

# FORT BEND COUNTY ENGINEERING

Fort Bend County, Texas

D. Jesse Hegemier  
County Engineer

November 13, 2009

Commissioner W. A. "Andy" Meyers  
Fort Bend County Precinct 3  
1809 Eldridge Road  
Sugar Land, Texas 77478

**RE: Traffic Study - Multiway Stop for Ephram Drive at Gaston Road  
and Gaston Road at Flewellen Road**

Dear Commissioner:

The Fort Bend County Engineering Department has completed a multiway stop study for the referenced intersections.

1. Ephram Drive at Gaston Road

**Warrant 1** - *Where traffic signals are warranted and urgently needed, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.*

**Not Warranted** - Does not meet any of the warrants for a signalized intersection

**Warrant 2** - *An accident problem, as indicated by five or more reported accidents of a type susceptible of correction by a multiway stop installation in a 12-month period. Such accidents include right and left-turn collisions as well as right-angle collisions.*

**Not Warranted** - Traffic accident reports show no accidents at this location. However, does show accidents along Gaston Road at various locations. Multiway stop at this location will not change accidents not associated with this intersection.

**Warrant 3** - *Minimum traffic volumes:*

- (a) *The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any 8 hours of an average day, and*
- (b) *The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 units per hour for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour, but*

- (c) *When the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum vehicular volume warrant is 70 percent of the above requirements.*

**Not Warranted** - All approaches (even with 80 percentile of the requirements reduced to 70%), does not meet the minimum requirements.

Therefore, the Engineering Department recommends no change to the intersection of Ephram Drive at Gaston Road.

## 2. Gaston Road at Katy Flewellen Road

**Warrant 1** - *Where traffic signals are warranted and urgently needed, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.*

**Not Warranted** - Does not meet any of the warrants for a signalized intersection at this time.

**Warrant 2** - *An accident problem, as indicated by five or more reported accidents of a type susceptible of correction by a multiway stop installation in a 12-month period. Such accidents include right and left-turn collisions as well as right-angle collisions.*

**Warranted** - An accident problem was indicated by accident reports for the last twelve months.

**Warrant 3** - *Minimum traffic volumes:*

- (a) *The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any 8 hours of an average day, and*
- (b) *The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 units per hour for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour, but*
- (c) *When the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum vehicular volume warrant is 70 percent of the above requirements.*

**Not Warranted** - All approaches (even with 85 percentile of the requirements reduced to 70%), does not meet the minimum requirements.

Therefore, the Engineering Department recommends for a multiway stop to be installed at the intersection of Gaston Road at Katy Flewellen, along with all appurtenances as indicated on the traffic control plan.

A copy of the traffic control plan is attached for your review. A public hearing date for acceptance of the plan is being scheduled. If you should have any questions, please give me a call.

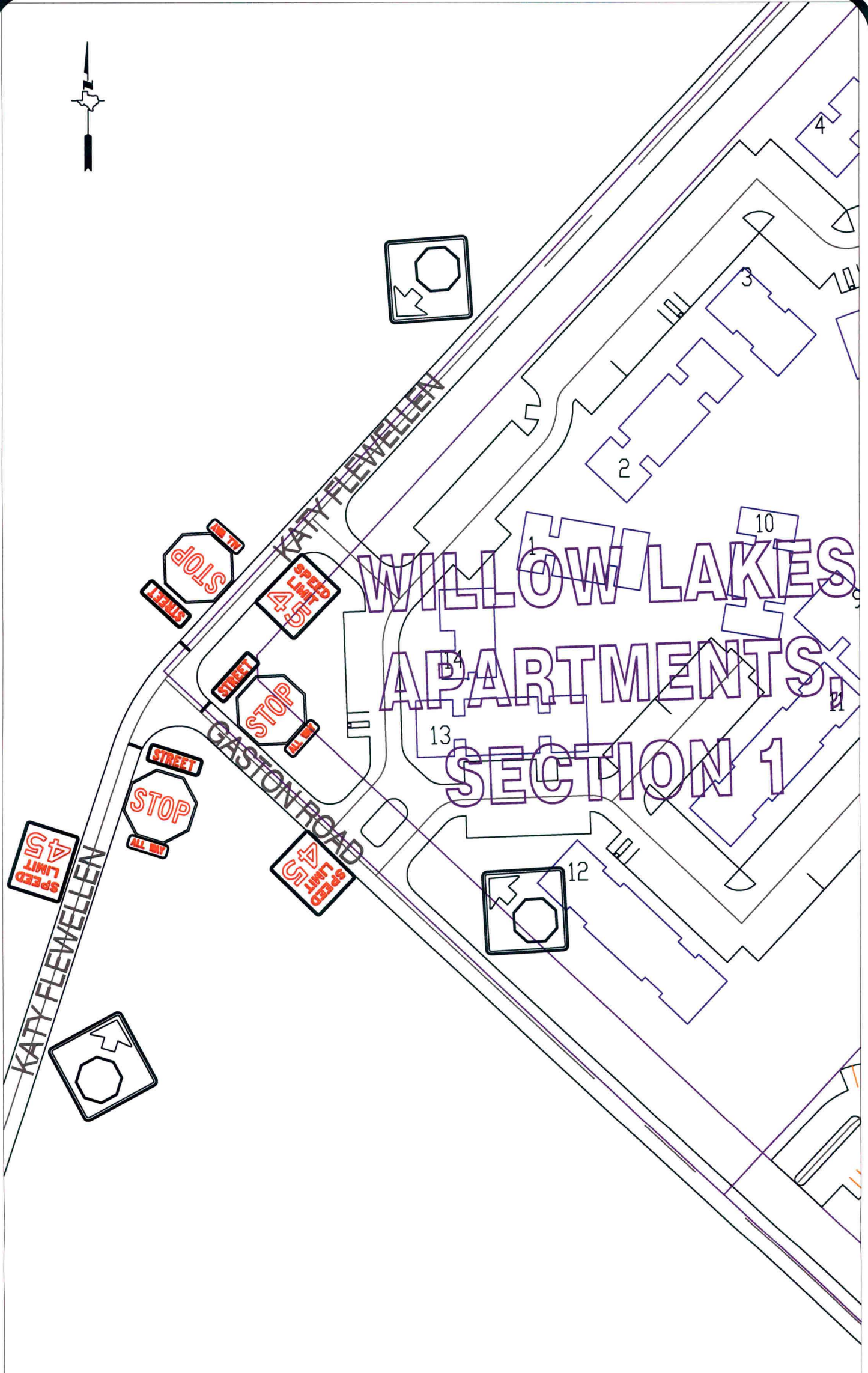
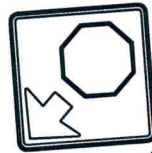
Sincerely,

A handwritten signature in black ink, appearing to read 'Nathan D. Hatcher', written over the printed name.

Nathan D. Hatcher  
Assistant to County Engineer

NDH/mjs

cc: Judge Robert E. Hebert, County Judge  
Marc Grant - FBC Road & Bridge  
Marc Grant - Signage Department  
File



**Note:**

The purpose of this traffic control plan is to establish traffic control for the intersection of Katy Flewellen at Gaston Road.

Drawn By: L. Brdecka

Date: 11-16-09

Approved By: Nathan Hatcher

Date: 11-16-09

Scale

1" = 100'-0"

**Katy Flewellen at Gaston Road  
Intersection  
Control Map and Traffic Sign Layout**

Fort Bend County Engineering Dept.  
1124 Blume Road  
Rosenberg, Texas 77471