That Section 14.80 is hereby amended to read as follows:

#### 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:

Aldrich Place. At the southwest corner of the intersection of Aldrich Place and Woodward Avenue, to direct vehicular traffic proceeding easterly on Aldrich Place to come to a full stop before proceeding across or into Woodward Avenue.

Applegate Avenue. At the northeast corner of the intersection of Applegate Avenue and Old Main Street, to direct vehicular traffic proceeding westerly on Applegate Avenue to come to a full stop before proceeding across or into Old Main Street.

<u>Austin Street</u>. At the northeast and southwest corners of the intersection of Austin Street and Douglas Road, to direct traffic proceeding easterly or westerly on Austin Street to come to a full stop before proceeding across or into Douglas Road.

*Banchory Court.* At the northeast corner of the intersection of Banchory Court and Lee Avenue, regulating westbound traffic on Banchory Court.

Barneswood Drive. At the northeast corner of the intersection of Barneswood Drive and Venard Road, regulating westbound traffic on Barneswood Drive.

*Barrett Street*. At the northwest corner of the intersection of Barrett Street and Norfolk Street to direct traffic proceeding southerly on Barrett Street to come to a full stop before proceeding across or into Norfolk Street.

*Barrett Street.* At the northwest and southeast corners of the intersection of Barrett Street and 71st Street, to direct vehicular traffic proceeding southerly and northerly on Barrett Street to come to a full stop before proceeding across or into 71st Street.

*Belden Avenue*. At the northwest corner of the intersection of Belden Avenue and Maple Avenue, to direct vehicular traffic proceeding southerly on Belden Avenue to come to a full stop before proceeding across or into Maple Avenue.

*Benton Avenue*. At the southeast corner of the intersection of Benton Avenue and Maple Avenue, to direct vehicular traffic proceeding northerly on Benton Avenue to come to a full stop before proceeding across or into Maple Avenue.

*Birch Avenue*. At the northeast corner of the intersection of Birch Avenue and Washington Street, to direct vehicular traffic proceeding westerly on Birch Avenue to come to a full stop before proceeding across or into Washington Street.

Birch Avenue. At the southwest corner of the intersection of Birch Avenue and Elm Street, regulating eastbound traffic on Birch Avenue.

Blackburn Avenue. At the southwest corner of the intersection of Blackburn Avenue and Fairview Avenue, to direct vehicular traffic proceeding easterly on Blackburn Avenue to come to a full stop before proceeding across or into Fairview Avenue.

*Blackburn Avenue*. At the northwest corner of the intersection of Blackburn Avenue and Claremont Drive, to direct traffic proceeding southerly on Blackburn Avenue to come to a full stop before proceeding across or into Claremont Drive.

*Blackburn Avenue*. At the southeast corner of the intersection of Blackburn Avenue and Claremont Drive, to direct traffic proceeding northerly on Blackburn Avenue to come to a full stop before proceeding across or into Claremont Drive.

Blanchard Street. At the northeast and southwest corners of the intersection of Blanchard Street and Webster Street, to direct traffic proceeding easterly or westerly on Blanchard Street to come to a full stop before proceeding across or into Webster Street.

Blanchard Street. At the northeast corner of the intersection of Blanchard Street and Dunham Road, to direct vehicular traffic proceeding westerly on Blanchard Street to come to a full stop before proceeding across or into Dunham Road.

*Blodgett Avenue*. At the southeast corner of the intersection of Blodgett Avenue and 59th Street, to direct vehicular traffic proceeding northerly on Blodgett Avenue to come to a full stop before proceeding across or into 59th Street.

*Blodgett Avenue*. At the southeast corner of the intersection of Blodgett Avenue and Maple Avenue, to direct vehicular traffic proceeding northerly on Blodgett Avenue to come to a full stop before proceeding across or into Maple Avenue.

*Bolson Drive*. At the southwest corner of the intersection of Bolson Drive and Dunham Road, to direct vehicular traffic proceeding easterly on Bolson Drive to come to a full stop before proceeding across or into Dunham Road.

*Bolson Drive*. At the northeast corner of the intersection of Bolson Drive and Woodward Avenue, to direct vehicular traffic proceeding westerly on Bolson Drive to come to a full stop before proceeding across or into Woodward Avenue.

*Brookbank Road.* At the southeast and northwest corners of the intersection of Brookbank Road and 59th Street, to direct vehicular traffic proceeding northerly and southerly on Brookbank Road to come to a full stop before proceeding across or into 59th Street.

*Brookbank Road.* At the southeast corner of the intersection of Brookbank Road and Gilbert Avenue, to direct vehicular traffic proceeding northerly on Brookbank Road to come to a full stop before proceeding across or into Gilbert Avenue.

*Brookbank Road.* At the southeast and northwest corners of the intersection of Brookbank Road and Maple Avenue, to direct vehicular traffic proceeding northerly and southerly on Brookbank Road to come to a full stop before proceeding across or into Maple Avenue.

*Brookside Drive.* At the southwest corner of the intersection of Brookside Drvie and Fairview Avenue, to direct vehicular traffic proceeding easterly on Brookside Drive to come to a full stop before proceeding across or into Fairview Avenue.

*Brookside Lane.* At the southwest corner of the intersection of Brookside Lane and Saratoga Avenue, to direct vehicular traffic proceeding easterly in Brookside Lane to come to a full stop before proceeding into Saratoga Avenue.

*Bryan Place*. At the northwest corner and the southeast corner of the intersection of Bryan Place and Franklin Street, to direct vehicular traffic proceeding northerly and southerly on Bryan Place to come to a full stop before proceeding across or into Franklin Street.

*Bryan Place*. At the northwest corner of the intersection of Bryan Place and Rogers Street, to direct vehicular traffic proceeding southerly on Bryan Place to come to a full stop before proceeding across or into Rogers Street.

*Bryan Place*. At the northwest corner of the intersection of Bryan Place and Grant Street, to direct vehicular traffic proceeding southerly on Bryan Street to come to a full stop before proceeding across or into Grant Street.

# Bryan Place. At the northwest corner of the intersection of Bryan Place and Lincoln Street, regulating southbound traffic on Bryan Place.

*Buckingham Place*. At the southwest corners of the intersection of Buchingham Place and Fairview Avenue, to direct vehicular traffic proceeding easterly on Buchingham Place to come to a full stop before proceeding across or into Fairview Avenue.

*Bunning Drive*. At the southwest corner of the intersection of Bunning Drive and Fairview Avenue, to direct vehicular traffic proceeding easterly on Bunning Drive to come to a full stop before proceeding across or into Fairview Avenue.

*Burlington Avenue.* At the northeast corner of the intersection of Burlington Avenue and Maple Avenue, to direct vehicular traffic proceeding westerly on Burlington Avenue to come to a full stop before proceeding across or into Maple Avenue.

*Burlington Avenue*. At the southwest corner of the intersection of Burlington Avenue and Fairview Avenue, to direct vehicular traffic proceeding easterly on Burlington Avenue to come to a full stop before proceeding across or into Fairview Avenue.

Burlington Avenue. At the northeast and southwest corners of the intersection of Burlington Avenue and Washington Street, to direct vehicular traffic proceeding westerly and easterly on Burlington Avenue to come to a full stop before proceeding across or into Washington Street.

Butterfield Frontage Road. At the southwest corner of the intersection of Butterfield Frontage Road and Downers Drive to direct vehicular traffic proceeding easterly in Butterfield Frontage Road to come to a full stop before proceeding into Downers Drive.

Camden Road. At the intersection of Camden Road and Devereux Road, to direct traffic proceeding northeasterly or southwesterly on Devereux Road or southerly on Camden Road, to come to a full stop before proceeding across or into said intersection.

Carpenter Street. At the northwest and southeast corners of the intersection of Blanchard Street and Carpenter Street, to direct traffic proceeding northerly and southerly in Carpenter Street to come to a full stop before proceeding across or into Blanchard Street.

Carpenter Street. At the southeast and northwest corners of the intersection of Carpenter Street and 59th Street, to direct vehicular traffic proceeding northerly and southerly on Carpenter Street to come to a full stop before proceeding across or into 59th Street.

Carpenter Street. At the southeast corner of the intersection of Carpenter Street and Gilbert Avenue, to direct vehicular traffic proceeding northerly on Carpenter Street to come to a full stop before proceeding across or into Gilbert Avenue.

*Chase Avenue.* At the northwest corner of the intersection of Chase Avenue and Curtiss Street, to direct vehicular traffic proceeding southerly on Chase Avenue to come to a full stop before proceeding across or into Curtiss Street.

*Chicago Avenue*. At the northeast and southwest corners of the intersection of Chicago Avenue and Fairview Avenue, to direct vehicular traffic proceeding westerly and easterly on Chicago Avenue to come to a full stop before proceeding across or into Fairview Avenue.

*Chicago Avenue*. At the northeast and southwest corners of the intersection of Chicago Avenue and Main Street, to direct vehicular traffic proceeding westerly and easterly on Chicago Avenue to come to a full stop before proceeding across or into Main Street.

*Chicago Avenue*. At the southwest corner of the intersection of Chicago Avenue and Cumnor Road, to direct traffic proceeding in an easterly direction on Chicago Avenue to come to a full stop before proceeding into or across Cumnor Road.

Claremont Drive. At the southwest corner of the intersection of Claremont Drive and Fairview Avenue, to direct vehicular traffic proceeding easterly on Claremont Drive to come to a full stop before proceeding across or into Fairview Avenue.

Concord Drive. At the southwest corner of the intersection of Concord Drive and Dunham Road, to direct vehicular traffic proceeding easterly on Concord Drive to come to a full stop before proceeding across or into Dunham Road.

*Concord Drive*. At the northeast corner of the intersection of Concord Drive and Woodward Avenue, to direct vehicular traffic proceeding westerly on Concord Drive to come to a full stop before proceeding across or into Woodward Avenue.

Coralberry Lane. At the southwest corner of the intersection of Coralberry Lane and Venard Road, to direct vehicular traffic proceeding easterly in Coralberry Lane to come to a full stop before proceeding into Venard Road.

*Cornell Avenue*. At the northwest corner of the intersection of Cornell Avenue and Warren Avenue, to direct vehicular traffic proceeding southerly on Cornell Avenue to come to a full stop before proceeding across or into Warren Avenue.

Cornell Avenue. At the northwest and southeast corners of the intersection of Cornell Avenue and Prairie Avenue, to direct vehicular traffic proceeding southerly and northerly on Cornell Avenue to come to a full stop before proceeding across or into Prairie Avenue.

*Cross Street.* At the northwest and southeast corners of the intersection of Cross Street and Haddow Street, to direct traffic proceeding northerly or southerly on Cross Street to come to a full stop

before proceeding across or into Haddow Street.

Cumnor Road. At the northwest corner of the intersection of Cumnor Road and Burlington Avenue, to direct traffic proceeding southerly on Cumnor Road to come to a full stop before proceeding into Burlington Avenue.

Curtiss Street. At the northeast corner of the intersection of Curtiss Street and Walnut Avenue, to direct vehicular traffic proceeding westerly on Curtiss Street to come to a full stop before proceeding across or into Walnut Avenue.

*Curtiss Street.* At the southwest corner of the intersection of Curtiss Street and Cornell Avenue, to direct traffic proceeding easterly on Curtiss Street to come to a full stop before proceeding into Cornell Avenue.

*Curtiss Street*. At the northeast corner of the intersection of Curtiss Street and Carpenter Street, to direct vehicular traffic proceeding westerly on Curtiss Street to come to a full stop before proceeding across or into Carpenter Street.

*Curtiss Street*. At the southwest and northwest corners of the intersection of Curtiss Street and Forest Avenue, to direct vehicular traffic proceeding easterly and westerly on Curtiss Street to come to a full stop before proceeding across or into Forest Avenue.

*Curtiss Street.* At the southwest corner of the intersection of Curtiss Street and Mochel Drive, to direct vehicular traffic proceeding easterly on Curtiss Street to come to a full stop before proceeding across Mochel Drive.

*Davis Street*. At the southwest corner of the intersection of Davis Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on Davis Street to come to a full stop before proceeding across or into Fairview Avenue.

Davis Street. At the northeast and southwest corners of the intersection of Davis Street and Douglas Road, to direct vehicular traffic proceeding easterly and westerly on Davis Street to come to a full stop before proceeding across or into Douglas Road.

*Dearborn Parkway.* At the northwest corner of the intersection of Dearborn Parkway and 59th Street, to direct vehicular traffic proceeding southerly on Dearborn Parkway to come to a full stop before proceeding across or into 59th Street.

*Debolt Avenue.* At the northwest corner of the intersection of Debolt Avenue and Prairie Avenue, regulating southbound traffic on Debolt Avenue.

Downers Drive. At the southeast corner of the intersection of Downers Drive and Brook Drive, to direct vehicular traffic proceeding northerly on Downers Drive to come to a full stop before proceeding across or into Brook Drive.

*Downers Drive.* At the northwest corner of the intersection of Downers Drive and Chicago Avenue, to Direct vehicular traffic proceeding southerly on Downers Drive to come to a full stop before proceeding across or into Chicago Avenue.

Douglas Road. At the northwest and southeast corners of the intersection of Wilson Street and Douglas Road, to direct vehicular traffic proceeding southerly and northerly on Douglas Road to come to a full stop before proceeding across or into Wilson Street.

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

*Douglas Road*. At the northwest and southeast corners of the intersection of Douglas Road and Grant Street, to direct vehicular traffic proceeding southerly and northerly on Douglas Road to come to a full stop before proceeding across or into Grant Street.

*Douglas Road*. At the northwest corner of the intersection of Douglas Road and Rogers Street, to direct vehicular traffic proceeding southerly on Douglas Road to come to a full stop before proceeding across or into Rogers Street.

Douglas Road. At the northwest corner of the westerly intersection of Sherman Street and Douglas Road and the southeast corner of the easterly intersection of Sherman Street and Douglas Road,

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#### regulating northbound and southbound traffic on Douglas Road.

Downers Drive. At the southeast and northwest corners of the intersection of Downers Drive and Frontage Road, to direct vehicular traffic proceeding northerly and southerly on Downers Drive to come to a full stop before proceeding across or into Frontage Road.

*Dunham Road.* At the intersection of Dunham Road and 59th Street, to direct traffic proceeding northerly or southerly on Dunham Road or westerly on 59th Street to come to a full stop before proceeding across or into said intersection.

*Earlston Road.* At the southeast corner of the intersection of Earlston Road and 39th Street, to direct vehicular traffic proceeding northerly on Earlston Road to come to a full stop before proceeding across or into 39th Street.

*Eldon Place*. At the northwest corner of the intersection of Eldon Place and 59th Street, to direct vehicular traffic proceeding southerly on Eldon Place to come to a full stop before proceeding across or into 59th Street.

# <u>Elm Street</u>. At the northwest corner of the intersection of Elm Street and Warren Avenue regulating southbound traffic on Elm Street.

*Elm Street*. At the southeast corner of the intersection of Elm Street and 39th Street, to direct vehicular traffic proceeding northerly on Elm Street to come to a full stop before proceeding across or into 39th Street.

*Elm Street*. At the northwest and southeast corners of the intersection of Elm Street and Chicago Avenue, to direct vehicular traffic proceeding southerly and northerly on Elm Street to come to a full stop before proceeding across or into Chicago Avenue.

*Elm Street*. At the northwest and southeast corners of the intersection of Elm Street and Grant Street, to direct vehicular traffic proceeding southerly and northerly on Elm Street to come to a full stop before proceeding across or into Grant Street.

*Elm Street*. At the northwest and southeast corners of the intersection of Elm Street and Rogers Street, to direct vehicular traffic proceeding southerly and northerly on Elm Street to come to a full stop before proceeding across or into Rogers Street.

*Elmore Avenue*. At the southwest corner of the intersection of Elmore Avenue and Lee Avenue, to direct traffic proceeding in an easterly direction on Elmore Avenue to come to a full stop before proceeding across or into Lee Avenue.

*Elmwood Avenue*. At the southeast corners of the intersection of Elmwood Avenue and Maple Avenue, to direct vehicular traffic proceeding northerly on Elmwood Avenue to come to a full stop before proceeding across or into Maple Avenue.

*Elmwood Avenue*. At the northwest corner of the intersection of Elmwood Avenue and Randall Street, regulating southbound traffic on Elmwood Avenue.

Fairmount Avenue. At the northwest corner of the intersection of Fairmount Avenue and 72nd Street, to direct vehicular traffic proceeding southerly on Fairmount Avenue to come to a full stop before proceeding across or into 72nd Street.

Fairmount Avenue. At the southeast corner of the intersection of Fairmount Avenue and Maple Avenue, to direct vehicular traffic proceeding northerly on Fairmount Avenue to come to a full stop before proceeding across or into Maple Avenue.

Fairmount Avenue. At the northwest corner of the intersection of Fairmount Avenue and Oxford Street, to direct traffic proceeding southerly in Fairmount Avenue to come to a full stop before proceeding across or into said intersection.

Florence Avenue. At the southeast corner of the intersection of Florence Avenue and Indianapolis Avenue to direct vehicular traffic proceeding northerly on Florence Avenue to come to a full stop before proceeding into Indianapolis Avenue.

Florence Avenue. At the northwest and southeast corners of the intersection of Florence Avenue and Sheldon Avenue, regulating both northbound and southbound traffic on Florence Avenue.

Florence Avenue. At the southeast corner of the intersection of Florence Avenue and 2nd Street,

regulating the northbound traffic on Florence Avenue.

*Florence Avenue*. At the southeast corner of the intersection of Florence Avenue and Chicago Avenue regulating northbound traffic on Florence Avenue.

*Florence Avenue.* At the northwest corner of the intersection of Florence Avenue and Chicago Avenue regulating southbound traffic on Florence Avenue.

*Forest Avenue.* At the northwest corner of the intersection of Forest Avenue and Curtiss Street, to direct traffic proceeding southerly on Forest Avenue to come to a full stop before proceeding into Curtiss Street.

Forest Avenue. At the northwest corner of the intersection of Forest Avenue and Sherman Street, to direct traffic proceeding southerly on Forest Avenue to come to a full stop before proceeding into Sherman Street.

Forest Avenue. At the northwest corner of Forest Avenue and Warren Avenue, to direct traffic proceeding southerly on Forest Avenue to come to a full stop before proceeding across or into Warren Avenue.

Forest Avenue. At the southeast corner of the intersection of Forest Avenue and Thirty-Ninth Street to direct traffic proceeding northerly on Forest Avenue to come to a full stop before proceeding into Thirty-Ninth Street.

*Forest Avenue*. At the southeast corner of the intersection of Forest Avenue and 41st Street to direct vehicular traffic proceeding northerly on Forest Avenue to come to a full stop before proceeding into 41st Street.

*Forest Avenue.* At the intersection of Forest Avenue and Franklin Street, to direct traffic proceeding northerly or southerly on Forest Avenue or easterly on Franklin Street, to come to a full stop before proceeding across or into said intersection.

Forest Avenue. At the northwest and southeast corners of the intersection of Forest Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly and northerly on Forest Avenue to come to a full stop before proceeding across or into Chicago Avenue.

*Forest Avenue*. At the northwest corner of the intersection of Forest Avenue and Warren Avenue, to direct vehicular traffic proceeding southerly on Forest Avenue to come to a full stop before proceeding across or into Warren Avenue.

*Franklin Street.* At the northeast and southwest corners of the intersection of Franklin Street and Elm Street, to direct traffic proceeding easterly or westerly on Franklin Street to come to a full stop before proceeding across or into Elm Street.

*Franklin Street.* At the northeast and southwest corners of the intersection of Franklin Street and Highland Avenue, to direct traffic proceeding easterly or westerly on Franklin Street to come to a full stop before proceeding across or into Highland Avenue.

*Franklin Street.* At the northeast corner of Oakwood Avenue, regulating westbound traffic on Franklin Street.

*Glen Avenue*. At the northeast corner of the intersection of Lee Avenue and Glen Avenue, regulating westbound traffic on Glen Avenue.

*Gierz Street*. At the southwest and northeast corners of the intersection of Gierz Street and Douglas Road, to direct vehicular traffic proceeding easterly and westerly on Gierz Street to come to a full stop before proceeding into Douglas Road.

Gierz Street. At the northeast and southwest corners of the intersection of Gierz Avenue and Fairview Avenue, to direct vehicular traffic proceeding westerly and easterly on Gierz Avenue to come to a full stop before proceeding across or into Fairview Avenue.

*Gierz Street*. At the southwest corner of the intersection of Gierz Street and Florence Avenue, regulating the eastbound traffic on Gierz Street.

Gierz Street. At the northeast corner of the intersection of Gierz Street and Linden Place, regulating the westbound traffic on Gierz Street.

Glendenning Street. At the southeast and northwest corner of the intersection of Glendenning

Street and 39th Street, to direct vehicular traffic proceeding northerly and southerly on Glendenning Street to come to a full stop before proceeding across or into 39th Street.

*Grand Avenue*. At the southeast corner of the intersection of Grand Avenue and 59th Street, to direct vehicular traffic proceeding northerly on Grand Avenue to come to a full stop before proceeding across or into 59th Street.

*Grand Avenue*. At the intersection of Grand Avenue and 74th Street, to direct traffic proceeding northerly or southerly on Grand Avenue or westerly on 74th Street, to come to a full stop before proceeding across or into said intersection.

*Grand Avenue.* At the southeast corner of the intersection of Grand Avenue and Burlington Avenue, regulating northbound traffic on Grand Avenue.

*Grant Street*. At the southwest corner of Lee Avenue, regulating eastbound traffic on Grant Street.

*Grant Street.* At the northeast corner of Downers Drive, regulating westbound traffic on Grant Street.

*Grant Street.* At the northeast corner and the southwest corner of the intersection of Grant Street and Cumnor Road, to direct vehicular traffic proceeding easterly or westerly on Grant Street to come to a full stop before proceeding across or into Cumnor Road.

*Grant Street*. At the southwest and northeast corners of the intersection of Grant Street and Fairview Avenue, to direct vehicular traffic proceeding easterly and westerly on Grant Street to come to a full stop before proceeding across or into Fairview Avenue.

*Grove Street*. At the northeast corner of the intersection of Grove Street and Carpenter Street, to direct vehicular traffic proceeding westerly on Grove Street to come to a full stop before proceeding across or into Carpenter Street.

*Grove Street*. At the southwest corner of the intersection of Grove Street and Main Street, to direct vehicular traffic proceeding easterly on Grove Street to come to a full stop before proceeding across or into Main Street.

*Haddow Street.* At the northeast corner of the intersection of Haddow Street and Cross Street to direct traffic proceeding westerly on Haddow Street to come to a full stop before proceeding into Cross Street

*Hastings Avenue*. At the northeast corner of the intersection of Hastings Avenue and Woodward Avenue, to direct vehicular traffic proceeding westerly on Hastings Avenue to come to a full stop before proceeding across or into Woodward Avenue.

Highland Avenue. At the northwest and southeast corners of the intersection of Highland Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly and northerly on Highland Avenue to come to a full stop before proceeding across or into Chicago Avenue.

*Highland Avenue.* At the northwest and southeast corners of the intersection of Highland Avenue and 41st Street, to direct vehicular traffic proceeding southerly and northerly on Highland Avenue to come to a full stop before proceeding across or into 41st Street.

Highland Avenue. At the northwest and southeast corners of the intersection of Highland Avenue and Rogers Street, to direct vehicular traffic proceeding southerly and northerly on Highland Avenue to come to a full stop before proceeding across or into Rogers Street.

Highland Court. At the northeast corner of the intersection of Highland Court and Highland Avenue regulating westbound traffic on Highland Court.

*Hillcrest Road.* At the northwest corner of the intersection of Hillcrest Road and Jefferson Avenue, regulating southbound traffic on Hillcrest Road.

Hitchcock Avenue. At the southwest corner of the intersection of Hitchcock Avenue and Cornell Avenue, to direct traffic proceeding easterly on Hitchcock Avenue to come to a full stop before proceeding into Cornell Avenue.

*Hitchcock Avenue*. At the southwest corner of the intersection of Hitchcock Avenue and Walnut Avenue, to direct vehicular traffic proceeding easterly on Hitchcock Avenue to come to a full stop before

proceeding across or into Walnut Avenue.

*Indianapolis Avenue*. At the northeast corner of the intersection of Indianapolis Avenue and Douglas Road, regulating westbound traffic on Indianapolis Avenue.

<u>Indianapolis Avenue</u>. At the southwest corner of the intersection of Indianapolis Avenue and Cumnor Road, regulating the eastbound traffic on Indianapolis Avenue.

*Indianapolis Avenue*. At the southwest and northeast corners of the intersection of Indianapolis Avenue and Fairview Avenue, to direct vehicular traffic proceeding easterly and westerly on Indianapolis Avenue to come to a full stop before proceeding across or into Fairview Avenue.

*Indianapolis Avenue*. At the northeast and southwest corners of the intersection of Indianapolis Avenue and Florence Avenue, to direct vehicular traffic proceeding easterly and westerly on Indianapolis Avenue to come to a full stop before proceeding across or into Florence Avenue.

Indianapolis Avenue. At the southwest corner of the intersection of Indianapolis Avenue and Cumnor Road, regulating the eastbound traffic on Indianapolis Avenue.

Jacqueline Drive. At the southeast corner of the intersection of Jacqueline Drive and Gilbert Avenue, to direct vehicular traffic proceeding northerly on Jacqueline Drive to come to a full stop before proceeding across or into Gilbert Avenue.

*Janet Street*. At the northeast and southwest corners of the intersection of Janet Street and Downers Drive to direct traffic proceeding easterly or westerly on Janet Street to come to a full stop before proceeding into or across Downers Drive.

*Jefferson Avenue*. At the northeast corner of the intersection of Jefferson Avenue and Springside Avenue, to direct vehicular traffic proceeding westerly on Jefferson Avenue to come to a full stop before proceeding into Springside Avenue.

*Jefferson Avenue*. At the northeast and southwest corners of the intersection of Jefferson Avenue and Hillcrest Road, regulating westbound and eastbound traffic on Jefferson Avenue.

*Jefferson Avenue*. At the southwest and northeast corners of the intersection of Jefferson Avenue and Dunham Road, to direct vehicular traffic proceeding easterly and westerly on Jefferson Avenue to come to a full stop before proceeding across or into Dunham Road.

*Katrine Avenue*. At the southeast corner of the intersection of Katrine Avenue and Curtiss Street, to direct vehicular traffic proceeding northerly on Katrine Avenue to come to a full stop before proceeding across or into Curtiss Street.

Lake Avenue. At the southwest corner of the intersection of Lake Avenue and Fairview Avenue, to direct vehicular traffic proceeding easterly on Lake Avenue to come to a full stop before proceeding across or into Fairview Avenue.

Lane Place. At the southeast corner of the intersection of Lane Place and Maple Avenue, to direct vehicular traffic proceeding northerly on Lane Place to come to a full stop before proceeding across or into Maple Avenue.

*Lee Avenue*. At the northwest corner of the intersection of Lee Avenue and Warren Avenue, regulating southbound traffic on Lee Avenue.

Lee Avenue. At the southeast corner of the intersection of Lee Avenue and Gilbert Avenue, to direct vehicular traffic proceeding northerly on Lee Avenue to come to a full stop before proceeding across or into Gilbert Avenue.

*Lee Avenue*. At the southeast and northwest corners of the intersection of Lee Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Lee Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Lincoln Street. At the northeast corner of the intersection of Lincoln Street and Douglas Road, regulating westbound traffic on Lincoln Street.

Lincoln Street. At the southwest corner of the intersection of Lincoln Street and Sterling Road, regulating eastbound traffic on Lincoln Street.

*Lincoln Street*. At the northeast and southwest corners of the intersection of Lincoln Avenue and Main Street, to direct vehicular traffic proceeding westerly and easterly traffic on Lincoln Avenue to

come to a full stop before proceeding across or into Main Street.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Street and Linscott Avenue, to direct vehicular traffic proceeding easterly and westerly on Lincoln Street to come to a full stop before proceeding into or across Linscott Avenue.

*Lincoln Street.* At the northeast and southwest corners of the intersection of Lincoln Street and Saratoga Avenue, to direct traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding into or across Saratoga Avenue.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Street and Stanley Avenue, to direct traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding into or across Stanley Avenue.

*Lincoln Street.* At the northeast and southwest corners of the intersection of Lincoln Street and Forest Avenue, to direct traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding into or across Forest Avenue.

*Lincoln Street*. At the northeast and southwest corners of the intersection of Lincoln Street and Highland Avenue, to direct traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding into or across Highland Avenue.

*Lincoln Street.* At the northeast corner of the intersection of Lincoln Street and Middaugh Avenue, to direct traffic proceeding westerly on Lincoln Street to come to a full stop before proceeding into or across Middaugh Avenue.

*Lincoln Street.* At the northeast and southwest corners of the intersection of Lincoln Street and Elm Street to direct vehicular traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding across or into Elm Street.

Linden Place. At the southeast corner of the intersection of Linden Place and Chicago Avenue, to direct vehicular traffic proceeding northerly on Linden Place to come to a full stop before proceeding across or into Chicago Avenue.

Linden Place. At the southeast corner of the intersection of Linden Place and Franklin Street, to direct vehicular traffic proceeding northerly on Linden Place to come to a full stop before proceeding across or into Franklin Street.

*Linden Place*. At the northwest corner of the intersection of Linden Place and Rogers Street, to direct vehicular traffic proceeding southerly on Linden Place to come to a full stop before proceeding across or into Rogers Street.

*Lindley Street.* At the intersection of Lindley Street and 41st Street, to direct traffic proceeding northerly or southerly on Lindley Street to come to a full stop before proceeding across or into 41st Street.

*Linscott Avenue*. At the northwest corner of the intersection of Linscott Avenue and Warren Avenue, regulating southbound traffic on Linscott Avenue.

*Linscott Avenue.* At the southeast corner of the intersection of Linscott Avenue and Grant Street, regulating northbound traffic on Linscott Avenue.

*Linscott Avenue*. At the southeast and northwest corners of the intersection of Linscott Avenue and Chicago Avenue, to direct vehicular traffic proceeding northerly and southerly on Linscott Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Loomes Avenue. At the northeast corner of the intersection of Loomes Avenue and Woodward Avenue, to direct traffic proceeding westerly on Loomes Avenue to come to a full stop before proceeding across or into Woodward Avenue.

*Lyman Avenue*. At the southeast and northwest corners of the intersection of Lyman Avenue and 59th Streeet, to direct vehicular traffic proceeding northerly and southerly on Lyman Avenue to come to a full stop before proceeding across or into 59th Street.

*Mackie Place*. At the northwest corner of the intersection of Mackie Place and Maple Avenue, to direct vehicular traffic proceeding southerly on Mackie Place to come to a full stop before proceeding across or into Maple Avenue.

Maplewood Place. At the southeast corner of the intersection of Maplewood Place and Maple

Avenue, to direct vehicular traffic proceeding northerly on Maplewood Place to come to a full stop before proceeding across or into Maple Avenue.

*Middaugh Avenue*. At the northwest corner of Middaugh Avenue and Warren Avenue, regulating southbound traffic on Middaugh Avenue.

*Middaugh Avenue.* At the northwest and southeast corners of the intersection of Middaugh Avenue and Franklin Street, regulating both northbound and southbound traffic on Middaugh Avenue.

*Middaugh Avenue*. At the northwest and southeast corners of the intersection of Middaugh Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly and northerly on Middaugh Avenue to come to a full stop before proceeding across or into Chicago Avenue.

*Middaugh Avenue*. At the northwest corner of the intersection of Middaugh Avenue and 59th Street, to direct vehicular traffic proceeding southerly on Middaugh Avenue to come to a full stop before proceeding across or into 59th Street.

*Mochel Drive*. At the southeast and southwest corners of the intersection of Mochel Drive and Burlington Avenue, to direct vehicular traffic proceeding northerly on Mochel Drive to come to a full stop before proceeding across or into Burlington Avenue.

*Montgomery Avenue*. At the northwest corner of Montgomery Avenue and Warren Avenue, regulating southbound traffic on Montgomery Avenue.

*Montgomery Avenue*. At the southeast corner of Montgomery Avenue and Chicago Avenue, regulating northbound traffic on Montgomery Avenue.

Montgomery Avenue. At the southeast and northwest corners of the intersection of Montgomery Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Montgomery Avenue to come to a full stop before proceeding across or into Prairie Avenue.

*Northcott Avenue.* At the northwest corner of Northcott Avenue and Warren Avenue, regulating southbound traffic on Northcott Avenue.

*Northcott Avenue*. At the southeast corner of Northcott Avenue and Chicago Avenue, regulating northbound traffic on Northcott Avenue.

*Northcott Avenue*. At the southeast and northwest corners of the intersection of Northcott Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Northcott Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Oakwood Avenue. At the northwest corner of Oakwood Avenue and Warren Avenue, regulating southbound traffic on Oakwood Avenue.

# Otis Avenue. At the northeast corner of the intersection of Otis Avenue and Douglas Road, regulating westbound traffic on Otis Avenue.

*Otis Avenue*. At the southwest corner of the intersection of Otis Avenue and Cumnor Road, regulating the eastbound traffic on Otis Avenue.

Oxnard Drive. At the northeast and southwest corners of the intersection of Oxnard Drive and Woodward Avenue, to direct vehicular traffic proceeding westerly and easterly on Oxnard Drive to come to a full stop before proceeding across or into Woodward Avenue.

*Parkway Drive*. At the southeast corner of Franklin Street, regulating northbound traffic on Parkway Drive.

Parkway Drive. At the northeast corner of Linscott Avenue, regulating westbound traffic on Parkway Drive.

*Pershing Avenue*. At the southeast and northwest corners of the intersection of Pershing Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Pershing Avenue to come to a full stop before proceeding across or into Prairie Avenue.

*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.

*Powell Street.* At the northwest and southeast corners of the intersection of Powell Street and 68th Street to direct vehicular traffic proceeding northerly or southerly on Powell Street to

come to a full stop before proceeding into 68th Street.

*Prairie Avenue*. At the southwest corner of the intersection of Prairie Avenue and Florence Avenue, regulating the eastbound traffic on Prairie Avenue.

*Prince Street.* At the northwest and southeast corners of the intersection of Prince and Lincoln Streets, to direct traffic proceeding northerly or southerly on Prince Street to come to a full stop before proceeding into or across Lincoln Street.

*Prince Street.* At the northwest corner of Franklin Street, regulating southbound traffic on Prince Street.

*Prince Street.* At the southeast and northwest corners of the intersection of Prince Street and Chicago Avenue, to direct vehicular traffic proceeding northerly and southerly on Prince Street to come to a full stop before proceeding across or into Chicago Avenue.

Prospect Avenue. At the southeast corner of the intersection of Prospect Avenue and Lincoln Street, regulating northbound traffic on Prospect Avenue.

Prospect Avenue. At the northwest and southeast corners of the intersection of Prospect Avenue and Sherman Street, to direct vehicular traffic proceeding southerly and northerly on Prospect Avenue to come to a full stop before proceeding across or into Sherman Street.

*Prospect Avenue*. At the northwest corner of the intersection of Prospect Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly on Prospect Avenue to come to a full stop before proceeding across or into Chicago Avenue.

*Prospect Avenue*. At the northwest and southeast corners of the intersection of Prospect Avenue and Rogers Street, to direct vehicular traffic proceeding southerly and northerly on Prospect Avenue to come to a full stop before proceeding across or into Rogers Street.

Prospect Avenue. At the northwest and southeast corners of the intersection of Franklin Street and Prospect Avenue, to direct traffic proceeding northerly or southerly on Prospect Avenue to come to a full stop before proceeding across or into Franklin Street.

*Puffer Road.* At the southeast corner of the intersection of Puffer Road and Haddow Avenue to direct traffic proceeding northerly on Puffer Road to come to a full stop before proceeding into or across Haddow Avenue.

Randall Street. At the intersection of Randall Street and Lyman Avenue, to direct traffic proceeding easterly or westerly on Randall Street to come to a full stop before proceeding across or into Lyman Avenue.

Randall Street. At the northwest and southeast corners of the intersection of Randall Street and Benton Avenue, to direct vehicular traffic proceeding northerly and southerly on Benton Avenue to come to a full stop before proceeding across or into Randall Street.

*Randall Street.* At the northwest and southeast corners of the intersection of Randall Street and Fairmount Avenue to direct vehicular traffic proceeding northerly or southerly on Fairmount Avenue to come to a full stop before proceeding into Randall Street.

Randall Street. At the northeast and southwest corners of the intersection of Randall Street and Washington Street, to direct vehicular traffic proceeding easterly and westerly on Randall Street to come to a full stop before proceeding across or into Washington Street.

Ridgewood Circle. At the southwest corner of the intersection of Ridgewood Circle and Dunham Road, to direct vehicular traffic proceeding easterly on Ridgewood Circle to come to a full stop before proceeding across or into Dunham Road.

*Rogers Street*. At the northeast corner of the intersection of Rogers Street and Main Street, to direct vehicular traffic proceeding westerly on Rogers Street to come to a full stop before proceeding across or into Main Street.

*Rogers Street.* At the southwest corner of the intersection of Rogers Street and Maple Avenue, to direct vehicular traffic proceeding easterly on Rogers Street to come to a full stop before proceeding

across or into Maple Avenue.

*Ross Court*. At the southwest corner of the intersection of Ross Court and Carpenter Street, to direct vehicular traffic proceeding easterly on Ross Court to come to a full stop before proceeding across or into Carpenter Street.

Saratoga Avenue. At the northwest corner of Saratoga Avenue and Warren Avenue, regulating southbound traffic on Saratoga Street.

Saratoga Avenue. At southeast corner of Franklin Street, regulating northbound traffic on Saratoga Street.

*Saratoga Avenue*. At northwest corner of Franklin Street, regulating southbound traffic on Saratoga Street.

*Saratoga Avenue*. At the intersection of Saratoga Avenue and Black Oak Drive, to direct traffic proceeding northerly or southerly on Saratoga Avenue or westerly on Black Oak Drive to come to a full stop before proceeding across or into said intersection.

*Saratoga Avenue*. At the southeast corner and the northwest corner of the intersection of Saratoga Avenue and 35th Street, to direct traffic proceeding northerly or southerly on Saratoga Avenue to come to a full stop before proceeding across or into 35th Street.

*Saratoga Avenue*. At the southeast corner of the intersection of Saratoga Avenue and 41st Street, to direct vehicular traffic proceeding northerly on Saratoga Avenue to come to a full stop before proceeding across or into 41st Street.

*Saratoga Avenue*. At the northwest corner of the intersection of Saratoga Avenue and Norfolk Street to direct traffic proceeding southerly on Saratoga Avenue to come to a full stop before proceeding across or into Norfolk Street.

*Saylor Street*. At the northeast corner of the intersection of Saylor Street and Dunham Road, to direct vehicular traffic proceeding westerly on Saylor Street to come to a full stop before proceeding across or into Dunham Road.

*Seeley Avenue*. At the northwest corner of Seeley Avenue and Warren Avenue, regulating southbound traffic on Seeley Avenue.

*Seeley Avenue*. At the southeast and northwest corners of the intersection of Seeley Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Seeley Avenue to come to a full stop before proceeding across or into Prairie Avenue.

*Sheldon Avenue.* At the southwest corner of the intersection of Sheldon Avenue and Cumnor Road, regulating the eastbound traffic on Sheldon Avenue.

*Sheridan Place*. At the northeast corner of the intersection of Sheridan Place and Washington Street, to direct vehicular traffic proceeding westerly on Sheridan Place to come to a full stop before proceeding across or into Washington Street.

Sherman Street. At the northeast corner of Saratoga Avenue, regulating westbound traffic on Sherman Street.

*Sherman Street.* At the northeast corner of Prince Street, regulating westbound traffic on Sherman Street.

Sherman Street. At the northeast corner of the intersection of Sherman Street and Elm Street, regulating westbound traffic on Sherman Street.

Sherman Street. At the southwest corner of the intersection of Sherman Street and Highland Avenue, regulating eastbound traffic on Sherman Street.

*Sherman Street*. At the southwest corner of the intersection of Sherman Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on Sherman Street to come to a full stop before proceeding across or into Fairview Avenue.

Sherman Street. At the northeast corner and the southwest corner of the intersection of Sherman Street and Stanley Avenue, to direct vehicular traffic proceeding easterly or westerly on Sherman Street to come to a full stop before proceeding across or into Stanley Avenue.

Sherwood Avenue. At the northwest corner of the intersection of Sherwood Avenue and Chicago

Avenue, to direct vehicular traffic proceeding southerly on Sherwood Avenue to come to a full stop before proceeding across or into Chicago Avenue.

*Sherwood Avenue*. At the southeast corner of the intersection of Sherwood Avenue and Grant Street, to direct vehicular traffic proceeding northerly on Sherwood Avenue to come to a full stop before proceeding across or into Grant Street.

*Stanford Avenue*. At the northeast corner of the intersection of Stanford Avenue and Dunham Road, to direct vehicular traffic proceeding westerly on Stanford Avenue to come to a full stop before proceeding across or into Dunham Road.

Stanley Avenue. At the northwest corner of the intersection of Stanley Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly on Stanley Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Stanley Avenue. At the northwest and southeast corners of the intersection of Stanley Avenue and Grant Street, to direct vehicular traffic proceeding southerly and northerly on Stanley Avenue to come to a full stop before proceeding across or into Grant Street.

Stanley Avenue. At the northwest corner of the intersection of Stanley Avenue and Rogers Street, to direct vehicular traffic proceeding southerly on Stanley Avenue to come to a full stop before proceeding across or into Rogers Street.

*Stanley Avenue.* At the northwest and southeast corners of the intersection of Franklin Street and Stanley Avenue, to direct traffic proceeding northerly or southerly on Stanley Avenue to come to a full stop before proceeding across or into Franklin Street.

<u>Station Statton</u> Street. At the southeast corner of the intersection of <u>Station Statton</u> Street and Grant Street, to direct vehicular traffic proceeding northerly on <u>Station Statton</u> Street to come to a full stop before proceeding across or into Grant Street.

Statton Street. At the northwest corner of the intersection of Statton Street and Lincoln Street, regulating southbound traffic on Statton Street.

Sterling Road. At the northwest corner of the intersection of Sterling Road and Sherman Street, regulating southbound traffic on Sterling Road.

Sterling Road. At the northwest and southeast corners of the intersection of Sterling Road and 41st Street, to direct vehicular traffic proceeding northerly and southerly on Sterling Road to come to a full stop before proceeding across or into 41st Street.

*Sterling Road.* At the southeast and northwest corners of the intersection of Sterling Road and 39th Street, to direct vehicular traffic proceeding northerly and southerly on Sterling Road to come to a full stop before proceeding across or into 39th Street.

Sterling Road. At the northwest corner of the intersection of Sterling Road and Chicago Avenue, to direct vehicular traffic proceeding southerly on Sterling Road to come to a full stop before proceeding across or into Chicago Avenue.

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

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

*Summit Street.* At the southwest corner of the intersection of Summit Street and Washington Street, to direct vehicular traffic proceeding easterly on Summit Street to come to a full stop before proceeding into Washington Street.

Summit Street. At the northeast and southwest corners of the intersection of Summit Street and Main Street, to direct vehicular traffic proceeding westerly and easterly on Summit Street to come to a full stop before proceeding across or into Main Street.

*Thatcher Road.* At the southwest corner of Thatcher Road and Walnut Avenue, to direct vehicular traffic proceeding easterly on Thatcher Road to come to a full stop before proceeding into or

across Walnut Avenue.

Thornwood Drive. At the southwest corner of the intersection of Thornwood Drive and Dunham Road, to direct vehicular traffic proceeding easterly on Thornwood Drive to come to a full stop before proceeding across or into Dunham Road.

*Traube Avenue.* At the southwest and northeast corners of the intersection of Traube Avenue and Roslyn Road, to direct traffic proceeding in an easterly and westerly direction on Traube Avenue to come to a full stop before proceeding into or across Roslyn Road.

*Victor Street.* At the northwest and southeast corners of the intersection of Victor Street and 7th Street, regulating northbound and southbound traffic on Victor Street.

*Victor Street.* At the southeast corner of the intersection of Victor Street and for 2<sup>nd</sup> Street, regulating the northbound traffic on Victor Street.

*Wall Place*. At the northwest corner of the intersection of Wall Place and 59th Street, to direct vehicular traffic proceeding southerly on Wall Place to come to a full stop before proceeding across or into 59th Street.

Wallbank Avenue. At the northwest corner of Wallbank Avenue and Warren Avenue, regulating southbound traffic on Wallbank Avenue.

Wallbank Avenue. At the southeast corner of Wallbank Avenue and Chicago Avenue, regulating north bound traffic on Wallbank Avenue.

*Wallbank Avenue*. At the northwest and southeast corners of the intersection of Wallbank Avenue and Prairie Avenue, to direct vehicular traffic proceeding southerly and northerly on Wallbank Avenue to come to a full stop before proceeding across or into Prairie Avenue.

*Warren Avenue*. At the southeast corner of the intersection of Warren Avenue and Forest Avenue, to direct vehicular traffic proceeding easterly on Warren Avenue to come to a full stop before proceeding across or into Forest Avenue.

*Warren Avenue*. At the northeast and southwest corners of the intersection of Highland Avenue and Warren Avenue, which signs shall be so located as to direct vehicular traffic proceeding easterly and westerly on Warren Avenue, to come to a full stop before proceeding into Highland Avenue.

*Warren Avenue*. At the southwest corner of Warren Avenue and Forest Avenue, to direct traffic proceeding easterly on Warren Avenue to come to a full stop before proceeding across or into Forest Avenue.

Warren Avenue. At the northeast corner of Warren Avenue at the East Loop ramp.

*Washington Street.* At the northwest and southeast corners of the intersection of Washington Street and Blanchard Street, to direct traffic proceeding northerly or southerly on Washington Street to come to a full stop before proceeding across or into Blanchard Street.

Washington Street. At the northwest corner of the intersection of Washington Street and Warren Avenue, to direct traffic proceeding southerly on Washington Street to come to a full stop before proceeding across or into Warren Avenue.

*Washington Street*. At the northwest and southeast corners of the intersection of Washington Street and 59th Street, to direct vehicular traffic proceeding southerly and northerly on Washington Street to come to a full stop before proceeding across or into 59th Street.

Washington Street. At the northeast and southwest corners of the intersection of Washington Street and Lincoln Avenue, to direct vehicular traffic proceeding westerly and easterly on Washington Street to come to a full stop before proceeding across or into Lincoln Avenue.

Webster Place. At the southeast corner of the intersection of Webster Street and 59th Street, to direct vehicular traffic proceeding northerly on Webster Street to come to a full stop before proceeding across or into 59th Street.

*Webster Street*. At the northwest corner of the intersection of Webster Street and 59th Street, to direct vehicular traffic proceeding southerly on Webster Street to come to a full stop before proceeding across or into 59th Street.

Webster Street. At the northwest and southeast corners of the intersection of Webster Street and

Kenyon Street, to direct traffic proceeding northerly or southerly on Webster Street to come to a full stop before proceeding across or into Kenyon Street.

*Webster Street.* At the southeast corner of the intersection of Webster Street and Randall Street, regulating northbound traffic on Webster Street.

*Wells Street.* At the southwest corner of the intersection of Wells Street and Springside Avenue to direct traffic proceeding easterly on Wells Street to come to a full stop before proceeding across or into Springside Avenue.

Whiffin Place. At the northwest corner of the intersection of Whiffin Place and Rogers Street, to direct vehicular traffic proceeding southerly on Whiffin Place to come to a full stop before proceeding across or into Rogers Street.

*Wilcox Avenue.* At the northwest corner of the intersection of Wilcox Avenue and Burlington Avenue, regulating the southbound traffic on Wilcox Avenue.

*Wilson Avenue*. At the northwest and southeast corners of the intersection of Wilson Avenue and Grant Street, to direct vehicular traffic proceeding northerly and southerly on Wilson Avenue to come to a full stop before proceeding into Grant Street.

*Wilson Avenue*. At the northwest corner of the intersection of Wilson Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly on Wilson Avenue to come to a full stop before proceeding across or into Chicago Avenue.

*Wilson Street.* At the northeast corner of the intersection of Wilson Street and Linden Place, regulating westbound traffic on Wilson Street.

*Wisconsin Avenue*. At the northeast corner of Wisconsin Avenue and Walnut Avenue, to direct vehicular traffic proceeding westerly on Wisconsin Avenue to come to a full stop before proceeding across or into Walnut Avenue.

*Woodward Avenue*. At the northwest and southeast corners of the intersection of Grant Street and Woodward Avenue, to direct traffic proceeding northerly or southerly on Woodward Avenue to come to a full stop before proceeding across or into Grant Street.

*Woodward Avenue*. At the northwest and southeast corners of the intersection of Woodward Avenue and Prairie Avenue, to direct vehicular traffic proceeding southerly and northerly on Washington Street to come to a full stop before proceeding across or into Prairie Avenue.

*2nd Street.* At the southwest corner of the intersection of 2nd Street and Williams Street to direct traffic proceeding easterly on 2nd Street to come to a full stop before proceeding into Williams Street.

*3rd Street.* At the northeast and southwest corners of the intersection of 3rd Street and Florence Avenue, to direct vehicular traffic proceeding easterly and westerly on 3rd Street to come to a full stop before proceeding across or into Florence Avenue.

*3rd Street.* At the northeast corner of the intersection of 3rd Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 3rd Street to come to a full stop before proceeding across or into Fairview Avenue.

4th Street. At the northeast corner of the intersection of 4th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 4th Street to come to a full stop before proceeding across or into Fairview Avenue.

*4th Street.* At the northeast and southwest corners of the intersection of 4th Street and Florence Avenue, regulating both eastbound and westbound traffic on 4th Street.

*4th Street.* At the northeast and southwest corners of the intersection of 4th Street and Victor Street, regulating both eastbound and westbound traffic on 4th Street.

4<sup>th</sup> Street (south). At the southwest corner of the intersection of 4<sup>th</sup> Street (south) and Cumnor Road, regulating the eastbound traffic on 4<sup>th</sup> Street.

4<sup>th</sup> Street (north). At the northeast corner of the intersection of 4<sup>th</sup> Street (north) and Cumnor Road regulating the westbound traffic on 4<sup>th</sup> Street.

4<sup>th</sup> Street. At the southeast, southwest and northwest corners of the intersection of 4<sup>th</sup> Street and Williams Street, regulating the northbound, southbound and eastbound traffic of 4<sup>th</sup> Street and Williams

Street.

*5th Street.* At the northeast and southwest corners of the intersection of 5th Street and Florence Avenue, to direct vehicular traffic proceeding easterly and westerly on 5th Street to come to a full stop before proceeding across or into Florence Avenue.

5th Street. At the northeast corner of the intersection of 5th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 5th Street to come to a full stop before proceeding across or into Fairview Avenue.

*5<sup>th</sup> Street.* At the southwest corner of the intersection of 5<sup>th</sup> Street and Cumnor Road, regulating the eastbound traffic on 5<sup>th</sup> Street.

6th Street. At the northeast corner of the intersection of 6th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 6th Street to come to a full stop before proceeding across or into Fairview Avenue.

6<sup>th</sup> Street. At the northeast and southwest corners of the intersection of 6<sup>th</sup> Street and Victor Street, regulating the eastbound and westbound traffic on 6<sup>th</sup> Street.

6<sup>th</sup> Street. At the southwest corner of the intersection of 6<sup>th</sup> Street and Williams Street, regulating the eastbound traffic on 6<sup>th</sup> Street.

6<sup>th</sup> Street. At the southeast and northwest corners of the intersection of 6<sup>th</sup> Street and Cumnor Road, regulating the northbound and southbound traffic on Cumnor Road.

7th Street. At the northeast corner and the southwest corner of the intersection of 7th Street and Cumnor Road, to direct traffic proceeding easterly or westerly on 7th Street to come to a full stop before proceeding across or into Cumnor Road.

7th Street. At the northeast corner of the intersection of 7th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 7th Street to come to a full stop before proceeding across or into Fairview Avenue.

7th Street. At the northeast and southwest corners of the intersection of 7th Street and Florence Avenue, regulating both eastbound and westbound traffic on 7th Street.

8th Street. At the northeast and southwest corners of the intersection of 8th Street and Cumnor Road, regulating both eastbound and westbound traffic on 8th Street.

8th Street. At the northeast and southwest corners of the intersection of 8th Street and Florence Avenue, regulating the eastbound and westbound traffic on 8th Street.

8<sup>th</sup> Street. At the northeast and southwest corners of the intersection of 8<sup>th</sup> Street and Victor Street, regulating the eastbound and westbound traffic on 8<sup>th</sup> Street.

8<sup>th</sup> Street. At the southwest corner of the intersection of 8<sup>th</sup> Street and Williams Street, regulating the eastbound traffic on 8<sup>th</sup> Street.

40th Place. At the northeast corner of the intersection of 40th Place and Fairview Avenue, to direct vehicular traffic proceeding westerly on 40th Place to come to a full stop before proceeding across or into Fairview Avenue.

40th Street. At the southwest corner of the intersection of 40th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 40th Street to come to a full stop before proceeding across or into Fairview Avenue.

*41st Street.* At the southwest corner of the intersection of 41st Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 41st Street to come to a full stop before proceeding across or into Fairview Avenue.

41st Street. At the northeast and southwest corners of the intersection of 41st Street and Glendenning Road, to direct vehicular traffic proceeding easterly and westerly on 41st Street to come to a full stop before proceeding across or into Glendenning Road.

41st Street. At the northeast corner of the intersection of 41st Street and Saratoga Avenue, to direct traffic proceeding westerly on 41st Street to come to a full stop before proceeding across or into Saratoga Avenue.

41st Street. At the northeast and southwest corners of the intersection of 41st Street and

Washington Street, to direct vehicular traffic proceeding easterly and westerly on 41st Street to come to a full stop before proceeding across or into Washington Street.

41st Street. At the northeast corner and the southwest corner of the intersection of 41st Street and Williams Street, to direct vehicular traffic proceeding easterly or westerly on 41st Street to come to a full stop before proceeding across or into Williams Street.

*56th Street*. At the northeast corner of the intersection of 56th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 56th Street to come to a full stop before proceeding across or into Fairview Avenue.

*57th Street*. At the southwest corner of the intersection of 57th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 57th Street to come to a full stop before proceeding across or into Fairview Avenue.

61st Street. At the northeast corner of the intersection of Brookbank Road and 61st Street, to direct vehicular traffic proceeding westerly on 61st Street to come to a complete stop before proceeding southerly into Brookbank Road.

61st Street. At the northeast and southwest corners of the intersection of Chase Avenue and 61st Street, which signs shall be so located as to direct vehicular traffic proceeding easterly and westerly on 61st Street, to come to a full stop before proceeding into Chase Avenue.

61st Street. At the northeast and southwest corners of the intersection of Puffer Road and 61st Street, which signs shall be located as to direct vehicular traffic proceeding easterly and westerly on 61st Street, to come to a full stop before proceeding into Chase Avenue.

61st Street. At the southwest and northeast corners of the intersection of 61st Street and Chase Avenue, to direct vehicular traffic proceeding easterly and westerly on 61st Street to come to a full stop before proceeding across or into Chase Avenue.

62nd Street. At the southwest corner of the intersection of 62nd Street and Dunham Road, to direct vehicular traffic proceeding easterly on 62nd Street to come to a full stop before proceeding across or into Dunham Road.

64th Street. At the northeast corner of the intersection of 64th Street and Puffer Road, to direct vehicular traffic proceeding westerly on 64th Street to come to a full stop before proceeding across or into Puffer Road.

66th Street. At the southwest corner of the intersection of 66th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 66th Street to come to a full stop before proceeding across or into Fairview Avenue.

67th Court. At the southwest corner of the intersection of 67th Court and Fairview Avenue, to direct vehicular traffic proceeding easterly on 67th Court to come to a full stop before proceeding across or into Fairview Avenue.

67th Place. At the northeast corner of the intersection of 67th Place and Dunham Road, to direct vehicular traffic proceeding westerly on 67th Place to come to a full stop before proceeding across or into Dunham Road.

67th Street. At the northeast and southwest corners of the intersection of 67th Street and Dunham Road, to direct vehicular traffic proceeding westerly and easterly on 67th Street to come to a full stop before proceeding across or into Dunham Road.

68th Street. At the northeast corner of the intersection of 68th Street and Dunham Road, to direct vehicular traffic proceeding westerly on 68th Street to come to a full stop before proceeding across or into Dunham Road.

68th Street. At the southwest corner of the intersection of 68th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 68th Street to come to a full stop before proceeding across or into Fairview Avenue.

72nd Street. At the southwest corner of the intersection of 72nd Street and Fairmount Avenue, to direct vehicular traffic proceeding easterly on 72nd Street to come to a full stop before proceeding across or into Fairmount Avenue.

72nd Street. At the northwest intersection of 72nd Street and Fairmount Avenue to direct vehicular traffic proceeding southerly on Fairmount Avenue and easterly on 72nd Street to come to a full stop before proceeding into said intersection.

72nd Street. At the southeast intersection of 72nd Street and Fairmount Avenue to direct vehicular traffic proceeding northerly on Fairmount Avenue and westerly on 72nd Street to come to a full stop before proceeding into said intersection.

73rd Street. At the southwest corner of the intersection of 73rd Street and Fairmount Avenue, to direct vehicular traffic proceeding easterly on 73rd Street to come to a full stop before proceeding across or into Fairmount Avenue.

73rd Street. At the northeast corner of the intersection of 73rd Street and Old Main Street, to direct vehicular traffic proceeding westerly on 73rd Street to come to a full stop before proceeding across or into Old Main Street.

74th Street. At the southwest corner of the intersection of 74th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 74th Street to come to a full stop before proceeding across or into Fairview Avenue. (Ord. No. 1023, § 1; Ord. No. 1097, § 1; Ord. No. 1135, § 1; Ord. No. 1136, § 1; Ord. No. 1178, § 1; Ord. No. 1245, § 1; Ord. No. 1303, § 1; Ord. No. 1304, § 1; Ord. No. 1332, §§ 1 to 3; Ord. No. 1353, §§ 1, 2; Ord. No. 1363, § 1; Ord. No. 1364, § 1; Ord. No. 1366, § 1; Ord. No. 1367, § 1; Ord. No. 1368, §§ 1, 2; Ord. No. 1374, §§ 1, 2; Ord. No. 1405, § 1; Ord. No. 1413, § 1; Ord. No. 1435, § 1; Ord. No. 1437, §§ 1, 2; Ord. No. 1444, §§ 1 to 5; Ord. No. 1446, §§ 1 to 4; Ord. No. 1451, § 1; Ord. No. 1454, §§ 1, 2; Ord. No. 1460, § 1; Ord. No. 1461, §§ 1, 2; Ord. No. 1482, § 1; Ord. No. 1487, § 1; Ord. No. 1498, § 1; Ord. No. 1517, § 1; Ord. No. 1538, § 1; Ord. No. 1596, § 1; Ord. No. 1606, § 1; Ord. No. 1607, § 1; Ord. No. 1707, § 3; Ord. No. 1717, § 3; Ord. No. 1722, § 3; Ord. No. 1760, § 5; Ord. No. 1781, § 7; Ord. No. 1815, § 3; Ord. No. 1817, § 4; Ord. No. 1837, § 3; Ord. No. 1866, § 3; Ord. No. 1911, § 3; Ord. No. 1933, § 4; Ord No. 1946, § 3; Ord. No. 2095, § 4; Ord. No. 2104, § 8; Ord. No. 2141, § 2; Ord. No. 2219, § 2; Ord. No. 2297, § 2; Ord. No. 2303, § 2; Ord. No. 2323, § 2; Ord. No. 2333, § 2; Ord. No. 2348, § 2; Ord. No. 2352, § 2; Ord. No. 2353, § 2; Ord. No. 2360, § 2; Ord. No. 2372, § 2; Ord. No. 2380, § 2; Ord. No. 2391, § 2; Ord. No. 2485, § 1; Ord. No. 2550, § 4; Ord. No. 2560, § 2; Ord. No. 2611, § 2; Ord. No. 2620, § 2; Ord. No. 2624, § 2; Ord. No. 2663, § 5; Ord. No. 2675, § 2; Ord. No. 2682, § 3; Ord. No. 2788, § 2; Ord. No. 2804, § 2; Ord. No. 2829, § 2; Ord. No. 2844, § 2; Ord. No. 2867, § 2; Ord. No. 2879, § 2; Ord. No. 2899, § 2; Ord. No. 2914, § 2; Ord. No. 2995, § 3; Ord. No. 3022, § 2; Ord. No. 3023, § 2; Ord No. 3035, § 2; Ord. No. 3102, § 6; Ord. No. 3113, § 2; Ord. No. 3117, § 4; Ord. No. 3123 § 2; Ord. No. 3153 § 2; Ord. No. 3192, § 3; Ord. No. 3269, § 2; Ord. No. 3291, § 2.)

#### Section 4. That Section 14.80.1. is hereby amended to read as follows:

#### 14.80.1. All-way stop signs.

There shall be erected in conspicuous places at the following intersections signs lettered with the words "4<u>All</u>-Way Stop", which signs shall be so located as to direct all traffic to come to a full stop before proceeding into the intersection:

Barneswood Drive and Saratoga Avenue.

Bolson Drive and Springside Avenue.

Chicago Avenue and Douglas Road.

Chicago Avenue and Oakwood Avenue.

Chicago Avenue and Saratoga Avenue.

Chicago Avenue and Highland Avenue.

Chicago Avenue and Lee Avenue.

Chicago Avenue and Roslyn Road.

Chicago Avenue and Cumnor Road.

Claremont Drive and Fairmount Avenue.

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#### NTS #4

Curtiss Street and Washington Street.

Douglas Road and Franklin Street.

Downers Drive and Herbert Street.

Downers Drive and 40th Street.

Dunham Road. Andrus Avenue and 71st Street.

Florence Avenue and Grant Street.

Forest Avenue and Lincoln Street.

Grand Avenue and Hill Street.

Grant Street and Highland Avenue.

Grant Street and Middaugh Avenue.

Grant Street and Oakwood Avenue.

Grant Street and Prince Street.

Grant Street and Saratoga Avenue.

Grant Street and Seeley Avenue.

Grant Street and Stanley Avenue.

Grant Street/Traube Avenue and Cumnor Road.

Hill Street and Blodgett Street.

Highland Avenue and Franklin Street.

#### Highland Avenue and Warren Avenue.

Kenyon Street and Washington Street.

Lee Avenue and Chicago Avenue.

Linscott Avenue and Franklin Street.

Lyman Avenue and Summit Street.

Maple Avenue and Carpenter Street.

Maple Avenue and Washington Street.

Norfolk Street and Dunham Road.

Palmer Street and Dunham Road.

Park Avenue and Randall Street.

Prairie Avenue and Douglas Avenue.

Randall Street and Blodgett Avenue.

Saratoga Avenue and Candlewood Drive.

Seeley Avenue and Chicago Avenue.

Springside Avenue and Concord Drive.

Venard Road and Drove Avenue.

Washington Street and Chicago Avenue.

Washington Street and Grant Street.

Washington Street and Rogers Street.

6th Street and Florence Avenue.

7th Street/DesMoines Street and Williams Street.

39th Street and Cumnor Road.

39th Street and Washington Street.

59th Street and Fairmount Avenue.

61st Street and Lee Avenue.

61st Street and Pershing Avenue.

61st Street and Sherman Road.

61st Street and Woodward Avenue.

(Ord. No. 1362, § 1; Ord. No. 1365, § 1; Ord. No. 1558, § 1; Ord. No. 1559, § 1; Ord. No. 1589, § 1; Ord. No. 1654, § 3; Ord. No. 1655, § 3; Ord No. 1781, § 6; Ord. No. 2024, § 4; Ord. No. 2095, §§ 5, 6; Ord. No. 2104, § 10; Ord. No. 2145, § 2; Ord. No. 2220, § 2; Ord. No. 2352, § 4; Ord. No. 2365, § 2; Ord. No.

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NTS #4

2408,  $\S$  2; Ord. No. 2409,  $\S$  2; Ord. No. 3022,  $\S$  3; Ord. No. 3117,  $\S$  5; Ord. No. 3123,  $\S$  3; Ord No. 3192,  $\S$  2; Ord. No. 3333,  $\S$  2.)

**Section 5.** That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

**Section 6.** 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	

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DRAFT

# TRANSPORTATION AND PARKING COMMISSION Excerpted Draft Minutes

May 13, 2015, 7:00 p.m.

Council Chambers - Village Hall 801 Burlington Avenue, Downers Grove

Chairman Pro tem Schiller called to order the May 13, 2015 meeting of the Transportation and Parking Commission at 7:02 p.m. and led the commissioners in the recital of the Pledge of Allegiance.

Roll call followed and a quorum was established.

#### **ROLL CALL:**

Present: Chairman Pro tem Schiller, Commissioners Carter, Cronin, Saricks, Wilkinson

Absent: Chairman Stuebner; Commissioners Golomb, Wrobel

Staff Present: Dir. Nan Newlon, Transportation Division Mgr. Matt Meyer

Others Present: Ms. Kim Carter, 627 Chicago Avenue, Downers Grove

Chairman Pro tem Saricks reviewed the protocol for the meeting.

File #06-15 Neighborhood Traffic Study Area #4 – Final Draft Report – Traffic Division Mgr. Matthew Mayer summarized the meetings held and public comment received which led up to this point, noting additional comments were received and inserted into the draft since the March 19, 2015 public hearing. Per Mayer, staff was seeking additional input tonight regarding the short-term recommendations with a recommendation moving to the village council. Mr. Mayer walked through a PowerPoint presentation explaining the background of the initial study undertaken by the village and then walked through the study in more detail.

Mr. Michel Worthman, KLOA consultant and project manager, reviewed the traffic study for Area #4, stating that much of the work focused on data collection. Recommendations followed as to intersection traffic control, with the focus on balance. Per Mr. Wilkinson's question about the neighborhood's positive response in Traffic Study Areas 1 and 2, Mr. Worthman explained the village did the follow-up studies for those areas, which appeared to be "reasonable" and most residents were satisfied with the changes to those areas.

Continuing, Mr. Worthman reviewed slides on the overhead discussing the study area's recommendations for pedestrian/bicycle improvements, improved signage, and improved/reflective crosswalks to better channelize traffic and pedestrians.

Mr. Mayer returned and explained the next steps which included a recommendation coming from this commission and finalizing the report to present it to village council within the first three weeks of June. He expected implementation of the recommendations would begin this fall.

Per Mr. Schiller's concern about the document moving forward without any further public input, Mr. Mayer said he anticipated having another week to allow last minute public comments to be considered before the final report was completed and forwarded to the village council for consideration. Mr. Schiller then invited the public to the podium.

Ms. Kim Carter, 627 Chicago Avenue, Downers Grove, indicated she worked with staff to get the stop sign installed at Chicago and Douglas due to her having children attending the nearby school and she appreciated seeing the recommendation for it. Asked if drivers would be

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May 13, 2015

forewarned about the new stop sign installation or if any police enforcement would occur, Mr. Mayer indicated there would be temporary signs announcing the new signage and he would consider keeping that signage in place for 30 days for drivers to adjust. He also had considered the same temporary signage for the removal of stop signs. He has been speaking to the police department about this issue. Regarding Ms. Carter's question about bicycle signs, Mr. Mayer responded that the village did have a bicycle and pedestrian plan with various implementations to come in the future.

Regarding the previous comments about Traffic Study # 3 completed last year near Lester School and whether residents/staff had seen any improvements, Ms. Carter was pleased to report that she and the school community did see many improvements in the area.

As to the installation of new stop signs in unexpected intersections, Mr. Saricks mentioned he has seen the red LED lights surrounding some stop signs to catch motorists' attention. Mr. Mayer appreciated the comment.

Regarding Mr. Cronin's question whether the village was planning future traffic studies, Mr. Mayer replied that if the study program is successful and other areas need to be explored, he anticipates there will be more studies. If so, Mr. Cronin suggested that the next study area be around Downers Grove South High School; Mr. Saricks agreed that other areas, with distinct issues, needed to be reviewed.

Asked if there were future traffic study areas being considered by the village/staff, Mr. Mayer stated there were none at this time -- just side discussions by staff for now. However, he stated the topic could be placed on the agenda and discussed at next month's meeting. Mr. Cronin appreciated that. Asked if traffic signal interconnection was suggested for the next steps, Mr. Mayer explained there was interconnections along Fairview Avenue, along with other master controllers, at other intersections and one of his initiatives coming to the village was to get the communication out into the field so he could better control it utilizing software. However, there were challenges.

Asked whether KLOA studied the area around the two churches and the nearby park that was being utilized everyday, Mr. Worthman, from KLOA, reported it was reviewed and there were many complaints about parking on both sides of the street as well as the restricted parking but with the issue of vehicles still parking near the park, even when signs restricted it, he emphasized that enforcement still had to take place, as recommended in prior reports. Many of the issues raised were vehicles parking too close to driveways or blocking them. KLOA suggested painting the curbs red or yellow to warn motorists not to park in certain areas. Asked if the new parking lot at the high school relieved any congestion in the neighborhood. Mr. Worthman reported that from his own experience driving past the area, he did notice there has been more on-street parking but it was due to the parking restrictions currently there. He believed traffic would still occur before and after school, vehicles would still park short-term waiting for students, and cut-through traffic would still occur to avoid Ogden Avenue, which was why improvements were suggested for Grant and Main to improve the ingress and egress to the parking lot. As to the exact location of the drop-off area at the school, Mr. Worthman stated the drop-off area was located in the parking lot on the south side. Better clarification followed by Mr. Worthman on the steps taken to improve this area.

Lastly, per a question, Mr. Worthman explained that with this particular study he did not review and take into consideration the existing parking restriction signs since it was not part of the assignment and he believed the village would review that independently.

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WITH RESPECT TO FILE #06-15, MR. CARTER MADE A MOTION THAT THE TRAFFIC AND PARKING COMMISSION FORWARD THE RECOMMENDATIONS, AS OUTLINED IN THE TRAFFIC STUDY REPORT, TO THE VILLAGE COUNCIL FOR CONSIDERATION. SECONDED BY MR. WILKINSON.

MOTION CARRIED UNANIMOUSLY BY VOICE VOTE OF 5-0.

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# Neighborhood Traffic Study Area Number 4 Downers Grove, Illinois



Prepared for: Village of Downers Grove

Submitted by:

Kenig, Lindgren, O'Hara, Aboona, Inc.

Kenig, Lindgren, O'Hara, Aboona, Inc.

**May 2015** 

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## **Neighborhood Traffic Study** Area Number 4 **Downers Grove, Illinois**

Prepared for Village of Downers Grove

By Kenig, Lindgren, O'Hara, Aboona, Inc. Rosemont, Illinois

May 2015

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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 in Area Number 4. Overall, the objective of the study was to thoroughly examine the existing operations within the neighborhood, identify operational deficiencies and recommend modifications and/or improvements to enhance both vehicular and pedestrian operations. In addition this included addressing the primary traffic concerns within a neighborhood, vehicular volume, vehicular speed and overall vehicular and pedestrian safety.

Bounded by Ogden Avenue on the north, Fairview Avenue on the east, Warren Avenue/Rogers Street on the south and Main Street on the west, the neighborhood is located just northeast of downtown Downers Grove. The neighborhood has 15 north-south roads and 20 east-west roads. Primarily consisting of residential homes, the neighborhood also contains: commercial and office land uses, St. Joseph Catholic School, St. Mary of Gostyn Catholic School, the east parking lot and a drop-off/pick-up area for Downers Grove North High School and Washington Park. **Figure 1** shows the location of the neighborhood (all of the figures for this study are provided at the end of the report).



# 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 bounded by Ogden Avenue on the north, Fairview Avenue on the east Warren Avenue/Rogers Street on the south and Main Street on the west. Located just northeast of downtown Downers Grove, single-family homes are the predominant land use within the neighborhood with some commercial and office land uses located in the north and southwest portions of the neighborhood. The neighborhood contains St. Joseph Catholic School, which is located in the northeast corner of Main Street and Franklin Street, and St. Mary of Gostyn Catholic School, which is located in the northeast corner of the Prairie Avenue and Douglas Road. In addition, the east parking lot for Downers Grove North High School is located in the northwest section of the neighborhood. This parking lot serves students, staff and visitors and also provides a drop-off/pick-up area. Washington Park is located in the southwest quadrant of the neighborhood. Finally, downtown Downers Grove and a Metra commuter rail station (Downers Grove Main Street station) are located within walking distance of the neighborhood.



#### **Existing Roadway System**

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

Ogden Avenue (U.S. Route 34) is an east-west road that is under the jurisdiction of the Illinois Department of Transportation (IDOT). It has a five-lane cross section with a posted speed limit of 35 mph. Traffic signal control is provided at its intersections with Main Street and Fairview Avenue. IDOT classifies Ogden Avenue as a major arterial.

Main Street is a north-south roadway that is under the jurisdiction of the Village of Downers Grove south of Ogden Avenue and the DuPage County Division of Transportation (DuDOT) north of Ogden Avenue. Between Ogden Avenue and Franklin Street, Main Street has a four-lane cross section and a posted speed limit that varies between 25 and 30 mph. South of Franklin Street, Main Street has a two-lane cross section with on-street parking and a posted speed limit of 25 mph. Traffic signal control is provided at its intersections with Ogden Avenue, Grant Street, Prairie Avenue, Franklin Street and Warren Avenue. The Village of Downers Grove classifies Main Street as a major arterial.

Fairview Avenue is a north-south roadway that is under the jurisdiction of the Village of Downers Grove south of Ogden Avenue and the DuDOT north of Ogden Avenue. It has a three-lane cross section and a posted speed limit of 30 mph. Parking is prohibited along both sides of the road. The Village of Downers Grove classifies Fairview Avenue as a minor arterial road.

Warren Avenue is an east-west roadway that is under the jurisdiction of the Village of Downers Grove. It has a two-lane cross section and a posted speed limit of 25 mph. Parking is generally provided on both sides of the road. Warren Avenue is a recommended bike route. The Village of Downers Grove classifies Warren Avenue as a collector road.

Rogers Street is an east-west roadway that is under the jurisdiction of the Village of Downers Grove. It has a two-lane cross section and a posted speed limit of 25 mph. Parking is provided along the south side of the roadway between Maple Avenue and Highland Avenue and is provided on both sides of the roadway between Main Street and Highland Avenue. The Village of Downers Grove classifies Rogers Street as a collector road.

#### **Internal Neighborhood Roadways**

Excluding Ogden Avenue, Main Street, Fairview Avenue, Warren Avenue and Rogers Street the following summarizes the physical and operating characteristics of the neighborhood roadways.

All of the neighborhood roads provide one lane in each direction except Linden Place.
 Between Chicago Avenue and Prairie Avenue, Linden Place is a one-way southbound road and between Austin Street and Prairie Avenue, Linden Place is a one-way northbound road.



- All of the roadways within the neighborhood are classified as local roads except the following which are classified as collector roads:
  - Warren Avenue
  - Prairie Avenue
  - **❖** Rogers Street
  - Washington Street
- Parking is generally provided on one or both sides of the roadways. However, parking restrictions are provided on many of the roadways.
- The posted speed limit within the neighborhood is 25 miles per hour with 20 mph school and park zone speed limits.

Figure 2 illustrates the number of lanes and posted speed limits on each of the roadways and the geometrics at the primary intersections.

#### Pedestrian and Bicycle Facilities and Traffic Control Devices

The neighborhood contains two schools, the Downers Grove North High School's east parking lot, Washington Park and is located within walking distance of downtown and the Main Street Metra commuter rail station. In order to accommodate the neighborhood pedestrian and bicycle activity, a number of facilities and traffic control devices are provided in the neighborhood. These are illustrated in **Figure 3** and highlighted below.

- The following roads are designated and signed as bike routes:
  - Grant Street west of Douglas Road
  - ❖ Lincoln Street east of Douglas Road
  - ❖ Douglas Road between Grant Street and Lincoln Street
  - Rogers Street/Warren Avenue
- Dedicated school crossings at intersections.
- School zones with warning signs and reduced speed limits.
- School crossing guards are provided at the intersections of Highland Avenue/Prairie Avenue, Main Street/Franklin Street and Prairie Avenue/Douglas Road.
- All of the traffic signals provide pedestrian signals.
- Except Linden Place sidewalks are provided on at least one side of all the roadways.



In order to determine the pedestrian activity around the neighborhood school areas, pedestrian counts were conducted at four intersections in the neighborhood in October 2014. The counts were conducted from 2:00 P.M. to 4:00 P.M. at the following intersections:

- Highland Avenue and Franklin Street
- Highland Avenue and Prairie Avenue
- Prairie Avenue and Douglas Road
- Highland Avenue and Grant Street

**Figure 3** also illustrates the results of the pedestrian traffic counts.

#### **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 the 106 intersections within the neighborhood and those that are not under traffic signal control.

- Nine traffic signal controlled intersections
- Eight all-way stop sign controlled intersections
- Six two-way or one-way yield sign controlled intersections
- Sixty-five two-way or one-way stop sign controlled intersections
- One intersection where two of the three legs are under stop sign control
- One intersection where three of the four legs are under stop sign control
- Seventeen intersections with no intersection traffic control

## **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 55 locations. In addition, previous traffic counts and speed surveys at 15 locations were obtained from the Village of Downers Grove. Of the total traffic counts and speed surveys, 34 were conducted along the north-south roadways and 36 were conducted along the east-west roadways. The KLOA, Inc. traffic counts and speed surveys were conducted during October and November 2014. All of the traffic counts and speed surveys were conducted for a minimum of two days and were broken down by direction and by hour.



**Figure 5** shows the two-way daily traffic volumes and **Figure 6** 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. The 85<sup>th</sup> percentile speed is commonly used to establish the posted speed limits along roadways.

#### **Existing Morning and Evening Peak Period Traffic Volumes**

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

- Main Street with Franklin Street
- Highland Avenue with Grant Street
- Washington Street with Franklin Street
- Washington Street with Prairie Avenue
- Douglas Road with Chicago Avenue
- Douglas Road with Prairie Avenue

The traffic counts were conducted in October 2014 during the morning (6:00 A.M. to 9:00 A.M.) and the evening (3:00 P.M. to 6:00 P.M.) peak periods. **Figure 7** illustrates the existing morning and evening peak hour traffic volumes.

### **Planned/Proposed Roadway Improvements**

The Village of Downers Grove recently completed the Maple Avenue/Fairview Avenue traffic study in conjunction with two Village initiatives. The first is the Village's near-term plan to reconstruct Maple Avenue between Fairview Avenue and Cumnor Road, and the second is the planned long-term transformation into a Transit-Oriented Development area as identified in the 2011 Village Comprehensive Plan. In order to enhance the flow of traffic through the area, capacity, operational and signal improvements were identified that could be implemented in conjunction with the programmed reconstruction of Maple Avenue. In addition, the study also evaluated significant modifications (realignments, disconnections and one-way conversions) to the roadway system serving the area with the intent of enhancing operations in the area, reducing traffic on Maple Avenue and facilitating or complementing the Transit-Oriented Development concept.



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# 3.

# **Evaluation of Existing Conditions**

To determine how the roadway system is currently functioning, KOLA, 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 and the speed surveys 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.

#### **Daily Traffic Volumes**

From **Figure 6**, it can be seen that the collector roads (Prairie Avenue, Rogers Street and Washington 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, the collector roads generally extend the length of the neighborhood and serve many homes and other land-uses within the neighborhood. In addition, the north-south roads of Highland Avenue, Elm Street and Douglas Road and the east-west roads of Grant Street and Chicago Avenue carry a higher volume of traffic which is due to the length of the road, the fact they extend the entire length of the neighborhood and that they serve the various schools.

Residential Streets, Third Edition<sup>a</sup> indicates that local residential roads have a daily volume between 400 and 1,500 vehicles while residential collector roads have a daily volume exceeding 1,500 vehicles. Therefore, even with the characteristics outlined above, the traffic volumes are within the established standards for residential roads.

A review of the existing traffic volumes as well as the roadway system's physical and operating conditions indicates that the neighborhood is likely experiencing some cut-through traffic, particularly along the following roads:

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<sup>&</sup>lt;sup>a</sup> Residential Streets, Third Edition was developed by the National Association of Home Builders (NAHB), the American Society of Civil Engineers (ASCE), the Institute of Transportation Engineers (ITE) and the Urban Land Institute (ULI)

- Washington Street has the highest daily traffic volume in the neighborhood (a high of 4,657 vehicles). However, this is expected as it is a collector road that extends the length of the neighborhood. Furthermore, the road provides indirect access to St. Joseph Catholic School, Washington Park, the Downers Grove North High School east parking lot and downtown. It is also partially due to motorists who likely traverse the road to access Ogden Avenue from downtown and avoid congestion along Main Street.
- Prairie Avenue has daily traffic volumes between 2,351 and 3,319 vehicles. However, this is expected as it is a collector road that extends the length of the neighborhood. Furthermore, the road provides direct access to St. Mary of Gostyn Catholic School and Washington Park and indirect access to St. Joseph Catholic School. It is also partially due to motorists who likely traverse the road to utilize the traffic signals at Fairview Avenue and Main Street.
- Rogers Street has daily traffic volumes between 2,091 and 3,155 vehicles. However, this is expected as it is a collector road that extends the length of the neighborhood. Furthermore, Rogers Street provides direct access to downtown. It is also partially due to motorists who likely traverse the roadway to access the downtown area.
- Grant Street has daily traffic volumes between 1,222 and 1,850 vehicles between Main Street and Elm Street. The higher traffic volumes are primarily due to the fact that the road provides direct access to the Downers Grove North High School parking lot and drop-off/pick-up area. In addition, the western portion of Grant Street has higher traffic volumes due to the fact that left-turn movements are prohibited from Ogden Avenue to Highland Avenue and, as such, motorists must traverse (1) Elm Street or (2) Washington Street to Grant Street to access the Downers Grove North High School parking lot.
- Chicago Avenue has daily traffic volumes between 1,177 and 1,519 vehicles along sections of the road. The higher traffic volumes are primarily due to the fact that Chicago Avenue does extend the length of the neighborhood and is generally located in the middle of the neighborhood.
- Douglas Road has daily traffic volumes between 1,018 and 1,417 vehicles. The higher traffic volumes are primarily due to the fact that the road provides direct access to St. Mary of Gostyn Catholic School and partially due to motorists who traverse the road to avoid congestion along Fairview Avenue.
- *Highland Avenue* has daily traffic volumes of between 894 and 1,563 vehicles along the blocks within proximity to the Downers Grove North High School east parking lot. The sections with higher traffic volumes are primarily due to the fact that the road serves the parking lot and drop-off/pick-up area and that many parents drop off and pick up students along Highland Avenue and Grant Street.



#### **Travel Speed Surveys**

The main factors affecting travel speeds are the roadway's physical and operating characteristics, including width of road, number of travel lanes, hills, curves, roadway surface and length of free-flow conditions. Many of these attributes are fixed within the neighborhood's infrastructure and are generally difficult and/or costly to change.

The internal neighborhood roads had an observed average speed of approximately 23 mph and an observed 85<sup>th</sup> percentile speed of approximately 28 mph. As shown in **Figure 7**, the average speeds were generally between 14 and 29 mph. A number of the surveyed road sections did experience 85<sup>th</sup> percentile speeds that exceeded 30 mph. The higher 85<sup>th</sup> percentile speeds were primarily observed along those roadway sections that had longer lengths of free-flow conditions. The speed surveys show that the following roadways had 85<sup>th</sup> percentile speeds that exceeded 30 mph at more than one location.

- Highland Avenue
- Washington Street
- Grant Street
- Sherman Street
- Prairie Avenue
- Rogers Street



# 4.

# **Detailed Evaluation and Recommendations**

This section of the study provides the detailed evaluation of the internal roadways and pedestrian and bicycle facilities and traffic control devices within the neighborhood. This section provides a thorough analysis of traffic operations, vehicles 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
- External Intersection Improvements

In addition, a number of traffic calming measures and/or tools were identified that can be used to effectively reduce the operating speeds and traffic volumes in the neighborhood.

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 the input from Village staff. 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.



#### **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 neighborhood issues, such as the functional classification, cut-through traffic, speeding, traffic calming, neighborhood 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). It is important to note that to increase the level of standardization and consistency of the neighborhood traffic control, the Village has requested that traffic signal control or some form of stop sign control generally be provided at all of the neighborhood intersections.

The first step consisted of evaluating the physical and operating conditions of each intersection to determine if they meet any of the MUTCD warrants/requirements that control the installation of all-way stop sign control. The second step was to determine which road of the one-way and two-way controlled intersections is to be under stop sign control. **Figure 8** illustrates the recommended traffic control plan which is presented below.

#### **All-Way Stop Sign Controlled Intersections**

The following points summarize the all-way stop sign control warrants/requirements as outlined in the MUTCD.

- 1. Meets the minimum traffic and pedestrian volume
- 2. Meets the minimum number of intersection crashes
- 3. Required to control left-turn conflicts
- 4. Required to control vehicle/pedestrian conflicts
- 5. Required due to poor intersection sight distance
- 6. Required to improve traffic operational characteristics of the intersection of two collector roads with similar design and operating characteristics

The characteristics of each intersection were evaluated to verify if the existing operations met any of the warrants and/or requirements that control the installation of an all-way stop sign control. It has been determined that the following ten intersections should be under all-way stop sign control.

• Washington Street/Rogers Street and Washington Street/Prairie Avenue. Both of these intersections should continue to operate under all-way stop sign control as they are the intersections of two collector roadways.



- Highland Avenue/Grant Street and Douglas Road/Prairie Avenue. Both intersections should continue to operate under all-way stop sign control given that they are located adjacent to the schools in the neighborhood and the fact that Highland Avenue/Grant Street is an off-set intersection. All-way stop sign control is proposed to control the vehicle and pedestrian conflicts at these intersections.
- Washington Street/Grant Street, Washington Street/Chicago Avenue and Douglas Road/Franklin Street. All three intersections are proposed to continue to operate under all-way stop sign control to maintain these established locations and to reduce the uninterrupted flow along Washington Street and Douglas Road.
- *Highland Avenue/Warren Avenue and Highland Avenue/Franklin Street*. Both of these intersections are proposed to be converted to all-way stop sign control given their proximity to downtown, the Downers Grove Main Street Metra Station and St. Joseph Catholic School and the fact that both are off-set intersections. The all-way stop sign control is proposed to control the vehicle and pedestrian conflicts at these intersections.
- Stanley Avenue/Grant Street and Douglas Road/Chicago Avenue. Both of these intersections are proposed to be converted to all-way stop sign control given the uninterrupted flow along Grant Street and Chicago Avenue as well as the pedestrian activity in proximity to the intersections.

#### Two-Way/One-Way Stop Sign Control

Once the all-way stop sign control intersections were identified, it was assumed that all of the other intersections were to be controlled via one-way (T-intersections) or two-way (four-legged intersections) stop sign control. The criteria used in determining which road of an intersection should be under stop sign control were based on the following.

- 1. The guidelines provided in the MUTCD.
- 2. Minimizing the uninterrupted flow along the local road by providing, if possible, a stop sign at every other cross road along the local roads.
- 3. If possible, maintaining which road is currently under traffic control (via either yield sign or stop sign) at each intersection in order to minimize the change in the flow of traffic through the neighborhood.



#### New or Modified Two-Way Stop Sign Controlled Intersections

New or modified two-way stop sign control is proposed at the following intersections.

- *Highland Avenue/Chicago Avenue*. The existing all-way stop sign control is not warranted or required at this intersection and, as such, should operate under two-way stop sign control. Given that Chicago Avenue carries the higher traffic volumes and that the Highland Avenue approaches provide sufficient sight distance, the Highland Avenue approaches should be under stop sign control.
- *Douglas Road/Austin Street*. The Austin Street approaches are proposed to be converted from yield sign to stop sign control.
- *Douglas Road/Sherman Street*. The Douglas Road approaches are proposed to be converted from yield sign to stop sign control.
- Stanley Avenue/Lincoln Street. The Lincoln Street approaches are proposed to be converted from yield sign to stop sign control.
- *Prospect Avenue/Sherman Street.* This intersection currently operates with no intersection traffic control. The Prospect Avenue approaches are proposed to be under stop sign control.

#### Proposed One-Way Stop Sign Controlled Intersections

The following T-intersections are currently under yield sign control or have no control and are proposed to be converted so the minor approaches are under stop sign control.

- *Highland Avenue/Sherman Street and Highland Avenue/Highland Court.* Sherman Street and Highland Court are proposed to be under stop sign control at their intersections with Highland Avenue. Both intersections currently have no intersection traffic control.
- Bryon Street/Lincoln Street, Stratton Street/Lincoln Street and Prospect Avenue/Lincoln Street. Bryon Street, Stratton Street and Prospect Avenue are proposed to be under stop sign control at their intersections with Lincoln Street. All three intersections currently have no intersection traffic control.
- *Elm Street/Birch Avenue*. Birch Avenue is proposed to be under stop sign control at this intersection which currently has no intersection traffic control.
- *Elm Street/Sherman Street*. The Sherman Street approach is proposed to be converted from yield sign to stop sign control.



- Debolt Avenue/Prairie Avenue. Debolt Avenue is proposed to be under stop sign control at this intersection which currently has no intersection traffic control.
- *Linden Place/Franklin Street*. The Linden Place approach is proposed to be converted from yield sign to stop sign control.
- Linden Place/Gierz Street and Linden Place/Wilson Street. Gierz Street and Wilson Street are proposed to be under stop sign control at their intersections with Linden Place. Both intersections currently have no intersection traffic control.
- Sterling Road with Lincoln Street. The Lincoln Street approach is proposed to be converted from yield sign to stop sign control.
- Sterling Road/Sherman Street. Sterling Road is proposed to be under stop sign control at this intersection which currently has no intersection traffic control.
- *Elm Street/Warren Avenue*. Elm Street is proposed to be under stop sign control at this intersection which currently has no intersection traffic control.
- Douglas Road/Otis Avenue, Douglas Road/Lincoln Street and Douglas Road/Indianapolis Avenue. Otis Avenue, Lincoln Street and Indianapolis Avenue are proposed to be under stop sign control at their intersections with Douglas Road. All three intersections currently have no intersection traffic control.

#### **Summary of Recommended Intersection Traffic Control Plan**

**Table 1** provides a summary of the intersection traffic control modifications, **Table 2** provides a comparison of the existing and recommended traffic control within the neighborhood and the following summarizes the recommended modifications.

- Under the recommended plan, 105 of the 107 intersections will be under either traffic signal control or some form of stop sign control. This is an improvement over existing conditions where six intersections have yield sign control and 17 intersections have no intersection traffic control.
- Along many of the local roads, a stop sign is provided at least at every other intersection. This type of intersection traffic control is an excellent deterrent to neighborhood traffic concerns such as cut-through traffic and speeding along local roads.
- Modifications to the existing intersection traffic control are recommended at 25 intersections. However, none of the two-way stop sign controlled intersections or two-way yield sign controlled intersections require switching the road which is currently under stop sign or yield sign control.



Table 1 PROPOSED INTERSECTION TRAFFIC CONTROL MODIFICATIONS

Modifications	Intersections	
Convert two-way stop sign control to all-way	Highland Avenue with Franklin Street	
stop sign control	<ul> <li>Highland Avenue with Warren Avenue</li> </ul>	
	<ul> <li>Stanley Avenue with Grant Street</li> </ul>	
	<ul> <li>Douglas Road with Chicago Avenue</li> </ul>	
Convert all-way stop sign control to	Highland Avenue with Chicago Avenue	
two-way stop sign control	(stop signs on Highland Ave.)	
Convert yield signs to stop signs	<ul> <li>Sherman Street at Elm Street</li> </ul>	
	<ul> <li>Lincoln Street at Stanley Avenue</li> </ul>	
	<ul> <li>Lincoln Street at Sterling Road</li> </ul>	
	<ul> <li>Linden Place at Franklin Street</li> </ul>	
	<ul> <li>Sherman Street at Douglas Road</li> </ul>	
	<ul> <li>Austin Street at Douglas Road</li> </ul>	
Add stop signs at intersections with no	<ul> <li>Highland Court at Highland Avenue</li> </ul>	
intersection traffic control	<ul> <li>Sherman Street at Highland Avenue</li> </ul>	
	<ul> <li>Bryon Street at Lincoln Street</li> </ul>	
	<ul> <li>Stratton Street at Lincoln Street</li> </ul>	
	<ul> <li>Prospect Avenue at Sherman Street</li> </ul>	
	<ul> <li>Birch Avenue at Elm Street</li> </ul>	
	<ul> <li>Prospect Avenue at Lincoln Street</li> </ul>	
	<ul> <li>Debolt Avenue at Prairie Avenue</li> </ul>	
	<ul> <li>Gierz Street at Linden Place</li> </ul>	
	<ul> <li>Wilson Street at Linden Place</li> </ul>	
	<ul> <li>Sterling Road at Sherman Street</li> </ul>	
	<ul> <li>Otis Avenue at Douglas Road</li> </ul>	
	<ul> <li>Lincoln Street at Douglas Road</li> </ul>	
	<ul> <li>Indianapolis Avenue at Douglas Road</li> </ul>	
	• Elm Street at Warren Avenue	

Table 2
EXISTING AND RECOMMENDED INTERSECTION TRAFFIC CONTROL

		Existing	Recommended
		Intersection	Intersection
		Traffic Control	Traffic Control
Traffic Signal Control		9	9
All-Way Stop Sign Control		8	11
Two-Way/One-Way Stop Sign Control		65	84
Two of Three Legs Under Stop Sign Control		1	0
Three of Four Legs Under Stop Sign Control		1	1
Yield Sign Control		6	0
No Intersection Traffic Control		<u>17</u>	_2
	Total	107	107

## Pedestrian and Bicycle Facilities and Traffic Control Devices

In addition to the standard pedestrian and bicycle facilities (i.e., sidewalks, crosswalks and bike routes), the neighborhood contains various traffic control devices associated with the two elementary schools and park located in the neighborhood. The neighborhood has several dedicated school crossings and school and park zones, which include appropriate warning signs and reduced speed limits. Overall, these traffic control devices are generally well distributed and located appropriately.

However, recommendations have been developed to further enhance the pedestrian and bicycle circulation and to ensure that the traffic control devices comply with the MUTCD. The proposed recommendations are illustrated in **Figure 9** and summarized in **Table 3**. In addition, all of the signalized intersections in the study area include pedestrian signals. Further, all of the traffic signals have count down pedestrian signals except Fairview Avenue with Maple Avenue and Main Street with Warren Avenue. Therefore, as the traffic signal at the Fairview Avenue/Maple Avenue intersection is replaced and/or upgraded, countdown pedestrian signal should be installed. It should be noted that Illinois Commerce Commission does not permit countdown traffic signal adjacent to railroad crossings and, as such, they can't be installed at the Main Street/Warren Avenue intersection.



Table 3 PROPOSED PEDESTRIAN TRAFFIC CONTROL AND STRIPING MODIFICATIONS

Intersection	Modifications
Main/Grant	• Relocate School Crossing Assembly signs on Main Street lower to the ground and on near side of the intersection
	• Include arrow plaques that point to the crosswalk on the School Crossing Assembly signs
Main/Franklin	• Replace School Advance Crossing Assembly signs on Main Street with current MUTCD compliant signs
	• Replace School Crossing Assembly signs on Main Street with current MUTCD compliant signs and relocate the northbound sign to north side of the intersection
Highland/Prairie	• Relocate westbound School Crossing Assembly Sign on Prairie Avenue to the west side of the intersection.
	• Install School Advance Crossing Assembly sign on south side of Prairie Avenue west of Highland Avenue
Highland/Franklin	• Relocate southbound School Crossing Assembly sign on Highland Avenue to south side of the intersection
	• Remove crosswalks on north and south sides of the off-set intersection
Washington/Prairie	• Install a Park Zone Reduced Speed Limit sign on south side of Prairie Avenue east of Bryan Place
	<ul> <li>Replace standard crosswalks with continental crosswalks</li> </ul>
Washington/Franklin	• Replace School Crossing Assembly signs on Washington Street with current MUTCD compliant signs and relocate the northbound sign to north side of the intersection
	• Install In-Street Pedestrian Crossing sign on the Washington Street crosswalk
	• Install a Park Zone Reduced Speed Limit sign on east side of Washington Street north of Franklin Street
Elm/Franklin	<ul> <li>Replace standard crosswalks with continental crosswalks</li> </ul>
Sterling/Lincoln	Remove all School Advance Crossing Assembly signs
	<ul> <li>Remove all School Crossing Assembly signs</li> </ul>
	Remove crosswalk on Sterling Road
Douglas/Gierz	• Replace School Crossing Assembly signs on Douglas Road with current MUTCD compliant signs and relocate the southbound sign to south side of the intersection



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Table 3, Continued PROPOSED PEDESTRIAN TRAFFIC CONTROL AND STRIPING MODIFICATIONS

Intersection	Modifications
Douglas/Chicago	• Install School Advance Crossing Assembly signs on north side of Chicago Avenue east of Douglas Road, the south side of Chicago Avenue west of Douglas Road and the west side of Douglas Road north of Chicago Avenue.
	<ul> <li>Remove School Crossing Assembly signs on Chicago Avenue.</li> </ul>
	• Install continental crosswalks on north, south and west legs of the intersection.
Douglas Road	<ul> <li>Replace School Advance Crossing Assembly sign on Douglas Road south of Wilson Street with current MUTCD compliant signs</li> </ul>
Fairview/Lincoln	<ul> <li>Relocate the northbound School Advance Crossing Assembly sign on Fairview Avenue further south</li> </ul>
	<ul> <li>Replace southbound School Crossing Assembly sign on Fairview Avenue with current MUTCD compliant sign and relocate to the south side of the intersection</li> </ul>
	<ul> <li>Replace eastbound School Crossing Assembly sign on Lincoln Street with current MUTCD compliant sign</li> </ul>
Fairview/Prairie	• Relocate southbound School Advance Crossing Assembly sign on Fairview Avenue further north
	<ul> <li>Replace School Crossing Assembly signs on Fairview Avenue with current MUTCD compliant signs</li> </ul>
Warren Avenue	Remove In-Street Pedestrian Crossing sign located between Washington Street and Highland Avenue

# **Traffic Calming Measures**

One of the major concerns expressed by residents was speeding and cut-through traffic within the 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. Furthermore, the internal neighborhood roads had an observed average speed of approximately 23 mph and an observed 85<sup>th</sup> percentile speed of approximately 28 mph. Several of the roads did experience 85<sup>th</sup> percentile speeds that exceeded 30 mph. The higher 85<sup>th</sup> percentile speeds were primarily observed along those roadway sections that had longer lengths of free-flow conditions. As such, a review of the existing traffic volumes and speed surveys as well as the roadway system's physical and operating conditions indicates that the neighborhood is experiencing some higher travel speeds and cut-through traffic.

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The recommended traffic control and pedestrian traffic control and striping modifications should help to mitigate the speeds and cut-through traffic in the neighborhood. If these measures are not completely successful, other measures and/or tools that can effectively reduce vehicle speeds and cut-through traffic include the following traffic calming measures.

- Enhanced speed limit signs that increase motorist's awareness
- Increased police enforcement
- Portable or permanent speed awareness systems such as electronic speed radar signs
- Pavement markings, edge lines, parking lanes and bike lanes that reduce the width of roadways
- Horizontal or vertical deflections (i.e., curb extensions and/or medians at intersections and midblock locations, traffic circles, raised crosswalks, chokers, neck-downs and chicanes)

Table 4 provides a summary of these measures/devices and also shows how they 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.

Table 4
INCREMENTAL TRAFFIC CALMING MEASURES

	Examples
Level 1 Options	
Regulatory Modifications	Speed Limit Reductions
Increased Police Presence/Enforcement	
Level 2 Options	
Advisory Signing	Portable Speed Radar Signs, Enhanced Speed Limit Signs
Pavement Markings	Parking Lanes, Bike Lanes, Crosswalks, Edgelines
Level 3 Options	
Horizontal Deflections	Curb Extensions, Medians, Traffic Circles, Chicanes, Chokers/Neck-Downs
Vertical Deflections	Raised Crosswalks, Speed Humps, Speed Tables, Speed Cushions

The Village has committed to increasing the police presence/enforcement in the neighborhood and the use of portable speed radar signs along select roadways (Level 1 and 2 options) to help mitigate the speeding in the neighborhood. In addition, KLOA, Inc. examined locations that would be appropriate for horizontal deflection measures (curb extensions, median islands, chokers/neck-downs, chicanes, etc.). The review was only preliminary in nature and based on the existing traffic volumes and speed surveys. Before any horizontal deflection measures 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. Based on the results of the traffic counts and speed surveys, the following locations may benefit from the future implementation of horizontal deflection measures.

- Washington Street between Ogden Avenue and Grant Street
- Prairie Avenue between Douglas Road and Washington Street
- Grant Street between Fairview Avenue and Washington Street
- Rogers Street between Fairview Avenue and Washington Street

#### **External Neighborhood Intersections**

In addition to evaluating the operations within the neighborhood, the study also examined the operation of two key intersections located on the periphery of the neighborhood.

#### **Maple Avenue with Rogers Street**

The T-intersection of Maple Avenue with Rogers Street is located in the southeast corner of the neighborhood. Given that Rogers Street does not intersect Maple Avenue at a 90 degree angle, the Rogers Street approach is very wide and, as a result, does not provide any vehicle channelization and has a long pedestrian crossing. Further, due to the proximity of the intersection to the Maple Avenue/Fairview Avenue intersection to the northeast and the at-grade railroad crossing on Maple Avenue to the southwest, queues from the intersection and the at-grade railroad crossing often extend past the intersection and block access from Rogers Street to Maple Avenue.

As discussed previously, the Village recently completed a traffic study that evaluated alternatives to enhance operations within proximity to the Maple Avenue/Fairview Avenue intersection, including this intersection. In addition, the Village requested that KLOA, Inc. examined what striping and signage improvements could be implemented in the interim to enhance the intersection's existing operation. **Figure 10** illustrates and the following summarize the recommended improvements.

- To better channelize the traffic through this intersection, it is recommended that a striped center median be provided between the eastbound and westbound lanes on Rogers Street.
- To enhance access from Rogers Street to Maple Avenue, it is recommended that "Do Not Block Intersection" signs be placed on Maple Avenue both northeast and southwest of the intersection.



#### **Main Street and Grant Street**

This signalized intersection of Main Street and Grant Street is located in the northwest portion of the neighborhood and serves as the primary access between Main Street and the Downers Grove North High School's east parking lot via Grant Street. Given the current operation of the traffic signal, the capacity of the movements to and from Grant Street are limited which results in additional delay and queueing. As such, motorists traveling to/from the east parking lot will traverse through the neighborhood to avoid the congestion at this signalized intersection. To enhance the capacity of these movements and provide more efficient access between Main Street and Grant Street, consideration should be given to implementing the following improvements at this intersection.

- The existing traffic signal could be upgraded to provide a protected left-turn phase (arrow) from southbound Main Street to eastbound Grant Street. Currently, the left-turn movement operates only on a permissive phase (green ball) and the capacity of the left-turn movement is limited due to the volume of northbound Main Street traffic, particularly during the morning peak period.
- In order to improve the capacity of Grant Street, the traffic signal timings could be modified to increase the amount of green time for the Grant Street approach. Currently, during the peak drop-off/pick-up periods, the queue of traffic along the Grant Street approach does not always clear the intersection and, as such, some motorists must wait an additional signal cycle before clearing the intersection.
- To further increase the capacity of Grant Street, the Grant Street approach could be widened to provide one eastbound lane and two westbound lanes striped for a separate right-turn lane and a separate left-turn lane. In addition to operating during the green phase for Grant Street, the right-turn lane could also operate as an overlap phase with the recommended protected Main Street left-turn phase.

## **Illegal On-Street Parking**

A number of residents expressed concern over illegal parking along the roads within the neighborhood, particularly within proximity to Washington Park. To improve the operation of Elm Street and Franklin Street and enhance pedestrian safety, the Village recently prohibited parking from April 1 to November 1 on the west side of Elm Street and north side of Franklin Street within proximity of Washington Park. However, field observations and residents input have confirmed that many Washington Park patrons continue to park within these no parking zones. In addition, many parents/visitors of the two schools and patrons/guests of the various religious facilities within the neighborhood also park illegally on the roads within proximity to these institutions. To reduce the illegal parking, the Village should consider (1) increasing the parking enforcement in the neighborhood and (2) painting the curbs along those no parking zones that have not already been painted to further identify that parking is prohibited.



#### Operation of St. Joseph School and St. Mary Gostyn School

As part of the traffic study, KLOA, Inc. examined the student drop-off/pick-up, bus loading and pedestrian operations of both St. Joseph School and St. Mary Gostyn School. Based on the following, both schools generally operate well.

- The peak activity at both schools occurs for only 15 to 20 minutes in both the morning and afternoon peak periods.
- While some localized congestion occurs along the roadways within proximity to the schools, it generally only lasts for a short period (15 to 20 minutes) and is common and inherent with most schools due to the fixed start and end times.
- Both schools have established drop-off/pick-up, bus loading and parking procedures which provide for more efficient and orderly operations.
- Both schools provide bus service and some students live within walking distance of the schools which reduces the volume of drop-off/pick-up traffic.
- To help manage and control the flow of vehicle and pedestrian traffic, crossing guards are provided at one intersection within proximity of St. Mary Gostyn School (Douglas Road/Prairie Avenue) and at two intersections within proximity of St. Joseph School (Highland Avenue/Prairie Avenue and Main Street/Franklin Street). In addition, both schools use staff to assist in the drop-off/pick-up operations and the bus loading.
- For the most part, both schools generally segregate the bus loading from the drop-off/pick-up activity, which only provides for more efficient and orderly operations. It should be noted that the both bus loading and student drop off occur on Prairie Avenue in front of St. Mary Gostyn School during the morning peak period.
- Dedicated school crossings are provided at several intersections and school zones, which include appropriate warning signs and reduced speed limits, are located along several roads within the vicinity of the two schools.

Village staff recently met with representatives of both schools to discuss the current operations. According to Village staff, representatives at both schools are generally pleased with the current operations and do not have any major concerns that they feel need to be addressed at this time. Further, both schools indicated that they will continue to work with Village staff and the residents to refine, if necessary, the traffic and parking operations so to minimize the impact of the schools on the neighborhood and the neighborhood roads.



While both schools are generally operating well, some localized congestion does occur at both schools during the peak 15 to 20 minute periods in the morning and afternoon. This is often due to parents that do not follow the parking restrictions and/or the school's drop-off/pick-up procedures. School officials should continue to educate and enforce the drop-off/pick-up procedures. Further, as discussed above, the Village should consider (1) increasing the parking enforcement in the neighborhood and (2) painting the curbs along those no parking zones that have not already been painted to further identify that parking is prohibited.



# 5. Conclusion

This study summarizes the results and findings of the neighborhood traffic study for Area Number 4. The neighborhood is bounded by Ogden Avenue on the north, Fairview Avenue on the east, Warren Avenue/Rogers Street on the south and Main Street 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. In addition to addressing the primary traffic concerns within any neighborhood, vehicular volume, vehicular speed and overall vehicular and pedestrian safety, the study examined the operation of several intersections bordering the neighborhood. The recommendations developed in the study were based primarily on accepted engineering practices, conformity with the 2009 MUTCD, existing Village criteria and the input from Village staff and residents.

**Tables 5, 6** and 7 summarize the short-term, mid-term and long-term recommendations of the neighborhood traffic study. Short-term improvements generally have lower costs, are easier to implement and/or are needed to address immediate concerns. Long-term improvements are generally more costly, require additional planning/engineering, can be implemented with other improvement projects or may only be required depending on the effectiveness of previous efforts.



Table 5 SHORT-TERM (0 TO 6 MONTHS) RECOMMENDATIONS

Recommendations	Location	
<b>Intersection Traffic Control Modifications</b>		
Convert two-way stop sign control to all-way stop sign control	<ul> <li>Highland Avenue with Franklin Street</li> </ul>	
	• Highland Avenue with Warren Avenue	
	<ul> <li>Stanley Avenue with Grant Street</li> </ul>	
	Douglas Road with Chicago Avenue	
Convert all-way stop sign control to two-way stop sign control	Highland Avenue with Chicago Avenue (stop signs on Highland Avenue)	
Convert yield signs to stop signs	<ul> <li>Sherman Street at Elm Street</li> </ul>	
	<ul> <li>Lincoln Street at Stanley Avenue</li> </ul>	
	<ul> <li>Lincoln Street at Sterling Road</li> </ul>	
	<ul> <li>Linden Place at Franklin Street</li> </ul>	
	<ul> <li>Sherman Street at Douglas Road</li> </ul>	
	Austin Street at Douglas Road	
Add stop signs at intersections with no	<ul> <li>Highland Court at Highland Avenue</li> </ul>	
intersection traffic control	<ul> <li>Sherman Street at Highland Avenue</li> </ul>	
	<ul> <li>Bryon Street at Lincoln Street</li> </ul>	
	<ul> <li>Stratton Street at Lincoln Street</li> </ul>	
	<ul> <li>Prospect Avenue at Sherman Street</li> </ul>	
	<ul> <li>Birch Avenue at Elm Street</li> </ul>	
	<ul> <li>Prospect Avenue at Lincoln Street</li> </ul>	
	<ul> <li>Debolt Avenue at Prairie Avenue</li> </ul>	
	<ul> <li>Gierz Street at Linden Place</li> </ul>	
	<ul> <li>Wilson Street at Linden Place</li> </ul>	
	<ul> <li>Sterling Road at Sherman Street</li> </ul>	
	<ul> <li>Otis Avenue at Douglas Road</li> </ul>	
	<ul> <li>Lincoln Street at Douglas Road</li> </ul>	
	<ul> <li>Indianapolis Avenue at Douglas Road</li> </ul>	
	Elm Street at Warren Avenue	

Table 5, Continued SHORT-TERM (0 TO 6 MONTHS) RECOMMENDATIONS

Recommendations	Location	
Pedestrian Traffic Control and Striping Modifications		
Replace existing signs with MUTCD compliant signs	Douglas Road south of Wilson Street	
Relocate existing signs	• Highland Avenue with Prairie Avenue	
	<ul> <li>Highland Avenue with Franklin Street</li> </ul>	
Replace existing signs with MUTCD	Main Street with Grant Street	
compliant signs and relocate signs	• Fairview Avenue with Lincoln Street	
	• Fairview Avenue with Prairie Avenue	
	<ul> <li>Douglas Road with Gierz Street</li> </ul>	
Install new MUTCD compliant signs	Highland Avenue with Prairie Avenue	
	Washington Street with Prairie Avenue	
	<ul> <li>Douglas Road with Chicago Avenue</li> </ul>	
Install new signs, replace existing signs with MUTCD compliant signs and relocate signs	Washington Street with Franklin Street	
	<ul> <li>Main Street with Franklin Street</li> </ul>	
Remove existing signs	Bryon Place at Franklin Street	
	<ul> <li>Sterling Road with Lincoln Street</li> </ul>	
	<ul> <li>Douglas Road with Chicago Avenue</li> </ul>	
	<ul> <li>Warren Avenue between Washington Street and Highland Avenue</li> </ul>	
Add, modify or remove crosswalks	• Washington Street with Prairie Avenue	
	• Elm Street with Franklin Street	
	<ul> <li>Sterling Road with Lincoln Street</li> </ul>	
	Douglas Road with Chicago Avenue	
<b>Traffic Calming Measures</b>		
Increase police awareness/enforcement	Throughout the neighborhood	
On-Street Parking		
Increase parking enforcement	Throughout the neighborhood	
Paint curbs along no parking zones	Where required within the neighborhood	
School Operations		
School officials should continue to enforce drop off/pick up and parking procedures	St. Joseph School and St. Mary Gostyn School	
Village and School officials should continue to monitor operations	St. Joseph School, St. Mary Gostyn School and Downers Grove North High School	



Table 6 MID-TERM (6 TO 18 MONTHS) RECOMMENDATIONS

Recommendations	Location
Traffic Calming Measure	
Install portable/permanent speed radar signs (Only implement if objective of other measures are not sufficiently met.)	<ul> <li>Key areas in the neighborhood, including</li> <li>Highland Avenue</li> <li>Washington Street</li> <li>Grant Street</li> <li>Sherman Street</li> <li>Prairie Avenue</li> <li>Rogers Street</li> </ul>
Install pedestrian countdown signals	Fairview Avenue with Maple Avenue
<b>External Intersection Improvements</b>	
Striping and signage modifications	Maple Avenue with Rogers Street
Traffic signal modifications	Main Street with Grant Street

Table 7 LONG-TERM (18 TO 36 MONTHS) RECOMMENDATIONS

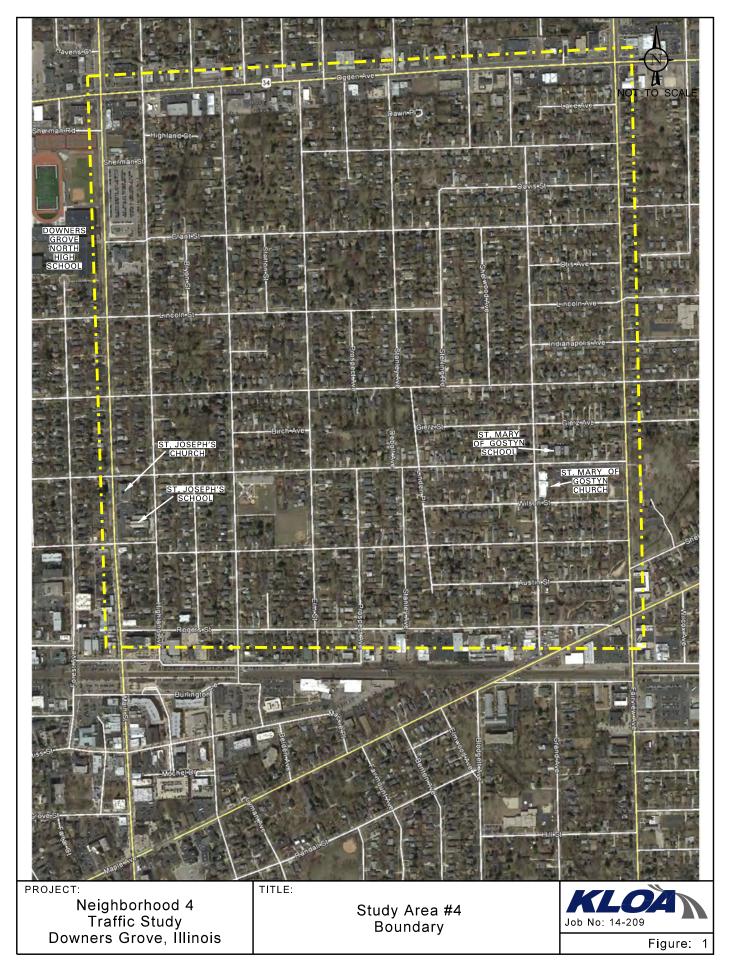
Recommendations	Location
Traffic Calming Measure	
Install horizontal deflection measures, including curb extensions, median islands, chokers/neck-downs and chicanes (Implement only if objective of other measures are not sufficiently met and a thorough evaluation of the impact of the measures/devices are performed.)	<ul> <li>Possible locations for consideration include</li> <li>Washington Street between Ogden Avenue and Grant Street</li> <li>Prairie Avenue between Douglas Road and Washington Street</li> <li>Grant Street between Fairview Avenue and Washington Street</li> <li>Rogers Street between Fairview Avenue and Washington Street</li> </ul>
<b>External Intersection Improvements</b>	
Widen Grant Street approach	<ul> <li>Main Street with Grant Street</li> </ul>
Implement recommendations from Maple Avenue/Fairview Avenue traffic study	<ul><li>Maple Avenue with Fairview Avenue</li><li>Maple Avenue with Rogers Street</li></ul>

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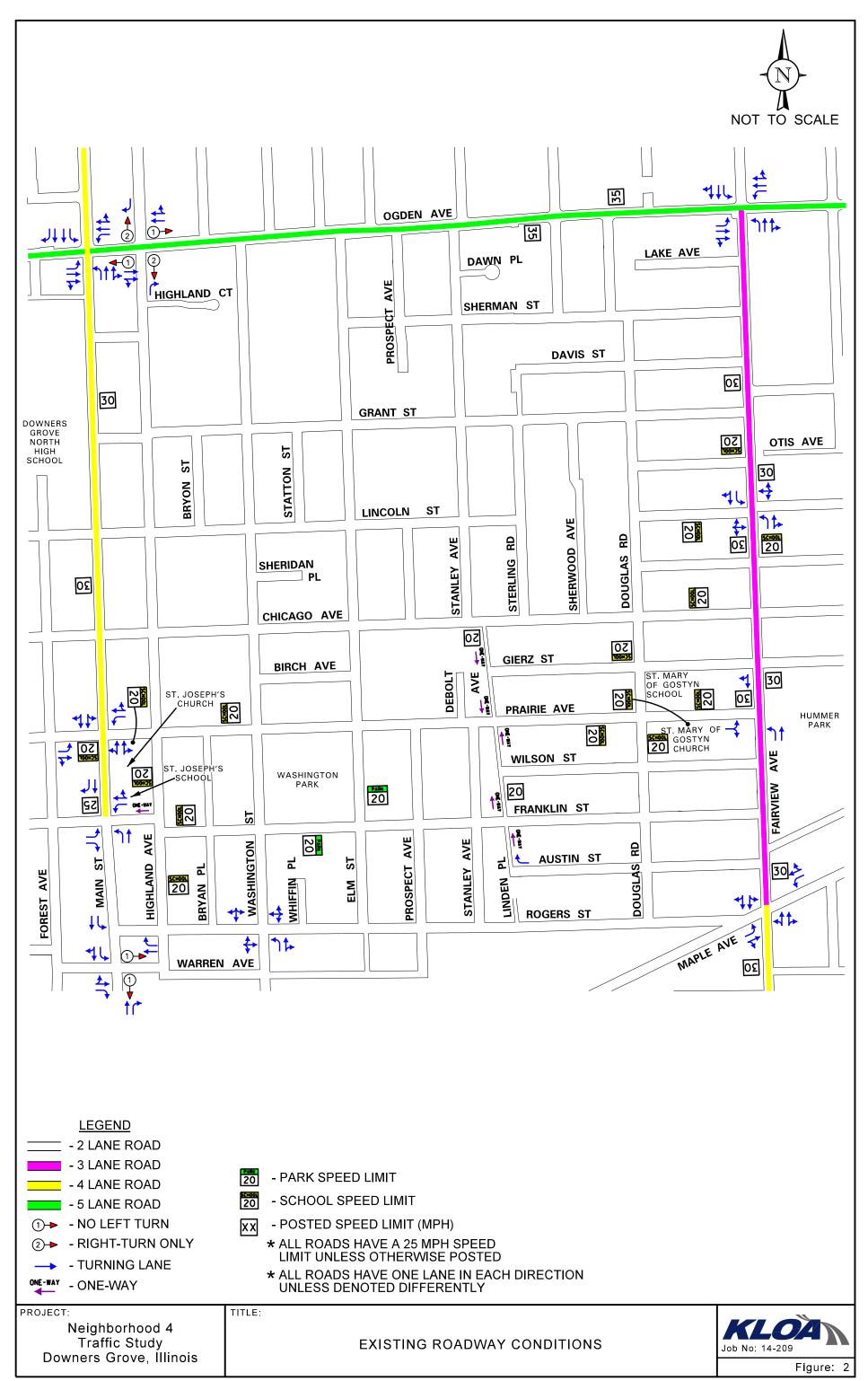
# **Appendix**



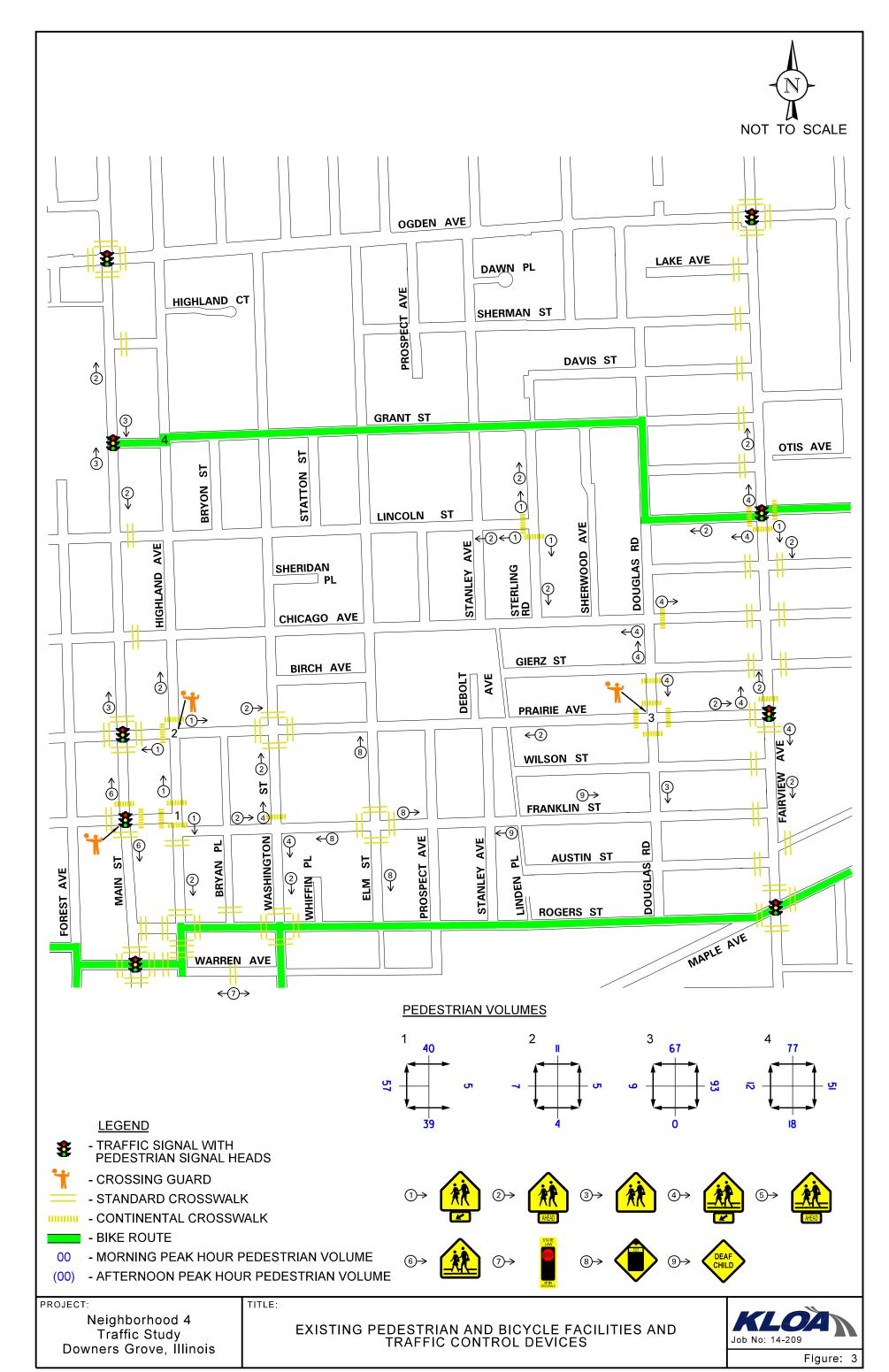
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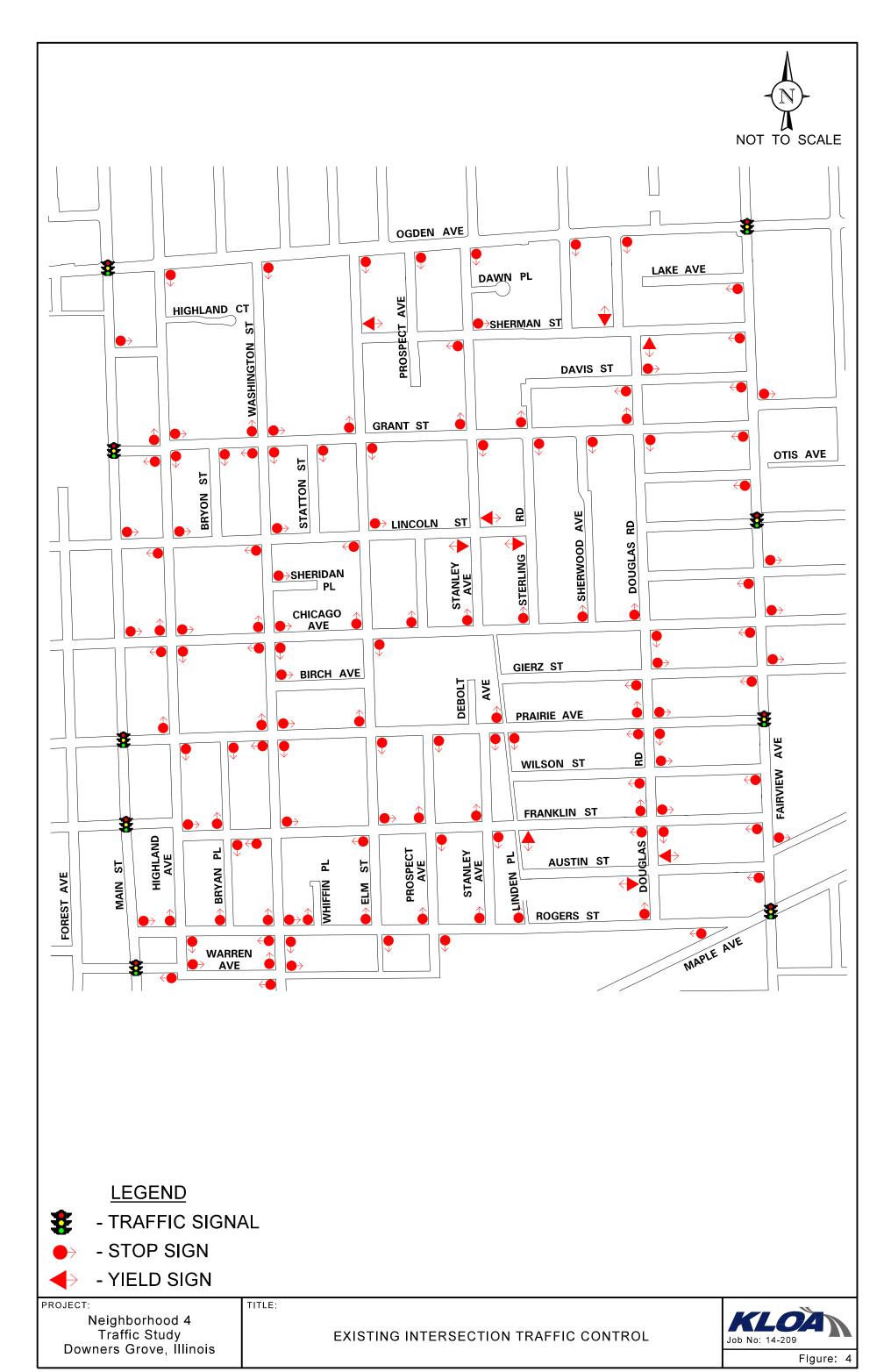
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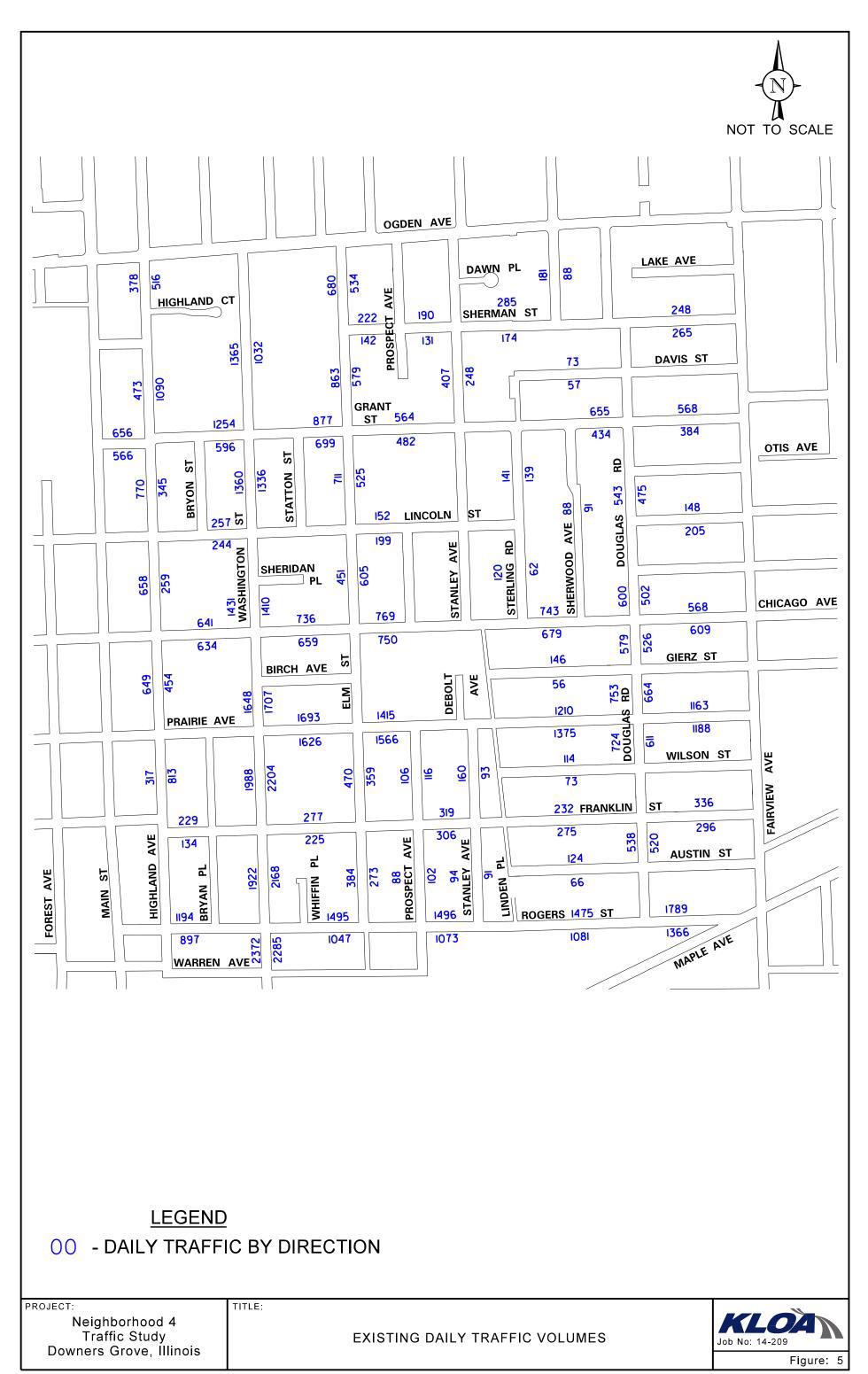
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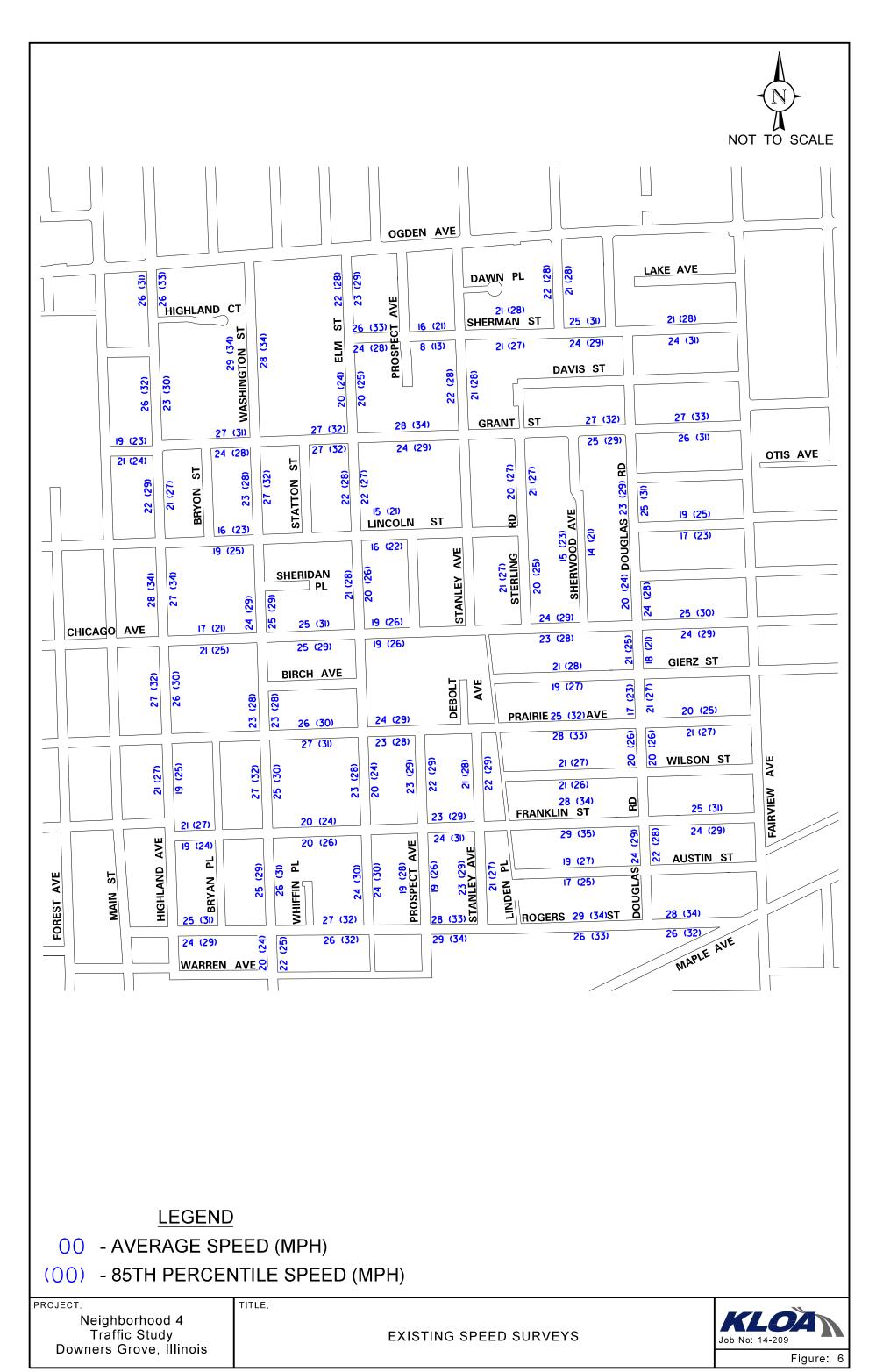
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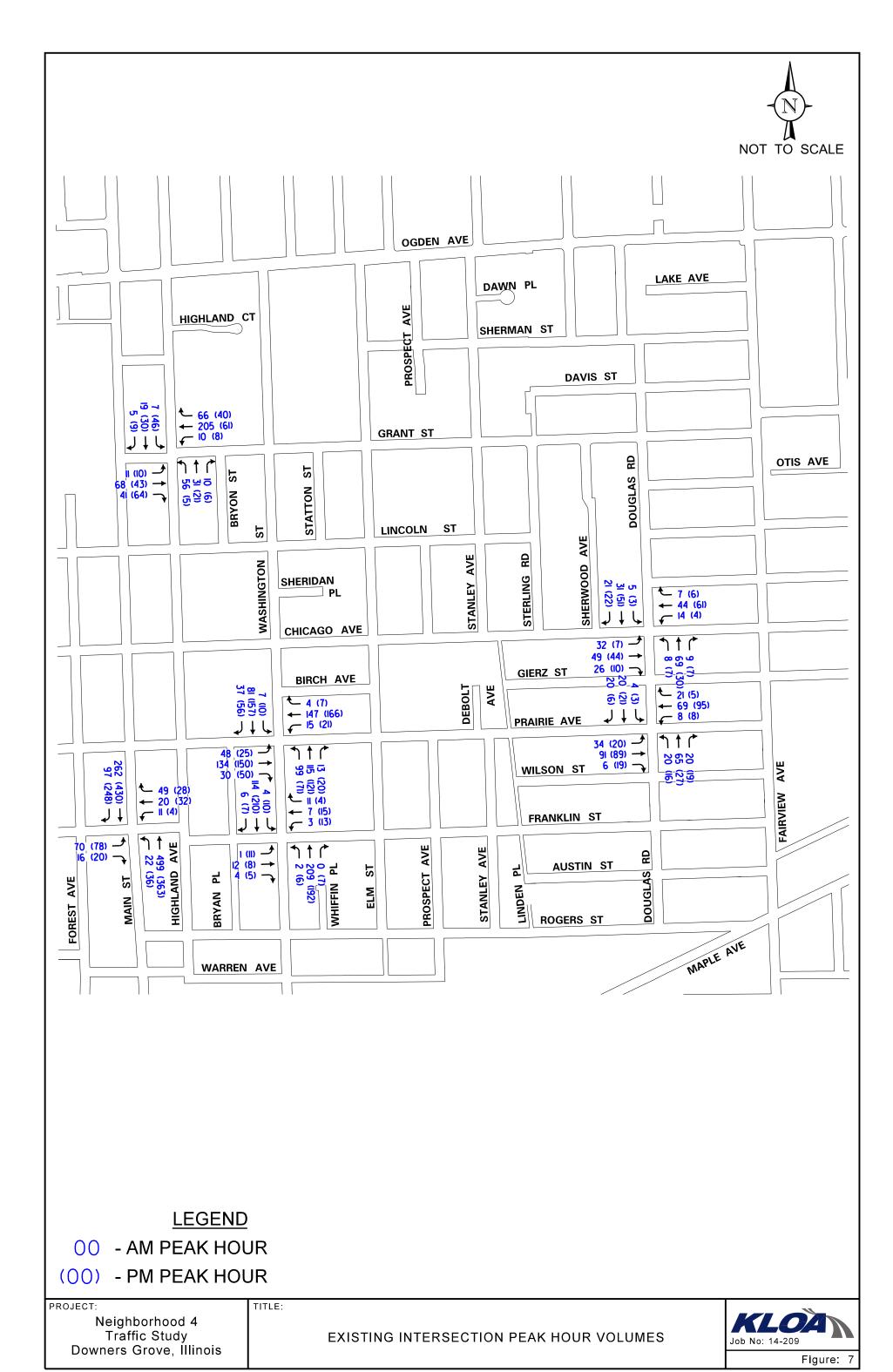
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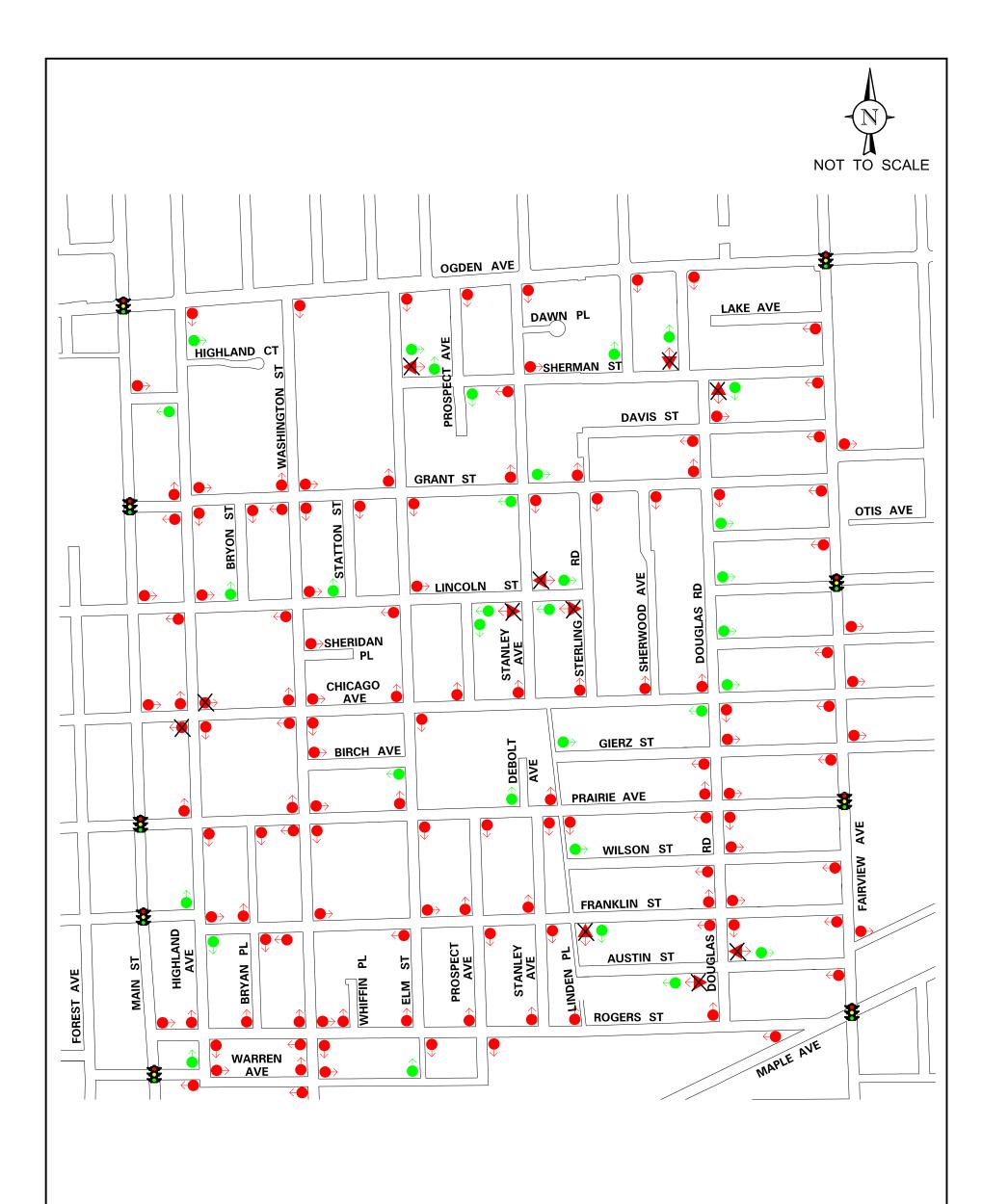
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# **LEGEND**

- TRAFFIC SIGNAL
- STOP SIGN
- YIELD SIGN
- → PROPOSED STOP SIGN
- REMOVE EXISTING SIGN

PROJECT:

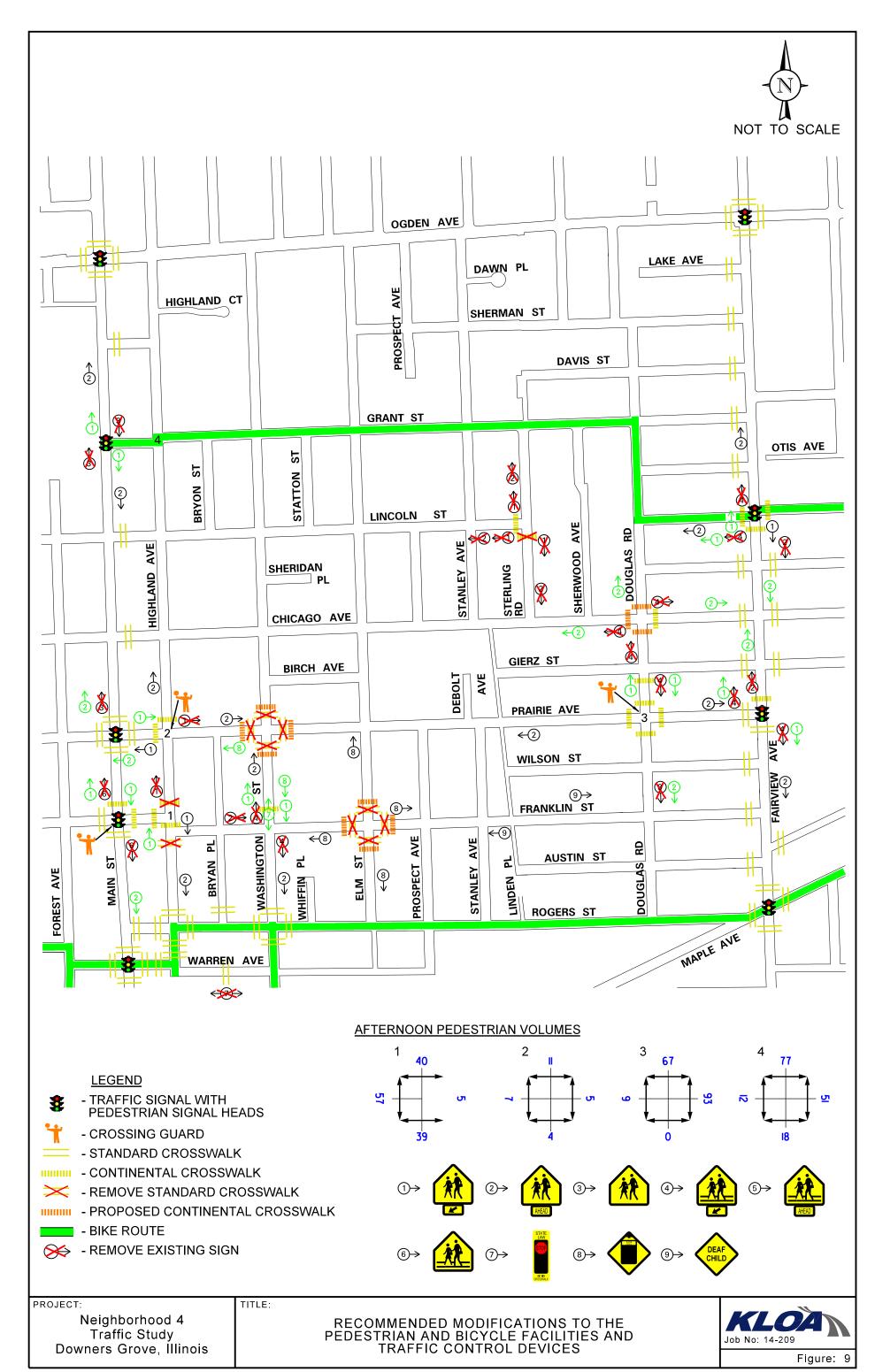
Neighborhood 4 Traffic Study Downers Grove, Illinois TITLE:

RECOMMENDED INTERSECTION TRAFFIC CONTROL

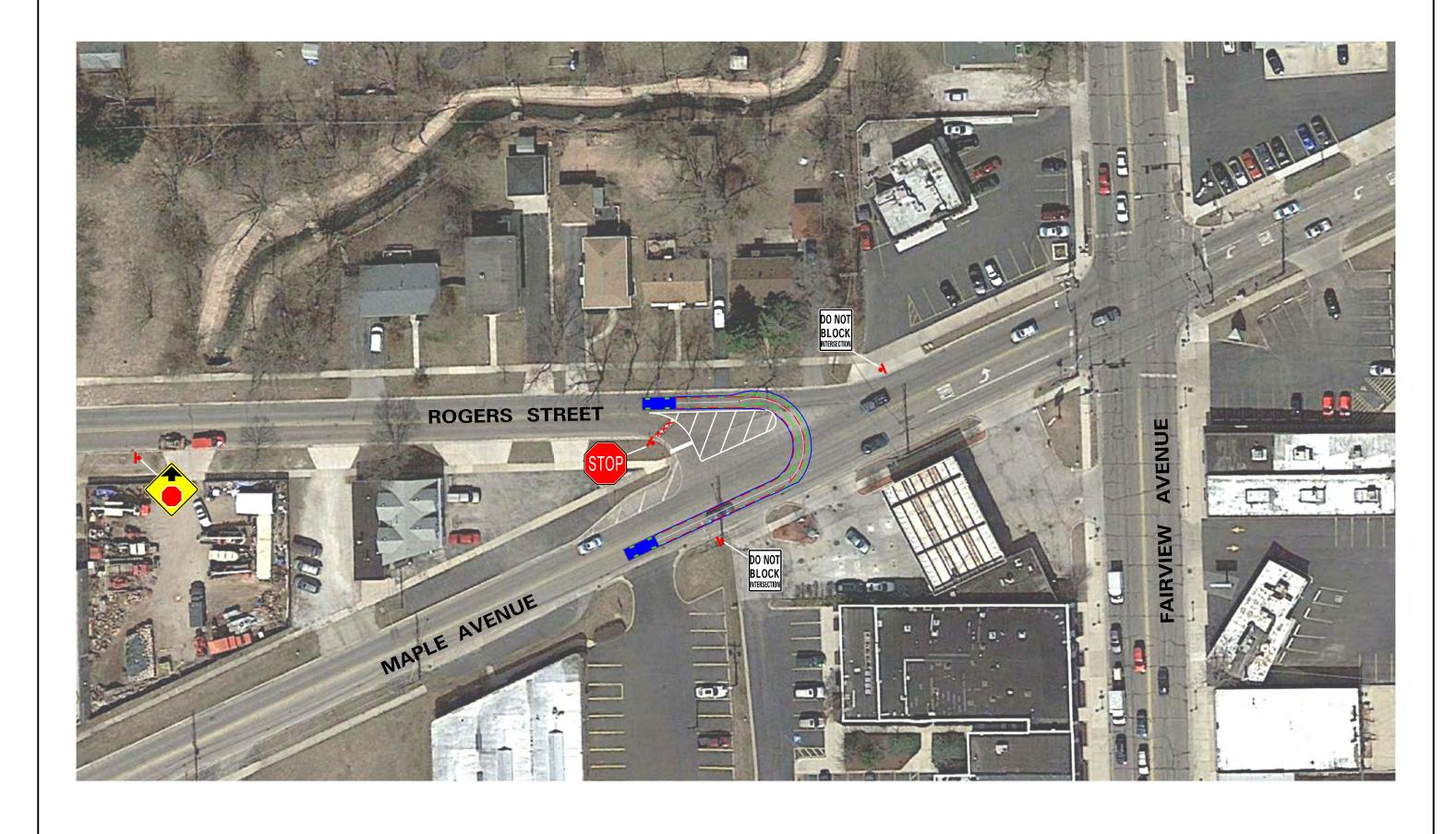


Figure: 8

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PROJECT # 14-209

CHECKED

SCALE: 11x17 PRINT: 1" = 50' 12-16-2014

NEIGHBORHOOD 4 TRAFFIC STUDY DOWNERS GROVE, ILLINOIS

MAPLE AVENUE/ROGERS STREET PROPOSED STRIPING AND SIGNAGE PRELIMINARY MODIFICATIONS

FIGURE NO. 10