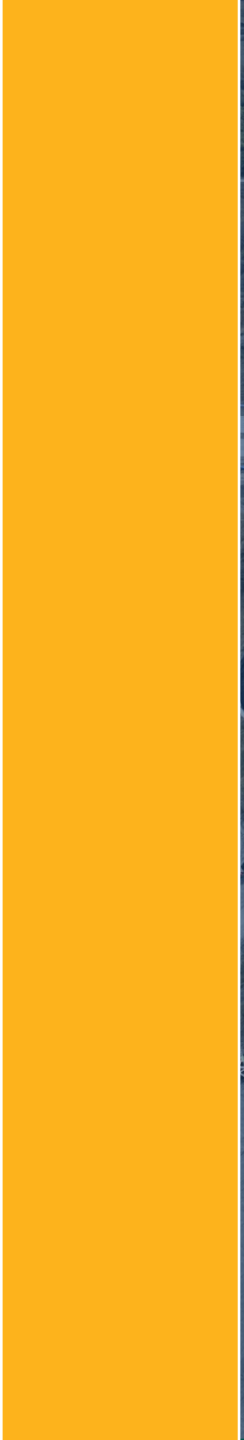


# DE SOTO LOCAL ROAD IMPROVEMENTS

THURSDAY, MARCH 14, 2024





# PROJECT LEADERS



**Paul Kulseth, P.E.**  
Project Director



**Brett Harding, P.E.**  
PMC Project Manager



**Chad Hall, P.E.**  
Design Manager



**Kevin Kellerman, P.E.**  
Project Manager



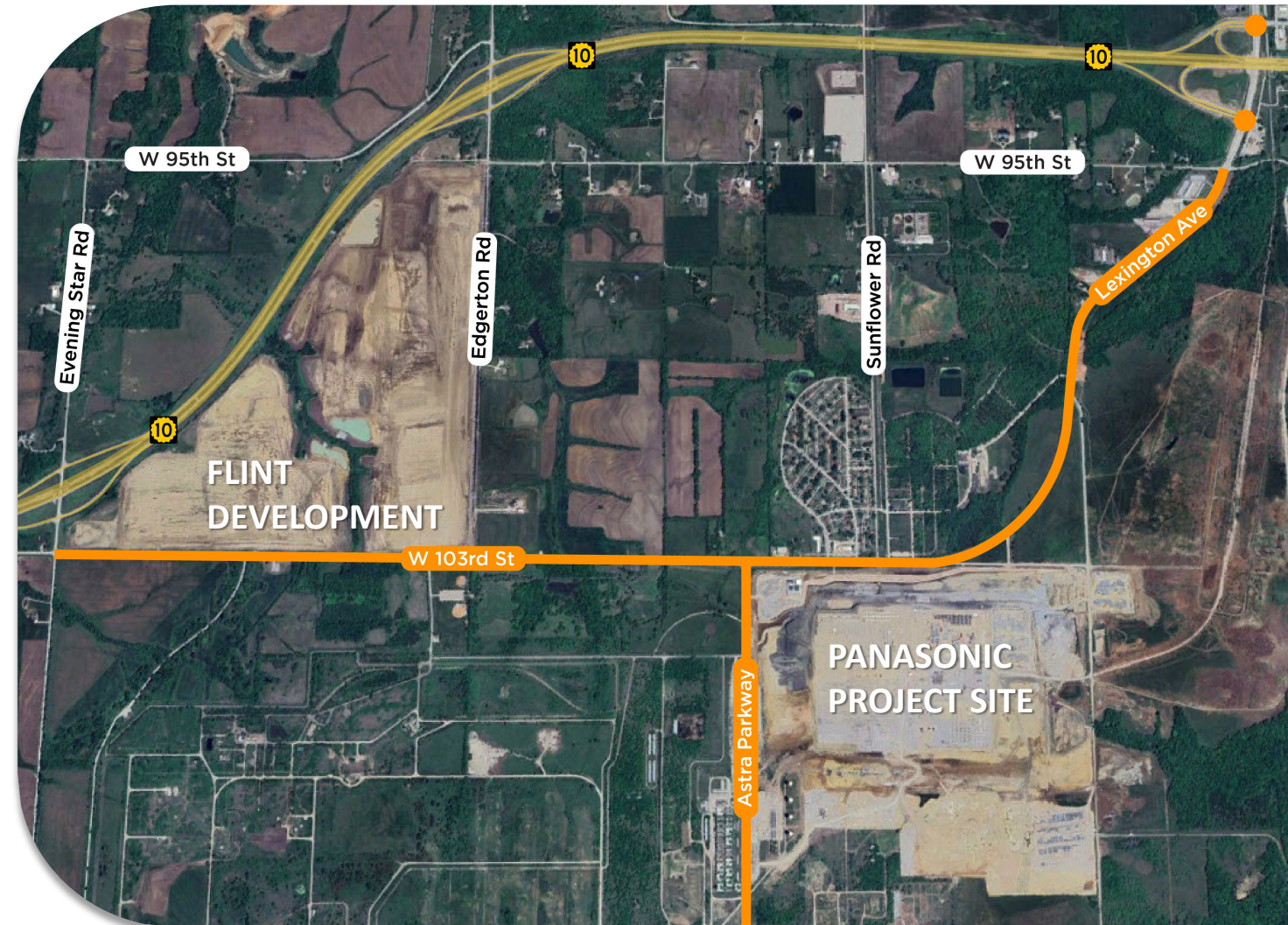
# PROJECT TEAM





# PROJECT OVERVIEW

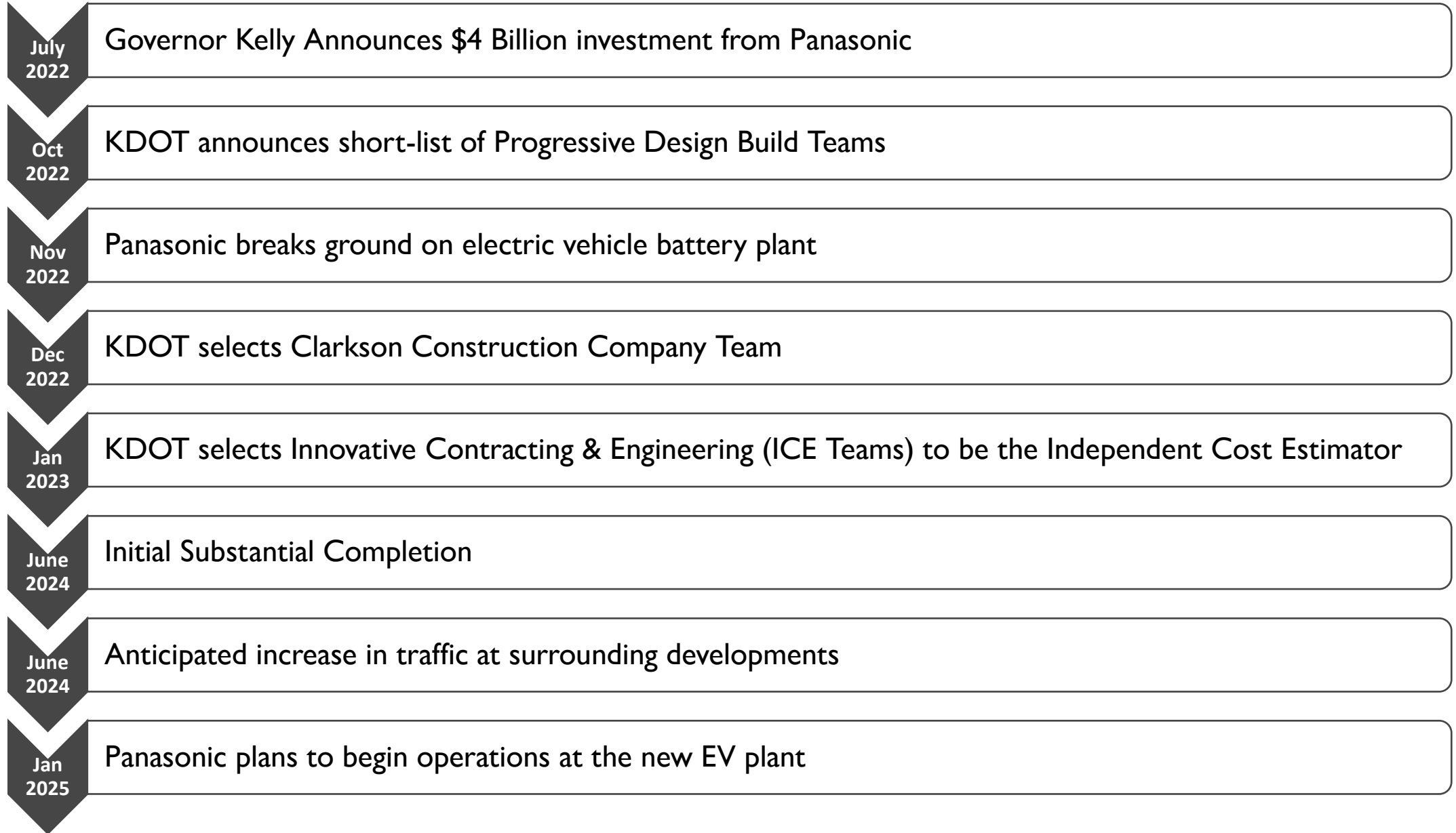
## De Soto Local Road Improvements *Johnson County*



- KDOT has committed to deliver the transportation infrastructure improvements necessary to support the Panasonic Energy Co. electric vehicle (EV) battery manufacturing facility in De Soto.
- The infrastructure improvements include updating approximately 4 miles of the current two-lane roadway to a new divided 4-lane roadway with curb, gutter, and sidewalks.

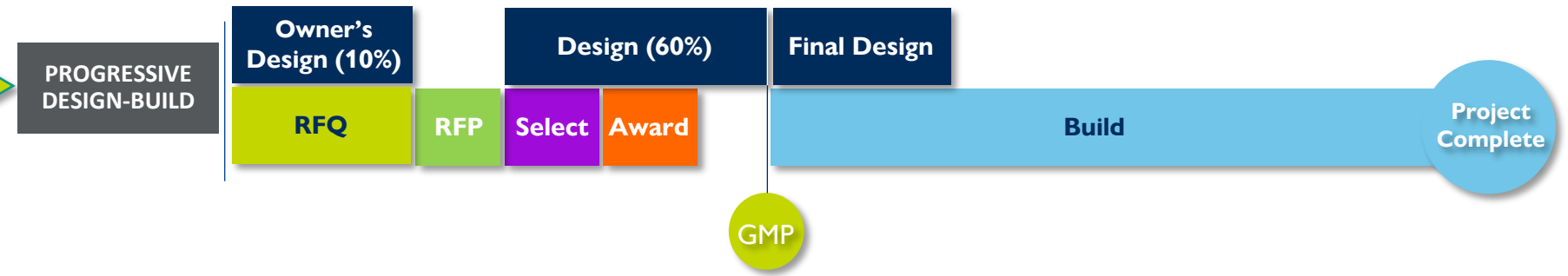
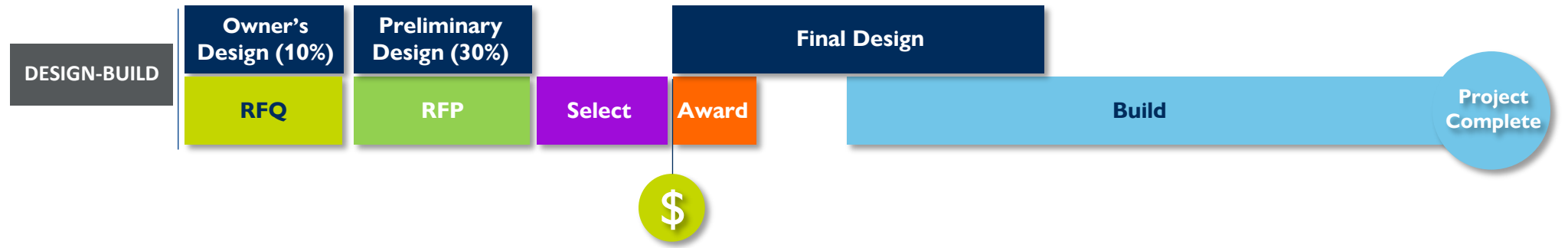


# INITIAL PROJECT TIMELINE





# PROJECT DELIVERY METHODS





# PROGRESSIVE DESIGN-BUILD MAIN FEATURES



Qualifications-based  
selection for  
Design-Build Team

Early contractor  
involvement and  
partnership  
(\$8 million savings  
captured)

Robust risk  
management  
(\$8.2 million)

Flexible contracting  
through passage of  
multiple phased  
amendments, defined  
by project team

Significant owner  
input and control

TIME reduction

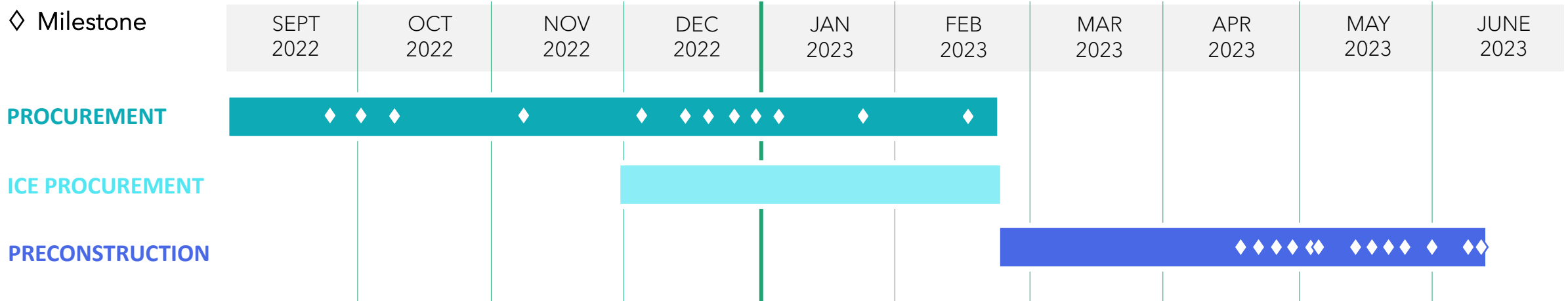
Cost transparency

Real-time construction  
quality feedback

Single point of  
responsibility



# DE SOTO TIMELINE



## PROCUREMENT MILESTONES

### SOQ

- ✓ 9/22 SOQ Due
- ✓ 10/11 Shortlist

### RFP

- ✓ 10/1 Draft RFP
- ✓ 11/9 Final RFP
- ✓ 12/2 Proposals Due

### Award

- ✓ 12/2 Page Turn
- ✓ 12/13 Evals
- ✓ 12/19 Interview
- ✓ 12/23 Award
- ✓ 12/28 1<sup>st</sup> Meeting
- ✓ 1/4 Kickoff

### Contract

- ✓ 1/23 Signed Contract
- ✓ 2/15 Precon Executed

## PRECONSTRUCTION MILESTONES

### 60% Plans

- ✓ 4/17 60% Submittal
- ✓ 4/21 PMC Review
- ✓ 4/24 Comments Addressed

### OPCC

- ✓ 4/27 Quant. submitted to ICE (TH)
- ✓ 5/1 Qnty Rec (M)
- ✓ 5/2 Sub Solicitation
- ✓ 5/16 Quotes Due (T)
- ✓ 5/19 OPCC (F)
- ✓ 5/22 Cost Rec (M)

### CPA

- ✓ 5/13 Min 12 Precon Submittals Approved
- ✓ 5/31 CPA Submitted

### GMP

- ✓ 5/31 Min 12 GMP submittals Approved
- ✓ 6/7 Final Cost Loaded Schedule Submitted
- ✓ 6/9 KDOT Approved CPA and GMP



# PRE-CONSTRUCTION PHASE

An aerial photograph of a construction site. A large, circular area in the center is covered with a blue tarp. The surrounding area is dirt and gravel, with several pieces of construction equipment, including a yellow excavator, a white truck, and a yellow loader. The site is bordered by a blue safety fence. The background shows some greenery and a road.

- Notice to Proceed for design – January 4<sup>th</sup>, 2023
- HDR, Braun & BHC mobilized design squads for:
  - 4 miles of four lane arterial
  - 3 roundabouts
  - 2 simple span bridges
  - 2 gravity block retaining walls
  - 4 RCBs
  - Corridor-wide storm sewer and lighting
- Develop 5% plans to 60% plans for estimating in 15 weeks (April 19<sup>th</sup>)





# PRE-CONSTRUCTION PHASE

- Continued from 60% to 100% & IFC plans while GMP development ongoing
  - Early Release package for materials – May 15
  - Early grade and drain (west half and Astra Parkway) – June 9
  - Remaining Design for West half and Astra Parkway – July 10
  - Design for East half of project and bridges – July 17
- Added De Soto Waterline and Force Main (Sanitary Sewer) design in late May
- Design complete by end of July 2023
  - 8000ft 12" Waterline
  - 4000ft 4" Sewer

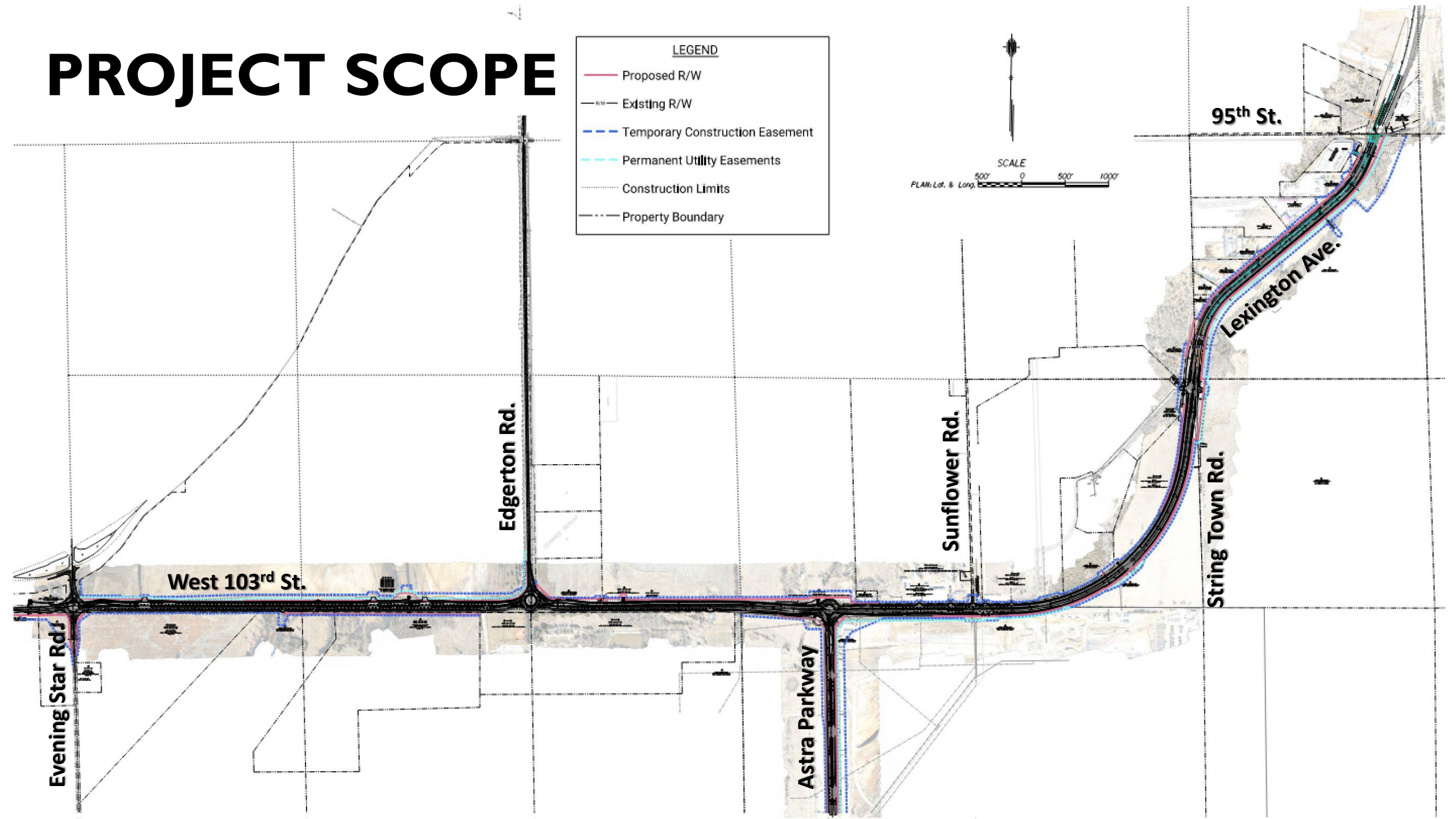


# PROJECT SCOPE

**LEGEND**

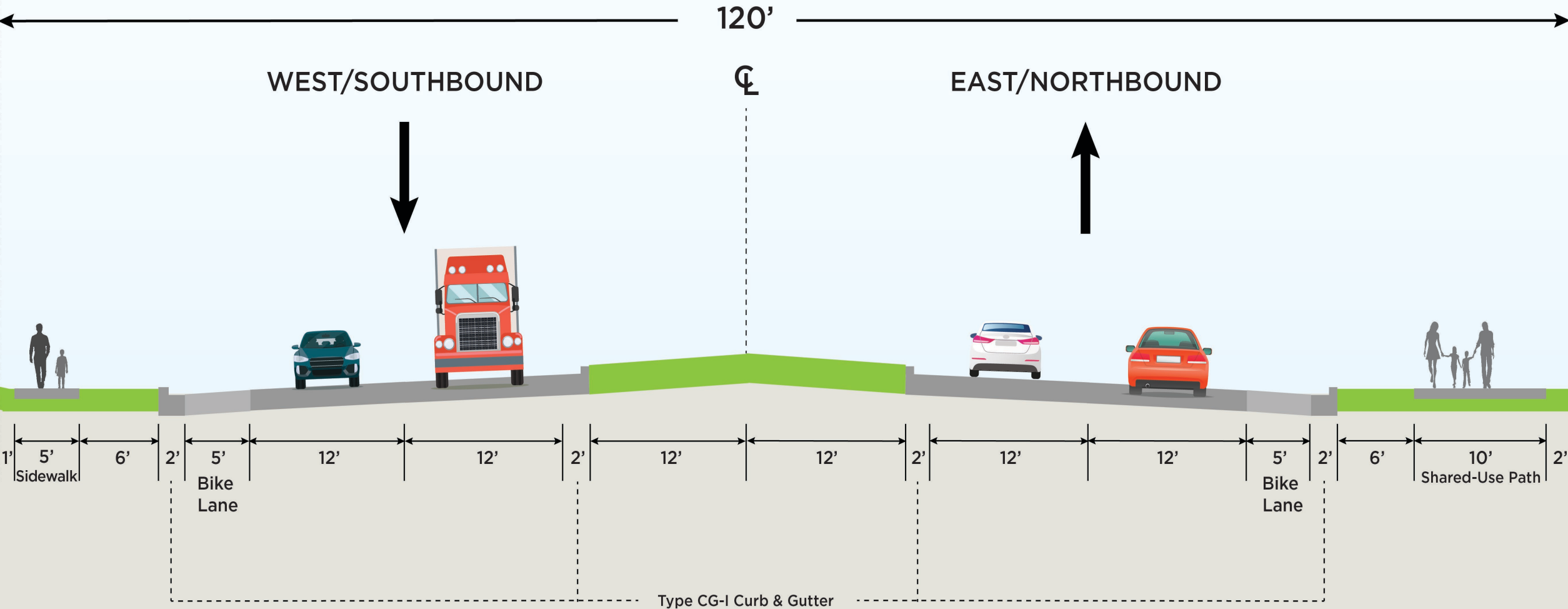
- Proposed R/W
- Existing R/W
- Temporary Construction Easement
- Permanent Utility Easements
- Construction Limits
- Property Boundary

SCALE  
500' 0 500' 1000'  
PLAN: Lot. & Long.



# TYPICAL SECTION

103<sup>rd</sup> Street, Lexington Avenue & Astra Parkway



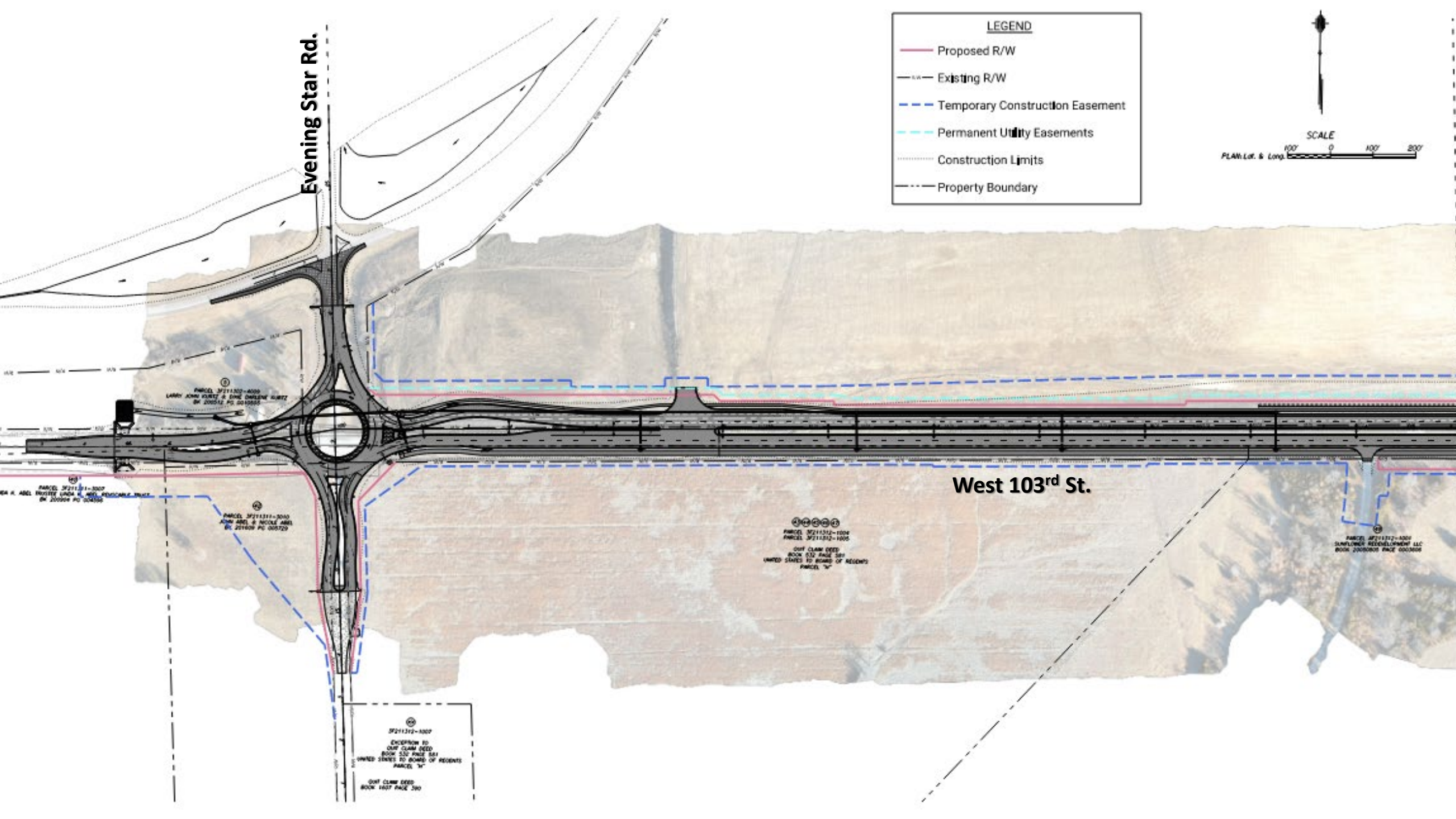
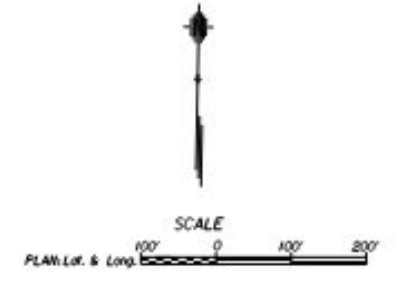




Evening Star Rd.

LEGEND

- Proposed R/W
- - - Existing R/W
- - - Temporary Construction Easement
- - - Permanent Utility Easements
- - - Construction Limits
- - - Property Boundary



PARCEL 3211307-0000  
LARRY JOHN KURTZ & DINA DARLENE KURTZ  
BY 200512 PG 0010555

PARCEL 3211311-3007  
M & A BEL PROPERTIES (M&A) HOLDING TRUST  
BY 200904 PG 004300

PARCEL 3211311-3010  
JOHN ABEI & NICOLE ABEI  
BY 201609 PG 008729

OUT CLAM DEED  
BOOK 032 PAGE 389  
UNITED STATES TO BOARD OF RESIDENTS  
PARCEL 74

PARCEL 3211312-1000  
SUNFLOWER REDEVELOPMENT LLC  
BOOK 2008008 PAGE 000308

3211312-1007  
EXCEPTION TO  
OUT CLAM DEED  
BOOK 1807 PAGE 394  
UNITED STATES TO BOARD OF RESIDENTS  
PARCEL 74  
  
OUT CLAM DEED  
BOOK 1807 PAGE 390

West 103<sup>rd</sup> St.







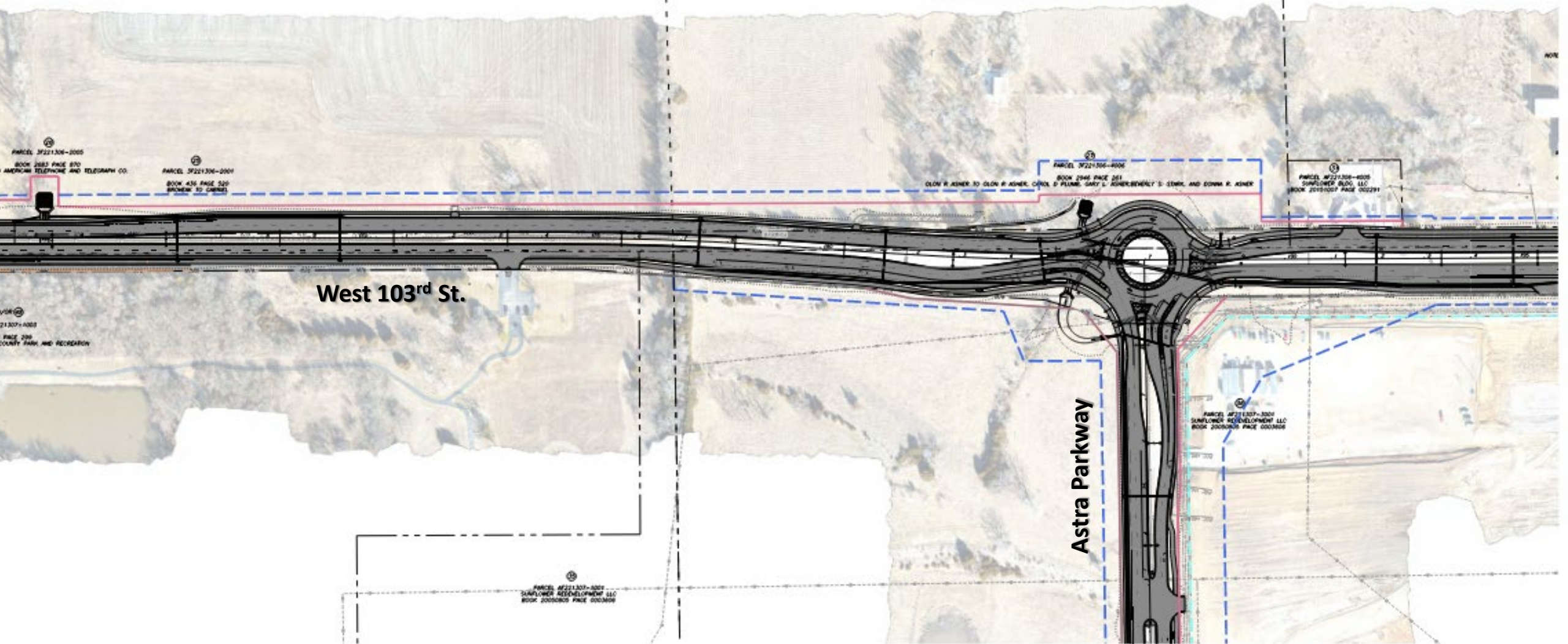
**LEGEND**

- Proposed R/W
- Existing R/W
- - - Temporary Construction Easement
- - - Permanent Utility Easements
- - - Construction Limits
- - - Property Boundary

SCALE

100' 0 100' 200'

PLAN: Lot. & Long





**LEGEND**

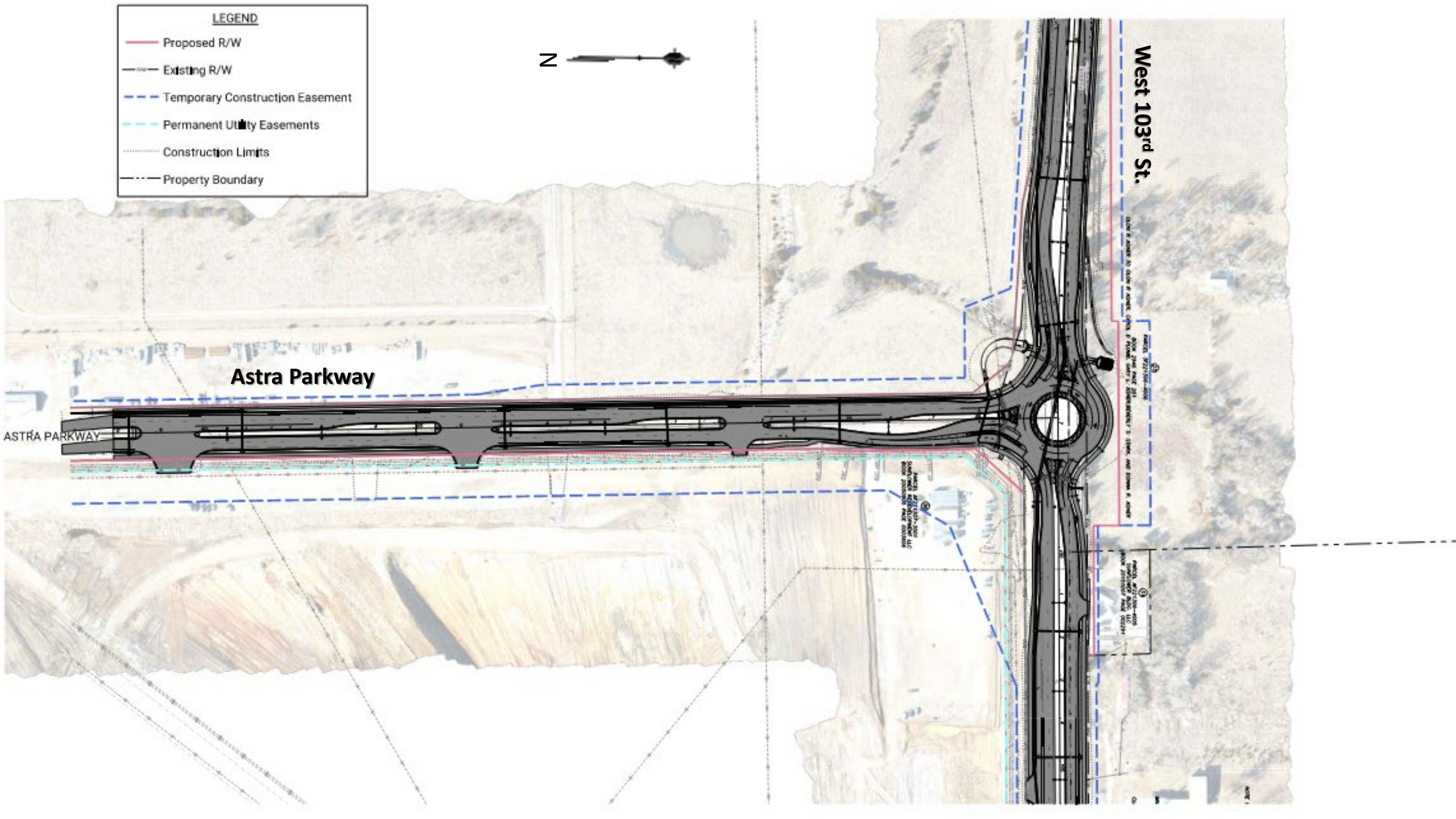
- Proposed R/W
- Existing R/W
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- Construction Limits
- Property Boundary



**West 103rd St.**

**Astra Parkway**

ASTRA PARKWAY

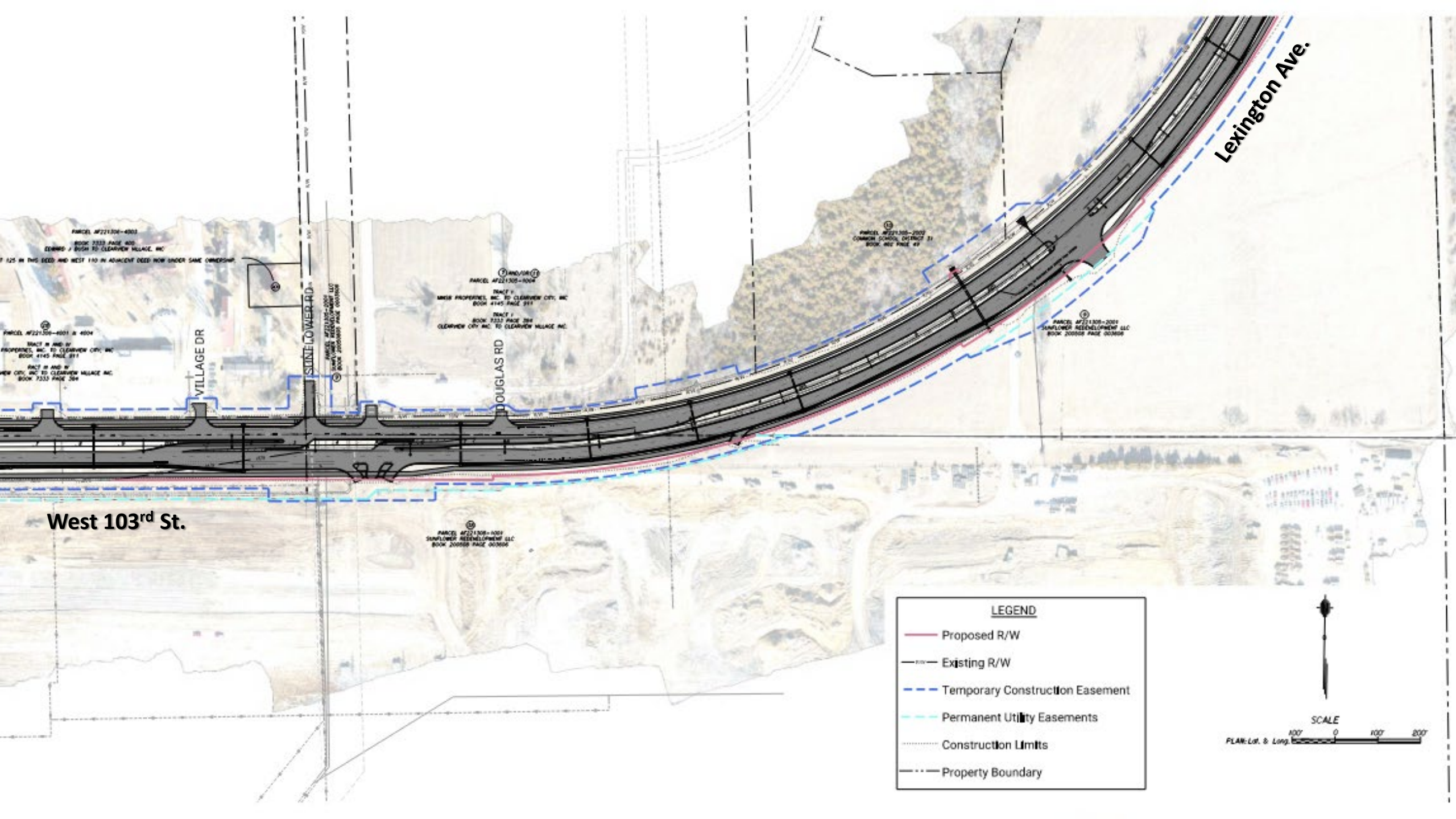


Circle 1: Detail of Astra Parkway Right-of-Way and Utility Easements at the intersection with West 103rd St.

Circle 2: Detail of Astra Parkway Right-of-Way and Utility Easements at the intersection with West 103rd St.

Circle 3: Detail of Astra Parkway Right-of-Way and Utility Easements at the intersection with West 103rd St.





Lexington Ave.

West 103<sup>rd</sup> St.

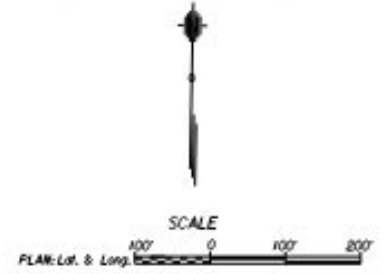
VILLAGE DR

STONE LOWER RD

DOUGLAS RD

**LEGEND**

- Proposed R/W
- Existing R/W
- - - Temporary Construction Easement
- - - Permanent Utility Easements
- - - Construction Limits
- - - Property Boundary



PARCEL #221304-4003  
BOOK 2333 PAGE 403  
EDWARD J BUSH TO CLEARVIEW HILLAGE, INC

1/25 IN THIS DEED AND WEST 110 IN ADJACENT DEED NOW UNDER SAME OWNERSHIP

PARCEL #221305-4004  
TRACT IN AND BY  
PROPERTIES, INC. TO CLEARVIEW CITY, INC  
BOOK 4145 PAGE 211

TRACT IN AND BY  
NEW CITY, INC. TO CLEARVIEW HILLAGE, INC.  
BOOK 7333 PAGE 304

PARCEL #221305-1004  
TRACT 1

ANDER PROPERTIES, INC. TO CLEARVIEW CITY, INC  
BOOK 4145 PAGE 211

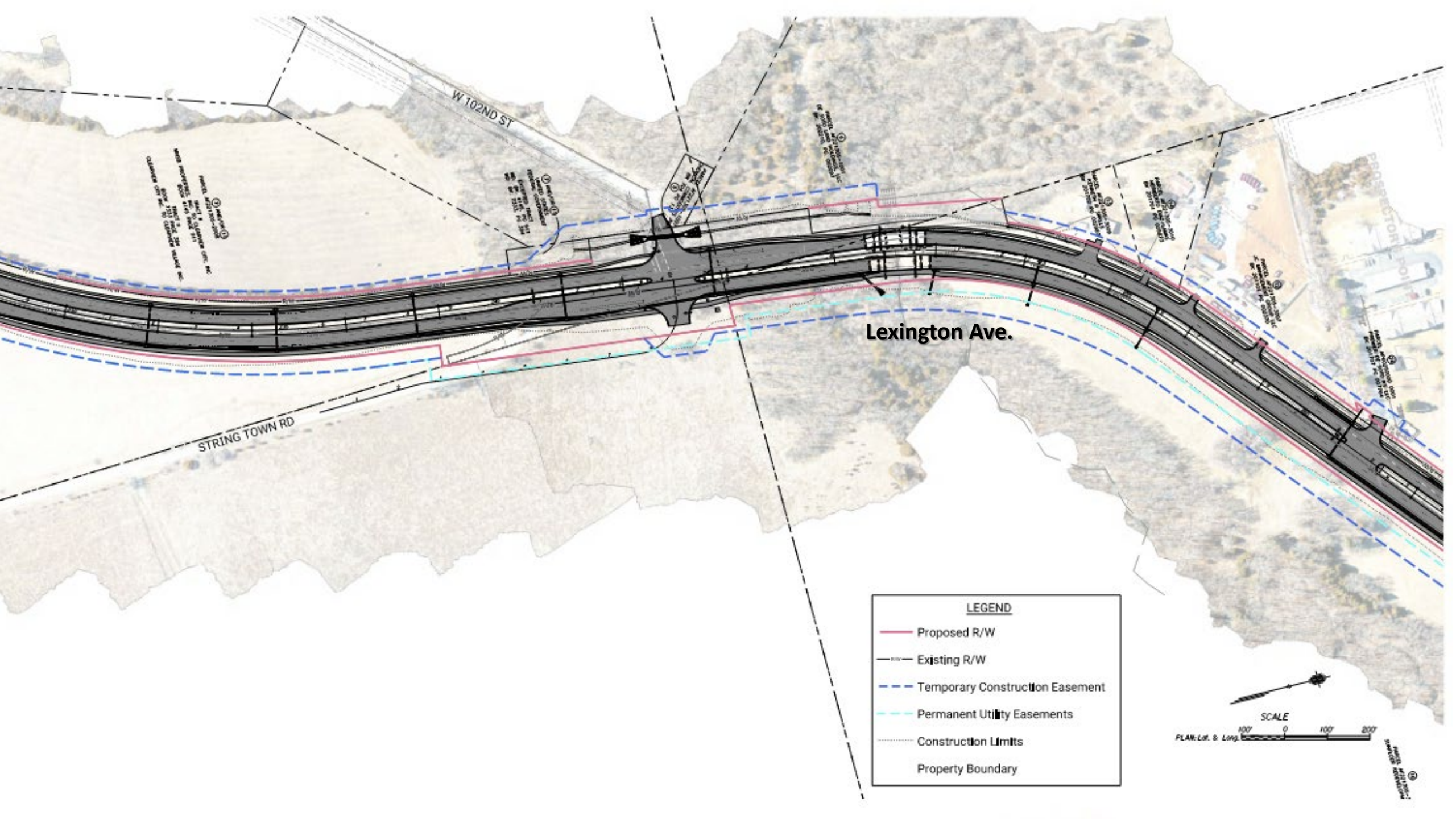
TRACT 1  
BOOK 7333 PAGE 304  
CLEARVIEW CITY, INC. TO CLEARVIEW HILLAGE, INC.

PARCEL #221305-2002  
COMMON SCHOOL DISTRICT 31  
BOOK 467 PAGE 47

PARCEL #221309-2001  
SUNFLOWER REDEVELOPMENT LLC  
BOOK 20068 PAGE 003606

PARCEL #221309-1001  
SUNFLOWER REDEVELOPMENT LLC  
BOOK 20068 PAGE 003606





W 102ND ST

STRING TOWN RD

Lexington Ave.

**LEGEND**

- Proposed R/W
- Existing R/W
- - - Temporary Construction Easement
- - - Permanent Utility Easements
- · - · - Construction Limits
- - - - - Property Boundary



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**103rd St**  
Existing Conditions  
(Phase 1 Construction -  
Closed to through traffic)







103rd St  
Phase 2 Construction  
Two Lane-Two Way traffic



103rd Street  
Final Improvement



# COMMUNITY INVOLVEMENT

City of De Soto  
Touch-a-Truck



2023 AEC Intern  
Partnership



City of De Soto  
Trunk-or-Treat





# CONSTRUCTION PHASE

- GMP approval on June 9<sup>th</sup>
- Construction began June 12<sup>th</sup>





# SAFETY FIRST

- All subcontractors, designers, inspectors, consultants, or any other party doing work on the project is required to attend a safety orientation prior to working on the project.
- Safety orientation is administered by Clarkson Construction Company.







1	Phase 1 : Astra Parkway	Open late Feb. 2024
2	Phase 2 : East/North Bound Lexington Ave.	Traffic Switch April 2024
3	Phase 3 : 103rd St. from Edgerton Rd. to Astra Pkwy.	Open Memorial Day 2024
4	Phase 4 : West/South Bound Lexington Ave.	Open Dec. 2024
5	Phase 5 : 103rd St. from Evening Star Rd. to Edgerton Rd.	Open Dec. 2024



# De Soto Local Road Improvements Phasing Plan



JULY 2023



PHASE 1: ASTRA PARKWAY

MARCH 2024





JULY 2023



ASTRA PARKWAY & WEST 103<sup>RD</sup> STREET

MARCH 2024

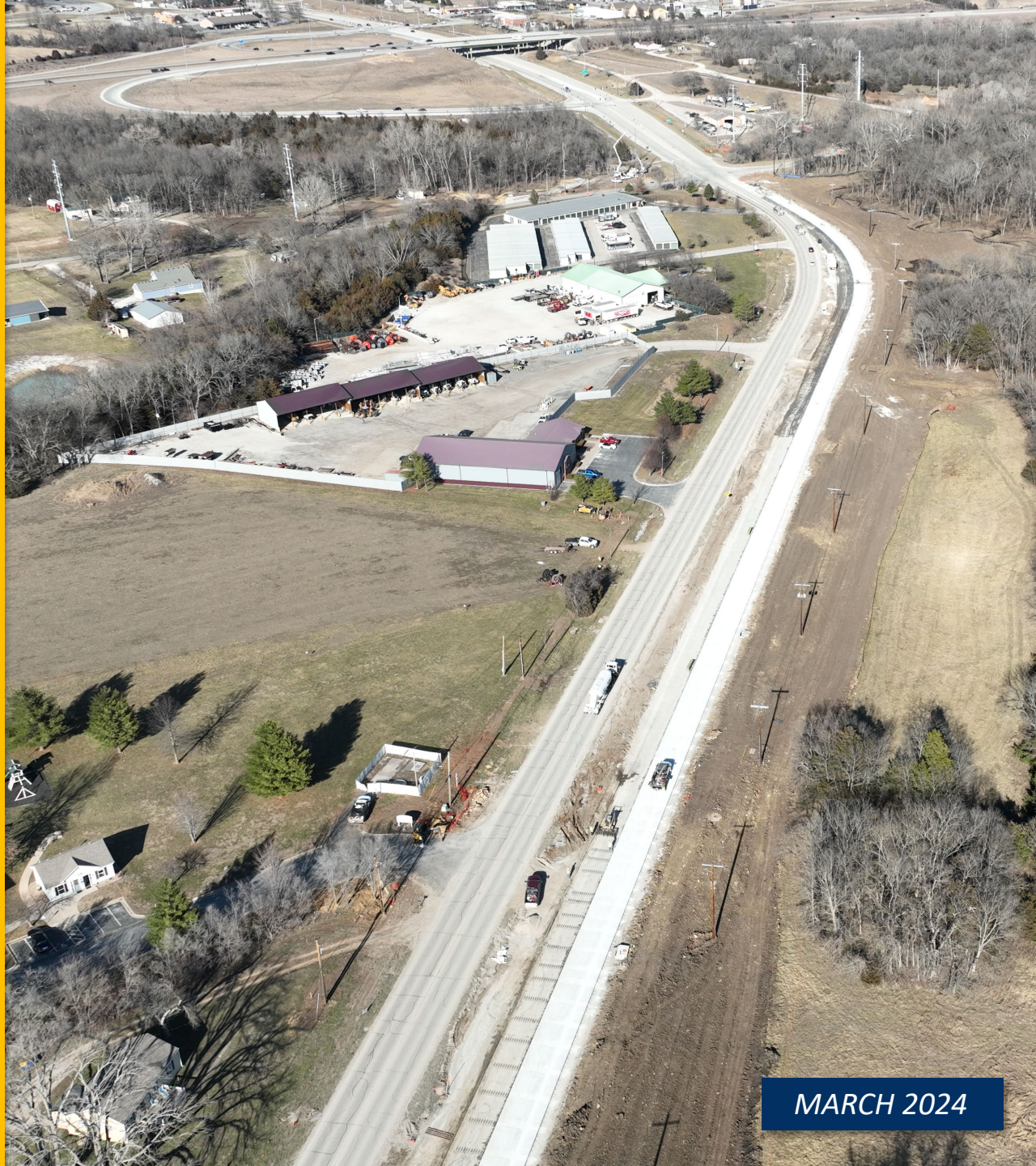




**PHASE 2: NB LEXINGTON AVENUE &  
EB WEST 103<sup>RD</sup> STREET**



**SEPTEMBER 2023**



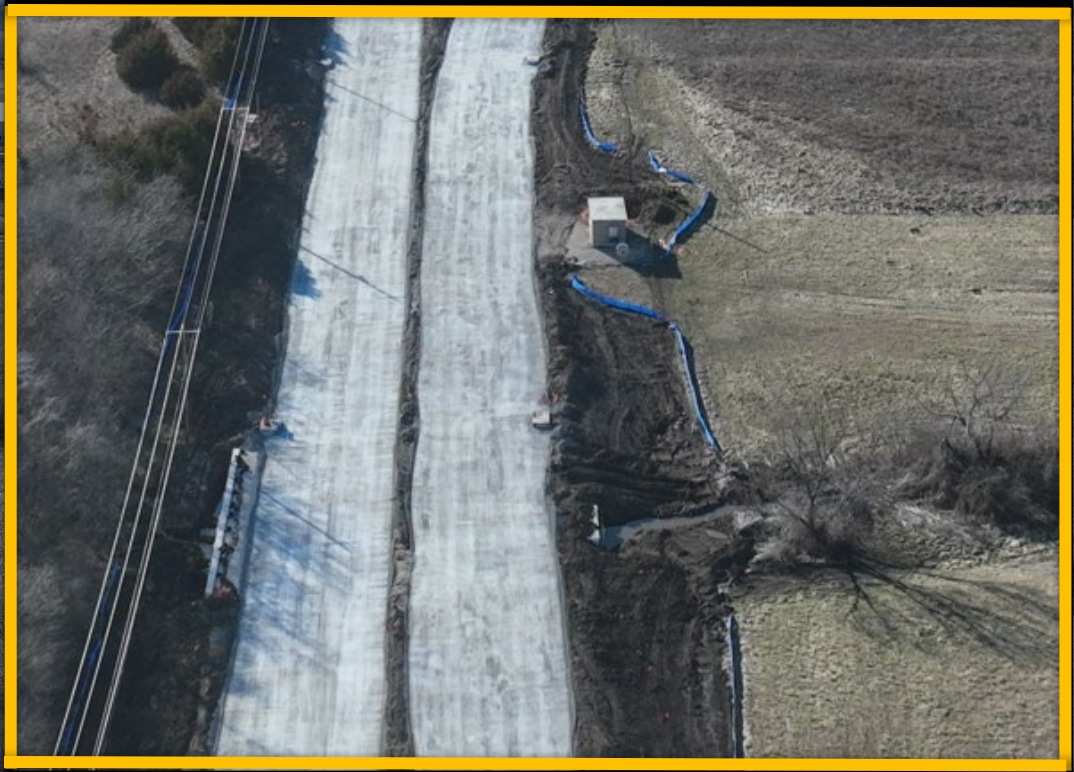
**MARCH 2024**





**PHASE 2: LEXINGTON AVE  
NEW NB/EB LANES FROM  
95<sup>th</sup> TO ASTRA PARKWAY**





**PHASE 3: WEST 103<sup>RD</sup> STREET  
ASTRA PKWY TO EDGERTON RD**



**PHASE 4: SB LEXINGTON AVENUE &  
WB WEST 103RD STREET**





**PHASE 5: WEST 103<sup>RD</sup> STREET  
EDGERTON RD TO EVENING STAR RD**







**CHALLENGES: UTILITES**





# CLOSING

- KDOT's 1<sup>st</sup> Progressive Design-Build Project
- Key Elements of a Successful Project:
  - Team Collaboration & Co-Location Office
  - Coordination with City, County, and other 3<sup>rd</sup> Parties (Panasonic, Flint Development, Sunflower Redevelopment)
  - Utility Coordination
  - Cost Reconciliation with Contractor and Independent Cost Estimator (ICE)
  - Reduced Contingency with the use of a Risk Register
    - City and Water 7 water lines
    - 60% to 100% design refinements
- Flexible Delivery Method
  - Allows for additional work packages.
  - Currently in the pre-construction phase of WP2.
- Overall, a very positive experience





# QUESTIONS?



## PROJECT WEBSITE

<https://desotoroadimprovements.ksdot.gov/>



## PROJECT E-MAIL ADDRESS

[desotoroadimprovements@ksdotike.org](mailto:desotoroadimprovements@ksdotike.org)



## FOLLOW TO LEARN MORE

Facebook: Kansas Department of Transportation | Clarkson Construction Company | HDR

X.com: @KDOTHQ | @ClarksonBuilds | @HDR\_INC

Instagram: @KansasDeptTransportation | @ClarksonConstruction | @HDR\_Inc

LinkedIn: Kansas Department of Transportation (KDOT) | Clarkson Construction Company | HDR

