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MEMORANDUM

Ryan Huebschman, PE

DATE: 4/9/2020

TO: Alison Krupski, PE City of Noblesville Engineer

JOSEPH T. RENGEL, P.E.

VICE PRESIDENT

- cc: Mark Maurovich, PE Hardik Shah, PE American Structurepoint Inc.
- FROM: Matt Brown, PE/PTOE A&F Engineering Co., LLC

RE: White River Bridge Alternative Analysis

A&F Engineering conducted an alternative analysis in 2016 to estimate the percent of traffic that would divert from SR 32 between River Road and SR 37 based on a future bridge constructed over the White River at the following 3 location options:

- Pleasant Street
- South Street
- Carbon Street

The attached Figure 1 shows each of these alignment options.

The results of this analysis were as follows:

Pleasant Street - Approximately 24% reduction in daily traffic along SR 32 South Street - Approximately 10% reduction in daily traffic along SR 32 Carbon Street - Approximately 8% reduction in daily traffic along SR 32

At the request of the City of Noblesville, an additional analysis has been conducted to analyze the impact on SR 32 traffic if a Greenfield Avenue/Irving Street White River crossing option was constructed (Option E1 on the attached Figure 2). As with the previous analysis done in 2016, this analysis was conducted using VISUM software, a comprehensive traffic modeling software that models traffic flow and routes based on existing traffic volume data and origin-destination data.

The results of this analysis showed that there would be a reduction of SR 32 traffic by approximately 10% if this alternative was constructed. Therefore, it can be concluded that this route would be fair less effective than the Pleasant Street corridor option in reducing SR 32 traffic between River Road and SR 37.



FIGURE 1

