

## IA 1/ N. Dodge Street Reconstruction

ACEC Iowa – Iowa DOT – FHWA  
Iowa Transportation Conference





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## Presenters



- Jeff Held, P.E., PTOE, Strand Associates, Inc.
  - Consultant PM for Planning and Functional Design
- Mark Harle, P.E., Iowa DOT
  - Iowa DOT PM for Design
- Josh Straka, P.E., Strand Associates, Inc.
  - Consultant PM for Design

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## IA 1/ N. Dodge Street Reconstruction

Limits, History, and Context





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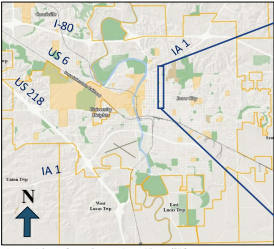
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## Project Location and Limits





Dodge Street—Looking South

- 1.3 Miles
- One-way southbound
- Governor Street is complementary pair

Images: Johnson County Property Image Viewer (PIV)

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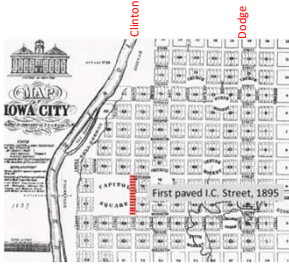
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## Corridor History

- Brick Streets





First paved I.C. Street, 1895

Images: ourtownhistory.com

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## Corridor History

- Brick Streets




Image: Google Earth Pro

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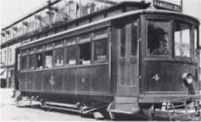
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Corridor History

Streetcar

Circa 1915






Images: ourtownheritage.com

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Corridor History

Historic and Conservation Districts

Brown Street Historic District:

Brick paved streets, mature oak trees, diverse architecture

Arthur Hillyer Ford House, Charles Berryhill House

2 Conservation Districts: Goosetown/Mann; College Hill

Historic homes, mature trees

Design guidelines to protect building styles and scales

College Green Historic District:

College Green Park

Dozens of contributing 1800s and 1900s buildings




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Project Need



Aging Signals and Utilities



Deteriorating Pavement



High Travelling Speeds

Sloppy Property Slopes

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## Preliminary Evaluation

- **Two-way Conversion Evaluation**
  - Considered prior to functional design
  - Iowa DOT owns and maintains both Dodge Street and Governor Street (Iowa 1)
- **Traffic Volumes**
  - Dodge Street – 5,900 to 7,900 vpd
  - Governor Street – 3,600 to 6,300 vpd
  - Combined – 9,500 to 14,200 vpd
- **Safety**
  - No intersections in MPOJC top 20
  - Neither corridor in MPOJC top 70



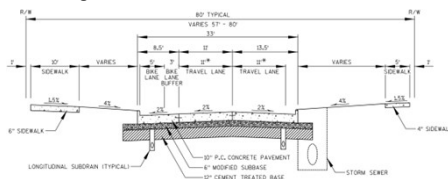
## Preliminary Evaluation

- **Two-Way Operation**
  - Conversion is feasible
  - Short blocks (200 to 400-feet) may require TWLTL (widening has impacts)
  - One of the pair would receive nearly double the existing traffic.
  - Iowa City would take over ownership/maintenance of Governor Street, would be solely responsible for future reconstruction
- City Decided to Maintain One-Way Pair



## Preliminary Evaluation

- **Functional Design**



\*NOTED THE USE OF 30' TRAVEL LANES FOR TRAFFIC CALMING AND A DESIGN EXCEPTION WITH IOWA DOT WILL BE EXPLORED IN FINAL DESIGN.

Preliminary Evaluation

- Functional Design

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Potential Improvements

Undergrounding Existing Aerial Utilities

Repave Dodge Street with Concrete Pavement

New 8-ft sidewalk on west, 5-ft sidewalk on east

New Underground Public Utilities

Implement Speed Management Design

New Driveway Approaches

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Potential Improvements

New Retaining Walls

New Street Trees

New Traffic Signals

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# IA 1/ N. Dodge Street Reconstruction

## Iowa DOT Perspectives and Design Features



## Iowa DOT Perspectives

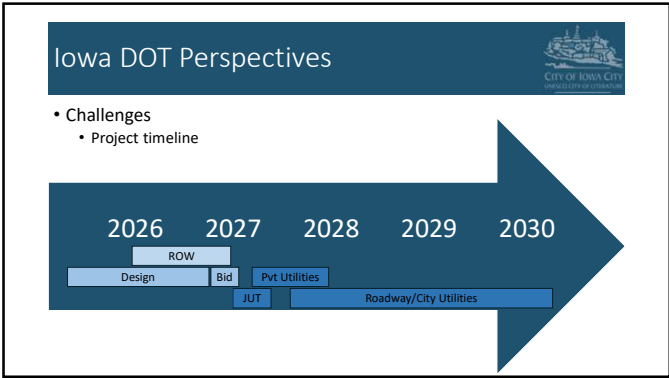
- Shared Goals
  - Pavement Needs
  - Aging Asphalt Overlay
  - Public Corridor Perception



## Iowa DOT Perspectives

- Shared Goals
  - Speed Reduction
  - Traffic Calming
  - Pedestrian/Bike Safety
  - Truck Accommodations





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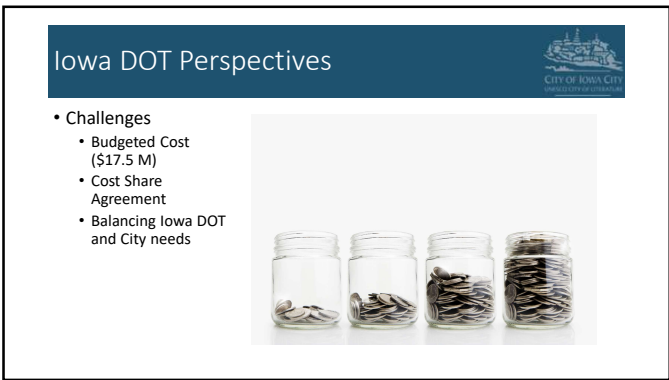
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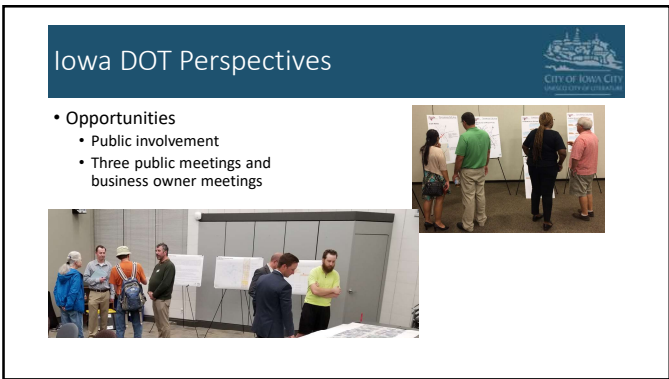
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## Bridge over Ralston Creek



- Condition is good
- Tying in only




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## Retaining Wall at Washington Avenue



- Remove existing, build new wall behind
- Pile wall to minimize excavation – guidance from other states




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## IA 1/ N. Dodge Street Reconstruction

Additional Design Elements




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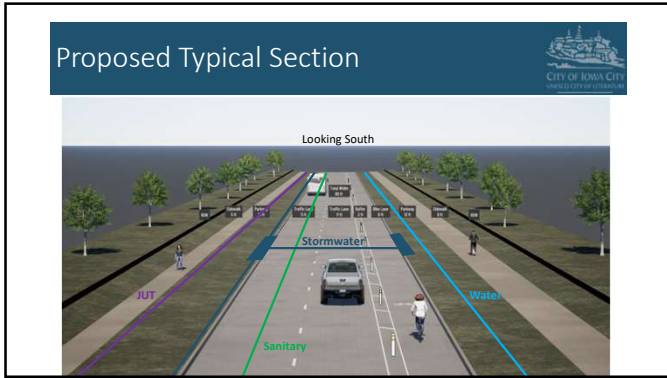
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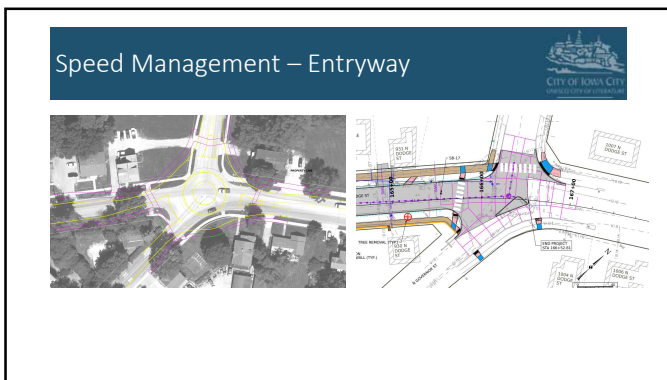
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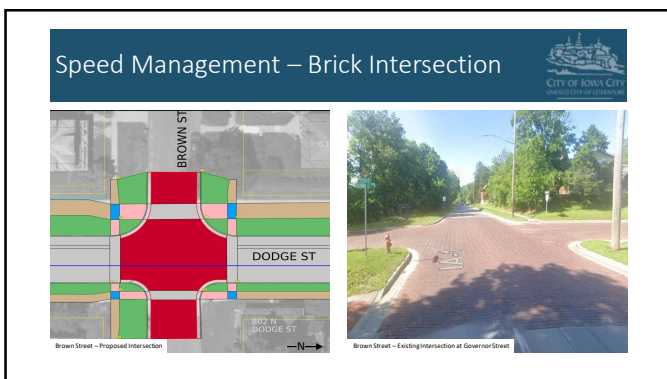
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## Speed Management – Speed Feedback / School Flashing



Dodge Street – South of Ronald Street



Benton Street

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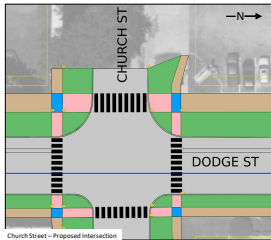
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## Speed Management – Raised Intersection



Church Street – Proposed Intersection



Raised Intersection Example

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## Potential Private Property Impacts



- Temporary Construction Easements
- Grading Impacts
- Tree/Landscape Removals
- Retaining Walls
- Detour/Staging of Construction
- Maintenance of Solid Waste and Postal Services

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Temporary Construction Easements/Grading Impacts

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Easement Needs

- Temporary Construction Easements
- Permanent Utility Easements
- Permanent Retaining Wall Easements

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Tree Assessment Results

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## Retaining Wall Needs



911 N Dodge Street



829 N Dodge Street

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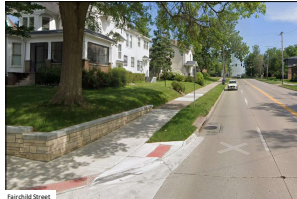
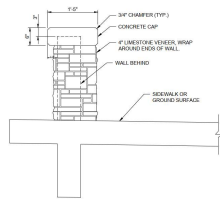
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## Sidewalk/Retaining Wall Combo



Fairchild Street

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## Undergrounding of Overhead Utilities



Dodge Street - Looking South



Dodge Street - Looking South

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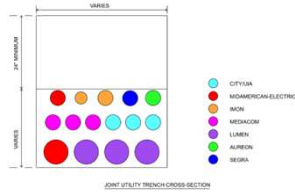
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## Joint Utility Trench (JUT) for Private and Public Utilities



- JUT will generally be located on the east side of the street
- JUT construction will begin prior to street construction
- Some permanent easements may be required
- Utility ground mounted equipment will be behind the sidewalk and sometimes on private property




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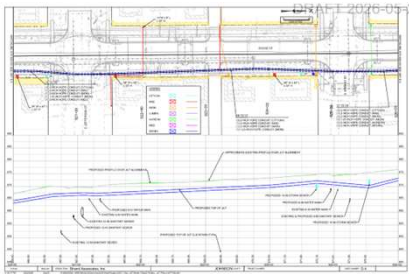
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## Joint Utility Trench (JUT) Design




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## Construction Detour/Staging



- Joint utility trench construction will begin first along with private utility relocations and potentially tree removals
- Roadway Construction will include 3 stages over 3 years
  - Construction starting on the north and working south
  - Local traffic only to driveways
  - Governor Street will be used as a two-way roadway section during construction as the detour route

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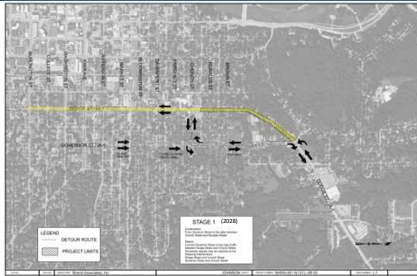
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### Construction Detour/Stage 1



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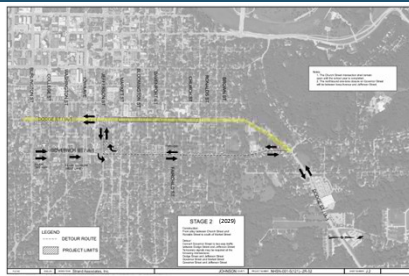
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### Construction Detour/Stage 2



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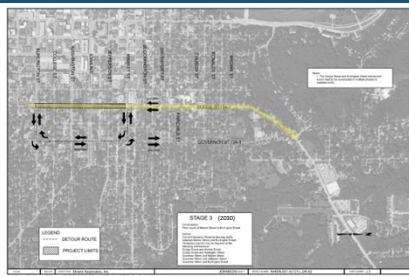
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### Construction Detour/Stage 3



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## Schedule and Next Steps



- Right-of-way Acquisition – June 2026 to May 2027
- Final Design – Late 2026
- Completed Design and Project Bidding – Spring 2027
- Public Information Meeting No. 3 – (Prior to Construction)
- Joint Utility Trench – Summer/Fall 2027
- Private Utility Relocation – Fall 2027/ Spring 2028
- Roadway Utility Construction – 2028 to 2030

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## Questions/Comments



### Project Contacts:

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 Mark Harle (Iowa DOT) [mark.harle@iowadot.us](mailto:mark.harle@iowadot.us)  
 Josh Straka (Strand Associates, Inc.) [josh.straka@strand.com](mailto:josh.straka@strand.com)

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## Tree Assessment Approach



Two Eocene Arborists Completed Field Survey – Trees Evaluated On:

- Roots
- Trunk
- Scaffold Branches
- Small Branches and Twigs
- Foliage

**Produces a scoring matrix for all trees**

- Rating of 4: No obvious issues or defects
- Rating of 3: Minor problems or defects that are repairable
- Rating of 2: Significant problems or defects that are difficult to repair
- Rating of 1: Problems or defects that are unrepairable

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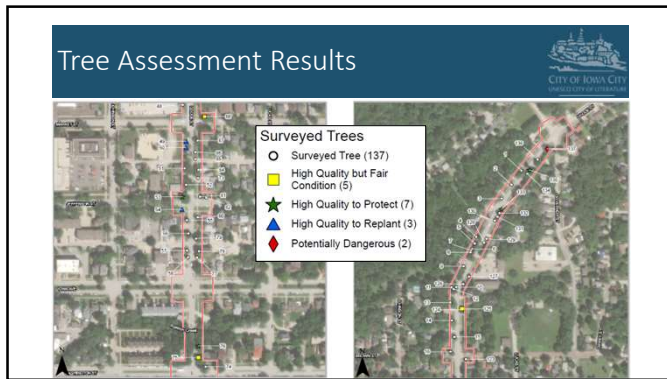
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### Tree Assessment Results

**High Value Trees**

- High rating based on the Quantitative Condition Rating System
- A species that is native to the area and provides beneficial habitat and forage for native species
- A tree that is advanced in age (50+ years) and provides considerable canopy to the area OR a tree that has been planted within the last three years and would be easily replanted elsewhere with minimal damage or stress to the tree
- A species that is robust and highly resistant to storm damage, pest infestation, and highly variable seasonal conditions

→ Tree Protection Zones / Tree Impact Avoidance and Planning

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### Tree Management Plan

- A majority of the street trees will be removed as part of this project
- High quality trees will be protected, where feasible
- Typically, only trees within the right-of-way will be impacted
- City intends to budget for and replant trees along the corridor

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