## EXHIBIT G DETAILED TIS REVIEW COMMITTEE COMMENTS (TRANSPORTATION/TRAFFIC ENGINEER, TRANSPORTATION PLANNER AND CITY ENGINEER)

## **Staff Comments TIS Review committee**

(Traffic Engineer, Sr. Transportation Planner, and City Engineer)

Comments from TIS Review Committee regarding the Traffic Impact Study by Mr. Mehrdad Givechi dated November 14<sup>th</sup>, 2007 are outlined below in two categories, e.g. Technical Issues and Policy Issues.

## **Technical Issues**

- 1. The Traffic Impact Study assumes that the signal at  $6^{\text{th}}$  and Wakarusa will operate under a signal cycle length of 110 seconds. This assumption is not reflective of the field conditions. The fact of the matter is: the traffic signal at this location will not operate on a 110 second cycle and provide for pedestrians; it is currently running "free" because it can't run on a 120 second cycle like the rest of 6<sup>th</sup> Street. However, when additional signals are added to the west, it will need to be coordinated and the minimum cycle length it will operate at is 136 In addition, when the federal government changes the pedestrian walking speed to 3.5 ft/sec instead of the current 4.0 ft./sec, the cycle length will need to be 150 seconds. Therefore the three signals along Wakarusa (at 6<sup>th</sup>, Bauer Farm Drive and Overland Drive) need to be evaluated at 136 and 150 second cycles and time/space diagrams need to be provided along with a SimTraffic simulation. Also, if a traffic signal is provided at this intersection, then it would be expected that pedestrians would want to cross there to get to-and-from Walmart instead of walking to Overland or to 6<sup>th</sup> Street; therefore, this signal should account for pedestrian timing.
- 2. State law requires that left-turning vehicles "yield" to all other traffic; therefore, the assumption that the eastbound right-turning vehicles at the intersection of Bauer Farm Drive & Wakarusa will "yield" to the westbound double left-turn is contrary to state law and driver expectation.
- 3. The TIS by Mr. Givechi shows 253 west-bound left turning vehicles at the intersection of Wakarusa and Bauer Farm Drive, whereas the Bauer Farm TIS by TranSystems, dated March 2007, showed a total of 83 vehicles exiting the entire development onto Overland Drive heading west, and it is likely that a percentage of those would be continuing west and north of Overland & Wakarusa instead of turning left. Please provide more explanation as to the assumption that 50% of the left turning vehicles at the intersection of Overland Drive and

Wakarusa would be diverted to the intersection of Wakarusa and Bauer Farm Drive.

- 4. Please provide geometric details of the intersection of Wakarusa and Bauer Farm Drive addressing the feasibility and practicality of the permitted and prohibited movements at this intersection including pedestrian crossing.
- 5. Please provide analysis of the RIRO and the RI only access drives on 6<sup>th</sup> street to determine Level Of Service and Delay.
- 6. During his presentation, Mr. Givechi argued that the proposed signal at the intersection of Wakarusa and Bauer Farm Drive will improve the Level of Service and reduce intersection delay at the intersection of Wakarusa and Overland Drive. According to the Bauer Farm Traffic Impact Study by TranSystems, dated March 2007, the average delay at the intersection of Overland and Wakarusa is less than 55 second, with the westbound left turning movements experiencing a delay of less than 55 seconds as well. So there is really no concern to address as far as the performance of this intersection is concerned with respect to Delay.
- 7. What is the volume of through traffic at the locations where no accidents have occurred involving right turning movements in the recent past? This refers to the examples cited by Mr. Mehrdad Givechi during his presentation on November 19, 2008.
- 8. The RI only access to CVS pharmacy is within the functional limit of the intersection of 6<sup>th</sup> and Wakarusa.
- 9. The Right out movement is a safety hazard due to the potential conflict with the large number of through vehicles on 6<sup>th</sup> street.
- 10. Please show the queue length for SB traffic at the intersection of 6<sup>th</sup> and Wakarusa, and, Wakarusa and proposed Bauer Farm Drive.
- 11. Figure 4 of the TIS by Mr. Givechi for projected SB movement at Wakarusa Drive and Bauer Farm Drive needs to be revised accordingly.

## **Policy Issues**

- 1. According to the West 6<sup>th</sup> Street Access Management plan and the agreement between the City and KDOT for the West 6<sup>th</sup> Street Reconstruction project, access onto 6<sup>th</sup> street along the proposed Bauer Farm is prohibited unless approved in writing by the Secretary of Transportation.
- 2. During the previous submittal of this development plan, compromise was reached among the City, KDOT and the developer to allow one RI only access from 6<sup>th</sup> street to this property. The new proposal is in direct conflict with the proposal previously agreed upon.
- 3. 6<sup>th</sup> street is a state highway and an arterial street as designated by the city. According to the current City Code [9-20 (e) (1) Arterial streets)], driveway access to Arterial streets is generally prohibited. In the event, a driveway access to an Arterial street is permitted, the spacing shall be a minimum of 300 feet from the perpendicular curb face of an intersecting street or driveway.
- 4. It is important that city policies and codes are applied consistently across the board. Waiver from established and adopted city policy and standard without a very sound justification would create bad precedence for future development proposals and for existing commercial establishments who would desire similar access onto 6<sup>th</sup> street or other arterial street throughout the city. In particular, the City and KDOT closed the entrance to Wakarusa Crossroads Shopping center during the reconstruction of 6<sup>th</sup> street. The 6<sup>th</sup> and Wak development, the Oakley Addition at 6<sup>th</sup> and Folks, Northgate Development and Mercato Development have not been granted access to 6<sup>th</sup> street.
- 5. It is also important to ponder on the incremental effect of waivers from standard guidelines. There are numerous locations in town where we have been experiencing the cumulative effect of a large number of driveways along arterial streets.