

# Pedestrian Bridge Evaluation

Windsor Elementary School  
October 6, 2016

Presented by

Jennifer McCoy, PE, PTOE  
City Traffic Engineer

Bill Good  
Chief Operations Officer



# Agenda

- ▶ Bridge Evaluation Recap
- ▶ Previous At-Grade Concept
- ▶ Comments received
- ▶ Revised At-Grade Concept
- ▶ Schedule

# Bridge Evaluation

- ▶ Constructed 1972 / Repaired 1994
- ▶ Safety concern for pedestrians and vehicles
- ▶ Bridge geometry does not meet current ADA requirements
- ▶ Consultant hired to perform evaluation
  - ▶ Current Condition
  - ▶ Short Term Repair
  - ▶ Full Replacement
  - ▶ Bridge Removal / At-Grade Crossing

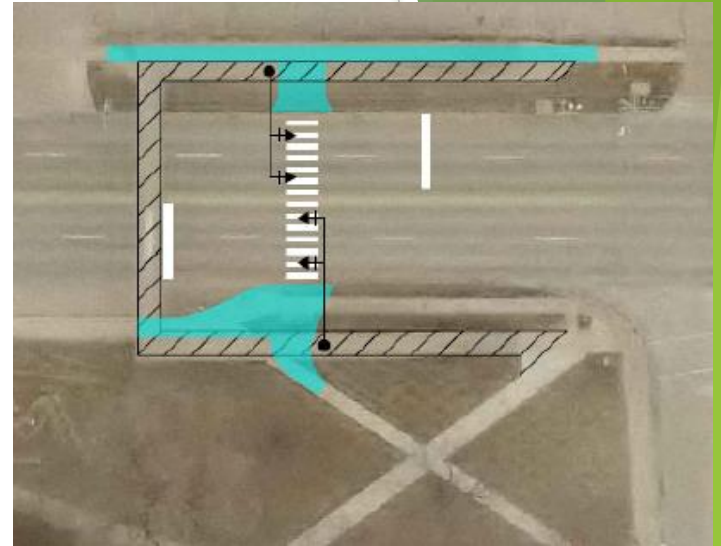


(B2) Overall structure (looking east)

# At-Grade Concept

## Original Concept

- ▶ Remove existing bridge
- ▶ Pedestrian Signals added on University Avenue
- ▶ Adult crossing supervision
- ▶ Preferred Concept
  - ▶ Bridge Out of Distance Travel 272' to 416'
  - ▶ On-going Maintenance
  - ▶ Similar crossing conditions to other DM Schools
  - ▶ Property Impacts
  - ▶ Life Cycle Costs

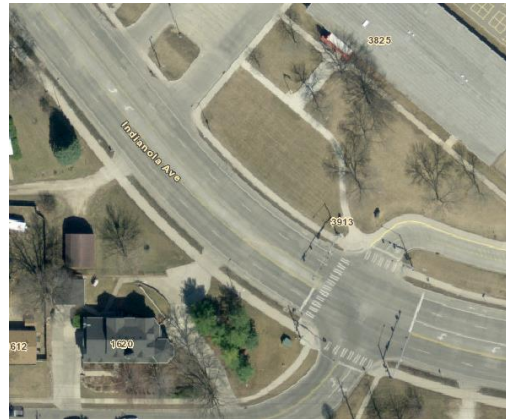


# Similar Situations

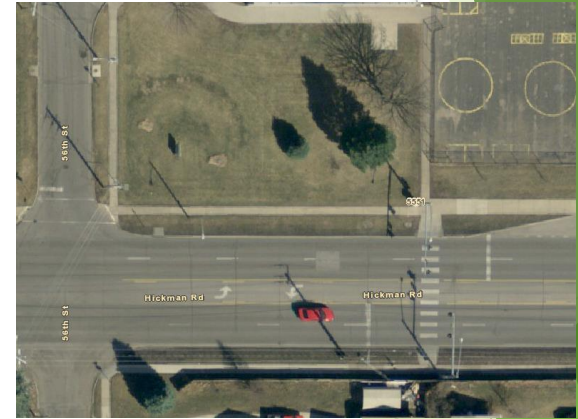
- ▶ University Avenue
  - ▶ 30 MPH (25 MPH w/ School Flashers)
  - ▶ 11,000 veh/day / 4 lane crossing
- ▶ Examples of DM Elementary Schools w/ at-grade signalized crossings:



**Monroe Elementary**  
30<sup>th</sup> & Hickman  
11,000 veh/day  
5 lane crossing  
30 MPH



**Jackson Elementary**  
Indianola & Watrous  
13,000 veh/day  
5 lane crossing  
35 MPH



**Hillis Elementary**  
56<sup>th</sup> & Hickman  
15,000 veh/day  
5 lane crossing  
30 MPH

# Comments Received

Comments from 1/21/16 Meeting at Windsor, 3/3/16 Merle Hay Neighborhood Meeting, and 3/8/16 Waveland Woods Neighborhood Meeting

- ▶ Bridge sometimes isn't used in winter due to ice / slick surface on ramps
- ▶ Could be an increase of parents using the parking lot across University w/ at-grade crossing
- ▶ Concern w / congestion and speed of University and turning in/out of drives and Cummins Parkway
- ▶ Similar to what Windsor Heights is considering, it was asked that the City considers a 4-lane to 3-lane conversion on University
- ▶ Bus inset on University should be extended
- ▶ Discussed placing HAWK closer to 60th



# Schedule

## Design / Construction

- ▶ City Council Acceptance – October 24, 2016
- ▶ Design – Fall/Winter 2016
- ▶ Bidding – February 2017
- ▶ Construction – Summer 2017



# Questions?

## Contact Information

Jennifer McCoy, PE, PTOE  
City Traffic Engineer  
(515) 283-4973

Bill Good  
Chief Operations Officer  
(515) 242-8321



# Pedestrian Signals













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



Example of HAWK Signal on Grand Avenue



HAWK Video

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

