

TRAFFIC & TRANSPORTATION DIVISION
MEMORANDUM



DATE: January 28, 2016
TO: File
FROM: Brian Willham, PE, PTOE, Senior Traffic Engineer
SUBJECT: Pedestrian Bridge Meeting – Windsor Elementary
Meeting notes

The City and Des Moines Public Schools presented the findings from the pedestrian bridge evaluation to the Windsor Elementary parent/teacher group on January 21, 2016. The presentation is attached for reference. In attendance from the City of Des Moines were Jennifer McCoy (City Traffic Engineer), Steve Naber (Deputy City Engineer), Ben Cole (Civil Engineer), Brian Willham (Traffic Engineer), and Councilman Chris Coleman. In attendance from the Des Moines Public Schools were Bill Good (COO), Scott Nichols (Windsor Elementary Principal), and several teachers and parents. Total attendance was approximately 15 individuals.

The following items/questions/comments were brought up from the audience and discussed:

1. The group asked if a crossing guard would be provided if the at-grade option were to be pursued. It was discussed that a crossing guard would be provided.
2. During the winter months there are several times when the bridge approach ramps become very slick and students won't use it due to safety concerns.
3. If the at-grade crossing were to be pursued with a crossing guard, there might actually be an increase in parents using the parking lot on the north side of University Avenue to drop off / pick up students.
4. There was discussion about heavy congestion of University Avenue during drop off / pick up times, including difficulty turning in/out of street and parking lot intersections near the school. It was also mentioned that traffic is not slowing down to the 25 MPH speed when the school flashers are operating.
5. The parking lot is owned by St. Theresa Church and the church has always supported the use of the parking lot by Windsor School parents to drop off / pick up students.
6. Operation and congestion of the parking lot on the school site was discussed with conflicts between parking / leaving and parents waiting to pick up students. The existing inset along 59th Street isn't being used currently and could potentially be considered as teacher parking.

7. Many parents travel west on Dagle Drive and then north on Cummins Parkway to exit the school site. It was reported that it is often difficult to turn left from Cummins Parkway due to congestion on University Avenue. It was also discussed that the nature of Cummins Parkway (2 separate two-way streets) sometimes makes it difficult / un-safe to make left turns onto University Avenue.
8. The existing bus inset along University Avenue was discussed. Sometimes buses back up and extend out on University Avenue. The extension of the bus inset to the east should be considered further.
9. The location of a potential at-grade crossing (w/ HAWK signal) was discussed, some suggested placing it closer to the 60th Street intersection.
10. A comment was made that Saint Theresa's also likely utilizes this pedestrian bridge, so direct conversations should also be had with them regarding the potential at-grade crossing and removal of the current pedestrian bridge.
11. A follow-up meeting will be held to present recommendations / concepts at a future date.
12. Parents / teachers were asked to submit any further comments to the Principal to be routed to Bill Good and the City.

Pedestrian Bridge Evaluation

Windsor Elementary School
January 21, 2016

Presented by

Jennifer McCoy, P.E.
City Traffic Engineer

Bill Good
Chief Operations Officer



Purpose of Evaluation

- ▶ Constructed 1972 / Repaired 1994
- ▶ Several Issues
 - ▶ Deterioration
 - ▶ Corrosion
 - ▶ Concrete spalling
- ▶ Safety concern for pedestrians and vehicles
- ▶ Consultant hired to perform an evaluation of existing conditions



(B2) Overall structure (looking east)

Existing Conditions

- ▶ City data collection
 - ▶ Visual observations Spring 2014
 - ▶ Students = 8 in morning & 94 in afternoon
 - ▶ Trail counters = 128 peds/day average
- ▶ University Avenue
 - ▶ 30 MPH (25 MPH with School Flashers)
 - ▶ 11,000 vehicles per day (2012)
 - ▶ Nearest traffic signals 400' away
- ▶ Bridge geometry does not meet current ADA requirements

3 Options Evaluated

- ▶ Short Term Repair
- ▶ Full Replacement
- ▶ Bridge Removal w/ At-Grade Pedestrian Crossing Enhancements

Evaluation Findings

- ▶ Short-term repair cost - \$219,000 (construction only)
 - ▶ Concrete repair to Tee Beams & Substructures
 - ▶ Joint repair
 - ▶ Replace Fencing

- ▶ Considerations
 - ▶ Band-Aid Approach = Buys limited time until next repair is needed
 - ▶ Does not substantially improve structural condition or useful life expectancy
 - ▶ Short term solution & Increased risk
 - ▶ Would not meet ADA requirements

Evaluation Findings

- ▶ Full replacement cost - \$682,000 (construction only)
 - ▶ Remove existing bridge
 - ▶ New 9' x 416' PPCB bridge

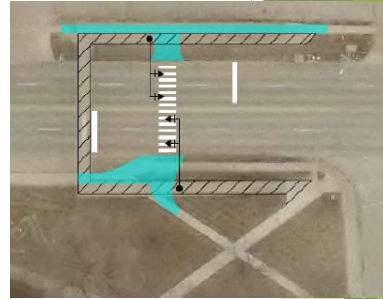
- ▶ Considerations
 - ▶ Much longer approach ramps (from 272' to 416' to complete crossing) could deter usage
 - ▶ Potential utility relocations
 - ▶ Right of way needs
 - ▶ Property impacts



Evaluation Findings

- ▶ Bridge removal / At-Grade Enhancements = \$215,000 (construction only)

- ▶ Remove existing bridge
- ▶ Pedestrian Signals added on University Ave
- ▶ Adult crossing supervision



- ▶ Considerations

- ▶ Minimal project footprint / no additional right of way needs
- ▶ Work with school on morning and afternoon traffic operations / parking inset opportunities
- ▶ Preferred alternative by City / DM Schools

Similar Situations

- ▶ Examples of DM Elementary Schools w/ at-grade signalized crossings:

- ▶ Monroe Elementary (Hickman Road crossing)
- ▶ Jackson Elementary (Indianola Avenue crossing)
- ▶ Hillis Elementary (Hickman Road crossing)



Monroe Elementary



Jackson Elementary



Hillis Elementary

Questions?

Contact Information

Jennifer McCoy, P.E.
 City Traffic Engineer
 (515) 283-4973
 jlmccoy@dmgov.org



Bill Good
 Chief Operations Officer
 (515) 242-8321
 harold.good@dmschools.org

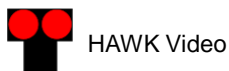


Pedestrian Signals

- ▶ High Intensity Activated Crosswalk (HAWK) Signals
- ▶ Operates similar to traditional traffic signals



Example of HAWK Signal on Grand Avenue



Drivers		Pedestrians	
See This	Do This	See This	Do This
	Proceed with Caution		Push the button to cross.
Dark			
	Slow down, prepare to stop. Pedestrian has activated the push button.		Wait. Traffic is preparing to stop.
Flashing Yellow Light			
	Stop if safe to do so.		Continue waiting. Traffic is beginning to stop.
Steady Yellow Light			
	Stop; remain stopped. Pedestrian in crosswalk.		Start Crossing. Look both ways before crossing.
Steady Red Light			
	Stop. Then proceed with caution when clear.		Continue crossing. If walking, continue. Those who have yet to enter the crosswalk, do not start.
Alternating			
	Proceed with caution.		Push the button to cross.
Dark			

