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MEMORANDUM

TO:	Jackson Moll, Vice President of Municipal Affairs Home Builders Association of Central Arizona
FROM:	Carson Bise, AICP, TischlerBise, Inc.
DATE:	June 19, 2019
RE:	Response to HBACA Comments/Questions on Draft City of Maricopa Draft Infrastructure Improvement Plan

The City of Maricopa (City) forwarded me your letter, dated June 5, 2019, that contained comments and questions related to the Draft Land Use Assumptions, Infrastructure Improvement Plan and Development Fee Report (Report) prepared by our firm (Consultant). After consultation with the City, we are preparing this memorandum in response and are prepared to meet via conference call if you wish to discuss the City/Consultant response further. Each IIP/Fee Category is discussed in turn.

Parks and Recreational Facilities

Based on your comments, the City and Consultant have revisited the cost assumptions for existing park amenities. For example, the replacement cost for a soccer/football has been reduced from $1,000,000 to $525,000. Parking stall costs have also been reduced from $6,000 to $5,000. Finally, the cost per horse shoe pit has been reduced to $8,000. As a result of these cost reductions, the cost per person has been reduced from $586.96 to $444.64 and the cost per job has been reduced from $71.71 to $54.32. This is shown in the table below. This reduces the proposed Parks and Recreational Facilities development fee for a single family unit to $1,207 (from $1,587 in the previous draft), which is an increase of $91 over the City's current development fee.

Amenity	# of Units*	Cost per Unit*	Replacement Cost
Restroom	5	$360,000	$1,800,000
Playground	3	$250,000	$750,000
Ramada	9	$50,000	$450,000
Ballfield	6	$325,000	$1,950,000
Basketball	4	$85,000	$340,000
Soccer/Football	11	$525,000	$5,775,000
Volleyball	2	$30,000	$60,000
Tennis	4	$50,000	$200,000
Horseshoes	2	$8,000	$16,000
Parking Spaces	2,171	$5,000	$10,855,000
Bike Rack	12	$900	$10,800
Frisbee Golf	18	$5,000	$90,000
Skate Court	30	$19,000	$570,000
Concession Stand	2	$75,000	$150,000
Scoreboards	8	$115,000	$920,000
TOTAL	**2,287**	**$10,466**	**$23,936,800**

Level-of-Service (LOS) Standards

Residential Proportionate Share	99%
Nonresidential Proportionate Share	1%
Residents in 2018	53,294
Jobs in 2018	4,406
LOS: Amenities per Resident	**0.0425**
LOS: Amenities per Job	**0.0052**

Cost Analysis

Average Cost per Amenity	$10,466
LOS: Amenities per Resident	0.0425
LOS: Amenities per Job	0.0052
Cost per Person	**$444.64**
Cost per Job	**$54.32**

**City of Maricopa*

Fire Facilities

After discussion with City staff, we have determined the $583 cost per square foot found in the Draft Report likely reflects the cost per square foot for an Administrative Complex. We are using the $410 per square foot you suggested, which is in line with the type of station the City is likely to construct. This reduces the cost per person from $410.13 to $288.43 and the cost per job from $216.40 to $152.19, which results in a revised Fire Facilities development fee of $1,444 for a single family unit in the South Maricopa Service Area (the previous draft single family fee was $1,769).

	Square Feet	Cost per Sq. Ft.*	Total Cost
Station 571	10,995	$410	$4,507,950
Station 572	5,848	$410	$2,397,680
Station 574	7,828	$410	$3,209,480
Station 575	8,116	$410	$3,327,560
Fire Fleet Area	10,808	$410	$4,431,280
TOTAL	**43,595**	**$410**	**$17,873,950**

Level-of-Service (LOS) Standards

Population in 2018	53,294
Nonresidential Vehicle Trips in 2018	16,443
Residential Share	86%
Nonresidential Share	14%
LOS: Square Feet per Person	**0.703**
LOS: Square Feet per Nonres. Vehicle Trip	**0.371**

Cost Analysis

Cost per Square Foot	$410.00
LOS: Square Feet per Person	0.703
LOS: Square Feet per Vehicle Trip	0.371
Cost per Person	**$288.43**
Cost per Nonres. Vehicle Trip	**$152.19**

**City of Maricopa*

Street Facilities

Regarding the Street Facilities comments, we have reduced the number of roundabouts contained in the sample of known road project costs, from 6 to 4, and have also added lane miles to the bridge and roundabout projects. As shown in the table below, this reduces the cost per lane mile from $1,721,531 to

$1,547,458. This reduces the Street Facilities development fee for a single family house from $3,273 to $2,965.

Street	From / To	Description	Length	New Lanes	Lane Miles Added	2018 Cost	Cost per Lane Mile
Porter Rd at Santa Rosa Wash		Bridge	0.1	4	0.4	$4,600,000	$11,500,000
Farrell Rd at Santa Cruz Wash		Bridge	0.1	4	0.4	$766,667	$1,916,668
Hartman Rd at Santa Cruz Wash		Bridge	0.1	4	0.4	$1,150,000	$2,875,000
MCGH at Santa Rosa Wash		Bridge	0.1	4	0.4	$3,066,667	$7,666,668
Various Roundabouts (4)		Roundabout	0.4	4	1.6	$13,248,000	$8,280,000
White and Parker Road	Maricopa Casa Grande Highway to Smith Enke Road	Widen to 2 lanes with center turn lane	3.3	3	9.9	$8,333,820	$841,800
White and Parker Road	Steen Road to Maricopa Casa Grande Highway	Widen to 4 lane arterial	0.7	4	2.8	$7,134,140	$2,547,907
		Improve existing at-grade RR crossing					
		All weather crossing of Santa Rosa Wash					
Honeycutt Road	White and Parker Road to Hartman Road	Widen to 4 lane arterial	2	4	8	$8,535,300	$1,066,913
		1/2 span all weather crossing of Santa Cruz wash					
Bowlin Road	White and Parker Road to Anthony Boulevard	Construct 4 lane arterial	1.2	4	4.8	$7,151,850	$1,489,969
		All weather crossing of Santa Cruz Wash					
Porter Road	Farell Road to Iron Point Road	Widen to 4 lane arterial	0.5	4	2	$6,303,150	$3,151,575
		All weather crossing of Santa Rosa Wash					
Farell Road	SR 347 to Porter Road	Construct 4 lane arterial	2.1	4	8.4	$9,785,580	$1,164,950
Edison Road Extension	Northern terminus to SR 238	Widen to 4 lane arterial	0.25	4	1	$841,800	$841,800
Bowlin Road	Hartman Road to Murphy Road	Construct 4 lane arterial	1	4	4	$4,209,000	$1,052,250
Farell Road	White and Parker Road to Hartman Road	Construct 4 lane arterial	2.1	4	8.4	$13,041,000	$1,552,500
		All weather crossing of Santa Cruz Wash					
Bowlin Road	MLK Jr. Boulevard to Karsten Drive	Widen to 4 lane arterial	0.5	4	2	$1,683,600	$841,800
Hartman Road	Bowlin Road to Honeycutt Road	Widen to 4 lane arterial	1	4	4	$3,367,200	$841,800
Hartman Road	Maricopa Casa Grande Highway to Bowlin Road	Widen to 4 lane arterial	2.8	4	11.2	$14,640,052	$1,307,148
		All weather crossing of Santa Cruz Wash					
			18.25	**67**	**69.7**	**$107,857,826**	**$1,547,458**
						Vehicle Miles of Capacity per Lane Mile	10,325
						Cost per VMC	**$149.87**

Source: Wilson and Company/City of Maricopa

The reduction in the lane mile cost assumption doesn't address your broader picture, philosophical comments about the need for a Street Facilities development fee in Maricopa. In response to those comments, the City/Consultant offer the following.

You referenced several communities where the developers construct most new roadways and dedicate them to the municipality, resulting in lower development fees. You cite that one reason for this, which

has been recognized by both Queen Creek and Goodyear, is that needed roads were not adjacent to land that is planned for development. However, we disagree that adjacency is relevant in the calculation of the Street Facility development fees. The Street Facilities development fee is based on systemwide capacity needs, which reflects the travel by development citywide. We account for work trips as well as trips to goods and services and other activities. Your argument depends on the City growing in a controlled progression from the center of the City outwards, but this is not the case. Rather, development projects are occurring in various areas throughout the City, requiring a variety of transportation capacity projects.

Finally, you assert the incremental expansion methodology used in the calculation does not ensure that new growth only pays its proportionate share, suggesting it pays for more than existing residents do. You also assert that because the ratio of Vehicle Miles of Capacity does not equal the Vehicle Miles of Travel, sufficient capacity exists within the network. The City and Consultant disagree with point. First, unlike a utility, which is a closed infrastructure system with an exact measurable capacity, the City's road network is an open infrastructure system with capacity defined by a subjective analysis of level of service. For example, the level of service for park land can vary by adopted (e.g., 5 acres per 1,000 residents) or the actual level of service(e.g., 3 acres per 1,000 residents). Communities can even choose to base the development fee on a lower level of service than what currently exists (e.g. 2 acres per 1,000 residents). As you pointed out in your letter, the analysis must ensure that new development is not paying for a higher level of service than exists today, or have a funding plan in place to correct the existing deficiency.

With the City's Street Facilities development fee, we have taken several steps to ensure that new development does not pay for a higher level of service. First, much of the City's road network operates at a LOS C and in many cases, LOS B. The Street Facilities development fee calculation utilizes a LOS D lane capacity. If the LOS C lane capacity standard was used, the development fee would be higher. Second, we have adjusted national average trip lengths to reflect local travel demand, which incorporates the fact that actual Vehicle Miles of Travel is less than expected given the network's capacity.

Please let us know if you have any questions about this memorandum.