



Staff Report

Agenda Item No. E-1

To: City of Imperial Traffic Commission

From: Lisa Tylanda, Planner

Date: July 2, 2020

Subject: Proposed new four-way stop signs and crosswalks @ the intersection of “P” Street and Worthington Road.

Background:

City Council has directed staff to begin the process for the potential placement of a new four (4) way stop sign and crosswalk at the intersection of “P” Street and Worthington Road, creating a four (4) way stop intersection. The item has been reviewed by the Development Review Committee. Based on the following guidelines from the Manual on Uniform Traffic Control Devices (MUTCD) staff is not recommending the proposed stop sign placements:

MUTCD Section 2B.04 Right-of-Way at Intersections

State or local laws written in accordance with the “Uniform Vehicle Code” (see Section 1A.11) establish the right-of-way rule at intersections having no regulatory traffic control signs such that the driver of a vehicle approaching an intersection must yield the right-of-way to any vehicle or pedestrian already in the intersection.

When two vehicles approach an intersection from different streets or highways at approximately the same time, the right-of-way rule requires the driver of the vehicle on the left to yield the right-of-way to the vehicle on the right. The right-of-way can be modified at through streets or highways by placing YIELD (R1-2) signs (see Sections 2B.08 and 2B.09) or STOP (R1-1) signs (see Sections 2B.05 through 2B.07) on one or more approaches.

Engineering judgment should be used to establish intersection control. The following factors should be considered:

- A. Vehicular, bicycle, and pedestrian traffic volumes on all approaches;*
- B. Number and angle of approaches;*

- C. Approach speeds;*
- D. Sight distance available on each approach; and*
- E. Reported crash experience.*

YIELD or STOP signs should be used at an intersection if one or more of the following conditions exist:

- A. An intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;*
- B. A street entering a designated through highway or street; and/or*
- C. An unsignalized intersection in a signalized area.*

In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:

- A. The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more than 2,000 units per day;*
- B. The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or*
- C. Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.*

YIELD or STOP signs should not be used for speed control. Support:

Section 2B.07 contains provisions regarding the application of multi-way STOP control at an intersection. Guidance:

Once the decision has been made to control an intersection, the decision regarding the appropriate roadway to control should be based on engineering judgment. In most cases, the roadway carrying the lowest volume of traffic should be controlled.

A YIELD or STOP sign should not be installed on the higher volume roadway unless justified by an engineering study.

The following are considerations that might influence the decision regarding the appropriate roadway upon which to install a YIELD or STOP sign where two roadways with relatively equal volumes and/or characteristics intersect:

- A. *Controlling the direction that conflicts the most with established pedestrian crossing activity or school walking routes;*
- B. *Controlling the direction that has obscured vision, dips, or bumps that already require drivers to use lower operating speeds; and*
- C. *Controlling the direction that has the best sight distance from a controlled position to observe conflicting traffic.*

Because the potential for conflicting commands could create driver confusion, YIELD or STOP signs shall not be used in conjunction with any traffic control signal operation, except in the following cases:

- A. *If the signal indication for an approach is a flashing red at all times;*
- B. *If a minor street or driveway is located within or adjacent to the area controlled by the traffic control signal, but does not require separate traffic signal control because an extremely low potential for conflict exists; or*
- C. *If a channelized turn lane is separated from the adjacent travel lanes by an island and the channelized turn lane is not controlled by a traffic control signal. Sect. 2B.04 December 2009 2009 Edition Page 51*

Except as provided in Section 2B.09, STOP signs and YIELD signs shall not be installed on different approaches to the same unsignalized intersection if those approaches conflict with or oppose each other.

Portable or part-time STOP or YIELD signs shall not be used except for emergency and temporary traffic control zone purposes.

A portable or part-time (folding) STOP sign that is manually placed into view and manually removed from view shall not be used during a power outage to control a signalized approach unless the maintaining agency establishes that the signal indication that will first be displayed to that approach upon restoration of power is a flashing red signal indication and that the portable STOP sign will be manually removed from view prior to stop-and-go operation of the traffic control signal. Option:

A portable or part-time (folding) STOP sign that is electrically or mechanically operated such that it only displays the STOP message during a power outage and ceases to display the STOP message upon restoration of power may be used during a power outage to control a signalized approach.

Section 9B.03 contains provisions regarding the assignment of priority at a shared-use path/roadway intersection.

Reference:

<https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part2b.pdf>

Staff Recommendation:

The Development Review Committee did not recommend the item due to not identifying a need and the lack of a traffic study for the proposed changes.

Location Map:

