



Fort Bend County Engineering
FORT BEND COUNTY, TEXAS

Richard W. Stolleis, P.E.
County Engineer

December 1, 2016

Commissioner W. A. "Andy" Meyers
Fort Bend County Precinct 3
22333 Grand Corner Drive
Katy, Texas 77494

RE: Canal Road at Bella Terra Parkway – Multi-Way Stop Control

Dear Commissioner Meyers:

The Fort Bend County Engineering Department has completed a review of the operational conditions at the intersection of Canal Road at Bella Terra Parkway in response to a request for multi-way stop control. The posted speed limit on both roadways is 35 mph. The intersection currently operates with stop control on Bella Terra Parkway. Both roadways are identified as Collectors in the 2015 Fort Bend County Major Thoroughfare Plan.

Traffic counts were collected and used to evaluate the intersection for multi-way stop control based on the warrants specified in the Texas Manual on Uniform Traffic Control Devices. Based on the data collected, traffic volumes warrant multi-way stop control at the intersection. Additionally, there have been eight crashes in the past 12 months that are susceptible to correction by multi-way stop control. The multi-way stop control worksheet and updated traffic control plan are attached.

Based on the above results, Engineering recommends the conversion of the intersection to multi-way stop control. If you have any questions please do not hesitate to contact me at 281-633-7528 or chris.debaillon@fortbendcountytexas.gov.

Regards,

A handwritten signature in blue ink, appearing to read "Chris Debaillon".

Chris Debaillon, PE, PTOE
Assistant County Engineer – Traffic

CD/mjs

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

Attachments

301 Jackson St., 4th Floor | Richmond, TX 77469
Phone 281-633-7500 * Fax 281-633-7545

Multi-Way Stop Warrant Analysis Summary

2011 Texas Manual on Uniform Traffic Control Devices Multi-Way Stop Warrants



Survey Date: 9/7/2016

Precinct 3

Fort Bend County Engineering

Streets		Speeds:	85th Pct.	Posted
Major	Canal Rd		42	35
Minor	Bella Terra Pkwy		29	35

Eight Highest Hours:

Hour	Major St.	Minor St.
	Veh. Total	Unit Total
18:00	313	350
19:00	308	354
17:00	315	339
16:00	278	327
14:00	234	299
15:00	237	291
12:00	258	251
13:00	253	232
Average	275	305

Required Average Vehicle Volumes:

Major St. - Both Approaches			Minor St. - Both Approaches		
100%	80%	70%	100%	80%	70%
300	240	210	200	160	140

80% Condition used when there have been 4 or more crashes susceptible to correction by a multi-way stop in a 12-month period

70% Condition used when major street posted or 85th percentile speed exceeds 40 mph

Eight-Hour Average Vehicular Volume Warrant Satisfied? Yes

Is a traffic signal warranted and are arrangements being made for its installation? No

Have there been 5 or more crashes susceptible to correction by a multi-way stop in a 12-month period? Yes

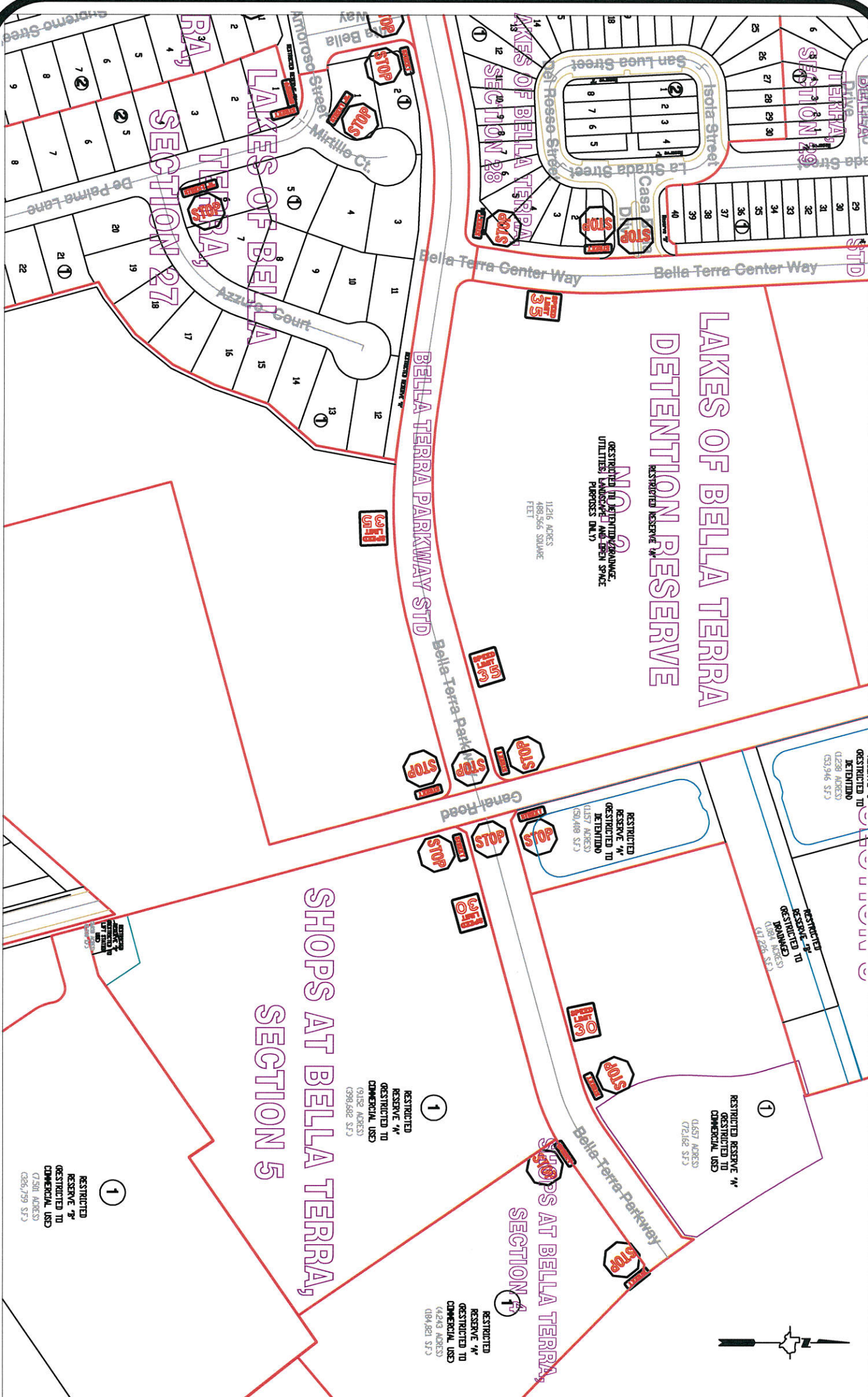
Is a driver on the minor street, after stopping, unable to see conflicting traffic and is unable to reasonably negotiate the intersection unless conflicting cross traffic is also required to stop? No

Is there a need to control pedestrian/vehicle conflicts and is the intersection near a location generating high pedestrian volumes? No

Is the intersection composed of two residential neighborhood collector streets of similar design and operating characteristics where multi-way stop control would improve operations? No

Comments:

Warrants the installation of multi-way stop control based on crash history and traffic volumes.



Note:

The purpose of this traffic control plan is to revise traffic control for the intersection of Canal Road and Bella Terra Parkway with the addition of a multi-way stop as indicated on the drawing.

Drawn By: L. Brdecka

Date: 12-1-16

Approved By: Chris Debaillon, PE PTOE

Date: 12/1/16

Scale

1" = 200'-0"

Canal Road at Bella Terra Parkway
(Revised) Control Map and
Traffic Sign Layout

Fort Bend County Engineering Dept.
301 Jackson Street
Richmond, Texas 77469