

Lehigh County SR 309, Sec 12M

PA Route 309 & Tilghman Street Interchange Reconstruction Project



pennsylvania
DEPARTMENT OF TRANSPORTATION

January 13, 2026

SR 309, Sec 12M Project Info – ECMS No. 096432

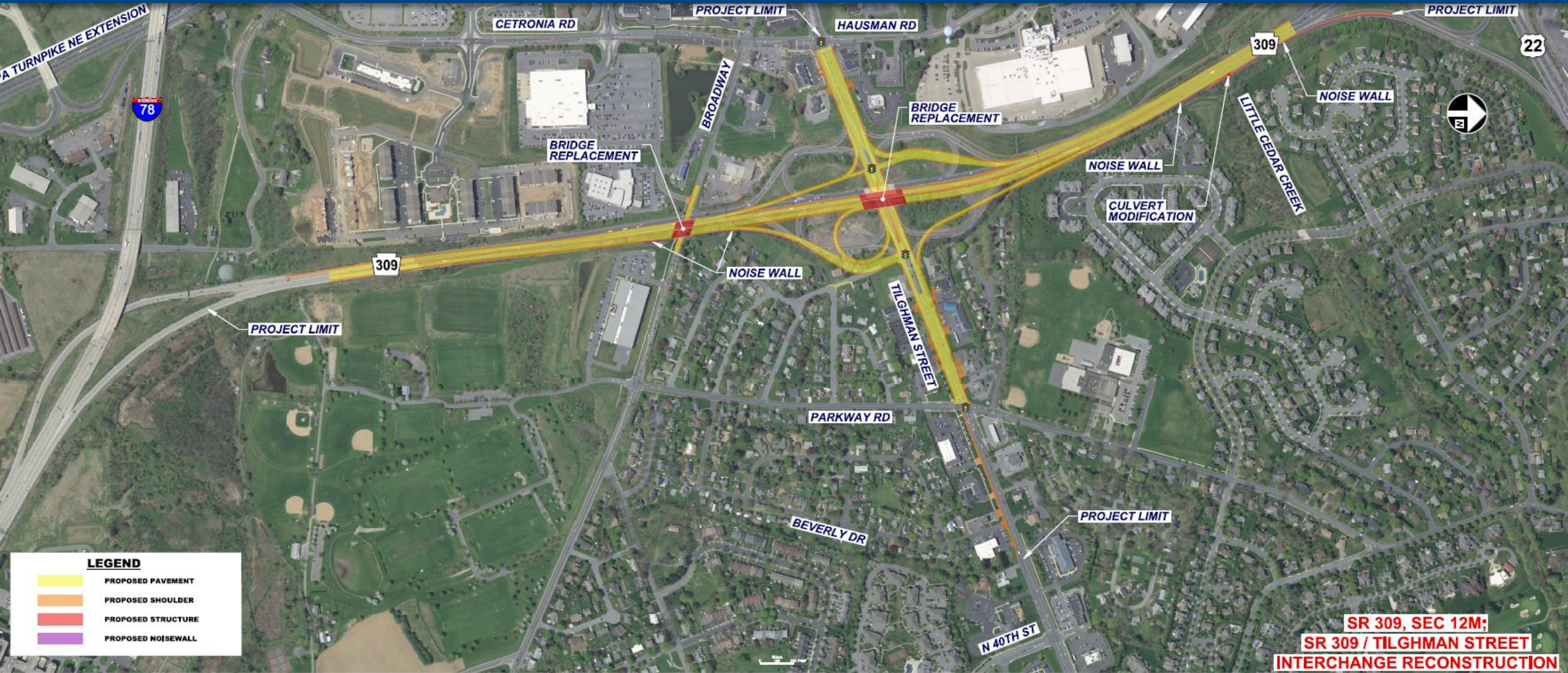
- Design Team

- RK&K – Roadway, Structures, Permitting, ROW
- JMT – Structures, Traffic, ROW
- TPD - Traffic
- Susquehanna Civil – Survey, Geotechnical
- Skelly & Loy – Environmental
- Arrow Land Solutions - ROW Acquisition

- Construction

- Prime Contractor – Allan Myers, LP
- PennDOT Dist. 5-0 Inspector-in-Charge- Ben Bayuk, EIT
- PennDOT Dist. 5-0 Senior A.C.E. - Darren LePage
- CM/CI - CDR Maguire Engineering , Urban Engineers
- Original Contract Dollar Amount - \$86,475,455
- Contract NTP Date – 9/23/2024
- Completion Date – 3/15/2030

SR 309, Sec 12M | PROJECT OVERVIEW



SR 309, Sec 12M | PURPOSE & NEED



PURPOSE

The purpose of the SR 309/Tilghman Street (SR 1002) Interchange project is to improve Safety, Relieve Congestion, Increase Accessibility and Mobility, and Mitigate/Eliminate facility deficiencies in the interchange.

The Tilghman Street Interchange is a major part of the overall SR 309 project.



NEED

Based on the analysis of existing and future conditions, **improvements to this interchange are needed to accommodate economic development while also mitigating future congestion along this corridor.**

Safety • Congestion • Facility Deficiencies • Economic Development

SR 309, Sec 12M | SAFETY UPGRADES

Safety Issue: Interchange Geometry



Substandard Ramp Radii

- Loop ramp eliminated in three interchange quadrants
- New loop ramp designed to meet current standards

SR 309, Sec 12M | SAFETY UPGRADES

Safety Issue: Interchange Geometry



Insufficient or No Acceleration/ Deceleration Lanes



Northbound

- On-Ramp: Continuous auxiliary lane between Tilghman Street and SR 22
- Off-Ramp: New decel lane meets current criteria



Southbound

- On-Ramp: New accel lane meets current criteria
- Off-Ramp: Continuous auxiliary lane between SR 22 and Tilghman Street

SR 309, Sec 12M | SAFETY UPGRADES

Safety Issue: Interchange Geometry



Insufficient Weaving Distance

- Eliminating the Cloverleaf configuration resolves this issue

SR 309, Sec 12M | SAFETY UPGRADES

Safety Issue: Structures



SR 309 over
Broadway



SR 309 over
Tilghman St.

Bridges are Structurally Obsolete

- New Parapets MASH compliant
- Shoulder widths designed for current criteria

Vertical Clearance

- **Broadway** – 13'-0" Vertical Clearance:
SR 309 profile adjusted to provide required underclearance
- **Tilghman Street** – 14'-0" Vertical Clearance:
SR 309 profile adjusted along with shallower superstructure of the new bridge provides required underclearance

SR 309, Sec 12M | SAFETY UPGRADES



Safety Issue: Guide Rail and Concrete Barrier

- Clear zone evaluated for barrier placement and to meet current criteria
- All roadside barrier MASH compliant

Safety Issue: Signing

- New retroreflective panels to address night-time visibility
- Guide signs that reduce driver indecision
- Sign Lighting to enhance visibility

SR 309, Sec 12M | SAFETY UPGRADES



Safety Issue: Roadway Widths

- **Travel Lanes** – Standard 12' widths on SR 309/Tilghman to match criteria for roadway typology
- **Shoulders** –
 - SR 309 Right shoulder widths increased from 8' to 12'
 - SR 309 Median shoulder widths increased from 1' to 4.75'; wider at locations to accommodate horizontal sight distance

Safety Issue: Interchange Lighting/Intersection Lighting

- Partial interchange lighting at all conflict points
- Intersection lighting at all new/replaced signalized intersections

SR 309, Sec 12M | SAFETY UPGRADES

Tilghman St and Hausman Rd



Safety Issue: Pedestrian Access

- ADA compliant ramps provided at all intersections
- Pedestrian push-buttons provided at all new/replaced signalized intersections

Tilghman St and Parkway Rd



Safety Issue: Traffic Signal Modifications

Tilghman/Hausman Intersection

- Dual left turns provided from WB Tilghman to Cetronia Road
- Interconnected with adjacent signalized intersections to ensure optimum traffic flow

Tilghman/Parkway Intersection

- Provide two EB thru lanes extended to 40th Street
- Interconnected with adjacent signalized intersections to ensure optimum traffic flow



Safety Issue: Pavement Condition

- New pavement to eliminate spalls, cracks, ruts, failed joints, and generally deteriorating pavement
- New pavement to increase surface friction
- Upgraded cross slopes and superelevation provided



Safety Issue: Drainage Systems

- New drainage system to efficiently remove water from the travel way

SR 309, Sec 12M | SAFETY UPGRADES



Safety Issue: Little Cedar Creek Flooding

- **Stream restoration to eliminate severe erosion and undermining of culvert**
- **Conditional Letter of FEMA Map Revision to address change in 100-yr flood boundary**
 - SR 309 Project Upgrades
 - Downstream improvements not previously addressed



SR 309, Sec 12M | Overall Construction Staging

Stage 3/Final Stage General Construction Activities:

- SR 309 / Tilghman Street Center Median Barrier/Islands and Inside Shoulders
- Any Final Traffic Signal Work
- Final Wearing Course Paved
- Final Line Striping

Temporary Traffic Conditions:

- SR 309 - 2 NB/SB lanes at all times
- Tilghman - 2 EB/WB lanes at all times

Stage 2 General Construction Activities:

- SR 309 SB Bridges over Broadway & Tilghman
- SR 309 SB Full Depth Reconstruction
- Broadway Full Depth Reconstruction
- SR 309 / Tilghman West Side of Interchange Ramp Construction/Traffic Signals

Temporary Traffic Conditions:

- SR 309 - 2 NB/SB lanes at all times
- Tilghman - 2 EB/WB lanes at all times
- Detours in effect during Stages 2, & 2A

Pre-Stage/Stage 1 General Construction Activities:

- Broadway Utilities/Drainage
- SR 309 NB Bridges over Broadway & Tilghman
- SR 309 NB Full Depth Reconstruction
- Tilghman Full Depth Reconstruction
- SR 309 / Tilghman East Side of Interchange Ramp Construction/Traffic Signals

Temporary Traffic Conditions:

- SR 309 - 2 NB/SB lanes at all times
- Tilghman - 2 EB/WB lanes except during Stages 1A & 1B
- Detours in effect during Pre-Stage (Overnight), 1A, & 1B

SR 309-12M

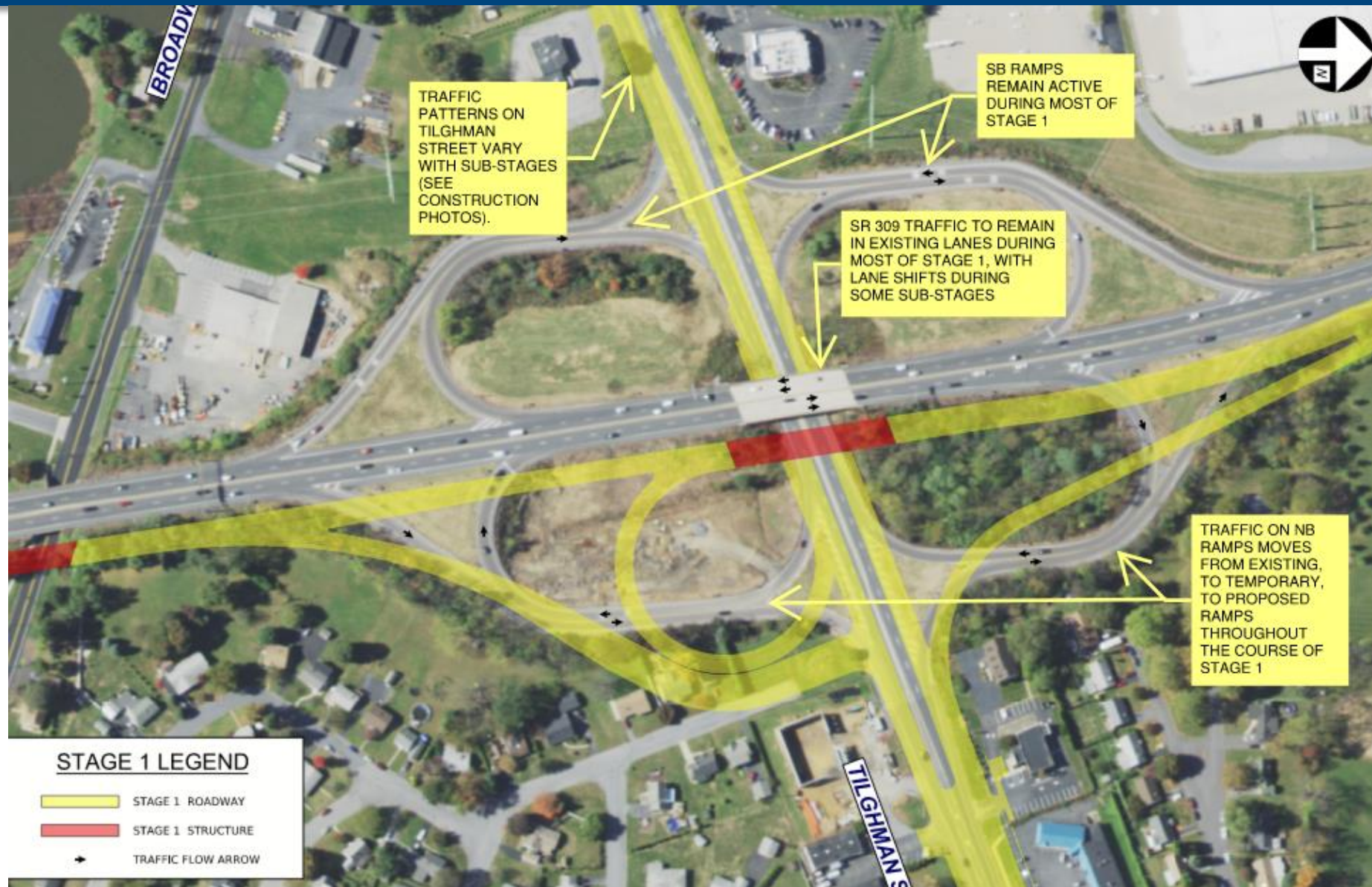
Traffic Control Plan
Staging Overview



Stage 1 | Overview – Southern Project Limit – Spring '25 to Summer '27



Stage 1 | Overview – Interchange Area – Spring '25 to Summer '27



Stage 1 | Overview – Northern Project Limit – Spring '25 to Summer '27



Pre -Stage | Tilghman St (Facing East)– Spring/Fall 2025



Pre -Stage | Tilghman St (Facing West)– Spring/Fall 2025



SR 309

Tilghman St

Pre -Stage | SR 309 (Facing South)– Spring/Fall 2025



Pre -Stage | SR 309 (Facing North)– Spring/Fall 2025



Pre -Stage | Interchange Close-up (Facing North)– Spring/Fall 2025



Stage 1A | Interchange (Facing North) – Fall 2025



Stage 1A | Tilghman St (Facing West) – Fall 2025



Stage 1A | Tilghman St Close-up (Facing West) – Fall 2025



Stage 1A | Tilghman St (Facing East) – Fall 2025



Stage 1B | Interchange (Facing North) – Fall 2025 to Present



Stage 1B | Interchange (Facing South) – Fall 2025 to Present



Stage 1B | Tilghman Street (Facing West) – Fall 2025 to Present



Stage 1B | Tilghman St (Facing East) – Fall 2025 to Present



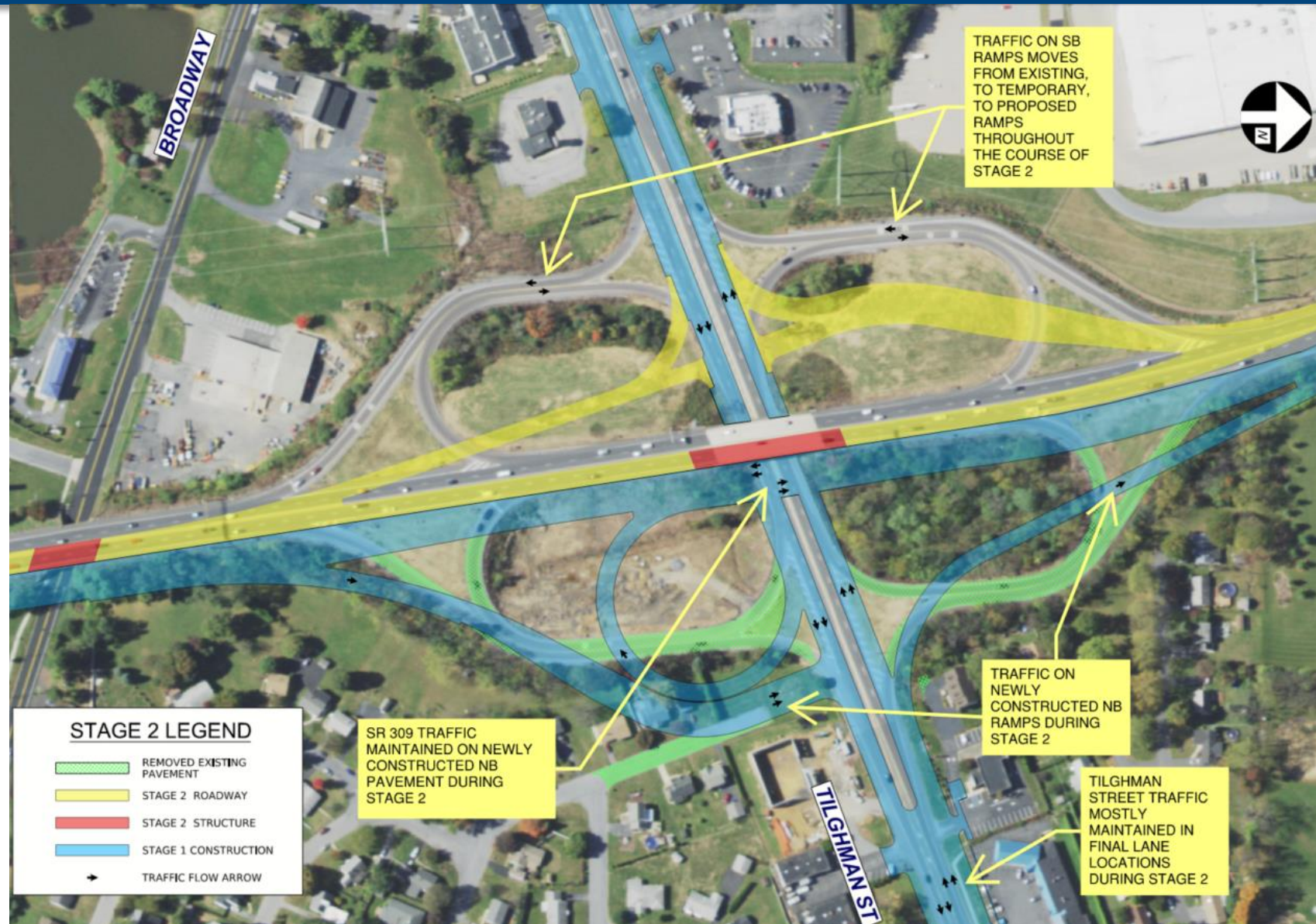
Stage 1B | Tilghman St Close-up(Facing East) – Fall 2025 to Present



Stage 2 | Preview – Southern Project Limit – Summer '27 to Spring '29



Stage 2 | Preview – Interchange Area – Summer '27 to Spring '29



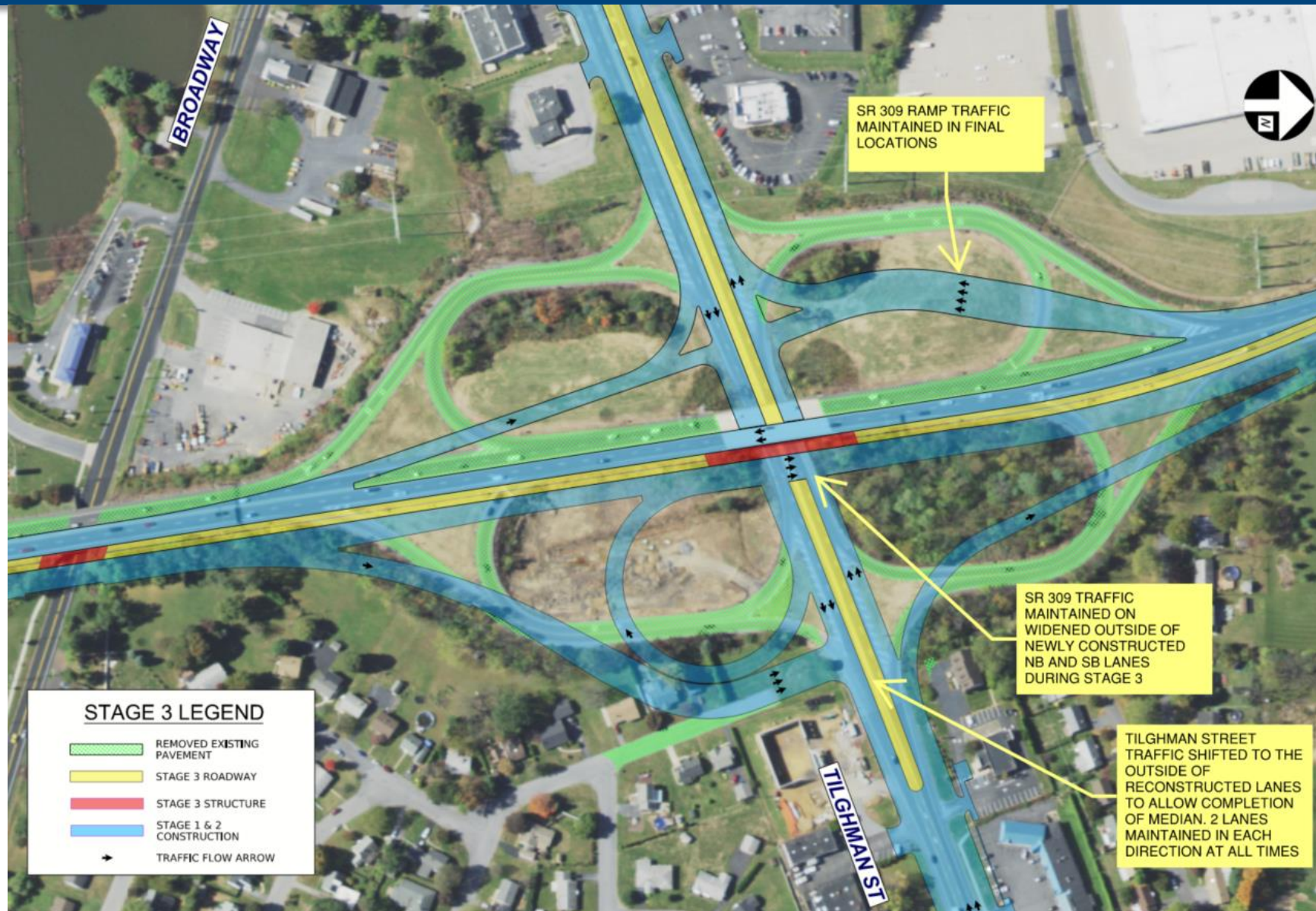
Stage 2 | Preview Northern Project Limit – Summer '27 to Spring '29



Stage 3 | Preview – Southern Project Limit – Spring '29 to Spring '30



Stage 3 | Preview – Interchange Area – Spring '29 to Spring '30



Stage 3 | Preview – Northern Project Limit- Spring '29 to Spring '30



Construction Project Pictures | Subbase Rough Grading



Construction Project Pictures | Overnight MPT for Paving



Construction Project Pictures | Drainage Channel Lining



Construction Project Pictures | Drainage Channel Lining



Construction Project Pictures | Concrete Curb Slipforming



Construction Project Pictures | Concrete Curb Finishing



Construction Project Pictures | Concrete Sidewalk Placement





THANK YOU

