



# Route 114 Safety Improvements Project Danvers/Peabody

*Tier 2 Public Meeting*

City Hall, Peabody, MA | May 17 | 6pm



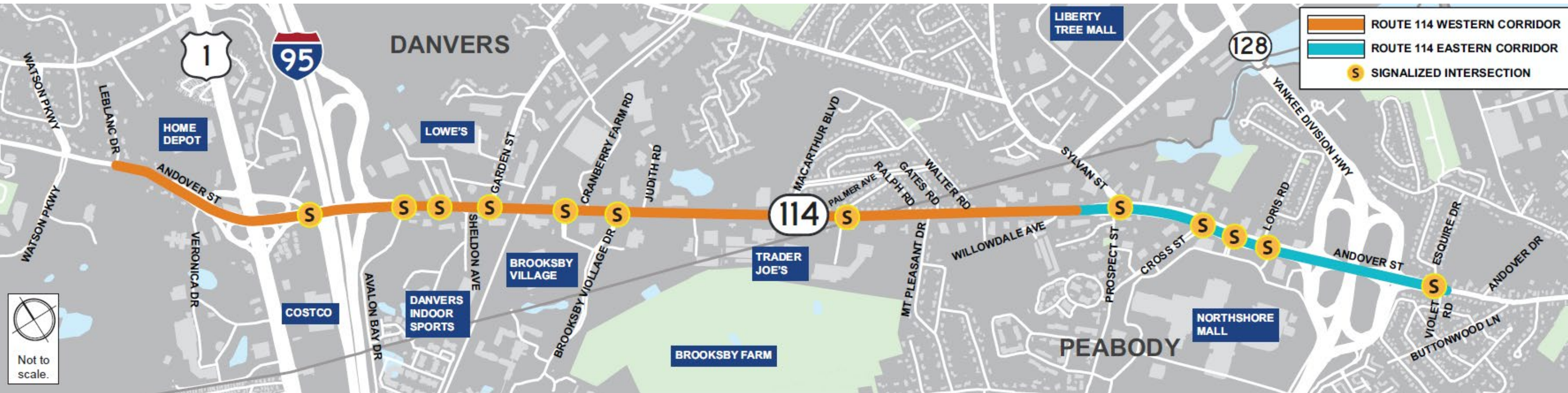
# Agenda

- Project History & Background
- Tier 1 & Road Diet Evaluation
- Tier 2 Design Overview
  - Crosswalks
  - Pilot Medians
  - Esquire Drive/Violet Road
- Next Steps
- Questions!





# Project Location



- 12 signalized intersections included in analysis
- Two separate Road Safety Audits were conducted along the corridor, so it will be referred to as the “Western Corridor” and “Eastern Corridor”
- Project exists both in Danvers and Peabody on state-owned roadway



# Purpose & Need

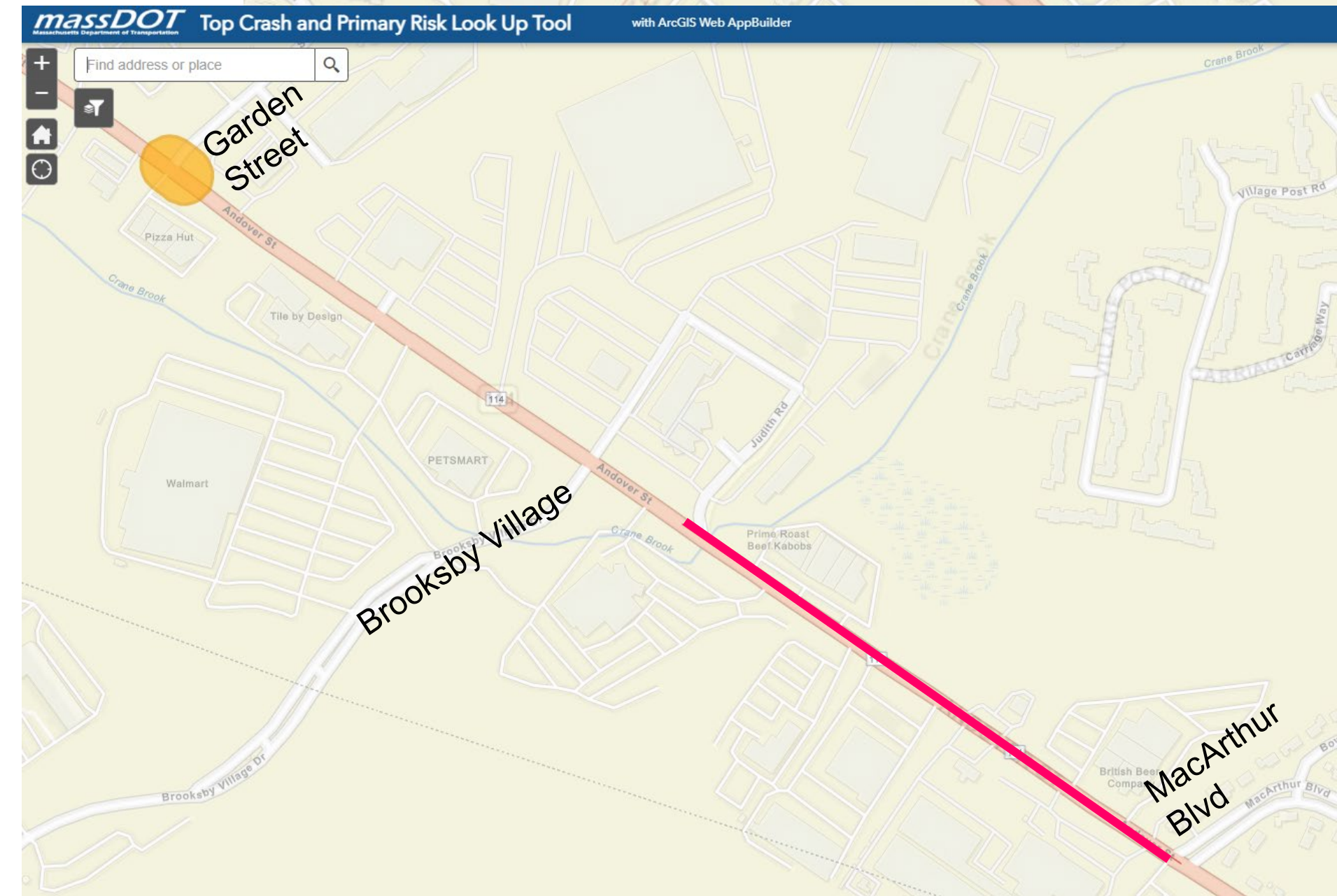
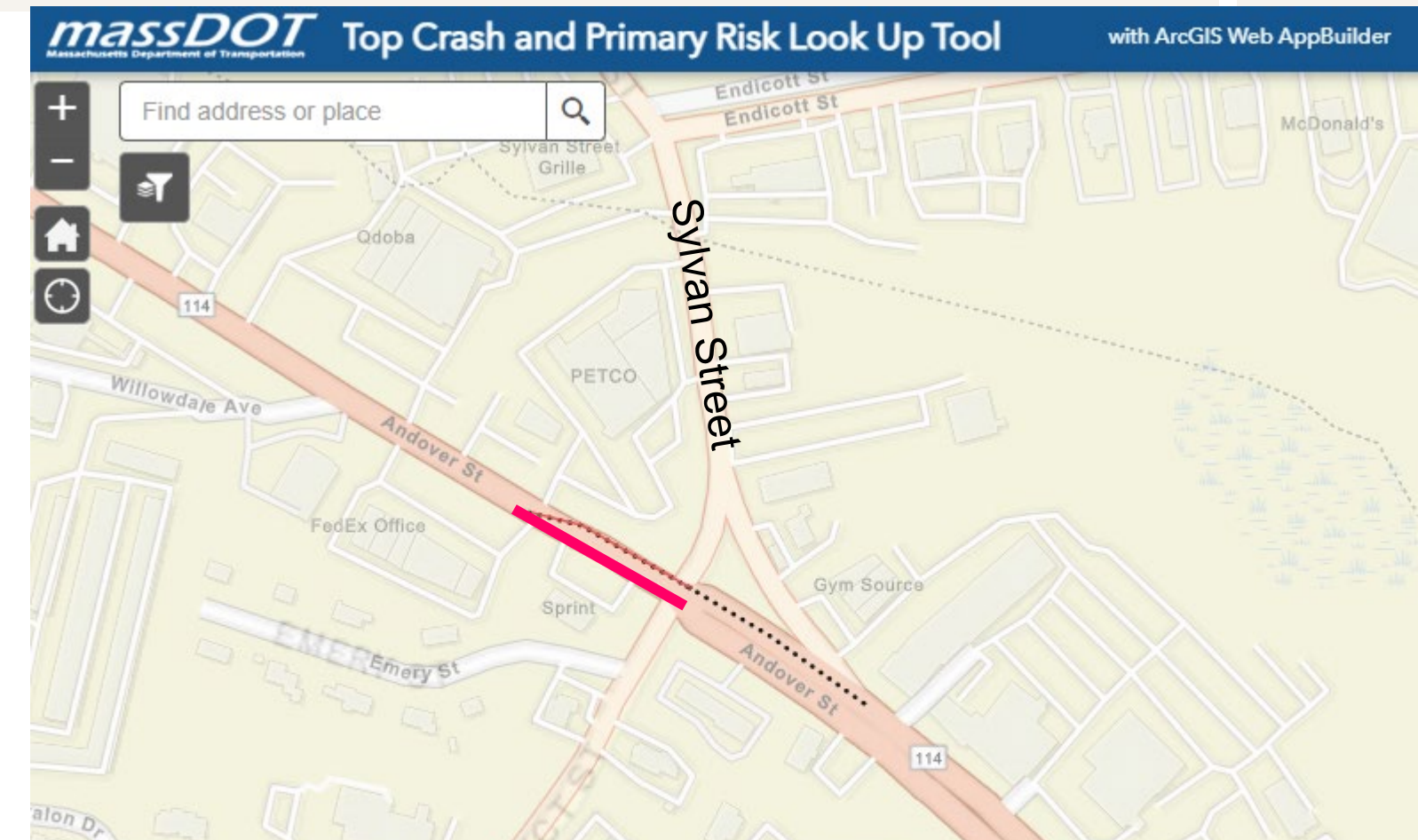
**! SAFETY FIRST !**

## Need

- Reduce Speeds and Decrease Injury Crashes
- Studied **285 Crashes** on the Western Corridor (2017-2019) inclusive of fatality crashes in 2020 and 2021
  - **4 Fatalities** within Study Period
  - **35% Injury** Crashes
  - **1 pedestrian** and **1 bicyclist** crash
- Studied **195 Crashes** on the Eastern Corridor (2012-2015)
  - **2 intersection crash clusters** at Esquire Drive and Cross Street at time of project initiation
  - **Zero** fatalities and pedestrian/bicyclist crashes during study period; most crashes were **rear end**

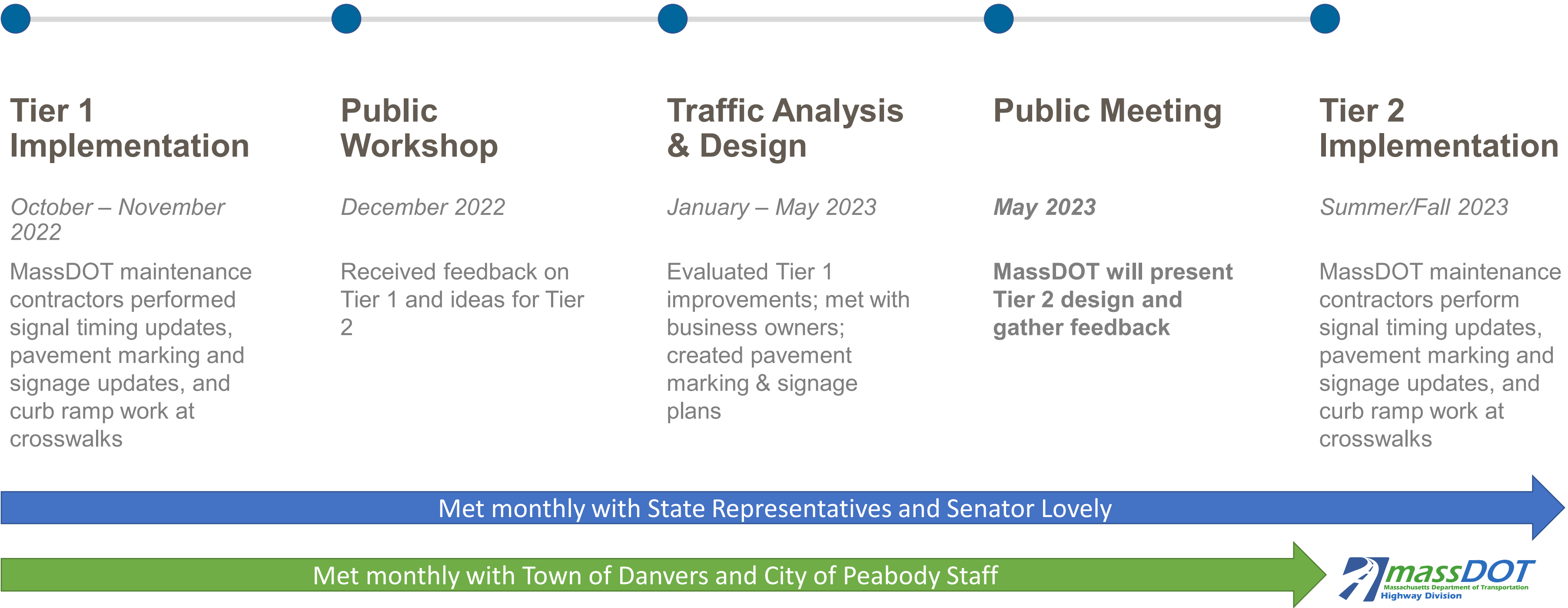
## Purpose

- Incrementally improve safety along the corridor in a tiered approach instead of waiting for a full long-term roadway reconstruction project; focus on fatal and injury crashes








# Timeline





# Tier 1 Evaluation

## Elements of Tier 1 constructed last Fall:

-  Signal timing updates including new protected left turns
-  Pavement marking & signage updates, including pilot road diet and visual breaks to the two-way-left-turn lane
-  Two new crosswalks across Route 114 at Garden Street and Palmer Avenue

**Evaluated post-implementation through public survey, stakeholder meetings, and field visits. Results of survey were discussed at December 13<sup>th</sup> public meeting.**

### Since then:

- Updated signal timing at Loris Road
- Updated signal timing between Cross/Sylvan and performed inventory of signal equipment
- Continued road diet evaluation post-holiday season





# Road Diet Evaluation

Download Save a copy to Dropbox



- Public feedback
- Stakeholder meetings
- Field visits
- Video monitoring
- Probe data
- Travel time runs

VMSC 39727-Peabody-Rt...9\_00h00min00s000ms.mp4 134 of 275

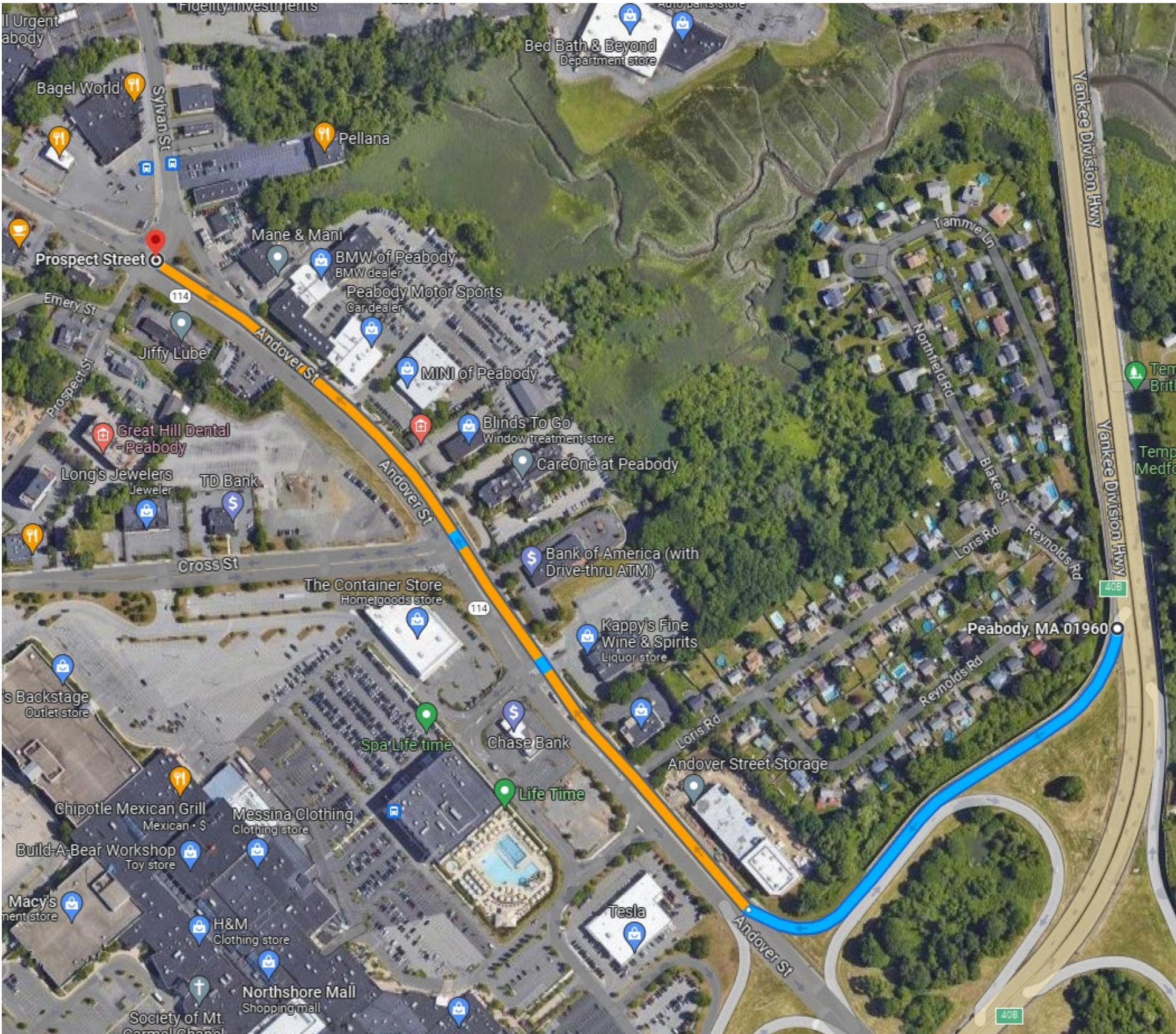
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Pause 39728-Peabody-Rte 114-Sy...23-04-29\_00h00min00s000ms.mp4 274 of 275



# Road Diet Evaluation – Westbound Travel Time Runs

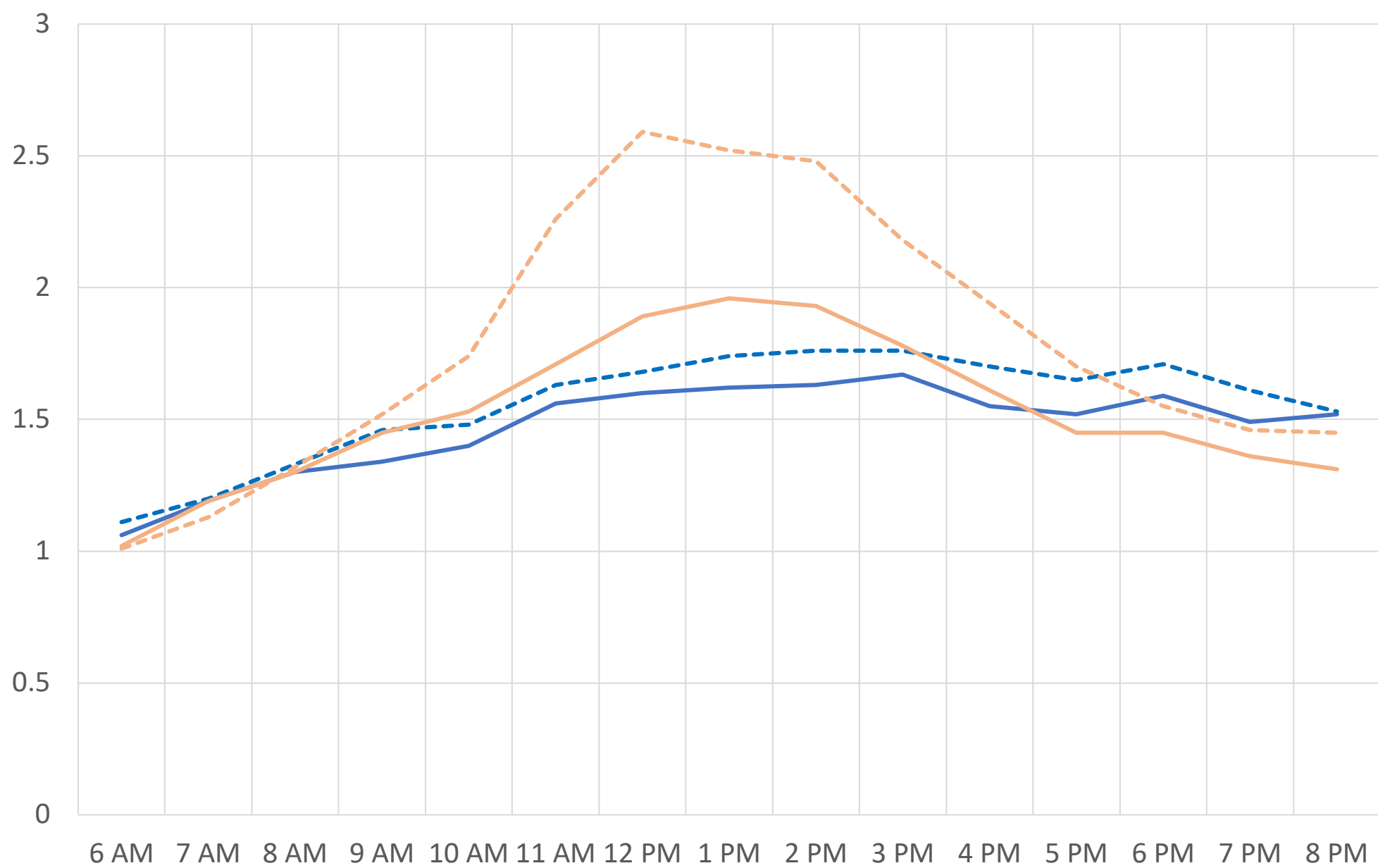


	Thursday, 2/2			Saturday, 3/18
Start time	12PM	3PM	6PM	12PM
Run 1	2:35	2:02	2:50	5:06
Run 2	1:56	2:18	1:55	4:46
Run 3	1:58	2:39	1:40	5:54
Run 4	1:22	4:44	2:25	7:18
Run 5	2:01	3:36	3:06	3:23
Average	1:58	3:03	2:23	5:17
Median	1:58	2:39	2:25	5:06

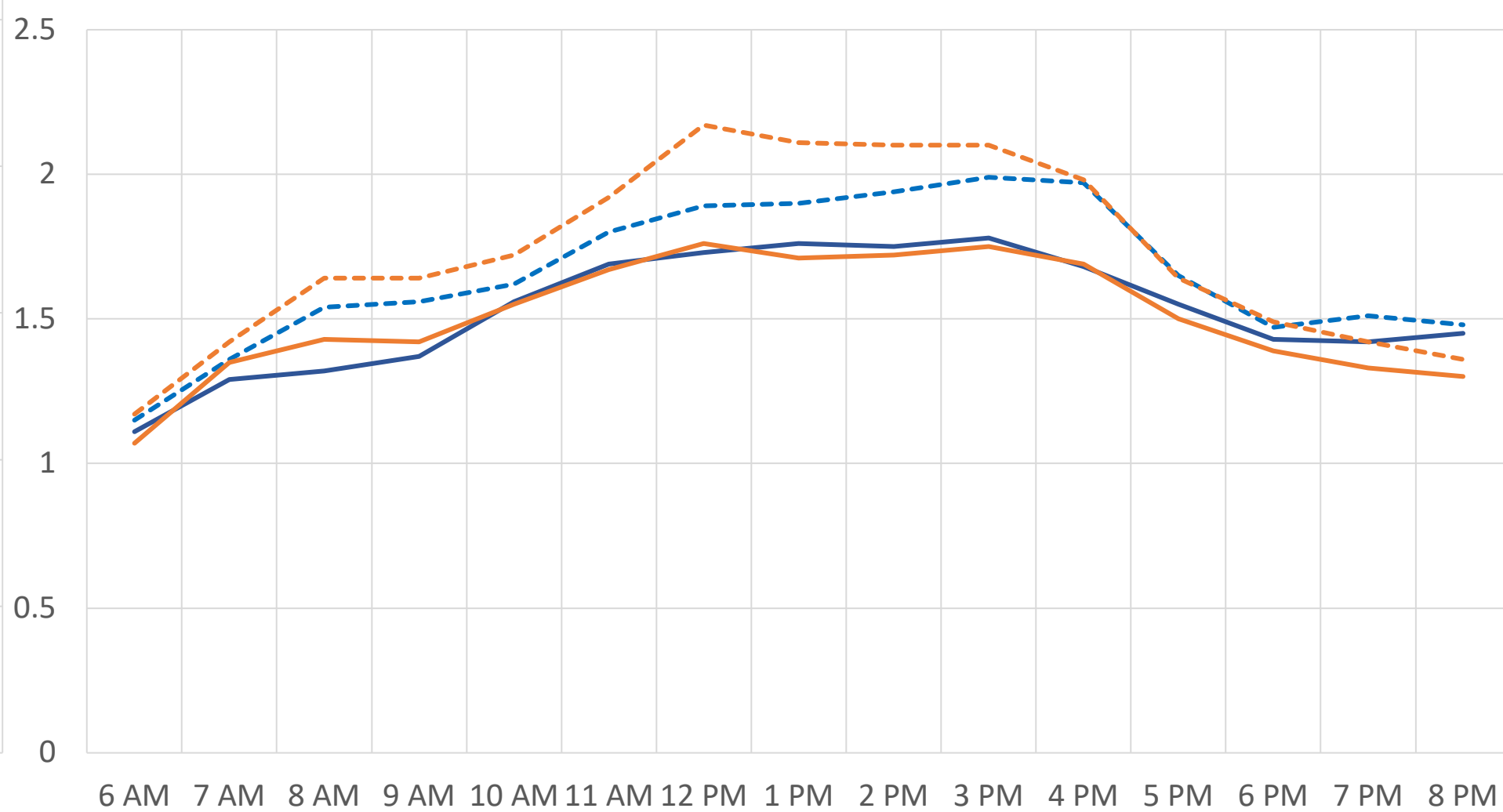


# Road Diet Evaluation – Travel Time from Sylvan to Route 128

Saturday Average in April & May



Weekday Average in April & May

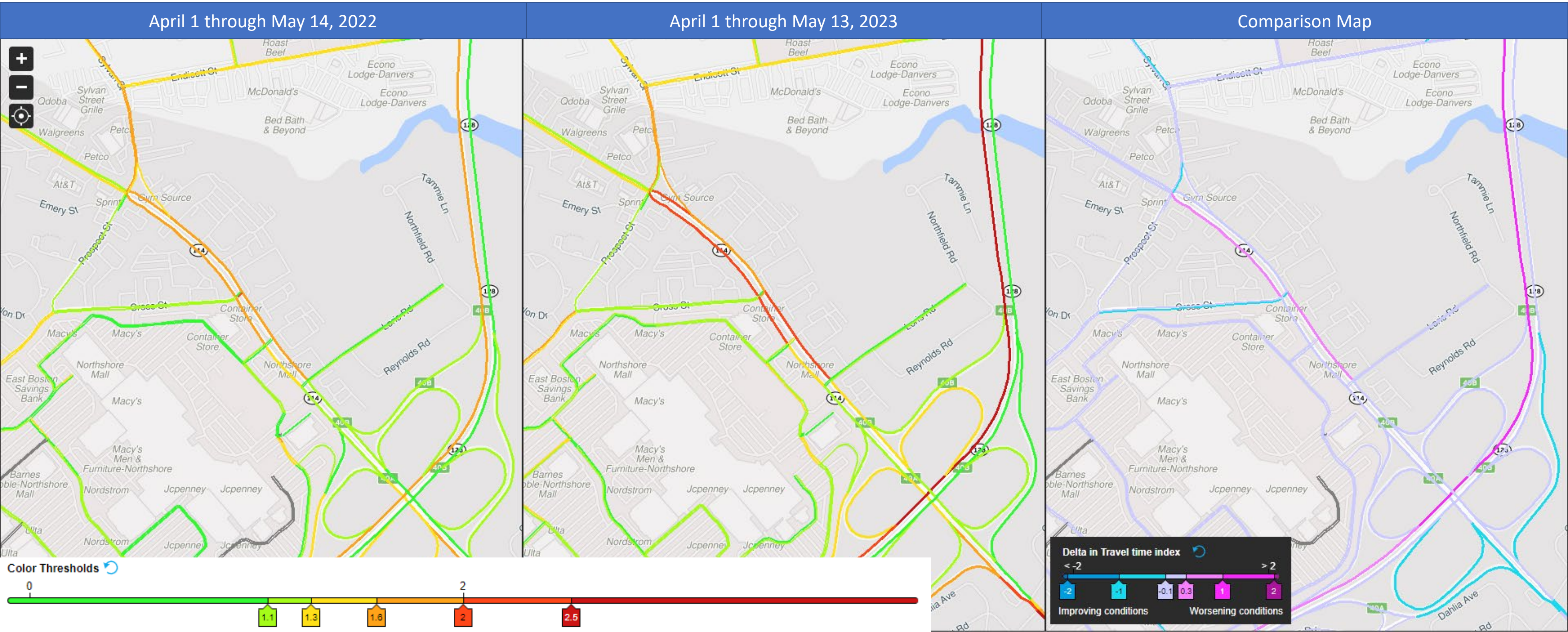


Eastbound - 2022    Eastbound - 2023    Westbound - 2022    Westbound - 2023

**Travel Time Index as shown on the y axis is a ratio of the average time it takes to travel through a segment over the ideal travel time (free-flow).**  
*i.e. 2 means it takes twice as long to get through at a certain time as it would if there were no traffic.*



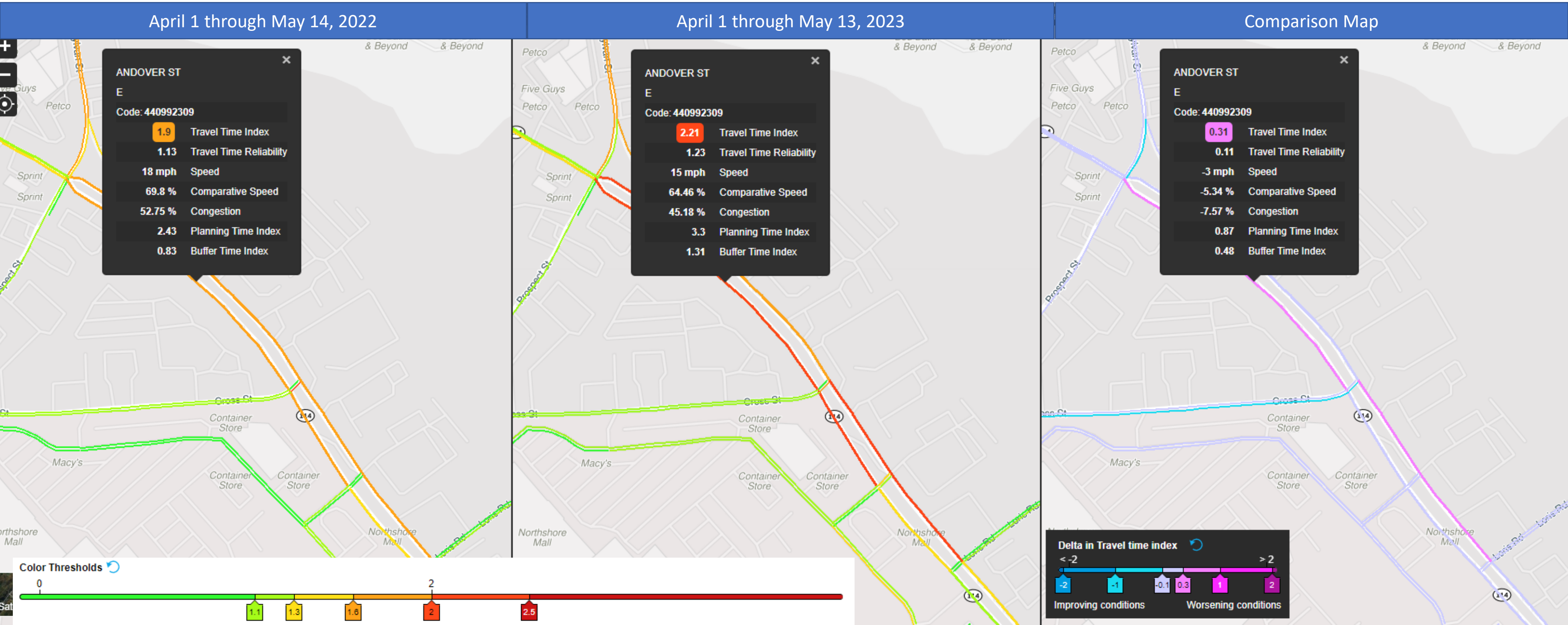
# Road Diet Evaluation – Weekdays 2pm-6pm (Average)



- Congestion worse in WB direction primarily from Loris to Cross.
- Congestion worse in EB direction from Sylvan to North Shore Mall.



# Road Diet Evaluation – Weekdays 2pm-6pm (Average)



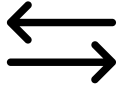




- Segment of roadway that saw increased travel time is Sylvan to Cross where there were no lanes removed. May be from gridlock of Cross to Sylvan WB. Want to hear public feedback!



# Tier 2 Scope

The following elements will be implemented in the Summer/Fall 2023 Improvements:

-  Add back WB travel lane, construct southern sidewalk between Cross St and Loris Rd
-  Repave corridor, narrow travel lanes
-  Pilot median at select locations
-  Three (3) crosswalks across Route 114 at Walmart, Sylvan St, and Cross St
-  Combine Esquire Dr and Violet Rd signals to ease confusion





## Tier 2: Preliminary Eastern Corridor Design



- Westbound: Lanes return to previous condition, lane removal did not work without significant signal upgrades
- Eastbound: Bring back right turn lanes but use space from lane removal to install sidewalk on South Side; details being worked out

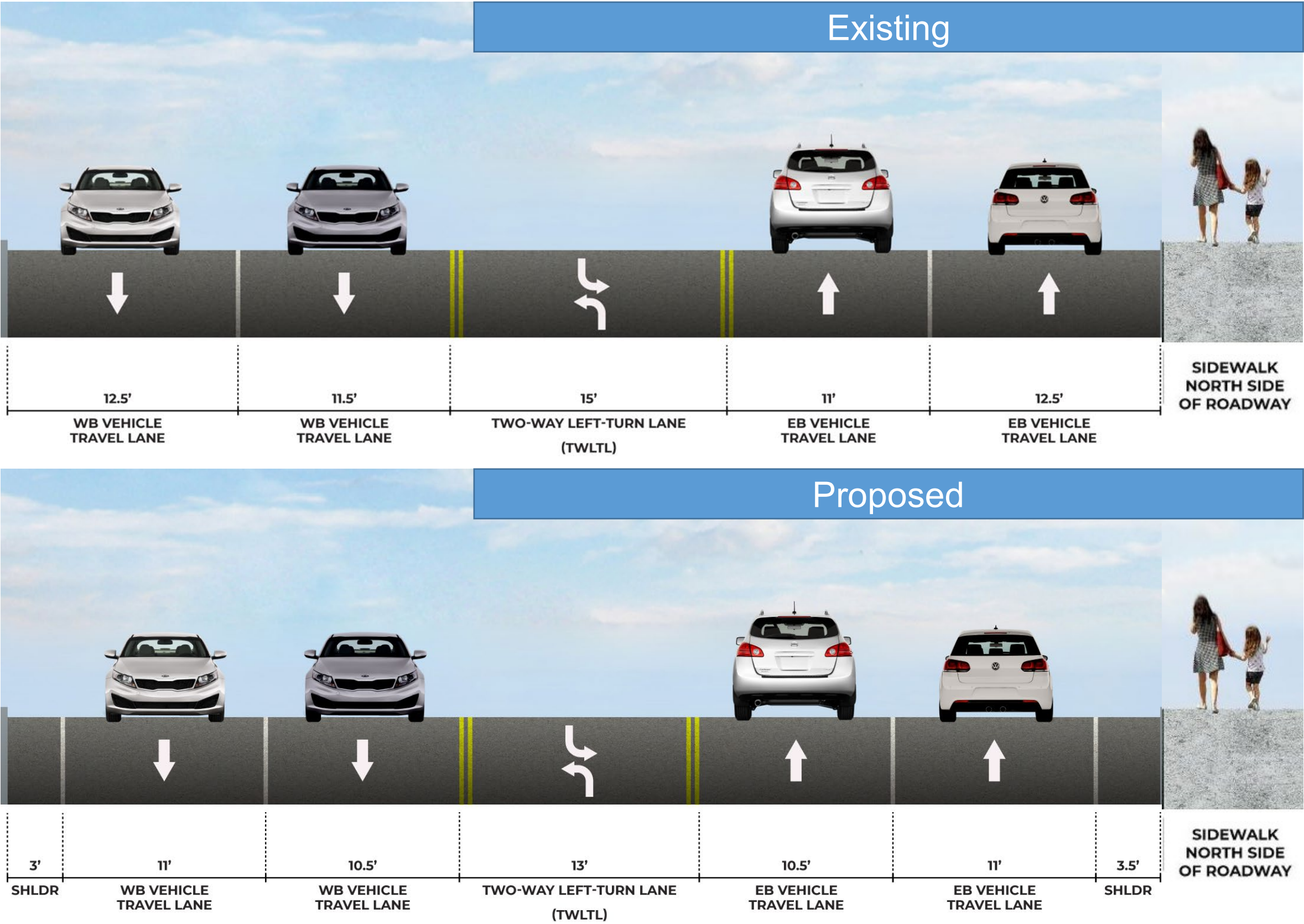


## Tier 2: Preliminary Eastern Corridor Design





# Tier 2: Narrow Travel Lanes



Benefits:

- Increased level of comfort for pedestrians
- Support roadway drainage
- Reduce speeds to match roadway target speed
- Improved sight distance to side streets and driveways



## Tier 2: Access Management/Pilot Medians

Physically restrict dangerous movements at select locations with high occurrence or high severity of crashes.

Targeted areas with redundant access points, alternate access to a signal via a side street, left-turns already restricted through markings and/or signs, and significant crash history.

Met with business owners of potentially affected locations to determine best design.

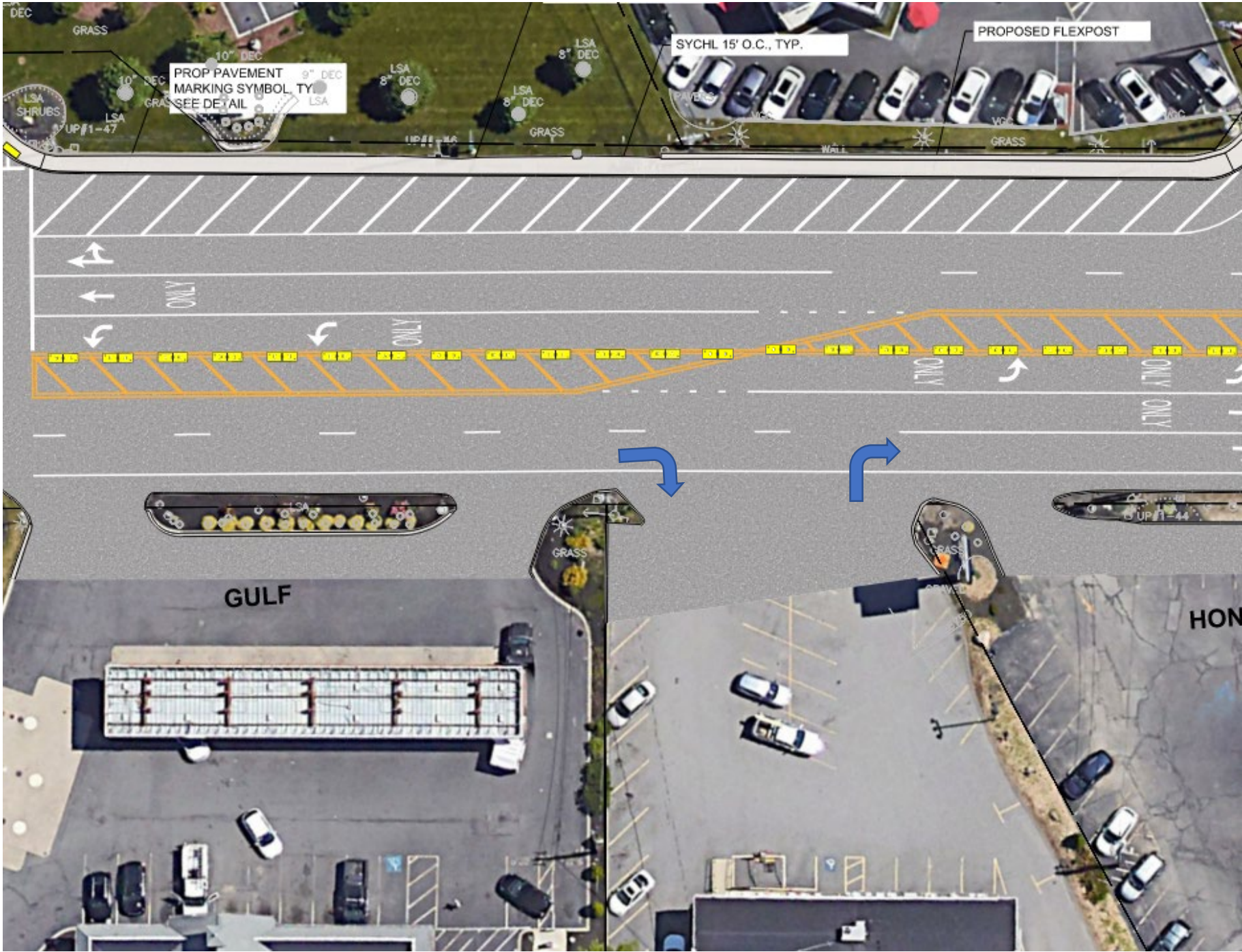
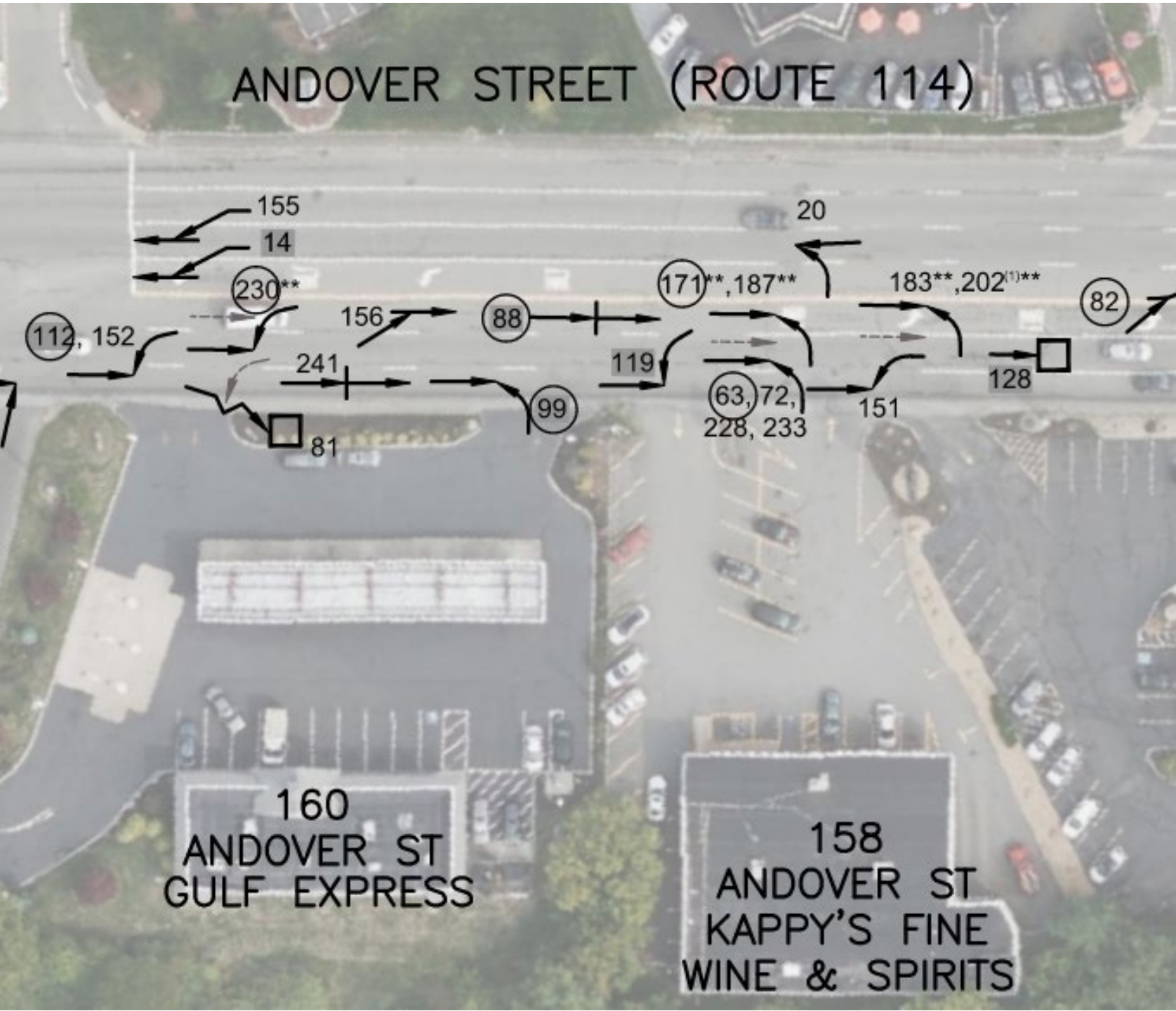


Source: 3D Specialties



# Tier 2: Pilot Medians

Gulf Express & Kappy's (Danvers)

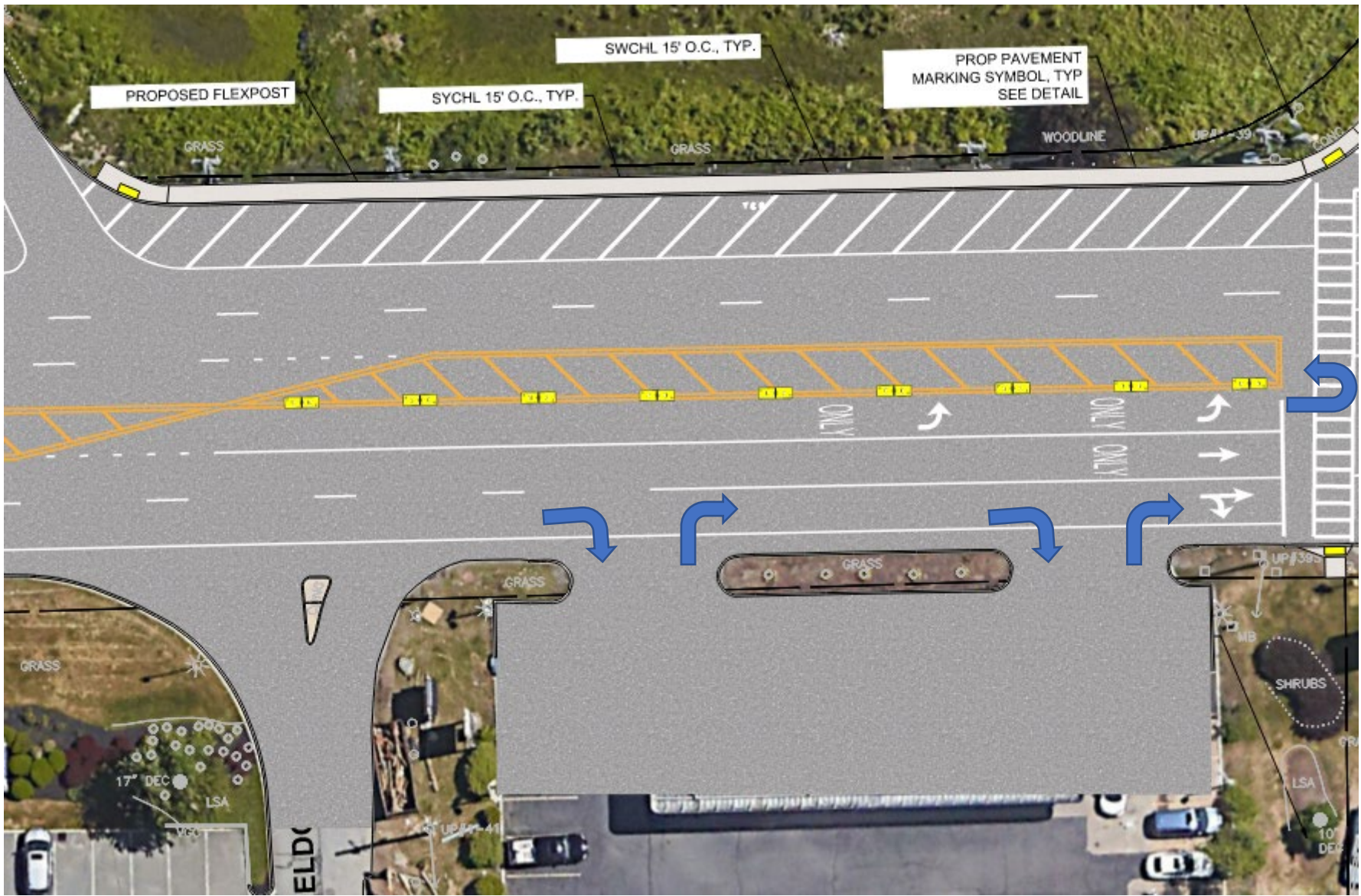
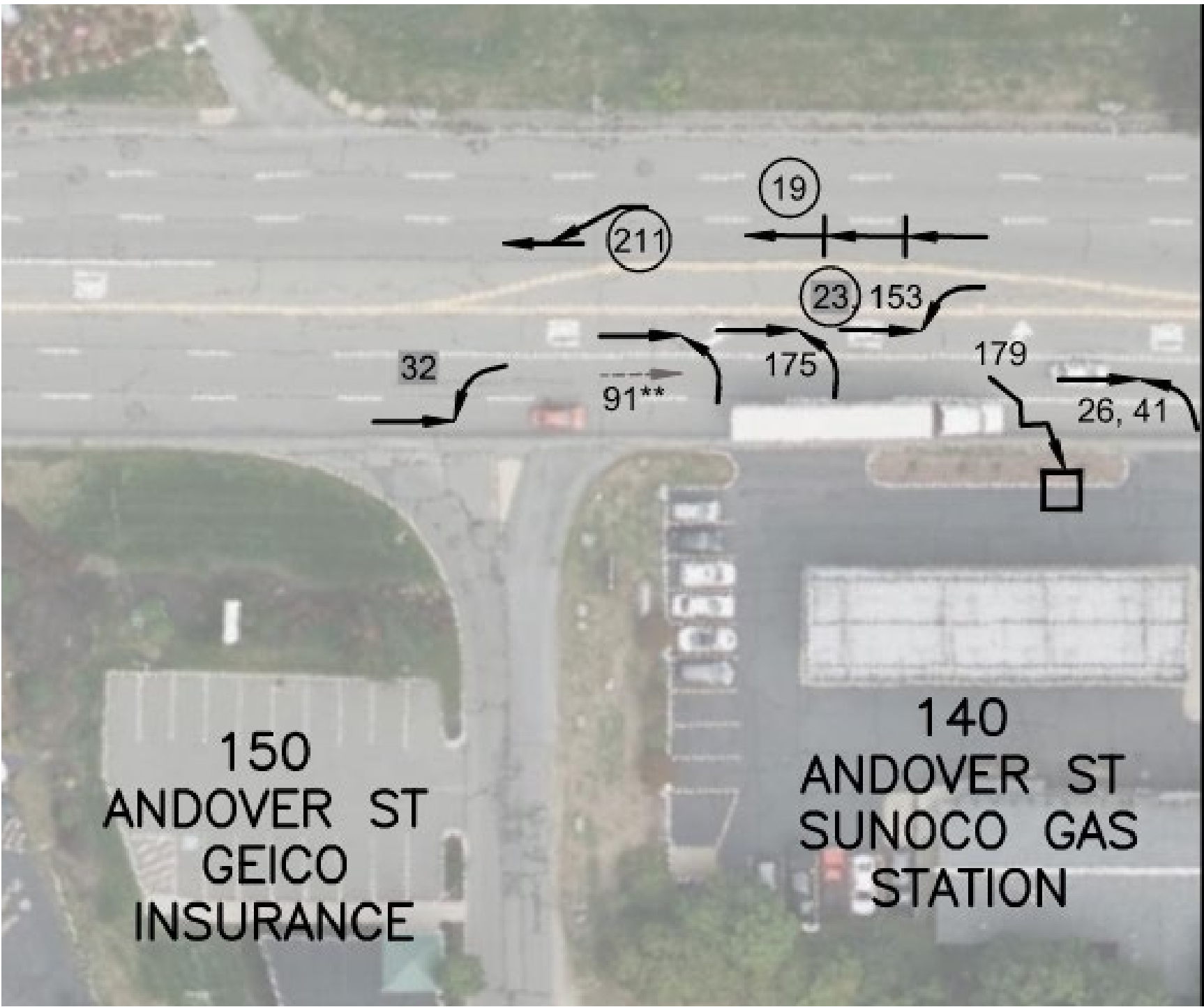


U-turn at signals to turn 'left' to or from Kappy's



# Tier 2: Pilot Medians

Sunoco

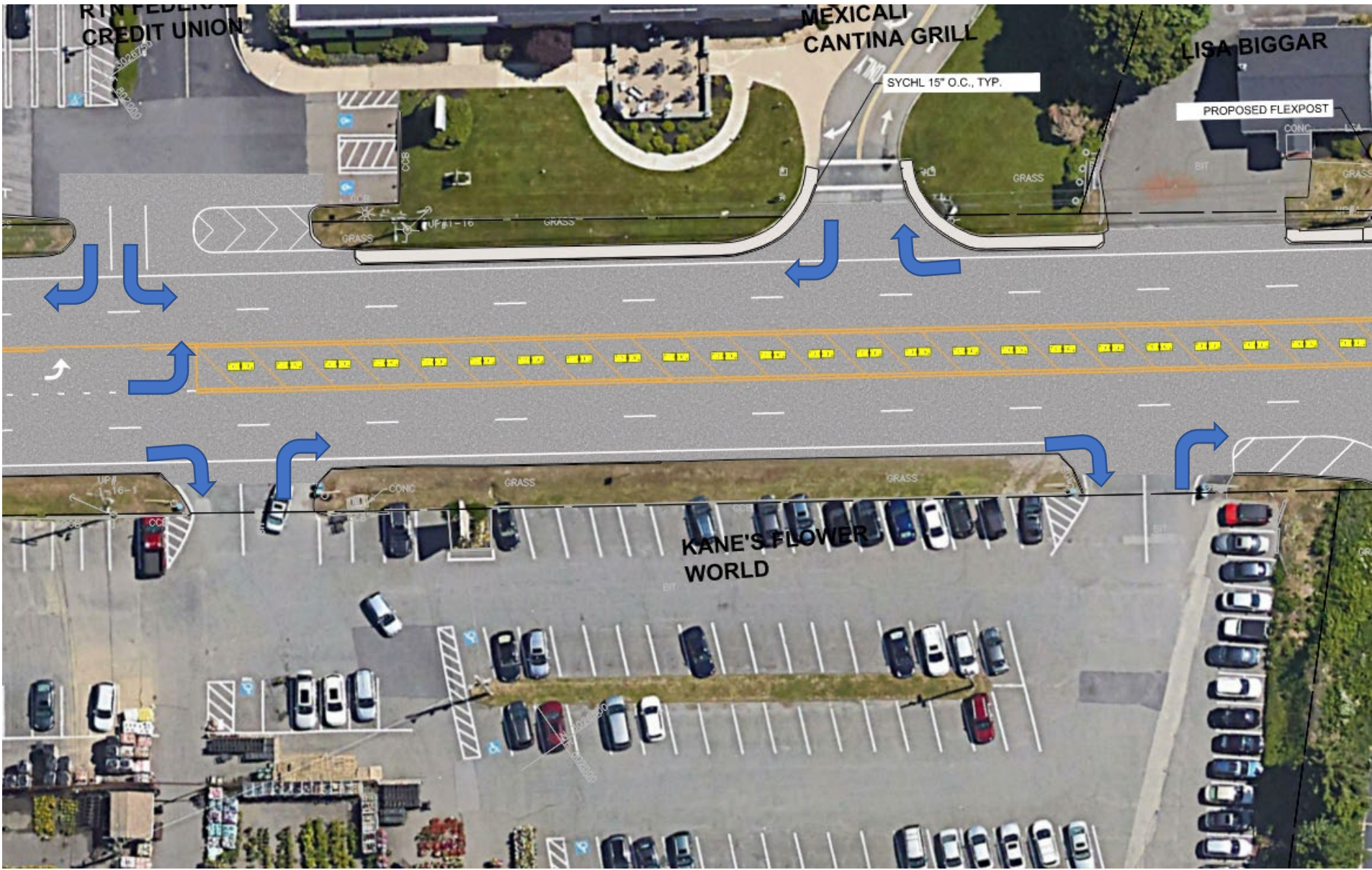
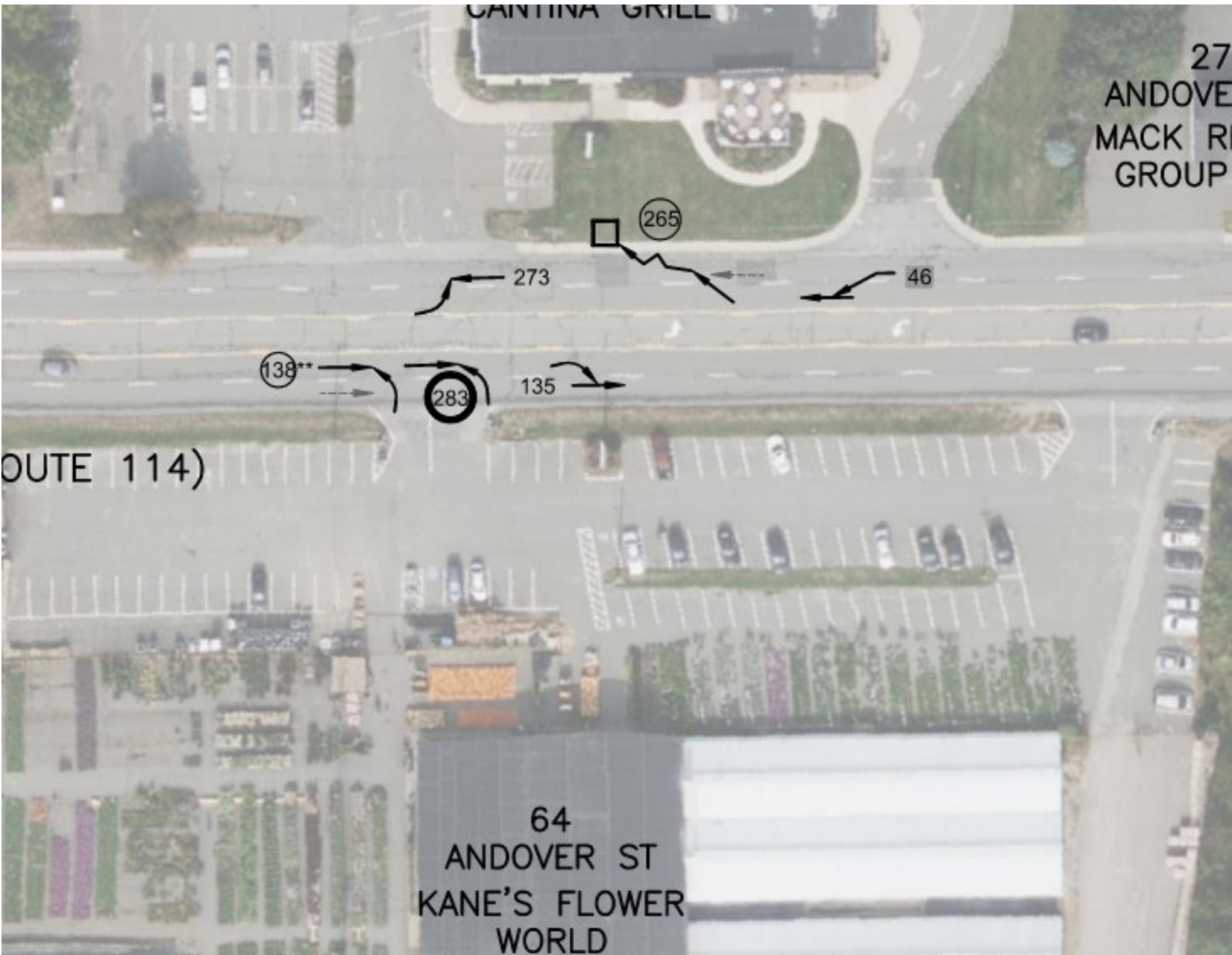


U-turn at signal;  
reinforcing existing  
restriction



# Tier 2: Pilot Medians

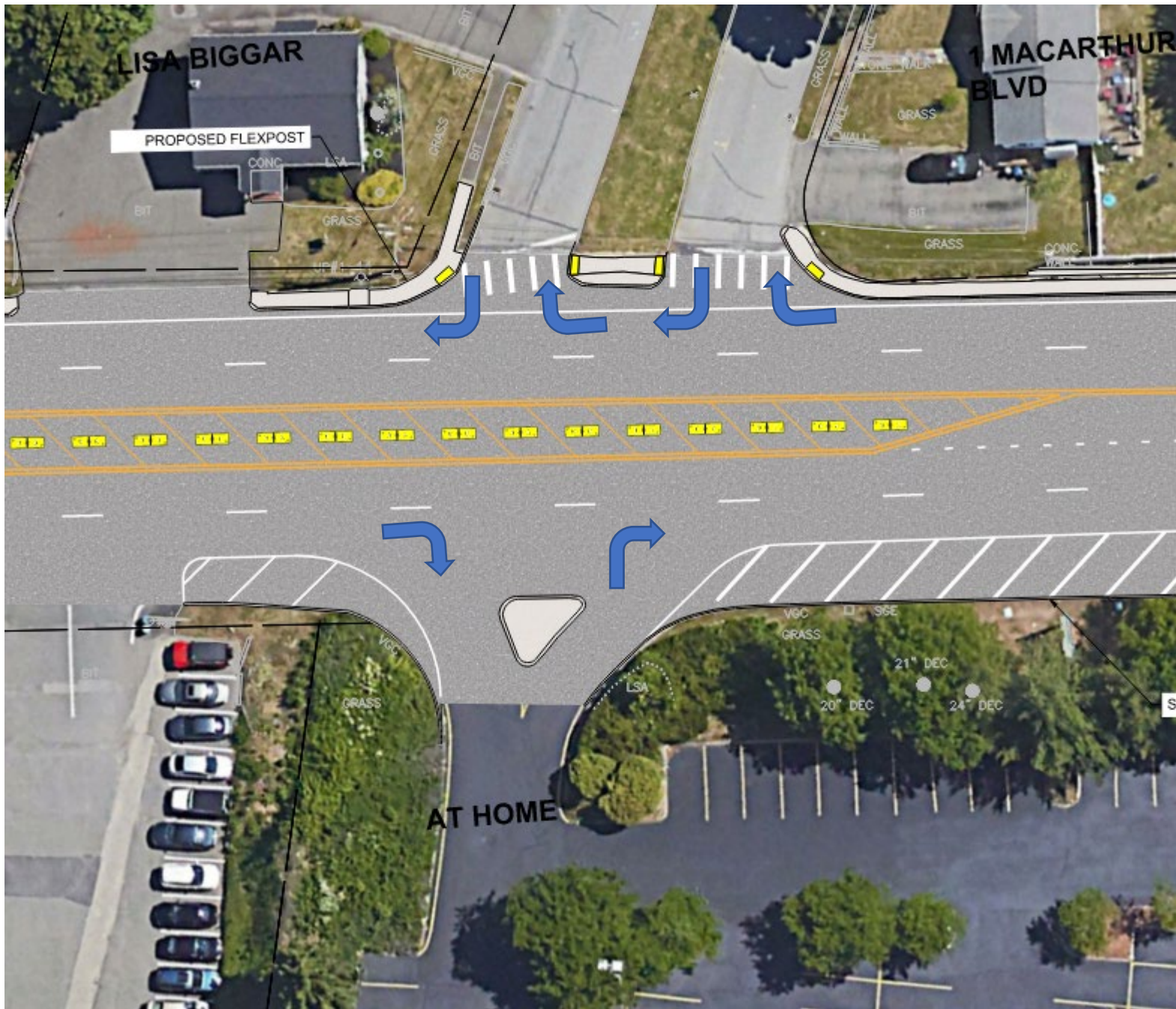
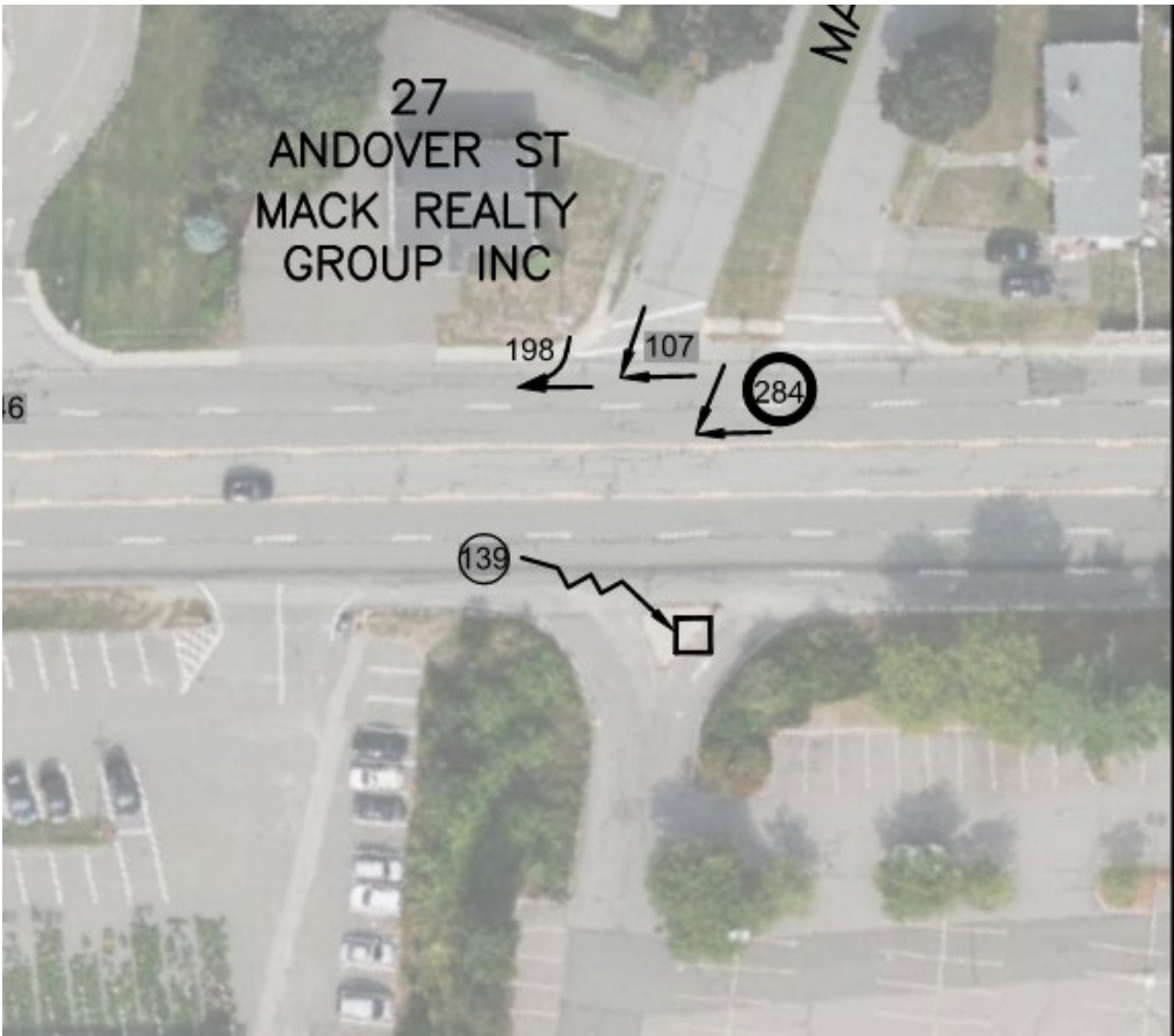
Kane's Flower World





# Tier 2: Pilot Medians

MacArthur Boulevard

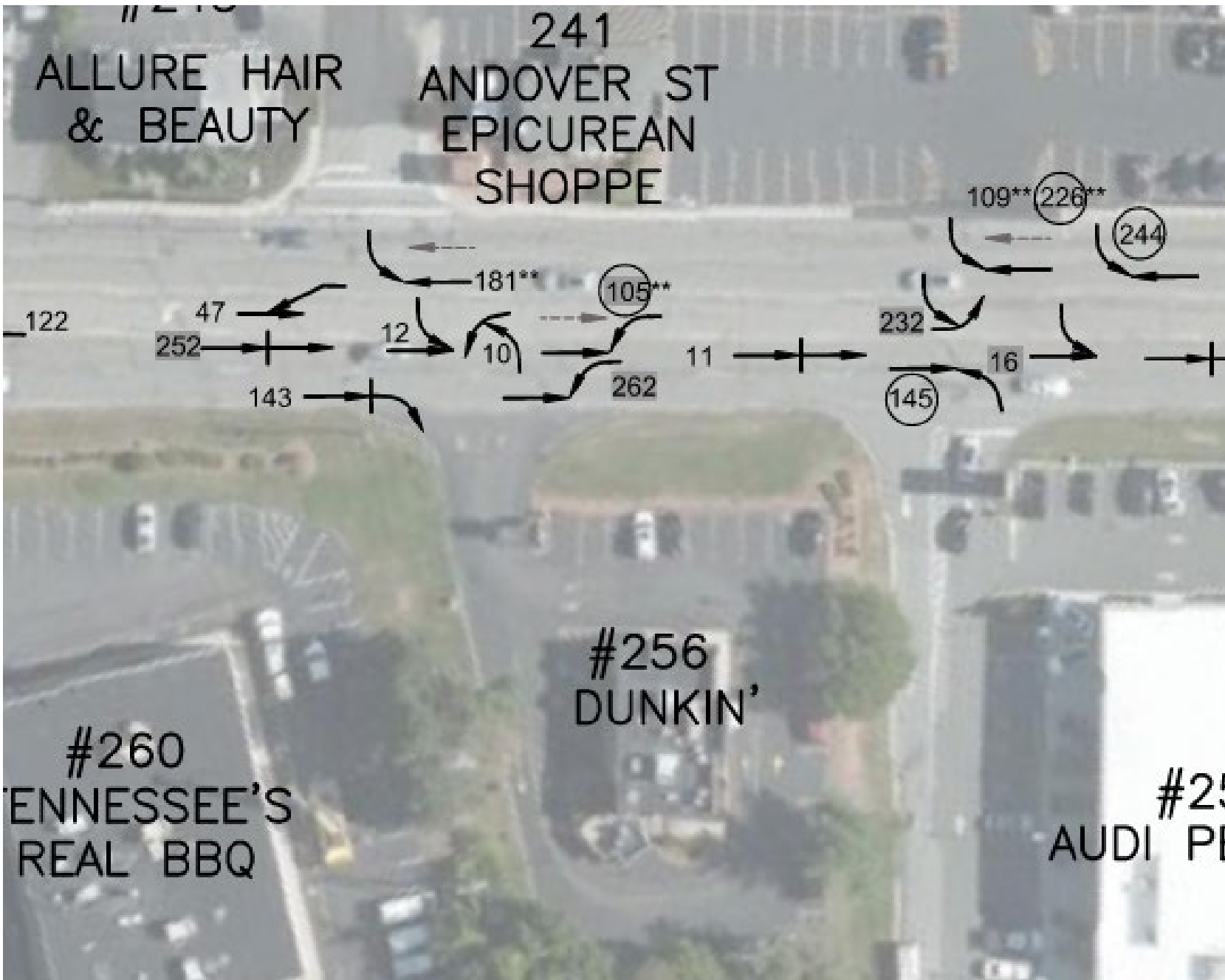


Access to/from neighborhood  
at Palmer signal



# Tier 2: Pilot Medians

Dunkin' & Audi Peabody

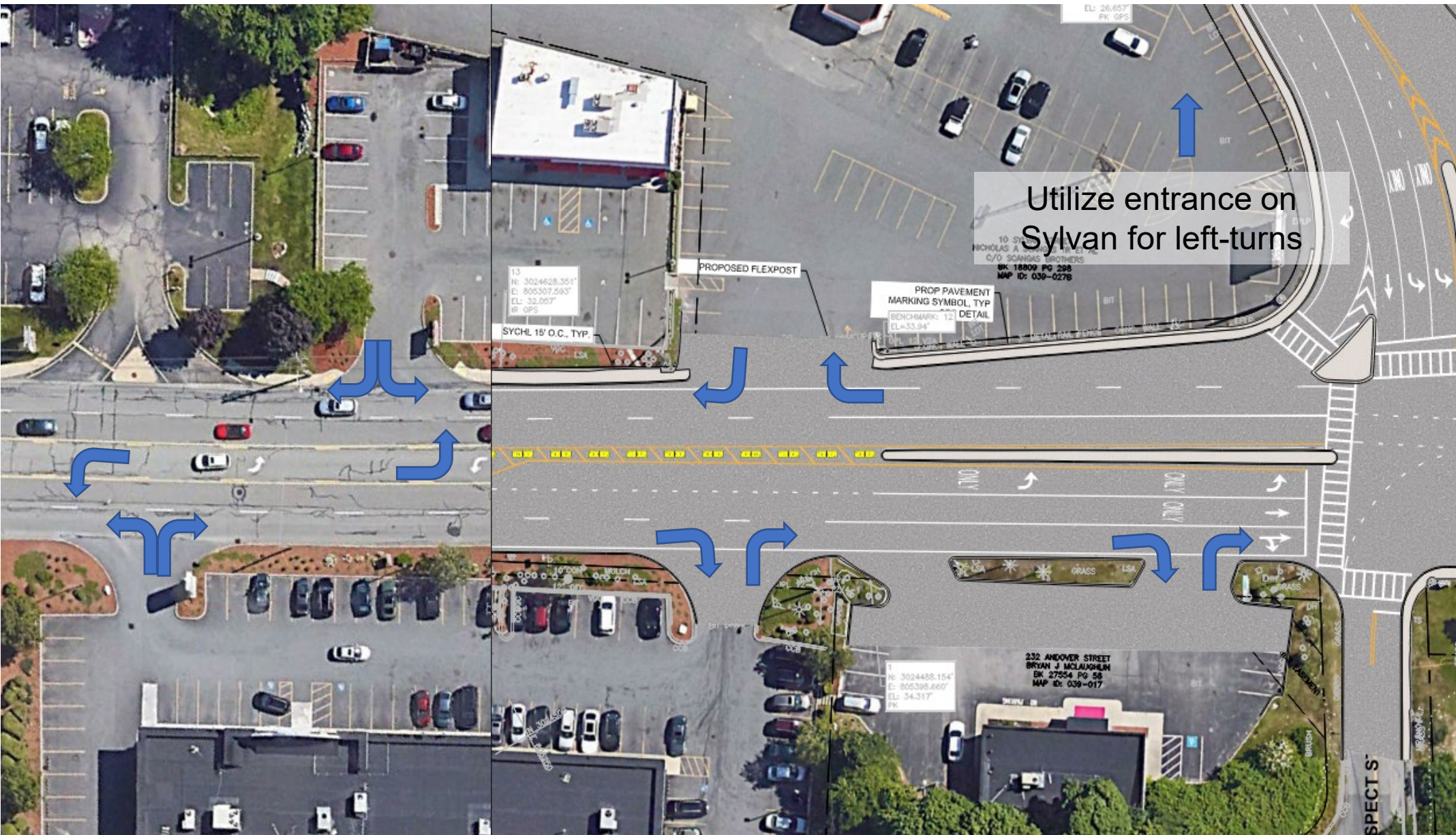
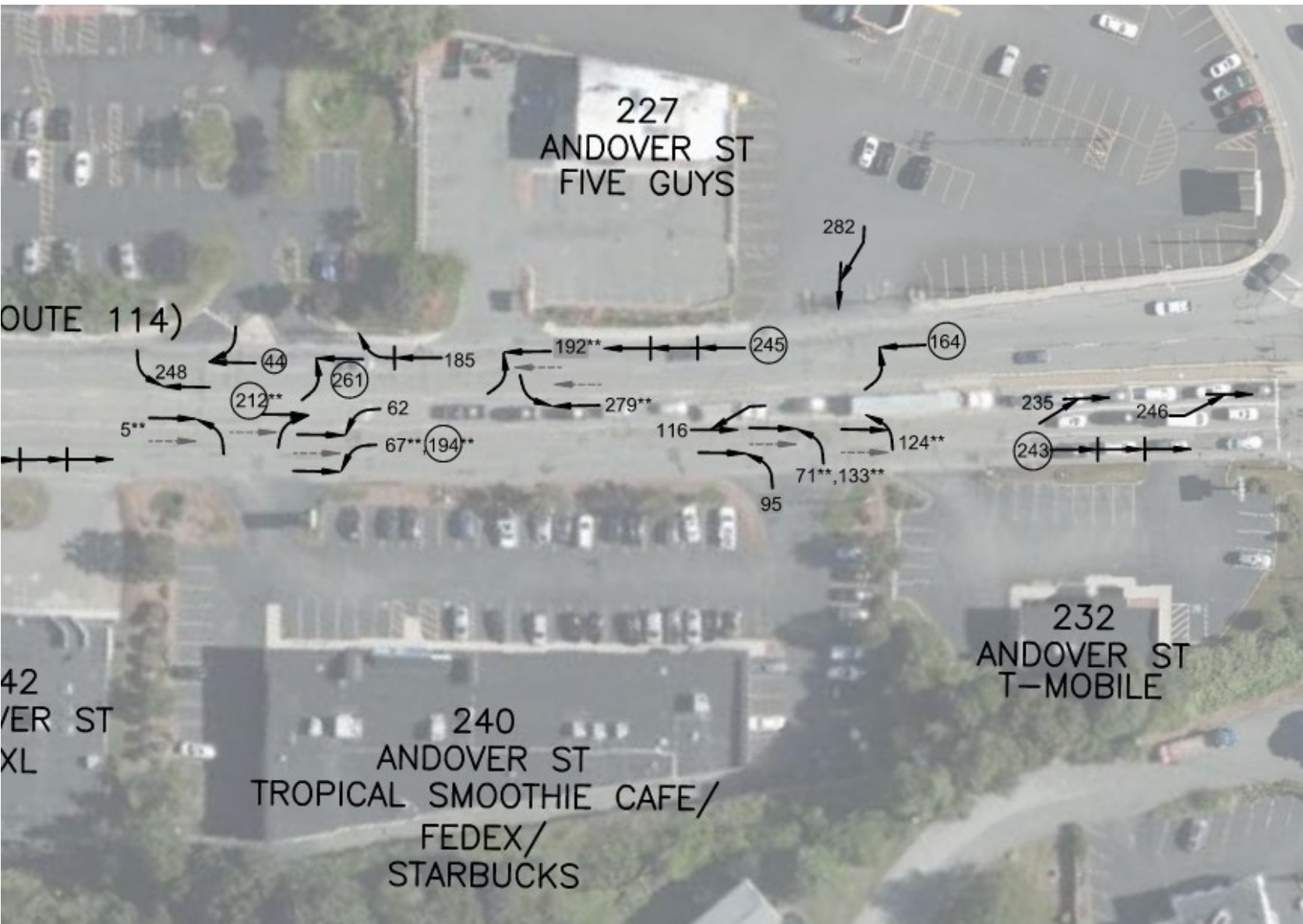


Alternative access to plaza at  
Walter Road



# Tier 2: Pilot Medians

West of Sylvan



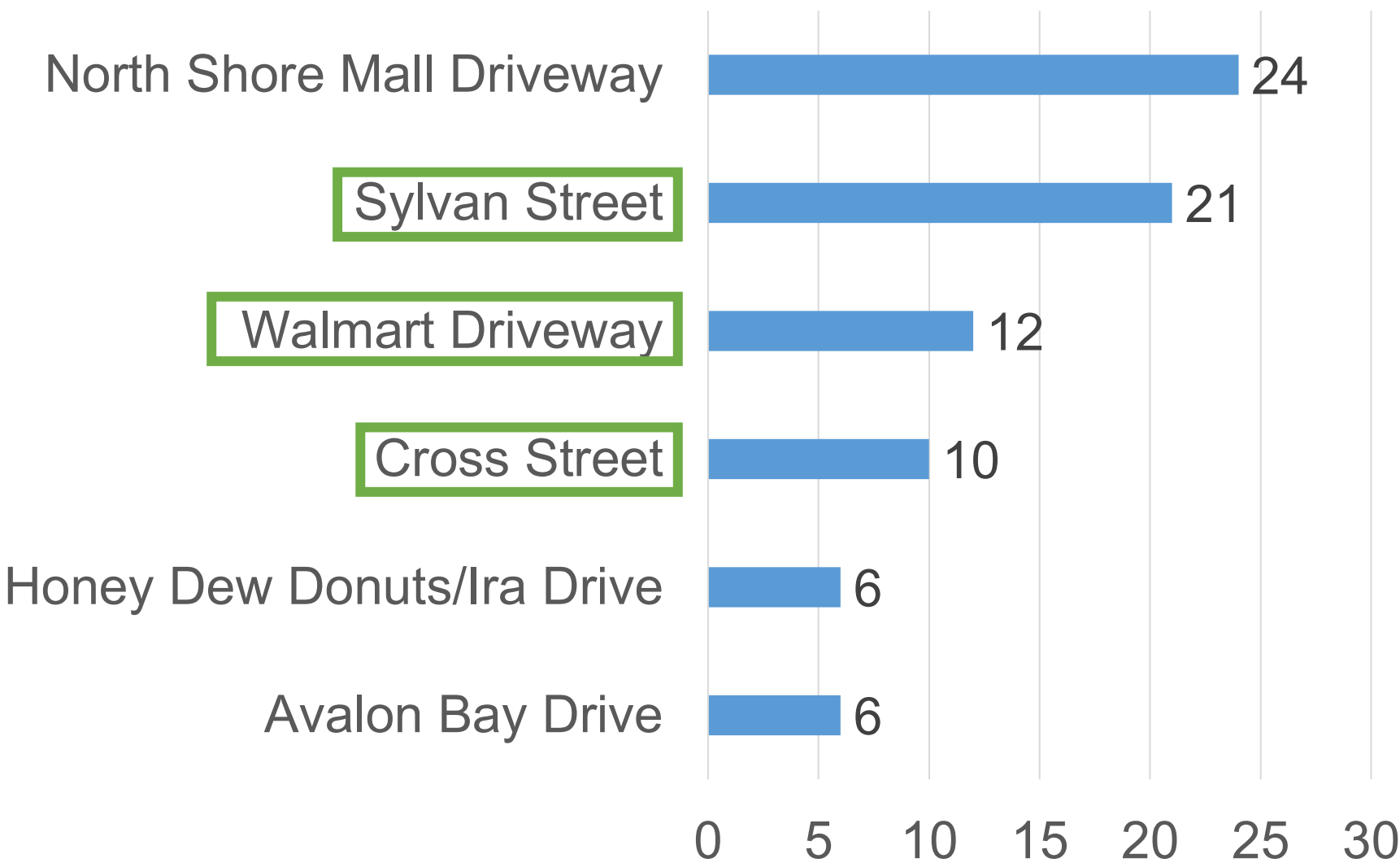
Alternative access at Sylvan;  
leftmost driveway retains full  
access



# Tier 2: Crosswalks

Where would you like to cross?

WHERE DO YOU WANT TO CROSS  
ROUTE 114?



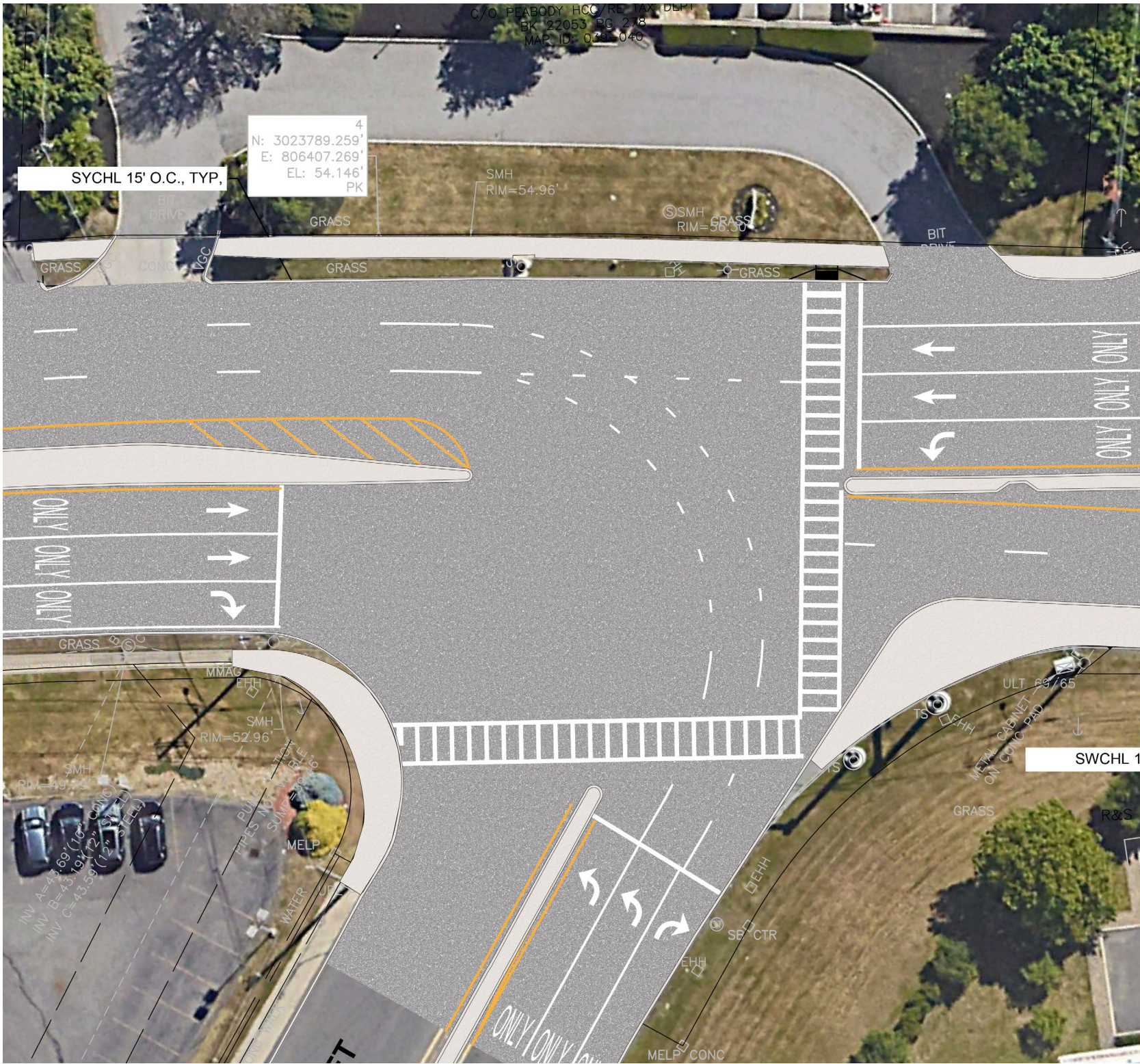
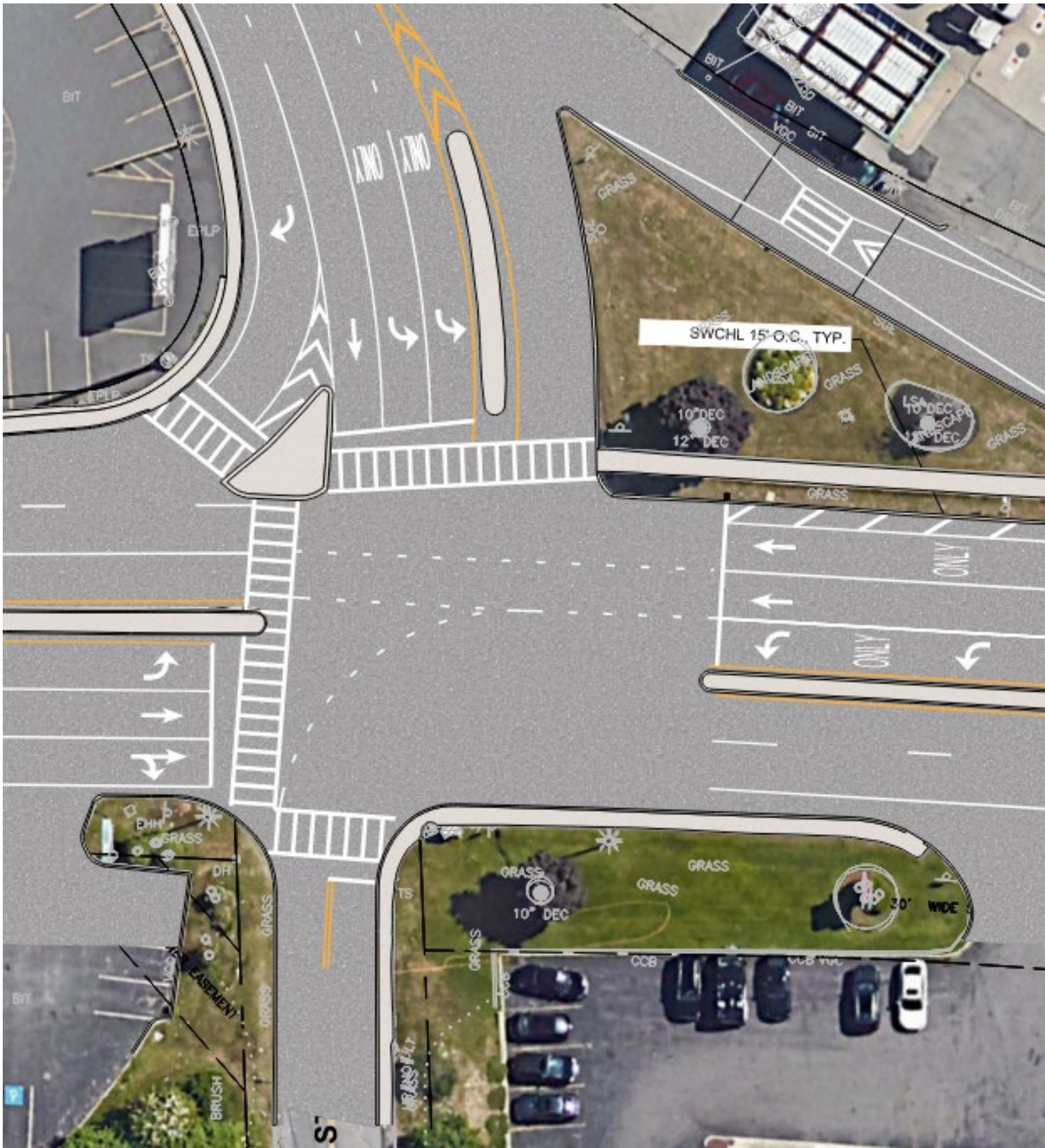


# Tier 2: Crosswalks





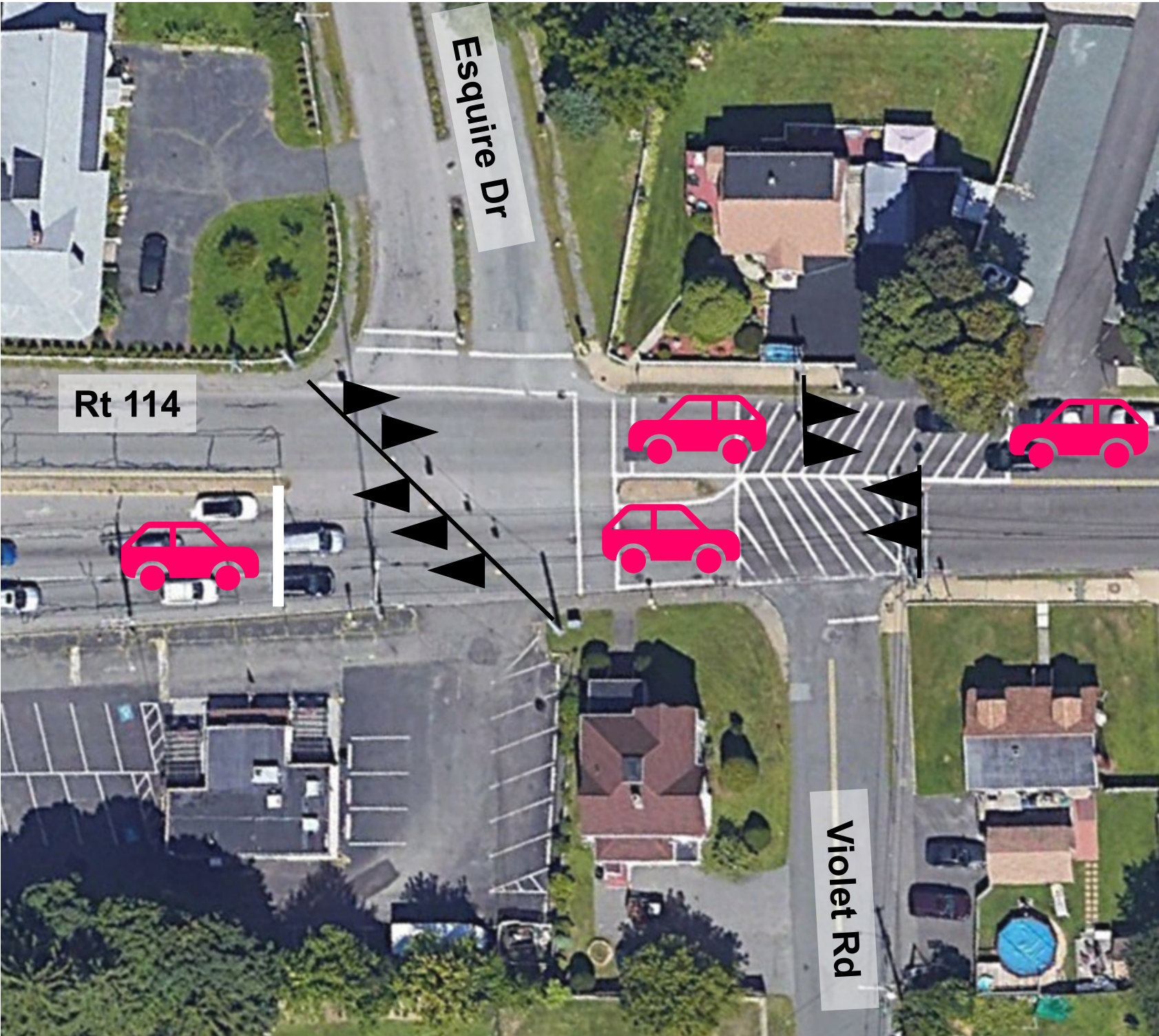
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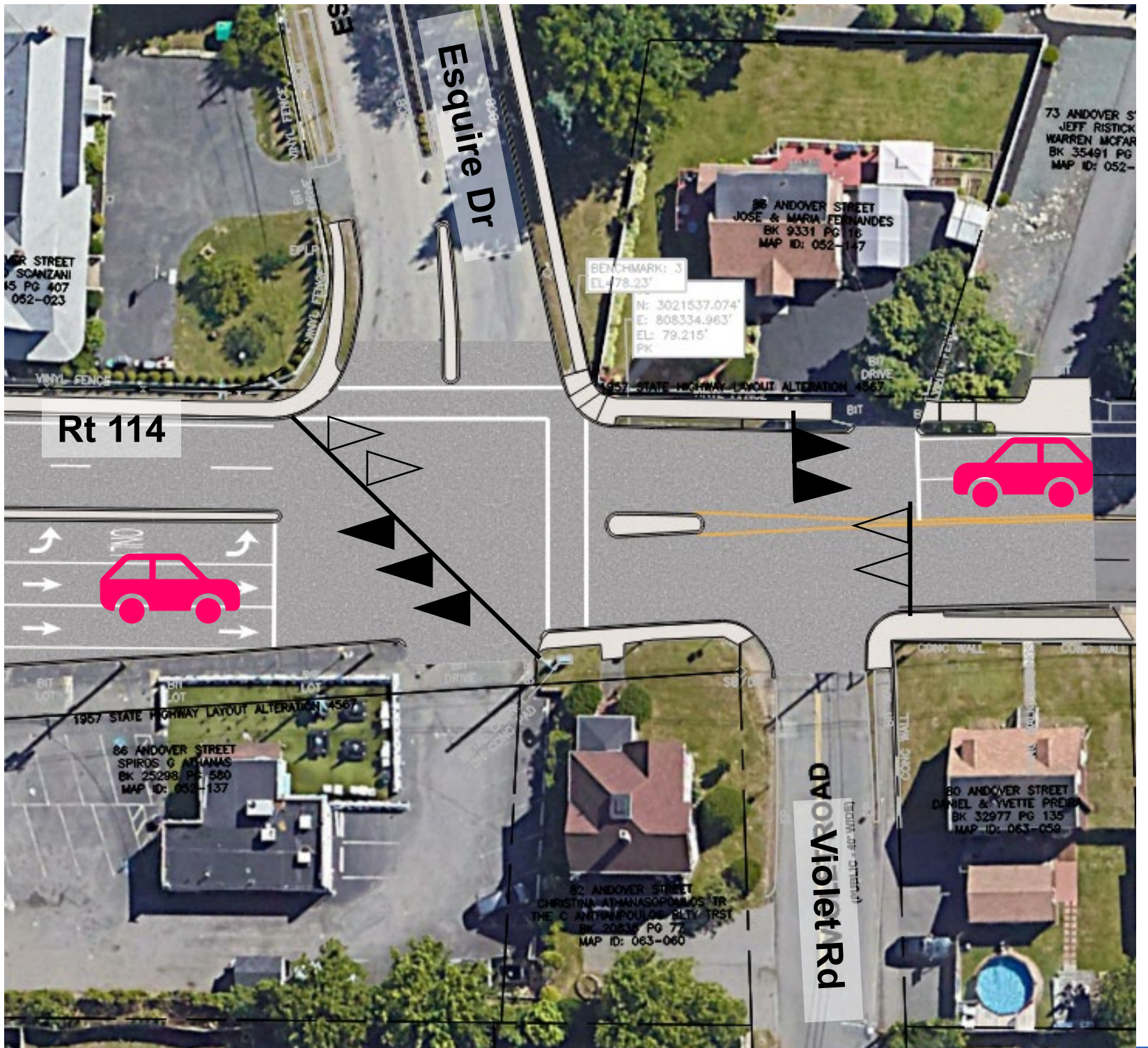


# Tier 2: Signal Consolidation

Existing



Proposed





# Next Steps



Fall Implementation of  
Tier 1 Improvements  
& Evaluation



Public Meeting for  
Discussion of Tier 2  
Improvements



Reach out to  
stakeholders and  
businesses for  
coordination and  
rights-of-entry as  
needed



Design of Tier 2  
Improvements  
ongoing

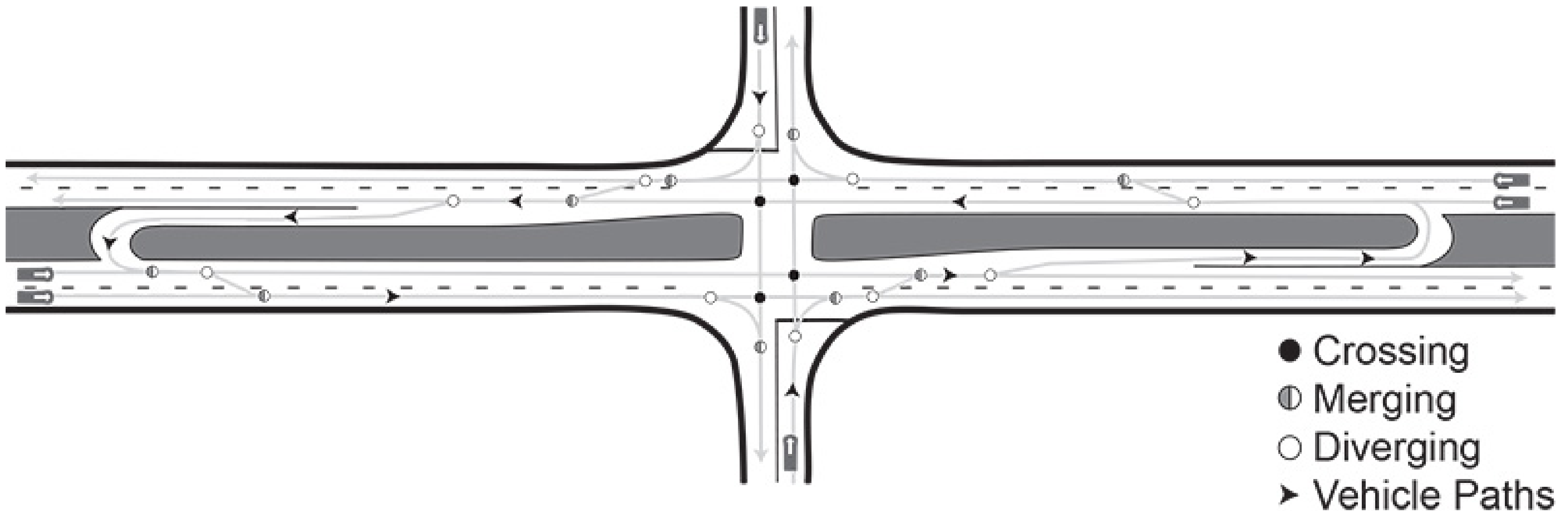


Summer/Fall  
Implementation of  
Tier 2 Improvements



## Ongoing: Corridor Study

- A corridor study has been commissioned by the MassDOT Office of Transportation Planning (OTP) to evaluate options for a long-term reconstruction project – **this will have its own public process**
  - What happens if a median is placed along the entire road?
  - Can a partial median have safety benefits but allow for some access along the roadway?
  - What are the impacts of bringing ped/bike facilities onto the road?





## How Will We Keep You Informed?



Project Website: <https://www.mass.gov/route-114-danverspeabody-safety-improvements-project>



Project email: [route114safety-peabodydanvers@dot.state.ma.us](mailto:route114safety-peabodydanvers@dot.state.ma.us)

*Reach out with questions, concerns, or to sign up for future updates!*





# *Thank You*

## *Route 114 Safety Improvements Project Danvers/Peabody*

Tier 2 Public Meeting | May 17 | 6pm

MassDOT Project Manager: Kayla Sousa

Email: [route114safety-peabodydanvers@dot.state.ma.us](mailto:route114safety-peabodydanvers@dot.state.ma.us)