



FORT WORTH DISTRICT

Trinity River Vision Bridges

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District Engineer



Photo by Liam Frederick

Thursday, Dec. 4, 2014



Mission Statement

Work with others to provide safe and reliable transportation solutions for Texas.

Goals

- Maintain a safe system
- Address congestion
- Connect Texas communities
- Become best-in-class state agency

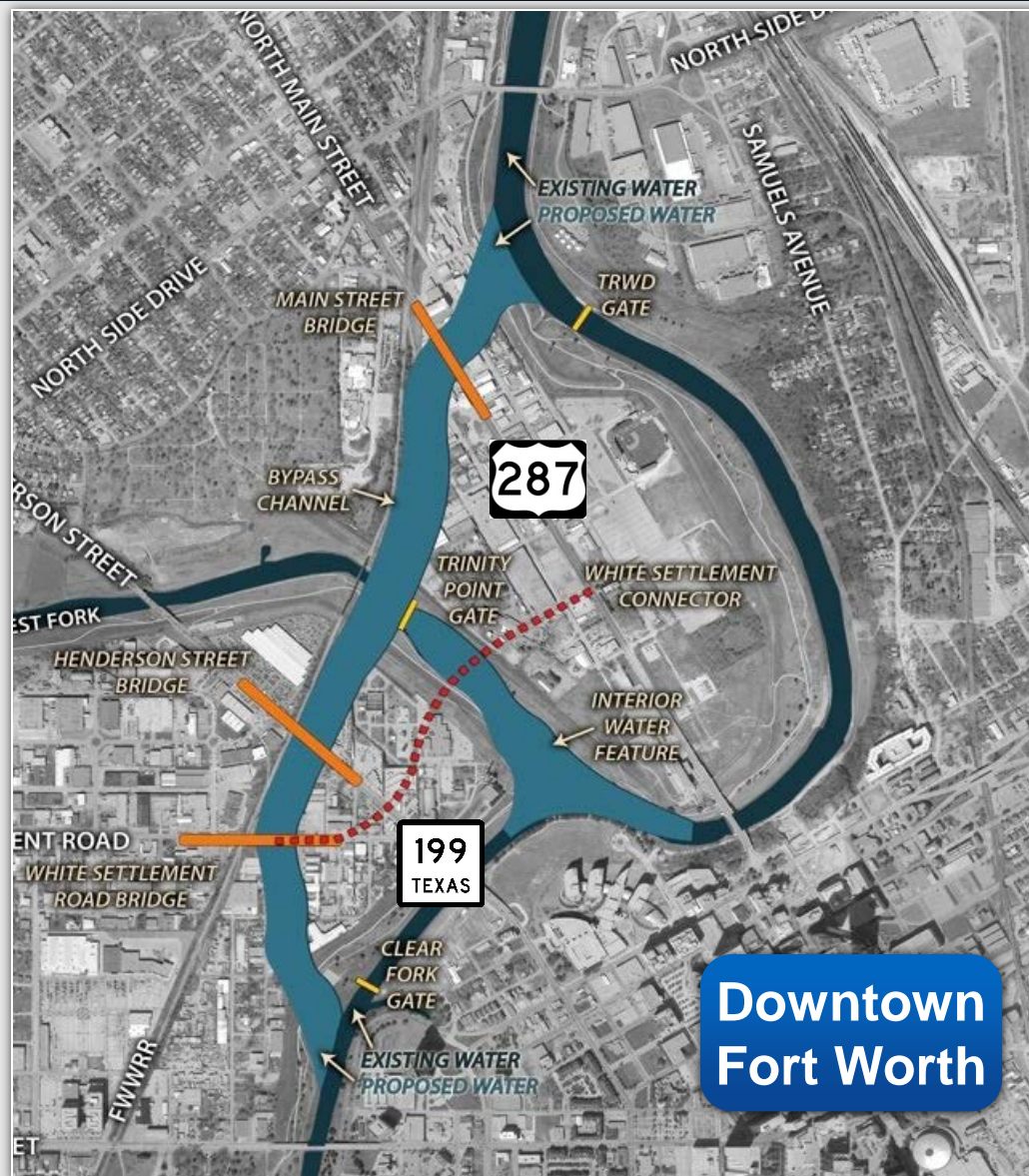
Values

- Trust
- Integrity
- Responsibility
- Excellence
- Service

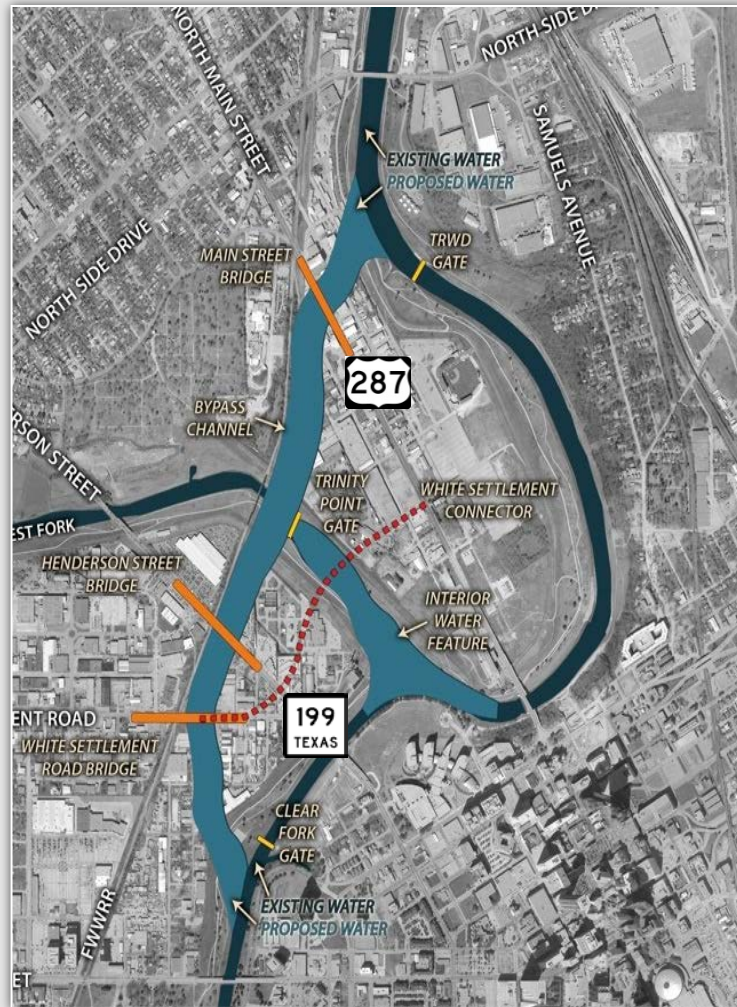


Trinity River Vision Master Plan

- Flood control
- Rerouting Trinity River
- New bypass channel
- Three new bridges
- Potential development



TRV Panther Island

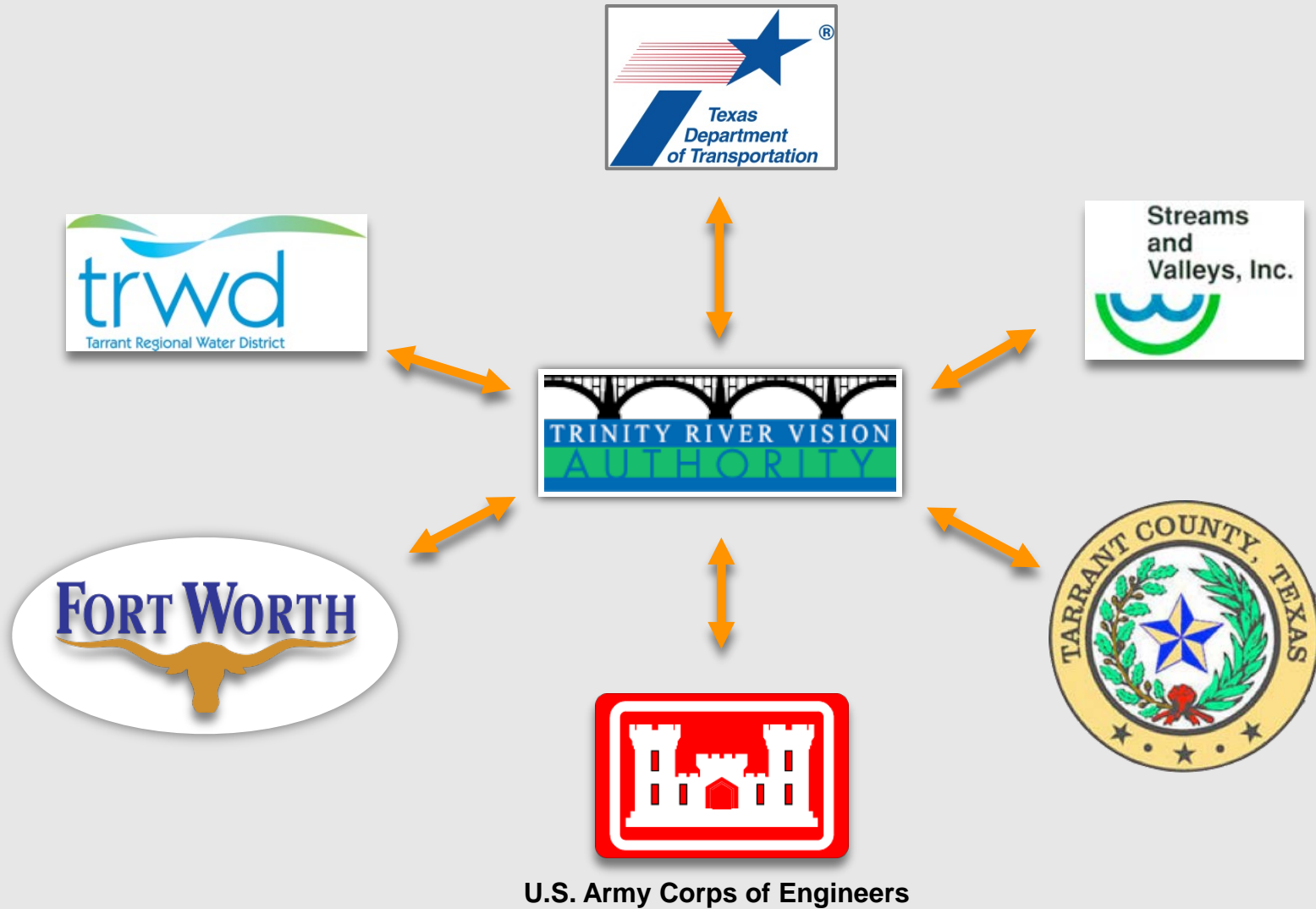


**Public Infrastructure Project:
for Flood Protection & Access**



**Potential Private Development:
as a Result**

Partnerships



Partnerships

–Local

- Environmental clearance, design & construction funding

–TxDOT

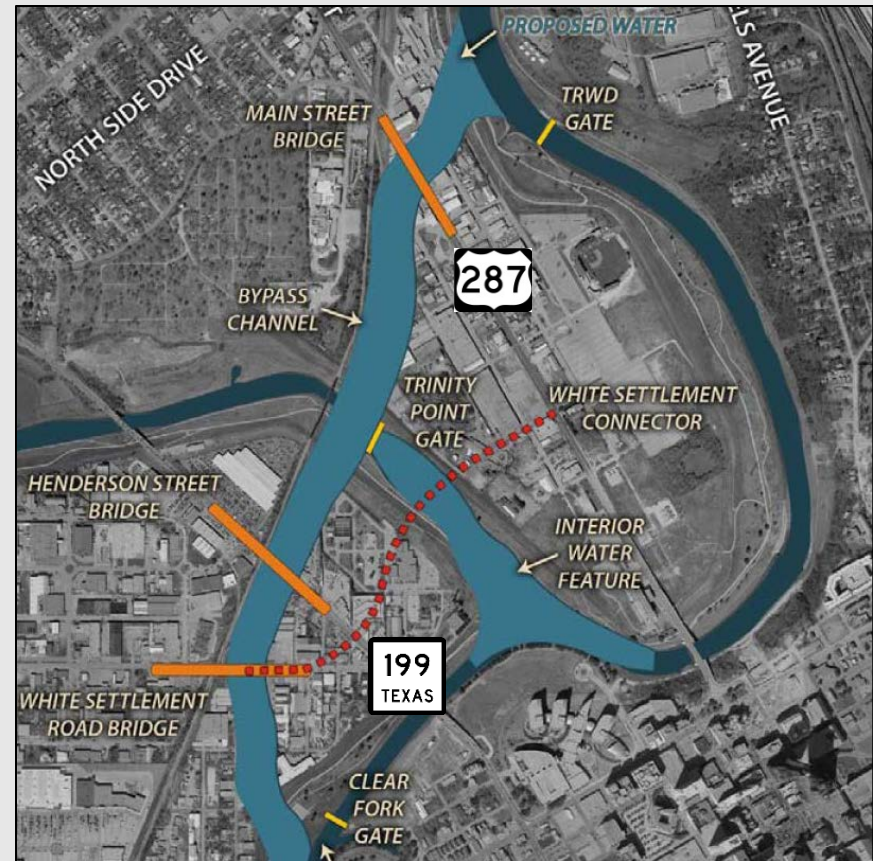
- Henderson St (SH 199) partial construction funding
- Main St (Business 287) partial construction funding
- Construction review, inspection & maintenance
- Environmental clearance with FHWA
- Partnered on consultant selection

–NCTCOG Funding

–Federal Funding

Trinity River Vision Bridges

- Construct 3 new bridges for bypass channel
 - Henderson St (SH 199)
 - Main St (Business 287)
 - White Settlement Rd (local street)
- Construction Cost:
\$65.5 million
- Awarded to Texas Sterling:
May 2014
- Construction Begins:
Fall 2014
- Est. Completion: **2018**



–Construction Funding

- Federal: **\$30.4**
- State: **\$9.9**
- Local: **\$25.2**
\$65.5 million

V-Pier Bridges

–Initial Design

- Challenging
- Intertwining bridges
- Less aesthetic appeal due to wider bypass channel
- Est. Cost: **\$115 million**

–V-Pier Design

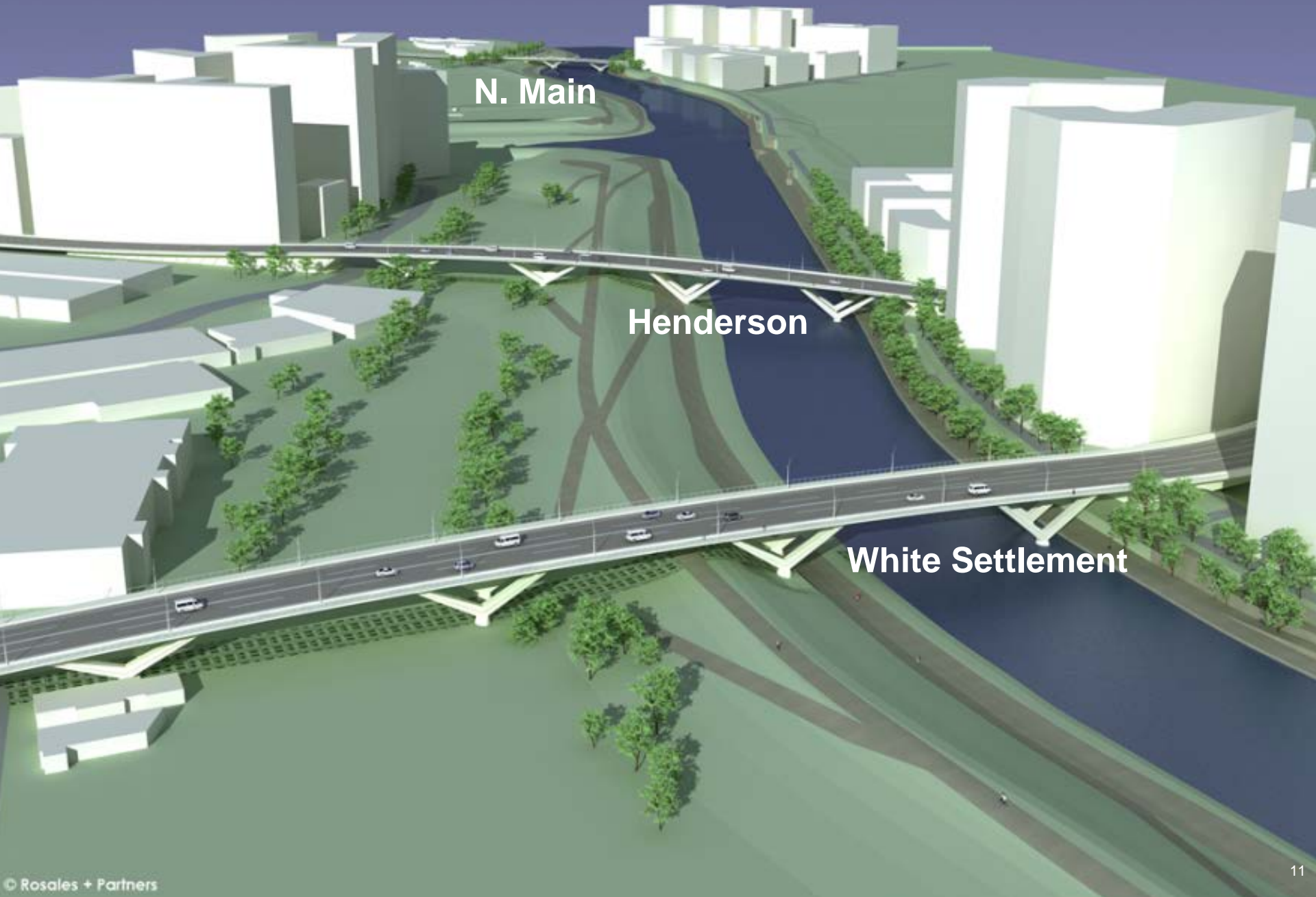
- Easier to construct
- Half the number of piers of a conventional bridge design
- More visually appealing
- Cost: **\$65.5 million**

Trinity River Vision Bridges

- Cast-in-place V-Pier Design
- Complete closure of the road during construction
- Construction of detour routes
- Extensive shoring and form work, including over the FWWR for the Henderson St and White Settlement Rd bridges

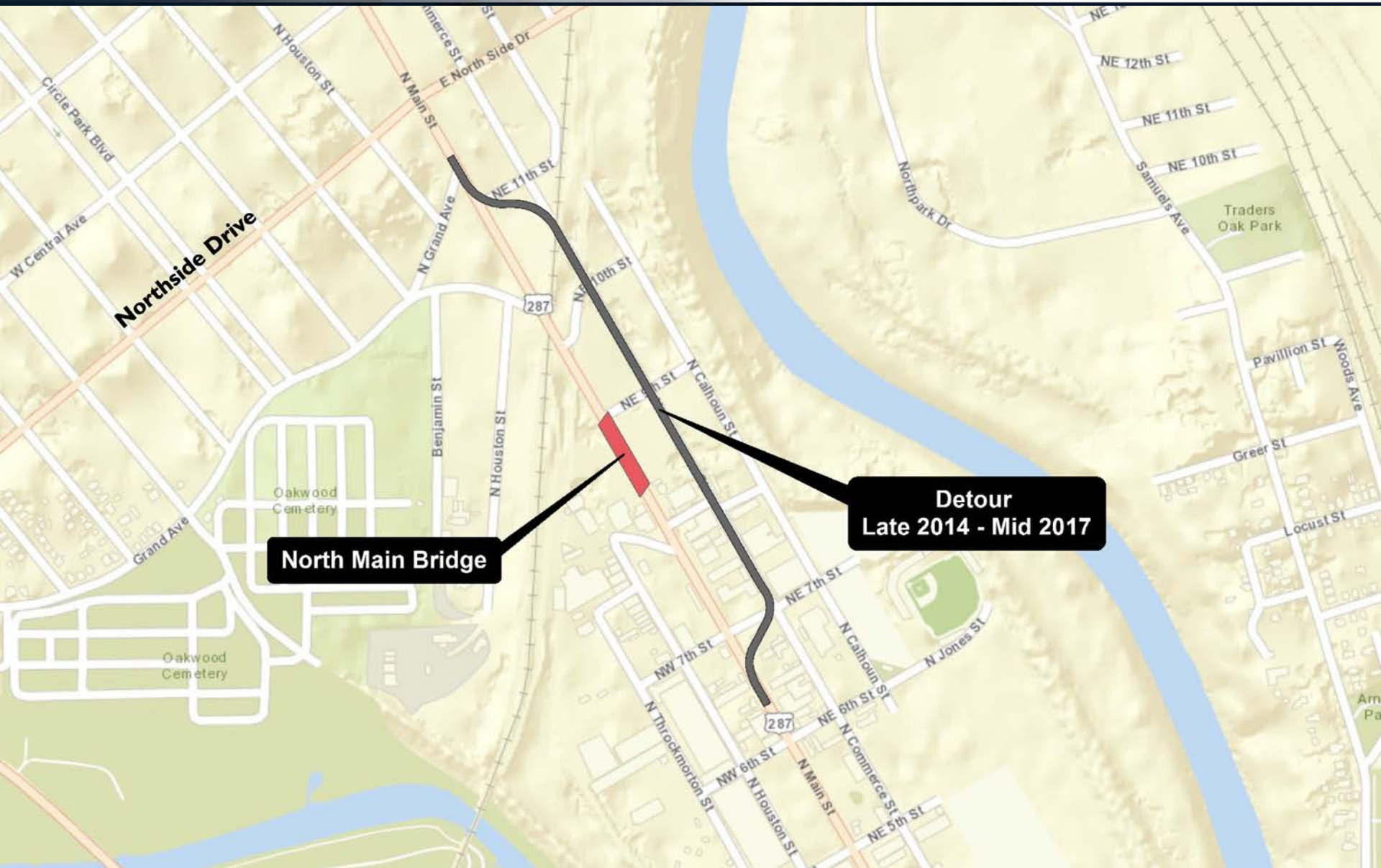


Future Bridges and Channel

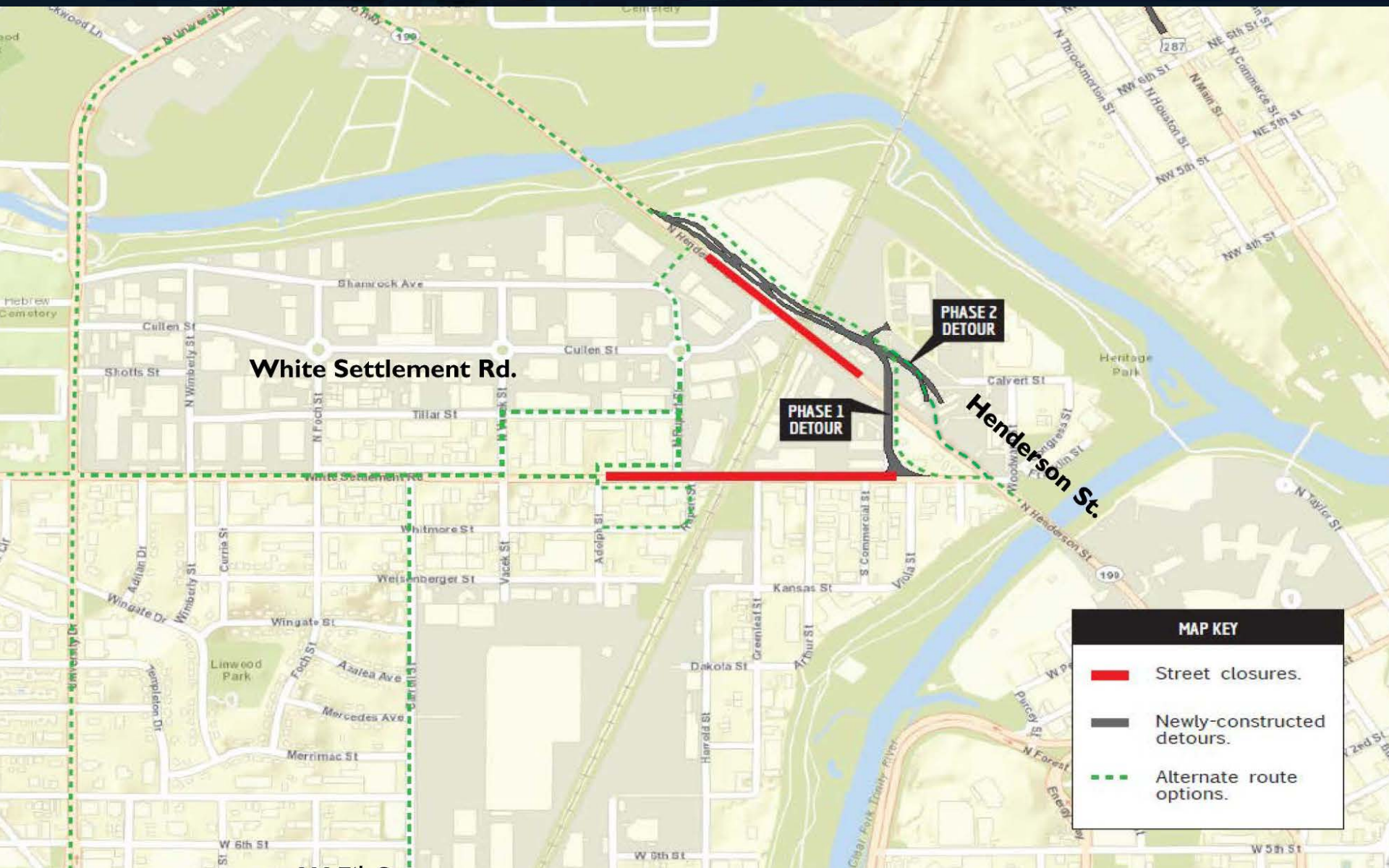


- Parallel Detours will be available adjacent to Henderson St & North Main St
 - Serve existing businesses and pass-through traffic
- White Settlement Rd Closure
 - Alternative routes have sufficient excess capacity to accommodate traffic from White Settlement Rd

Detours



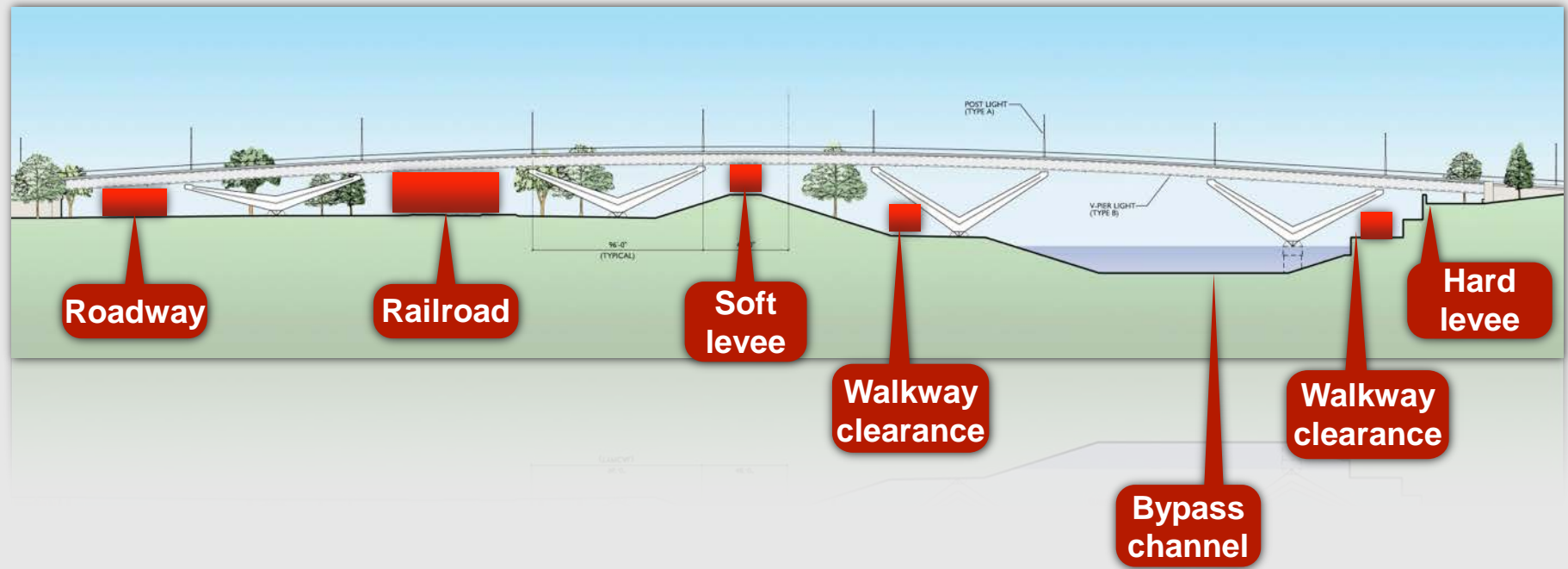
Detours

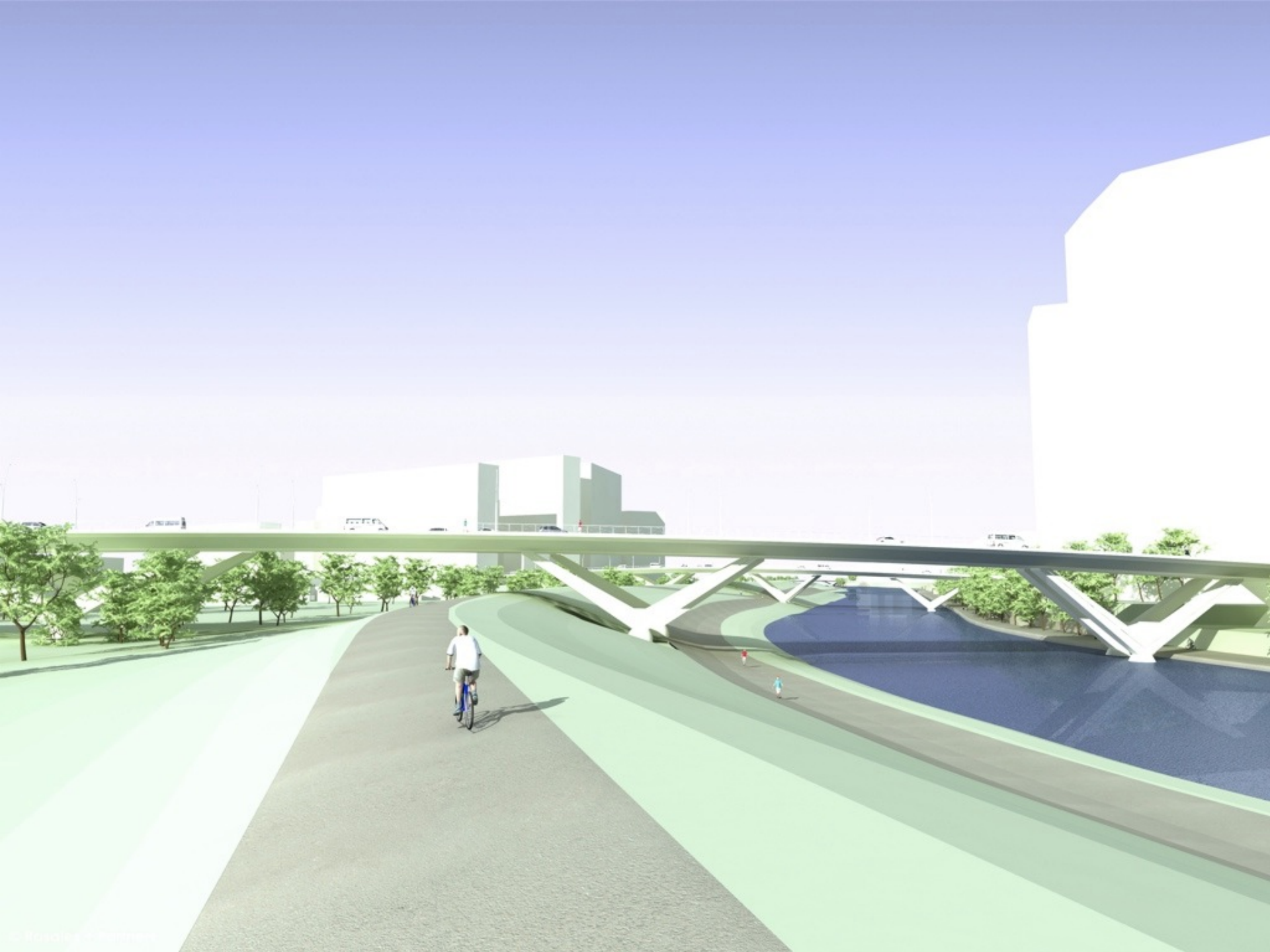


Henderson Street Detour



Future Items Below Bridge









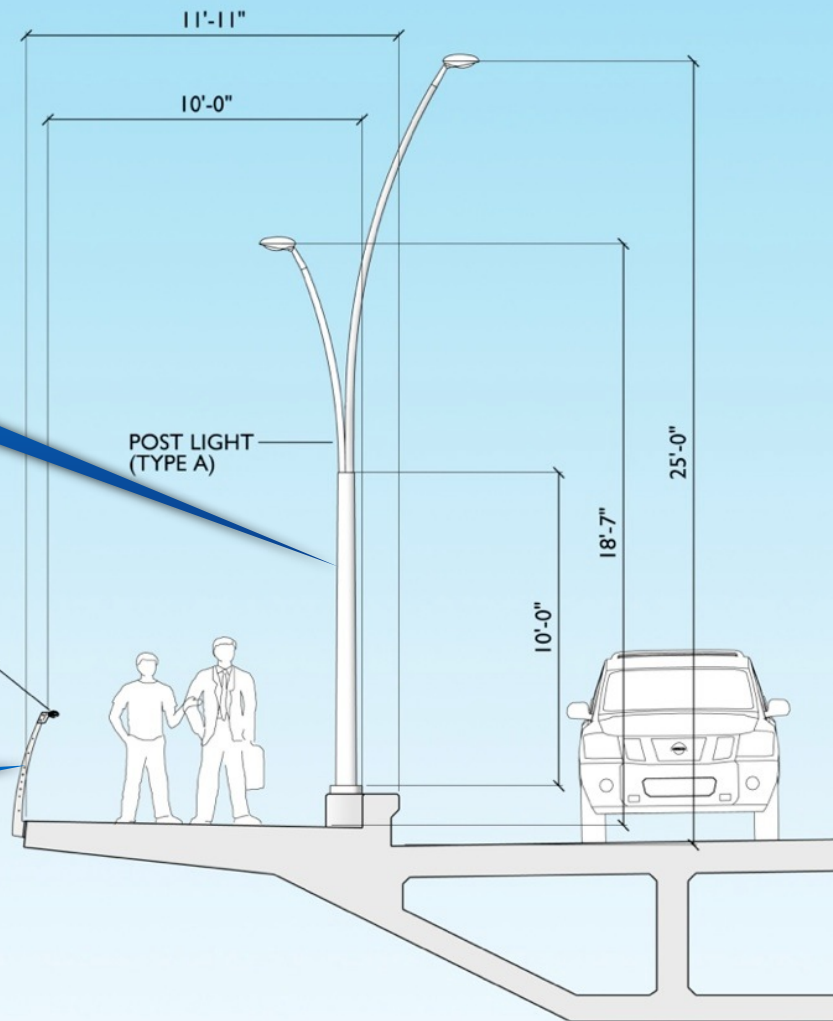
Pedestrian Elements

Street Lighting

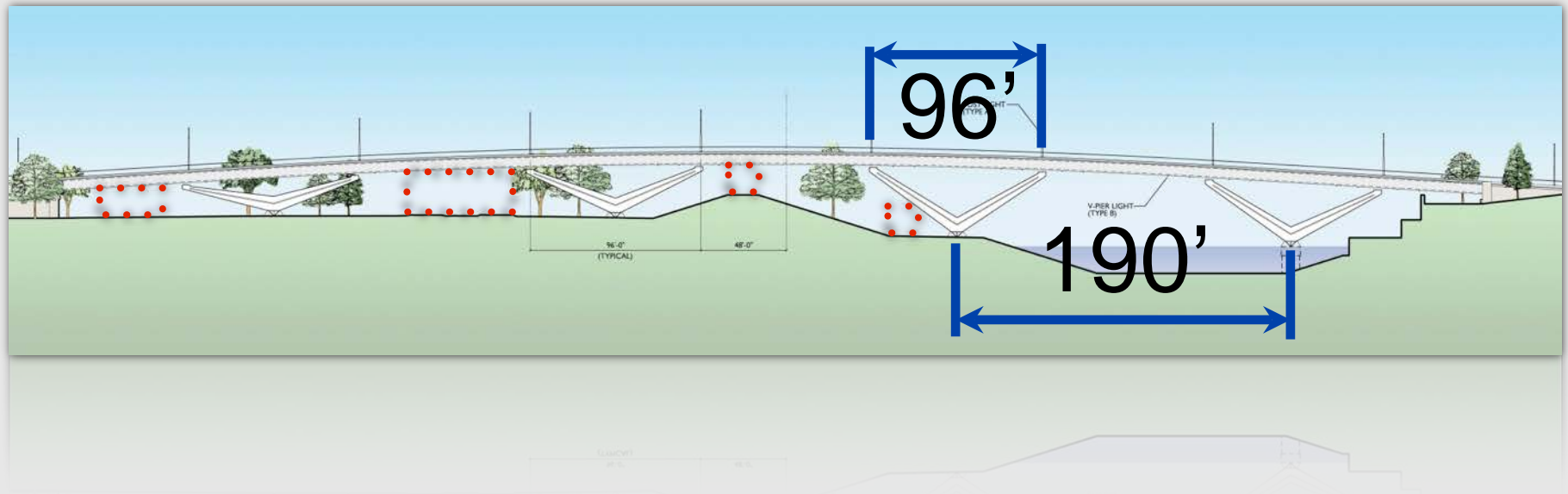
PEDESTRIAN RAIL
LIGHT (TYPE C)

POST LIGHT
(TYPE A)

Stainless Steel
Pedestrian Railing

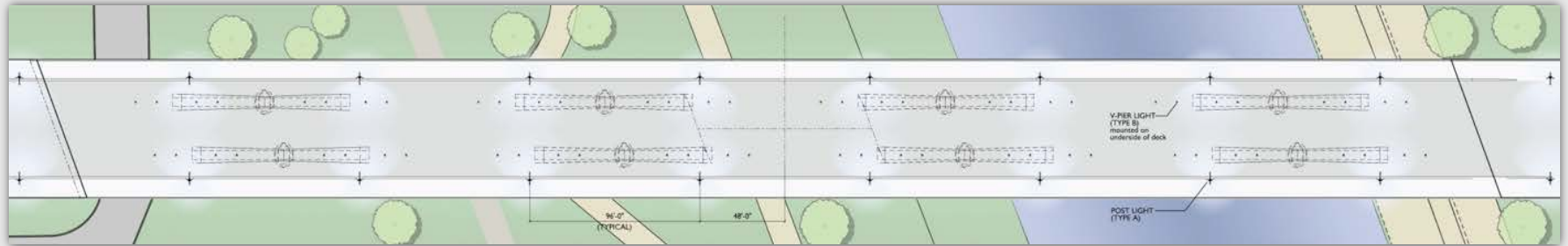


V-Pier Bridges

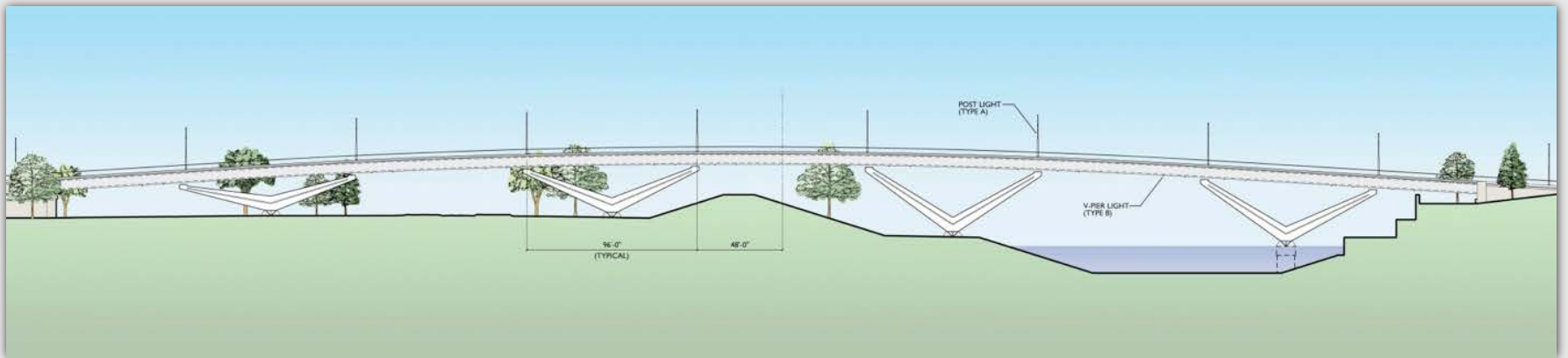


- V-piers minimize columns
- Shorter spans, shallower superstructure

Henderson Street Bridge

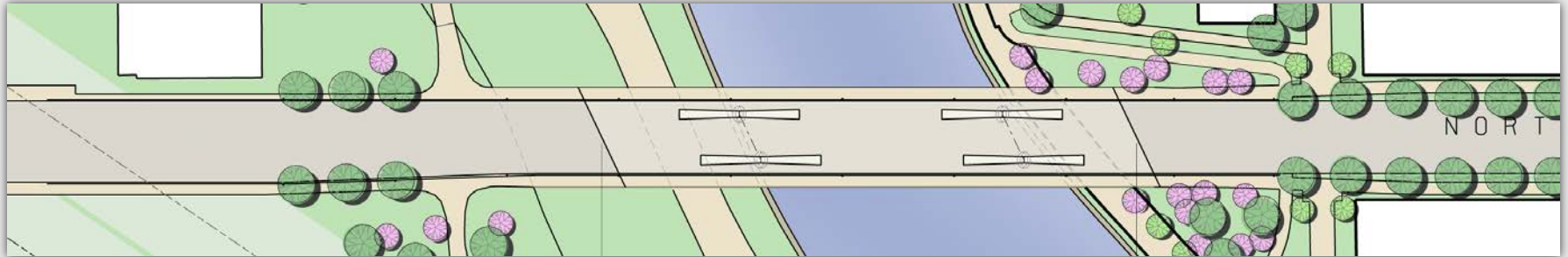


Plan

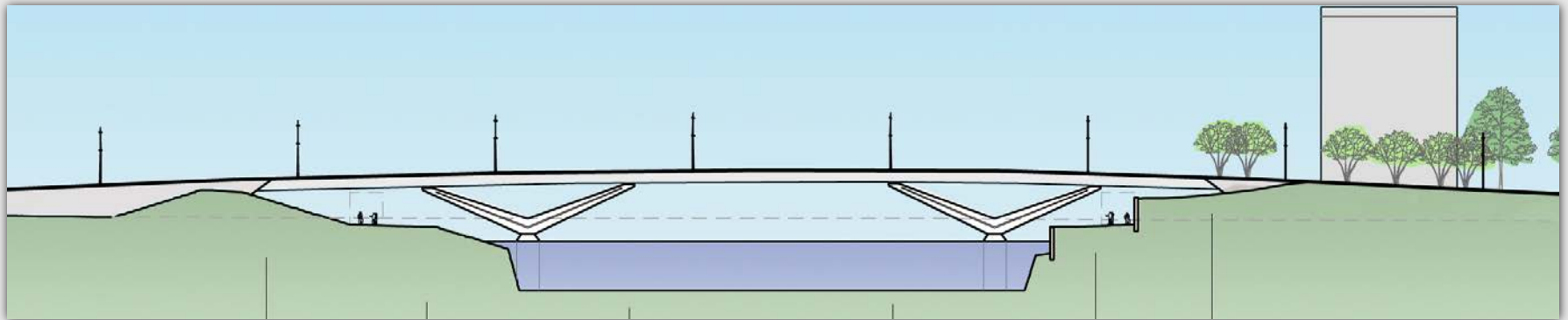


Elevation

North Main Street Bridge

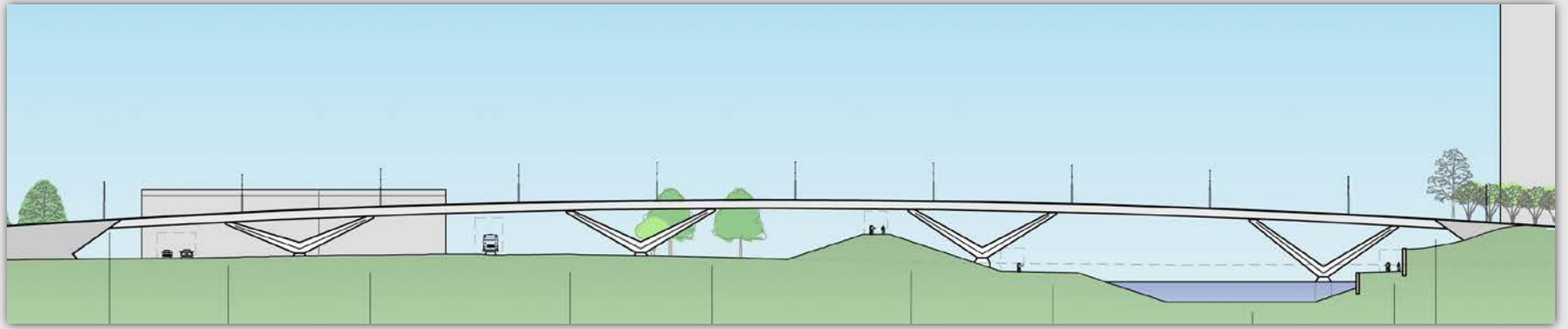


Plan



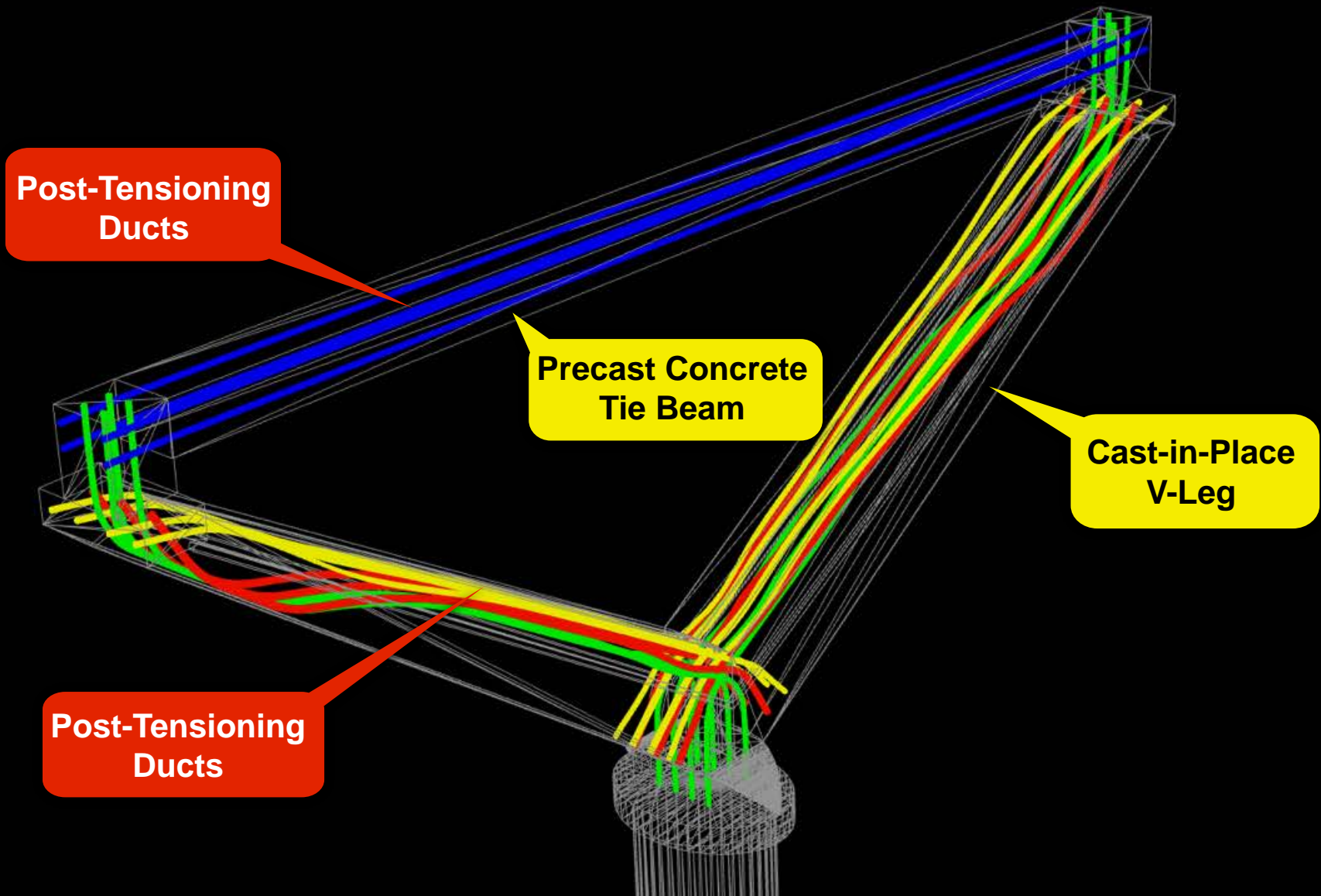
Elevation

White Settlement Road Bridge



Elevation

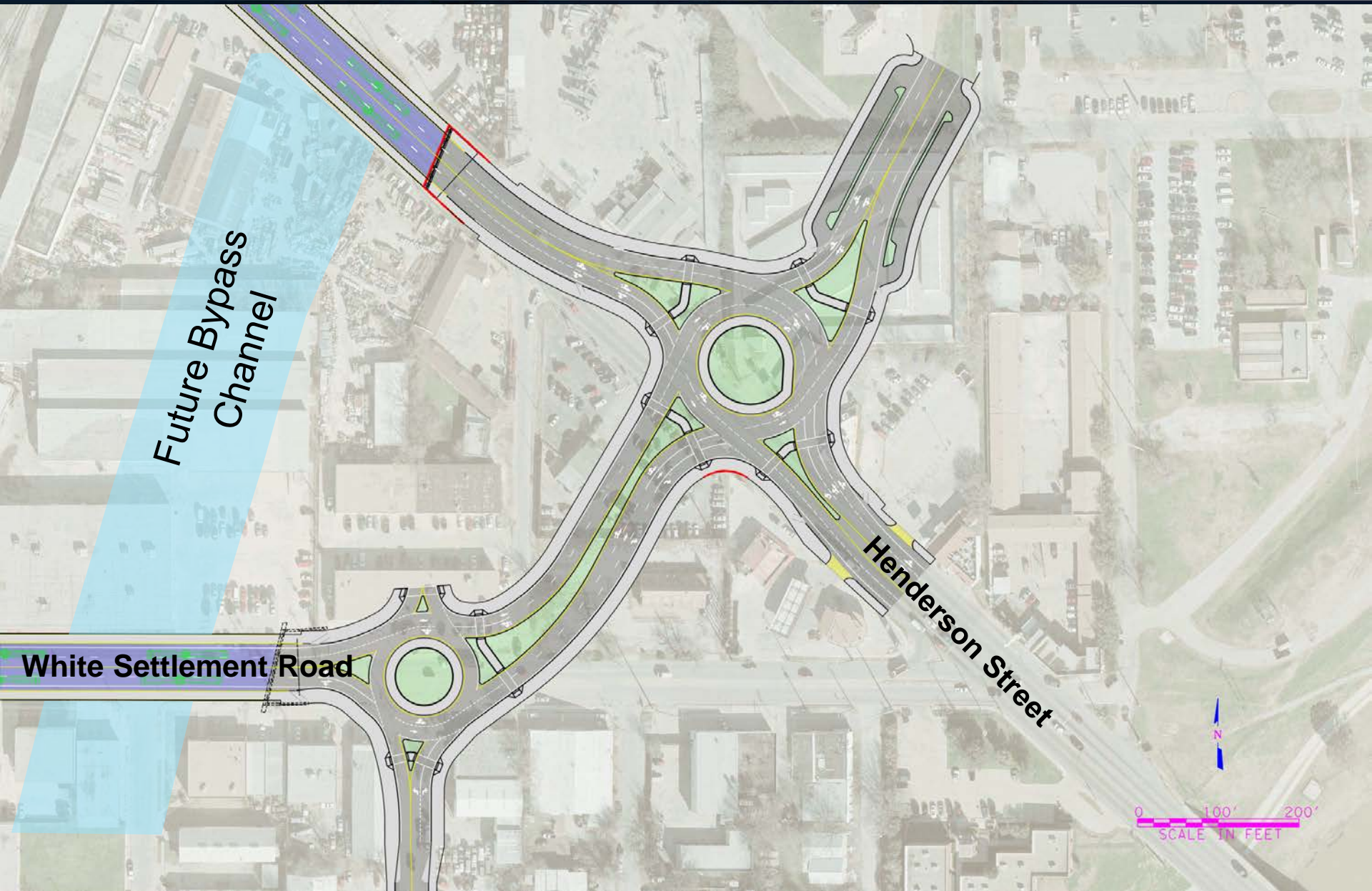
V-Pier Bridges



Mobility and Safety Benefits

- Four-Lane Roadway
- Grade Separation at Railroad
- Pedestrian Friendly
 - 10-foot wide sidewalks
- Henderson St & White Settlement Rd Roundabouts
 - $\frac{1}{2}$ the average delay time per vehicle
 - Accommodates 20% more traffic
 - Traffic speed reduced by $\frac{1}{3}$

Trinity River Vision Project



Henderson Street Roundabout



- TxDOT Mobility Coordinator
 - Door-to-door outreach for affected businesses
- Mailers & E-Blasts
 - City news (water bills)
 - Web-based sign-up lists
 - Construction updates at **www.trinityrivervision.org**

THANK YOU



Fort Worth District