



North McDowell Blvd. Complete Streets Project Update

PETALUMA CITY COUNCIL – JULY 17, 2023

Project Update Agenda



Project Overview



Traffic Calming



Trees and Landscaping



Active Transportation and Transit

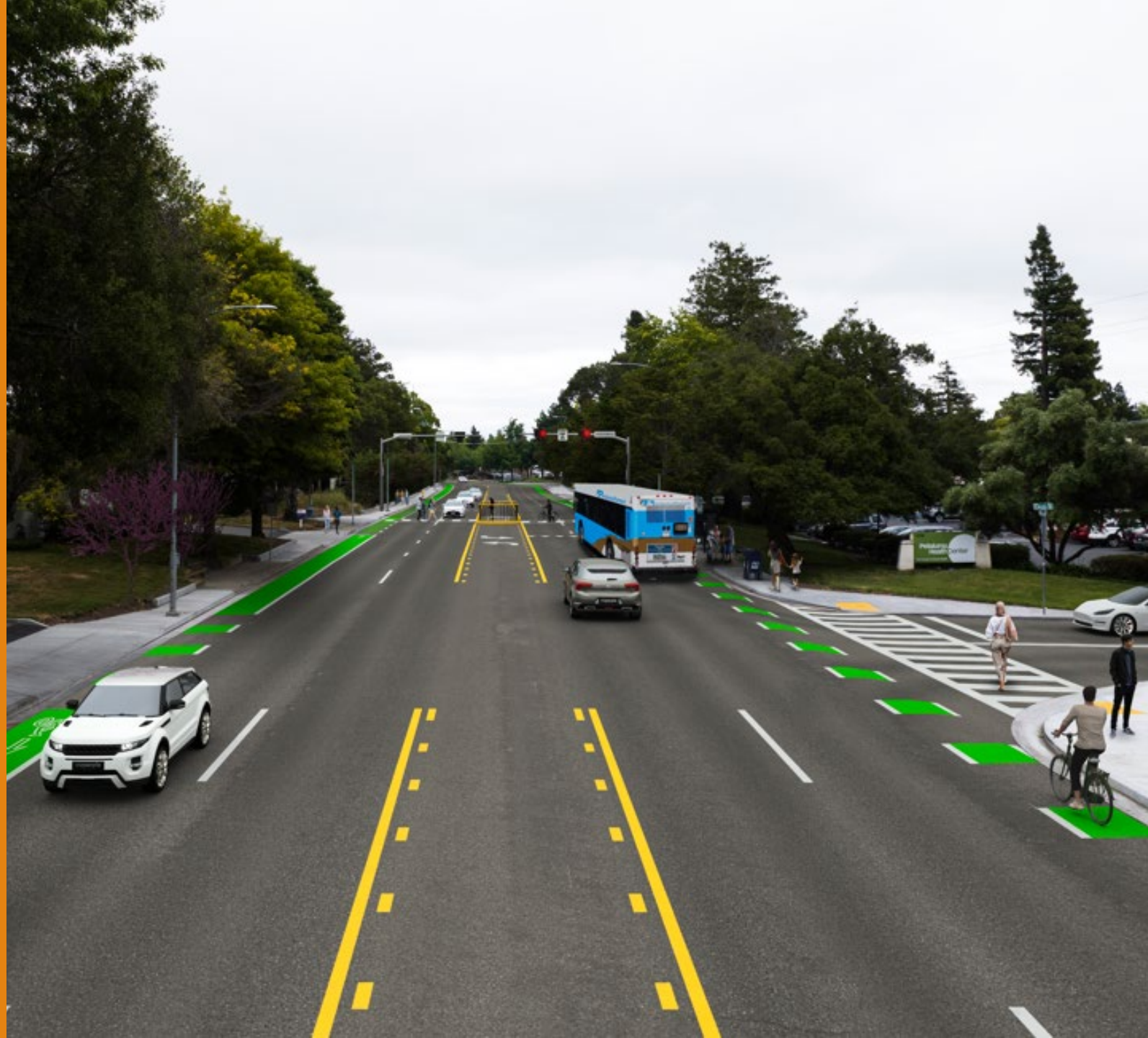


Safety Improvements



Summary

Project Overview



Project Goals

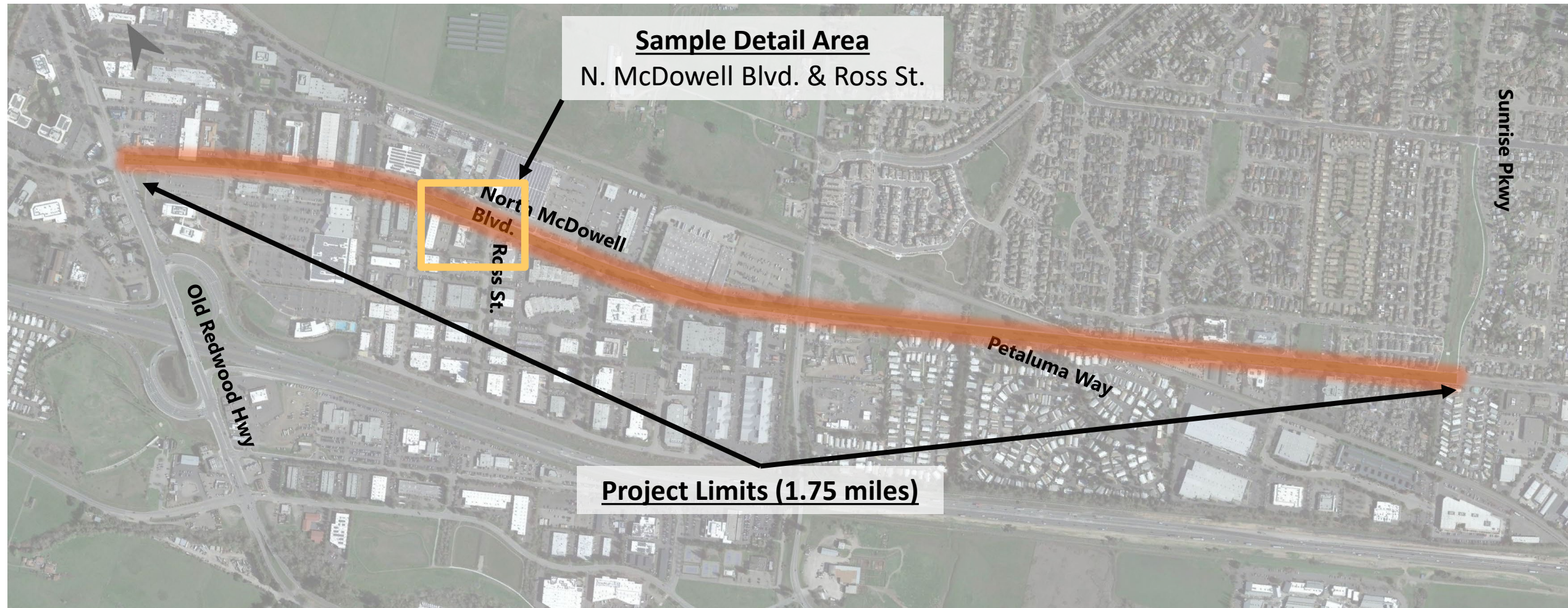
- Increase **SAFETY**
- Improve pavement structure
- Encourage active transportation
- Enhance transit facilities and access
- Reduce congestion while slowing traffic
- Facilitate commerce
- Take action to achieving climate goals



Crash “Heat” Map along North McDowell Blvd.

Project Area Extents

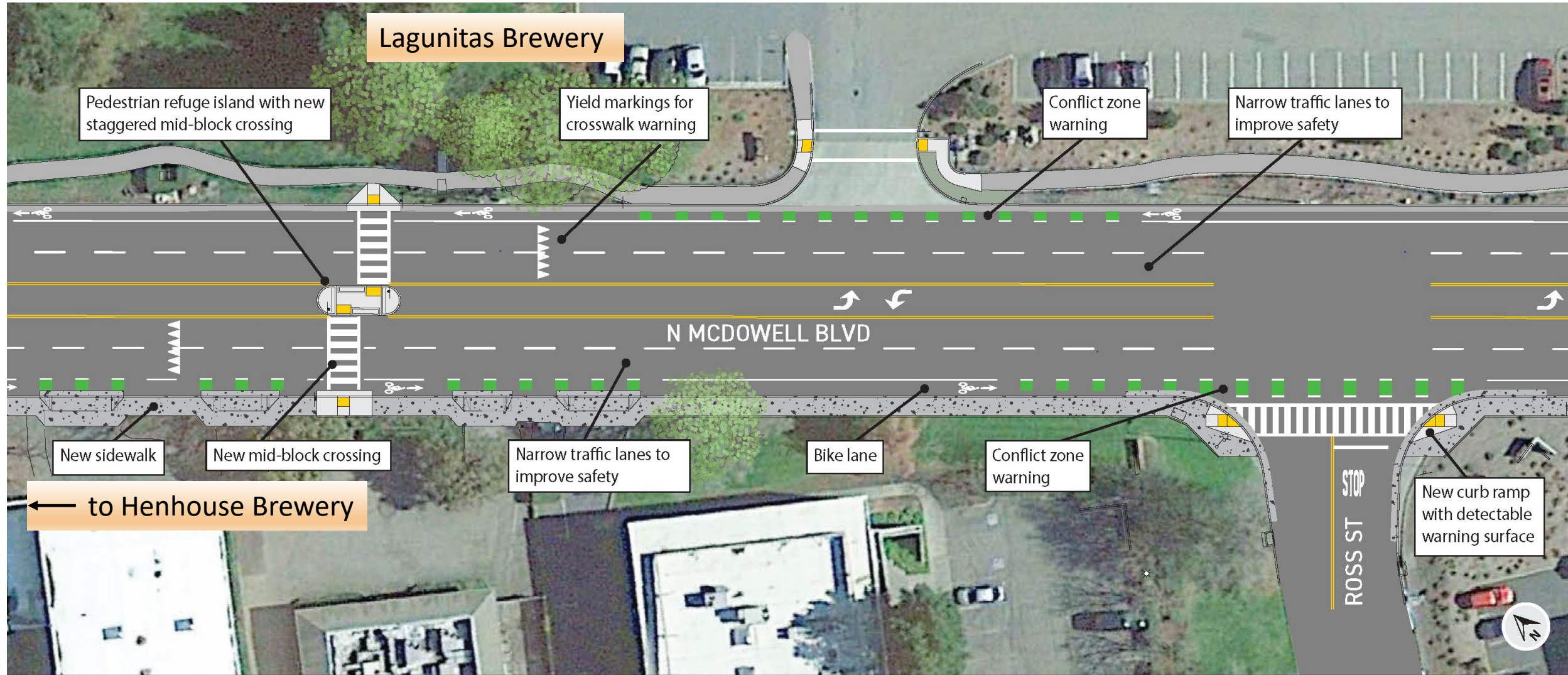
Sunrise Parkway to Old Redwood Highway



N. McDowell Blvd. & Ross St. - Existing



N. McDowell Blvd. & Ross St. - Proposed



Listening to Our Community



The community shared their input...

**PBAC
Discussions**

6/2/21
5/4/22

**Citywide
Community
Workshop**

1/26/22

**McDowell
Business &
Residential
Parks Outreach
Meetings &
Door Hangers**

**Neighborhood
Workshop @
Petaluma
Estates**
3/3/22

**City Council &
PCDSA
Presentations**

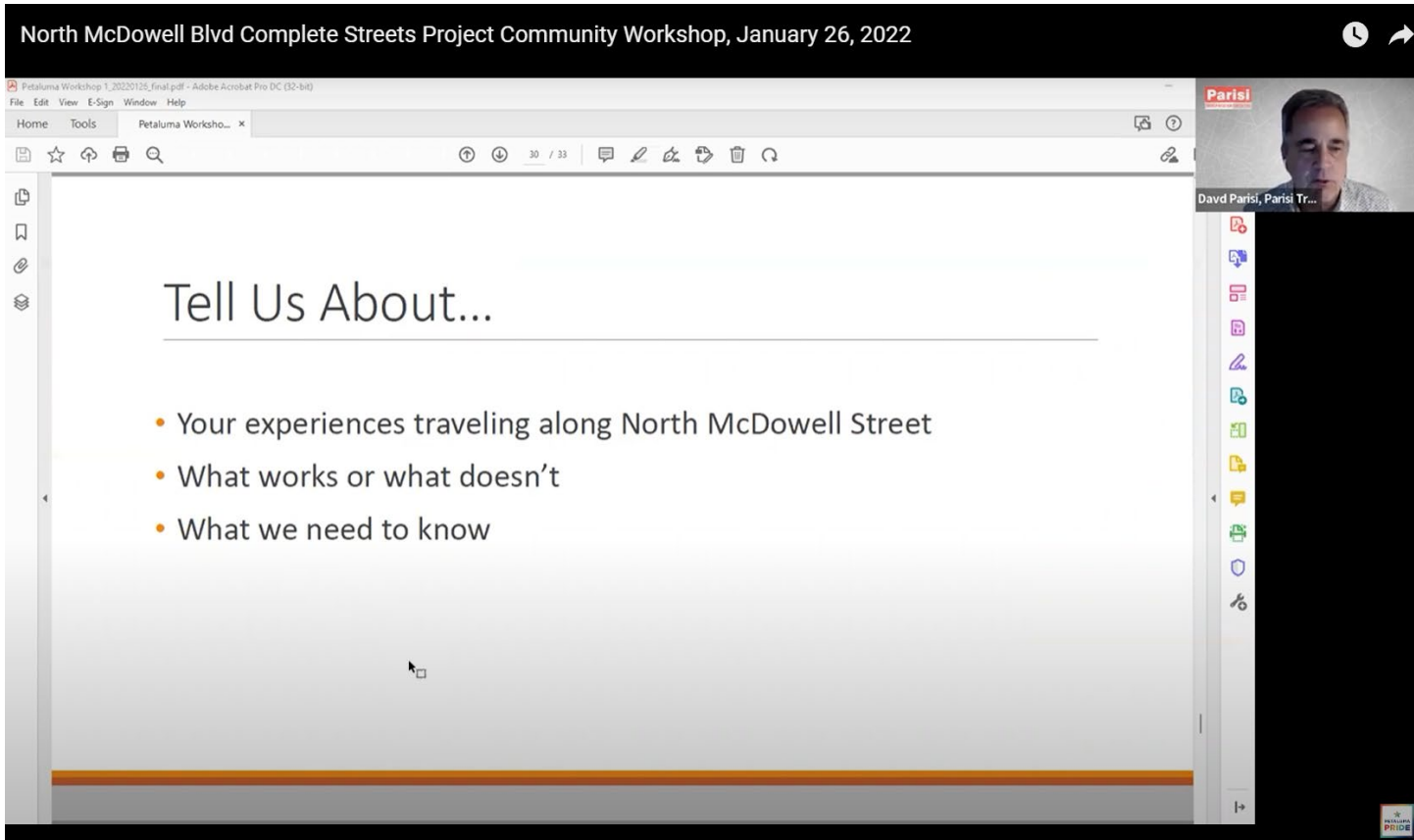
10/17/22
7/17/23*

**Tree
Committee
Presentation**
5/18/22

Ongoing Input
60+ people
signed up for
info

**General Public
Comments &
Suggestions**

**Community
Information
Sessions**
9/28/22 &
5/10/23



Citywide Community Workshops

- January 26, 2022
 - 58 participants
- September 28, 2022
 - 42 participants
 - Spanish interpretation provided
- Community Update on May 10, 2023
- Advertised through citywide mailers, *Argus* ad, and social media
- Performed business outreach with door hangers and fliers
- Meetings posted to project website
- Project design & schedule posted to bid website

Work Completed To Date

- Curb ramps installed
 - Bulb-outs where possible
- Sidewalks installed
 - Gap closures
- Pedestrian refuge islands installed
- Utilities upgraded
 - Water, sewer and storm drains





Current Work: Road Reconstruction Grinding

Our roadway is getting recycled!

- Grinding existing roadway pavement
- This ground material is reused as new, durable base pavement layers
- Four-step process

Overview of Road Recycling



Step 1
Grinding (milling)
existing road pavement



Step 2
Processing with
asphalt emulsion
(Cold Central
Recycling Plant)



Step 3
Placement of recycled
material as base layer



Step 4
Finish paving with
new asphalt



Current Work: Road Recycling

Benefits of Road Recycling

- Cold Central Plant Recycling (CCPR) method
- Construction traffic drastically reduced
- Up to 80% reduction in greenhouse gases
- Creates a new, durable pavement base material

UPCOMING WORK

CURRENT CONTRACT

- Paving
- Striping
- Signals

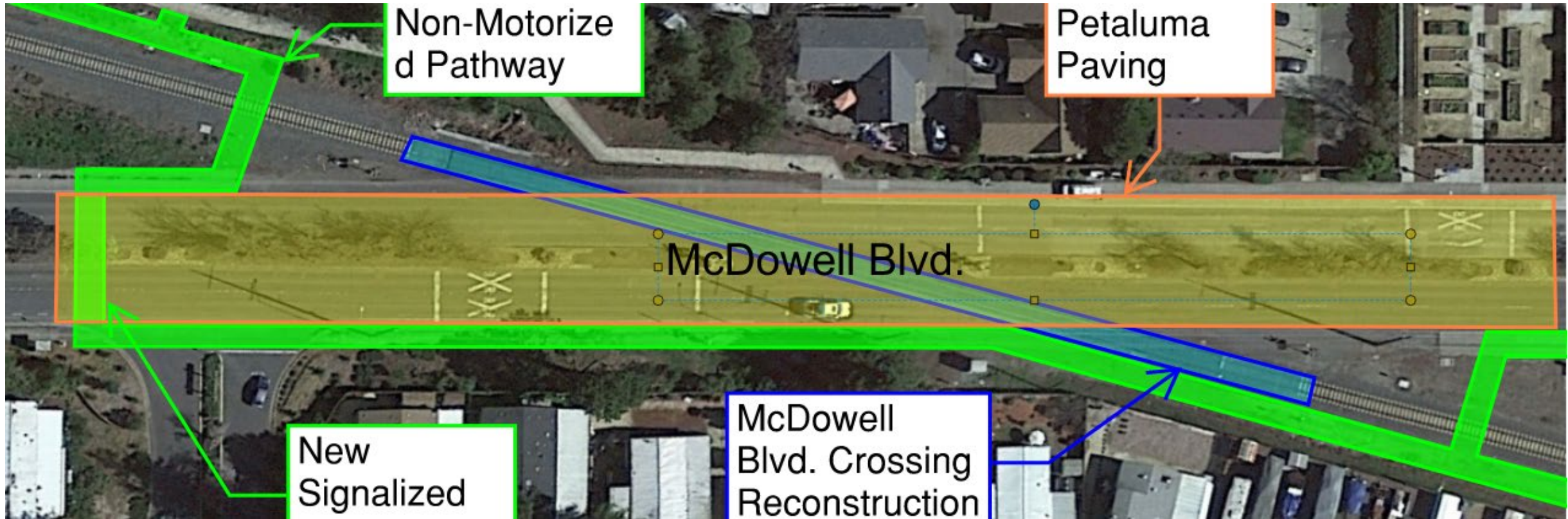


NEXT UP*

- Landscaping & Trees (ongoing)
- HAWK Signal System (mid/late-2024)
- SMART Track Crossing (mid-2024)
- SMART Ped Crossing (mid-2024)
- Housing Development (2024/25)



* Separate Contracts or By Others



Future SMART Track Crossing Improvements



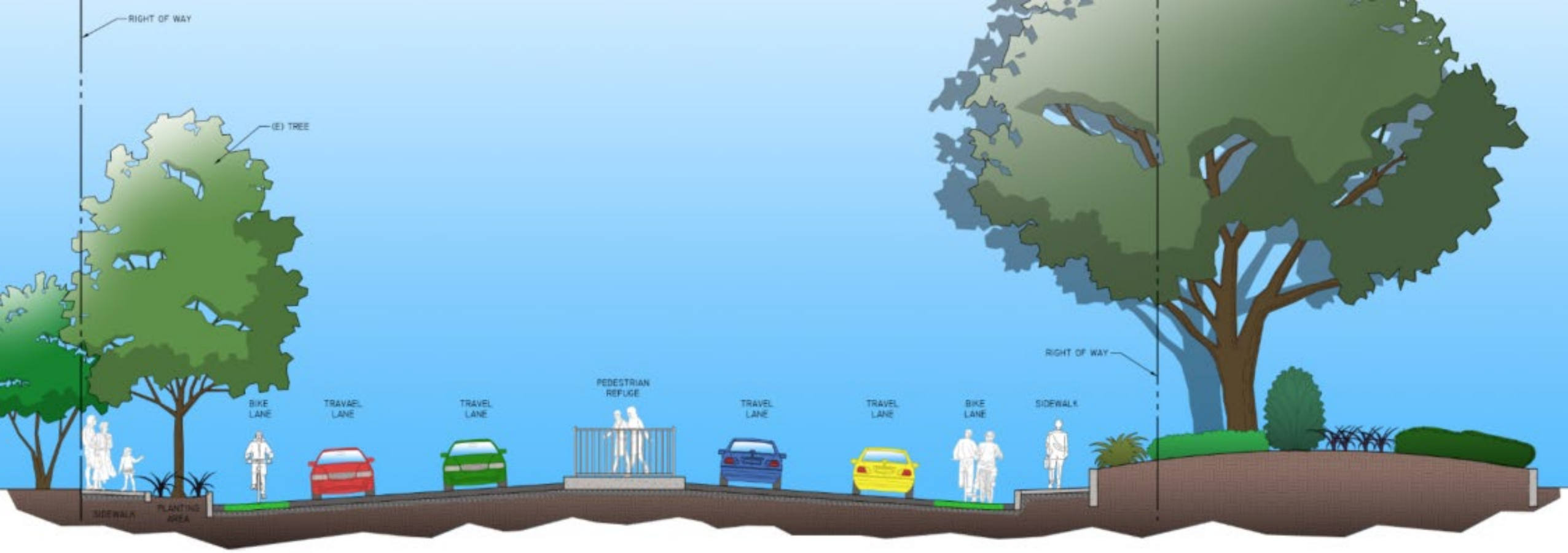
- *Petaluma North Station*
- *Track Panel Replacement*

- *Multi-Use Path*
- *Bike/Ped Crossing*



Future Improvements

- *Corona Housing Development/DANCO*
-



*TYPICAL SECTION
N. MCDOWELL BOULEVARD, PETALUMA*

Traffic Calming & Safe Streets Elements

Expanded Traffic Modeling Performed

Synchro traffic
simulation
model

State of the
art analysis
method

Input current
post-COVID
data

Verified using
actual
conditions



SUMMARY: 5 to 3 Conversion Analysis



Existing Conditions: Arterial with 20k + average daily traffic with 9% truck traffic



5 to 3 Lane Conversion Modeled & Tested
Additional data collected and analyzed



Findings

1. Significant delays
2. Congestion & backups
3. SMART tracks blocked
4. Impedes emergency response
5. Driver frustration & diversion

Existing

PM Peak Hour

Corona Road

N McDowell Boulevard

Road Diet

PM Peak Hour

Corona Road

N McDowell Boulevard

Traffic Simulations: Comparison With and Without 5 to 3 Lane Conversion

Expanded Traffic Modeling & Analysis of the 5 to 3 Lane Conversion

FINDINGS AND CONCLUSION

Significant delays:

- 3+ light cycles
- Verified by actual conditions
- Equivalent to approx. 10-15 minutes

Safety Issues
SMART tracks
blocked

Congestion & Backups
1/2 mile+

Impedes emergency
response vehicles

Driver frustration and
incentivizing diversion
to alternate routes
through neighborhoods

TRAFFIC CALMING for Safe Streets

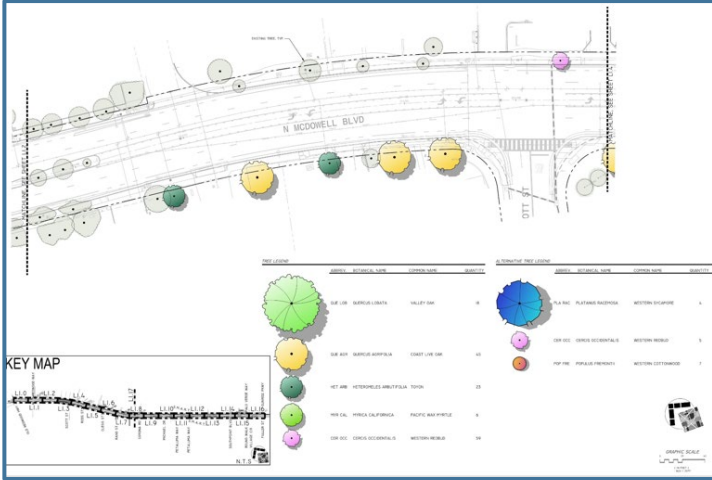
Narrowed travel lanes encourage lower speeds

“Green wave” **coordinated traffic signals** reward drivers who go the speed limit

Rectangular rapid flashing beacons warn drivers approaching crosswalks to lower their speeds

Canopy trees will encourage slower vehicle speeds

NEXT STEP: Designate roadway as safety corridor to **lower speed** another 5 mph

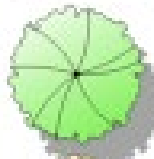






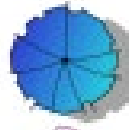


TREES AND LANDSCAPING

Treescape

- Treescape design
- Goal: 150 trees
 - Sites identified
 - Planting underway



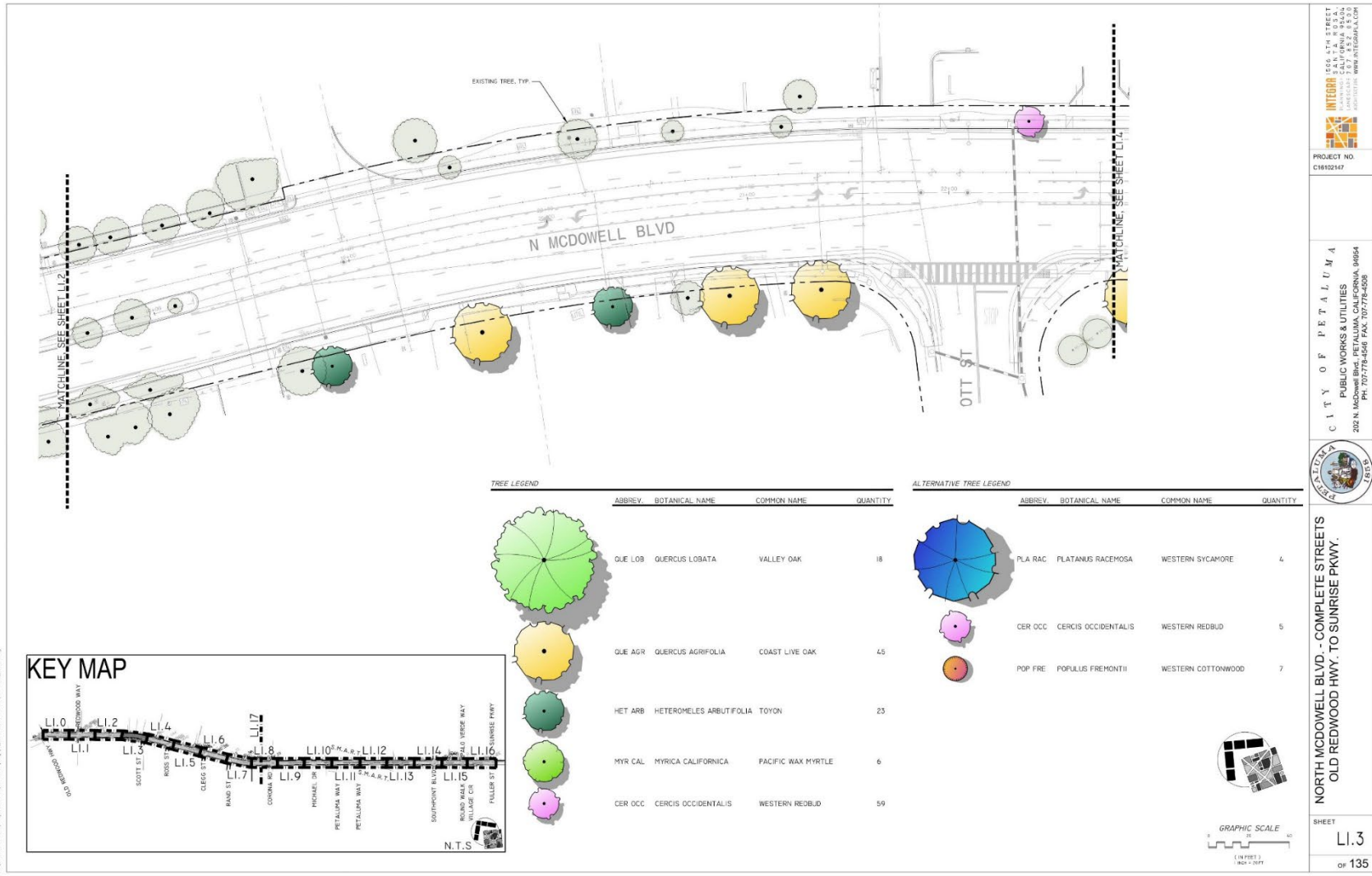
TREE LEGEND				
SYMBOL	SCIENTIFIC NAME	COMMON NAME	QUANTITY	
	WAL LAR	WALNUT (EMPT)	WALNUT TREE	0
	QUA ALB	QUERCUS ALBIFLORA	COAST WHITE OAK	10
	WET LAR	WEINMANNIA ARBORESCENS	WETLAND	25
	WAL CAL	WALNUT CALIFORNICA	PACIFIC WALNUT	6
	QUA OCC	QUERCUS OCCIDENTALIS	WESTERN REDBELL	50

ALTERNATIVE TREE LEGEND				
SYMBOL	SCIENTIFIC NAME	COMMON NAME	QUANTITY	
	PLA LAR	PLATANUS RADICATA	WESTERN Sycamore	6
	QUA OCC	QUERCUS OCCIDENTALIS	WESTERN REDBELL	6
	POP TRE	POPULUS TREMPERATA	WESTERN Cottonwood	7

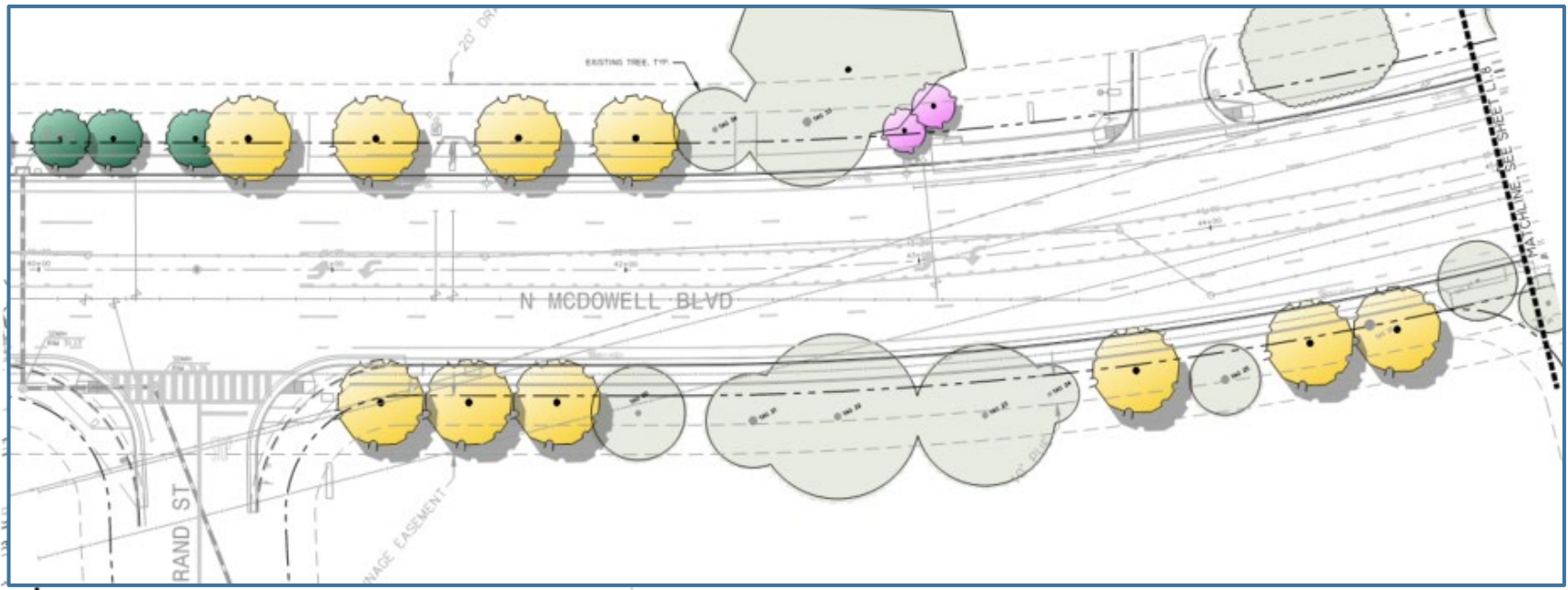
GRAPHIC SCALE



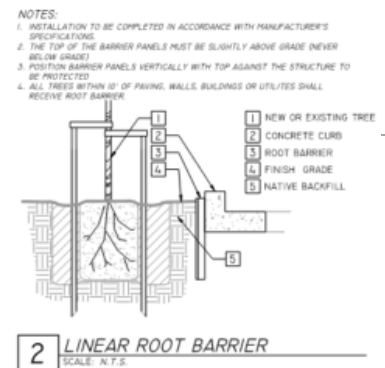
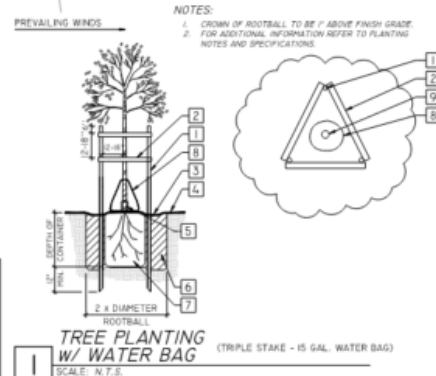
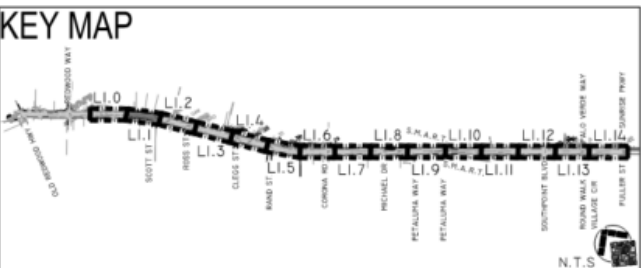
GRAPHIC SCALE
0 10 20 FEET
0 5 10 METERS



Treescape Design

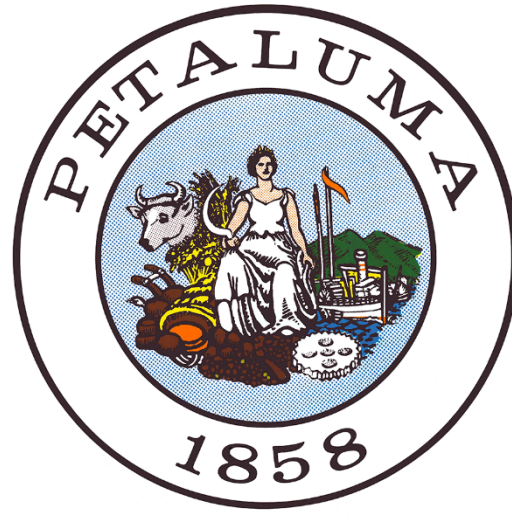


Treescape Design



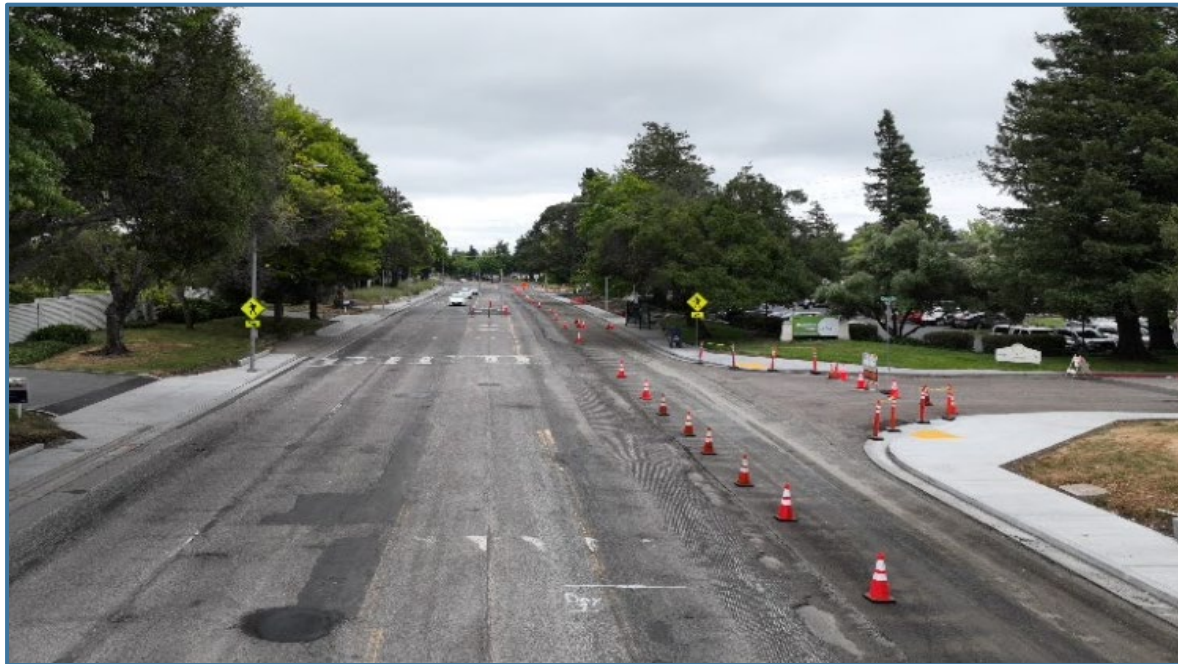
Drought-Tolerant Landscaping

- Collaborating with property owners and management companies to save water
- Replacing turf with drought tolerant landscaping
- Targeting higher water users

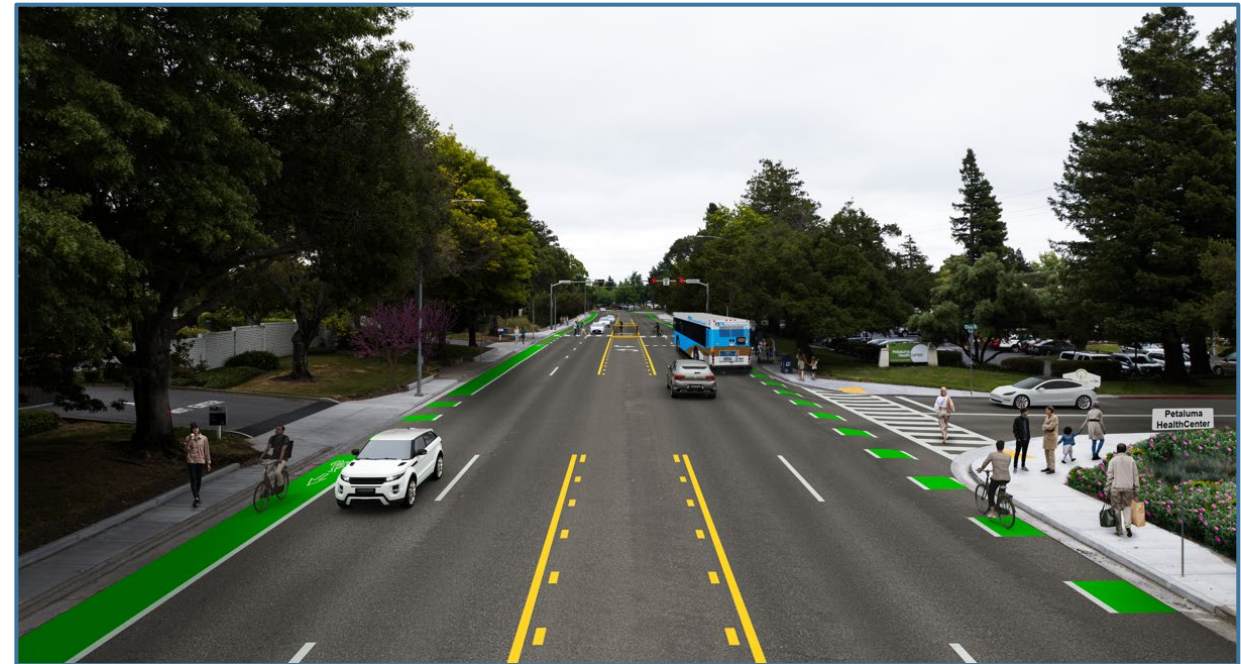


TREES AND LANDSCAPING

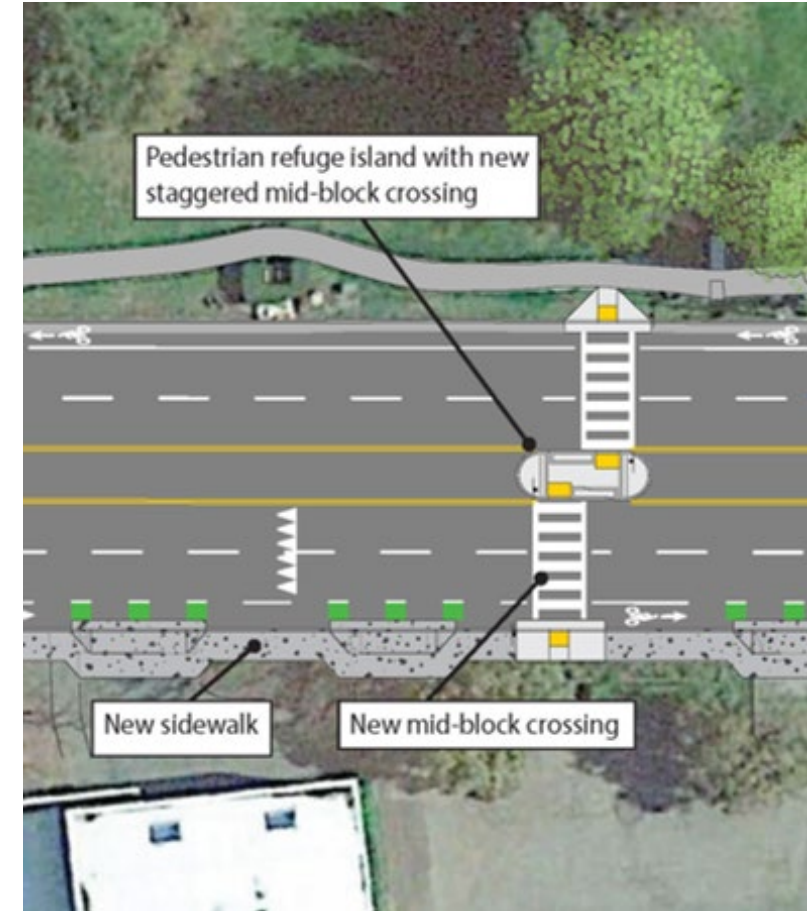
BEFORE



AFTER







Active Transportation & Transit Upgrades



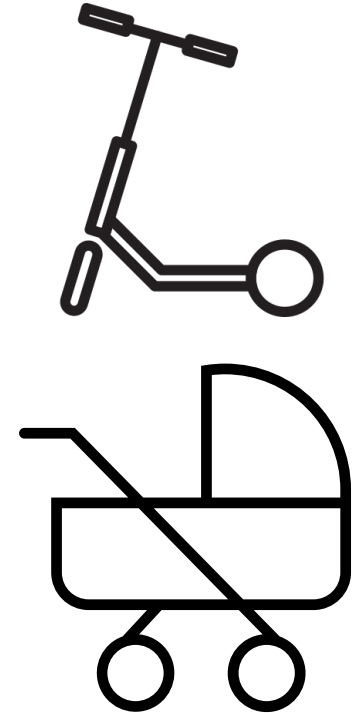
Walking



Biking



ROLLING



WHAT IS ACTIVE TRANSPORTATION?



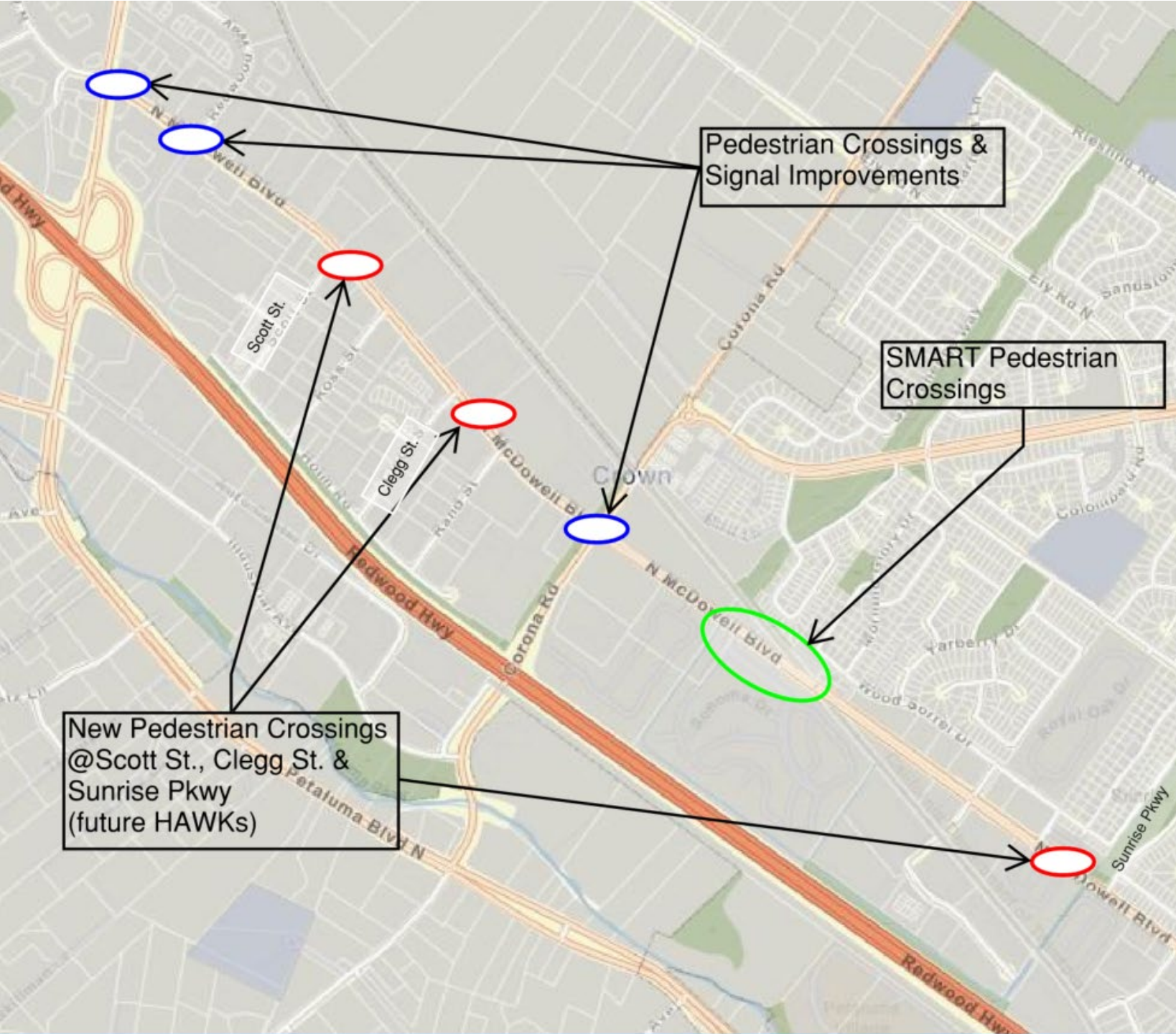
Pedestrian & Transit Improvements

- Sidewalk installation (1+ miles)
- Curb ramps (47) w/bulb outs (6)
- Crosswalks with **Rectangular Rapid Flashing Beacons (RRFB)** (3)
 - ❑ Next Up: **High-Intensity Activated CrossWalk (HAWK)** upgrades (3)
- Pedestrian refuge islands (3)
- Improved bus stops & loading areas

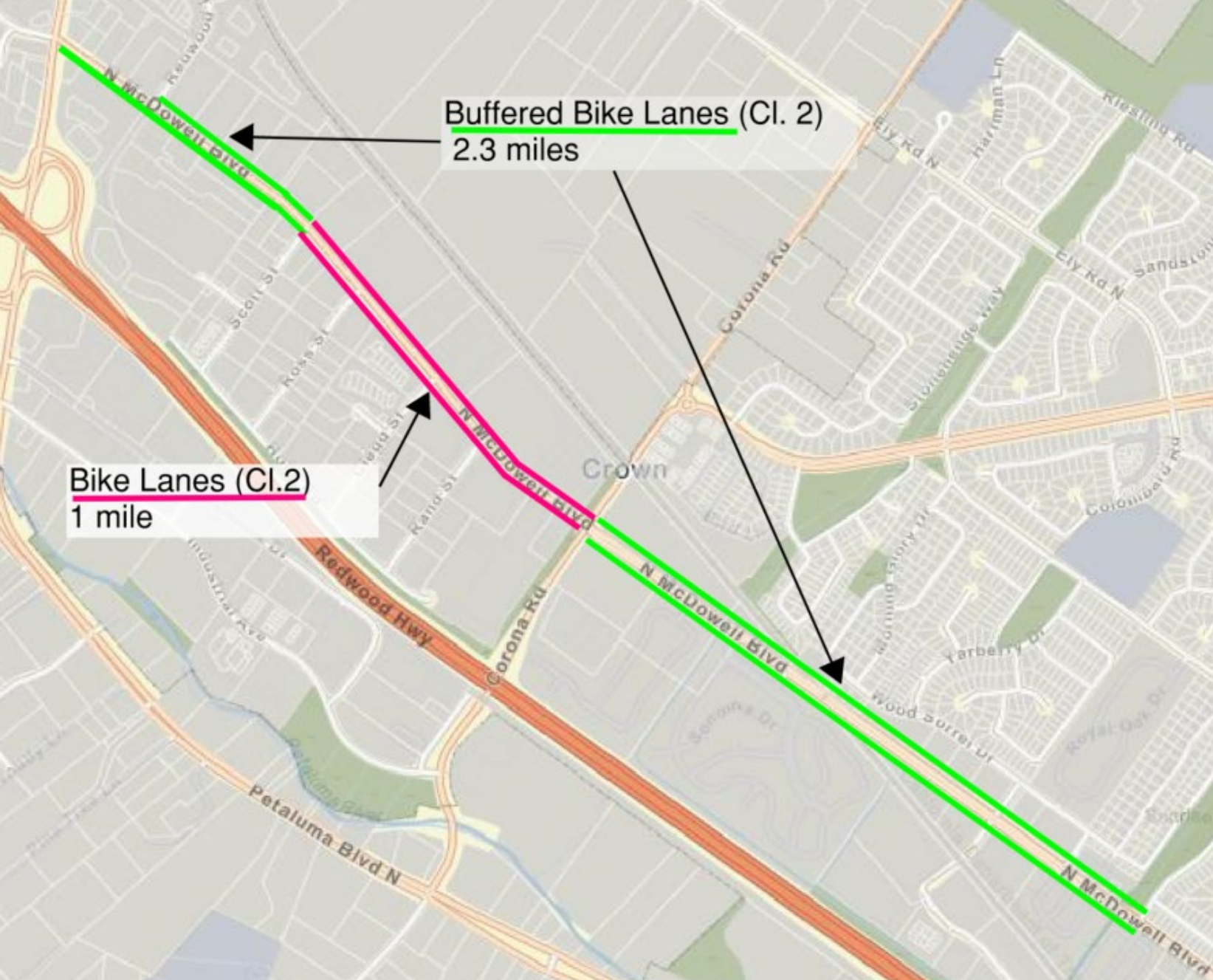
HAWK Pedestrian Signals

- High-intensity **Activated** cross**Walks**
- To be installed at 3 pedestrian crossings (Scott/Clegg/Sunrise)
- Foundations and conduit completed and ready for upcoming installation





Pedestrian Crossings:
New and Improved



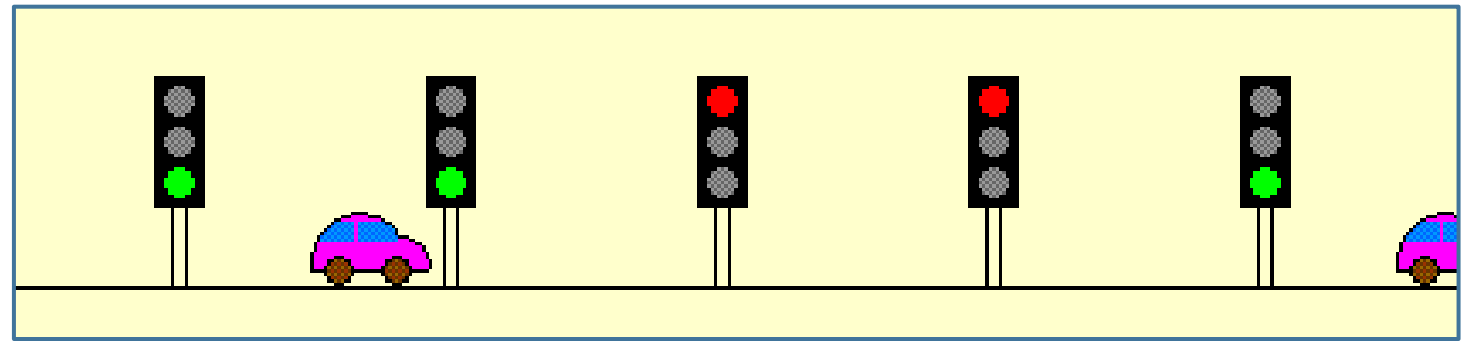
BIKE IMPROVEMENTS





Safety Improvements

- Pylon-buffered bike lanes
- New ADA curb ramps and sidewalk gap closures
- Pedestrian Z-Crossing (e.g. E. Washington Blvd.)
- “Green Wave” Coordinated Signal Timing



SAFE STREETS: Our No. 1 Priority



IMPROVED
SIGNALIZATION WITH
“LEADING PEDESTRIAN
INTERVAL” TO EXTEND
SAFE CROSSING TIME
FOR PEOPLE IN
CROSSWALKS



RRFB AND FUTURE
HAWK PEDESTRIAN
SIGNALS TO
FURTHER PROTECT
PEOPLE USING
CROSSWALKS



PYLON
BUFFERED
BIKE LANES
FOR CYCLIST
COMFORT
AND SAFETY



SPEED LIMIT
REDUCTION
FOR SAFETY
OF ALL ROAD
USERS

PROJECT TIMELINE

Today (July 2023)



Utility Construction

Dec-Mar 2023

Sidewalks, Ramps,
Driveways

Jan-June 2023

Road
Reconstruction

July-Aug 2023

Paving,
Signals &
Striping

Sept-Oct 2023

Trees &
Landscaping

Ongoing

2024

HAWKS

SMART
Improvements

2024/25

SUMMARY

- Construction is progressing and the recycling operation is going extremely well and on schedule
- Traffic calming data and analysis reveals that a 5 to 3 lane conversion is not feasible
- We are collaborating with ReLeaf and excited to be planting so many new trees to augment the streetscape and canopy
- This key city corridor will have more pedestrian access and new bike facilities - with connectivity to SMART trail and the new station
- Enhanced **safety** and traffic calming for all road users will be realized through the addition of complete streets and active transportation improvements

Questions &
Comments

Thank You!

Sign up for Updates at:
Cityofpetaluma.org/mcdowell

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