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## Southside Estates Traffic Calming

### BACKGROUND:

A traffic calming study was conducted to assess the need for speed reducing mechanisms and identify and recommend speed table spacing in the Southside Estates Neighborhood. The study determined the need to construct 22 speed tables on Peach Drive/Live Oak Drive between Beach Boulevard and Atlantic Boulevard and 13 speed tables on Forest Boulevard between Beach Boulevard and Peach Drive.

### PROJECT DESCRIPTION:

Design and construction of speed tables on Live Oak Drive, Peach Drive, and Forest Boulevard in the Southside Estates Neighborhood.

### PROJECT TIMELINE:

The City of Jacksonville has selected to use the existing design-build contractor for the project. The City is currently requesting funding to go to 100% design and construction.

Estimated Time to Complete  
Design

3 Months

Construct

6 months



### BENEFITS:

The improvements will help address the existing speeding issue in the Southside Estates Neighborhood, decreasing motorists' speed and increasing safety for motorists and pedestrians in the area.

**TOTAL PROJECT FUNDING:** \$211,575.00

## SOUTHSIDE ESTATES TRAFFIC CALMING

At typical travel speeds in residential areas, a speed hump produces sufficient discomfort to a motorist driving above the speed hump design speed to discourage speeding. Unlike a speed hump, a speed table has a long enough flat top to accommodate entire wheelbase of most passenger cars. *ITE<sup>1</sup> Guidelines for the Design and Application of Speed Humps* recommends consideration only on a street with posted speed limit of 30 mph or less. It also recommends a spacing between 260 and 500 feet. Upon reviewing several other jurisdiction criteria for spacing between speed humps/tables, the maximum spacing considered was 600 feet for the traffic calming initiatives to be effective and reduce speeding in problem areas.

The California Subcommittee of the California Traffic Control Devices Committee developed the following equation to determine optimal spacing between speed humps/tables.

$$H_s = 0.5 [2 * (V_{85}) * (V_{85}) - 700], \text{ where}$$

$H_s$  = optimal spacing between 3-inch high speed humps/tables (in feet);

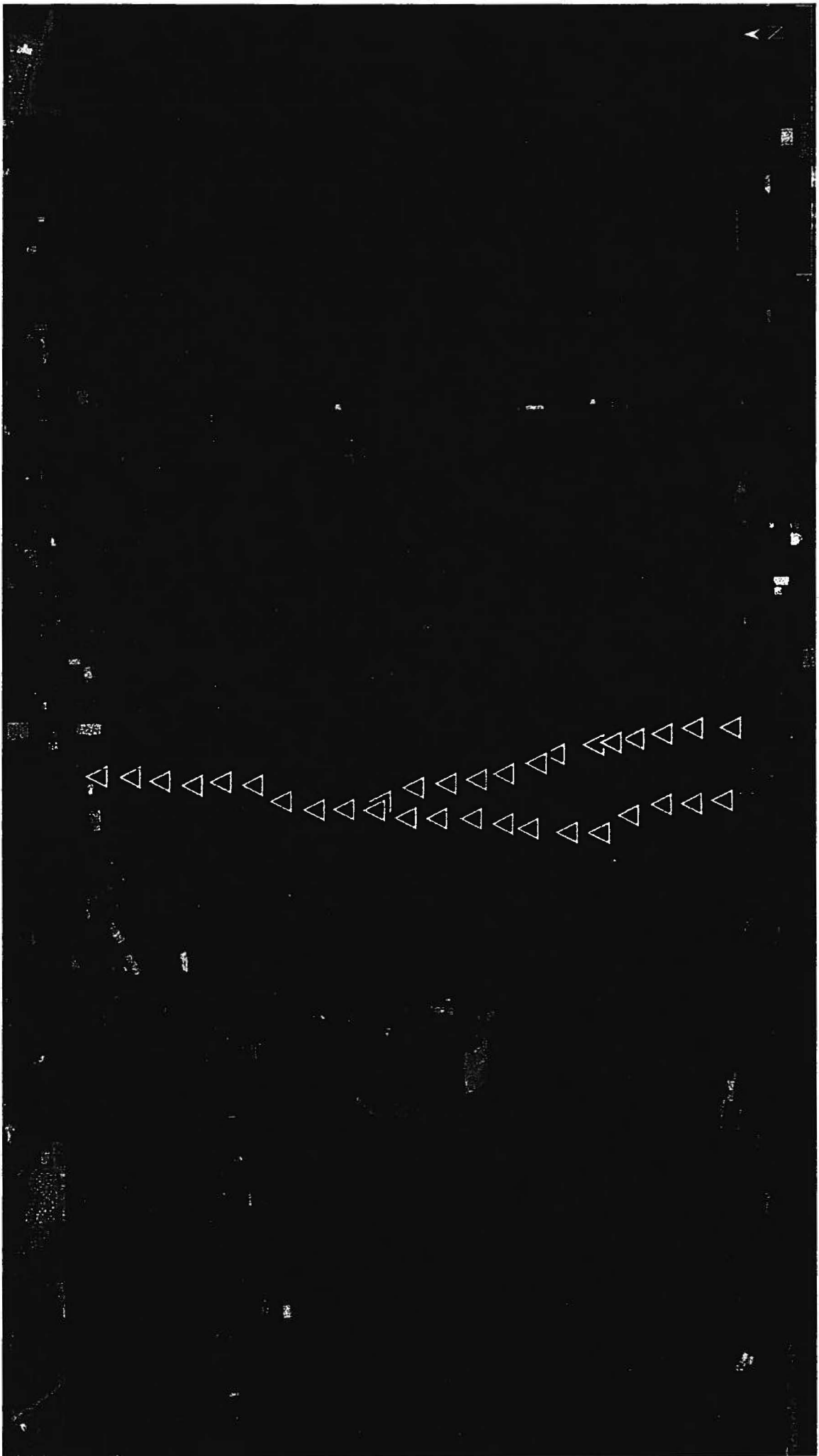
$V_{85}$  = desired 85<sup>th</sup> percentile speed (in miles per hour) between speed humps/tables.

Using the equation for a desired 85<sup>th</sup> percentile speed of 30 mph along the corridors of Peach Drive and Forest Boulevard suggests the optimal spacing between speed humps as 550-feet.

Based on the length of the corridors and suggested spacing, Peach drive between Beach boulevard and Atlantic boulevard is estimated to have 22 speed tables and Forest boulevard between Beach boulevard and Peach drive is estimated to have 13 speed tables, which adds up to a total of speed tables.

See attached map for approximate locations of the proposed speed tables and a cost estimate.

<sup>1</sup> – Institute of Transportation Engineers



Location: Southside Estates Traffic Calming

Estimated By: Usha Nadella

Date: 08/30/2019

Item No	Description	Unit	COJ Unit price	Estimated quantity	Final quantity	Estimated Cost	Final Cost
1	Asphalt Speed Table	EA	\$4,650.00	35		\$162,750.00	
Total						\$162,750.00	
Contingency (20%)						\$48,825.00	
Total Estimated Cost						\$211,575.00	