

US 18/151 (Verona Road)

Project ID 1206-07-03

City of Madison

Plan Commission

December 14, 2009

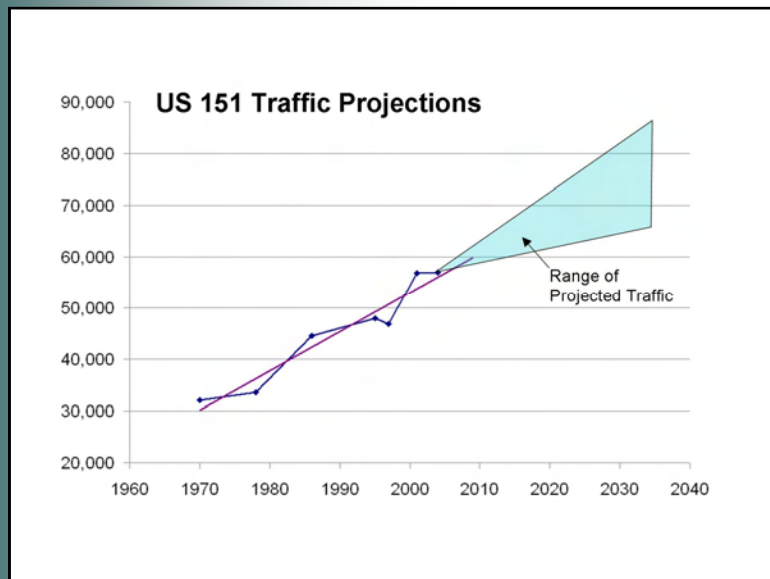
Agenda

1. Review of Needs
2. Recommended Alternative and Impacts
3. Project Schedule
4. Public Hearing

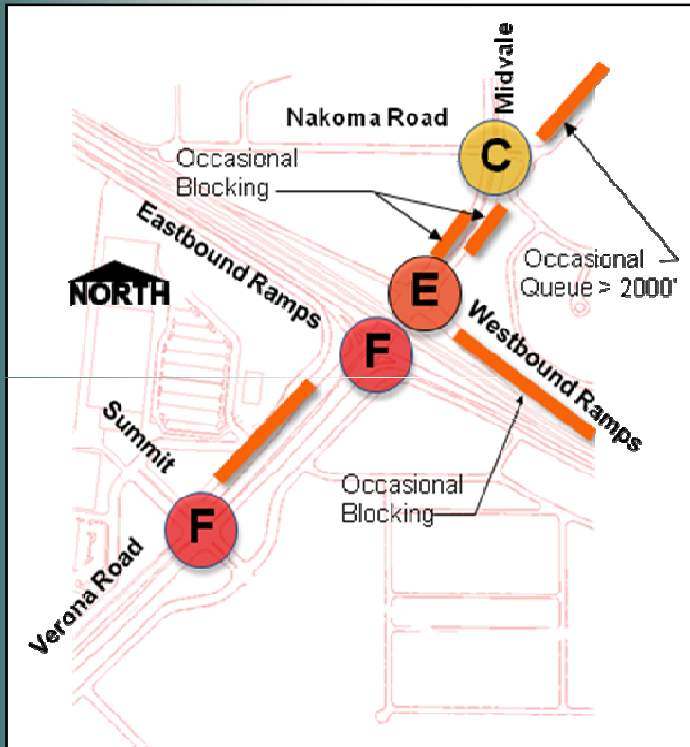
1. Corridor Needs

US 151 Traffic Growth

South of the Beltline, US 151 traffic has steadily risen from 30,000 vehicles per day in 1968 to 59,000 vehicles per day in 2008. At PD, volumes have risen especially fast recently and were at 51,000 and 32,000 north and south of the intersection. Capacity at both ends is exceeded during daily rush hour.



Growing Traffic Congestion and Increasing Crashes



Long Delays at Interchange during peak hour traffic (LOS shown was in 2005)



Delays on WB Off Ramp at Interchange Backs Up Beltline Traffic Flow, Increasing Crashes

Neighborhood isolation



Existing crossings of and connections to Verona Road are limited. Intersection crossings are inadequate for all traffic during rush hour, but especially so for pedestrians and bicyclists.



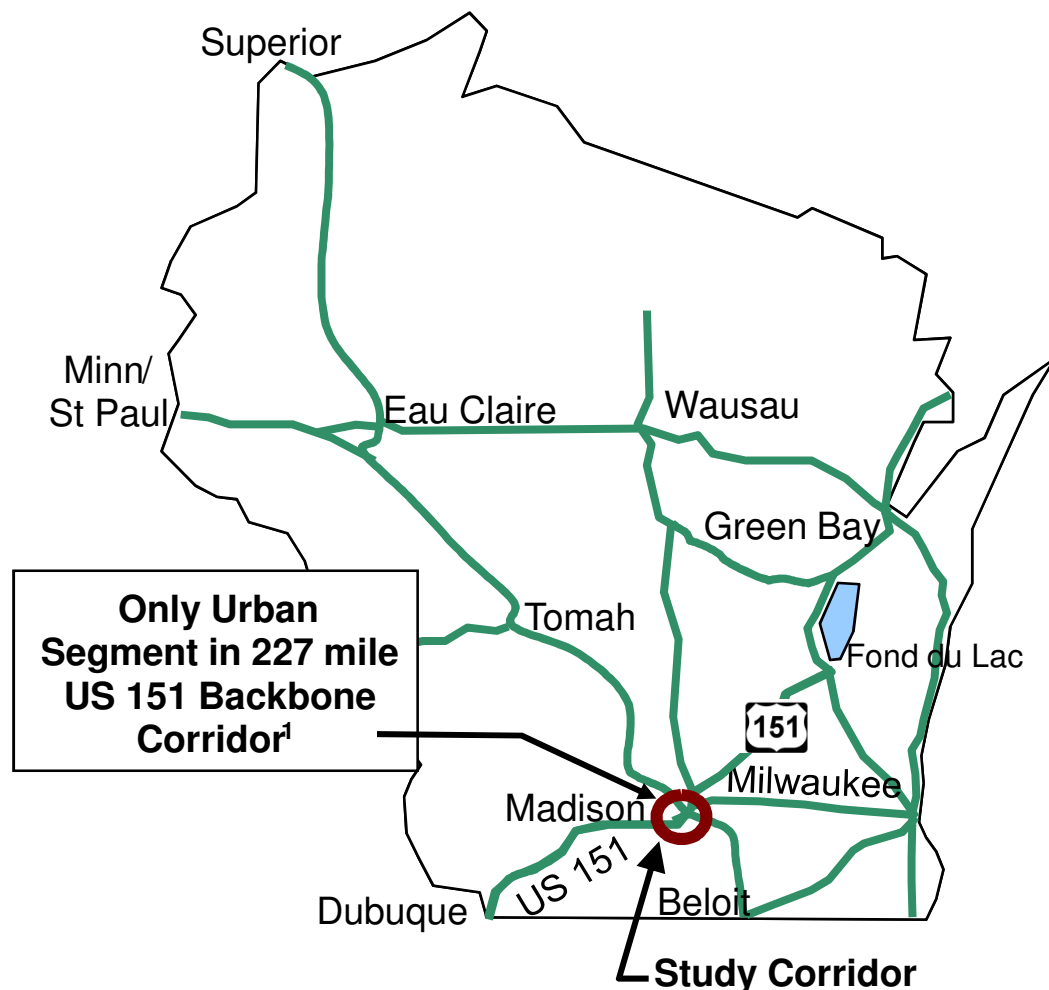
US 151's role in the State's transportation system

US 151 is a Connections 2030 Backbone Route in the State Highway Plan.

Backbone Routes are the state's most important highways.

They make up only 3 percent of Wisconsin's roadways, yet carry 34 percent of all auto travel and 57 percent of all truck travel.

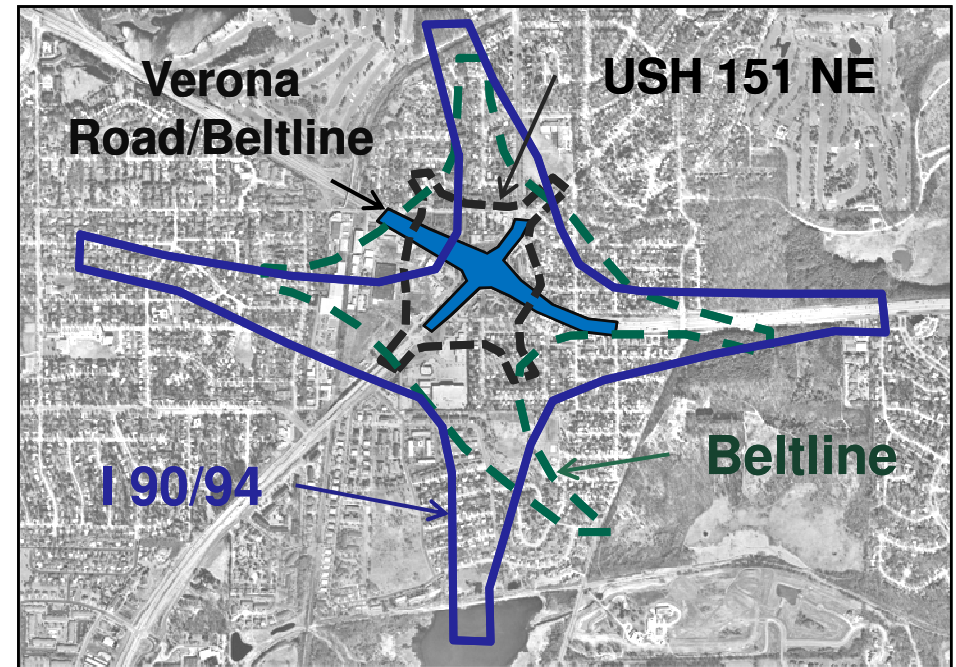
Corridor 2020 Backbone Routes



Interchange history



Verona Road interchange 1955



Verona Road interchange now.

- Solid blue represents the right of way footprint, while the much larger outlines represent footprint of other high volume interchanges in the area.
- This illustrates both the land space efficiency of the existing interchange and the reason more room is needed to significantly improve conditions.



Purpose of Improvements

The primary purposes are to:

- Enhance the mobility of motorized travel in the US 151 backbone Verona Road corridor and preserve it in the Beltline corridor to meet operation levels that are consistent with a Corridors 2020/Connections 2030 Backbone Route. Primarily, reduce delay, increase average traveling speed.
- Improve motorized travel safety on the US 151 corridor to levels consistent with a Corridors 2020/Connections 2030 Backbone Route.
- Enhance connectivity and safety of transit and nonmotorized travel accommodations along and across both the US 151 and the US 12/14 corridors.
- Enhance connectivity from and to abutting neighborhoods and reduce congestion related diversion of traffic to neighborhood streets.



US 151/Verona Rd Study History

- Needs study initiated in 1998
- Draft Environmental Impact Statement (DEIS) released in May 2003
 - Included the West Beltline in addition to Verona Rd
 - Described two alternatives for US 151/Verona Road
 - Urban Option improved the Beltline Interchange and at-grade signalized intersections
 - Freeway Option created non-stop flow for US 151 traffic and changed Verona Rd to a one-way pair alongside the center freeway lanes.
- Main issues and stakeholder views:
 - Urban Option doesn't fix long-term congestion or safety, insufficiently addresses connectivity from and to abutting neighborhoods and diversion to neighborhood streets.
 - Freeway Option heavily impacts Allied & Dunn's Marsh neighborhood, is expensive, creates physical divide
 - Split views on Seminole ramp removal proposal



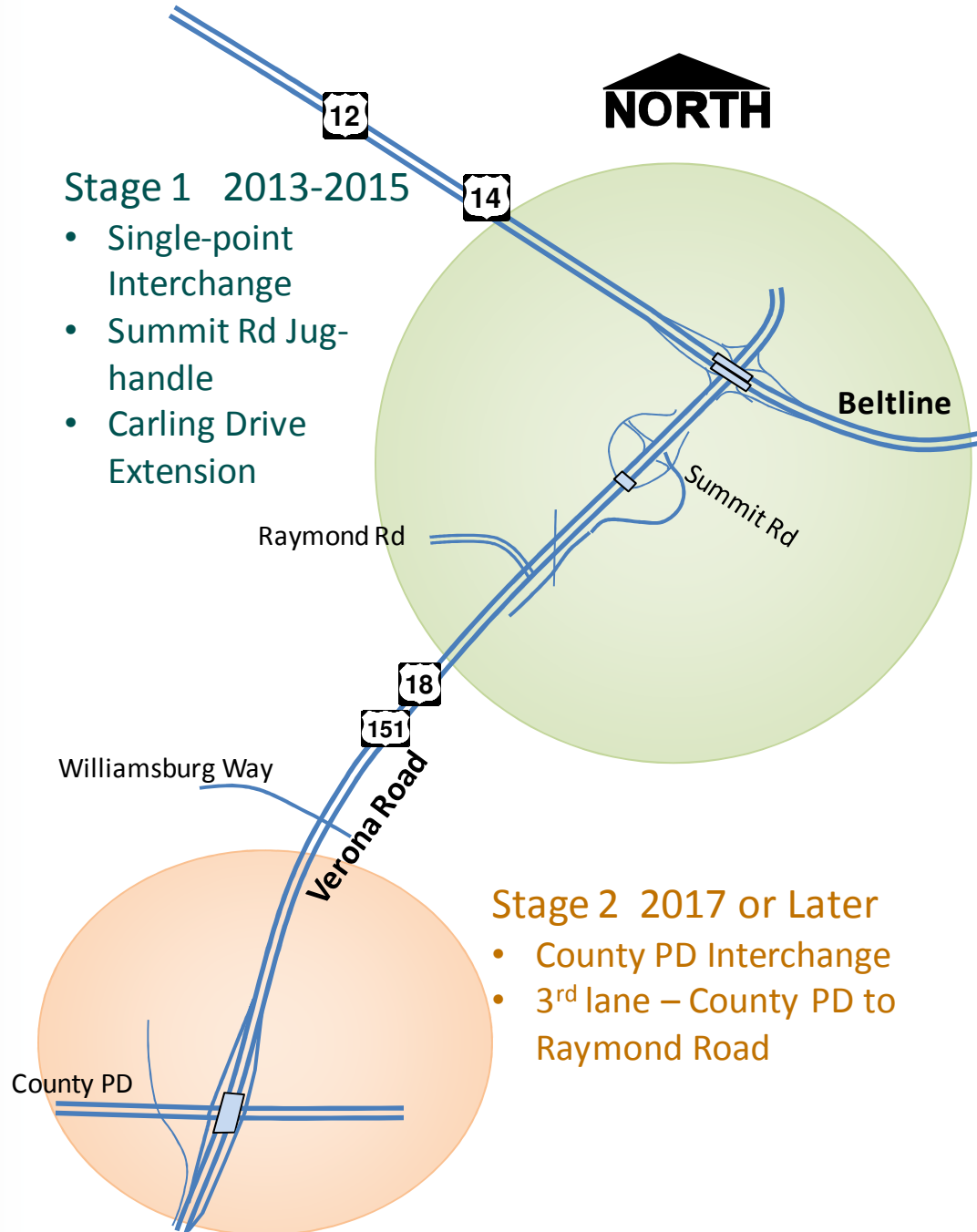
DEIS Comments Result

WisDOT reevaluated the DEIS options. Extensive stakeholder outreach and collaboration with representatives of neighborhoods, local government and property owners, determined three stage improvement to the corridor was reasonable and feasible:

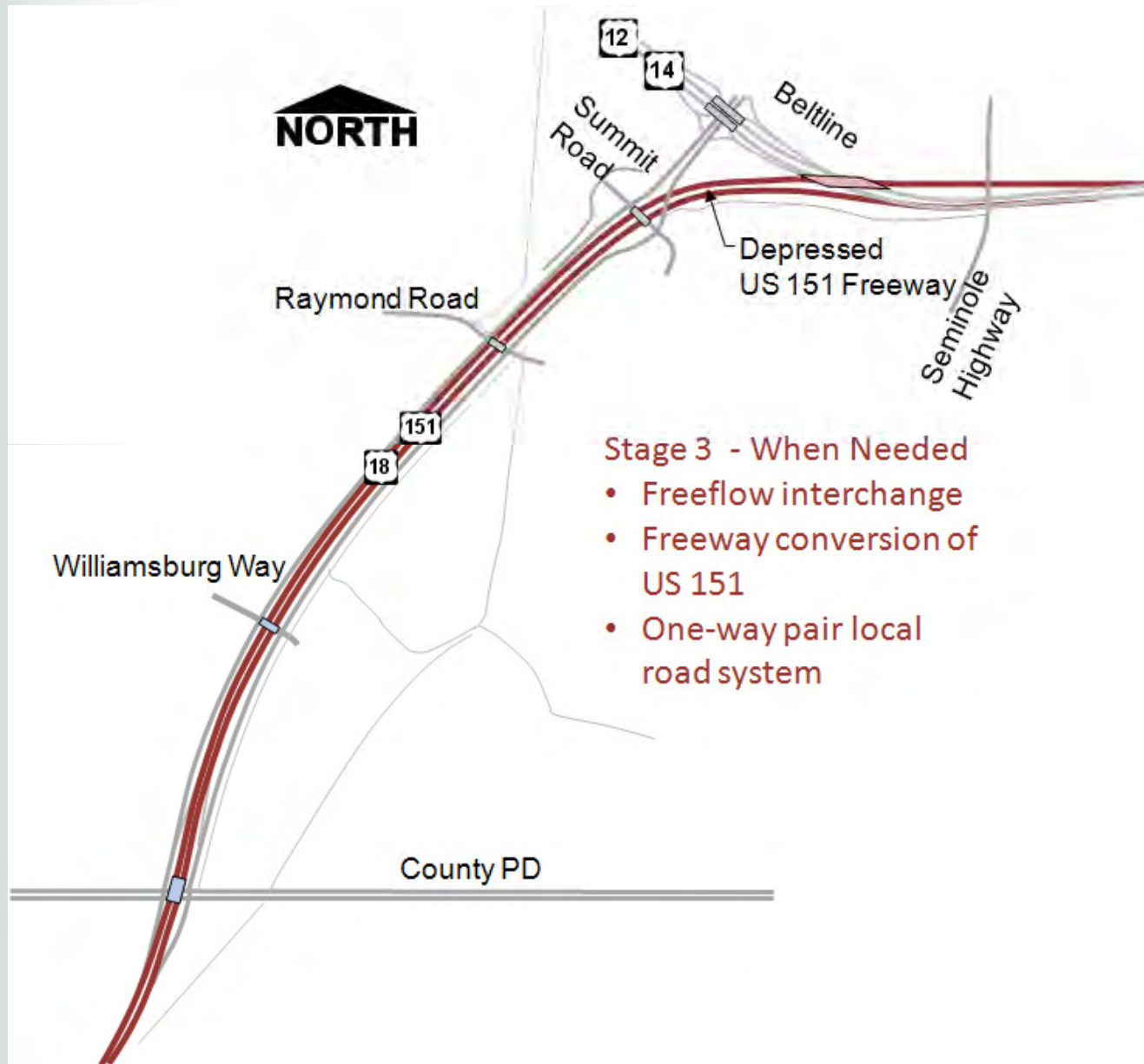
1. Urban Option now provides 15 - 20 years of improved conditions w/o large increase in neighborhood impacts. Split into 2 Stages, Stage 1 funded in 2013-15.
2. Delayed need for Freeway Option (Stage 3) until 2030 +/- , triggered by actual , not predicted, safety and congestion needs. Made it compatible with both ends of Urban Option.
3. Producing Supplemental DEIS and FEIS that analyze the 3 stages and the incremental impacts caused by each stage.
4. Protecting against escalated real estate in future by Mapping right-of-way for Freeway Option in 2013.

West Beltline component moved to Safety and Operations study created for entire Beltline, dropped from SDEIS and Final EIS.

Stage 1 and 2 Elements



Stage 3 Elements



- Stage 3 - When Needed
- Freeflow interchange
 - Freeway conversion of US 151
 - One-way pair local road system

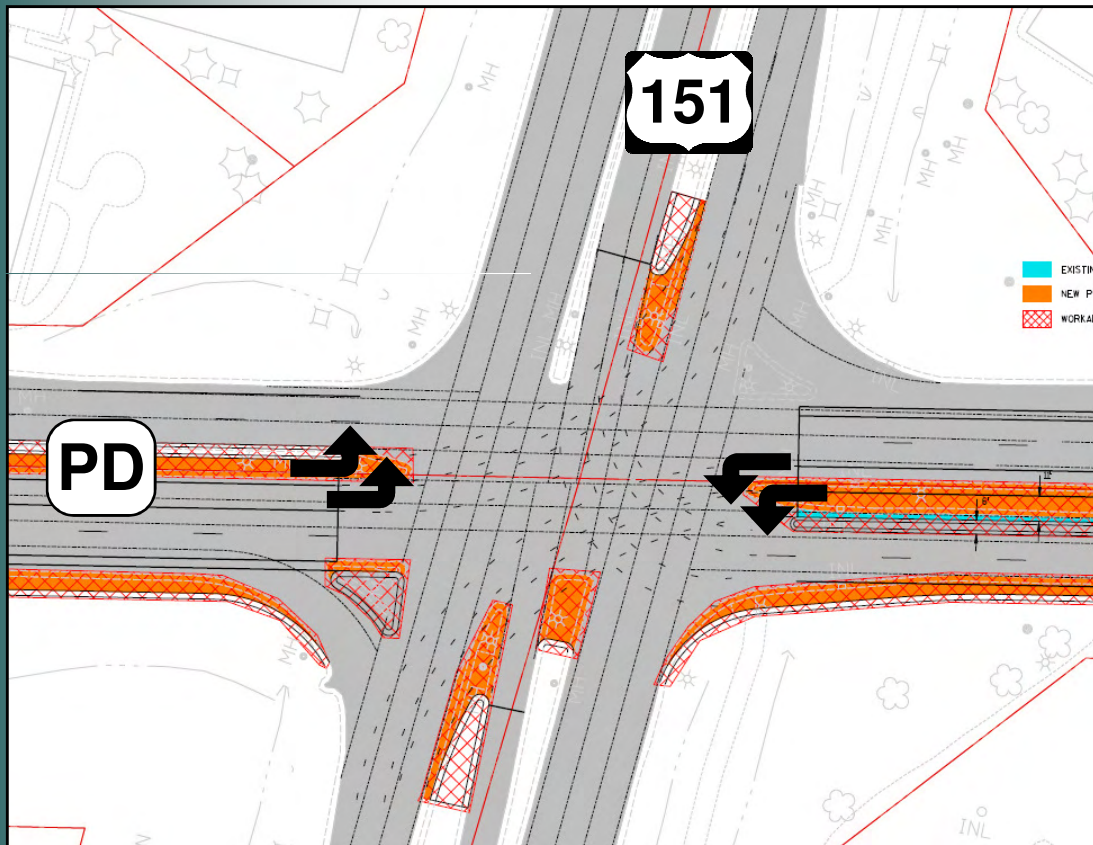
2. Recommended Alternative and Preliminary Impacts



Stage 1

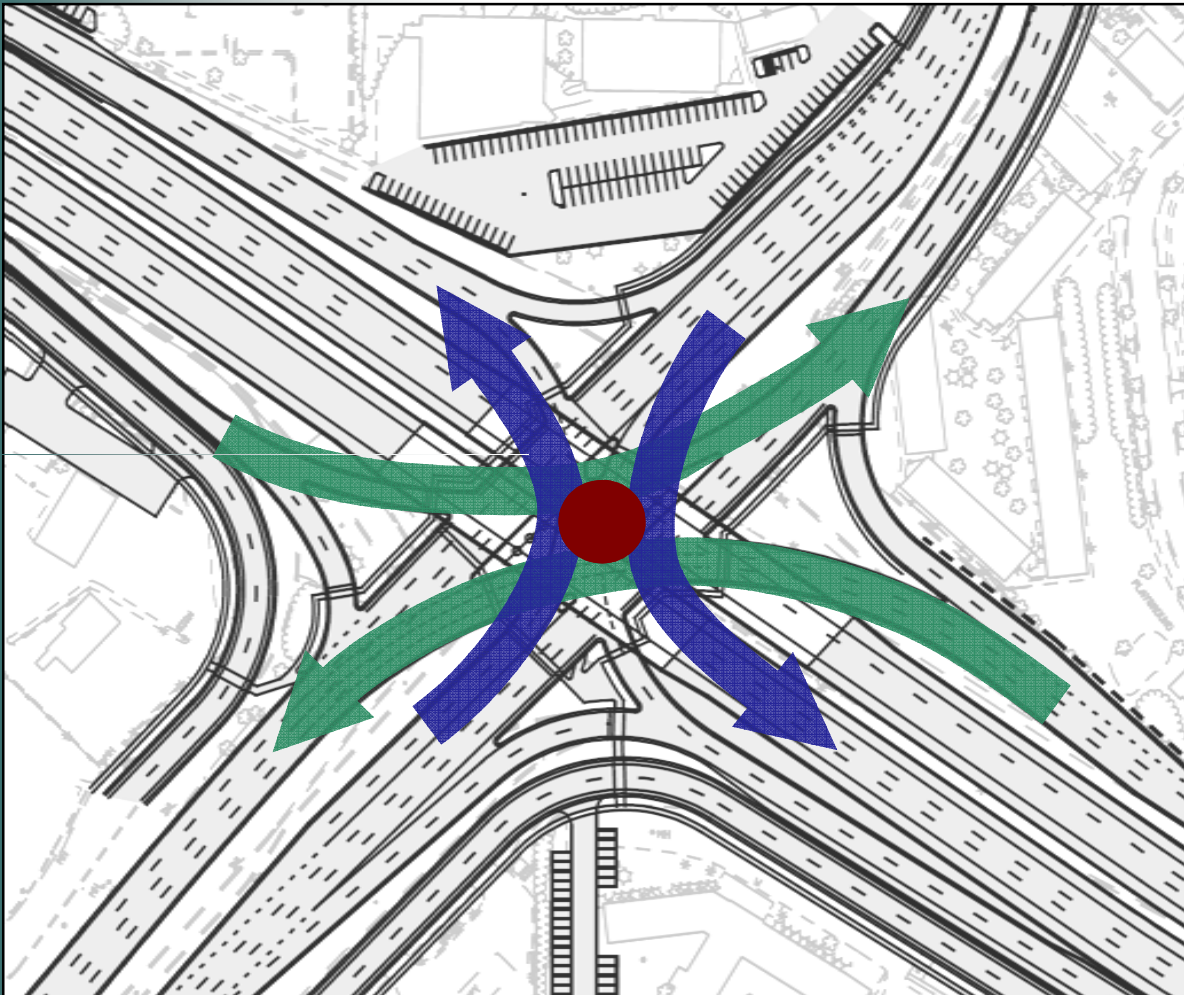
Construction for Stage 1 is anticipated
to begin in 2013

County PD Turn Lane Improvement



- Dual lefts added to east and west approaches prior to stage 1.
- Traffic mitigation
 - Improved operations will boost feasibility of PD as alternate corridor during Stage 1 construction
- Relatively low cost improvement.
- Average vehicle delay substantially reduced, though still at LOS F.

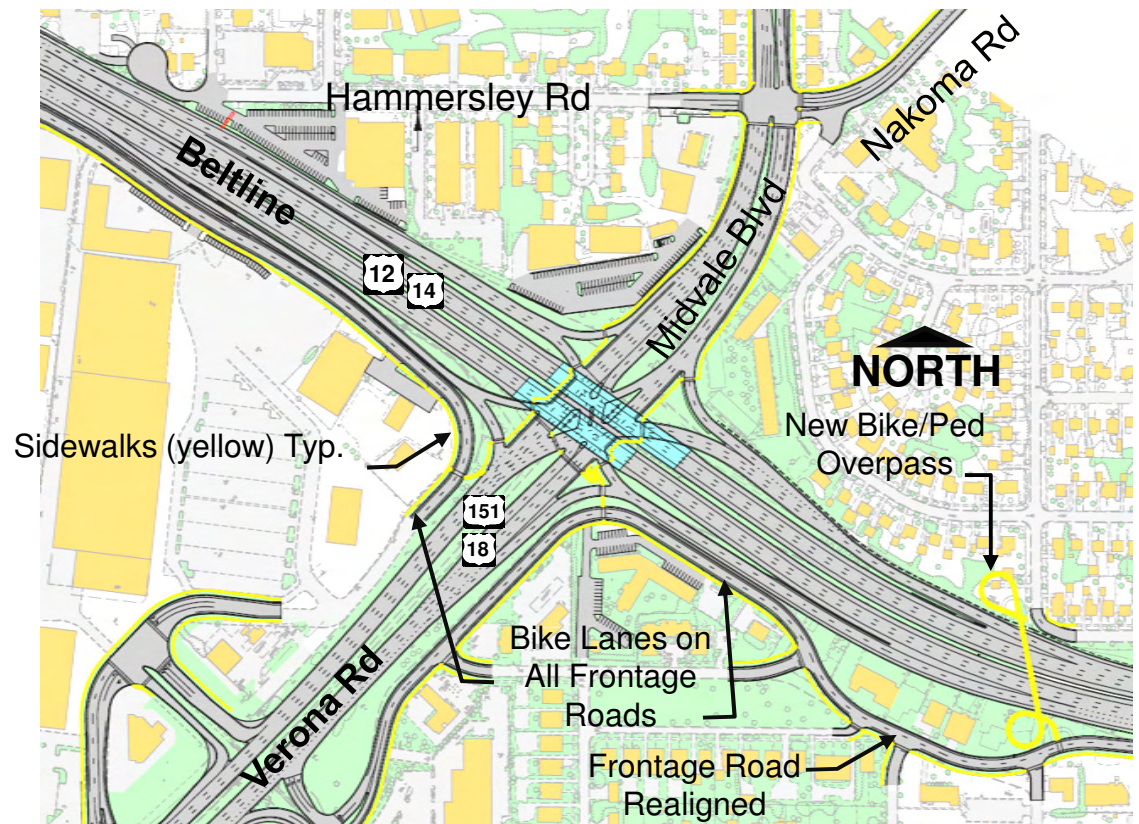
Single Point Urban interchange (SPUI)



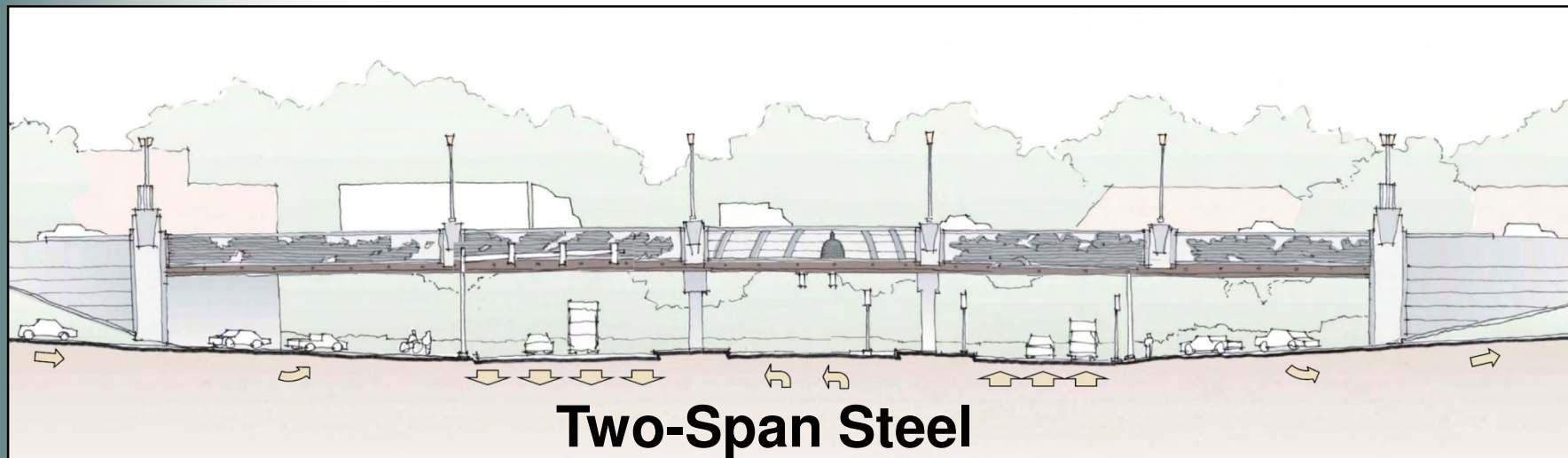
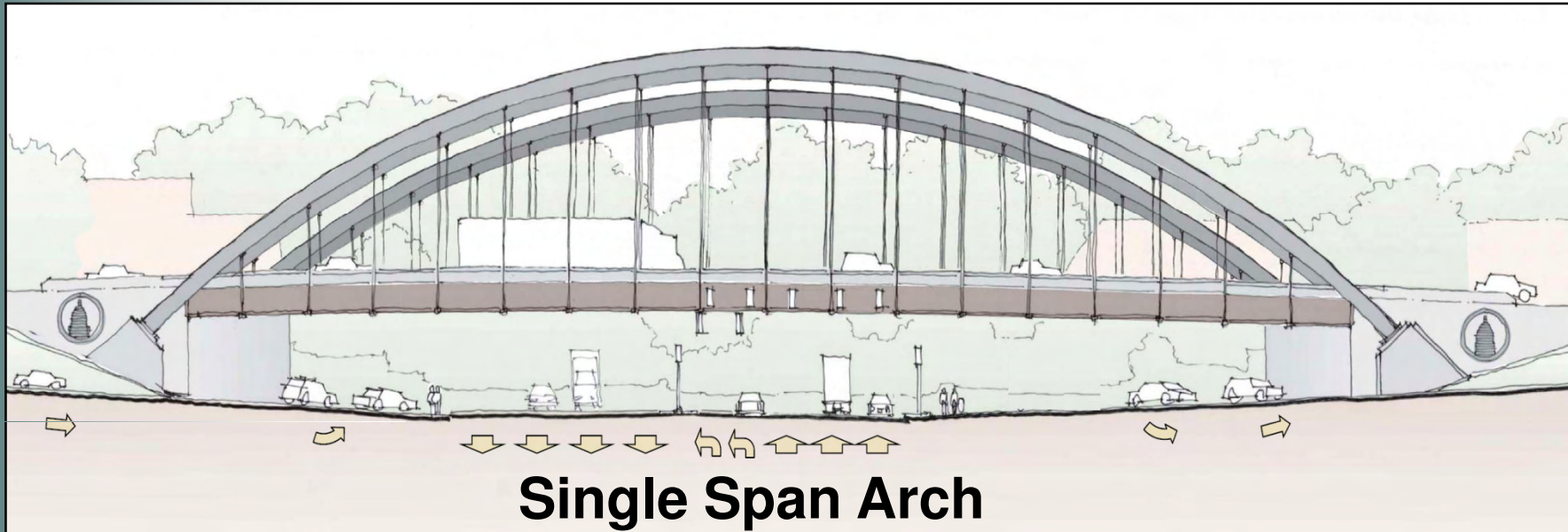
- All turning movements travel around a “single point”.
- Allows concurrent left turns which are not possible on a conventional diamond interchange (which has two sets of signals)
- More efficient signal timing results in greater interchange capacity
- One through lane added in both directions on Verona Rd also increases capacity

Stage 1 - Single Point Urban Interchange (SPUI)

- Added through lane from Seminole to Whitney on the Beltline improves interchange safety and operation.
- Nakoma Road/Midvale Boulevard intersection reconstructed.
- Additional and improved Ped and Bicycle accommodations along on and Verona/Midvale .

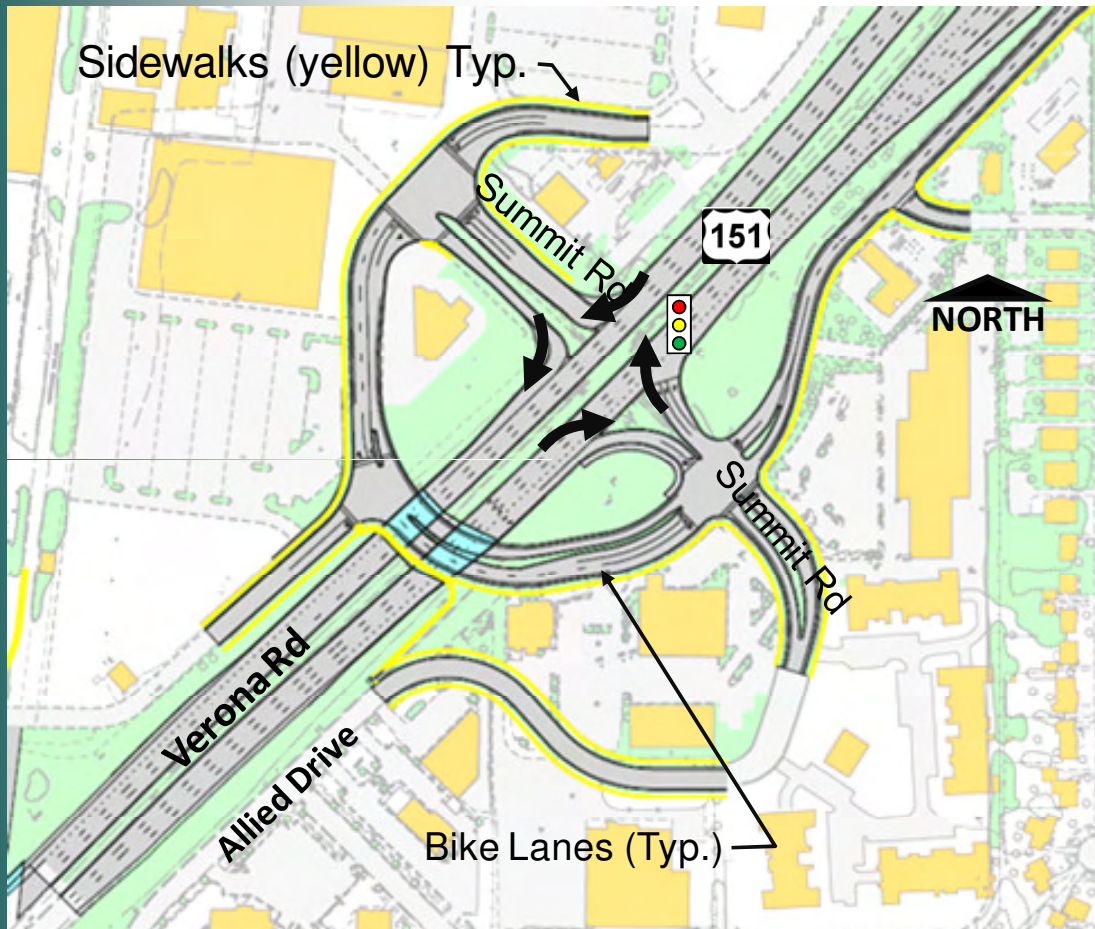


Two bridge types considered for SPUI

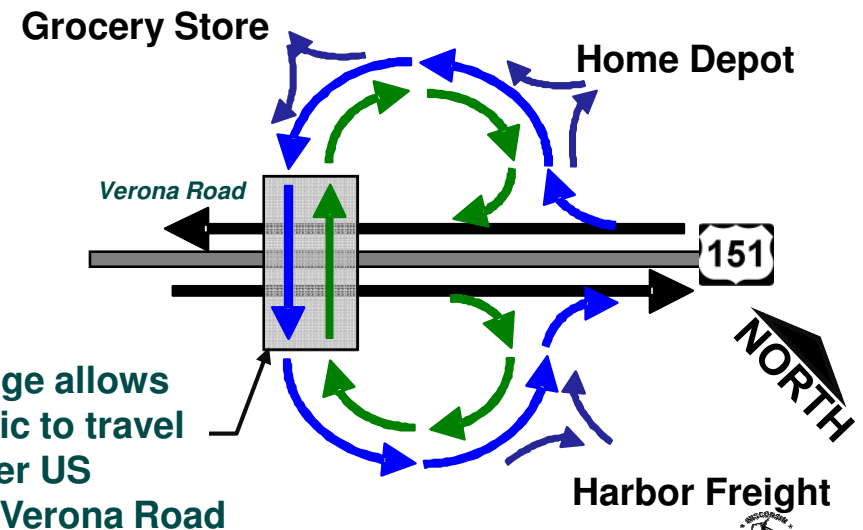


Two span is favored – cost, neighborhood aesthetics, urban road driver expectations considered

Summit (Home Depot) Jug-Handle

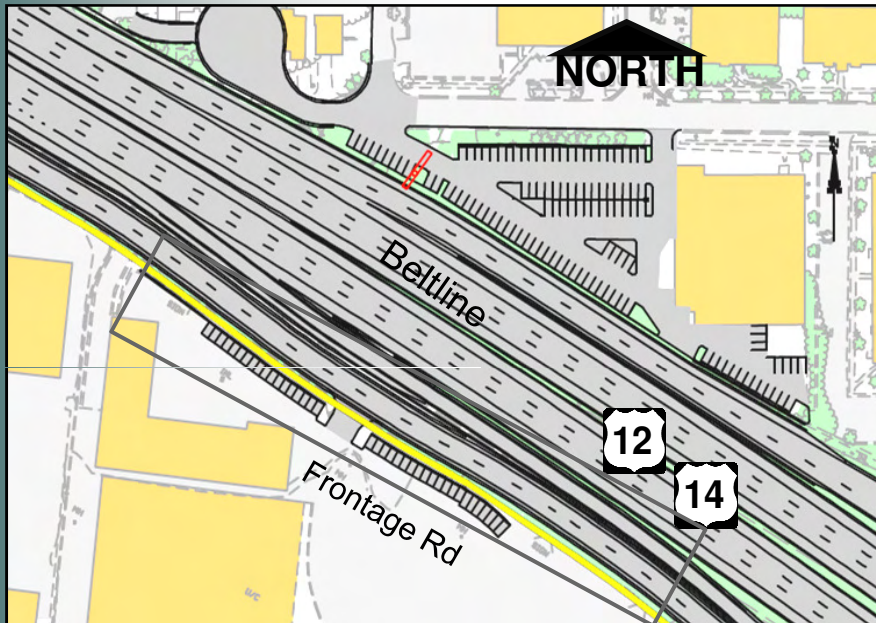


- Right turns only from and to Verona Rd.
- Pair of new bridges allows vehicles currently crossing US 151 or turning left to/from Summit to travel underneath US 151 instead.
- A signal will be placed for northbound US 151 entering from Summit.



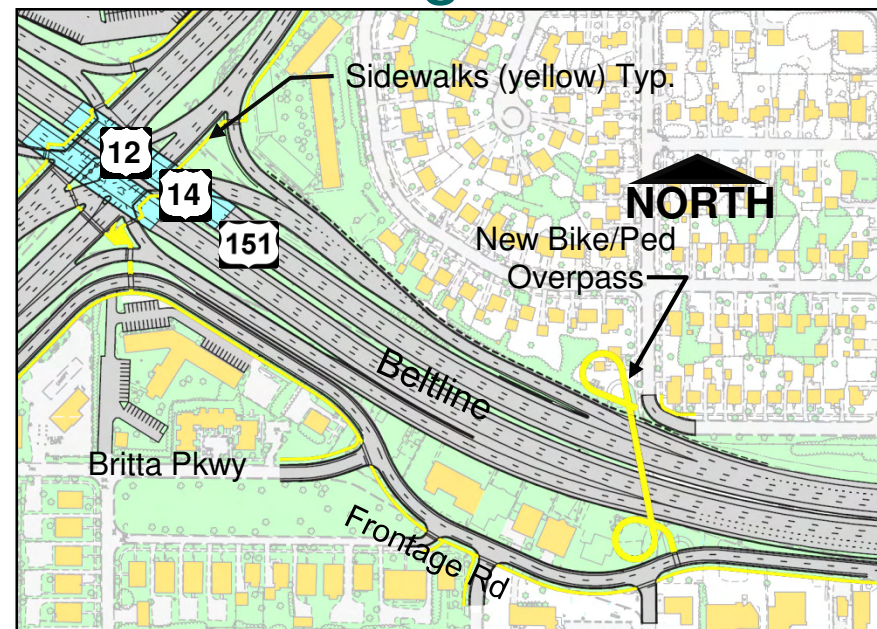
Frontage roads relocated

SW Frontage Road



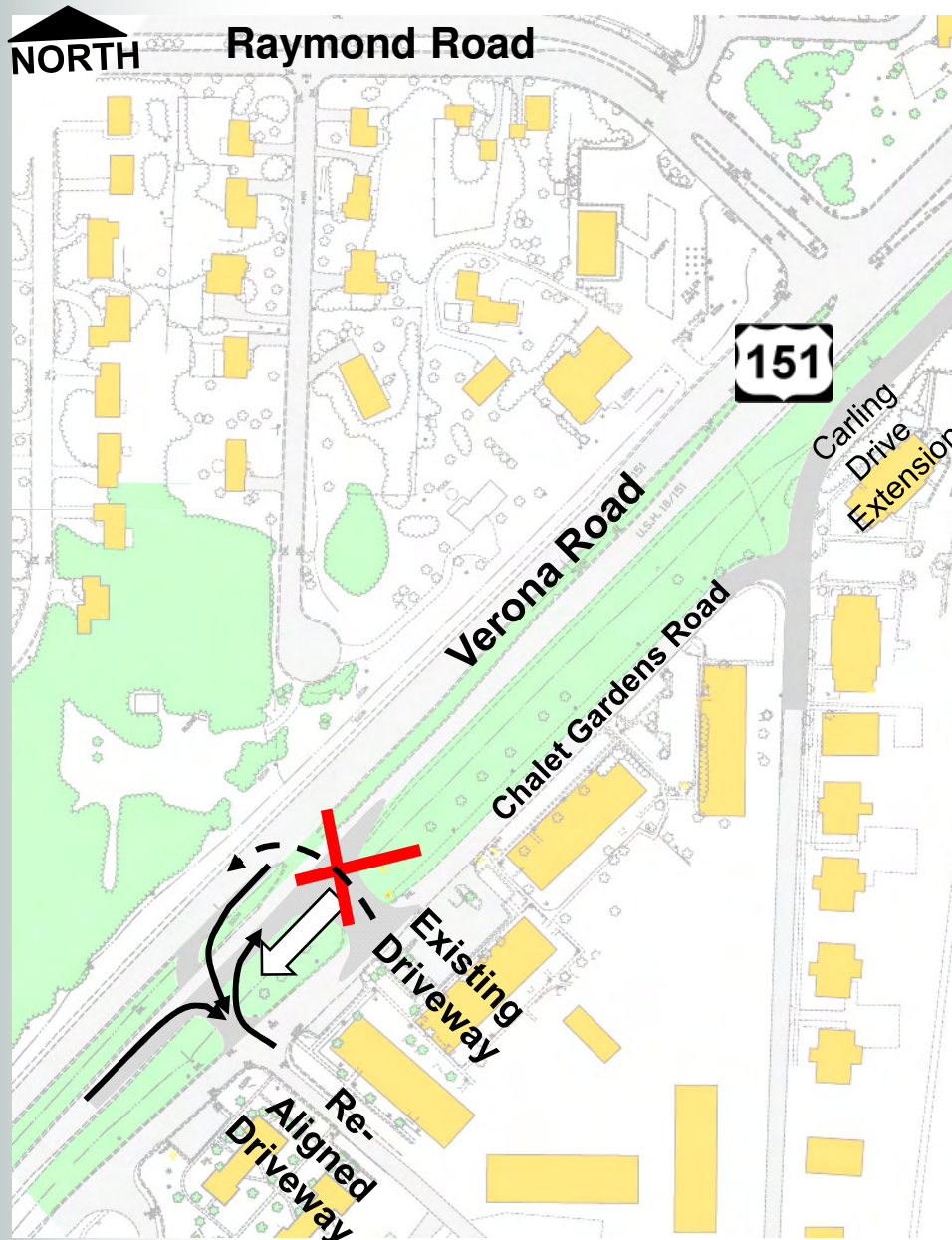
- 1 relocation – KFC
- Frontage Road shifted to the south.
- Parking impacts spread between SW and NW quadrants

SE Frontage Road



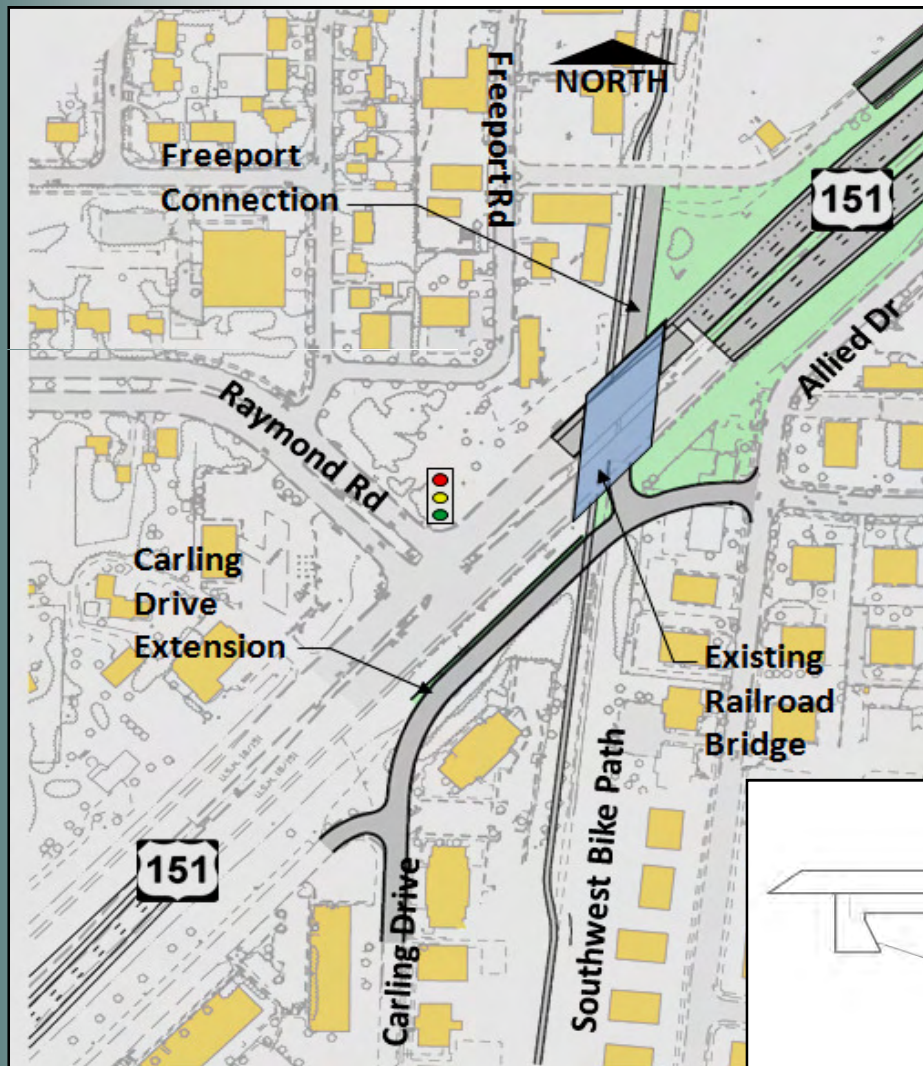
- Frontage Road realigned to reduce business relocations. Abuts far east end of Britta Parkway.
- Relocations include Montessori School, several businesses and apartments.

Changes to Chalet Drive Connection

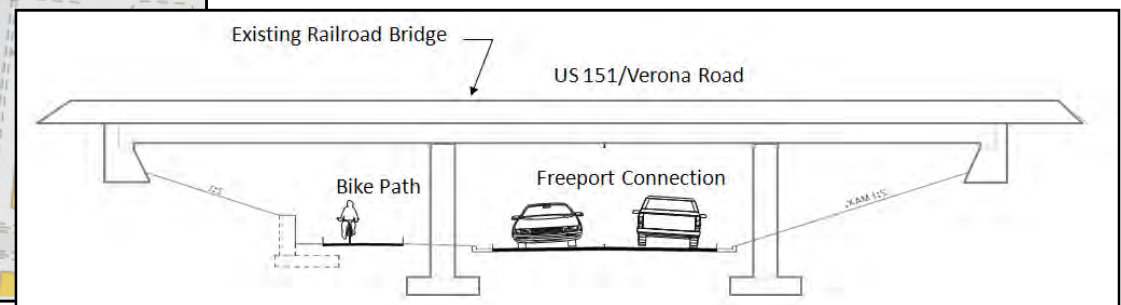


- Intersection Relocated South to align w/ Chalet Gardens Rd.
- Right-in, Right-out, and Left-in movements only.
- Access to remain until safety, operation, or mobility concerns requires additional modifications.

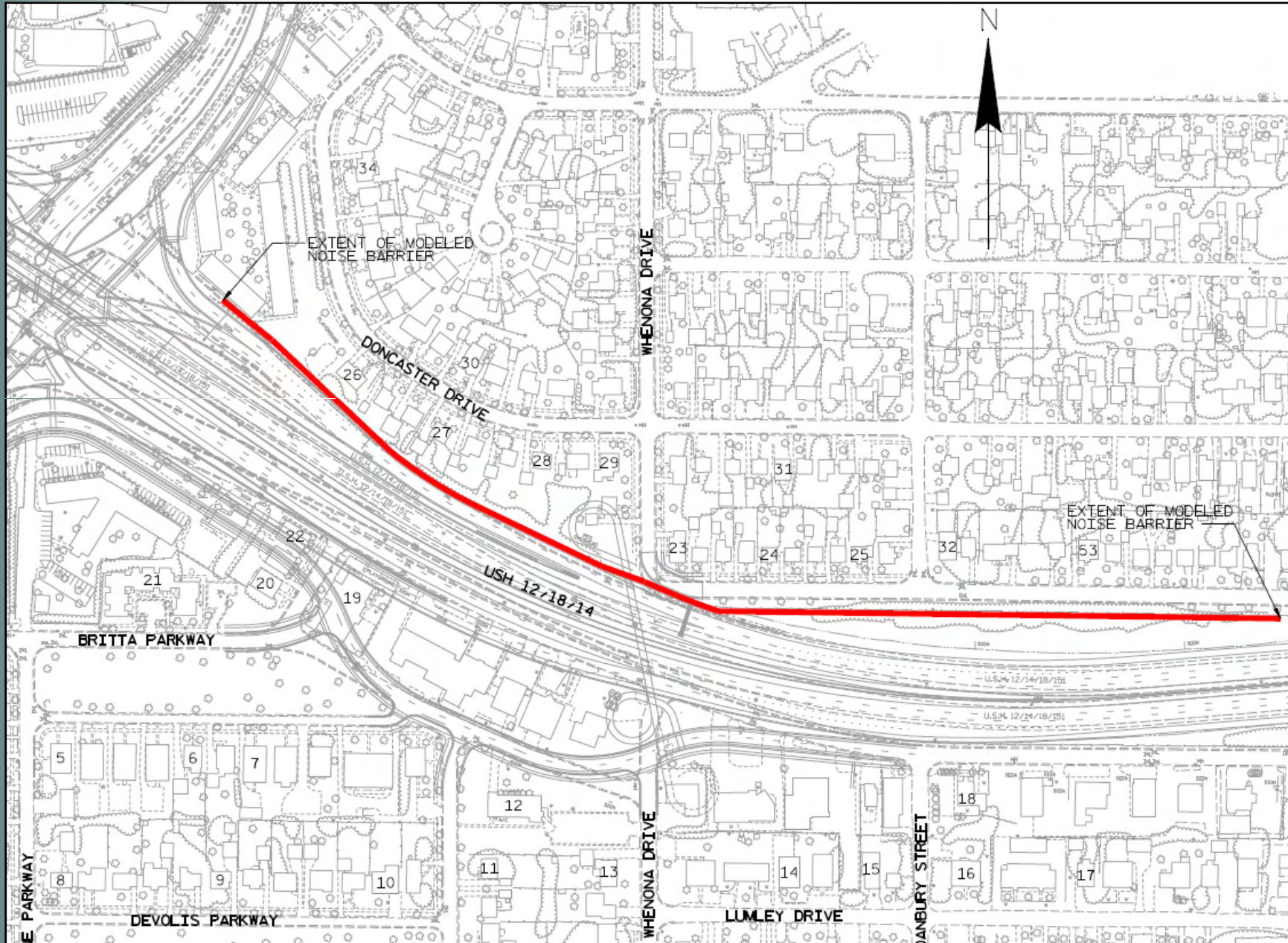
Carling Drive Extension and Connection to Freeport



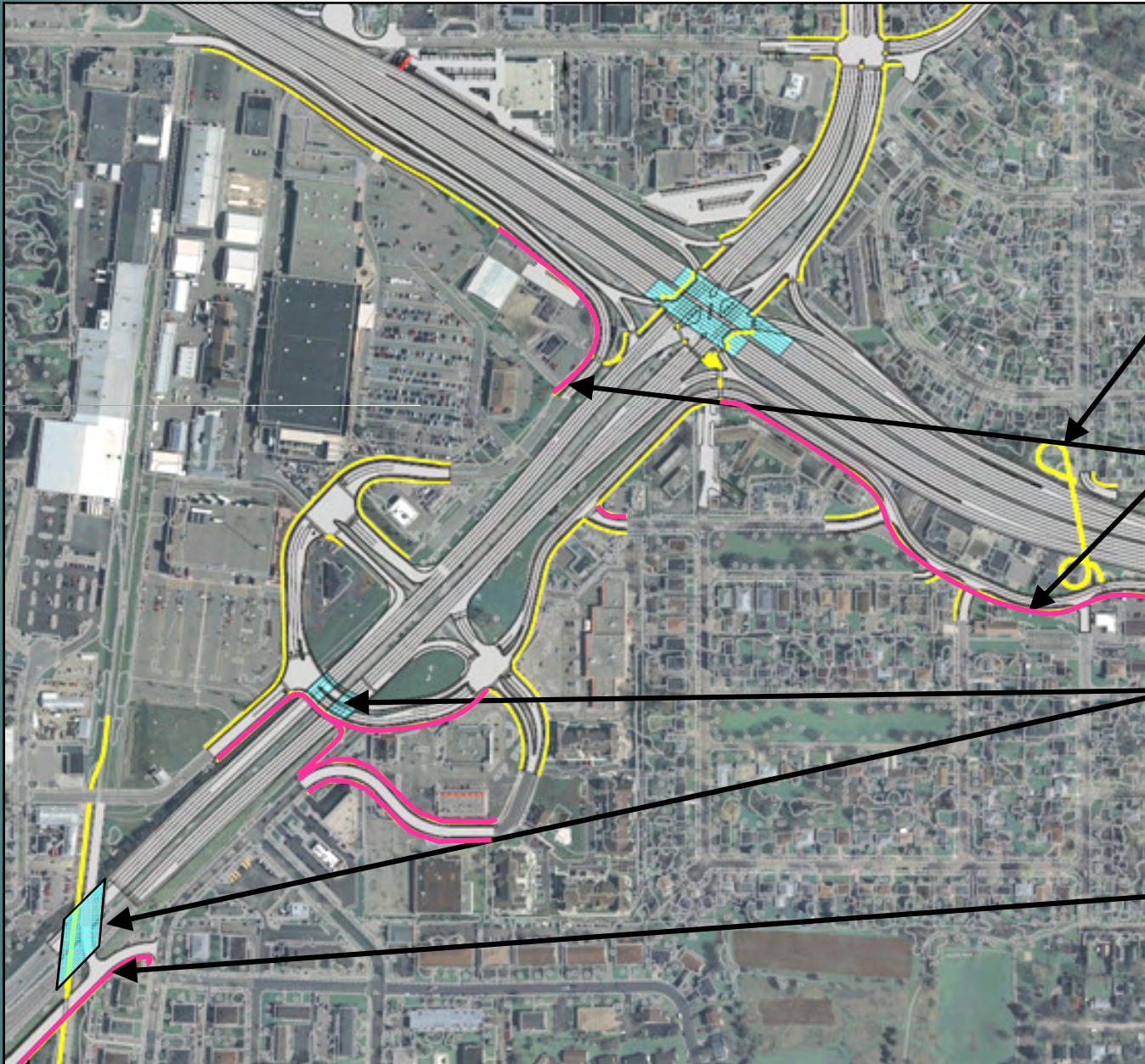
- Help mitigate reduced access during construction
- Provide an additional safe neighborhood connection across Verona Road.
- 1 relocation
- Bike path shares space under bridge



Noise Barrier, NE Quad of Interchange



Bike and Pedestrian Improvements



- Bike lanes are carried through the SPUI interchange.

— New Sidewalk (does not currently exist)

Replace bike/ped overpass with new one built to Current ADA standards

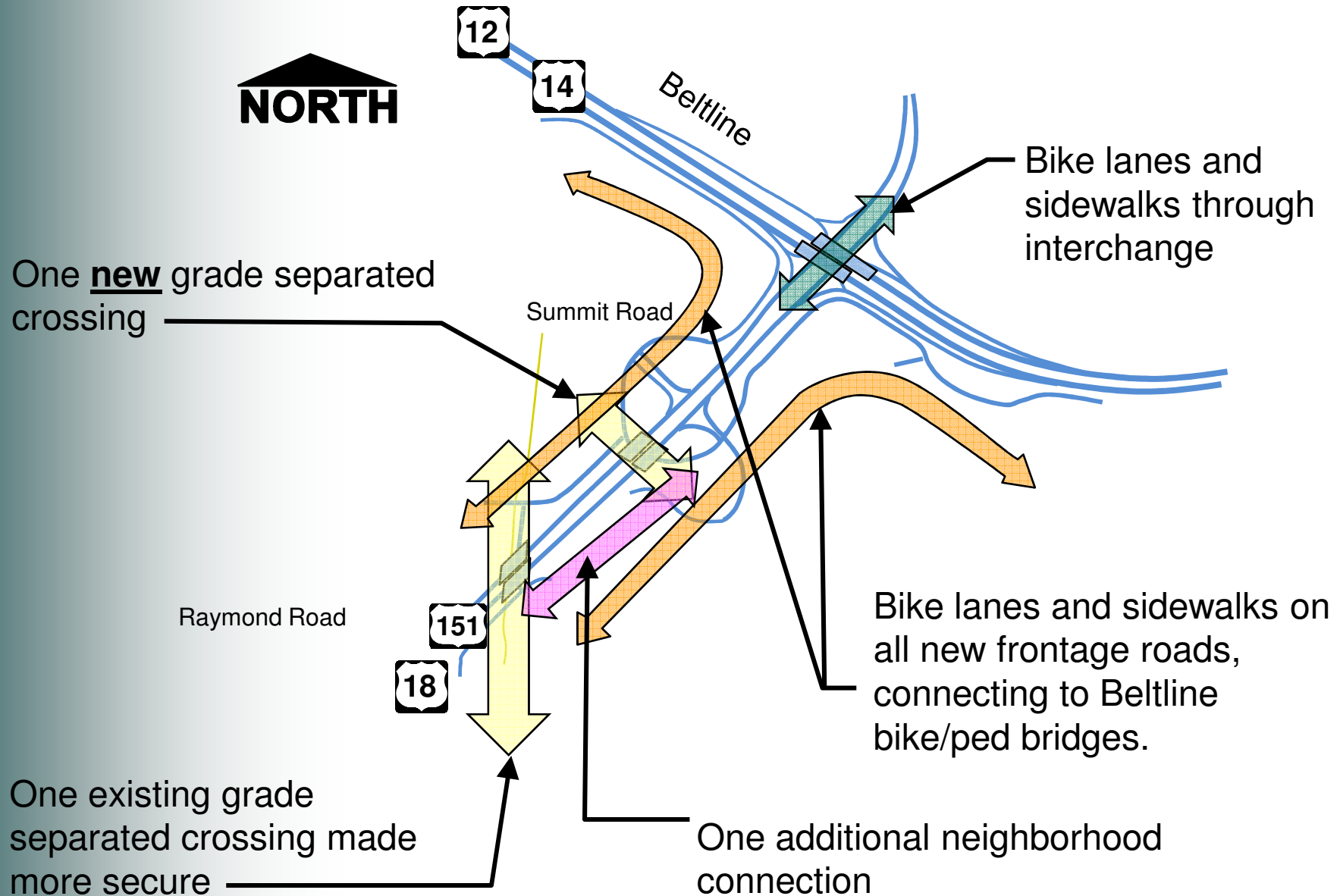
Extend Bike Lanes on all frontage roads to connect to Beltline and Verona Rd grade separated crossings.

Well lit bicycle and pedestrian crossings under Verona Road, separated from roadways.

New connection between Nakoma Heights and Allied Drive



Bike and Pedestrian Improvements



Raymond Road and Williamsburg Way

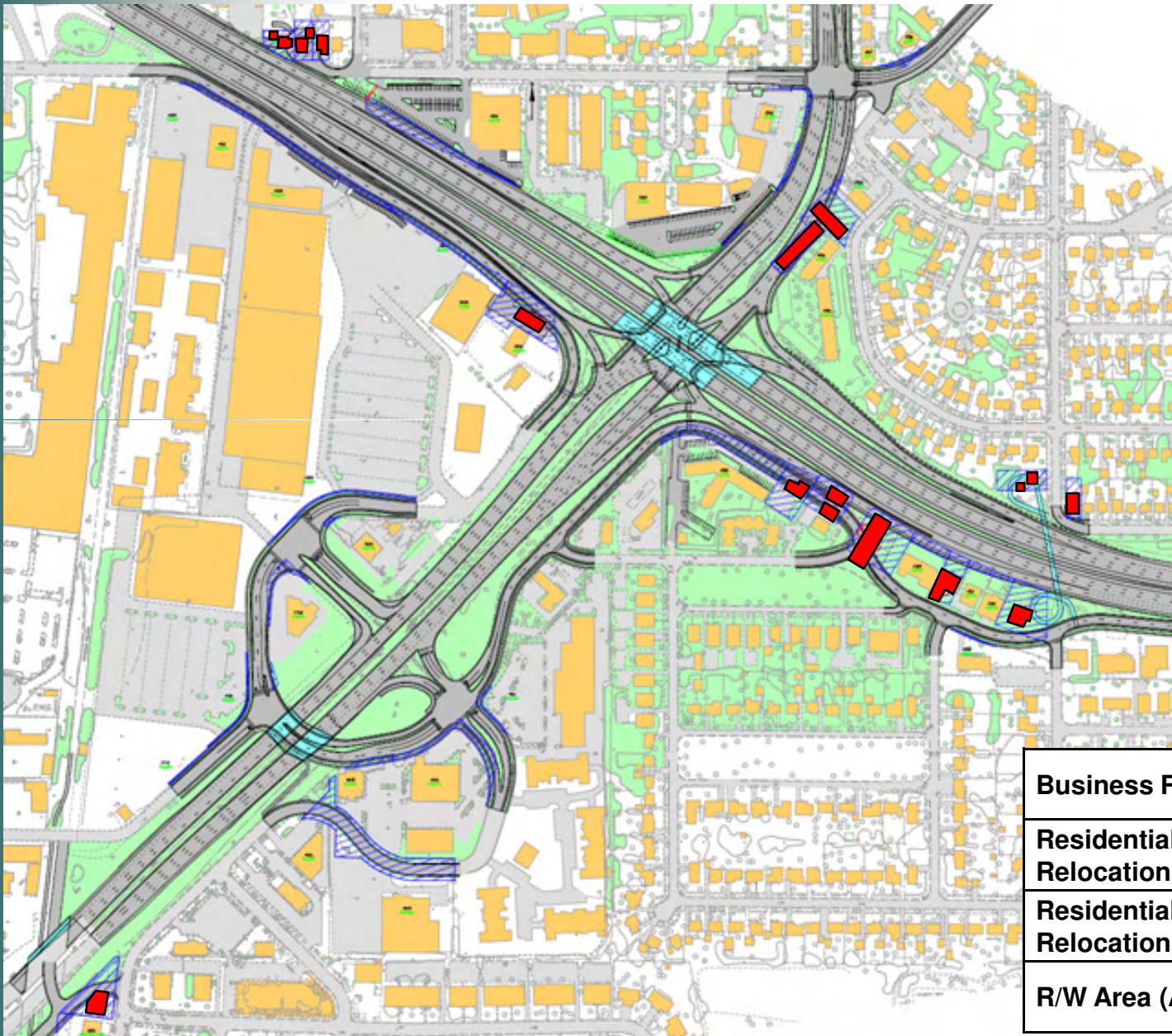
Raymond Road

- Remain a signalized intersection.
- US 151 southbound right-turn lane will be lengthened.

Williamsburg Way

- Remain a signalized intersection.
- Capacity expansion in Stage 2.

Stage 1 Relocations & Right of Way



Owner outreach conducted over past year

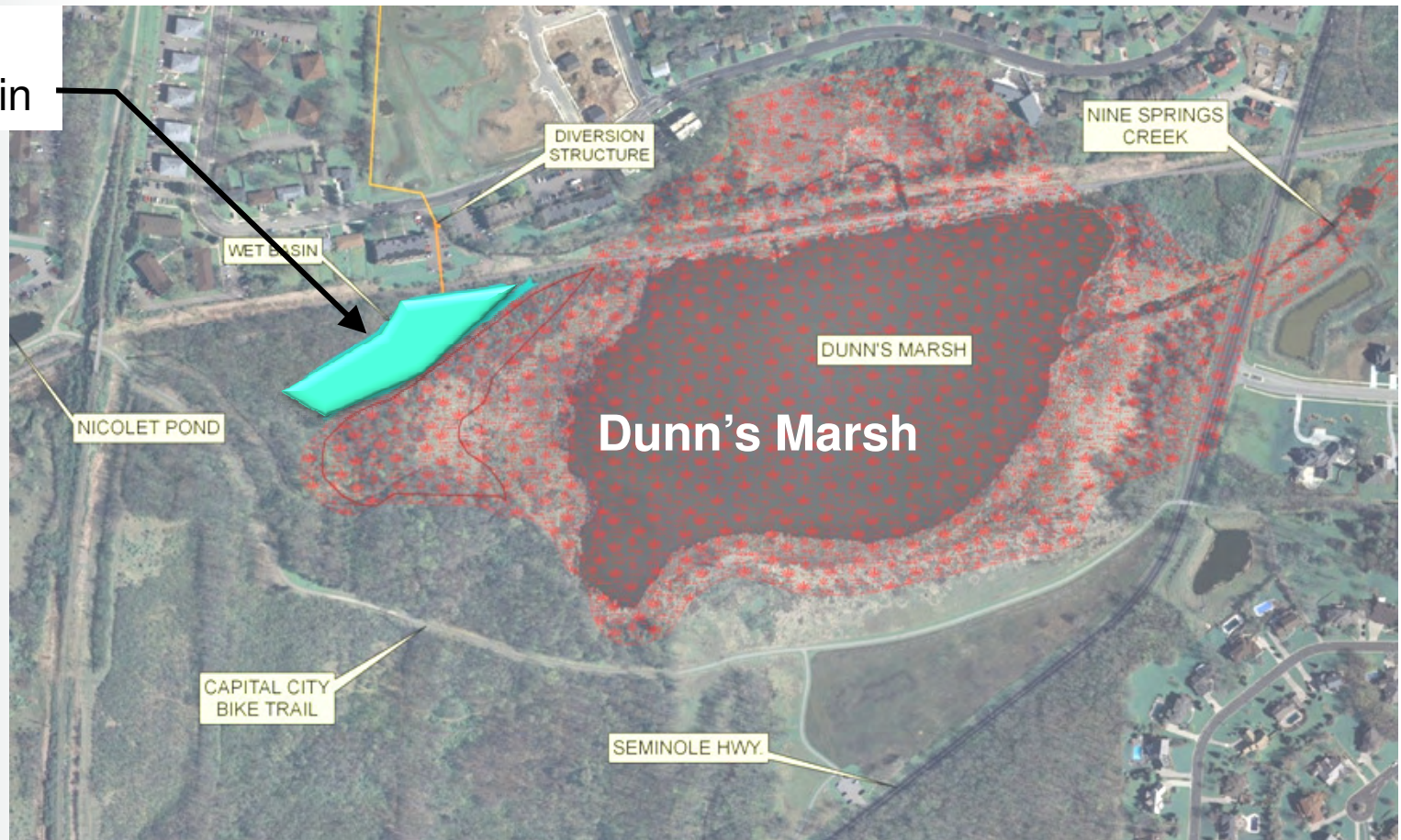
- Ensure relocatees understand process, have maximum time to prepare for moves.
- Refine roadway design to reduce impacts to property, especially parking to the extent possible
- Develop staging plans that best address access needs during construction

| | |
|-----------------------------------------|------------|
| Business Relocations | 5 |
| Residential Building Relocations | 9 |
| Residential Unit Relocations | 31 |
| R/W Area (Acres) | 6.4 |

Stormwater Management

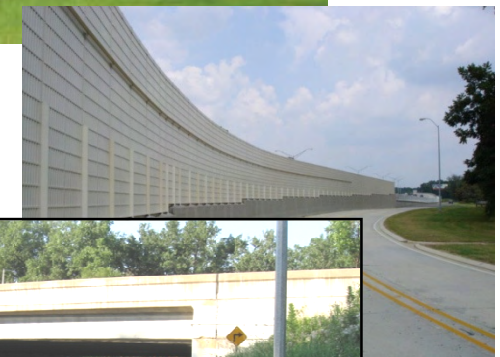
Coordinating with municipalities on improving water quality, focusing on reduction of suspended solids.

Possible Pre-treatment Basin



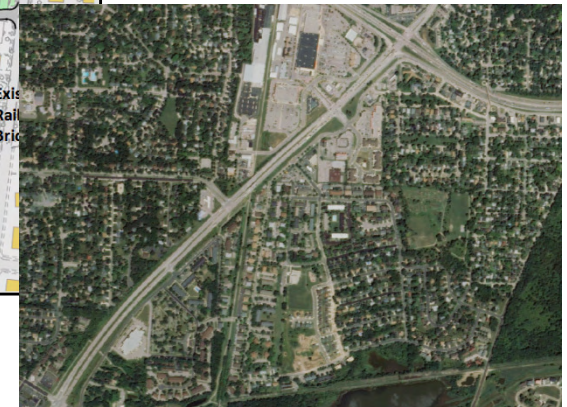
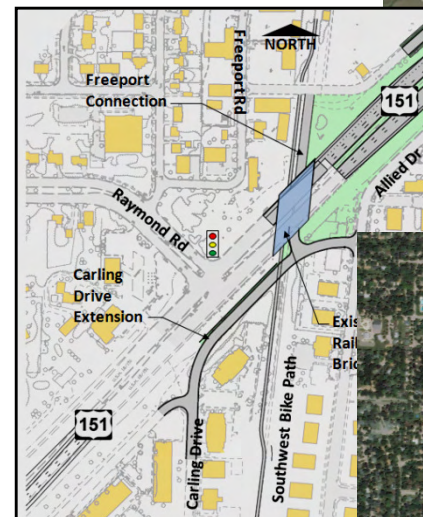
Community Sensitive Design/Solutions (CSD/CSS)

- Creating public works projects that function safely and efficiently, are aesthetically pleasing to the users and neighboring communities and stand the test of time.
- Collaborative effort between WisDOT and project stakeholders (ie: abutting neighborhoods and businesses, local government, facility users, etc)
- Construction includes budget for visually enhancing features such as landscaping, form lined or colored sidewalks, walls and bridges and fencing.



Environmental Justice and Outreach

- Focused outreach efforts seek to inform and obtain input on project improvements from Allied/Dunn's Marsh residents and neighborhood leaders
- Improvement features designed to minimize property impacts, especially to key neighborhood businesses
- Better/safer neighborhood access to/from and across Verona Road is a key study purpose



Staging Challenges, Local Streets Effects

- Access to abutting street system and properties to be maintained at all times
- Two through lanes in all four mainline directions provided except at night
- Spot improvements to local alternate routes to be investigated
- Multiple Stages over 2 ½ to 3 year construction time table being analyzed and developed

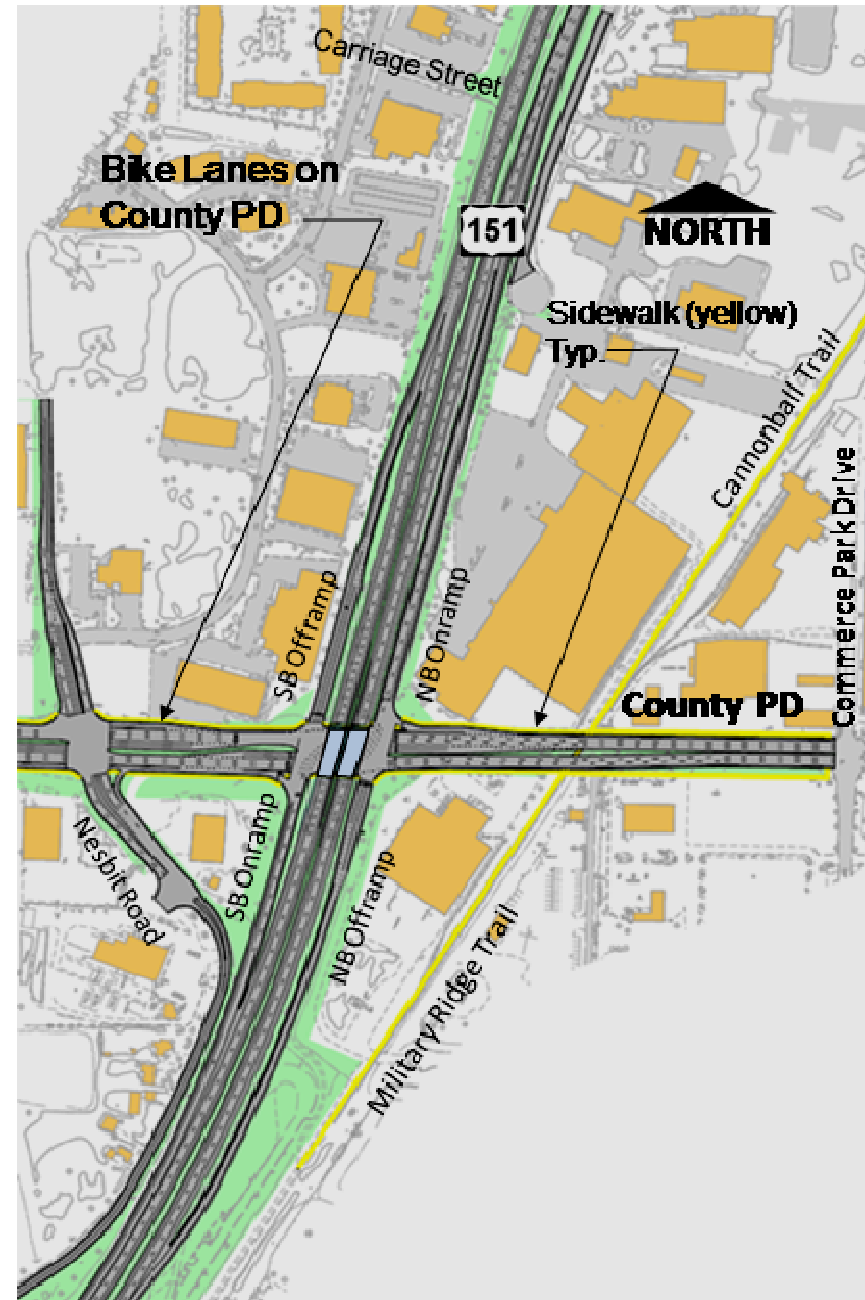


Stage 2

Construction for Stage 2 is anticipated to begin in 2017 or later. Not currently funded in any WisDOT highway program. Estimate to be included in FEIS.

County PD Interchange

- Converted to a diamond interchange.
- US 151 will travel over County PD.
- Access Road dropped from Stage 2. WisDOT and/or Fitchburg may reevaluate with Stage 3 based on future conditions.



Third Lane Extended

- Third lane on Verona Road extended south from Raymond Rd to through CTH PD interchange.
 - Will improve capacity of the Williamsburg Way signalized intersection.
- Carriage Way access to Verona Road eliminated.



Stage 2 Noise Barrier



- Noise mitigation is reasonable and feasible in Chalet Gardens neighborhood during Stage 2.
- Will need support from affected residents and municipalities.

Stage 2 Ped/Bike Improvements



Bike lanes and sidewalks on north and south sides of County PD through interchange.

Military Ridge Trail Shifted slightly to the east.

Cannonball Trail joined with Military Ridges and crosses County PD with mid-block crossing. Grade separated crossing to be investigated once Cannonball Trail opens.

Possible Stormwater Management



Possibly
enlarge/deepen
retention area
(WisDOT owned)

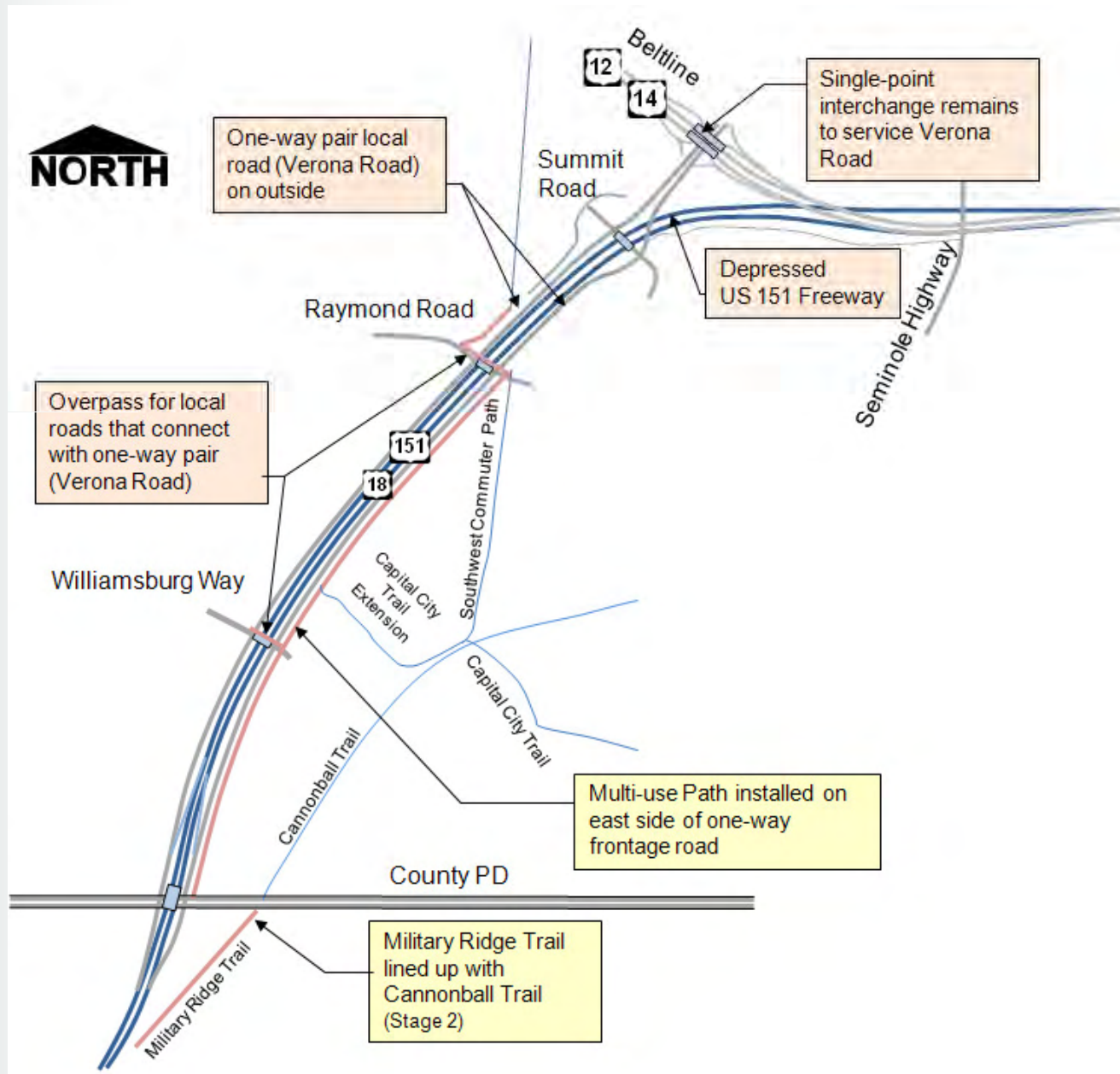
Possibly enlarge
detention area
(Fitchburg owned)

Stage 3

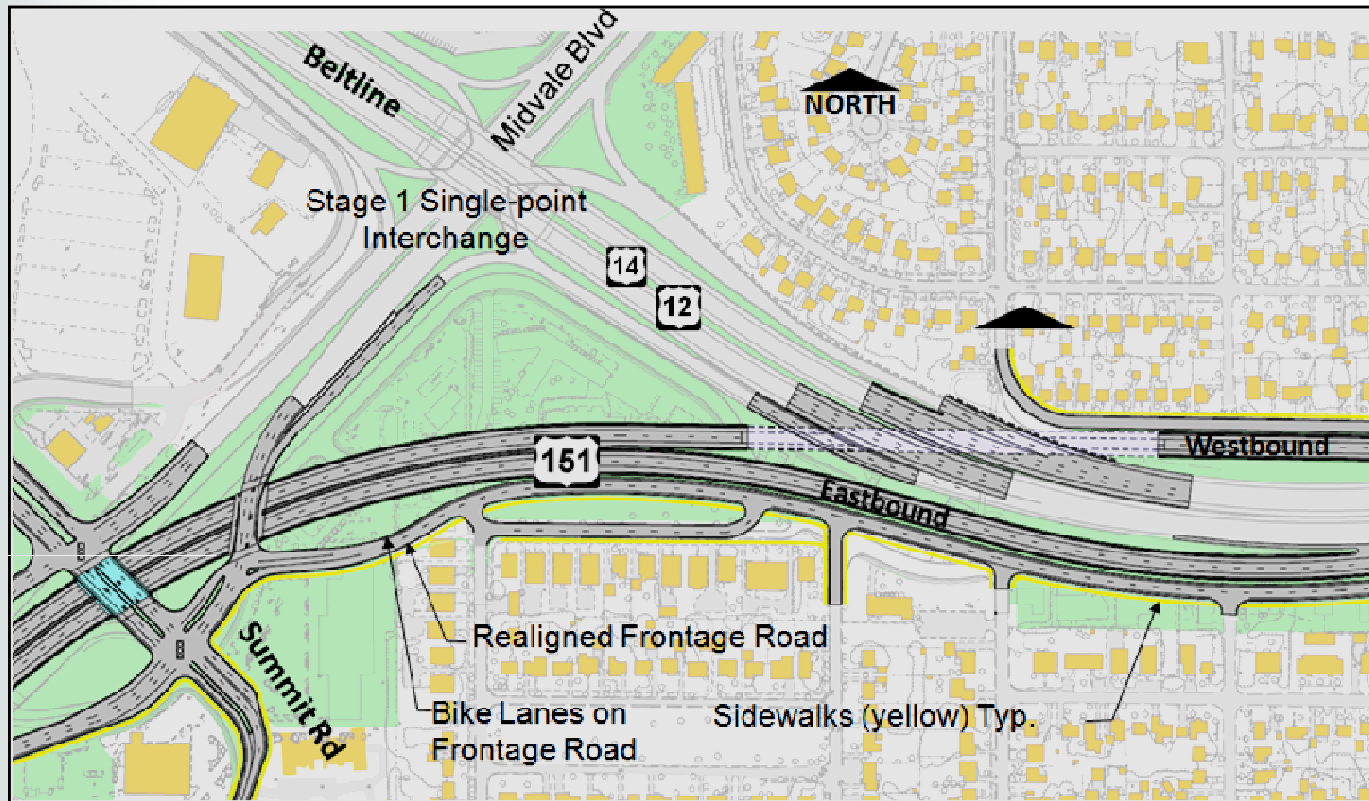
Stage 3 represents long term improvements for predicted future operational and safety needs.

It is not predicted to be needed before 2030 and must be reevaluated under the NEPA Process based on future conditions before final approval to ensure it is still the best solution. Not currently funded in any WisDOT highway program.

Stage 3 Elements



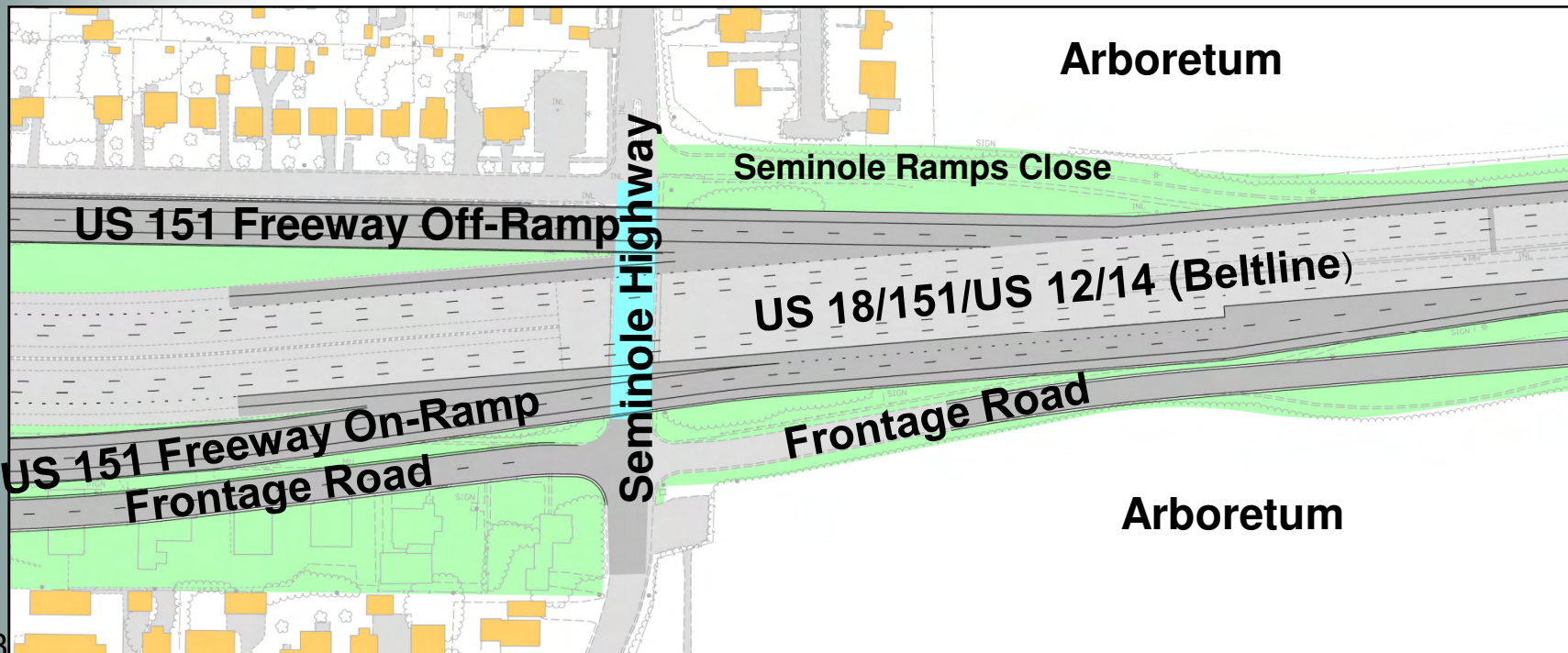
Conversion to Freeway



- Freeway lanes constructed in middle of current Verona Rd right of way. Eliminates all traffic signals for backbone through traffic.
- Free flow ramps for US 151 backbone traffic to/from Beltline added

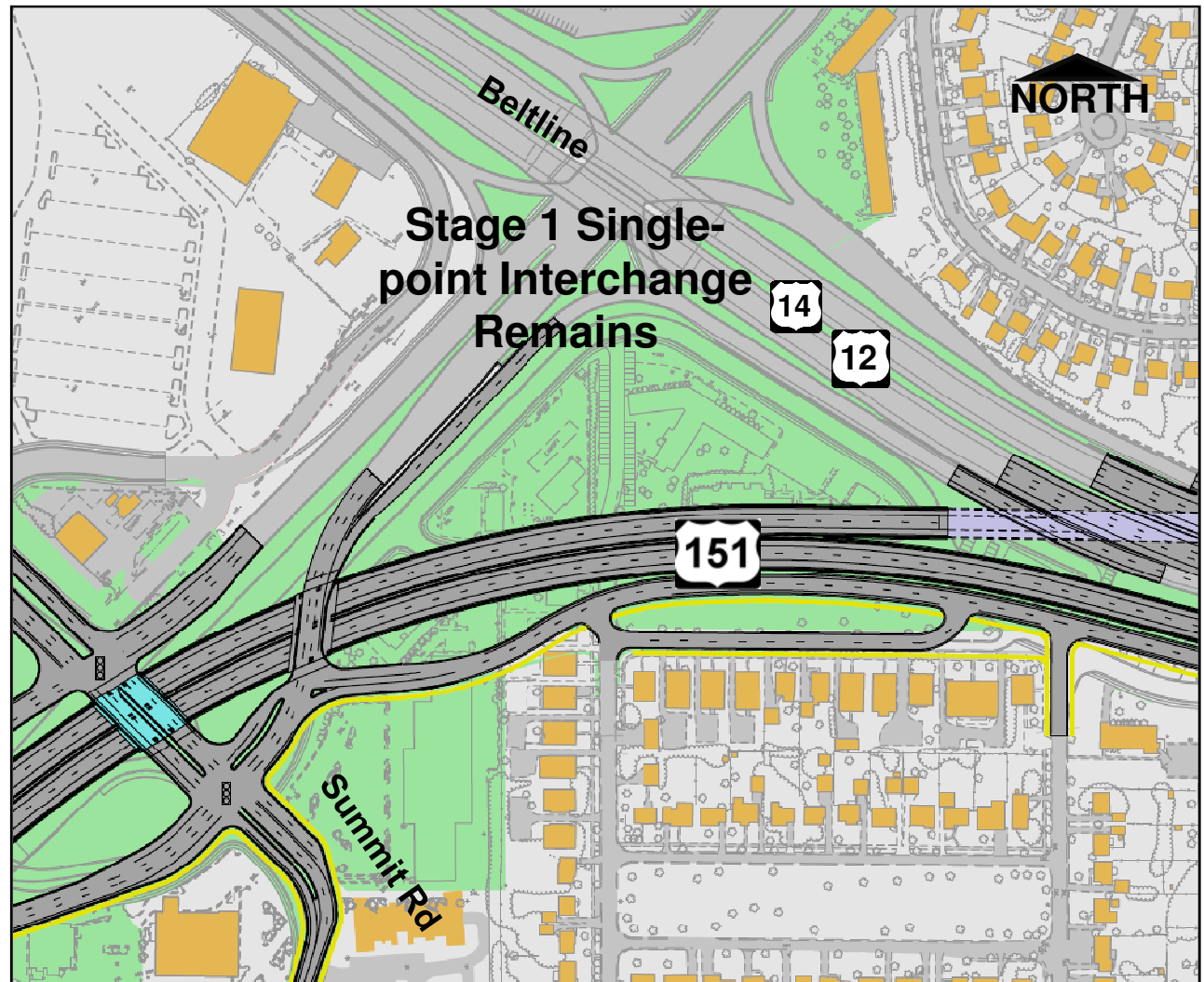
Seminole Highway Interchange

- US 12/14 interchange ramps at Seminole Highway removed.
 - Removing ramps will improve merge from free flow ramp to Beltline.
 - Distance between the Verona Road interchange and the Seminole interchange is half of the one-mile minimum interchange spacing required for safe and efficient traffic flow.
- Seminole highway will continue as a grade-separated crossing but bridge will be replaced to improve operations on and clearance below.



Verona Road/Midvale Boulevard Single Point Interchange Remains

- The SPUI built with Stage 1 will remain.
- Serves Verona Road/Midvale Boulevard movements to and from the Beltline.
- Serves West Beltline traffic to and from Verona Road.



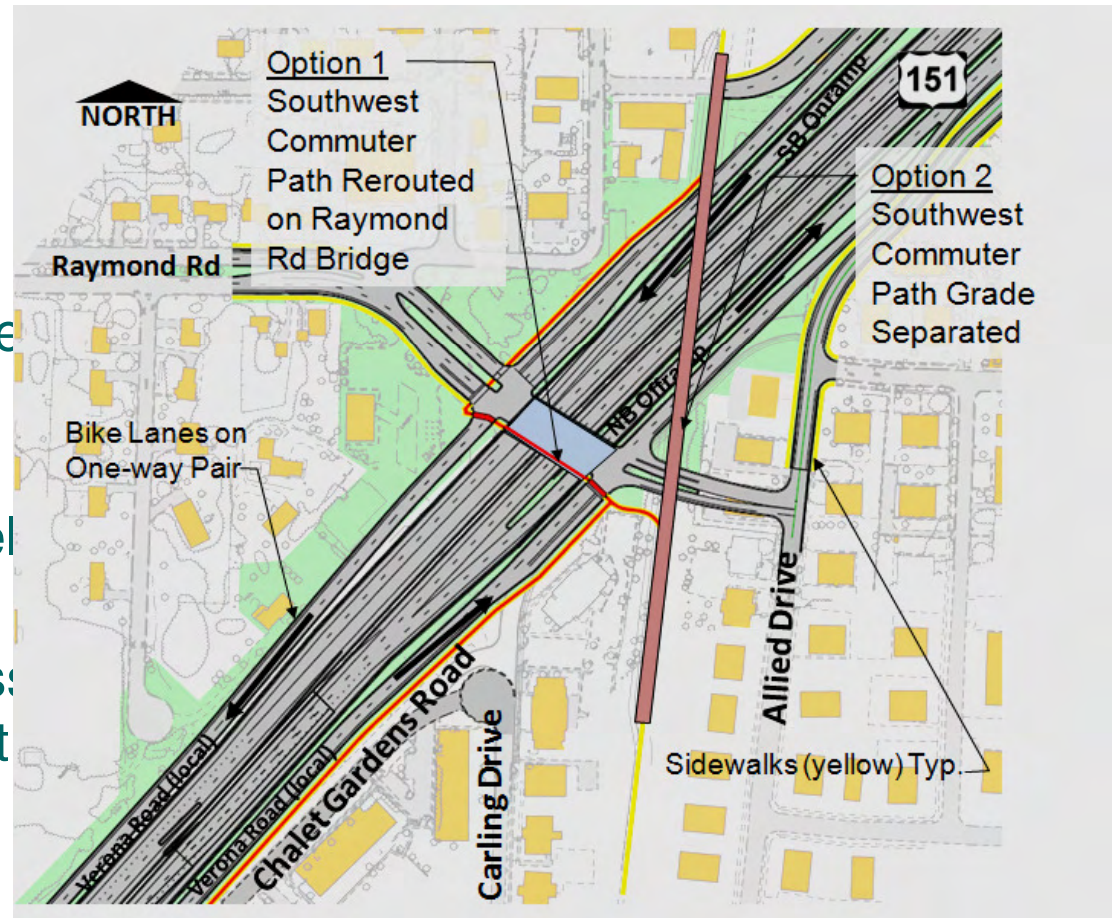
Summit Intersection

- Reconstructed as a grade-separated crossing over the US 151 freeway.
- Intersects with the one-way pair of roadways that parallel the center freeway lanes.
- Northbound ramp from freeway to one-way and Southbound ramp from one-way to freeway will be located south of the Summit crossing.

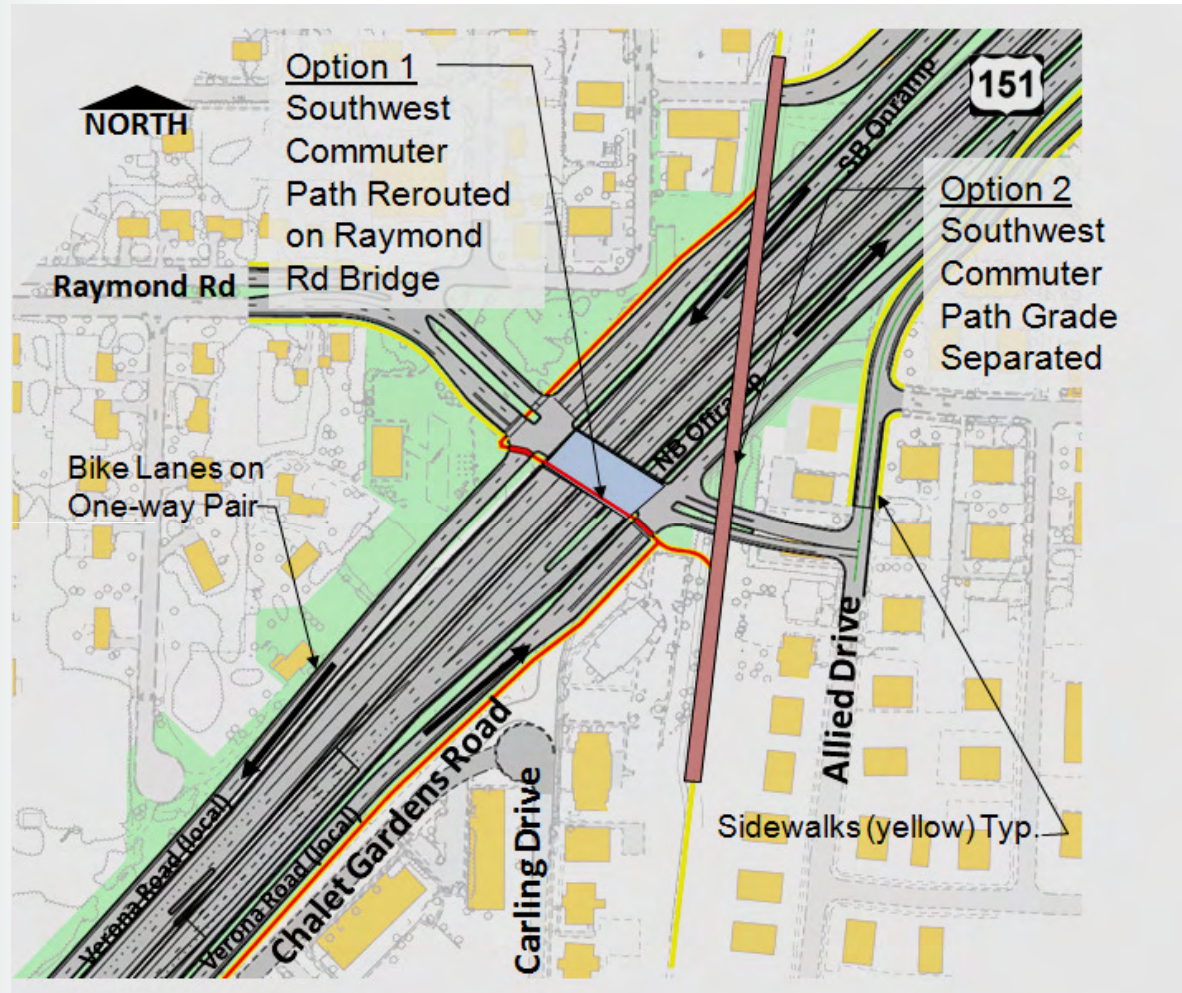


Raymond Road Intersection and Extension

- Reconstructed as a grade-separated crossing over the US 151 freeway. Extended east over US 151 into Allied neighborhood. Exact configuration to best fit future look of neighborhood.
- Intersects with the one-way pair of roadways that parallel the center freeway lanes.
- Chalet Gardens Road access to US 151 will be closed, but connecting to extended Raymond Road will improve mobility.



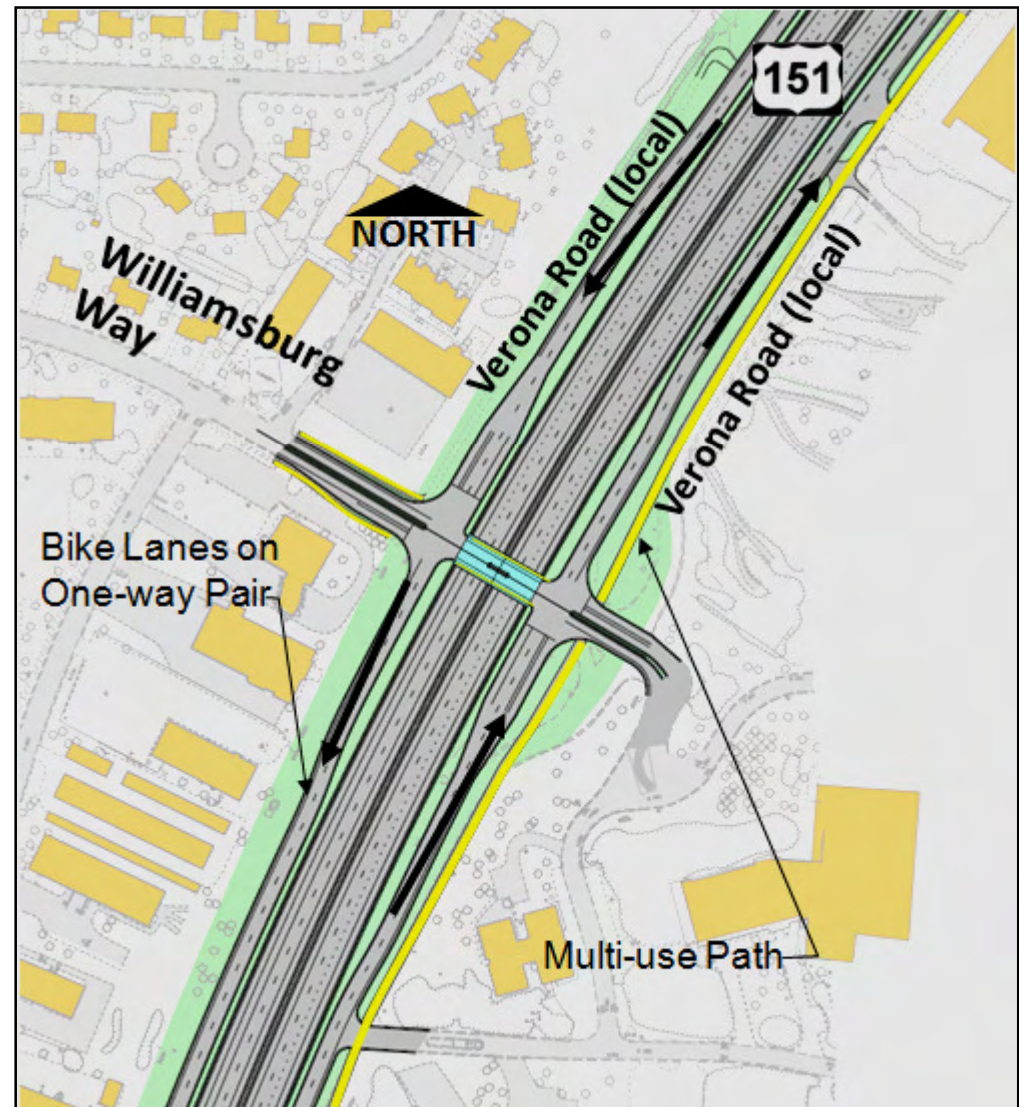
Southwest Commuter Path



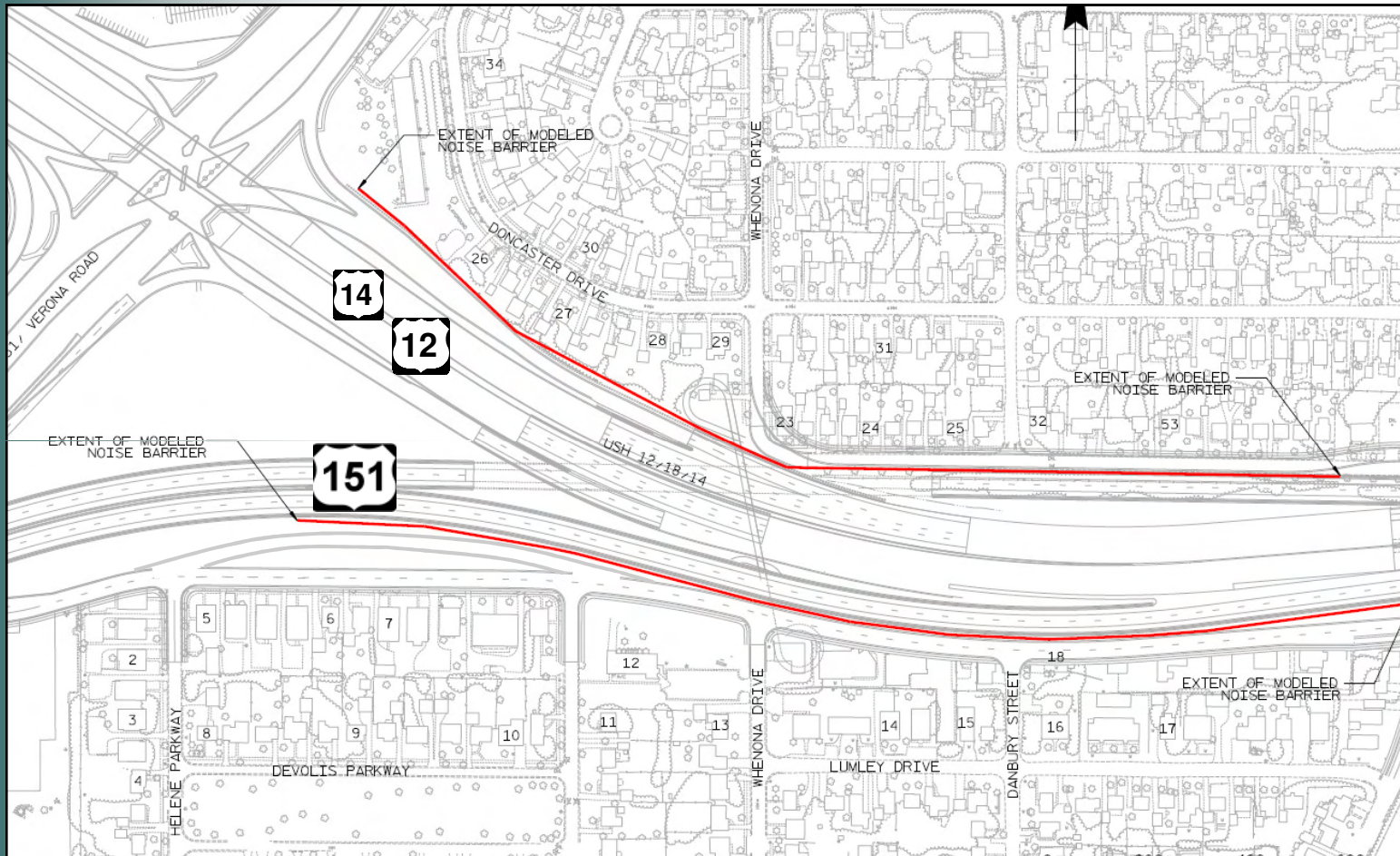
WisDOT acknowledges the higher cost of a grade separated crossing may be warranted because of the projected traffic volumes and path continuity

Williamsburg Way

- Reconstructed as a grade-separated crossing over the US 151 freeway.
- Intersects with the one-way pair of roadways that parallel the center freeway lanes.
- Williamsburg Way will not have direct access to the US 151 depressed freeway.

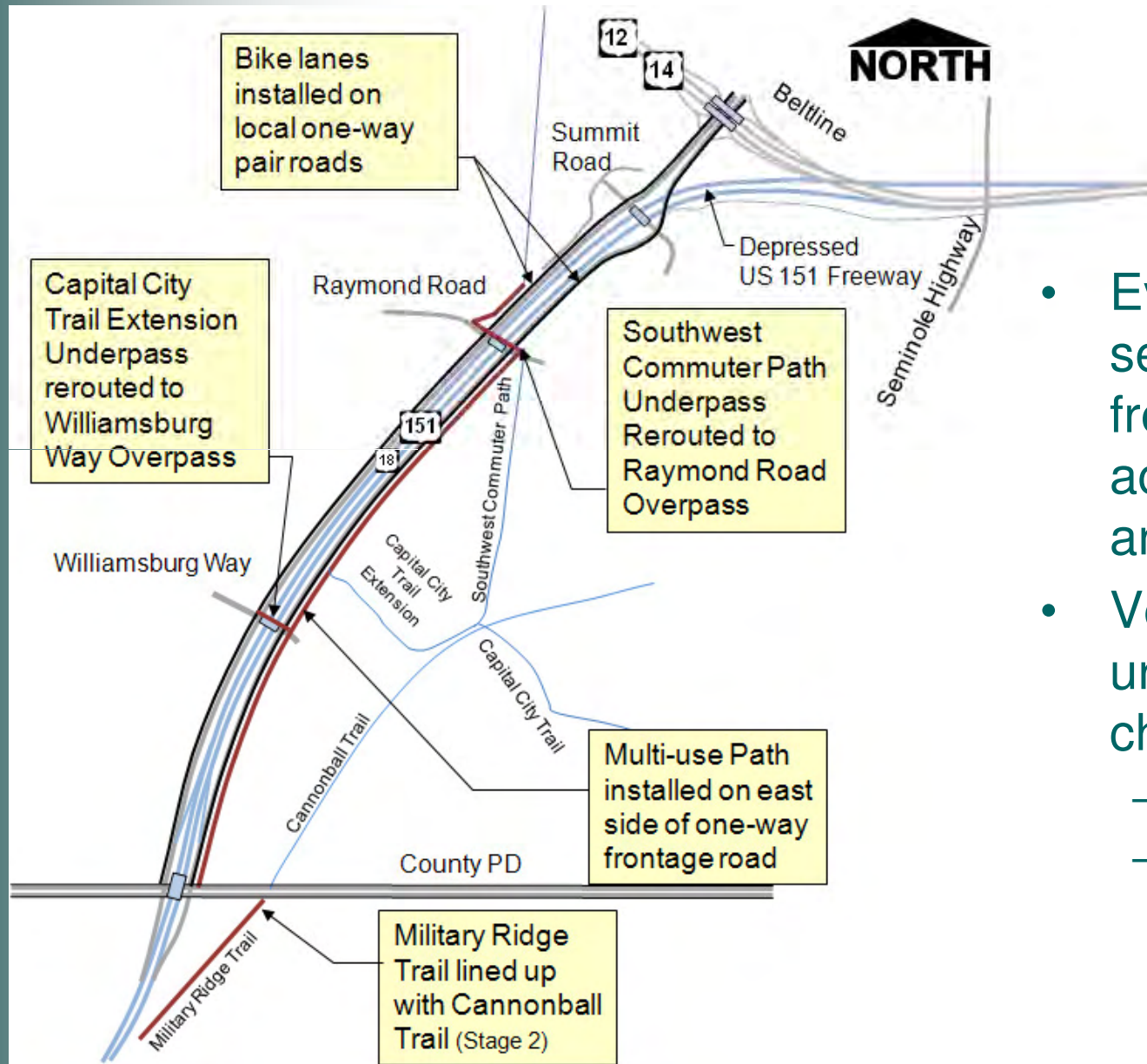


Stage 3 – Noise Barriers



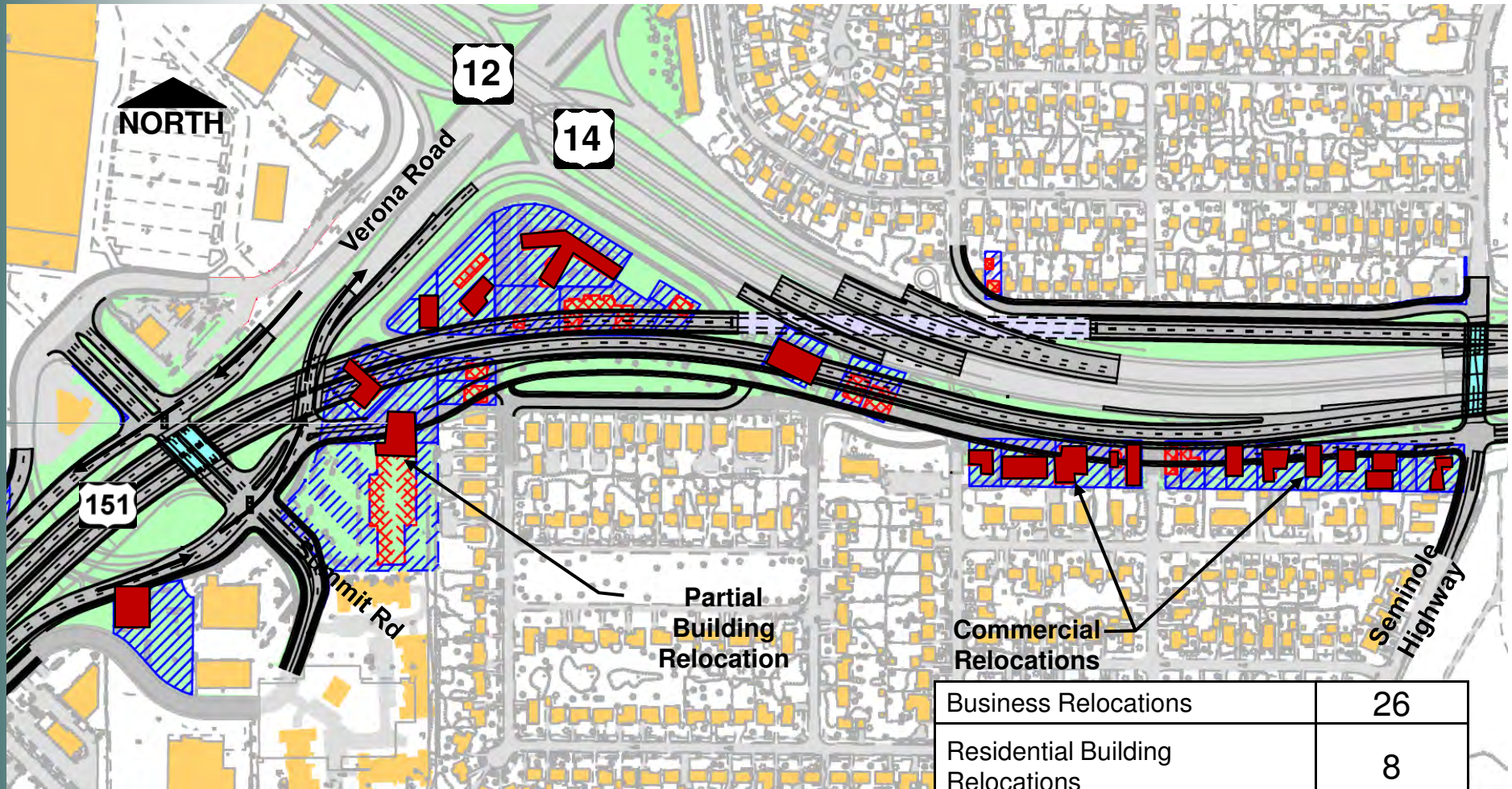
- Depressed US 151 freeway also helps to reduce noise levels from Williamsburg Way to Beltline.

Bike/Ped Facilities in Stage 3



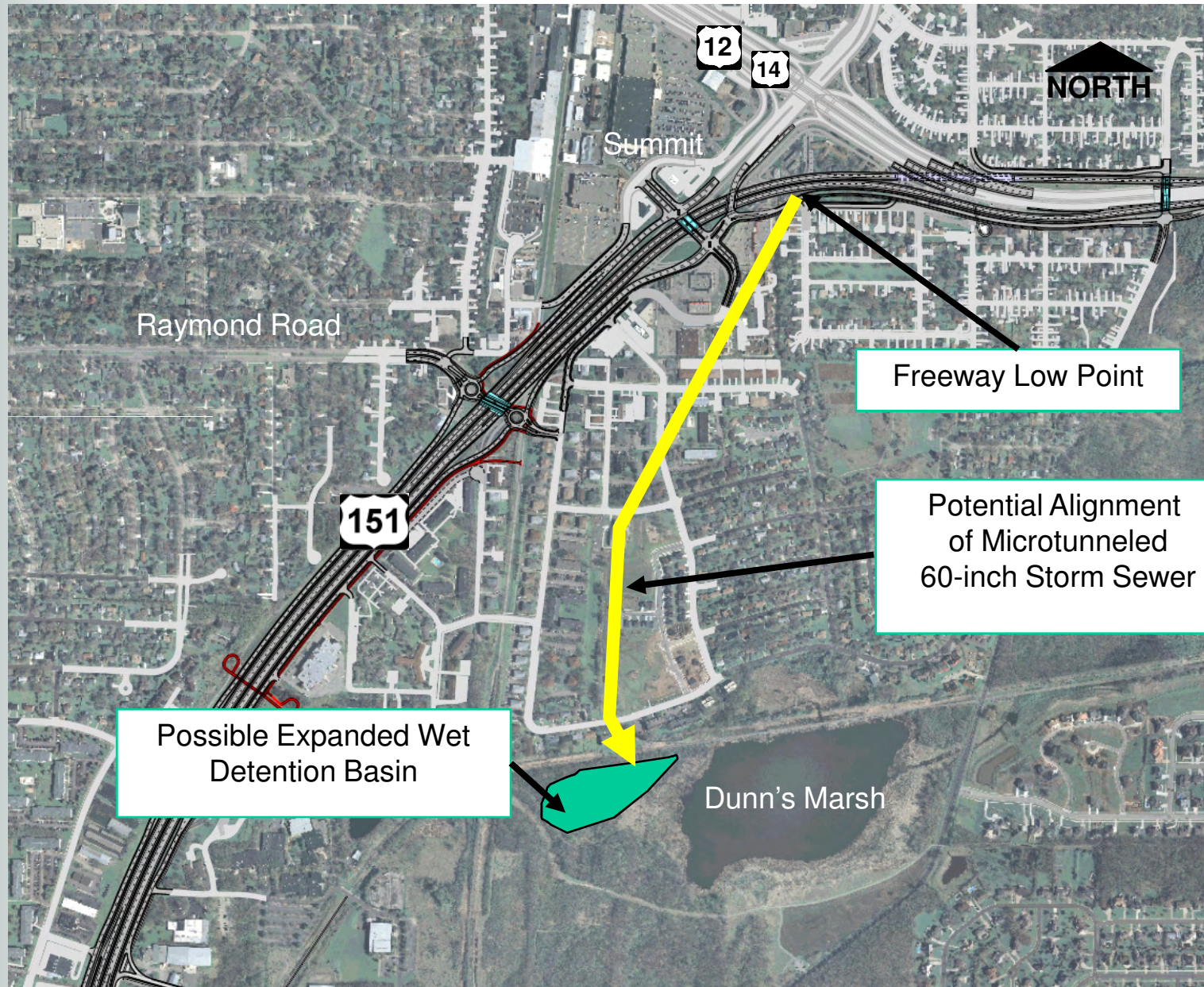
- Every side road is grade separated from US 151 freeway and accommodates bicycle and ped traffic.
- Verona Road takes on urban roadway characteristics
 - Bike lanes included
 - Bike path on east side

Stage 3 Relocations / Right-of-way



R/W to be mapped to keep future r/w costs from escalating until Stage 3 is needed

Possible Stormwater



3. Project Schedule

Remaining Schedule

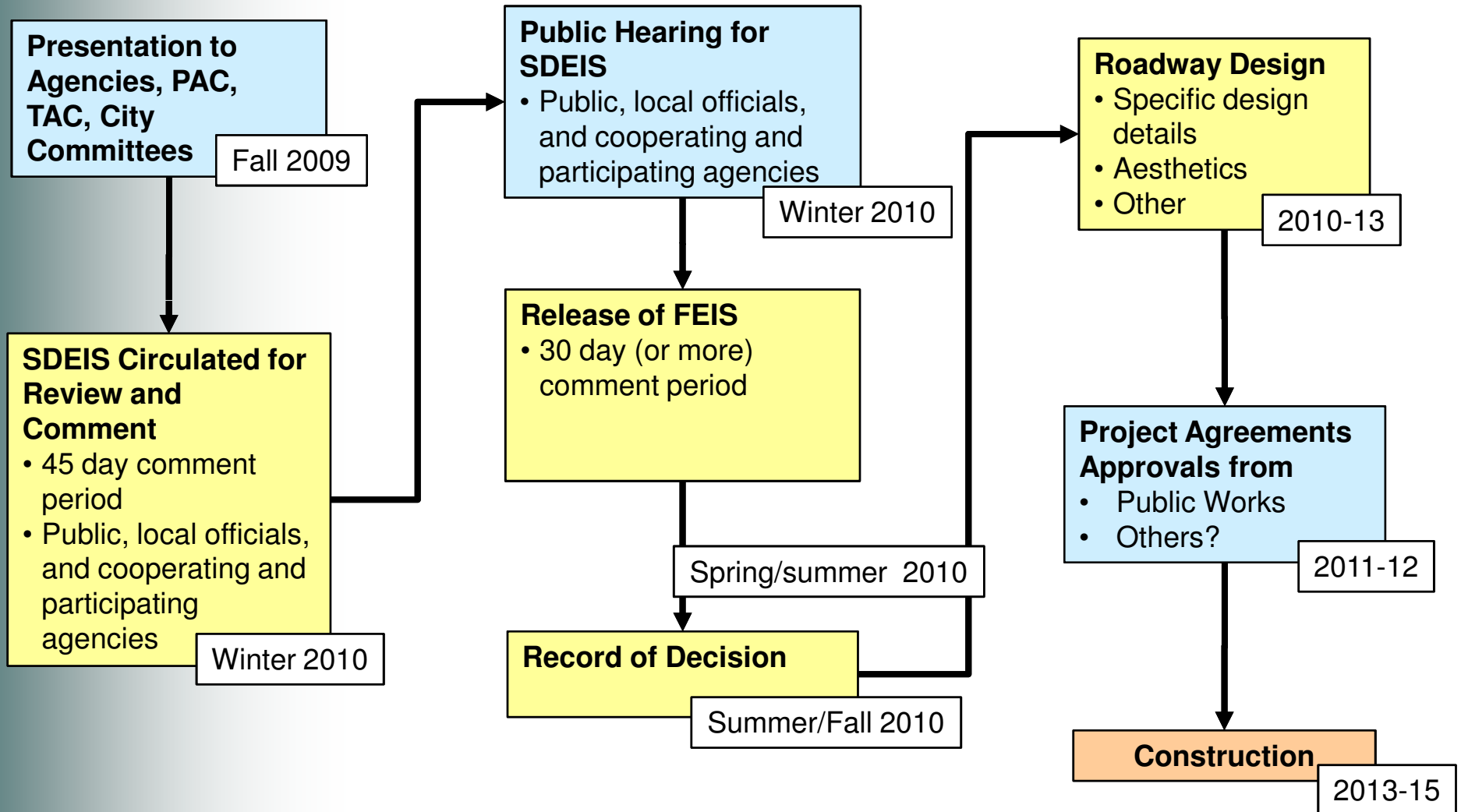
| Time Period | Type of work/activity |
|--------------------|---------------------------------------------------------------------------|
| 2007 - 2009 | Additional alternatives analysis Committee, public and agency meetings |
| 2009 | Selection of preferred alternative |
| 2009 | Supplemental Draft Environmental Impact Statement (SDEIS) |
| 2010 | Public Hearing Final Environmental Impact Statement (FEIS) |
| 2010 - 2013 | Design of Stage 1 |
| 2011 - 2013 | Right-of-way acquisition for Stage 1 Mapping of Stage 3 |
| 2013-2015 | Construction of Stage 1 |

4. Public Hearing

Public Hearing

- Anticipated for February or March 2010, 30 days from first legal notice of public hearing in official newspaper for project area, 15 calendar days from notice of SDEIS in Federal Register.
- SDEIS will be circulated to City and all other involved agencies at least 15 calendar days before the Public Hearing.
- Public Hearing will provide comments on purpose and need, recommended alternatives, and anticipated impacts.

Review and Comment Opportunities



US 18/151 (Verona Road)

Project ID 1206-07-03

City of Madison

Plan Commission

December 14, 2009