



CITY OF RAPID CITY

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MEMORANDUM

TO: Public Works Committee/Common Council

FROM: John Less, P.E.
Traffic Engineer

CC: Dirk Jablonski, P.E.
Director of Public Works

SUBJECT: Big Sky Neighborhood Meeting
Traffic Operations Issues

DATE: January 24, 2007

At the December 26, 2006 Public Works Committee Meeting, staff was directed to review and report on the following traffic related issues that were raised by citizens at the recent Big Sky Neighborhood Meeting:

Missing advance SCHOOL warning sign on Homestead Street, west of Aurora Drive – The sign had been removed by one of the contractors for the apartment development (currently under construction) and has been replaced.

Traffic signal installation at Homestead Street/Degeest Drive or Homestead Street/Aurora Drive – Traffic Operations had recently conducted a multi-way STOP warrant study at Homestead Street/Degeest Drive and found that a multi-way STOP was not warranted. Based on the volume data collected at that time, neither the Degeest Drive nor the Aurora Drive intersections warrant a traffic signal at this time. Additionally, the available crash data does not indicate a crash concern at either intersection.

Extending Existing School Speed Zones to Twilight Drive – School zones are established in accordance with the Federal Highway Administration's Manual on Uniform Traffic Control Devices (2003) and are used to increase pedestrian safety in the immediate vicinity of schools. Extending the existing zones beyond what is



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common and reasonable would have a negative effect on pedestrian safety by diminishing motorist compliance with the zones.

Signal timing at Homestead Street/Elk Vale Road – The South Dakota Department of Transportation (SDDOT) in December 2006 began operation of the traffic signal at this intersection. The concern raised at the meeting was that Homestead Street traffic would back-up at peak times after the signal was operational. The current traffic signal timing plan was developed by the SDDOT based on existing traffic volumes and obviously gives precedence to Elk Vale Road traffic. To date, there have been no operational problems (on either road) associated with the signal timing.

Existing West River Electric Switching Module, southwest corner of Homestead Street/Aurora Drive – The location of the module was reviewed several months ago by Code Enforcement and Building Inspection and it was determined the module is located in accordance with the City's existing sight distance ordinances.

Additional School Crossing at Valley View Elementary School – On June 21, 2004, the Council approved the Initial and Final Development Plan for 04PD024, the Homestead Gardens. One of the stipulations of that approval was that a crosswalk be provided on Homestead Street; we could not locate any further documentation waiving this stipulation. After talking with Valley View's principal, Wayne Rosby, we conducted an arrival and dismissal pedestrian count in the vicinity of the Homestead Gardens development. There were four (4) students that crossed in the morning and six (6) that crossed in the afternoon. These volumes are less than the minimum number for a marked crosswalk suggested in the Federal Highway Administration's (FHWA) Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations (2002). We advocate adhering to some minimum volume requirement so that crosswalks do not become so prevalent as to have a negative effect on pedestrian safety by diminishing motorist respect of the markings.

Mr. Rosby suggested that consideration be given to relocating the existing crosswalk at Aurora Drive further east to the Homestead Gardens development to accommodate all crossing students. We have concern about the interaction of pedestrians and vehicles exiting the school's driveway if such a change is implemented. Before proceeding, we recommend that this issue be jointly considered by representatives of the school, the Police Department/Traffic Division and Traffic Operations. We further recommend that any changes be implemented at the beginning of the 2007/2008 school year.