

North Fish Hatchery Road Traffic Conditions Summary

Corridor Characteristics:

- Principal Arterial (regional traffic route)
- Reliever route for Verona Road and US Highway 14
- One of only three Beltline Crossings between USH 14 and Verona Road
- Urbanized corridor with 4 traffic signals that operate with high delays during peak hours.
- 2 additional traffic signals may be installed along the corridor (total of 6 signalized intersections) in conjunction with new developments.

Traffic Volumes:

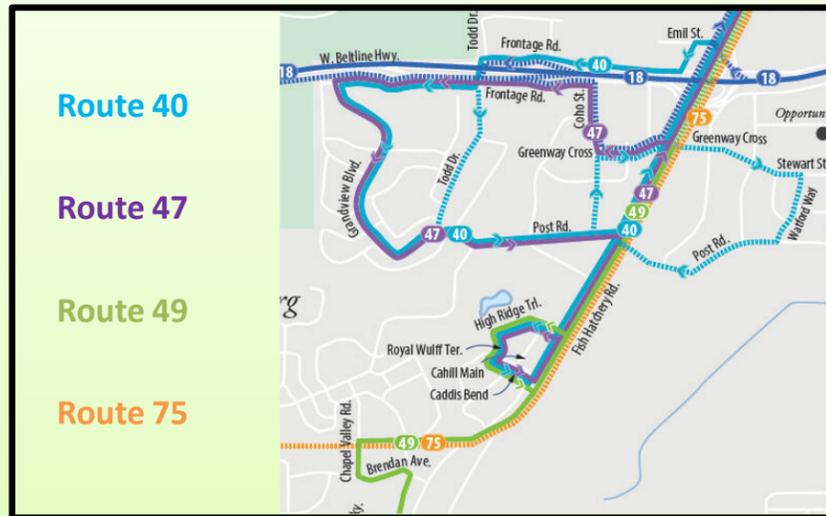
- Currently serves between 33,700 to 38,500 vehicles per day (increases from south to north)
- The Greenway Cross intersection serves almost 5,000 vehicles during the afternoon peak hour
- Infill development is anticipated to increase traffic volumes along the corridor by 8,000 – 12,000 vehicles per day

Safety and Crashes:

- 439 crashes reported along the corridor in 5 years (2013 – 2017)
- Majority of crashes intersection related
- Highest crash rates at the Greenway Cross and Post Road intersections
- High rate of rear-end crashes at Caddis Bend intersection

Traffic Flow and Congestion:

- Major congestion at the Greenway Cross intersection. Northbound traffic flow is unbalanced due to single lane EB Beltline Ramp entry (expansion would require WisDOT approval)
- High levels of congestion between Greenway Cross and Post Road
- Major congestion at the CTH PD intersection, especially on the west leg of McKee Road
- Moderate congestion at other intersections: Caddis Bend and Post Road



Metro Routes along Fish Hatchery Road (Weekday)

General Transit Facts:

- 11 Bus stop locations within the limits of the project (including 3 with shelter amenity)
- Nearly 1,600 weekly bus trips (1 trip = each time a bus passes by a stop along its route)
- Average weekday ridership = 160 passenger boardings per day within the limits of the project

Existing Conditions and Proposed Improvements

Fish Hatchery Road Current Configuration

- Existing curb lanes are restricted by enforcement for use by buses, right turns, and bikes (no thru vehicles)
- Northbound shared curb lane runs between High Ridge Trail to Greenway Cross (0.8 miles)
- Southbound shared curb lane runs between McKee Road to Greenway Cross (1.4 miles)
- Shared lanes do not continue north or south of the limits of the project (curb lane restrictions are removed and lane designations transition to include thru vehicles)

The Project Will Include the Following Transit Improvements:

- Review all bus stop locations for accessibility improvements & ADA compliance
- Evaluate improvements to traffic flow and stop locations
- Consider the impact of redevelopment and land use changes for new stop locations
- Upgrade stops when warranted with passenger amenities (shelters, benches, trash receptacles)
- Upgrade stops with bus pullouts when space is available (pullout = dedicated space for the bus to avoid stopping in the traveled way). Pullouts are a priority if the outside lane restrictions are removed.

Two Primary Alternatives are being Considered for the Roadway:

- Maintain the existing configuration → 4 travel lanes with restricted lanes (transit, right turns, and bikes)
- Remove the lane restriction → 6 travel lanes (buses would operate in a mixed thru traffic lane)

Impacts to Transit and Major Factors to Consider

Safety Concerns

- Buses may need to make stops in live traffic if the road is reconfigured to 6 travel lanes (3 in each direction)
- Buses would create full or partial lane blockage for vehicles and bikes if the transit lanes are eliminated (unless full width pullout is provided)
- Bus stops along the higher speed segment of the project (speed limit is 40mph near McKee Road)
- Accessibility and ADA-compliant stops for wheelchair loading

Operational Concerns

- Travel time reliability if the transit lanes are removed and buses are running with mixed traffic
- Bus stops need to be appropriately located to ensure efficient boarding and traffic flow
- Congestion resulting from buses stopping in live traffic lanes



Bus Rapid Transit (BRT for short)

Bus Rapid Transit – Prior Study

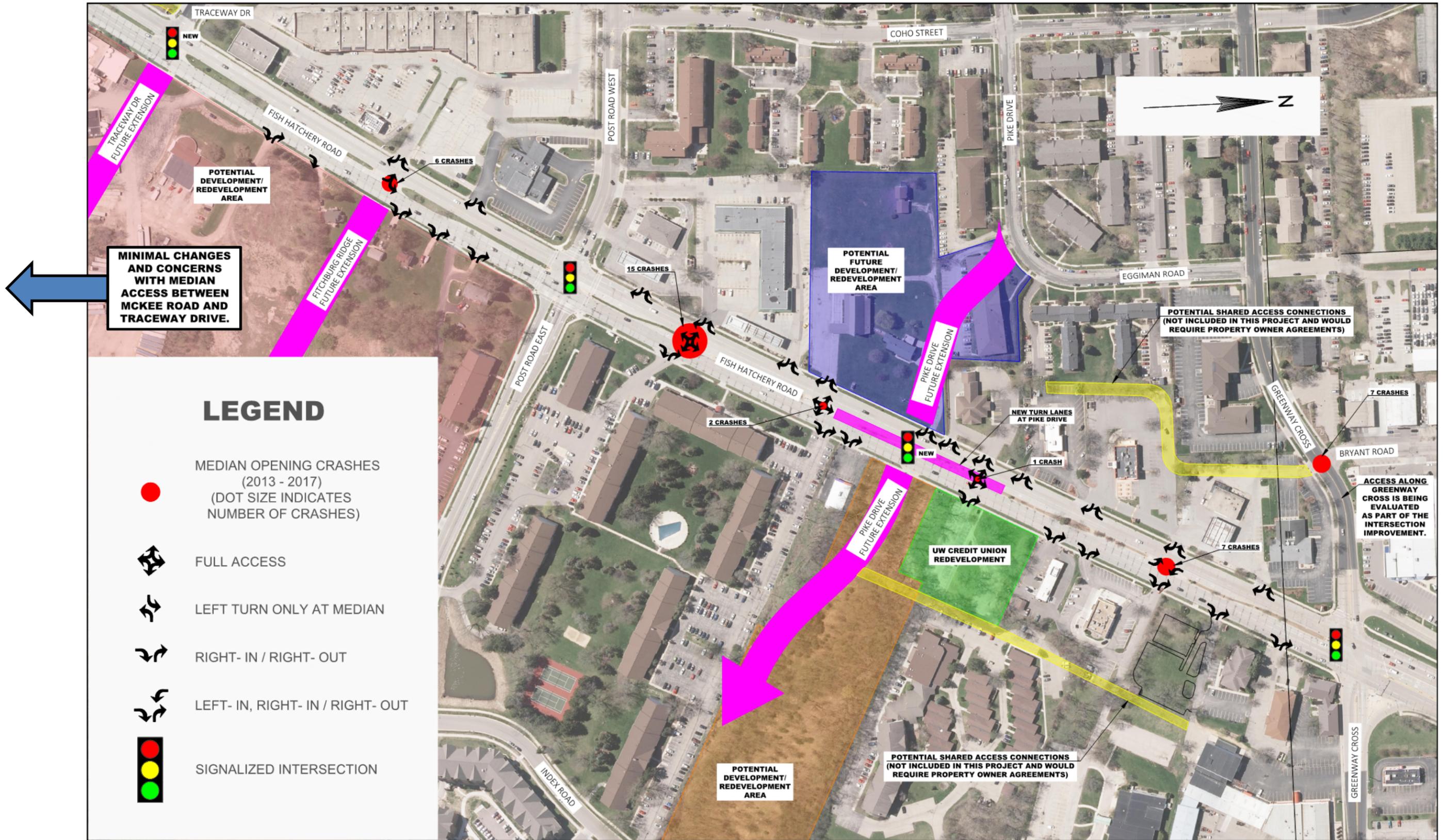
- BRT is a frequent, high-capacity, limited-stop transit service that offers improved rider experience on busy travel corridors.
- In 2013 the Madison Area Transportation Planning Board (MATB) completed a high-level study of implementing BRT in the Madison metro area
- The 2013 study identified Fish Hatchery Road as part of a potential “South Corridor”

Bus Rapid Transit – Current Status

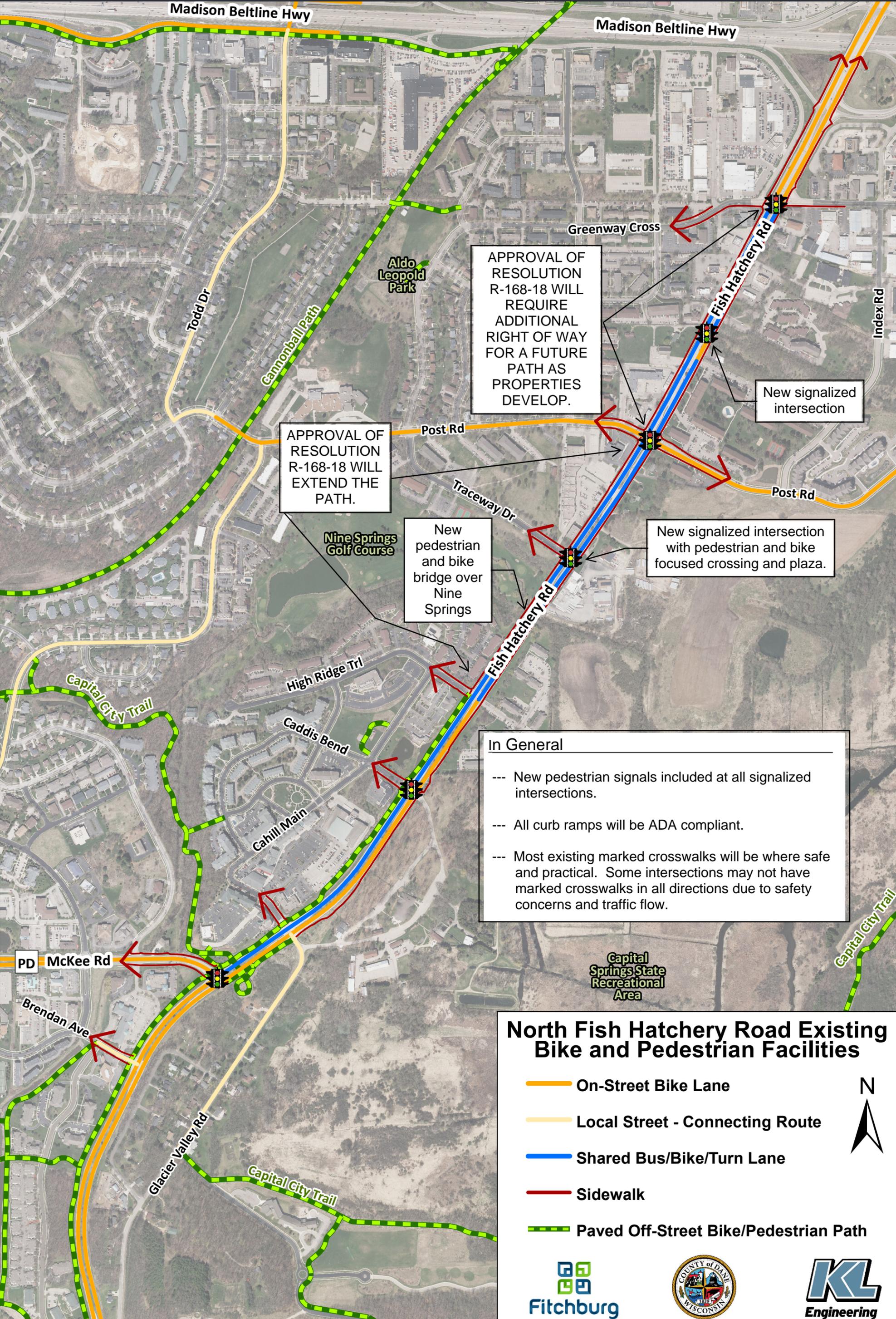
- In late 2018 the second phase of the BRT planning study was kicked off
- The current planning phase is prioritizing an “East-West” route (E Washington – University) for potential construction in ~5 years
- If implemented on the “South” segment (Fish Hatchery Road) BRT improvements could be 10+ years away

Future Conversion of Fish Hatchery Road to BRT

- All four alternatives currently under consideration for the reconstruction of Fish Hatchery Road would require a future reallocation of the roadway footprint to accommodate BRT
- Conversion to BRT in the future may require expansion of the roadway footprint to accommodate dedicated lanes and other transit features



North Fish Hatchery Road Bike and Pedestrian Facilities



APPROVAL OF RESOLUTION R-168-18 WILL REQUIRE ADDITIONAL RIGHT OF WAY FOR A FUTURE PATH AS PROPERTIES DEVELOP.

APPROVAL OF RESOLUTION R-168-18 WILL EXTEND THE PATH.

New pedestrian and bike bridge over Nine Springs

New signalized intersection with pedestrian and bike focused crossing and plaza.

In General

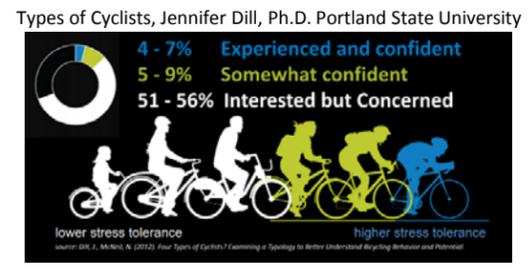
- New pedestrian signals included at all signalized intersections.
- All curb ramps will be ADA compliant.
- Most existing marked crosswalks will be where safe and practical. Some intersections may not have marked crosswalks in all directions due to safety concerns and traffic flow.

North Fish Hatchery Road Existing Bike and Pedestrian Facilities

- On-Street Bike Lane
- Local Street - Connecting Route
- Shared Bus/Bike/Turn Lane
- Sidewalk
- Paved Off-Street Bike/Pedestrian Path



Real Estate Limitations
 Wisconsin Act 59 established in 62.22 (1) (b) that "The governing body of any city may not use the power of condemnation for the purpose of establishing or extending a recreational trail; a bicycle way, as defined in s. 340.01 (5s); a bicycle lane, as defined in s. 340.01 (5e); or a pedestrian way, as defined in s. 346.02 (8) (a).
 What does this mean for the North Fish Hatchery Road project?
 ➤ Any land needed for a bike lane, path or sidewalk can only be acquired from willing sellers.



Process

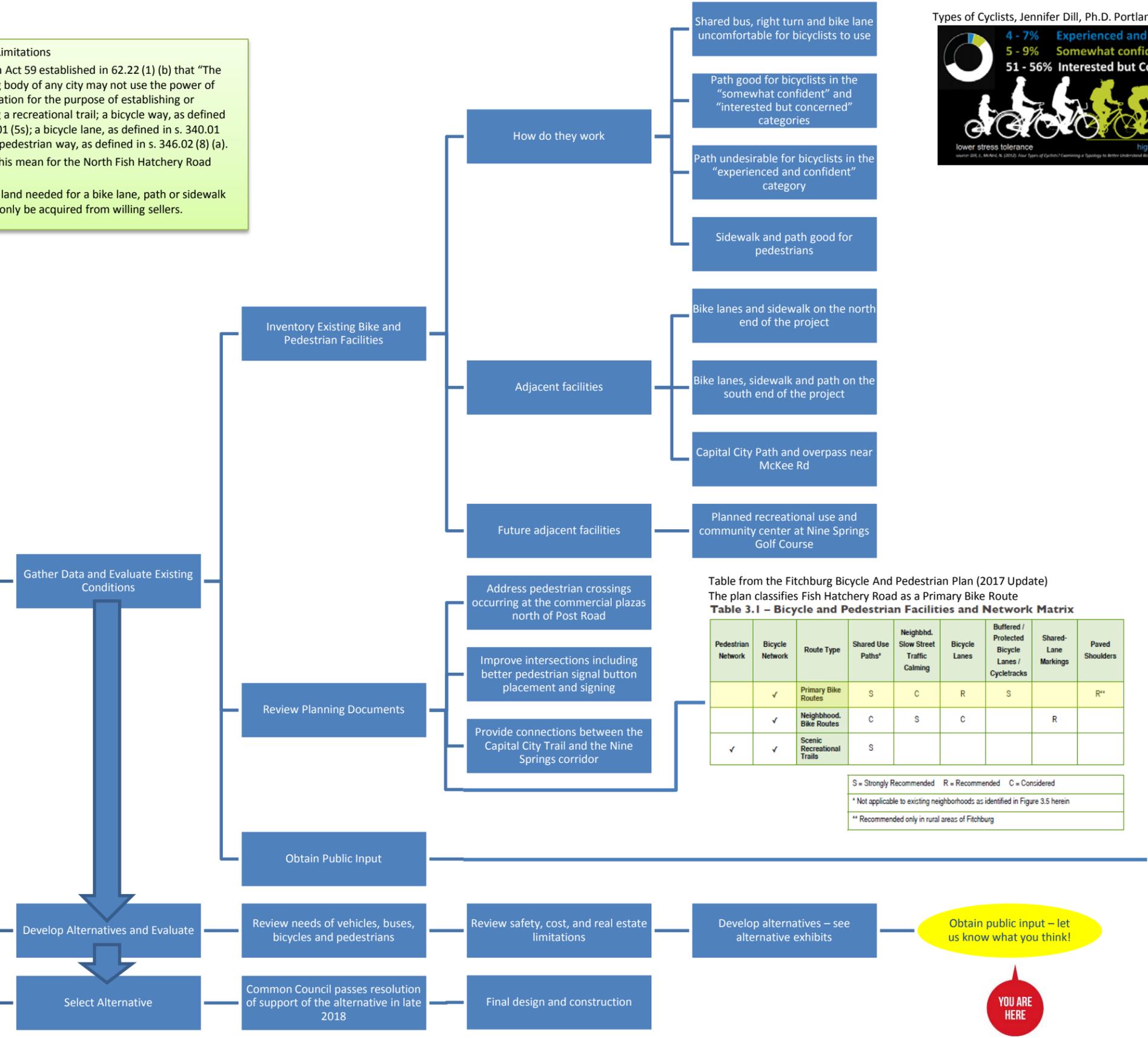


Table from the Fitchburg Bicycle And Pedestrian Plan (2017 Update)
 The plan classifies Fish Hatchery Road as a Primary Bike Route
Table 3.1 – Bicycle and Pedestrian Facilities and Network Matrix

Pedestrian Network	Bicycle Network	Route Type	Shared Use Paths*	Neighbhd. Slow Street Traffic Calming	Bicycle Lanes	Buffered / Protected Bicycle Lanes / Cycletracks	Shared-Lane Markings	Paved Shoulders
	✓	Primary Bike Routes	S	C	R	S		R**
	✓	Neighborhood Bike Routes	C	S	C		R	
✓	✓	Scenic Recreational Trails	S					

S = Strongly Recommended R = Recommended C = Considered
 * Not applicable to existing neighborhoods as identified in Figure 3.5 herein
 ** Recommended only in rural areas of Fitchburg

Comments on bike and pedestrian facilities from the August 22, 2018 public meeting are shown in black text.
 ✓ = number of additional times an item was mentioned
 Further details from the design team after evaluation of the comments are shown in blue italics.

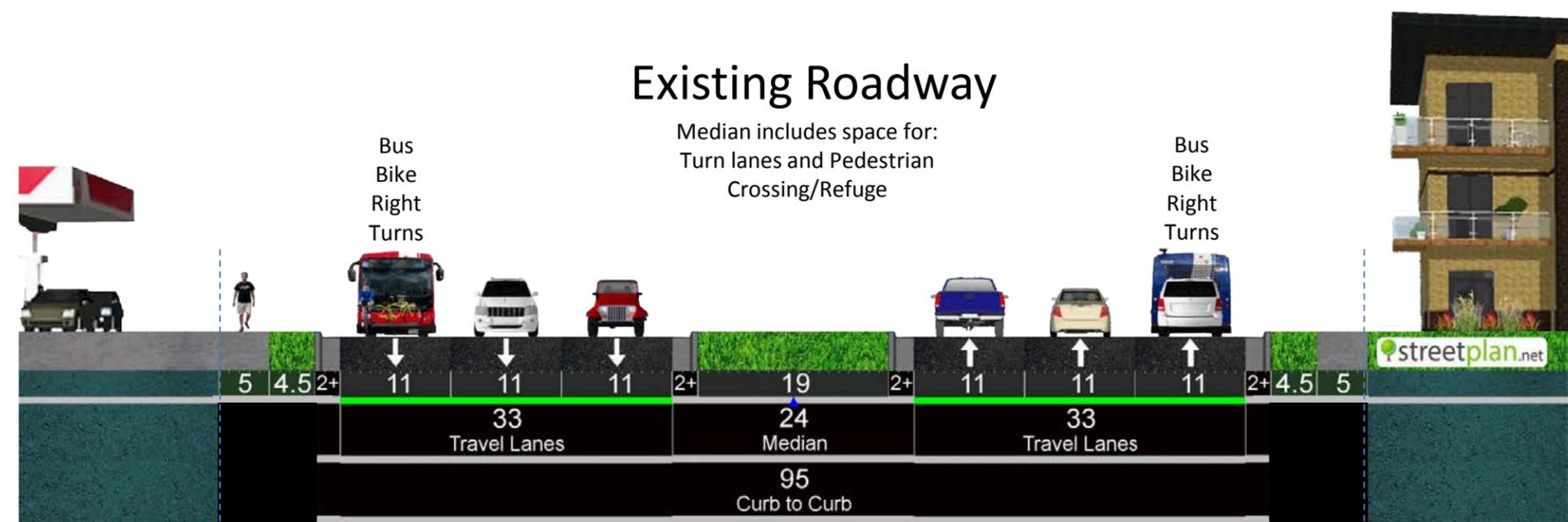
- Look into a mid-block crossing for the apartments to get to BP/Kelley's market. ✓
Mid-block crossings for high volume multi-lane roads like Fish Hatchery Road are generally not recommended.
- Improve the pedestrian crossing at Post Road, many kids walk from Valley View Apartments to Leopold Elementary.
This is planned with the project.
- Provide bicycle and pedestrian access under Fish Hatchery Road through the box culvert at Nine Springs Creek. ✓✓
The box culvert does not provide enough overhead clearance to allow this. Fish Hatchery Road would have to be raised 4' – 6' and the box culvert reconstructed to accommodate this. The box culvert is structurally in good shape.
- Please improve the pedestrian crossing at High Ridge Trail. ✓
Most existing marked crossings will be replaced. Marked crossings will be added at new locations where safe and practical. Some intersections may not have marked crossings in all 4 directions due to safety concerns and traffic flow. A new signalized intersection will be added at Traceway Dr. A pedestrian and bicycle focused crossing plaza will be included at this intersection.
- Consider a roundabout at McKee Road and Fish Hatchery Road intersection that would allow bikes to use the full lane.
Evaluated several roundabout options. The only configuration that meets the traffic demand is a three lane roundabout which is unusual and complex for this type of roadway. Due to the complex three legged nature of the intersection, and not recommended for implementation.
- Improve pedestrian and bicycle infrastructure (striping, countdown timers, etc.) ✓✓✓✓✓
This is planned with the project.
- Extend or add a multi-use path. ✓
Regardless of the alternative selected, the path on the west side will be extended from High Ridge Trail to Post Rd.
- Add pedestrian crossings at all intersections.
Most existing marked crossings will be replaced. Marked crossings will be added at new locations where safe and practical. Some intersections may not have marked crossings in all 4 directions due to safety concerns and traffic flow.
- Review shared bicycle and bus lane, it is scary to use.
Evaluated other facilities for bicycles and included other options in the alternatives. See alternatives exhibits for further details.
- I strongly recommend a multi-use path to be constructed on one side of Fish Hatchery. There is no way to construct a bike path on Fish Hatchery road itself that meets standards of safety for either adults or youth. The multi-use path also Meets the goal of connecting neighborhoods as well.
Regardless of the alternative selected, the path on the west side will be extended from High Ridge Trail to Post Rd.
- The successful reconstruction of FH RD would upgrade the infrastructure, improve the aesthetics of the corridor, make the entire span more pedestrian and bicycle friendly, and will be accomplished with as little inconvenience to those living and working and traveling on the corridor.
Agree! As we work though the project this is the design team's vision for the project as well.



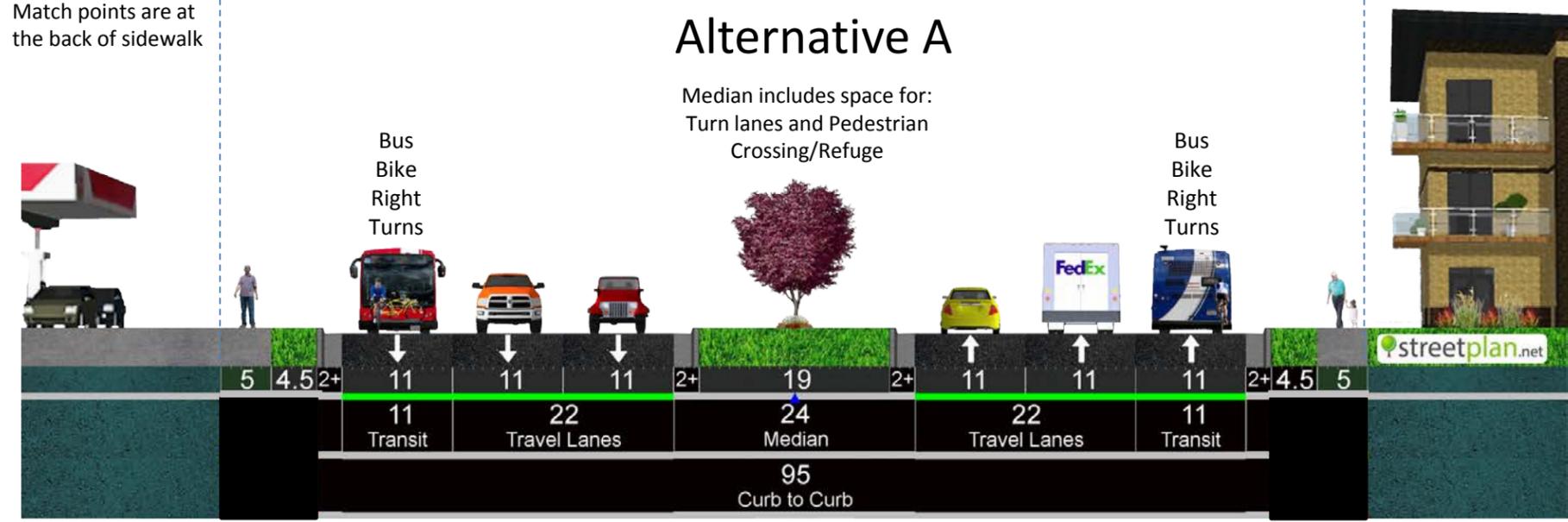
Roadway Width Information to Accompany Alternatives Discussion

	Minimum (Feet)	Preferred (Feet)
Inside or Outside Travel Lanes	10'	12'
Middle Travel Lane	11'	12'
Bus Lane	10'	13'
Bicycle Lane (no buffer)	5'	-
Bicycle Lane (with buffer)	7'	9'
Path	8'	10'
Sidewalk	5'	6'
Median	19'	24'
Terrace	4'	6'
Curb and Gutter	1.5'	2.5'





Match points are at the back of sidewalk



Alternative A is essentially the same as the existing roadway, with additional signing and pavement marking to discourage illegal thru-movements in the outer lane



- This alternative maintains 2 travel lanes in each direction (4 total lanes) similar to the existing footprint
- The shared bus, bike, right turn lane can be confusing to some drivers, and is often used inappropriately as a thru-lane
- This alternative does not expand roadway capacity and will not improve the existing congestion issues along Fish Hatchery Road



- This alternative maintains a dedicated transit lane, similar to the existing condition
- Dedicated lanes provide the most efficient transit service with the least traffic disruption
- Future Bus Rapid Transit service would likely use the dedicated transit lane
- Transit lanes would not extend beyond the limits of this project



- Bikes will share outside lane, same as the existing configuration
- The existing shared lanes are uncomfortable for bikes to use and are minimally used
- Modified lane markings may do a better job designating shared uses



- Existing sidewalk and path will remain with ADA and ramp upgrades

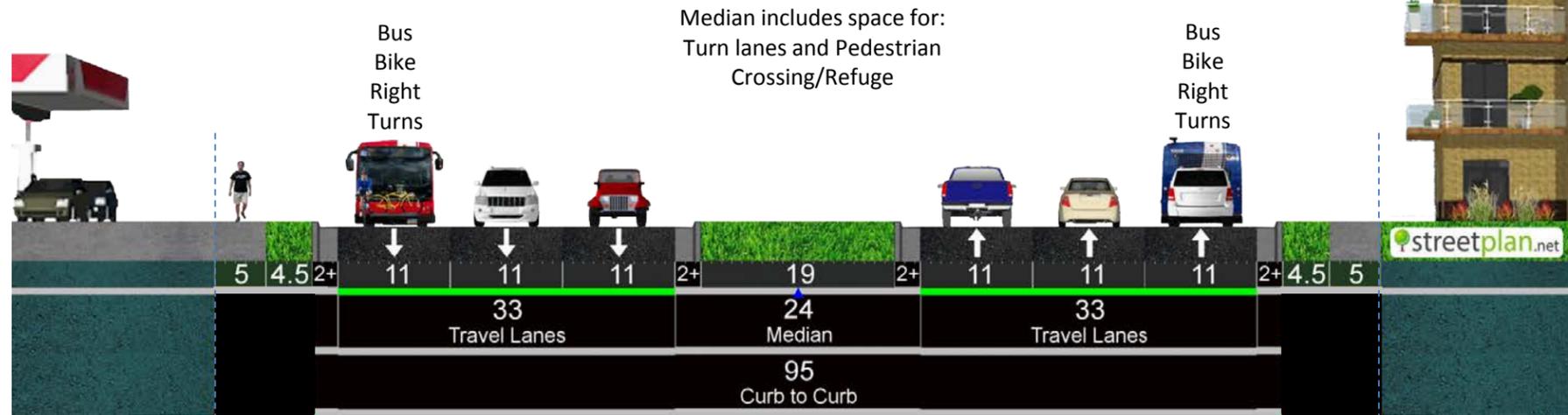


- No change in width for median and terrace greenspaces



- The current estimated cost for the project (\$21 million) is based on this alternative

Existing Roadway



- This alternative provides a 3rd travel lane in each direction (6 total lanes) to improve capacity and reduce travel times and backups
- Provides capacity to accommodate future growth and development
- Requires narrow travel lanes
- Requires driveway movements to cross an additional through lane in each direction
- Conversion to 6 total lanes may require approval from Madison Metro Planning Organization



- This alternative converts the shared lane to a travel lane
- Buses will make stops in the travel and bike lane, blocking traffic
- Future conversion to Bus Rapid Transit is likely to require the 3rd travel lane to revert back to a transit lane



- This alternative provides a dedicated on-street bike lane
- Width is not available to provide a buffer or barrier to the travel lane
- Experienced and confident bicyclists only



- Existing sidewalk and path will remain with ADA and ramp upgrades.

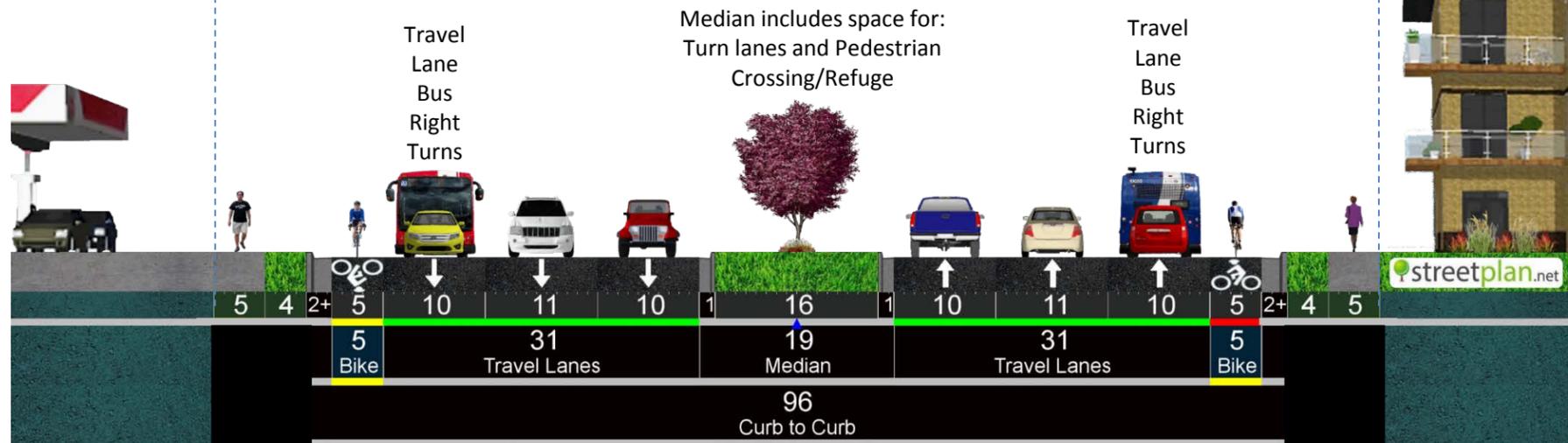


- Median and terrace widths will be slightly narrower than existing



- This alternative will increase the project cost by approximately 10% (requires additional pavement, grading work, and storm sewer inlets)

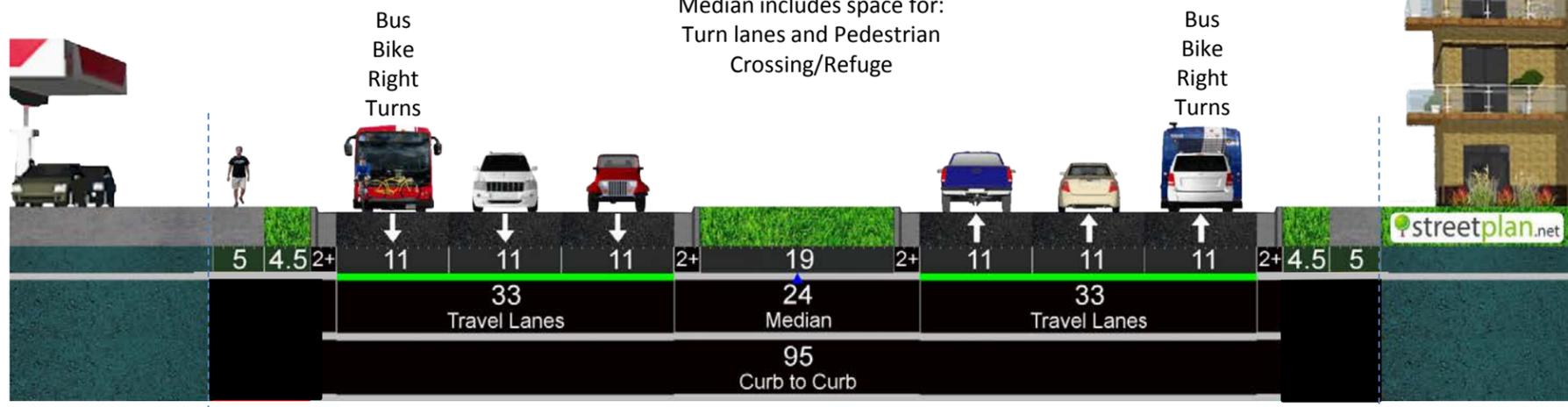
Alternative B



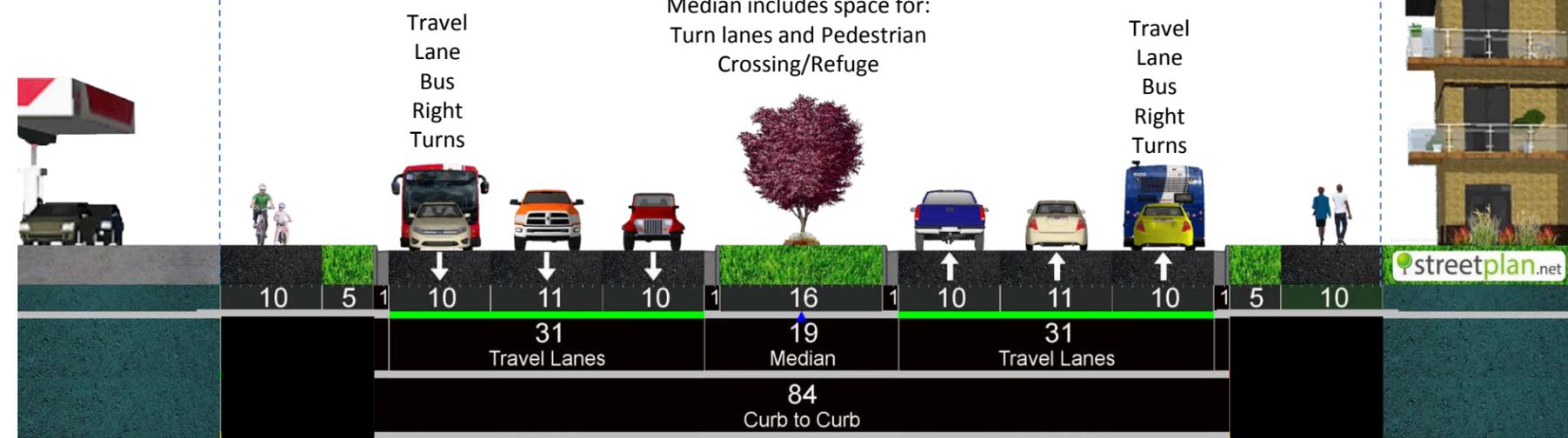
Match points are at the back of sidewalk

Alternative B converts the outside lane to a travel lane and adds a dedicated bike lane on the street

Existing Roadway



Alternative C



- This alternative provides a 3rd travel lane in each direction (6 total lanes) to improve capacity and reduce travel times and backups
- Provides capacity to accommodate future growth and development
- Requires narrow travel lanes
- Requires driveway movements to cross an additional through lane in each direction
- Conversion to 6 total lanes may require approval from Madison Metro Planning Organization



- This alternative converts the shared lane to a travel lane
- Buses will make stops in the travel lane, blocking traffic
- Future conversion to Bus Rapid Transit is likely to require the 3rd travel lane to revert back to a transit lane



- This alternative provides an off-street path for less confident bicyclists
- Width is not available to provide a dedicated on-street space for experienced and confident bicyclists due to lack of space
- Installing the path from Post Road to Greenway Cross is not recommended due to number of driveways and safety concerns



- This alternative provides a shared use path
- Provides additional space for pedestrians versus a conventional sidewalk
- Potential for conflicts with bicyclists using the path



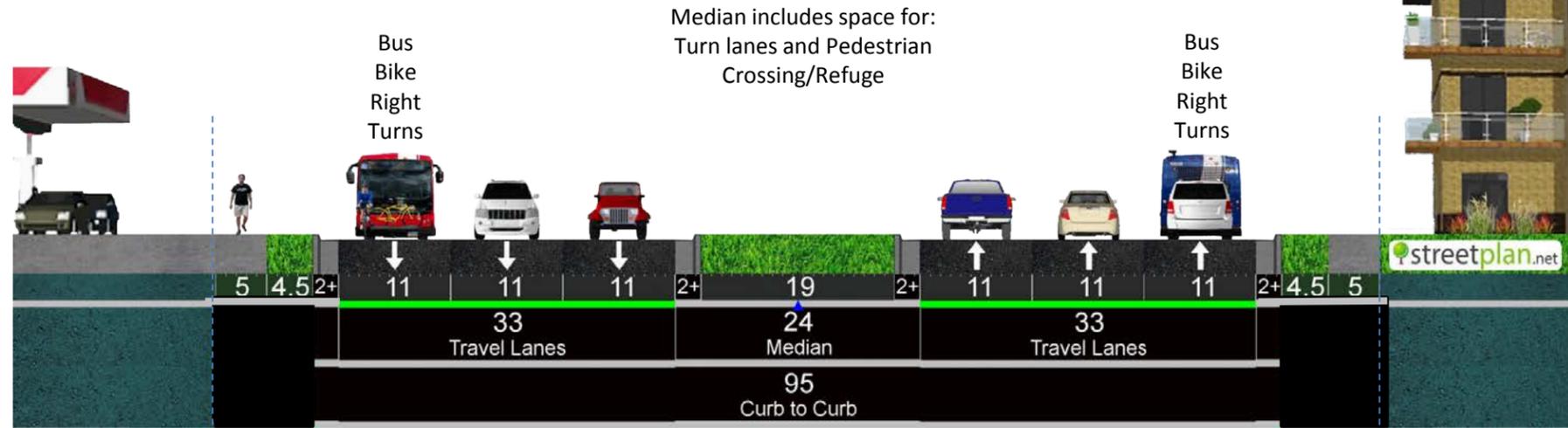
- Median width will be slightly narrower than existing
- Terrace width will be slightly wider than existing



- This alternative will increase the project cost by approximately 6% (requires additional pavement for path, grading work, and storm sewer inlets)

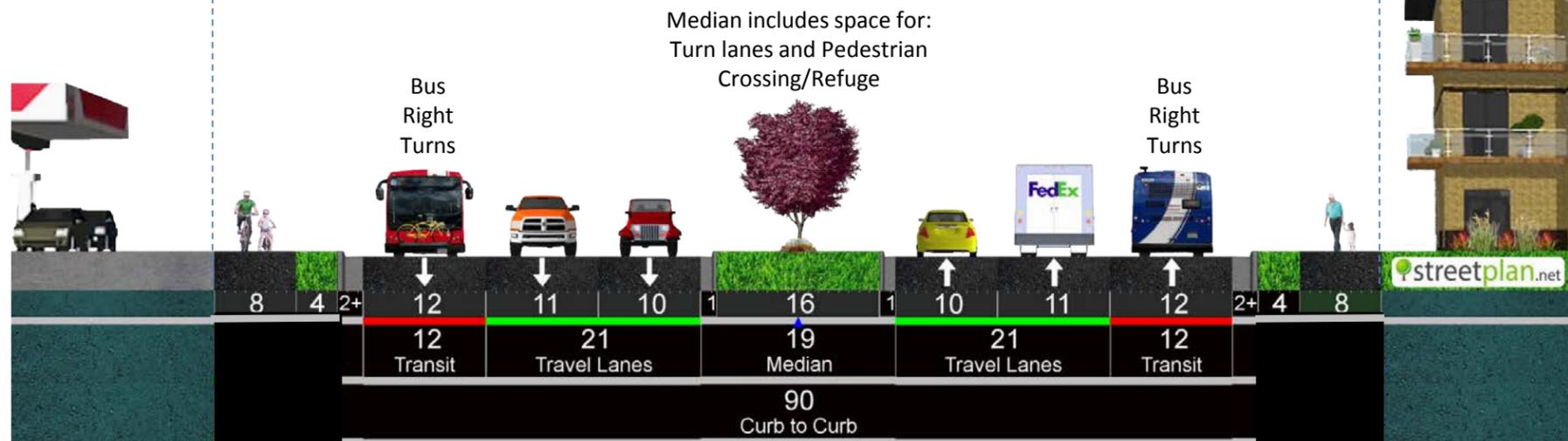
Alternative C converts the outside lane to a travel lane and adds a path on both sides of the roadway

Existing Roadway



Alternative D

Match points are at
the back of sidewalk



- This alternative maintains 2 travel lanes in each direction (4 total lanes) similar to the existing footprint
- This alternative does not expand roadway capacity and will not improve the existing congestion issues along Fish Hatchery Road



- This alternative maintains a dedicated transit lane, similar to the existing condition
- Dedicated lanes provide the most efficient transit service with the least traffic disruption
- Future Bus Rapid Transit service would likely use the dedicated transit lane
- Transit lanes would not extend beyond the limits of this project



- This alternative provides an off-street path for less confident bicyclists
- Requires the path to be 2' narrower than desirable due to lack of space
- Width is not available to provide a dedicated on-street space for experienced and confident bicyclists due to lack of space
- Installing the path from Post Road to Greenway Cross is not recommended due to number of driveways and safety concerns



- This alternative provides a shared use path
- Potential for conflicts with bicyclists using the path

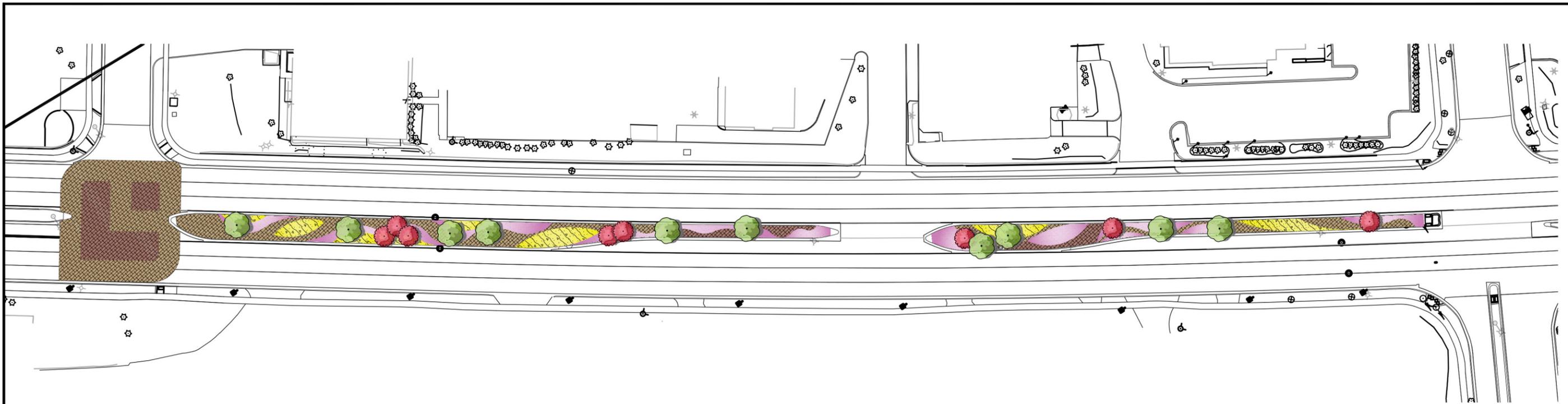


- Median and terrace widths will be slightly narrower than existing



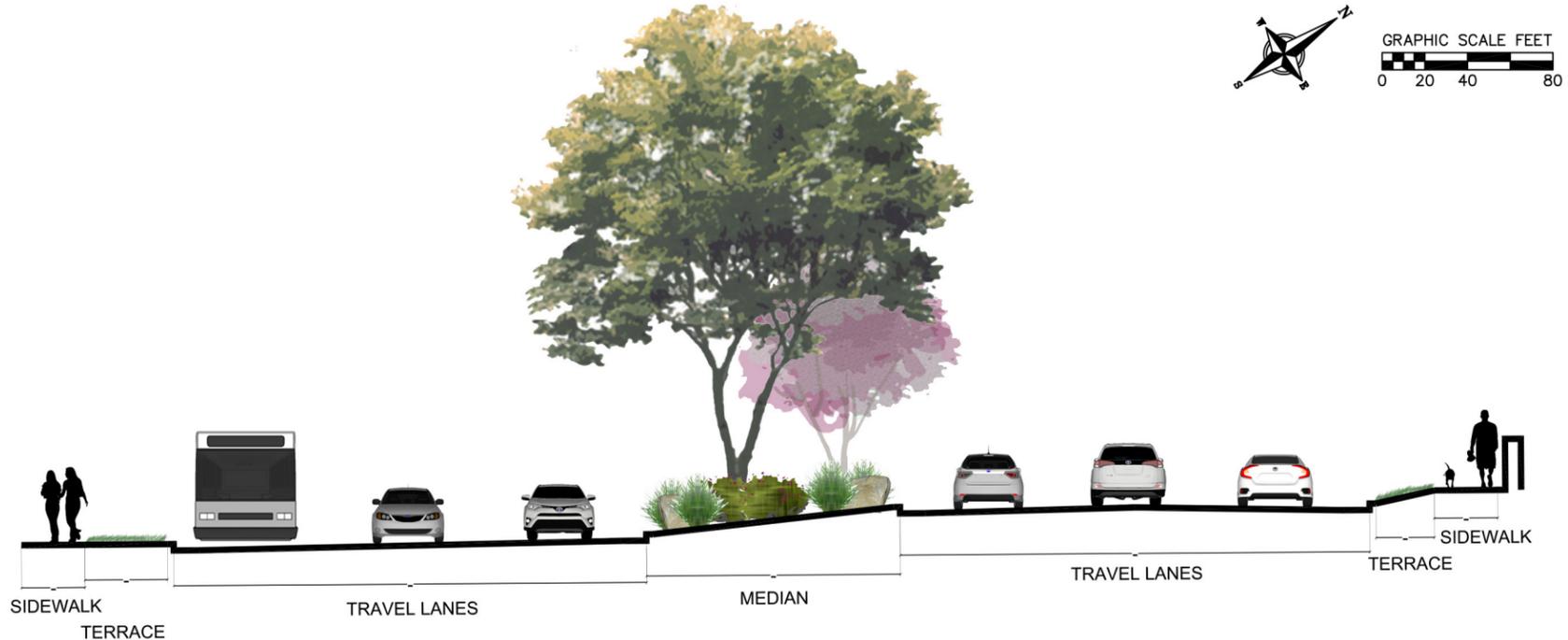
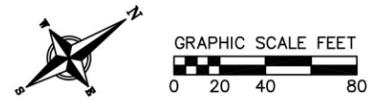
- This alternative will increase the project cost by approximately 7% (requires additional pavement, path widening, grading work, and storm sewer inlets)

Alternative D maintains the outside lane as a bus lane and adds a path on both sides of the roadway



CONCEPT PLANT SCHEDULE

	CANOPY TREES	10	
	ORNAMENTAL TREE	8	
	PERENNIALS 1 Panicum virgatum / Switch Grass	4,329 sf 2,000	18" oc
	PERENNIALS 2 Sporobolus heterolepis / Prairie Dropseed	2,530 sf 1,169	18" oc
	DECORATIVE PAVING	13,061 sf	
	DECORATIVE PAVING 2	3,678 sf	



REVISIONS	NO.	DATE	REMARKS

SCALE: AS SHOWN

DATE: 11.08.2018

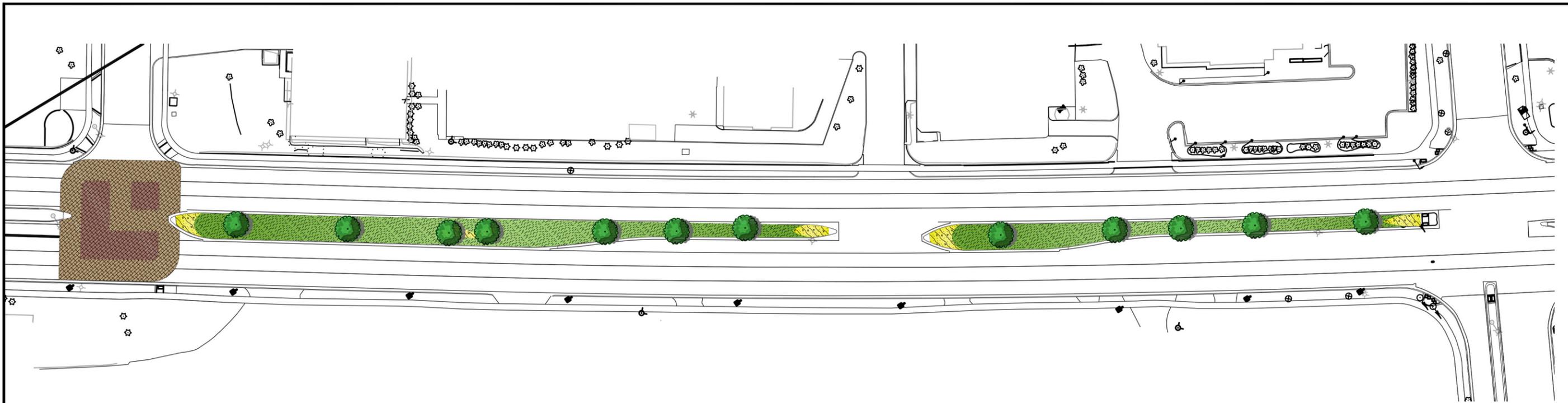
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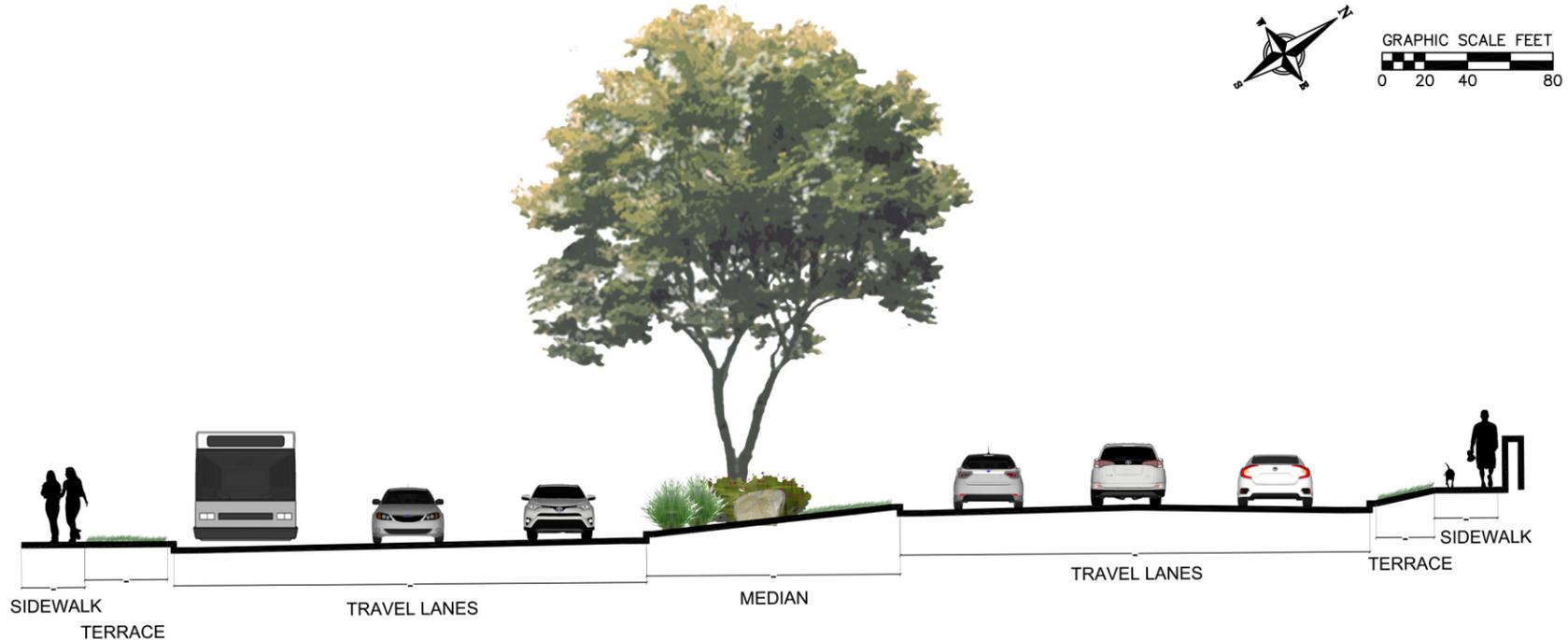
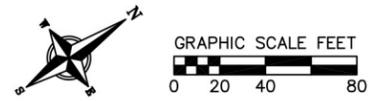
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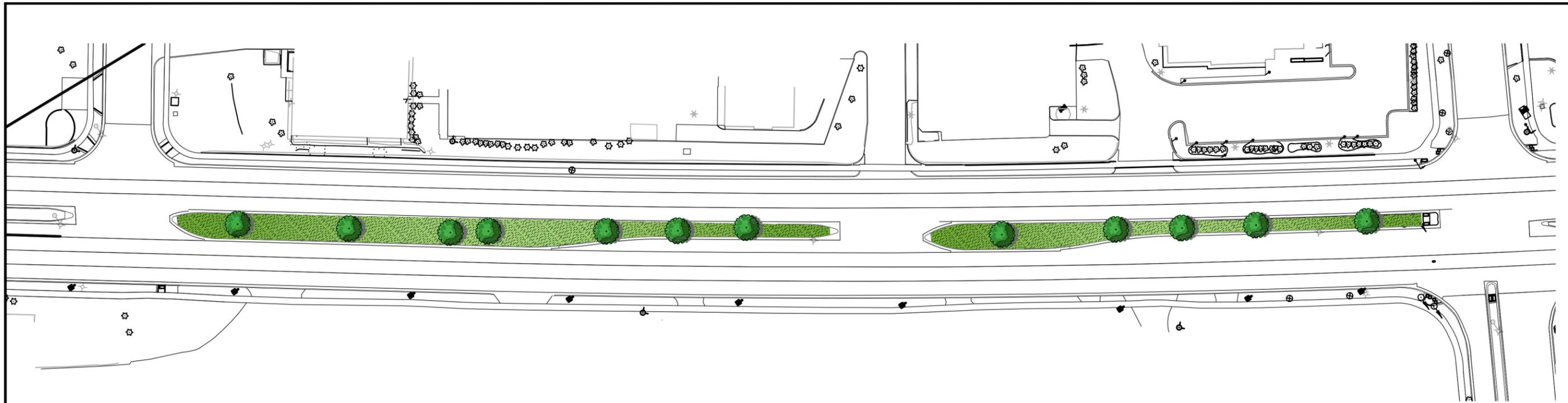
CONCEPT PLANT SCHEDULE

	CANOPY TREES	12	
	TURF GRASS	12,146 sf	
	PERENNIALS 2 Sporobolus heterolepis / Prairie Dropseed	1,061 sf 490	18" oc
	DECORATIVE PAVING	8,489 sf	
	DECORATIVE PAVING 2	2,674 sf	



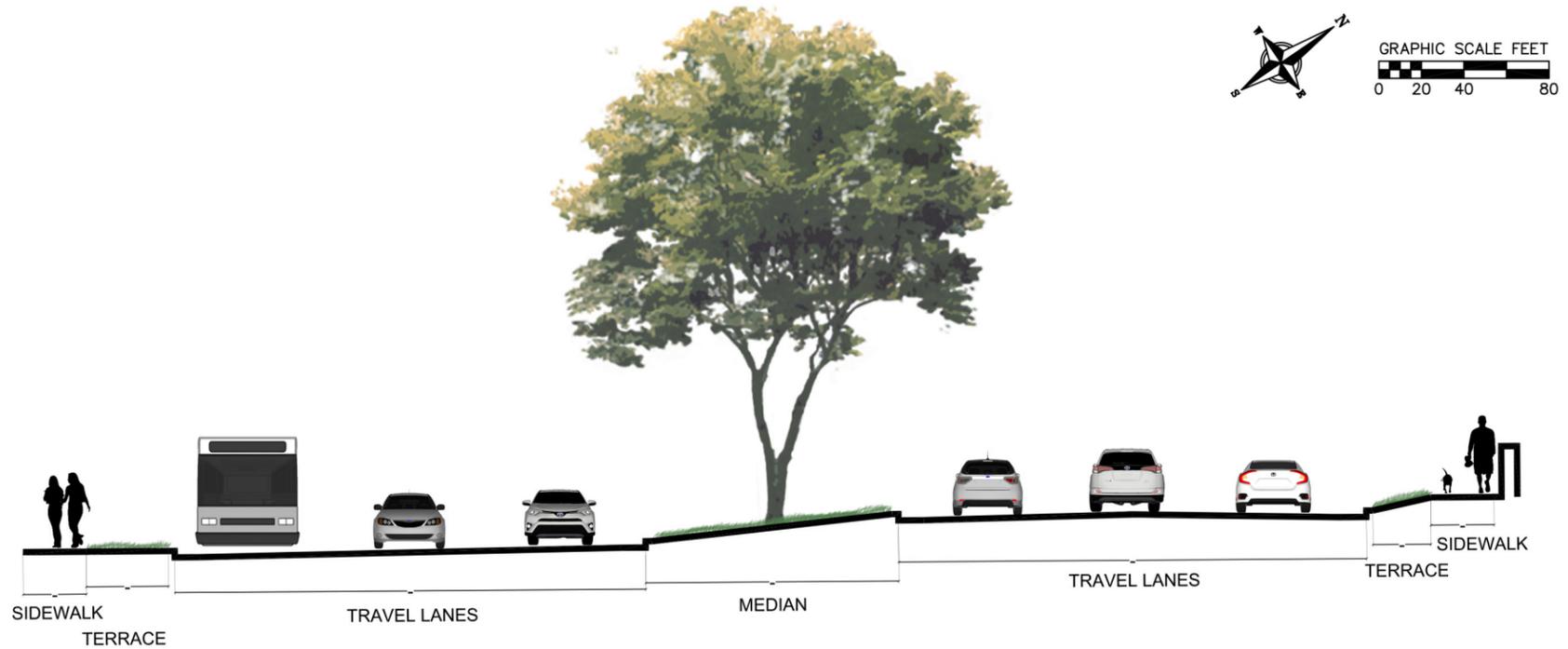
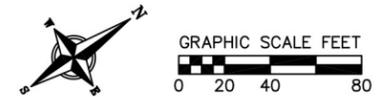
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CONCEPT PLANT SCHEDULE

-  CANOPY TREES 12
-  TURF GRASS 12,952 sf



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