

Local Intersection HSIP Improvements



July 6, 2022



Project Team

- Adam Schleicher
 - Director of Public Services/City Engineer
- Tom Veith
 - Engineering Director
- Zachary Pearson
 - WisDOT Local Program Project Manager
- Kevin Wehner
 - KL Engineering, Inc., Consultant Project Manager
- Sam Herheim
 - KL Engineering, Inc.

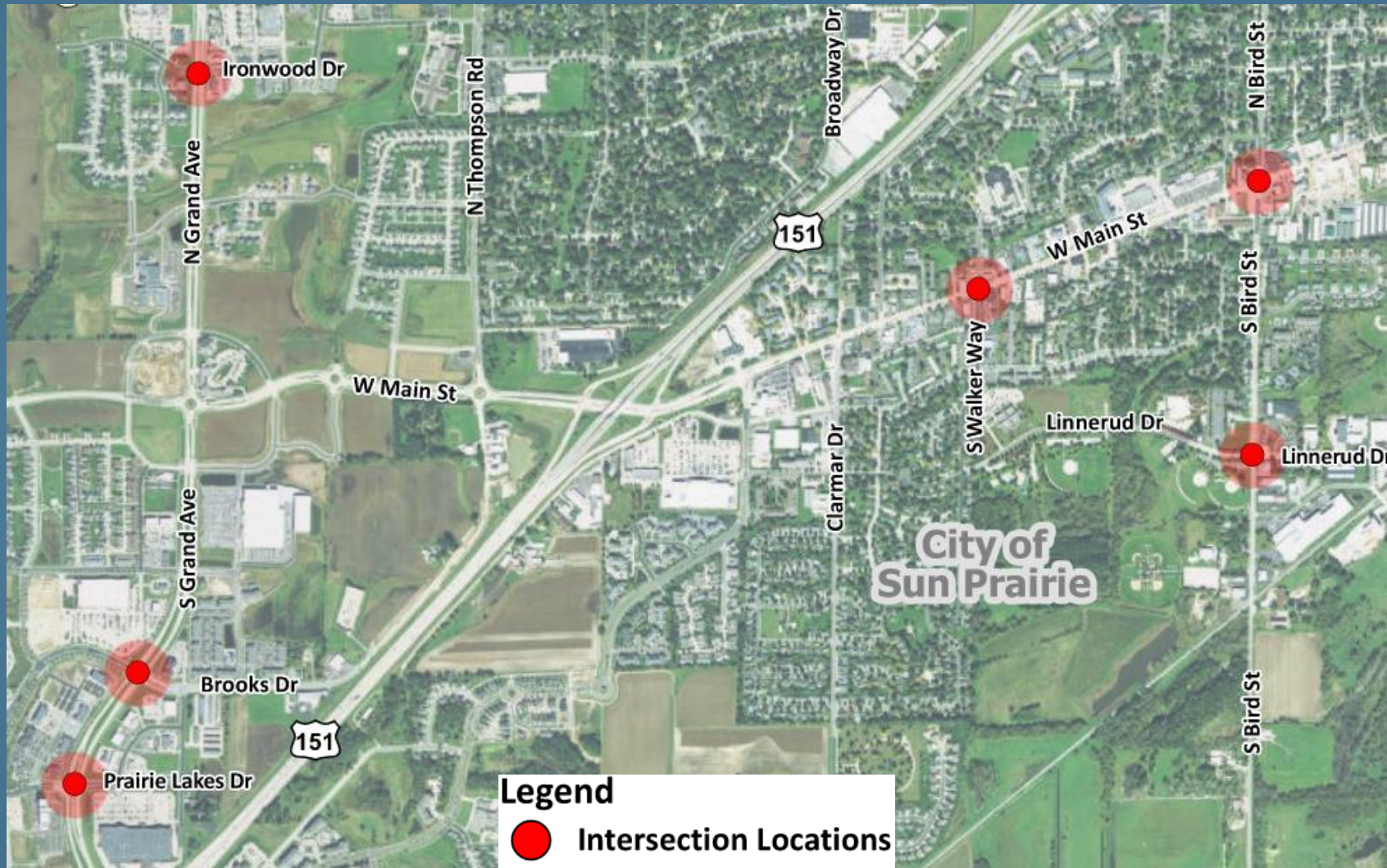


Presentation Agenda

- Project Location
- Project Background & Existing Conditions
- Project Purpose and Need
- Proposed Improvements
- Real Estate
- Construction Staging
- Project Cost and Funding
- Project Schedule
- How to Get Involved
- Contact Information



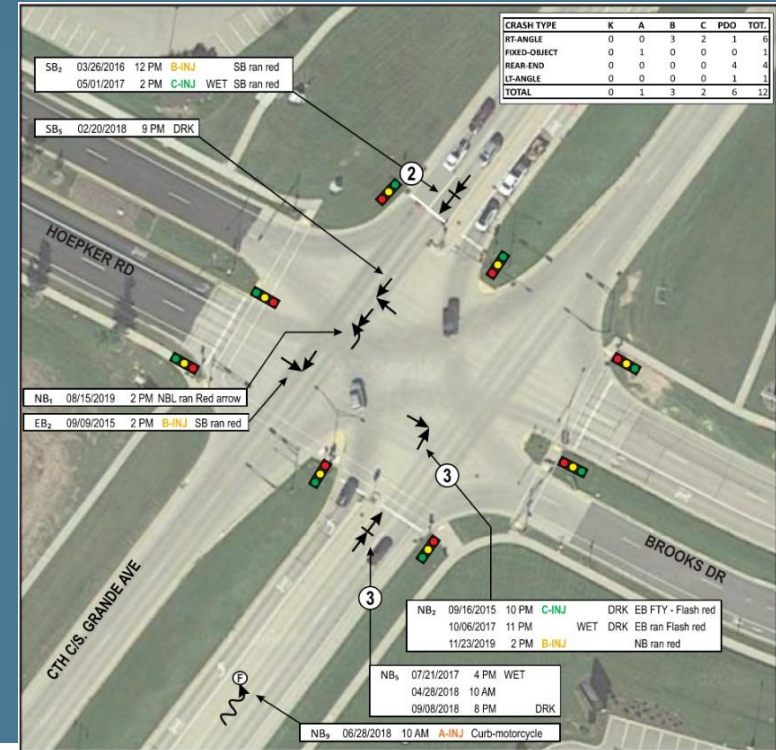
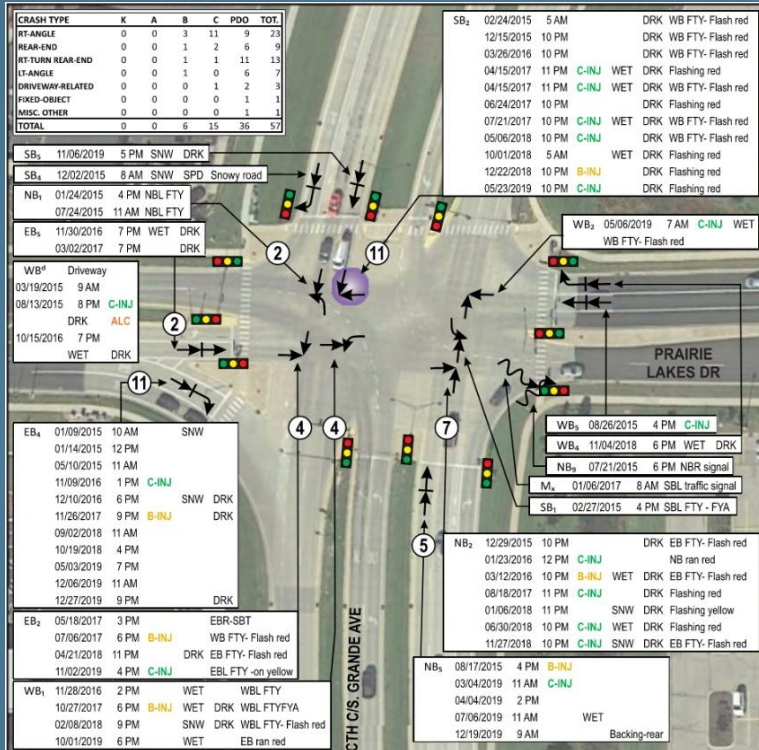
Project Location



Crash History

S Grand Ave & Prairie Lakes Dr

S Grand Ave & Brooks Dr



LEGEND

→ Moving Vehicle
 ←←← Backing Vehicle
 - - - Pedestrian
 - - - Bicyclist
 [] Parked Vehicle

🚦 Traffic Signal
 ⚠ Stop/Yield Sign
 🌳 Tree
 🚧 Fixed Object
 Ⓝ Non-Fixed Object

↘ Angle (Right Angle)
 ↙ Angle (Left Turn)
 ↗ Angle (Right Turn)
 ↔ Sideswipe-Same
 ↔ Sideswipe-Opposite

↔ Head-On
 ↘ Rear-End
 🌀 Out of Control
 ↘ Overtake
 ↘ Overtake

= CRASH FREQUENCY (if > 1 NON-PED/BIKE)

LABEL, DATE OF CRASH, TIME, SEVERITY, ROAD CONDITIONS, LIGHT, ALCOHOL, DRUGS, SPEED-RELATED, NOTES ABOUT CRASH

Note: Deer Crashes Not Included
 *Economic Loss = \$85k (KAB), \$25k (C), \$4k (PDO)

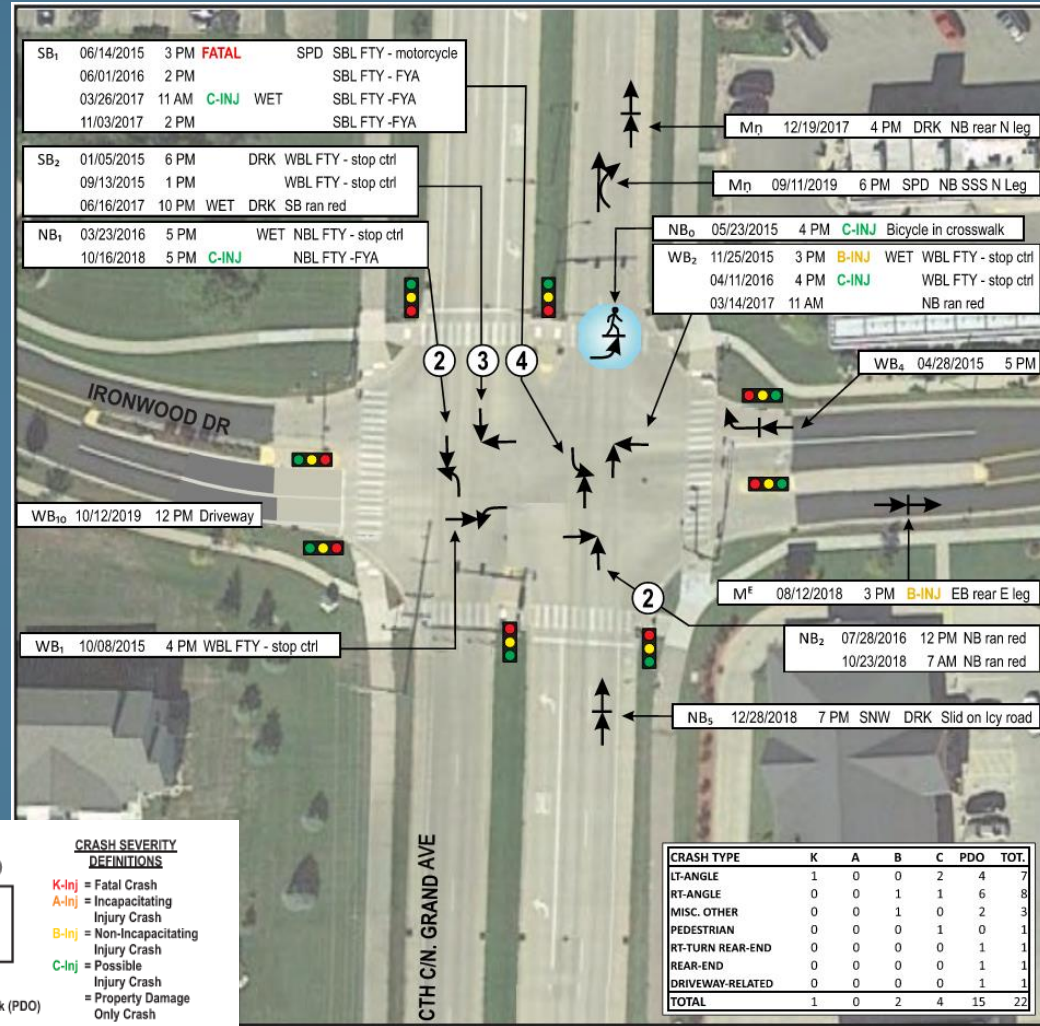
CRASH SEVERITY DEFINITIONS

K-Inj = Fatal Crash
 A-Inj = Incapacitating Injury Crash
 B-Inj = Non-Incapacitating Injury Crash
 C-Inj = Possible Injury Crash
 = Property Damage Only Crash



Crash History

N Grand Ave & Ironwood Dr



LEGEND

- Moving Vehicle
- Backing Vehicle
- Pedestrian
- Bicyclist
- Parked Vehicle
- Traffic Signal
- Stop/Yield Sign
- Tree
- Fixed Object
- Non-Fixed Object
- Angle (Right Angle)
- Angle (Left Turn)
- Angle (Right Turn)
- Sideswipe-Same
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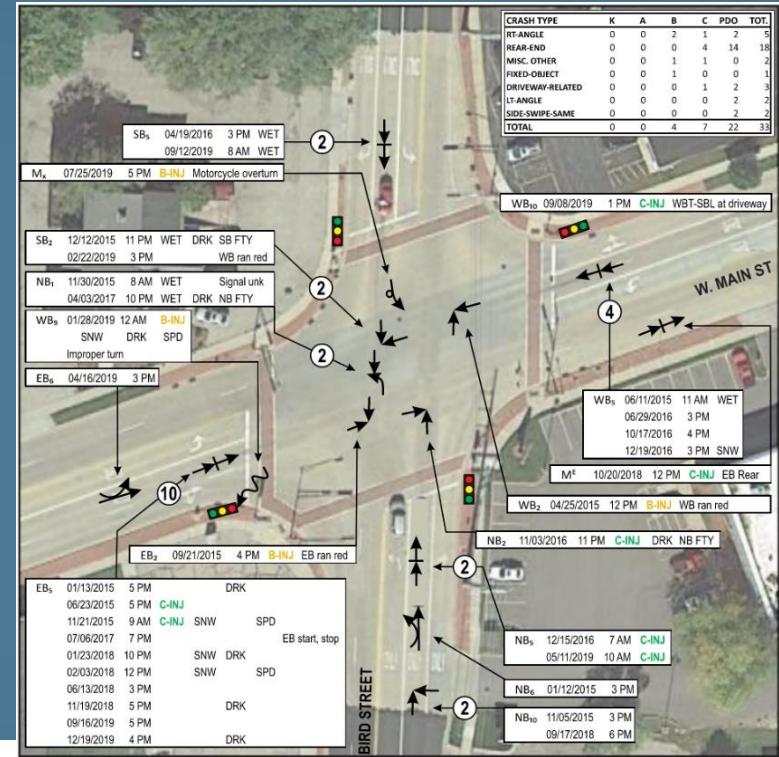
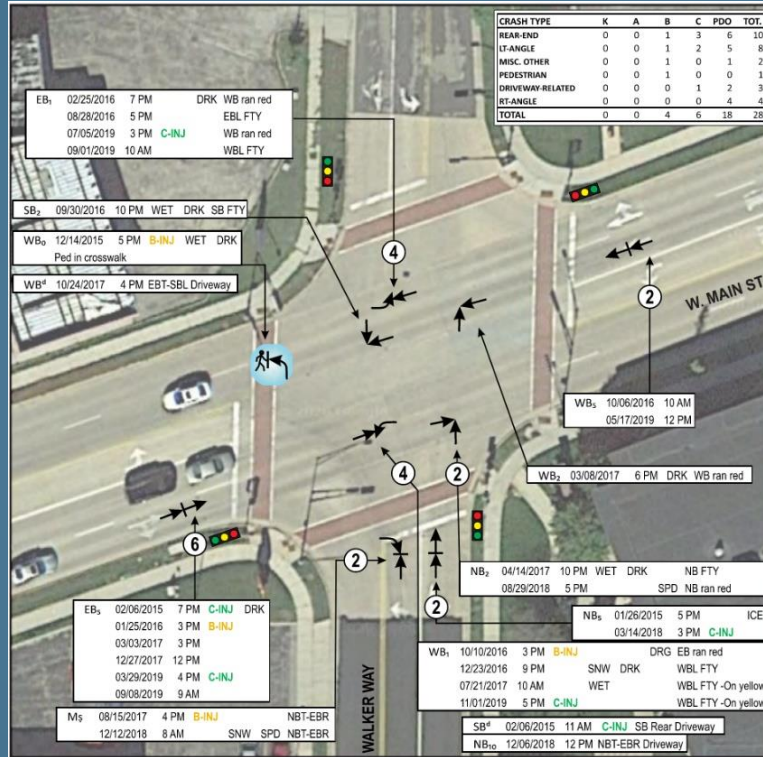
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Crash History

W Main St & Walker Way

W Main St & N Bird St



LEGEND

- Moving Vehicle
- ↔ Backing Vehicle
- - - Pedestrian
- - - Bicyclist
- [] Parked Vehicle
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- 🛑 Stop/Yield Sign
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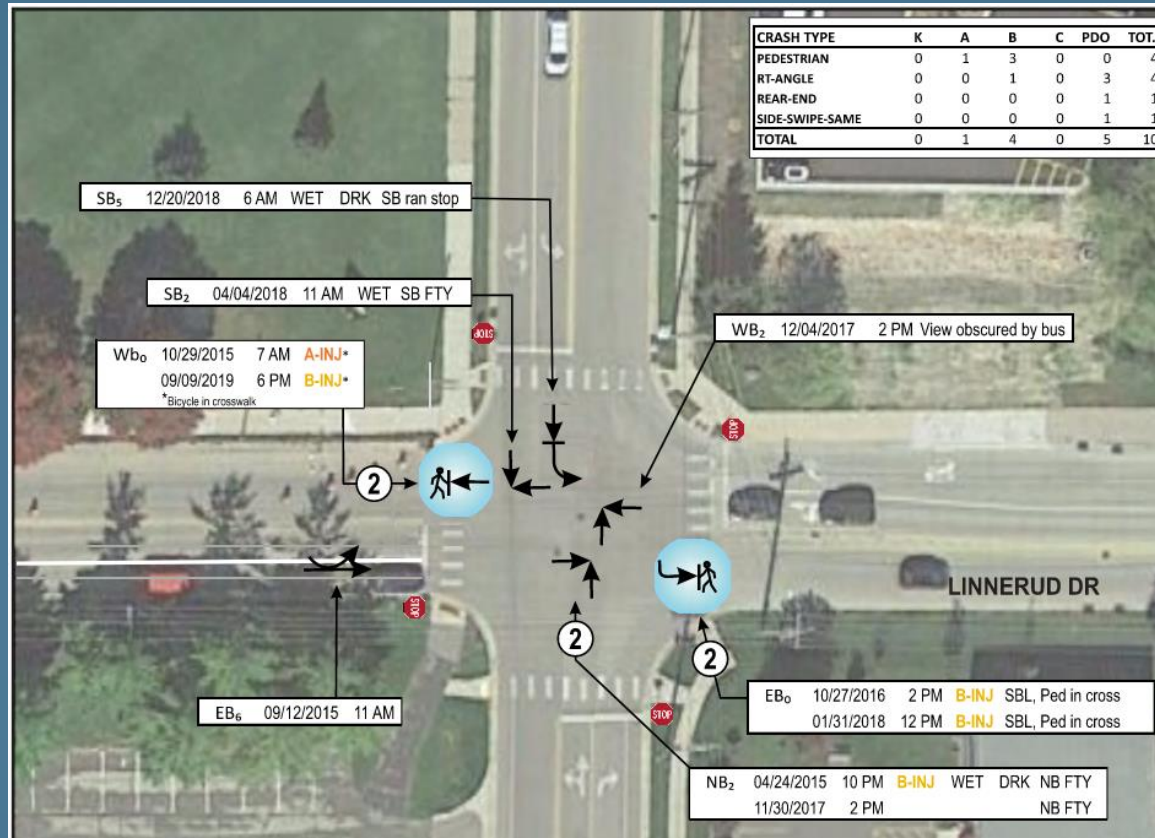
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- =** Property Damage Only Crash



Crash History

S Bird St & Linnerud Dr



LEGEND

- Moving Vehicle
- ↔ Backing Vehicle
- Pedestrian
- - - Bicyclist
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Existing Conditions

Grand Ave Intersections

- S Grand Ave & Prairie Lakes Dr
- S Grand Ave & Brooks Dr
- N Grand Ave & Ironwood Dr



Existing Conditions

W Main St & Walker Way



Existing Conditions

W Main St & Bird St



Existing Conditions

Bird St & Linnerud Dr



Project Purpose & Need

Why do we need this project?

Mitigate existing safety issues at the project intersections



Project Purpose & Need

- Safety Issues

- Pedestrian crashes
- Rear end and angle crashes
- Intersection lighting



Proposed Improvements

- Grand Ave – 3 Intersections
 - Retroreflective backplates

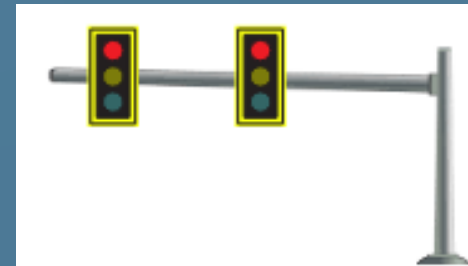


Proposed Improvements

- **W Main St & Walker Way**
 - Retroreflective backplates
 - Upgrade EB/WB signals:
 - signal heads over each lane
 - flashing yellow arrow
 - Upgrade street lighting
 - Improve EB/WB left-turn offset



**IMPROVE LEFT-TURN
OFFSET TO CREATE
POSITIVE OFFSET
(CMF = 0.644 KABC)**



**CONVERT TO
SIGNAL HEADS
OVER EACH LANE
(CMF = 0.768 Rt Angle
= 0.969 Rear End)**



**ADD RETRO-
REFLECTIVE
(YELLOW)
BACKPLATES
(CMF = 0.85 all)**

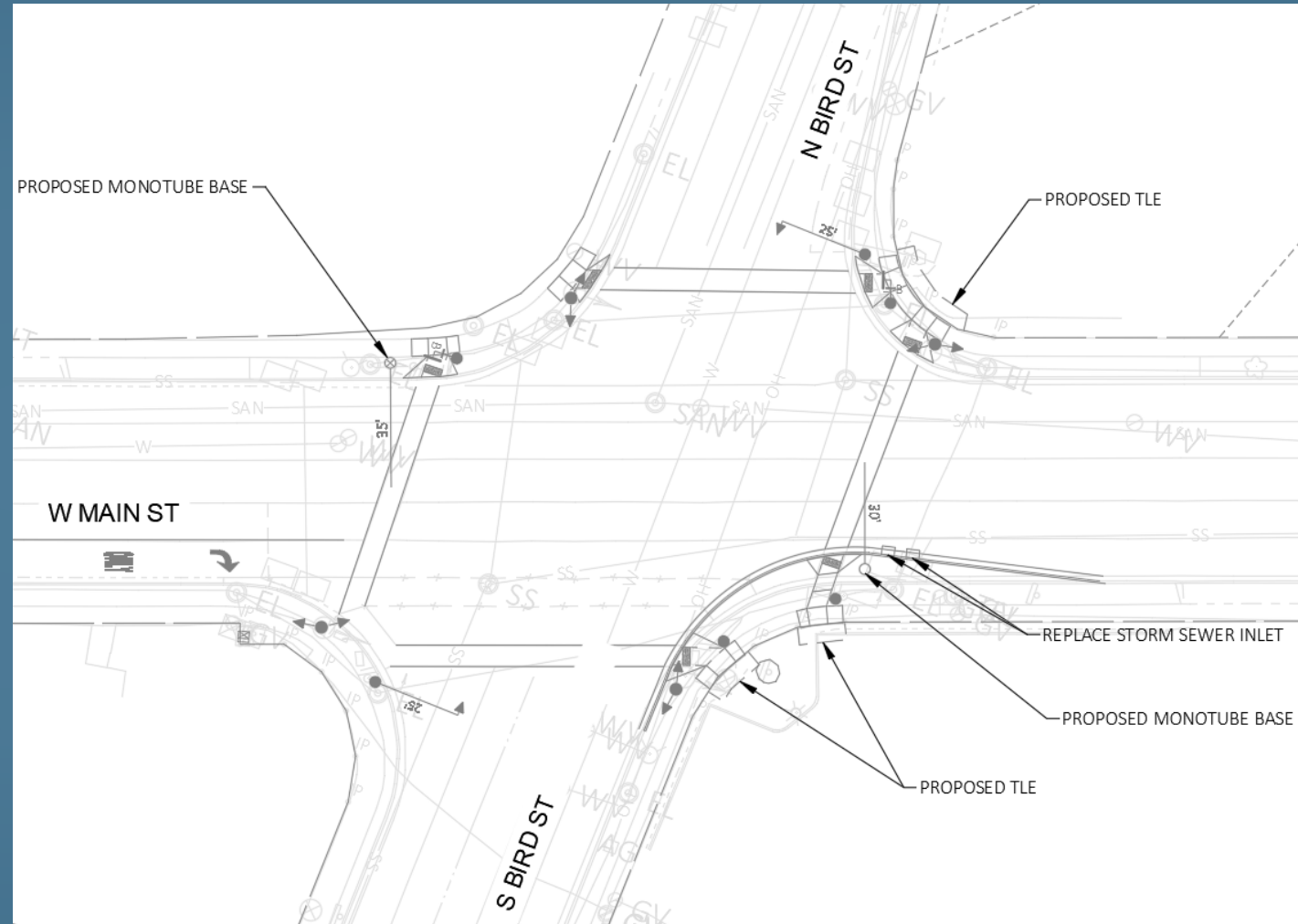
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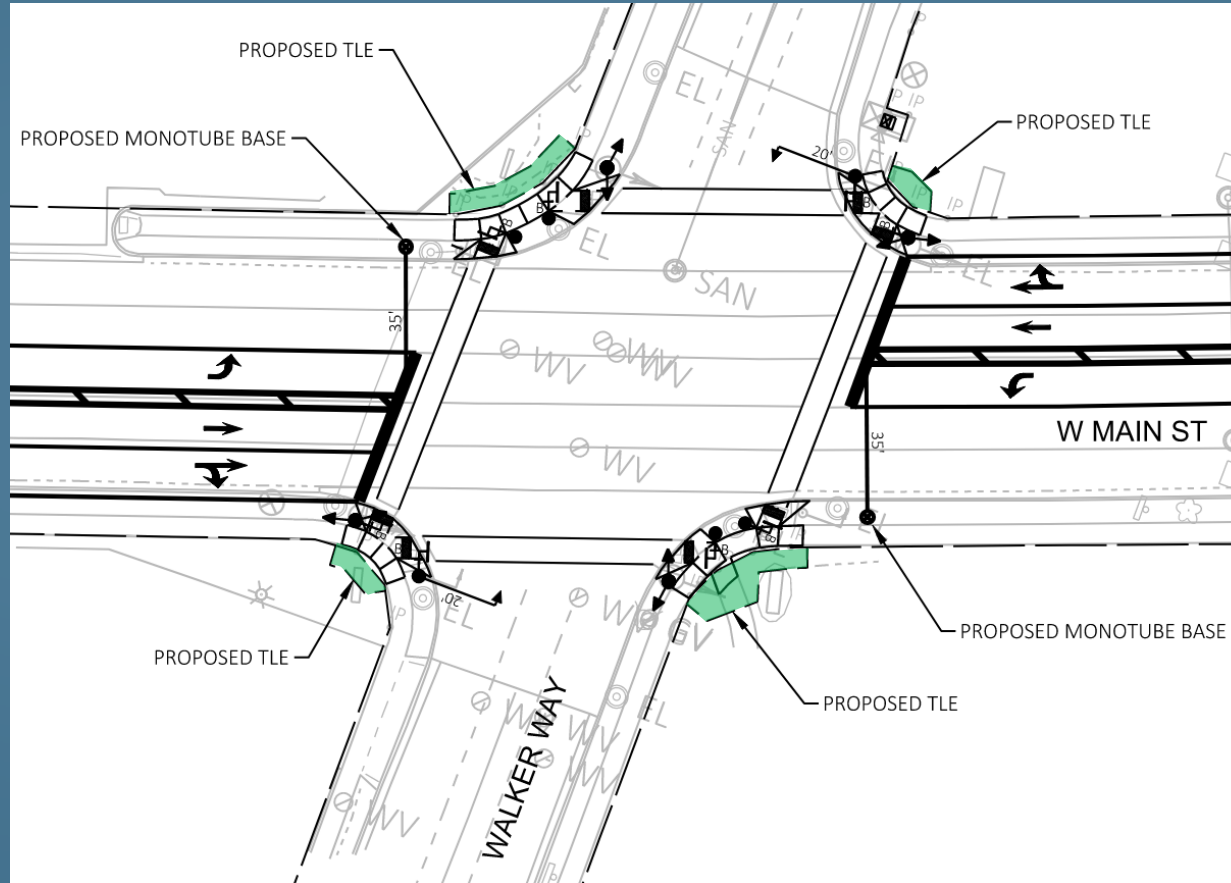
Proposed Improvements

- Bird St & Linnerud Dr
 - Provide median refuges on each leg
 - Improve street lighting



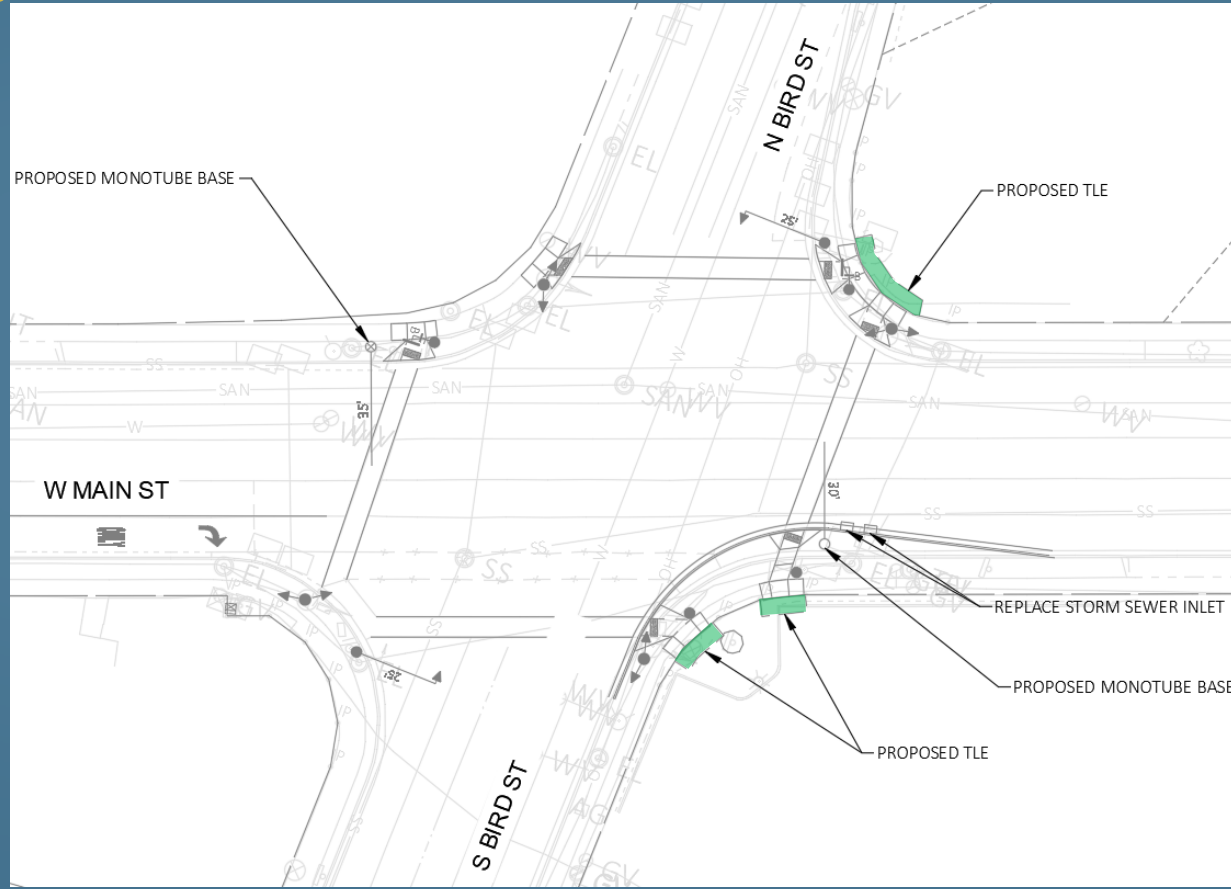
Real Estate

Temporary Limited Easement – Main Street & Walker Way



Real Estate

Temporary Limited Easement – Main Street & Bird Street



Construction Staging

- 2023 Construction
- Short term lane closures at the Main Street intersections with Walker Street and Bird Street
- Lane shifts during median construction at Bird Street & Linnerud Drive
- Very limited lane closures at Grand Avenue Intersections



Project Cost & Funding

- Design

- \$200,621 for consultant and WisDOT review
- \$20,062 (10%) Sun Prairie

- Construction

- \$923,036 estimated for construction and oversight
- Funding from the WisDOT Highway Safety Improvement Program
- \$830,732 (max) federal funds at 90% of participating costs
- \$92,304 (10%) Sun Prairie



Project Schedule

- Public Involvement Meeting July 6, 2022
- Environmental Document August 2022
- Temporary Limited Easements Fall 2022
- Draft Final Plans November 1, 2022
- Final Plans February 1, 2023
- Advertisement & Bidding May 9, 2023
- Construction Summer/Fall 2023

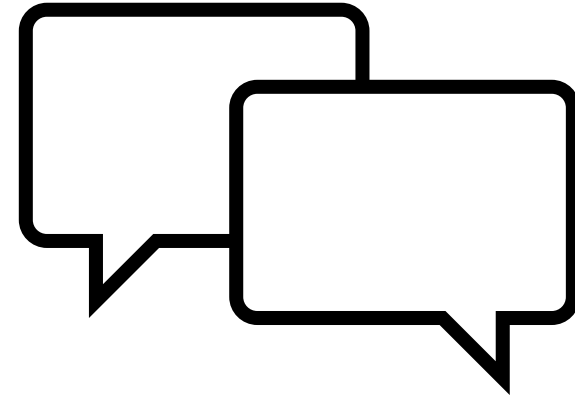


How You Can Get Involved

- View the presentation and exhibits
- Complete the online survey:

<https://www.surveymonkey.com/r/H92X3CJ>

- Reach out to the design team
- Please provide comments by 8/15/2022



Thank You For Your Time

Please contact either of the following for more information

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Any
Questions

