



Middle Avenue Pedestrian & Bicycle Rail Crossing Complete Streets Commission

July 10, 2019

Middle Avenue Pedestrian & Bicycle Rail Crossing Study



Goals For Tonight's Meeting

- Provide project update
- Obtain input regarding:
 - Three Concepts
 - Alma Street/Burgess Park Connections
 - Ramp and Stair Layouts
- Answer questions
- Obtain recommendation to City Council

Middle Avenue Pedestrian & Bicycle Rail Crossing Study



Background/History

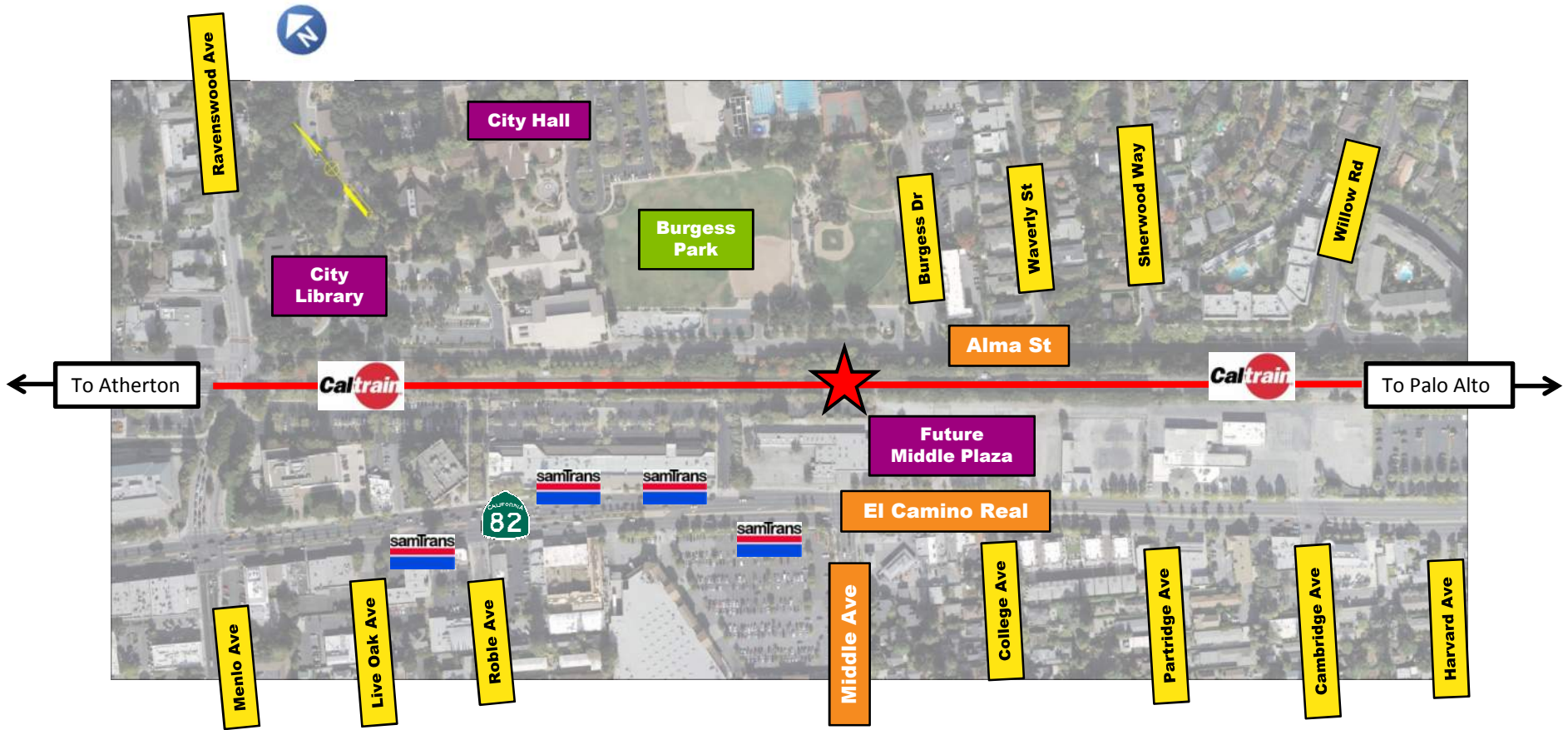
2009: Middle Avenue selected as preferred crossing location

2012: Middle Avenue crossing location adopted by City Council in the El Camino Real/Downtown Specific Plan

2016: San Mateo County Transportation Authority (SMCTA) programmed funds for the project

March 14, 2017: Scope approved by City Council

Project Area Map



Middle Avenue Pedestrian & Bicycle Rail Crossing Study



Project Goals

- **Improve Mobility**
 - Reduce travel times
 - Improve east/west bicycle and pedestrian connectivity
- **Enhance Safety**
 - Provide alternative to busy streets

→ *Encourage Other Modes of Travel*

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Community meeting #1

May 4, 2017

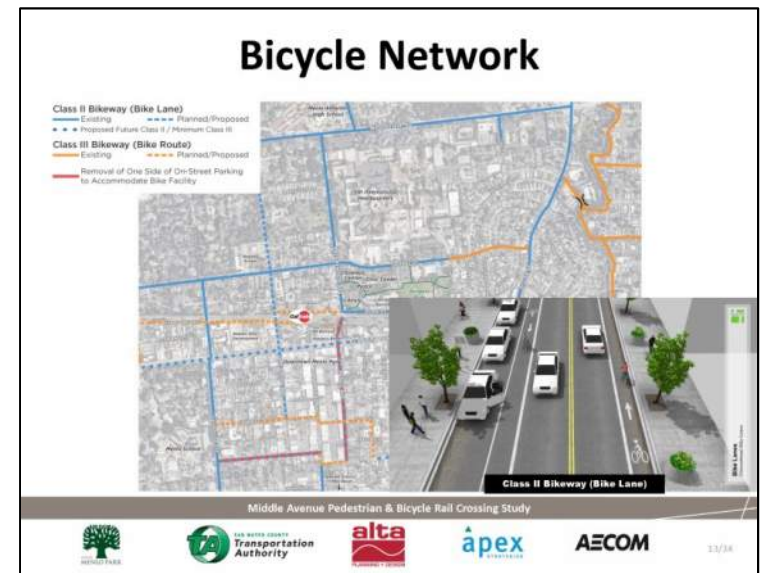
- **Crossing Types**

- Undercrossing
- Overcrossing
- Majority support undercrossing



- **Feedback Received**

- New Crossings on Alma Street
- Bike Lane on Middle Avenue
- Improvements to El Camino Real/ Middle Avenue Intersection



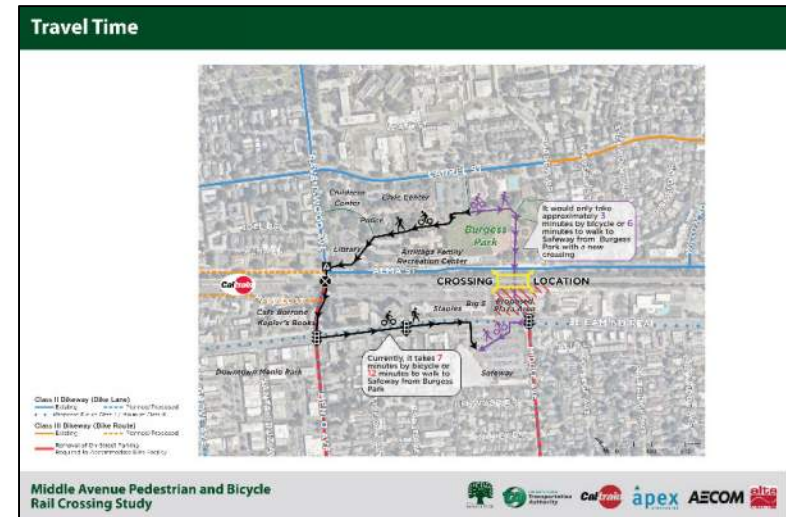
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Community meeting #2

May 13, 2019

- **Undercrossing concepts**
 - Construction methods
 - Tunnel location
 - Stair and ramp layouts
- **Feedback Received**
 - Preference for shallower tunnel
 - Ensure bike and pedestrian safety on ramps
 - Connections on both sides



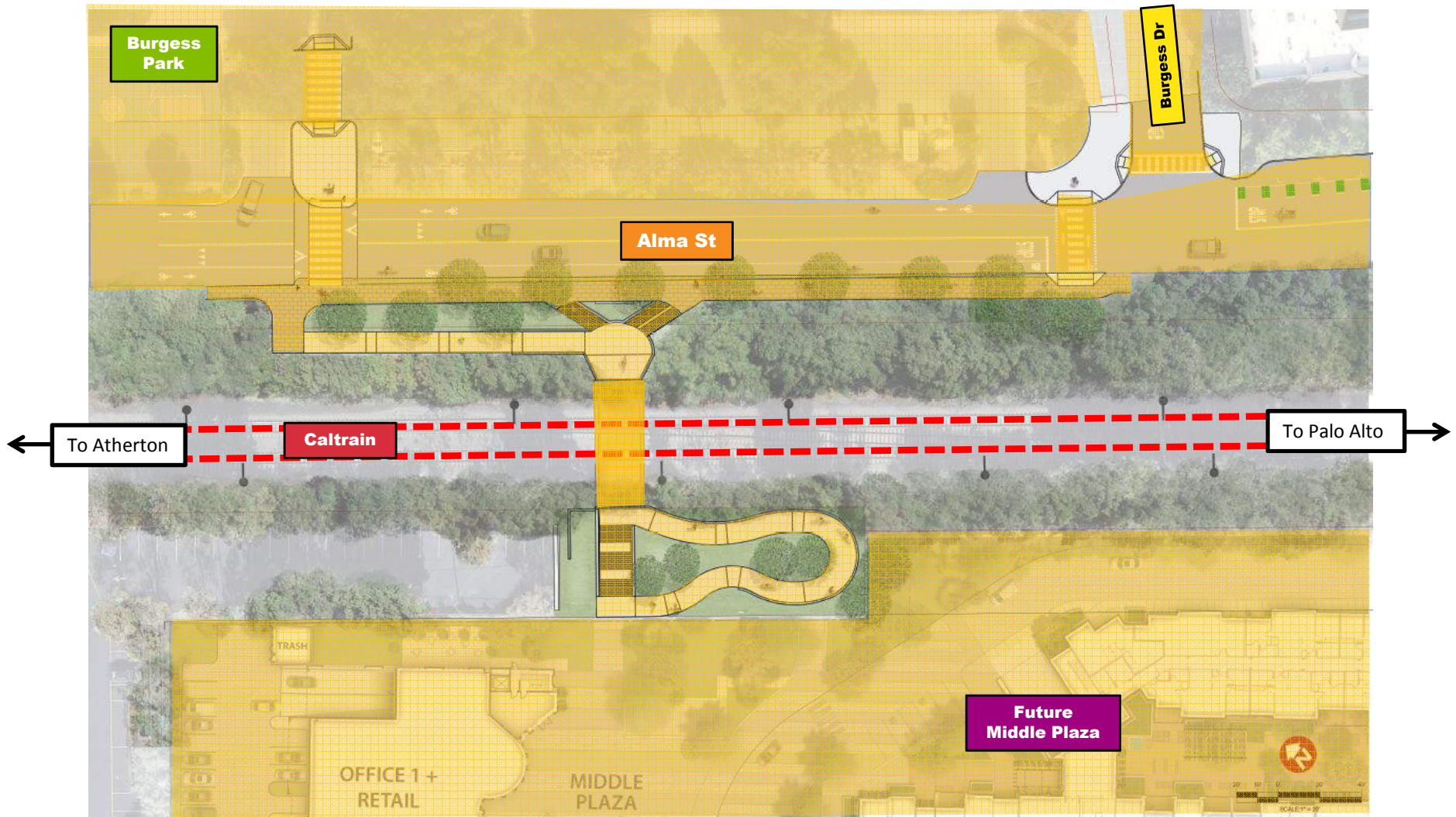
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Design Constraints/Considerations

- Accessibility
- Right-of-Way Impacts
- Utility Impacts
- Geometric Design Requirements
- Constructability
- Railroad Operations
- Trees/Landscaping
- Cost

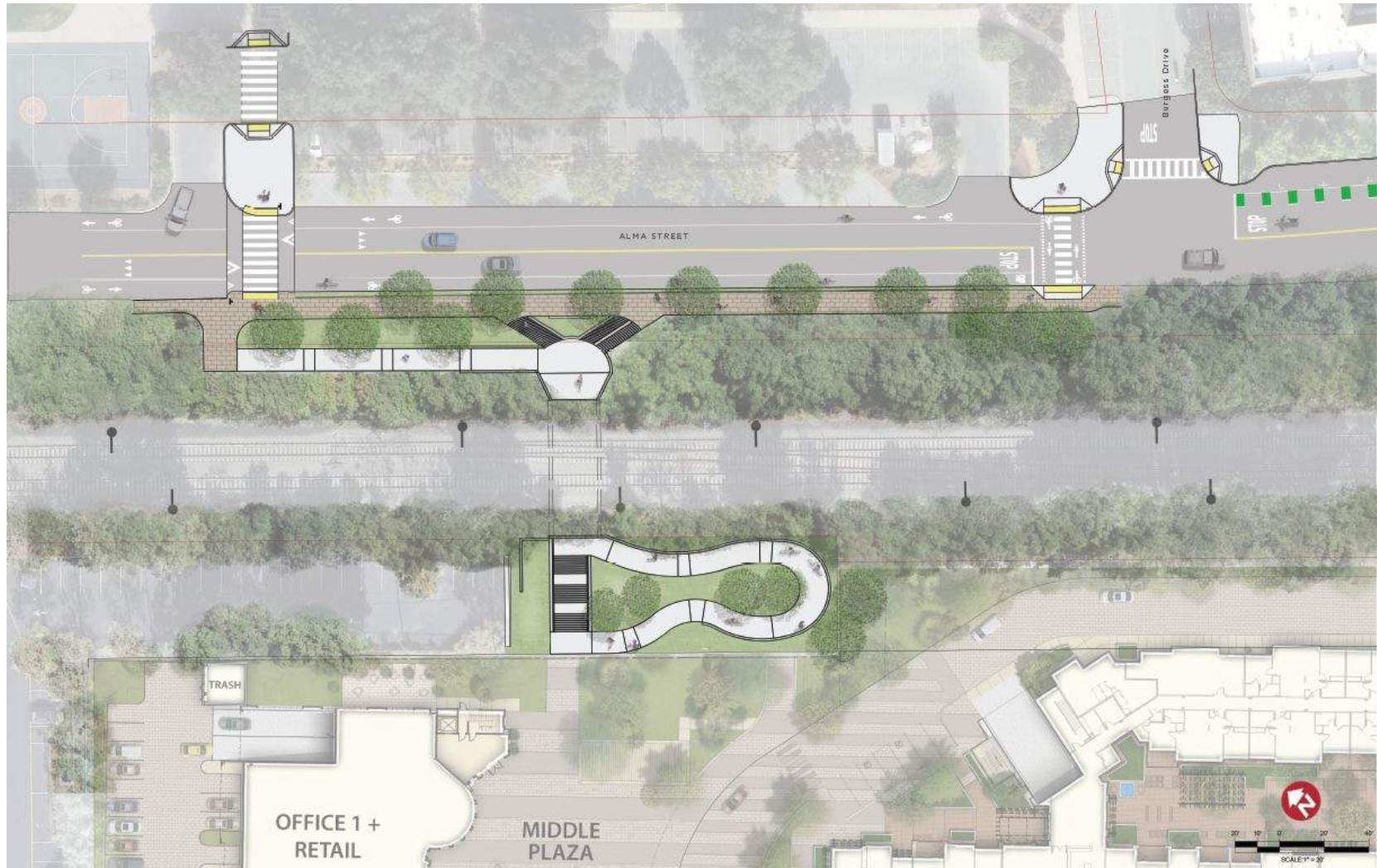
Concept 1 – Plan View



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Concept 1 – Plan View



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Concept 1 – 3D Rendering

(West side - looking south)



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Concept 1 – 3D Rendering

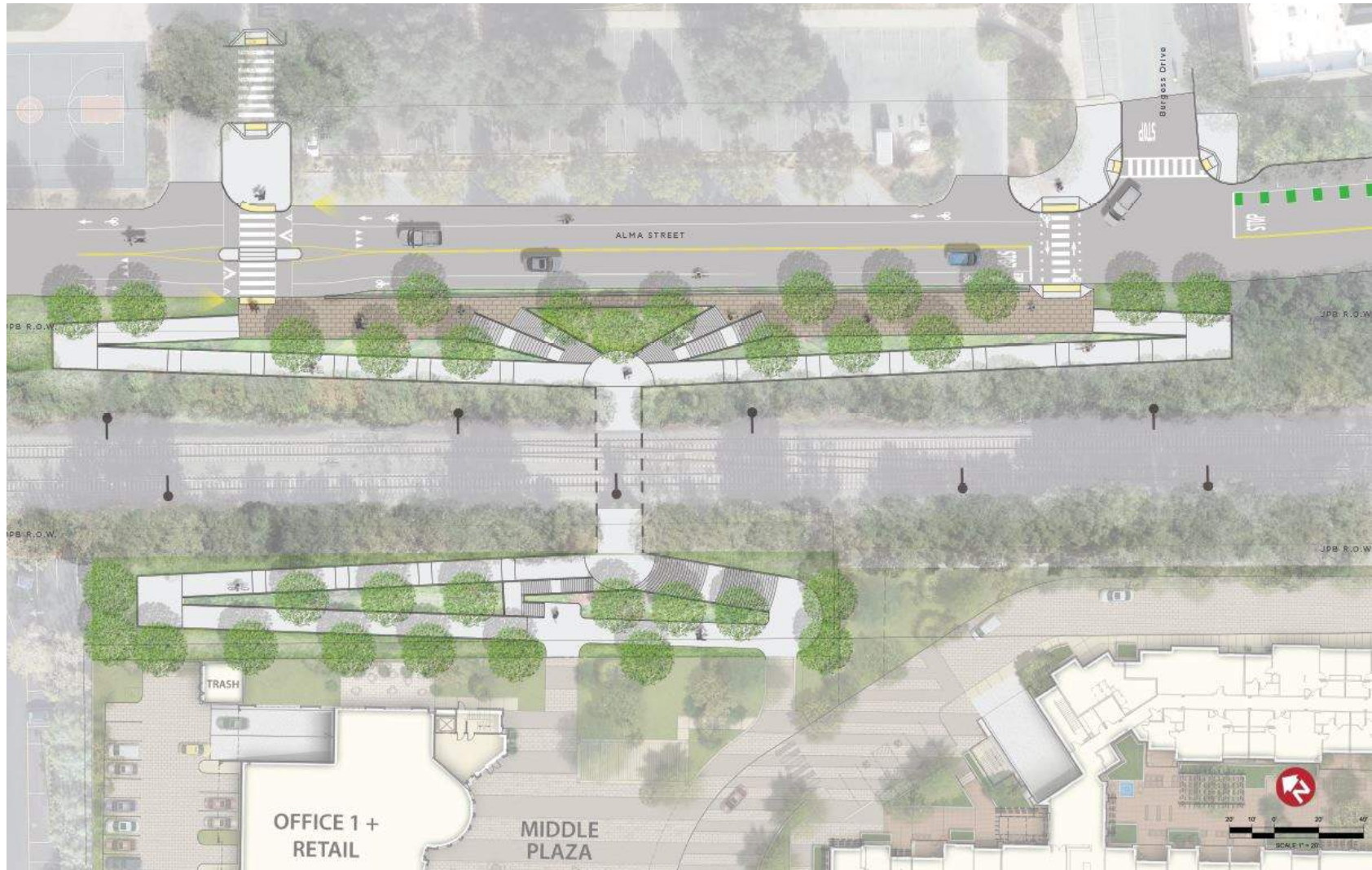
(East side - looking west)



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Concept 2 – Plan View



Middle Avenue Pedestrian & Bicycle Rail Crossing Study



Concept 2 – 3D Rendering

(West side - looking north)



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Concept 2 – 3D Rendering

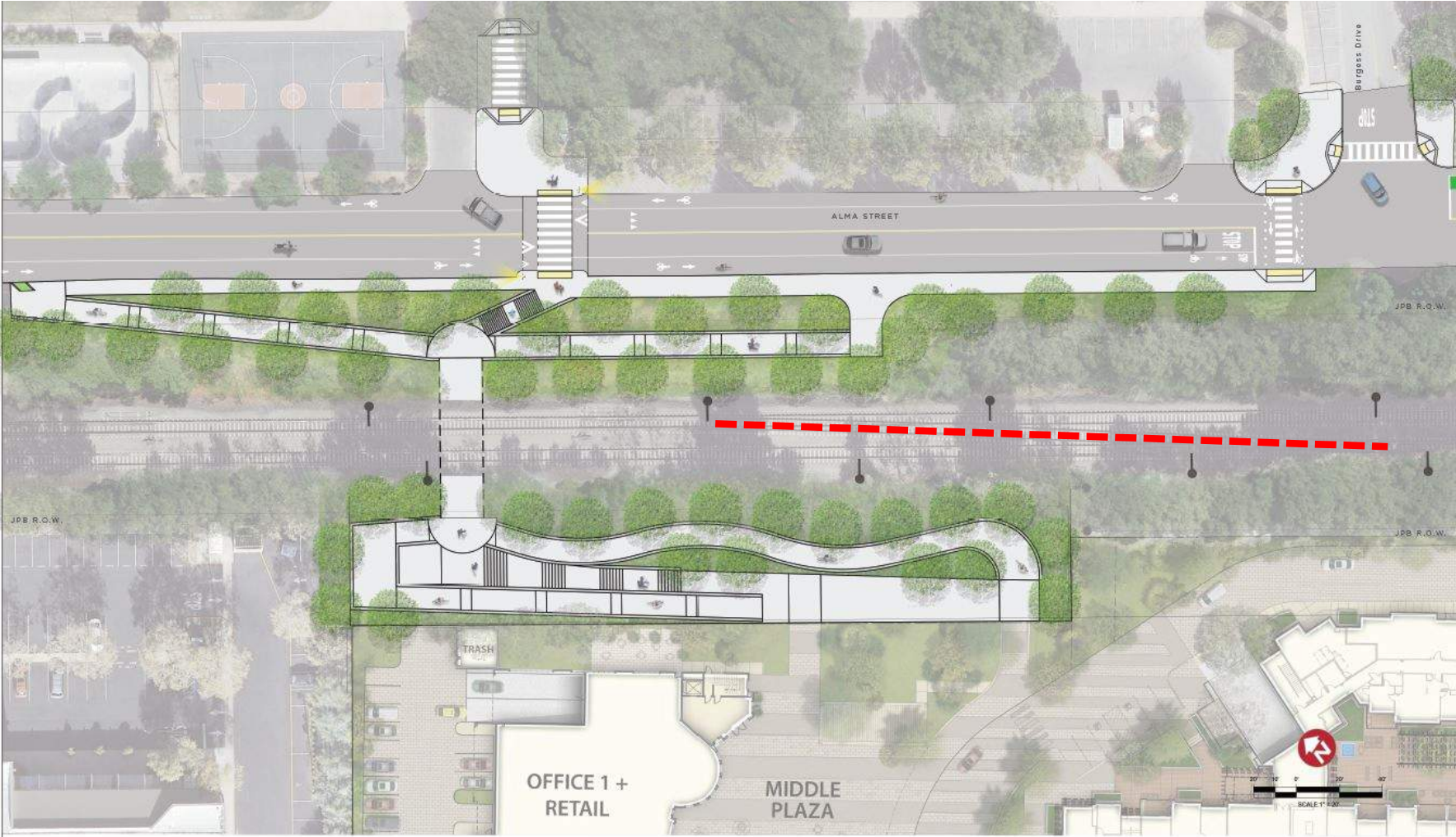
(West side – looking south)



Middle Avenue Pedestrian & Bicycle Rail Crossing Study



Concept 3 – Plan View



Middle Avenue Pedestrian & Bicycle Rail Crossing Study



Concept 3 – 3D Rendering

(West side - looking north)



Middle Avenue Pedestrian & Bicycle Rail Crossing Study



Concept 3 – 3D Rendering

(East side - looking north)



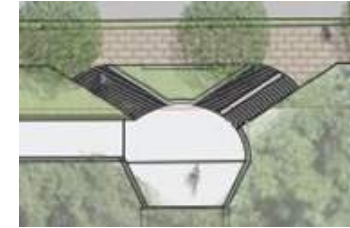
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Stair and Ramp Options

Stairs

- On Diagonal
- Straight
- 90 or 180 degree Turns



Ramps

- Curvilinear
- Straight
- 90 or 180 degree Turns



Cost Estimate Summary

Concept	Cost
1	\$20-25M (\$14-18M)
2	\$35-40M
3	\$20-25M

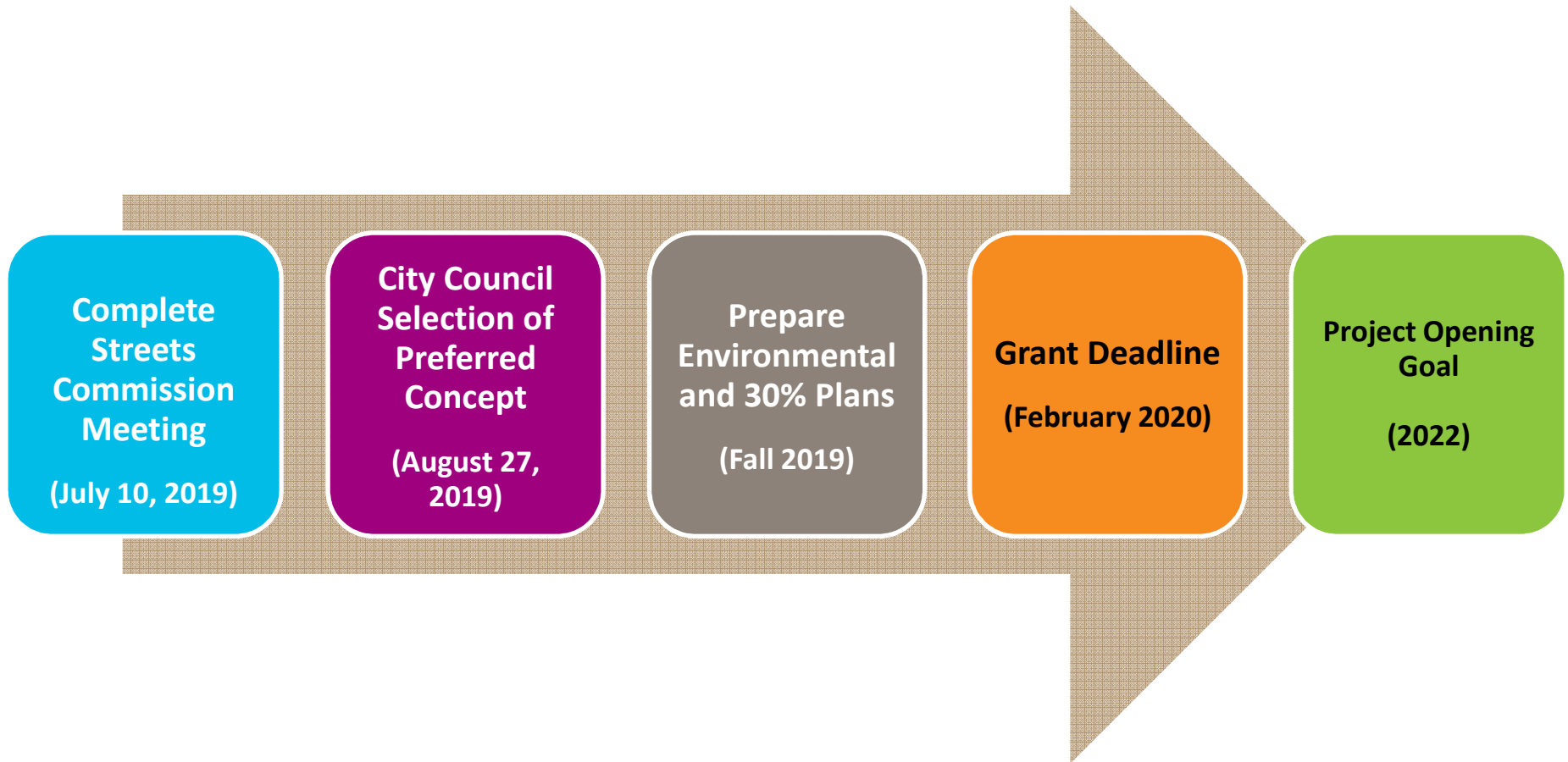
Cost Includes:

- Construction
- Utility Relocations
- Right-of-Way Acquisition
- Support Costs for:
Design Services & Construction Management
- Escalation to 2022
- **Red** costs are after Value Engineering

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Next Steps



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Commission Actions

- Provide feedback
 - Stairs and ramps, locations and quantity
 - Tunnel location
 - Other considerations
- Make recommendation to City Council
 - Staff recommendation: select concepts 1 and 3 to advance

Questions?

For More Information:

Visit Us at: <http://www.menlopark.org/MiddleCrossing>

Email Us at: transportation@menlopark.org

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