

**Memorandum
Public Works Department**



To: City Manager
Subject: Stop Signs
Date: May 23, 2011
Number: 2011-153

SOURCE OF REQUEST:

Kerry Gallagher
2220 20 ½ Avenue
Rock Island, IL 61201

NATURE OF REQUEST:

The Traffic Engineering Committee received a request from Kerry Gallagher, Stern Beverage Inc., to install a four-way stop at the intersection of 20½ Avenue and 23rd Street.

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WARRANTS:

The excerpts from the Manual of Uniform Traffic Control Devices (MUTCD) are attached.

CONTACTS WITH RESIDENTS:

None

TRAFFIC STUDY INFORMATION:

Currently there are stop signs on 23rd Street at this intersection.

The Engineering Division conducted a traffic study of this intersection and determined that the installation of stop signs is not warranted.

A copy of the traffic study is attached.

COST:

The cost to the city is minimal.

RECOMMENDATION:

The Traffic Engineering Committee recommends that the City Council deny the request.

Submitted by: Robert T. Hawes, P.E., Assistant City Manager/Public Works Director
Traffic Engineering Committee

Approved by: John C. Phillips, City Manager



MEMORANDUM
Public Works Department

TO:	City Manager	TEC Number:	11-14
SUBJECT:	Request for Installing STOP Signs 23 rd Street at 20-½ Avenue	Date:	05/19/11

The Engineering Division evaluated a request about installing 4-way STOP signs on 23rd Street at its intersection with 20-½ Avenue. Currently, there are STOP sign on 23rd Street at this intersection. Traffic at the above intersection was studied on May 16 and 17, 2011. According to the latest edition of the Manual of Uniform Traffic Control and Devices (MUTCD), STOP signs can be warranted at an intersection if one of the following warrants is met:

Intersection of a less important road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law: The traffic study indicated the following volumes:

- 23rd Street carried 47 to 158 AADT;
- 20-½ Avenue carried 323 to 332 AADT.

This intersection was observed to meet the application of the normal right-of-way rule with reasonable compliance with the law. *Therefore this warrant was not met.*

Street entering a through highway or street (arterial): 23rd Street and 20-½ Avenue are classified as local streets. *Therefore this warrant was not met.*

Unsignalized intersection in a signalized area: In accordance with MUTCD criteria, there are no signalized intersections in this area. *Therefore this warrant was not met.*

Minimum vehicular volumes: To satisfy the traffic warrant, the vehicular volume entering the intersection from the major street approaches (total of both approaches) should average at least 300 vehicles/hours for any 8 hours of an average day. The study indicated that 20-½ Avenue averaged less than 81 vehicles/hours for the busiest 8 hours of an average day. *Therefore this warrant was not met.*

Restricted view or crash records indicate a need for control by the STOP sign: There are no obstructions that would restrict a motorist's vision at this intersection. To satisfy the accident experience warrant, at least 5 or more reported crashes in a 12-month period that is susceptible to correction by a STOP sign installation. In the past 3 years, there have been no reported crashes at this intersection. *Therefore this warrant was not met.*

Summary: *The traffic study performed on the dates referenced above indicated that this intersection did not meet any of the above warrants or conditions for the installation of STOP signs.*

SUBMITTED BY: Michael J, Kane, P.E., Transitional City Engineer

APPROVED:

STOP

Regulatory Signs

2B-5 Warrants for Stop Sign

Because the STOP sign causes a substantial inconvenience to motorists, it should be used only where warranted. A STOP sign may be warranted at an intersection where one or more of the following conditions exist:

1. Intersection of a less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
2. Street entering a through highway or street.
3. Unsignalized intersection in a signalized area.
4. Other intersections where a combination of high speed, restricted view, and serious accident record indicates a need for control by the STOP sign.

Prior to the application of these warrants, consideration should be given to less restrictive measures, such as the YIELD sign (2B-7) where a full stop is not necessary at all times. Periodic reviews of existing installations may be desirable to determine whether, because of changed conditions the use of less restrictive control or no control could accommodate traffic demands safely and more effectively.

STOP signs should never be used on the through roadways of expressways. Properly designed expressway interchanges provide for the continuous flow of traffic, making STOP signs unnecessary even on the entering roadways. Where at-grade intersections are temporarily justified for local traffic in sparsely populated areas, STOP signs should be used on the entering roadways to protect the through traffic. STOP signs may also be required at the end of diverging roadways at the intersection with other highways not designed as expressways. In most of these cases, the speeds will not warrant any great increase in the sign sizes.

STOP signs shall not be erected at intersections where traffic control signals are operating. The conflicting commands of two types of control devices are confusing. If traffic is required to stop when the operation of the stop-and-go signals is not warranted, the signals should be put on flashing operation with the red flashing light facing the traffic that must stop.

Where two main highways intersect, the STOP sign or signs should normally be posted on the minor street to stop the lesser flow of traffic. Traffic engineering studies, however, may justify a decision to install a STOP sign or signs on the major street, as at a three-way intersection where safety considerations may justify stopping the greater flow of traffic to permit a left-turning movement.

STOP signs may be used at selected railroad-highway grade crossings only after their need has been determined by a detailed traffic engineering study. Use of the STOP

sign at railroad-highway grade crossings is described in section 8B-9.

Portable or part-time STOP signs shall not be used except for emergency purposes. Also, STOP signs should not be used for speed control.



#11-14

Michelle M. Martin

From: PAUL fOLEY [p_foley@hotmail.com]
Sent: Wednesday, April 13, 2011 11:06 AM
To: Michelle M. Martin; Robert T. Hawes; John C. Phillips
Subject: FW: Stop sign @ 23rd st and 20 1/2 ave

Hi Michelle,

Can you put this on the traffic committee agenda to be looked at?

Thanks,
P.J.

P. J.

From: kgallagher@sternbeverage.com
To: ward3@rigov.org
Subject: Stop sign @ 23rd st and 20 1/2 ave
Date: Wed, 13 Apr 2011 09:41:14 -0500

Dear Alderman Foley,

The four houses at the intersection of 20 1/2 avenue and 23rd street are all for putting a four way stop there. There are stop signs already on 23rd street. We would need 2 additional on 20 1/2 avenue. Please let me know what I / we need to do to move forward.

Thank you for your time on this matter.

Kerry Gallagher

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