From:	Abdulhalim El-Hout
To:	Cristin Emshoff
Cc:	Omar Escobar; Robert Barnett; Todd Thurber
Subject:	Stafford FM1092 @ W. Airport TIP application
Date:	Monday, January 12, 2015 2:32:20 PM
Attachments:	image001.png image002.png VHT Calculations.xlsx Delay Benefits_Congestion (2).xlsx

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The proposed improvements along the intersection of Murphy Road and West Airport Boulevard were analyzed and quantified to evaluate the benefits along the section of Murphy Road between US90A and West Airport Boulevard once these improvements are in place.

The following is a narrative that explains the difference between the No Build and Build Conditions and outlines some of the assumptions used in this analysis:

The 2018 No Build condition includes the anticipated traffic volumes along Murphy Road in year 2018 with the traffic that will be generated by the TIA Tract. However, the No Build condition does not include the proposed intersection improvements at Murphy Road and West Airport Boulevard.

The 2018 Build condition includes the anticipated traffic volumes along Murphy Road in year 2018 with the traffic that will be generated by the TI Tract development. The 2018 Build conditions also include the proposed improvements at the intersection of Murphy Road and West Airport Boulevard, and the updating of traffic signal timings and offsets along Murphy Road between US90A and West Airport Boulevard. The proposed improvements at the intersection of West Airport Boulevard and Murphy Road consist of:

1. The extension of the westbound left turn bay along West Airport Boulevard (300 feet storage / 120 feet taper)
2. The construction of an eastbound channelized right turn bay along West Airport Boulevard (130 feet storage / 120 feet taper)
3. The construction of a westbound receiving lane along West Airport Boulevard
4. The construction of a left turn bay along eastbound West Airport Boulevard (180 feet storage / 160 feet taper)

Assumptions made in this analysis:
Capacity of one lane = 1,900 feet
Peak hour volume = 10 percent of daily volume
Annualized growth rate = 3 Percent

Attached are all the information that you need to complete this TIP application. Feel free to contact me anytime if you have any questions. Thank you,

Abdul El Hout, PE
Project Manager

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