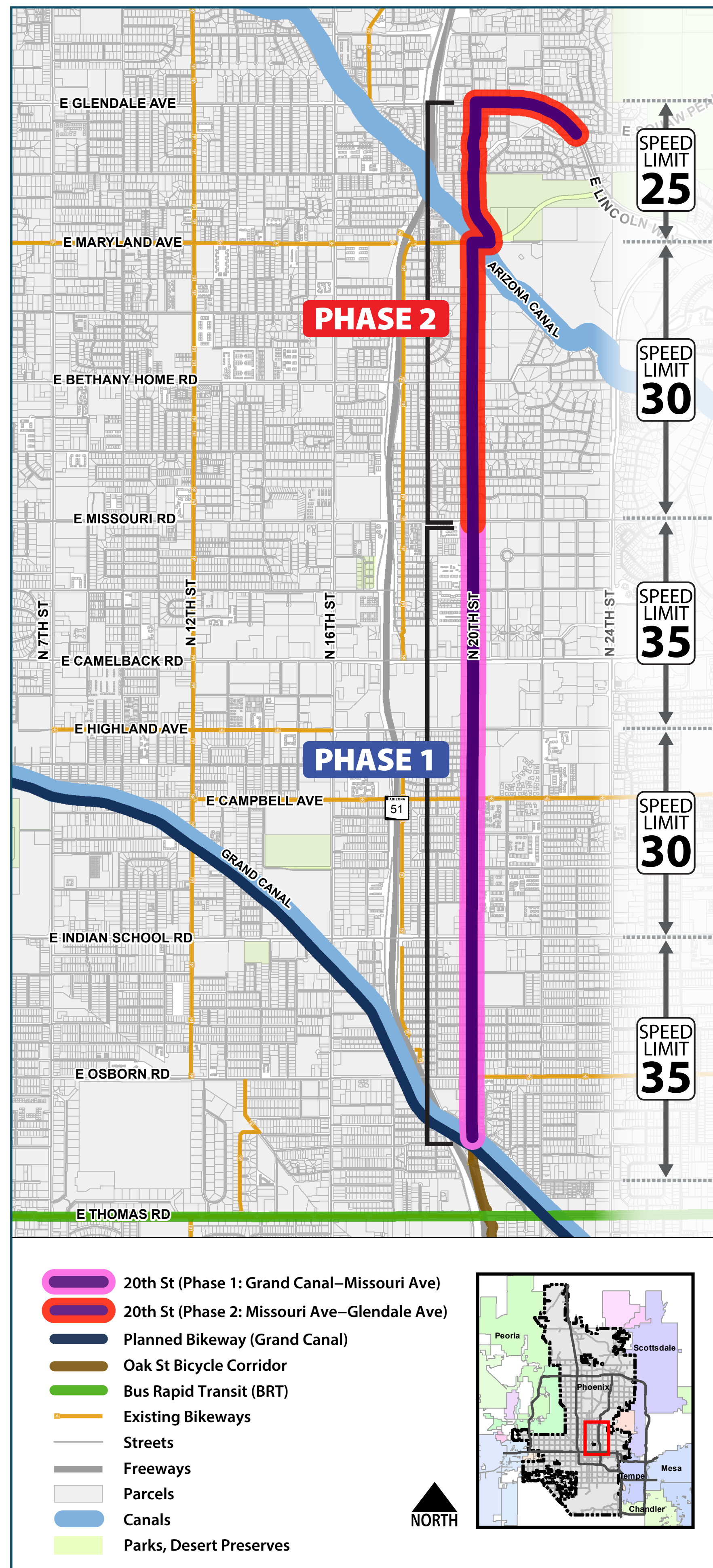


## Overview

- The 20th Street corridor from Glendale Avenue to the Grand Canal was identified as the **4th highest priority out of 39 corridors** for implementation in the City of Phoenix Bicycle Master Plan adopted by City Council in November 2014.
- Maricopa Association of Governments (MAG) awarded the City of Phoenix **Design Assistance Grant funds** to complete a project assessment and develop a series of safety improvements for the 20th Street bicycle corridor.
- The proposed improvements are meant to develop the corridor into a **low-stress environment** for bicyclists, close **gaps in the sidewalk network**, and make the pedestrian facilities **accessible** to people of all abilities.
- A bicycle and pedestrian network is being developed that connects the Camelback East core to Downtown. This project is a section of that plan.

## Proposed phasing

- **Phase 1** – near term improvements between the Grand Canal Path and Missouri Avenue (tentatively scheduled for Fiscal Year 2019)
- **Phase 2** – from Missouri Avenue to Glendale Avenue (proposed for funding in Fiscal Years 2021 and/or 2022)



# 20th Street Bicycle and Pedestrian Facilities Improvement Project

# Collector road treatments

This section of 20th Street handles car volumes in excess of 5,000 vehicles per day and has a posted speed limit of 30 or 35 MPH



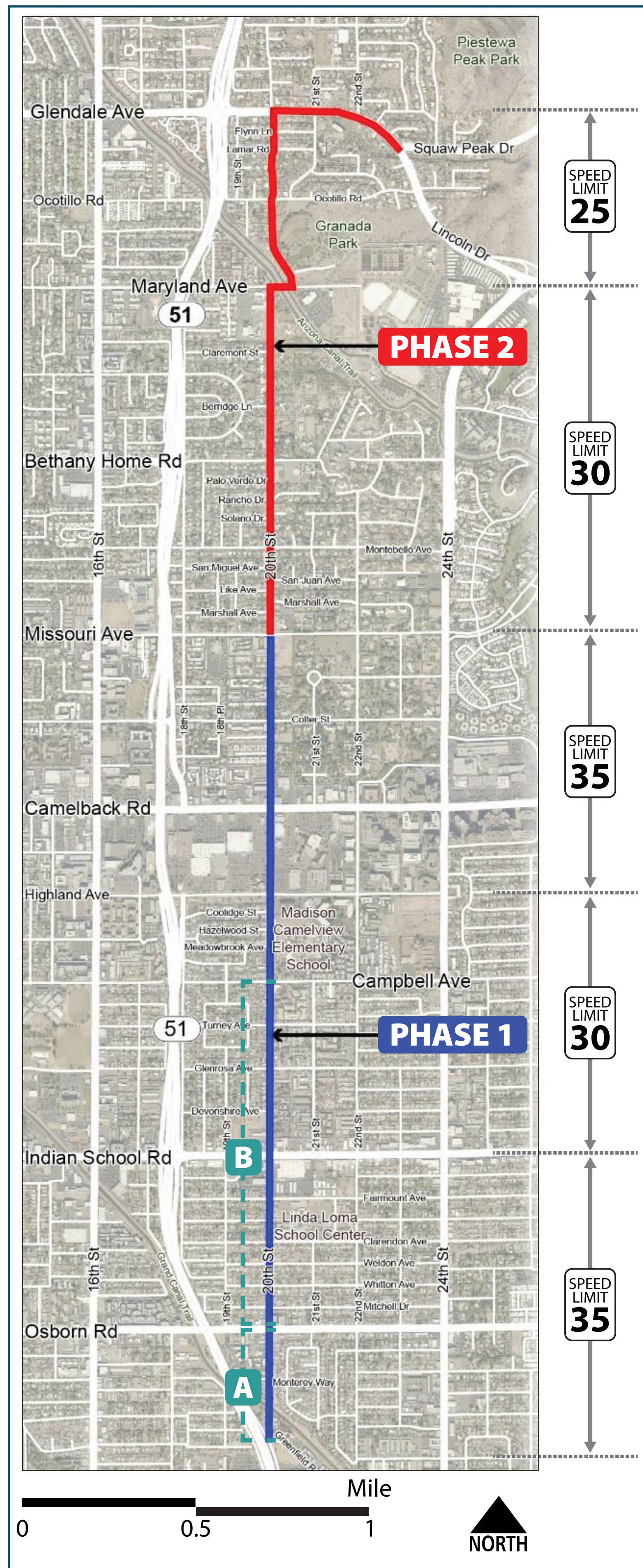
Greater separation between cyclists and cars is recommended due to the speed of the vehicles and traffic volumes.

## Proposed treatments

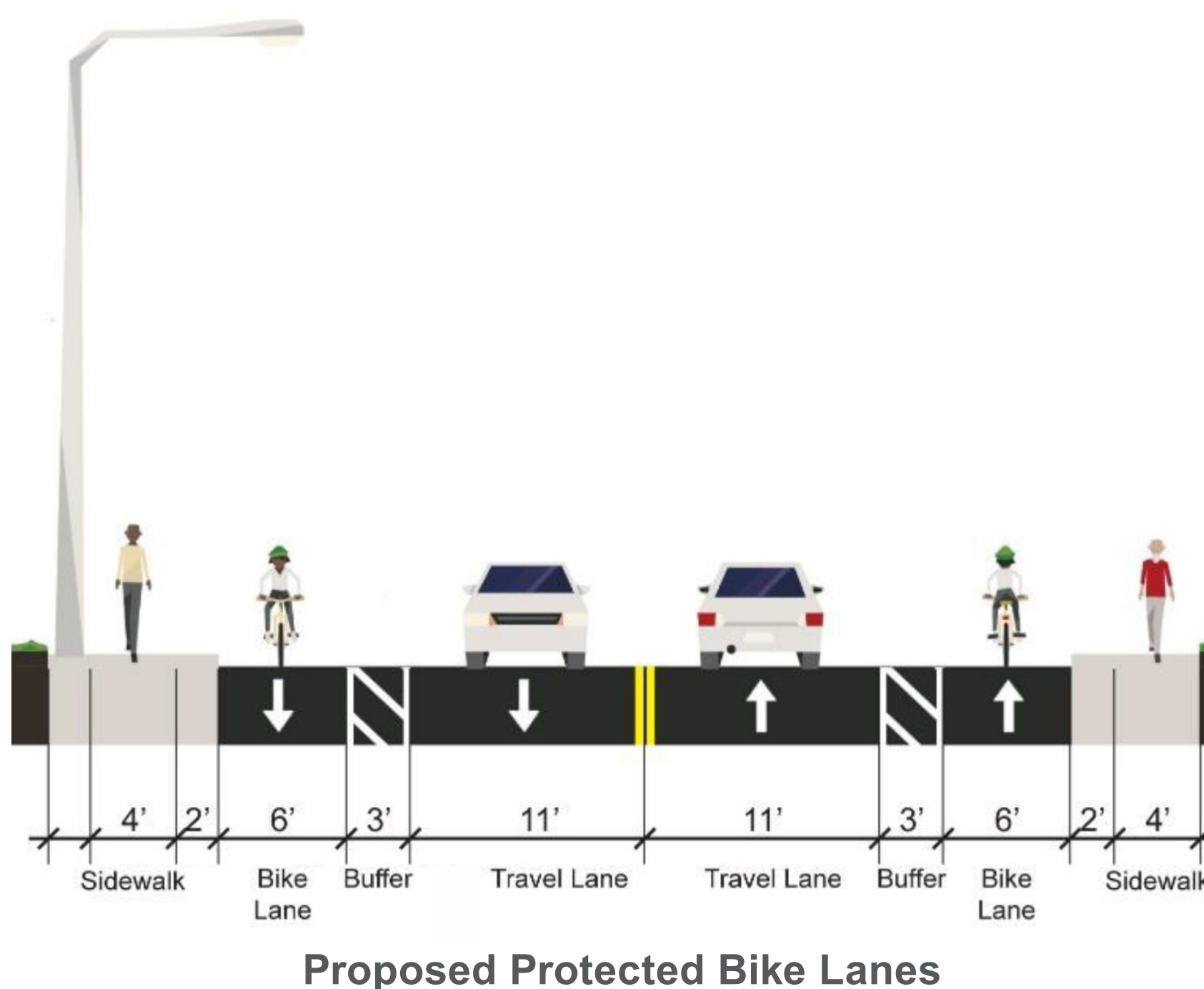
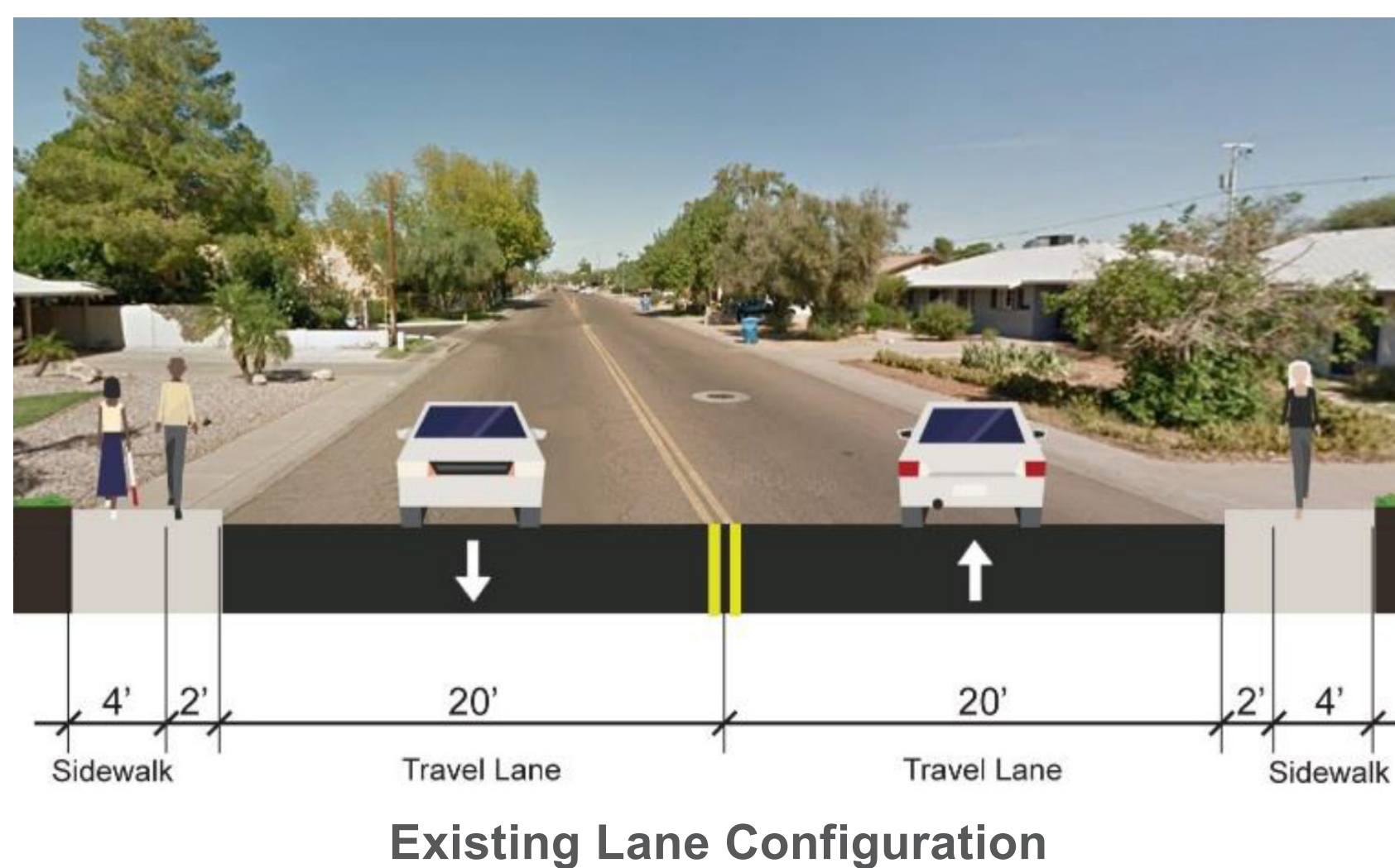
- Reduce the speed limit to 30 mph
- Install *buffered bike lanes*
- *Narrow the traffic lanes* to promote slower car speeds
- Rebuild corner ramps and driveway aprons to meet *ADA standards*
- Install additional street lighting

## Proposed intersection treatment

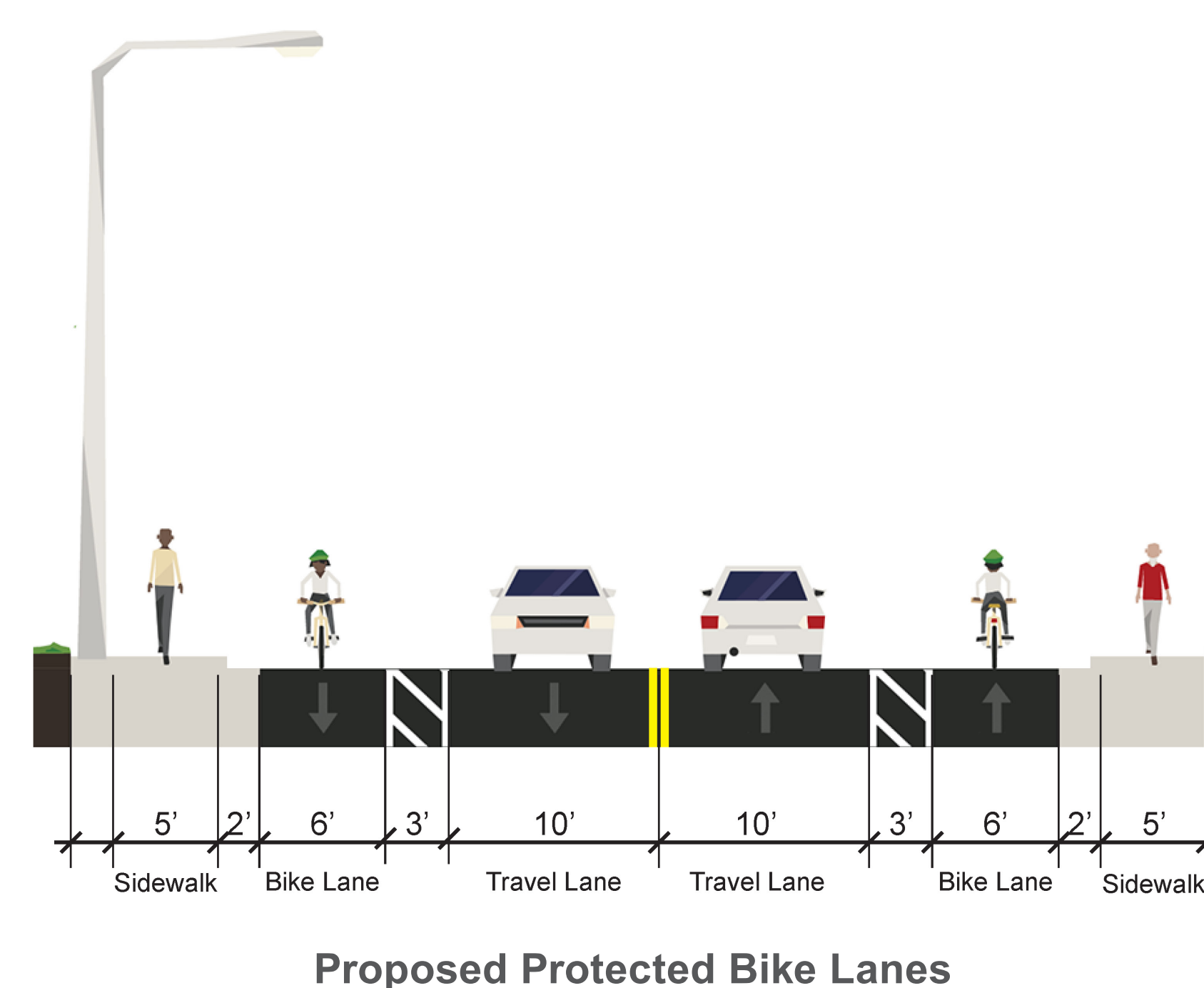
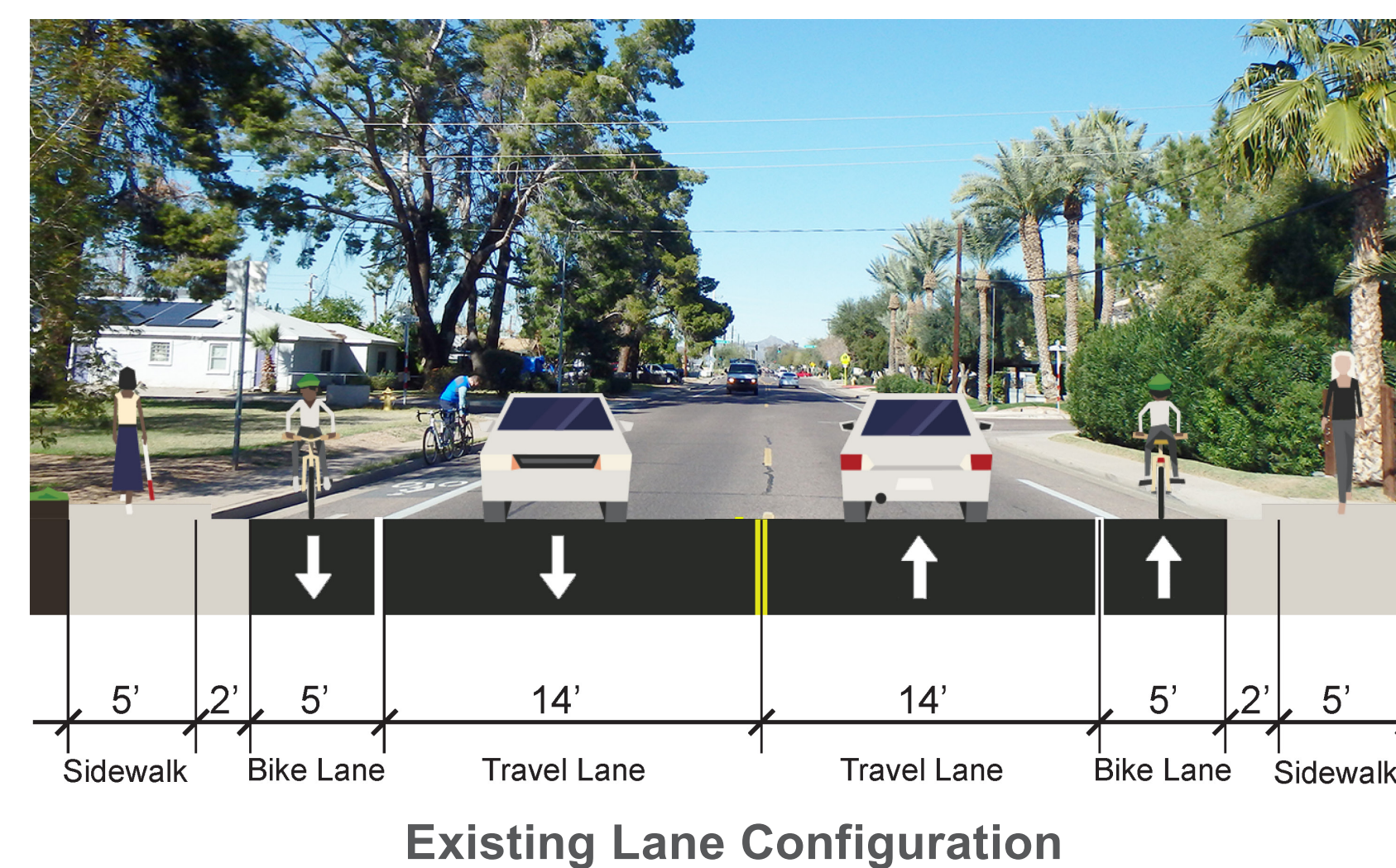
- Install shared bicycle and right-turn only lanes



**A** Grand Canal to Osborn Rd



**B** Osborn Rd to Campbell Ave



# Collector road treatments

This section of 20th Street handles car volumes in excess of **10,000 vehicles** per day at speeds greater than 35 MPH



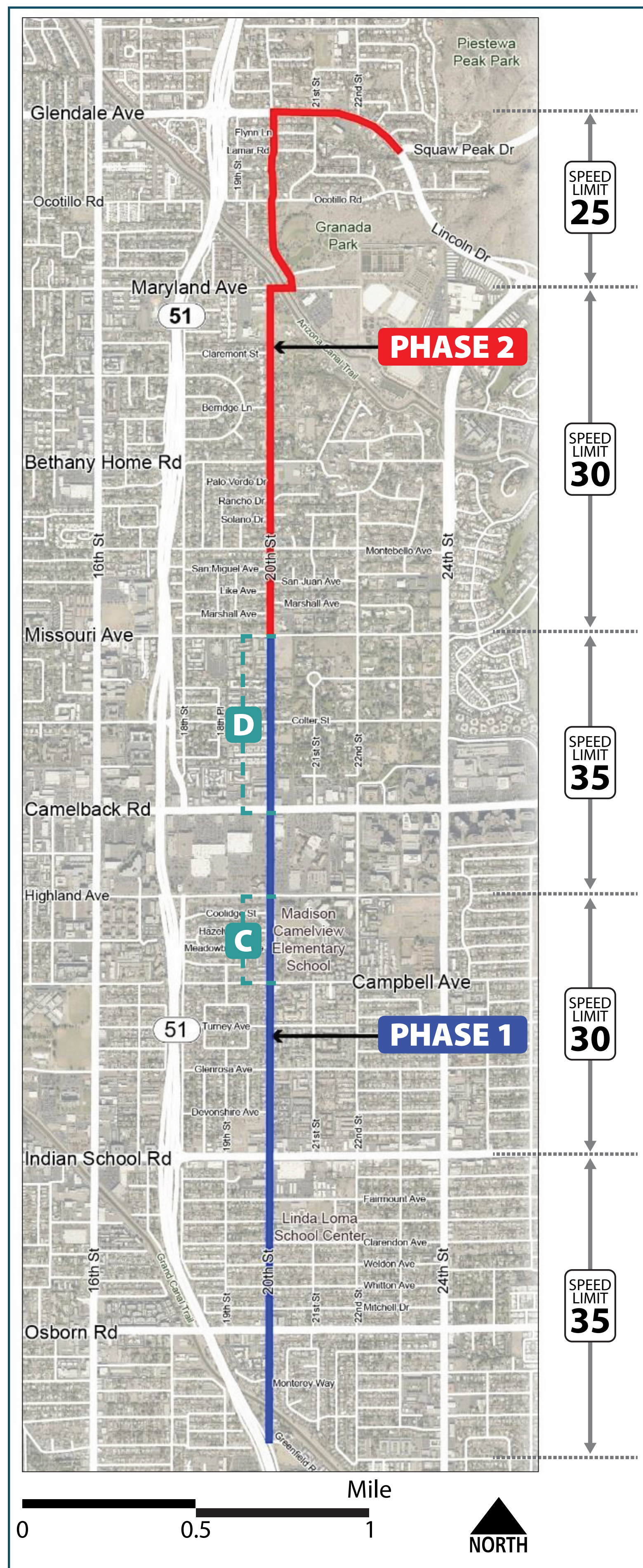
Greater separation between cyclists and cars is recommended due to the speed of the vehicles and traffic volumes.

## Proposed treatments

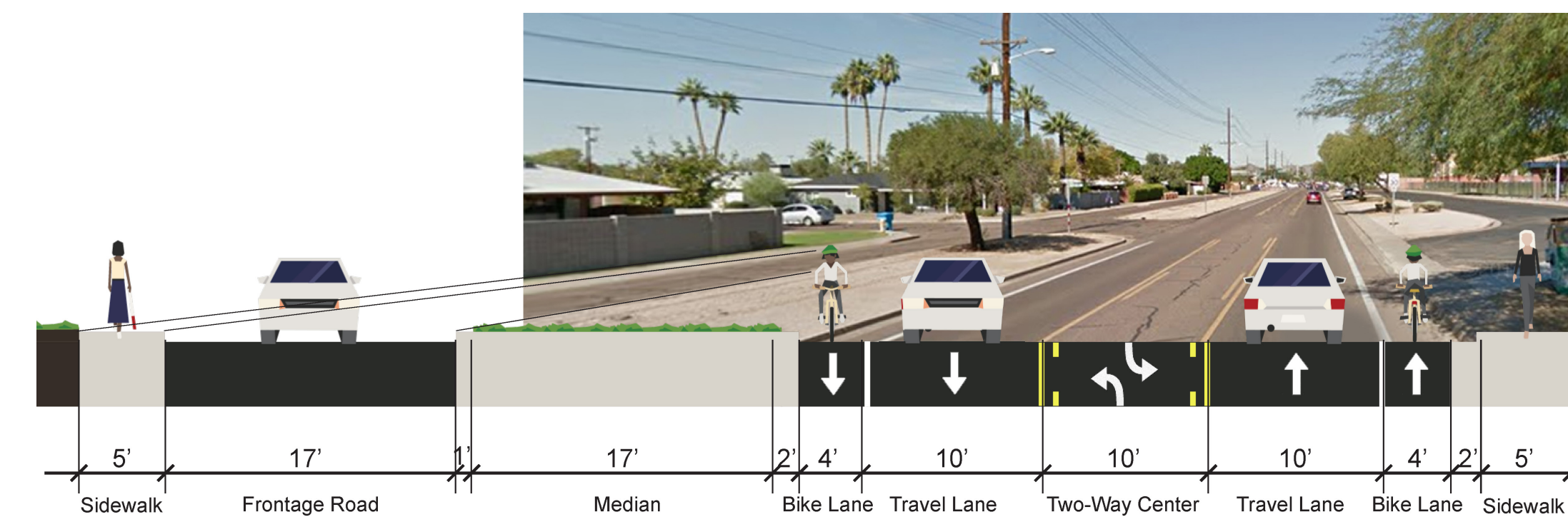
- Reduce the speed limit to 30 mph
- Install **buffered bike lanes** with RPM buttons
- **Narrow the traffic lanes** to promote slower car speeds
- Install sharrows pavement markings on the frontage road as a parallel travel option
- Create additional separation between the bike and the travel lane by locating existing on-street parking between them
- Rebuild corner ramps and driveway aprons to meet **ADA standards**

## Access management considerations

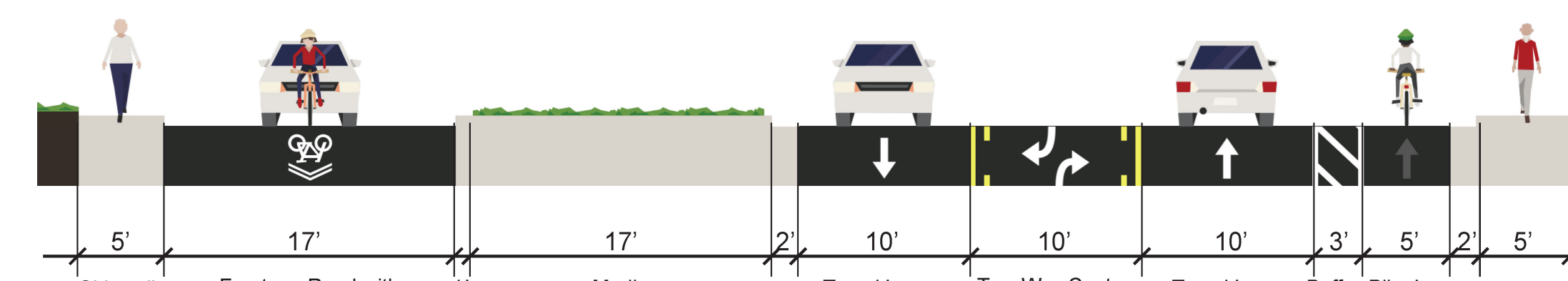
- Maintain access to adjacent commercial properties through the existing driveways
- Maintain the dual-center-left-turn lanes and full turning maneuvers to commercial driveway



### C Campbell Ave to Highland Ave

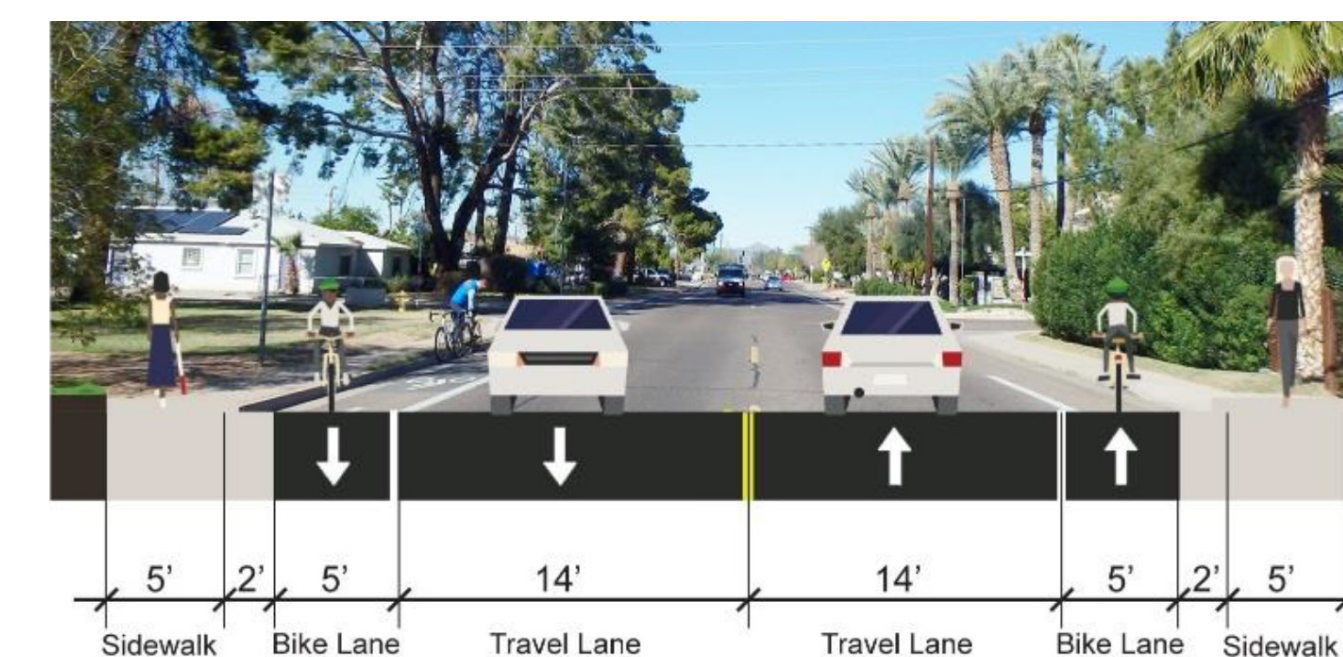


Existing Lane Configuration

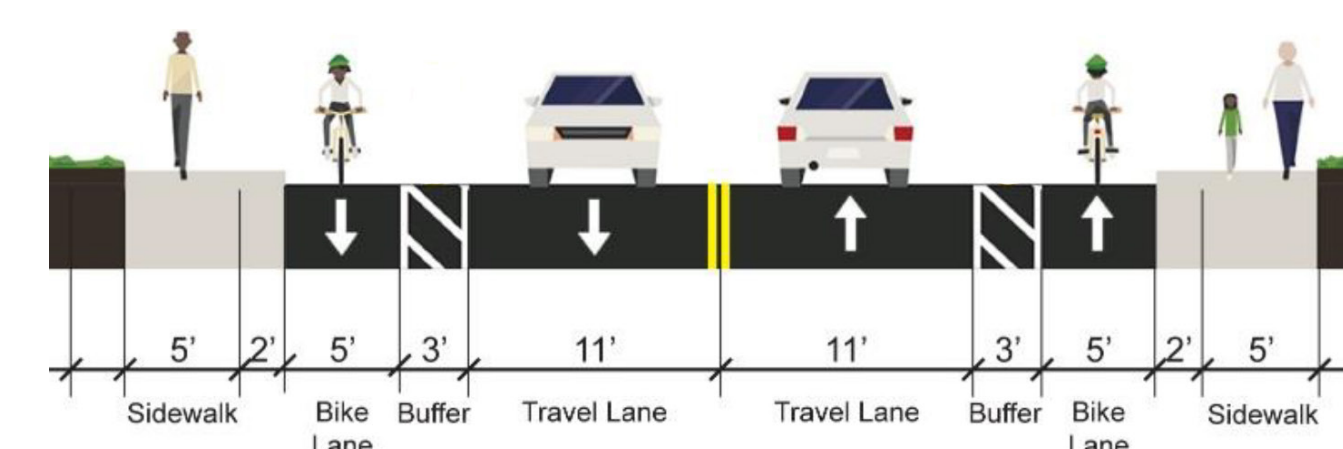


Proposed Protected Bike Lanes

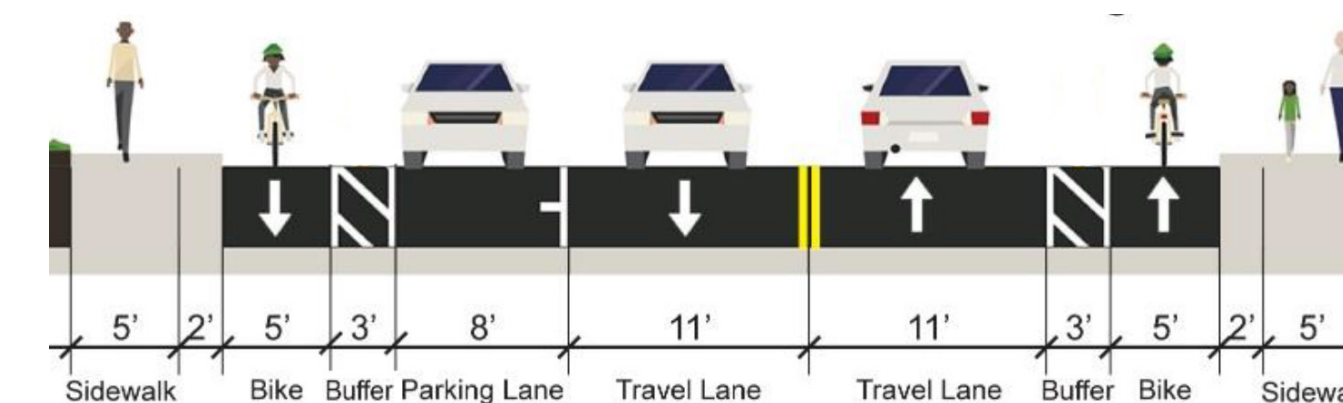
### D Camelback Rd to Missouri Ave



Existing Lane Configuration



Protected Bike Lanes



Protected Bike Lanes with On-Street Parking

# Commercial core road treatments

This section of 20th Street handles car volumes in excess of 20,000 vehicles per day at speeds greater than 35 MPH

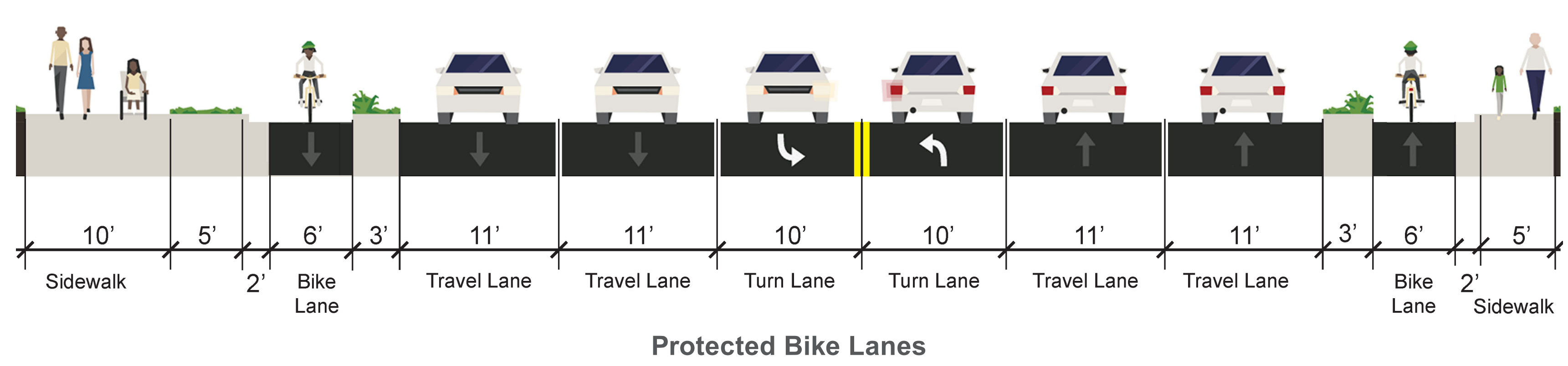
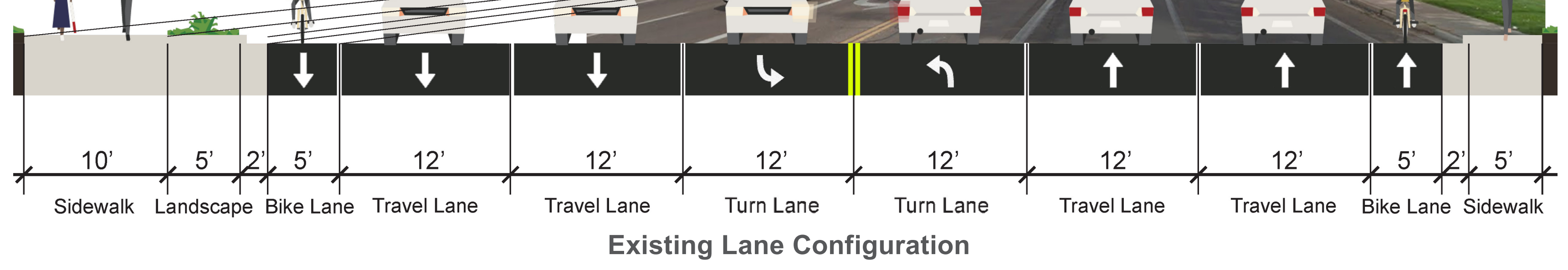


Greater separation between cyclists and cars is recommended due to the speed of the vehicles and traffic volumes.

## Proposed treatment

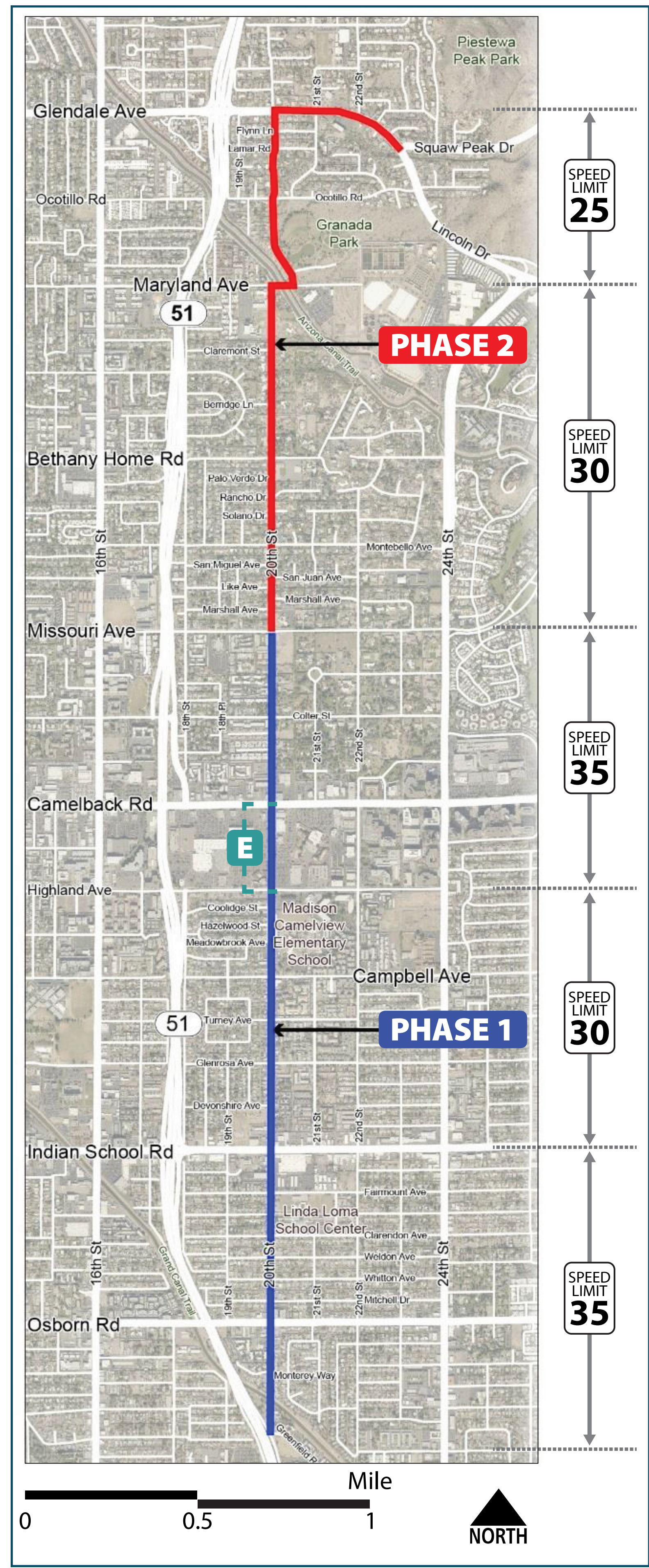
- Reduce the speed limit to 30 mph
- Install **protected bike lanes** with specific bicycle traffic signal at intersections
- **Narrow the travel lanes** to 11 feet to promote slower travel speeds
- Install **raised medians mid-block** to provide a refuge for pedestrians crossing and help reinforce a slower driving environment
- Decorate the bike lane separators to enhance the corridor aesthetics

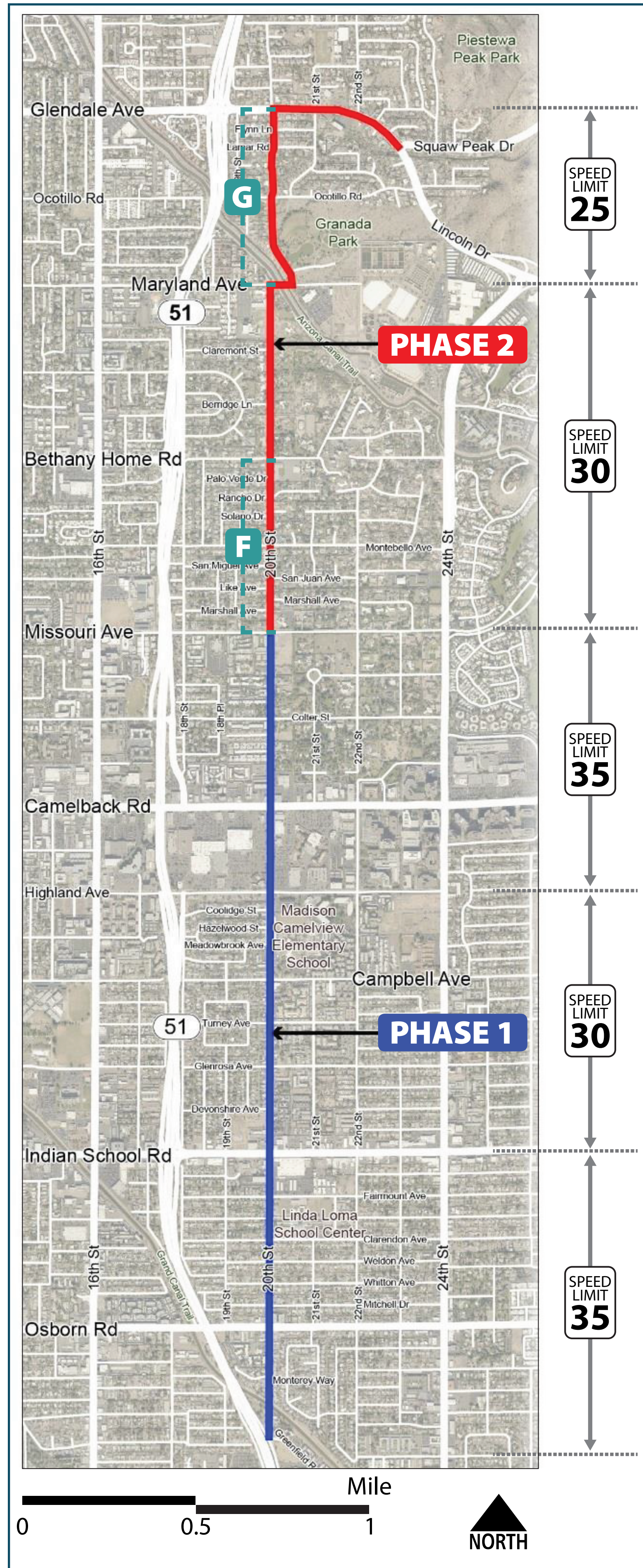
### E Highland Ave to Camelback Rd



## Access management considerations

- Maintain access to adjacent commercial properties through the existing driveways
- Maintain the dual-center-left-turn lanes and full turning maneuvers to commercial driveway





## Residential road treatments

### Missouri Ave to Bethany Home Rd

This section of 20th Street handles low car volumes and has bike lanes. The posted speed limit is 30 mph.

### Maryland Ave to Glendale Ave

20th Street handles low car volumes. The posted speed limit is 25 mph. On-street parking is allowed along Granada Park.

Shared use of the road is not appropriate given the wide pavement area, which promotes higher travel speeds than the posted speed limit

## Proposed treatments

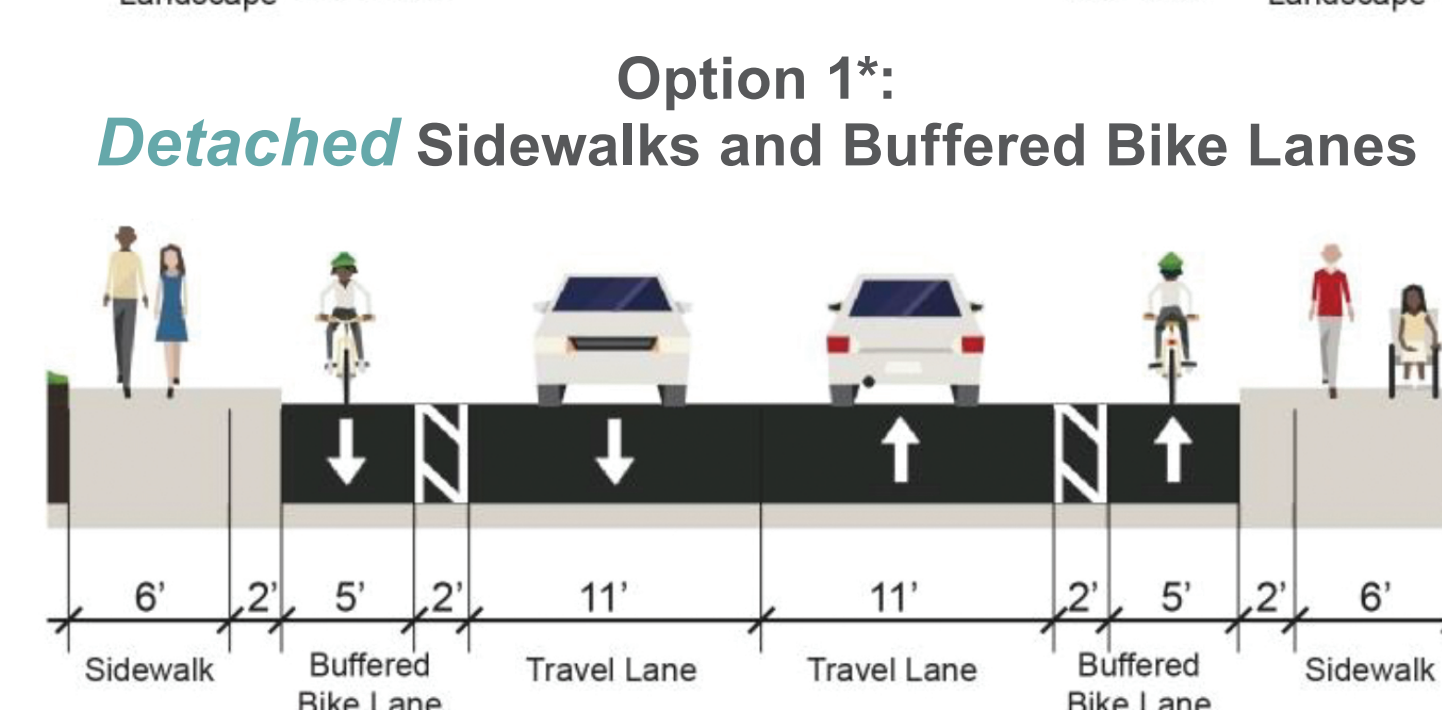
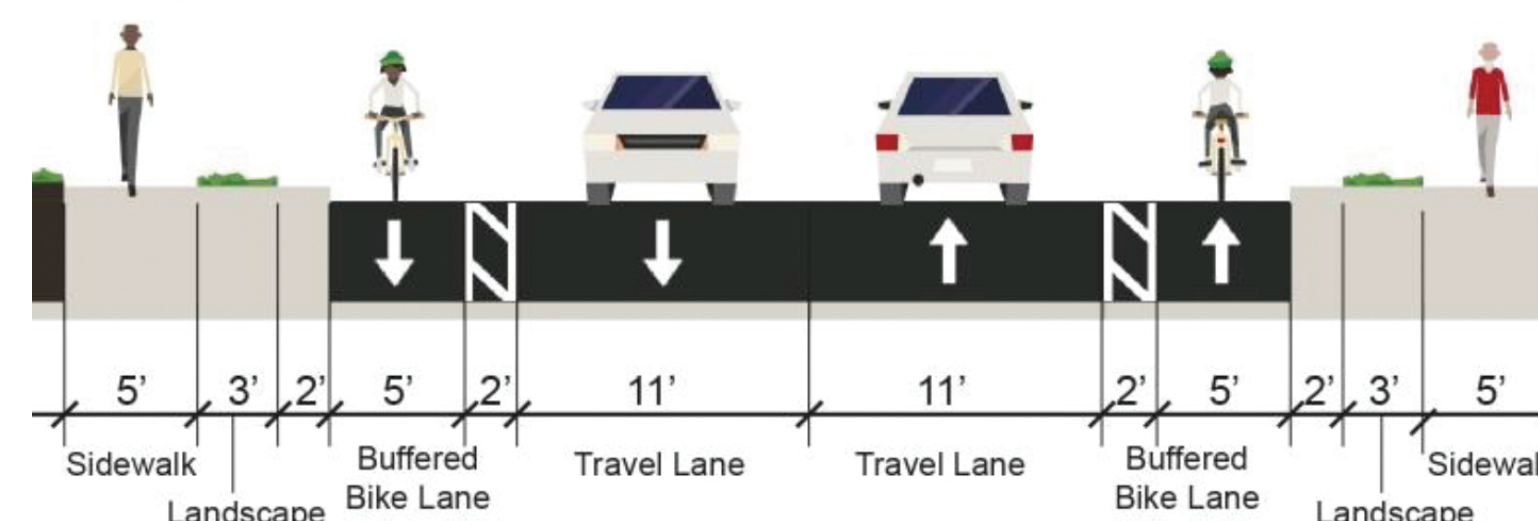
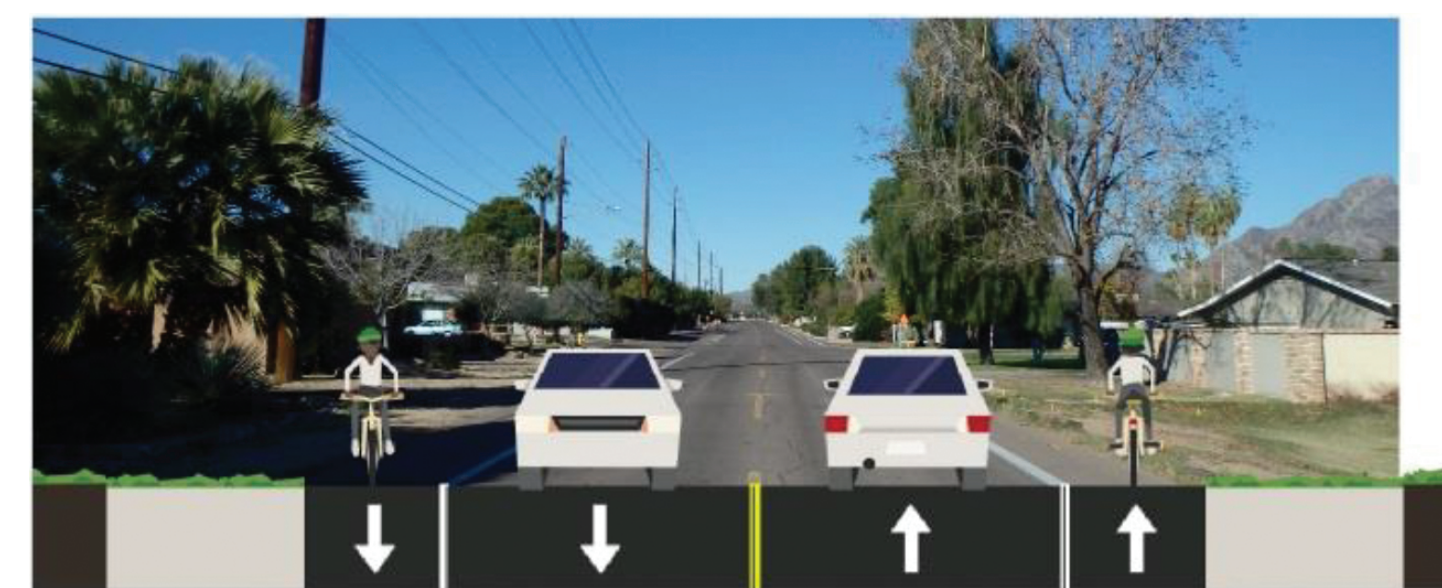
### Missouri Ave to Bethany Home Rd

- Install **buffered bike lanes**
- Install **ADA compliant** corner ramps and driveway aprons
- Add **detached concrete sidewalks (Option 1)**
- Add **attached concrete sidewalks (Option 2)**

### Maryland Ave to Glendale Ave

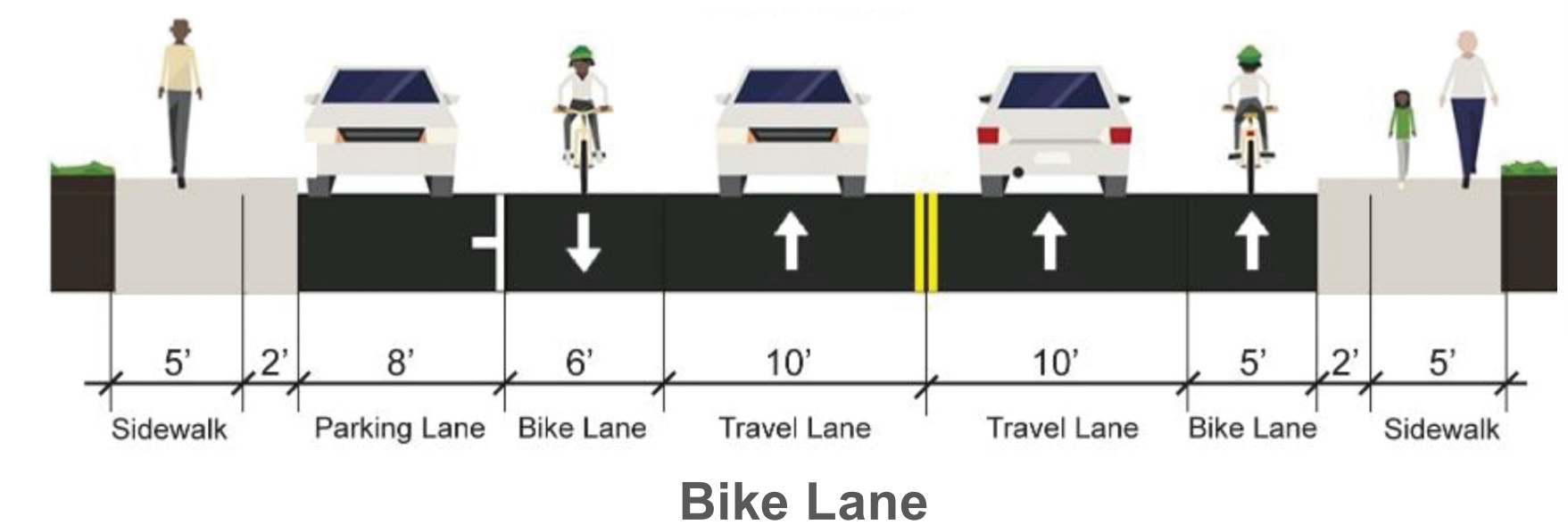
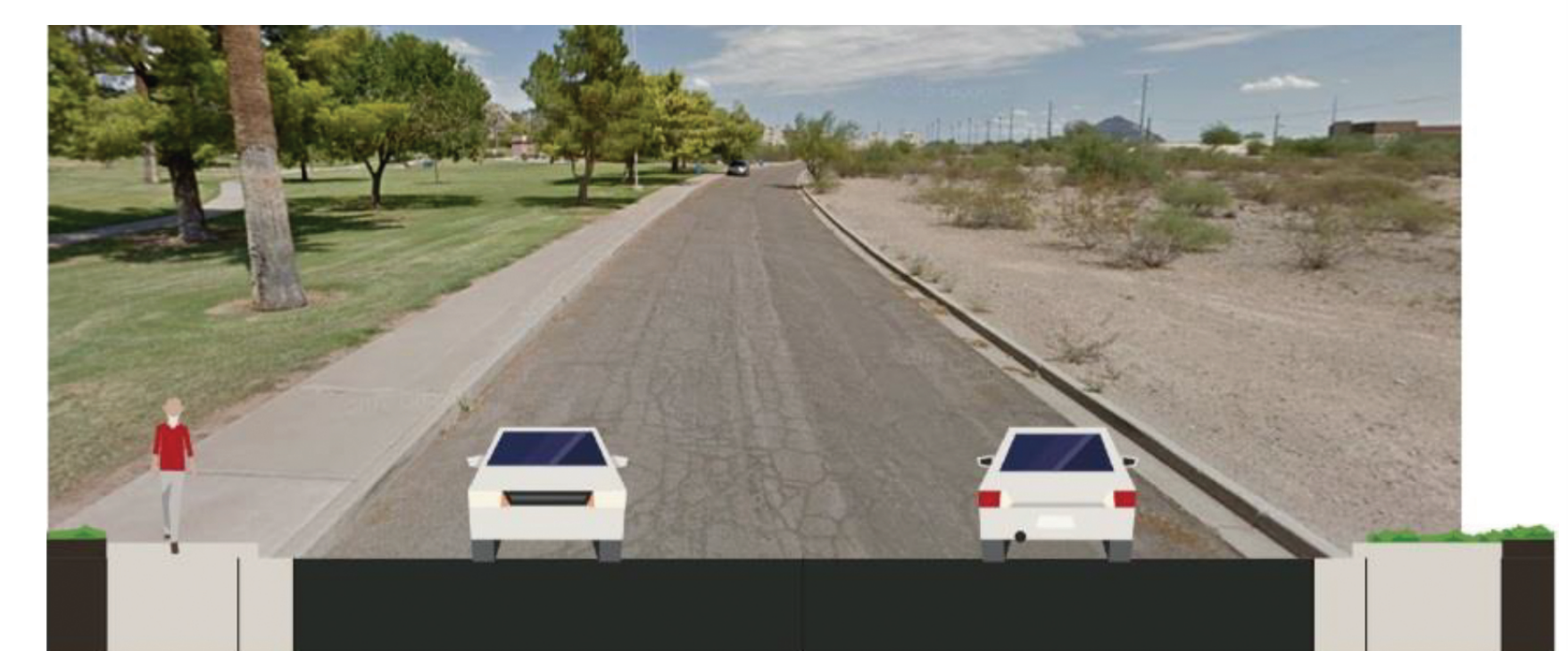
- Mark the **on-street parking space** along Granada Park
- Install **bike lanes**
- Mark the vehicular lanes at 10-feet-wide to promote slower speeds
- Install **bike route signing** for wayfinding and increased awareness
- Close the gaps in the sidewalk network
- Rebuild **ADA compliant** corner ramps and driveway aprons

### F Missouri Ave to Bethany Home Rd



\* Potential to add decomposed granite on the west side of the street.

### G Maryland Ave to Glendale Ave



Continues to Piestewa Park via frontage road along south side of Glendale Avenue

# Residential road treatments

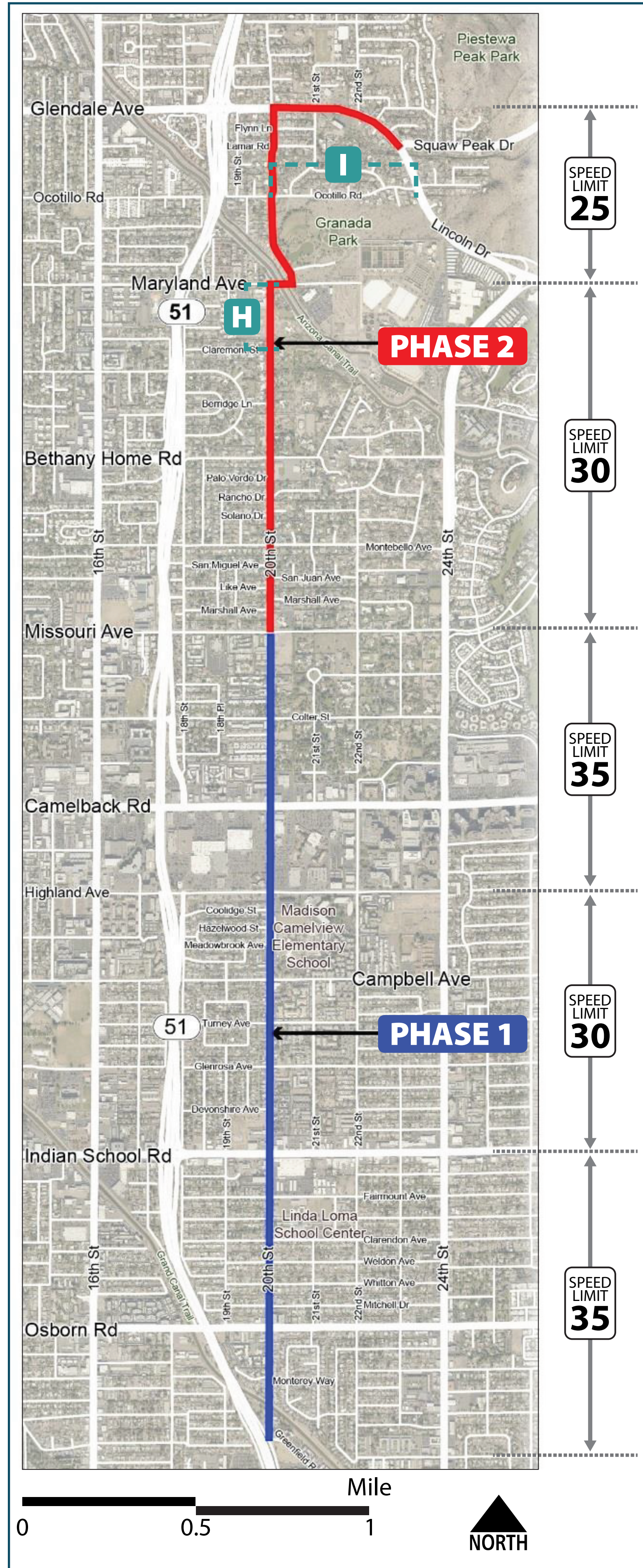
## Claremont St to Maryland Ave

North of Claremont Street, 20th Street dead-ends into an easement that is used by pedestrians

## 20th St to Lincoln Dr

Ocotillo Rd handles low car volumes at relatively low speeds. The posted speed limit is 25 mph.

Shared use of the road may be appropriate for all users



## Proposed treatment

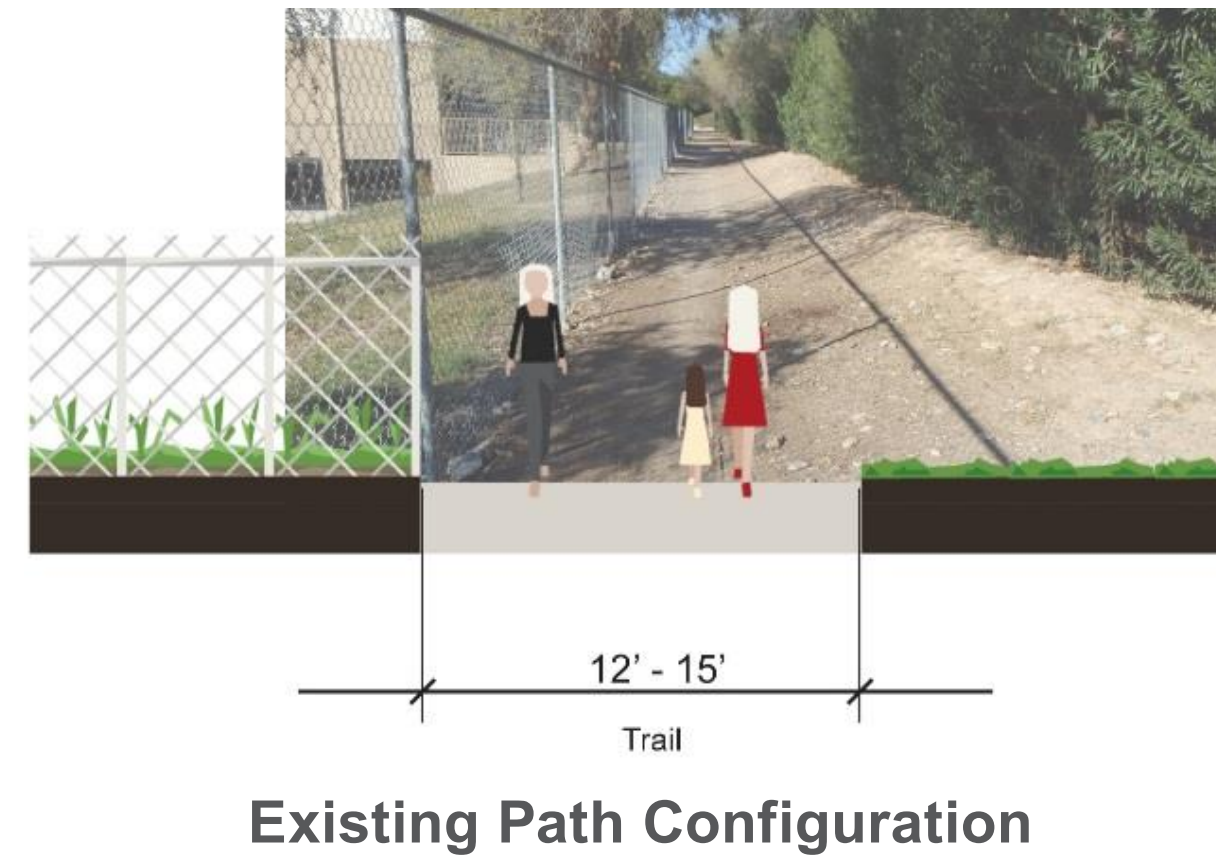
### Claremont St to Maryland Ave

- Construct a **paved shared-use path** within the easement
- Improve the connection at Maryland Avenue with ramps that meet **ADA standards**
- Install **privacy screens** along the western property fencing

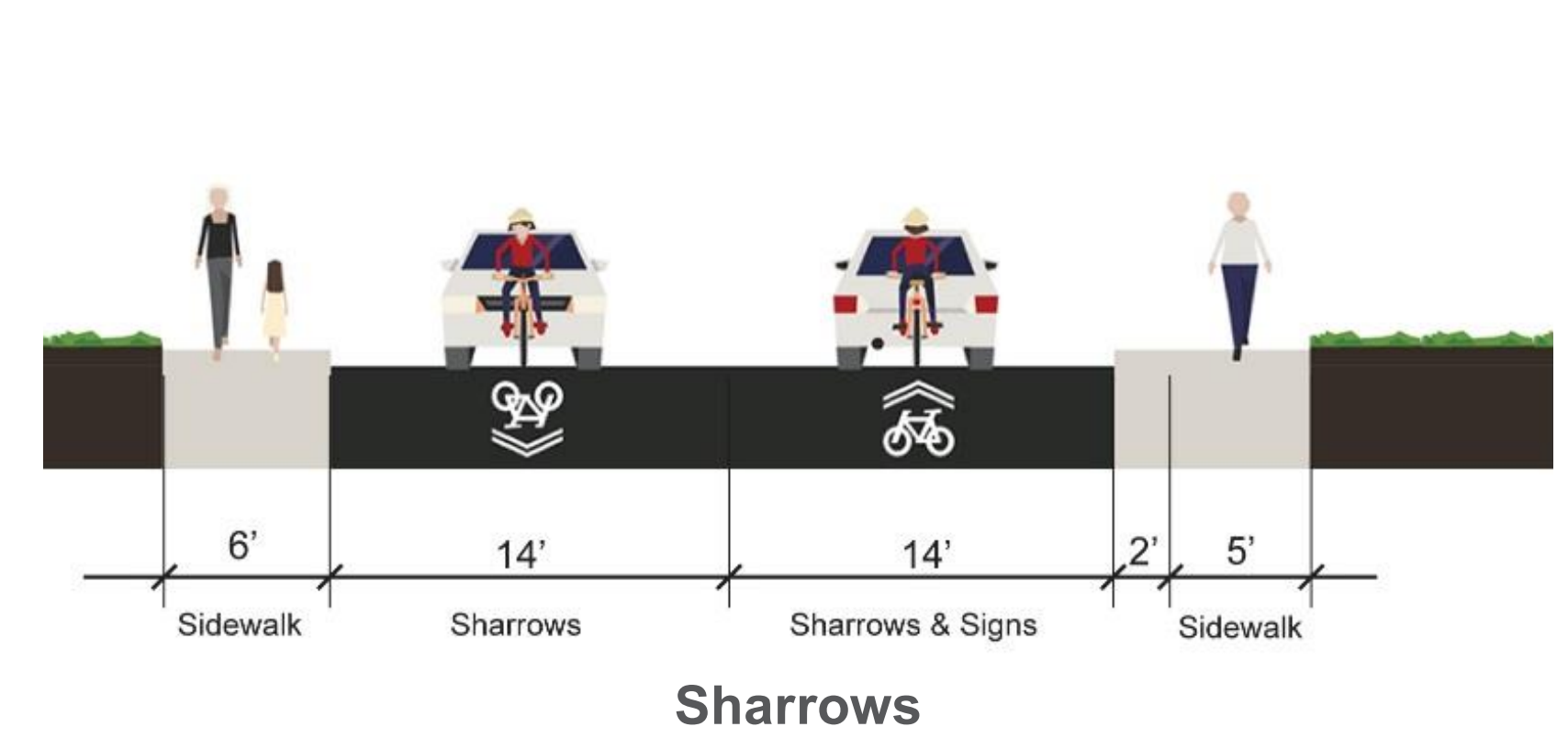
### 20th St to Lincoln Dr

- Install **sharrow pavement markings** to indicate the shared use of the road for cars and bikes
- Install **bike route signing** for wayfinding and increased awareness

### H Claremont St to Maryland Ave



### I 20th St to Lincoln Dr



Claremont to Bethany Home Rd  
Install **sidewalk and sharrow markings** or **decomposed granite**