#### City Council



#### SPECIAL AND REGULAR MEETING MINUTES

Date:1/15/2019Time:5:00 p.m.City Council Chambers701 Laurel St., Menlo Park, CA 94025

#### 6:00 p.m. Study Session

**SS1.** Provide direction on the future process for the draft project study report for the Ravenswood Avenue railroad crossing study and the draft scope for additional studies (Staff Report #19-009-CC)

Senior Transportation Engineer Angela Obeso made the presentation (Attachment).

- Verle Aebi spoke in support of option C and asked that the City Council consider traffic impacts and a possible traffic signal at Ravenswood Avenue and Alma Street.
- Marcy Abremowrtz spoke against the elevated track option.
- Bob Kelly spoke against the elevated track option.
- Ike Griffin made a presentation regarding the design of the crossing (Attachment).
- Elizabeth Blois spoke against the elevated track option and in support of revisiting the trench/tunnel option.
- Shazank Charan spoke against the elevated track option.
- Katie Behroozi spoke about the increased bicycle and pedestrian safety resulting from grade separation and the reduction of noise.
- Adina Levin with donated time from Jen Wolosin spoke in favor of option C and funding opportunities.
- Philip Miller spoke in favor of multi-grade separation, which is not present in option A.
- Charles Thompson spoke against grade separation in its entirety.
- Brooke C. spoke against option A and in support of option C.
- Henry Riggs expressed concerns regarding construction.
- Steven Geiser spoke against option A and in favor of option C.

City Council requested staff to return this item in February as a regular business item with modifications to option C.

#### 7:00 p.m. Regular Session

#### A. Call to Order

Mayor Pro Tem Taylor called the meeting to order at 7:37 p.m.

#### B. Roll Call

Present:	Carlton, Combs, Nash, Taylor
Absent:	Mueller
Staff:	Interim City Manager Starla Jerome-Robinson, City Attorney Bill McClure, City Clerk Judi A. Herren

#### C. Pledge of Allegiance

Mayor Pro Tem Taylor led the Pledge of Allegiance.

#### D. Report from Closed Session

None.

#### E. Presentations and Proclamations

E1. Proclamation: Recognizing John McGirr

Mayor Pro Tem Taylor read the proclamation. John McGirr accepted the proclamation (Attachment).

#### F. Public Comment

- Madeleine Roe spoke in favor of the removal of red light cameras.
- Jason Pressesky spoke about growing noise pollution in the City from gas-powered blowers and requested that the City Council require electric blowers and ban gas powered blowers (Attachment).

#### G. Consent Calendar

- G1. Accept the City Council meeting minutes for December 18, 2018 (Attachment)
- G2. Approval of City Council appointments to various regional agencies, to City Council subcommittees, and as liaisons to City Council advisory bodies and outside agencies (Staff Report #19-002-CC)
- G3. Authorize the City Manager to execute an agreement with Beyaz and Patel, Inc. for Reservoir No. 2 roof replacement design and engineering services (Staff Report #19-004-CC)
- G4. Second reading and adoption of Ordinance No. 1052 amending the City Manager's powers and duties to include design approval authority (Staff Report #19-005-CC)
- G5. Authorize the City Manager to enter into a joint permitting agreement with the City of East Palo Alto and the Midpeninsula Regional Open Space District for the Ravenswood Bay Trail project (Staff Report #19-006-CC)
- G6. Authorize the City Manager to execute an agreement with Cartegraph Systems, LLC. for implementation of an operations management system enterprise software as a service solution in amount not to exceed \$213,248 over three fiscal years (Staff Report #19-008-CC)

The City Council received confirmation about data safety during the conversion.

**ACTION:** Motion and second (Combs/Nash) to approve the consent calendar, passed unanimously (Mueller absent).

#### H. Regular Business

H1. Approve the proposed Library System Improvements project scope, planning process, goals and tentative timeline (Staff Report #19-001-CC)

Interim Library Services Director Sean Reinhart made the presentation (Attachment).

- Monica Corman spoke in support of approving the proposed Library System Improvements project.
- Lynne Fovinci spoke in support of approving the proposed Library System Improvements project.
- Elyse Stein spoke in support of approving the proposed Library System Improvements project.
- Katie Hadrovic spoke in support of approving the proposed Library System Improvements project.
- Libby Toub spoke in support of approving the proposed Library System Improvements project.
- Jacqui Cebrian spoke in support of approving the proposed Library System Improvements project.

The City Council reinforced the need to make the Belle Haven branch a priority and the need to shorten the timeline.

**ACTION:** Motion and second (Combs/Carlton) to approve the proposed Library System Improvements project scope, planning process, goals and tentative timeline, failed 2-2 (Nash and Taylor dissenting, Mueller absent).

The City Council requested staff update the Attachment A to the staff report to reflect the prioritization of the Belle Haven branch.

**ACTION:** Motion and second (Carlton/Combs) to approve the proposed Library System Improvements project scope, planning process, goals and tentative timeline with an updated Attachment A prioritizing the Belle Haven branch, passed 3-1 (Nash dissenting, Mueller absent).

#### I. Informational Items

11. Update on the Transportation Master Plan status (Staff Report #19-007-CC)

#### J. City Manager's Report

#### K. Councilmember Reports

City Councilmember Carlton reported on an upcoming World Economic Forum in Davos Switzerland.

#### L. Adjournment

Mayor Pro Tem Taylor adjourned the regular meeting to closed session at 9:12 p.m.

Judi A. Herren, City Clerk

These minutes were approved at the City Council meeting of January 29, 2019.



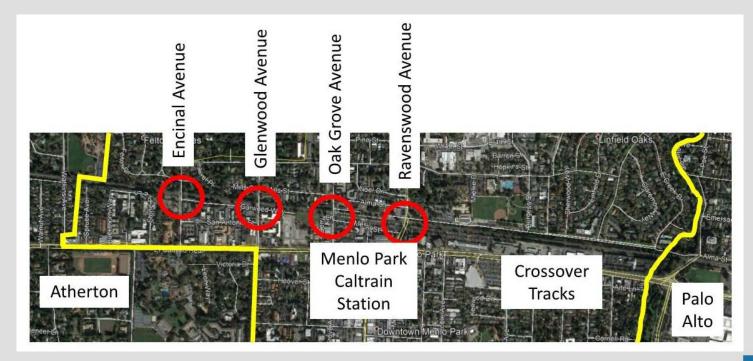
# RAVENSWOOD AVENUE RAILROAD CROSSING STUDY

City Council, Study Session, January 15, 2019





#### **EXISTING RAILROAD CROSSINGS**





# **PROJECT BACKGROUND**

- Previous grade separation studies performed
  - Since 1950s
  - City led study in 2003-2004
- 2013: San Mateo County Transportation Authority (SMCTA) Grade Separation Measure A grant received
- 2015: Rail Subcommittee and City Council direction
  - Two alternatives selected to advance
    - Roadway underpass
    - Hybrid (Railroad tracks raised, roadway lowered)
- 2016: Current study began



### **PROJECT PURPOSE**

- Advance previous work
- Improve public safety
  - Bicycles
  - Pedestrians
  - Vehicles
  - Trains
- Improve traffic
  - Additional trains = more gate downtime
  - Reduce traffic delays
  - Alleviate congestion
  - Improve flow at railroad crossing



### **CURRENT SCOPE**

- Project Study Report (PSR)
  - Focused on two alternatives
  - Design criteria and constraints
  - Conceptual designs and cost estimates
  - Technical evaluation and comparison
- Community Engagement
  - Gathering community feedback
  - Record community preferences
  - Report to City Council
- Goal: Select a preferred alternative



### **COMMUNITY ENGAGEMENT TO DATE**

- Community Meetings
  - May 2, 2016
  - October 4, 2016
  - June 7, 2017
- Rail Subcommittee Meetings
  - March 20, 2017
  - April 17, 2018
- Chamber of Commerce
  - September 29, 2016
- Property/Business Owners
  - More than 25 meetings
  - May 2016 September 2017
- Ongoing City Staff coordination
  - Caltrain
  - Atherton including City Council Study Session, December 6, 2017
  - Palo Alto including Rail Committee, November 8, 2017

- Commission Meetings
  - Parks & Recreation Commission May 25, 2016
  - Library Commission June 13, 2016
  - Transportation Commission November 9, 2016
  - Bicycle Commission November 14, 2016
  - Planning Commission December 5, 2016
  - Planning Commission September 11, 2017
  - Atherton Transportation Committee September 12, 2017
  - Complete Streets Commission September 13, 2017
- City Council Meetings
  - February 7, 2017 Study Session
  - April 4, 2017 Study Session
  - October 10, 2017 Regular Business
  - January 16, 2018 Informational Item
  - May 8, 2018 Regular Business
  - December 4, 2018 Informational Item
  - January 15, 2019 Study Session



### **COMMUNITY FEEDBACK**

- Recurring Themes:
  - More Grade Separations
  - Minimize Height of the Railroad
  - Improve Pedestrian & Bicycle Access and Safety
  - Improve Connectivity between Alma St & Ravenswood Ave
  - Coordinate with other Projects
  - Minimize Driveway Impacts
  - Inform owners about Property Impacts
  - Station Configuration
  - Aesthetics
- Wish List Items:
  - Menlo Park as a "Quiet Zone"
  - Grade Separation at Encinal Avenue
  - Railroad Trench or Tunnel
  - Viaduct/Fully Raised







#### **ALTERNATIVES**





# **CITY COUNCIL ACTION, MAY 8, 2018**

Approved the following motion:

- Move forward with Alternative A which provides for an underpass crossing at Ravenswood Avenue and keeps Oak Grove, Glenwood and Encinal Avenues open to all modes of traffic as existing
- Appropriate \$31,000 from the undesignated fund balance to complete the project
- Authorize the City Manager to amend the agreement with AECOM



### **CITY COUNCIL ACTION, MAY 8, 2018**

Provided direction to bring back the following additional items:

- Letters to Palo Alto, Atherton, Redwood City, Mountain View and Sunnyvale to request consideration of a multi-city trench or tunnel
- Letter to Caltrain to request a bicycle/pedestrian path adjacent to the rail within Caltrain right-of-way
- Additional scope of work and appropriation request to prepare (1) a financial assessment of a trench/tunnel; (2) a conceptual design, noise, tree, and visual impact assessment of a fully elevated alternative



# **CITY COUNCIL, DECEMBER 4, 2018**

Informational Item

- Update on letters to Palo Alto, Atherton, Redwood City, Mountain View and Sunnyvale
- Update on letter to Caltrain
- Draft scope of work for additional studies
- Draft Project Study Report (PSR)



# **COMMENTS RECEIVED (AS OF 4 P.M.)**

- Total comments received by 4 p.m. on January 15, 2019
- Total of 75 comments received
- Total of 64 unique commenters
- Three categories of comments
  - Draft Project Study Report
  - Draft Scope of work, additional studies
  - General



### **COMMENTS RECEIVED – DRAFT PSR**

Comments received

- 1. Opposed to Alternative A (32)
- 2. In support of Alternative C (21)
- 3. Specific design comments (3)
- 4. Move forward with Alternative A (3)



# **PROJECT STUDY REPORT OPTIONS**

- Option 1 Approve the PSR with the current preferred alternative selection of Alternative A.
  - Prior City Council action holds, no revisions needed
  - Return to City Council on January 29, 2019
  - Begin securing funding in February 2019
- Option 2 Select Alternative C as the preferred alternative and direct staff to revise the PSR to reflect this selection.
  - Revise PSR
  - Return to City Council in February 2019
  - Begin securing funding in March/April 2019
- No additional scope or fees required for either option

# **COMMENTS RECEIVED – DRAFT SCOPE OF WORK, ADDITIONAL STUDIES**



- 1. Study traffic impacts during construction for all alternatives (4)
- 2. Add visual studies (5)
- 3. Add more detail into the noise studies, including to assess future train frequencies (3)
- 4. Add acoustical and vibration studies (3)
- 5. Add local property value financial impact studies (3)
- 6. Add eminent domain or right-of-way requirement study for the fully elevated grade separation alternative (4)
- 7. Modify assumptions to apply a rail grade greater than 1% for tunnel and raised track studies (2)
- 8. Add alternative to keep freight rail (Union Pacific) at grade and tunnel Caltrain (1)
- 9. Prefer to not perform any more studies (1)

# NEW COMMENTS RECEIVED – DRAFT SCOPE OF WORK, ADDITIONAL STUDIES



New comments received after January 3, 2019:

10. Comparisons to viaduct study in Palo Alto (2)

- 11. Scope should be reviewed by City Council Rail Subcommittee (1)
- 12. Study vertical track alignment that starts rising at northern City border (1)
- 13. Identify all potential impacts to south end and north end neighborhoods (1)
- 14. Evaluate other options at Encinal (such as bicycle/pedestrian only crossing) (1)
- 15. Study train station area layout, plaza (1)
- 16. Complete additional studies in shortest amount of time (1)

# DRAFT SCOPE OF WORK ADDITIONAL STUDIES OPTIONS



- Option 1 Approve the original draft scope of work (Attachment C) with no changes and appropriate \$275,000 to begin the additional studies.
- Option 2 Incorporate the staff recommended revisions and return to City Council.
- Option 3 Forgo the draft scope of work and direct staff to not perform additional studies.



### **GENERAL COMMENTS**

- 1. Prefer more than one grade separation (11)
- 2. Add traffic signal at Ravenswood/Alma, either as a near-term improvement or in lieu of a grade separation (7)
- 3. Extend the public comment period (4)
- 4. Prefer below ground alternatives like tunnel or trench (3)
- 5. Opposed to fully raised alternative (3)
- 6. Prefer above ground alternatives like hybrid or fully raised tracks (2)
- 7. Prefer "no build" option, no grade separations (2)
- 8. Preference to "do anything" to move forward with grade separation(s) (2)
- 9. Push to create a Peninsula-wide plan (1)
- 10. Opposed to below ground alternatives like tunnel or trench (1)
- 11. NEW: Interest in a vehicle underpass at Willow Road to connect to El Camino Real (1)



### **DIRECTION REQUESTED**

Draft Project Study Report options:

- Option 1 Approve current PSR
- Option 2 Revise preferred alternative, revise PSR

Draft Scope of Work, additional studies, options:

- Option 1 Approve the original draft scope of work
- Option 2 Revise scope of work
- Option 3 Do not perform additional studies



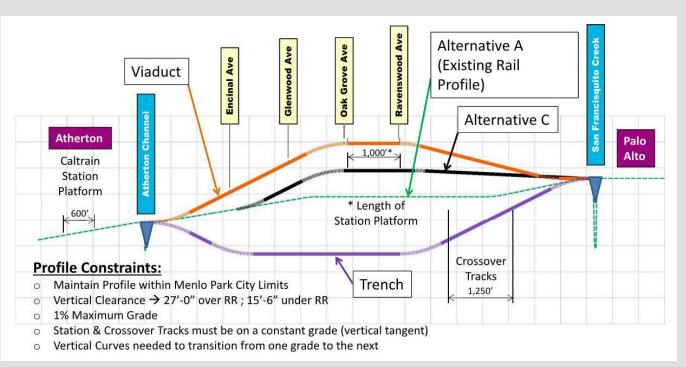


# THANK YOU





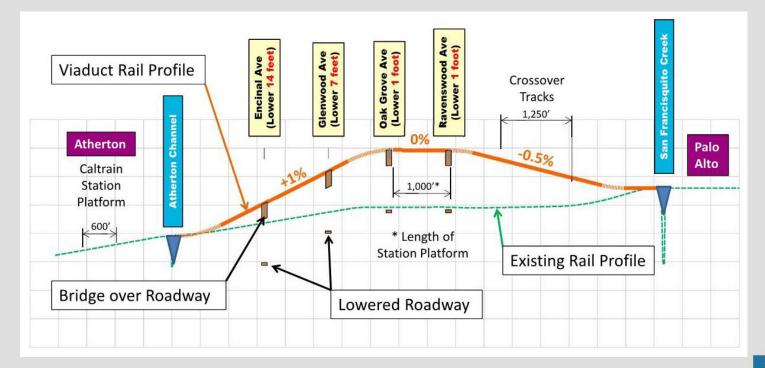
### ALTERNATIVES EVALUATED RAIL PROFILES



MENLO PARK

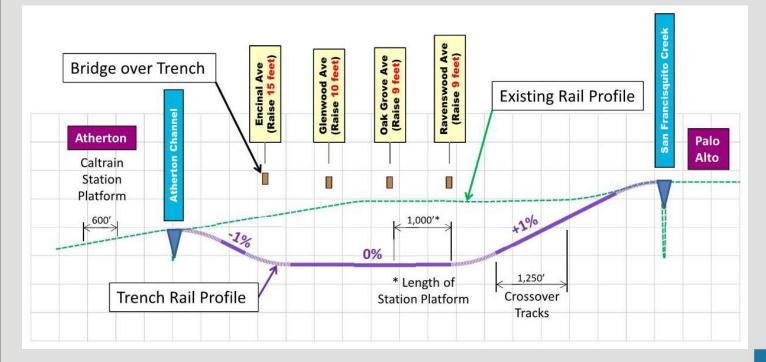


### **VIADUCT ALTERNATIVE PROFILE**





#### **TRENCH ALTERNATIVE PROFILE**





# DRAFT ADDITIONAL SCOPE OF WORK – COMMENTS (PAGE 1)



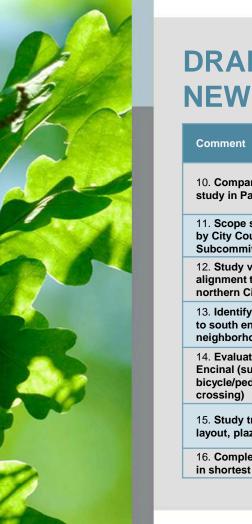
Comment	Commenter Describing this Issue	Staff recommendation
1. Study traffic impacts during construction for all alternatives	3	High level evaluation of traffic impacts during construction (i.e. construction staging and roadway closures) for the tunnel and fully raised alternatives are included in the draft scope of work and staff recommended revisions. Construction staging and roadway closures were previously evaluated for Alternatives A and C and are documented in the draft PSR. Detailed traffic impacts will be evaluated during environmental phase and mitigations will be incorporated during the design phase.
2. Add visual studies	3	The creation of three-dimensional renderings to illustrate the visuals of the fully raised alternative are included in the draft scope of work. The recommended revisions to the draft scope of work include providing examples of above ground structures of the tunnel alternative. Detailed visual studies will be performed during environmental and design phases.
3. Add more detail into the noise studies, including to assess future train frequencies	2	The draft scope of work includes analysis of single event and daily noise exposure for existing conditions and four build alternatives (Task 8). The draft scope was prepared to follow the Federal Transit Administration (FTA) noise impact criteria.
4. Add acoustical and vibration studies	2	Noise (acoustical) analysis is provided as part of the draft scope of work (Task 8). Vibration analysis and any necessary updates to the noise analysis would be performed during environmental study phase and potential mitigations would be included in design phase.
5. Add local property value financial impact studies	2	There is no precedent known for performing this type of study for this type of project, therefore no changes are proposed to the draft scope of work regarding this comment. Financial studies evaluating options to finance the tunnel alternative will be performed as part of the proposed draft scope (Task 6).



### DRAFT ADDITIONAL SCOPE OF WORK – COMMENTS (PAGE 2)



Comment	Commenter Describing this Issue	Staff recommendation
6. Add eminent domain or right- of-way requirement study for the fully elevated grade separation alternative	2	A high level right-of-way requirement study is included in the draft scope of work in the tunnel feasibility task (Task 6.1) and a more detailed right-of-way requirement study will be performed as part of the environmental study and design phases.
7. Modify assumptions to apply a rail grade greater than 1% for tunnel and raised track studies	1	For the fully raised rail alternative, the draft scope of work includes a track profile analysis to determine the maximum grade needed to provide sufficient elevation to avoid roadway excavation at Glenwood Avenue (Task 7.1). For the tunnel alternative, an evaluation of rail elevation is included in recommended revisions to the draft scope of work.
8. Add alternative to keep freight rail (Union Pacific) at grade and tunnel Caltrain	1	Not proposed for incorporation to the scope of work at this time.
9. Prefer to not perform any more studies	1	Noted.



# DRAFT ADDITIONAL SCOPE OF WORK – NEW COMMENTS



Comment	Commenter Describing this Issue	Staff recommendation
10. Comparisons to viaduct study in Palo Alto	2	A more thorough comparison would need to be undertaken to fully understand the similarities and differences between the two areas and constraints, for example the differing Caltrain right-of-way widths, the presence of a station or not, and potential landscaping replacement areas.
11. Scope should be reviewed by City Council Rail Subcommittee	1	Draft scope was coordinated with 2018 City Council Rail Subcommittee. City Council may direct staff to present to current Rail Subcommittee. This will delay returning to City Council with this item, timeline to be determined.
12. Study vertical track alignment that starts rising at northern City border	1	Noted, requires City Council direction as it conflicts with public feedback from this community.
13. Identify all potential impacts to south end and north end neighborhoods	1	Noted, requires City Council direction and definition of "potential impacts". Many types of impacts for the entire corridor are included in the draft scope of work.
14. Evaluate other options at Encinal (such as bicycle/pedestrian only crossing)	1	Current study keeps Encinal Avenue as existing. Other options can be considered, with City Council direction on constraints and options to evaluate.
15. Study train station area layout, plaza	1	Many variations on station layout are possible and may require a separate outreach process to finalize. This item is not completely dependent upon grade separation option and will be evaluated in detail as part of environmental study and design phase.
16. Complete additional studies in shortest amount of time	1	Noted.



#### **COMPARISON MATRIX**

		Notes Three grade separations for Alt C vs. one for Alt A More grade separations, better east/west
		Alt A More grade separations, better east/west
		mobility across town
		Increased safety and connectivity for Alt C
		With elimination of at-grade crossings, horn or gate noise will potentially be reduced
		No direct access to/from Ravenswood from/to Alma St for Alt A
		Railroad profile remains at current elevation for Alt A
		More impacts to properties with 3 grade separations, Alt C
		Fewer roads and properties impacted during construction for Alt A
		Improved traffic circulation for Alt C
\$160-200M*	\$310-380M*	Lower overall cost for Alt A
	\$160-200M*	\$160-200M* \$310-380M*

Greatest Improvement Significant Improvement Some Impact Significant Impact Greatest Impact



# **Alternative A**

**3D** Animation Flyover









**Ravenswood Avenue Railroad Crossing Project** 

Transportation Authority







### **Alternative C**

**3D Animation Flyover** 









**Ravenswood Avenue Railroad Crossing Project** 





# CITY COUNCIL DIRECTION OCTOBER 10, 2017



- Coordinate with Town of Atherton City Council on rail elevation
- Coordinate with City of Palo Alto on their study
- Confirm remaining San Mateo County Transportation Authority (SMCTA) Measure A Grade Separation grant funds available
- Coordinate with City's legal counsel on developing policy on passing tracks
- Report back with peak hour gate downtime



# **TOWN OF ATHERTON COORDINATION**

- Questions posed:
  - Is the Town open to elevation within Atherton limits?
  - Is the Town interested in partnering on grade separations?
- Mayor Keith's letter to Mayor Lempres
- Presentation at Atherton City Council meeting, December 6, 2017
- Not in support of elevation within Town limits
- Not interested in partnering on grade separations that raise tracks
- Felton Gables residents in attendance requesting no rail elevation at Menlo Park-Atherton boundary



# **CITY OF PALO ALTO COORDINATION**

- Ongoing staff-to-staff coordination
- Menlo Park staff participation in Connecting Palo Alto Technical Advisory Committee
- Presentation at Palo Alto Rail Committee meeting, November 8, 2017
- Attendance at Trench/Tunnel Roundtable, March 6, 2018
- Preferred alternative(s) to be selected in December 2018
- General interest to coordinate at Palo Alto-Menlo Park border



# **SMCTA GRADE SEPARATION FUNDS**

- Remaining funds fully committed
- Upcoming ballot measure, Get Us Moving San Mateo County







### **CITY'S RAIL POLICY**

- Ravenswood Avenue as highest grade separation priority
- Removes reference to items that have already been constructed and/or fully funded
- City opposition to elevated three track system, in addition to elevated four track system
- Updates of grammar and verbiage for clarity



#### PROJECTED PEAK HOUR GATE DOWNTIME

Gate Down Time – Morning Peak Hour				
Crossing	% Increase in Gate Down Time	% Gate Down Time Per Hour		
Encinal Ave.	35%	23%		
Glenwood Ave.	53%	24%		
Oak Grove Ave.	14%	27%		
Ravenswood Ave.	42%	28%		

Gate Down Time – Afternoon Peak Hour					
Crossing	% Increase in Gate Down Time	% Gate Down Time Per Hour			
Encinal Ave.	69%	23%			
Glenwood Ave.	33%	23%			
Oak Grove Ave.	35%	26%			
Ravenswood Ave.	70%	28%			



Data Source: Final Caltrain/HSR Blended Grade Crossing and Traffic Analysis, June 2013, http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Blended+System/Caltrain-HSR+Blended+Grade+Crossing\$!26Traffic+Analysis-Final.pdf

Percentages Calculated by Menlo Park City Staff





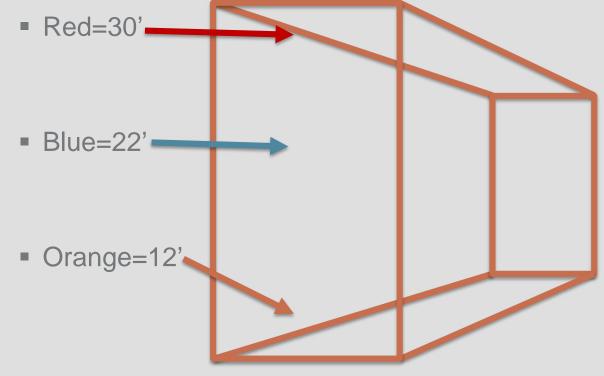
### **APRIL 17, 2018 RAIL SUBCOMMITTEE**

- 22 Public Comments
- Options
  - 1. Maintain existing scope
    - Return to City Council in May 2018
  - 2. Amend scope to include additional alternative(s)
    - Which alternative(s)
    - Return to City Council in Summer/Fall 2018
- Recommendation to City Council to maintain existing scope
- Willingness to receive more information





### **VISUAL AID**









#### PROJECTED PEAK HOUR GATE DOWNTIME



	Gate Down Time – Morning Peak Hour						
Crossing	Current Gate Down Time (minutes/peak morning hour)	Future Change in Gate Down Time (minutes/peak morning hour)	Total Gate Down Time (minutes/peak morning hour)	Worst Case Morning Peak Hour	% Increase in Gate Down Time *	% Gate Down Time Per Hour *	
Encinal Ave.	10.0	3.5	13.5	7:01-8:01 a.m.	35%	23%	
Glenwood Ave.	9.5	5.0	14.5	7:26-8:26 a.m.	53%	24%	
Oak Grove Ave.	14.0	2.0	16.0	7:26-8:26 a.m.	14%	27%	
Ravenswood Ave.	12.0	5.0	17.0	7:37-8:37 a.m.	42%	28%	

	Gate Down Time – Afternoon Peak Hour					
Crossing	Current Gate Down Time (minutes/peak afternoon hour)	Future Change in Gate Down Time (minutes/peak afternoon hour)	Total Gate Down Time (minutes/peak afternoon hour)	Worst Case Afternoon Peak Hour	% Increase in Gate Down Time *	% Gate Down Time Per Hour *
Encinal Ave.	8.0	5.5	13.5	4:51-5:51 p.m.	69%	23%
Glenwood Ave.	10.5	3.5	14.0	4:51-5:51 p.m.	33%	23%
Oak Grove Ave.	11.5	4.0	15.5	4:51-5:51 p.m.	35%	26%
Ravenswood Ave.	10.0	7.0	17.0	4:52-5:52 p.m.	70%	28%

Source: Final Caltrain/HSR Blended Grade Crossing and Traffic Analysis, June 2013,

http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Blended+System/Caltrain-HSR+Blended+Grade+Crossing\$126Traffic+Analysis-Final.pdf

\* = Calculated by Menlo Park City Staff



### **RECENT CONCERNS RECEIVED**

- Why did this study not include other alternatives?
- Does Alternative C put entire length of rail on a berm?
- Would construction close all east-west streets concurrently?
- Have we been collaborating with neighboring cities?
- Can more modest projects address our traffic issues at these crossings?

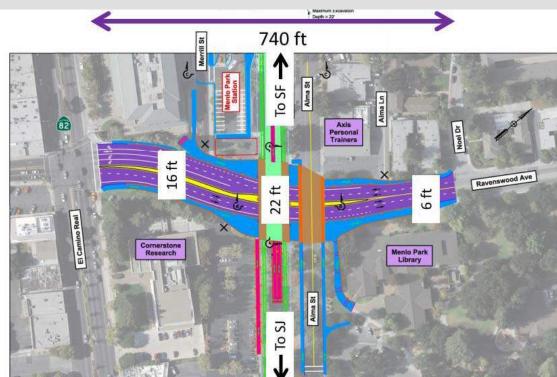


### **RECENT CONCERNS RECEIVED, CONT.**

- Is a full viaduct technically feasible?
- Do viaduct and tunnel require temporary tracks or "shoofly"?
- Can viaduct, tunnel and trench provide open space to be used for public purposes?

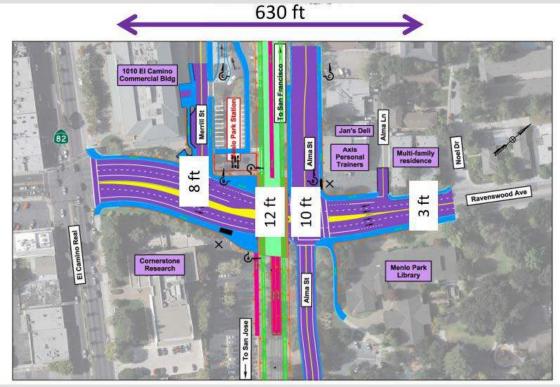








### ALTERNATIVE C: HYBRID RAVENSWOOD AVENUE

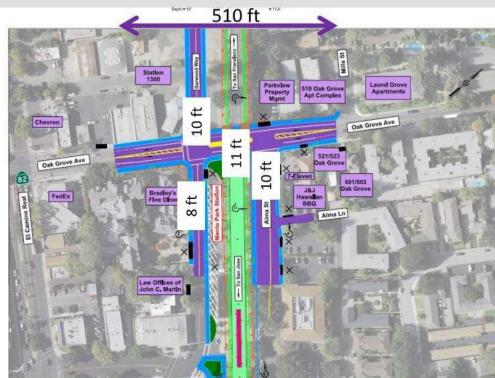






#### ALTERNATIVE C: HYBRID OAK GROVE AVENUE

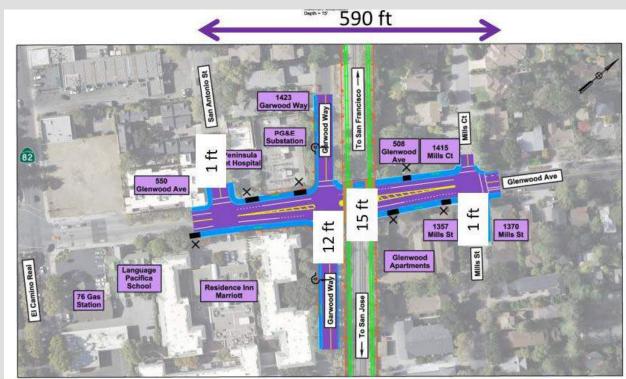






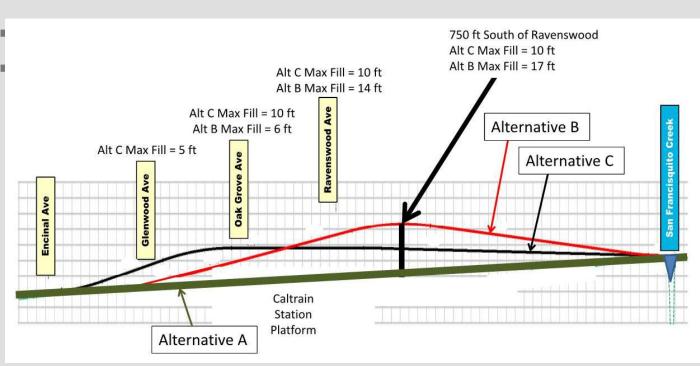
#### ALTERNATIVE C: HYBRID GLENWOOD AVENUE







#### ALTERNATIVES EVALUATED RAIL PROFILES







### **COMMUNITY FEEDBACK**

- Recurring Themes:
  - More Grade Separations
  - Minimize Height of the Railroad
  - Improve Pedestrian & Bicycle Access and Safety
  - Improve Connectivity between Alma St & Ravenswood Ave
  - Coordinate with other Projects
  - Minimize Driveway Impacts
  - Inform owners about Property Impacts
  - Station Configuration
  - Aesthetics
- Wish List Items:
  - Menlo Park as a "Quiet Zone"
  - Grade Separation at Encinal Avenue
  - Railroad Trench or Tunnel
  - Viaduct/Fully Raised



### ROADWAY UNDERPASS ALTERNATIVE - LOCAL EXAMPLES







Jefferson Ave, Redwood City



### ROADWAY UNDERPASS ALTERNATIVE - LOCAL EXAMPLES





Paseo Padre Parkway, Fremont



#### Valley Ave, Pleasanton



#### HYBRID / SPLIT ALTERNATIVE -LOCAL EXAMPLES

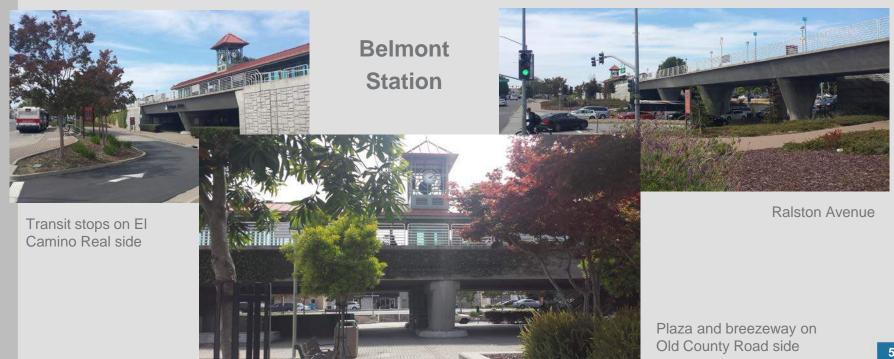






#### HYBRID / SPLIT ALTERNATIVE -LOCAL EXAMPLES







#### AESTHETICS











#### AESTHETICS



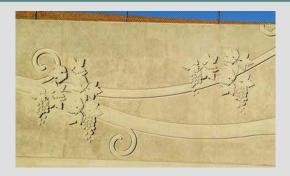




#### **AESTHETICS**













# **Berm Examples – San Carlos**



10-12 Ft Berm South of San Carlos Caltrain Station





**Ravenswood Avenue Railroad Crossing Project** 











# Wall Examples – Belmont



10-12 Ft Wall South of Belmont Caltrain Station



**Ravenswood Avenue Railroad Crossing Project** 











# WALL RENDERINGS



#### Looking West, Typical Breezeway

**Ravenswood Avenue Railroad Crossing Project** 









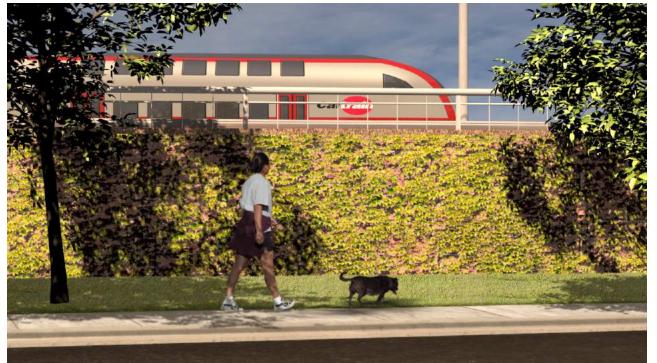




MENLO PARK

# WALL RENDERINGS





#### Looking West, just North of Oak Grove

**Ravenswood Avenue Railroad Crossing Project** 











# WALL RENDERINGS



#### Looking West, just South of Glenwood

**Ravenswood Avenue Railroad Crossing Project** 













MENLO PARK

#### ANIMATION FROM LIBRARY PARKING LOT EXISTING AND ALTERNATIVE A







RAILROAD CROSS





**Ravenswood Avenue Railroad Crossing Project** 









#### ANIMATION FROM LIBRARY PARKING LOT ALTERNATIVE B, HYBRID











Transportation Authority

**Ravenswood Avenue Railroad Crossing Project** 





#### ANIMATION FROM LIBRARY PARKING LOT ALTERNATIVE C, HYBRID











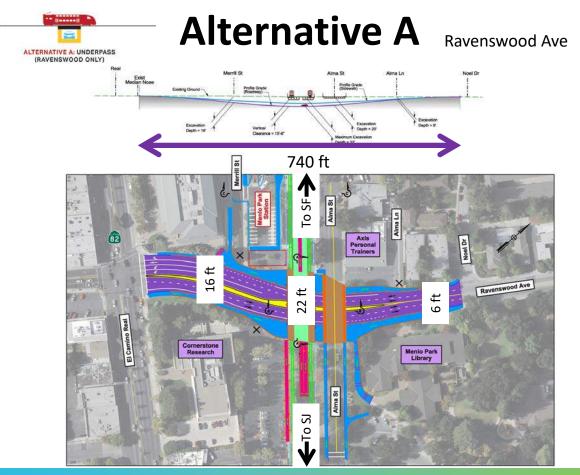


Transportation Authority

**Ravenswood Avenue Railroad Crossing Project** 







**Ravenswood Avenue Railroad Crossing Project** 

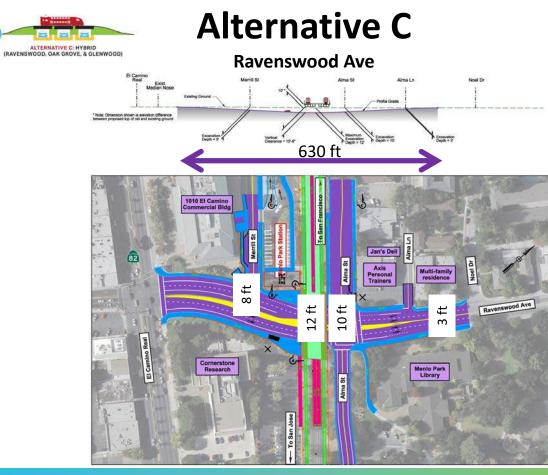












**Ravenswood Avenue Railroad Crossing Project** 





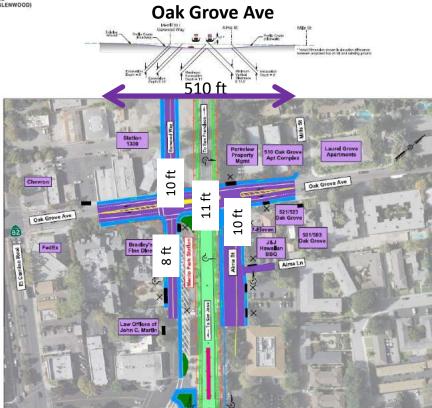








### **Alternative C**



**Ravenswood Avenue Railroad Crossing Project** 







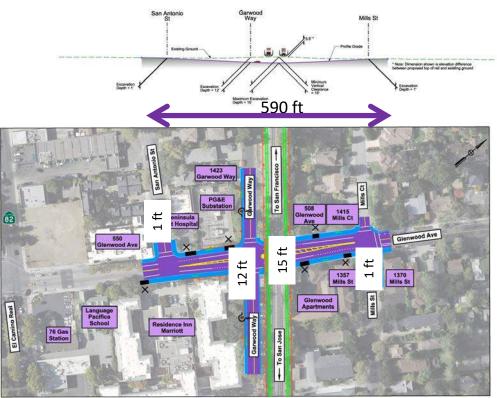






### Alternative C

**Glenwood Ave** 



**Ravenswood Avenue Railroad Crossing Project** 









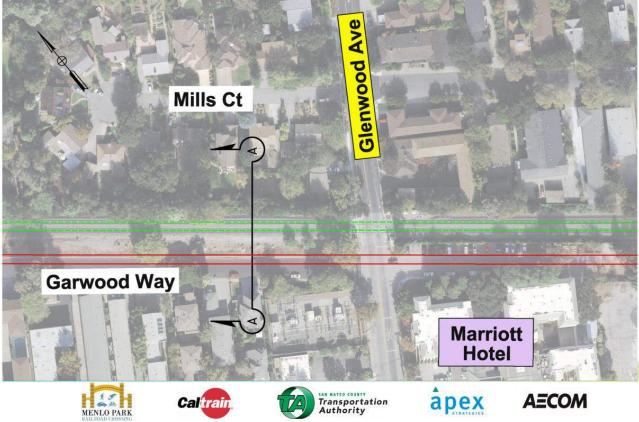


# Shoofly

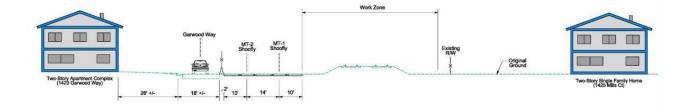




### **Shoofly at Glenwood**



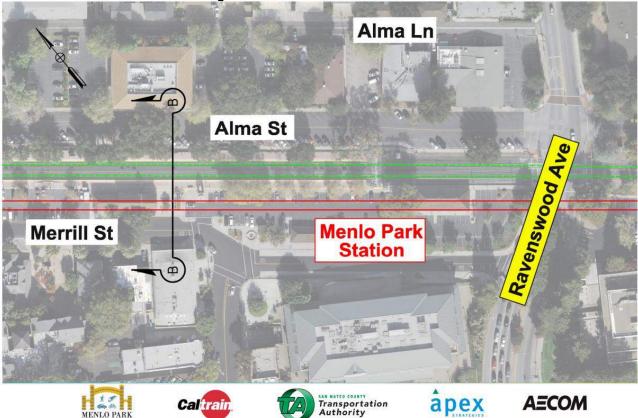
#### **Temporary Condition**



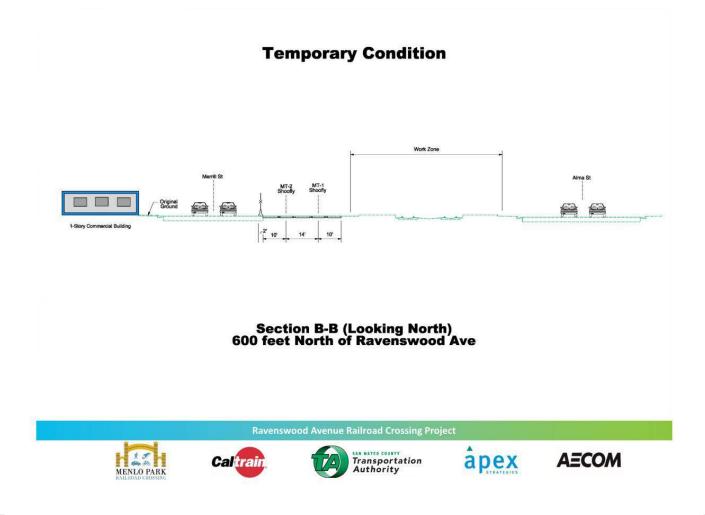
Section A-A (Looking North) Garwood Way - 200 feet North of Glenwood Ave



# **Shoofly at Caltrain Station**

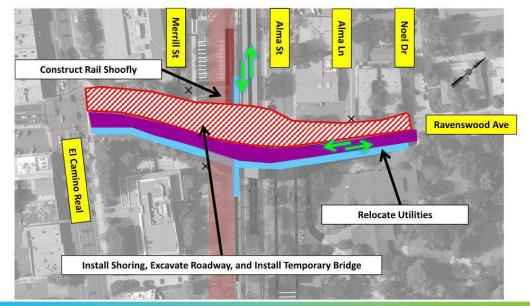


MENLO PARK



# Alternative A – Stages 1 & 2

- Relocate Utilities
- Install shoring, excavate roadway, and install temporary bridge
- Construct shoofly



Ravenswood Avenue Railroad Crossing Project





Transportation Authority

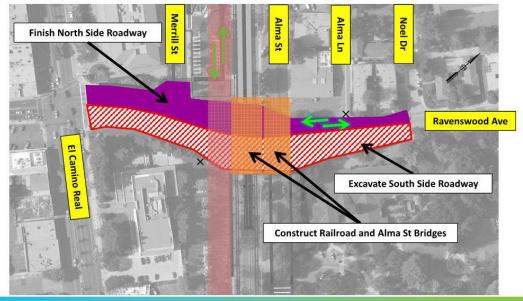






# Alternative A – Stage 3, 4 & 5

- Shift railroad to shoofly
- Finish north side roadway
- Excavate south side roadway
- Construct Railroad and Alma St Bridges



Ravenswood Avenue Railroad Crossing Project







Transportation Authority







# Alternative A – Stage 6, 7 & 8

- Finish Roadway
- Remove shoofly



Ravenswood Avenue Railroad Crossing Project







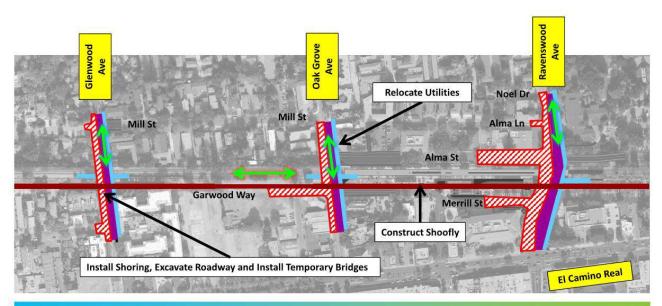






# Alternative C – Stage 1 & 2

- Relocate Utilities
- Install shoring, excavate roadway, and install temporary bridge
- Construct shoofly



Ravenswood Avenue Railroad Crossing Project





A SAN MATEO COUNTY Transportation Authority

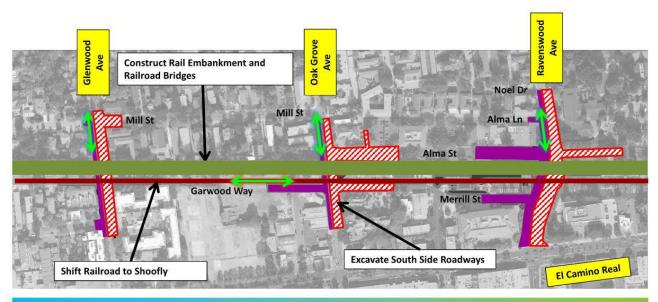






# Alternative C – Stage 3, 4 & 5

- Shift railroad to shoofly
- Construct rail embankment and railroad bridges
- Excavate south side roadways



Ravenswood Avenue Railroad Crossing Project







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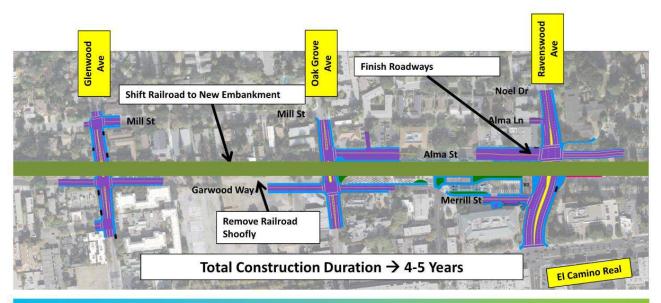






# Alternative C – Stage 6, 7 & 8

- Shift railroad to new embankment
- Finish roadways
- Remove railroad shoofly



Ravenswood Avenue Railroad Crossing Project





Transportation Authority âpex





From: Marcy Abramowitz Sent: Friday, January 04, 2019 11:21 AM Subject: Fwd: Input for Scope of Work of Possible New Track Plan

Dear Transportation Department,

I am writing in response to your recent outreach soliciting input to the design of the upcoming grade separation studies. What follows is the resubmission of my email to you from last May, which provided input to important topics that should be included in any study of an elevated track through Menlo Park.

In addition, I will add that I remain a firm believer that the best long-term option for our City overall is to put the train underground.

As an aside, Nikki, I was delighted to see that you have returned to Menlo Park. Welcome back. I wish you all a happy new year.

Best, Marcy

Begin forwarded message: From: Marcy Abramowitz Subject: Input for Scope of Work of Possible New Track Plan Date: May 22, 2018 at 7:29:09 AM PDT

Hi Nikki,

Here are our prioritized thoughts as input for the study.

- 1. Visual Study A: Numerical analysis of the distance from the track that the fully elevated train (i.e. cumulative of track + train + catenary wires) could be seen from ground level looking from both east and west sides along the length of the track through MP; Plus, 3D visuals (as were done for Options A and C) of what the fully elevated train would look like from both east and west.
- 2. Visual Study B. Analysis of impact of fully elevated train (again, track + train + catenary wires) on daylight plane, taking into consideration light blocked and shadows cast on both sides, throughout the movement of the sun on residential areas. (Note: residential construction requires assessment of daylight plane, so analysis of an elevated train on neighboring residences should adhere to the same requirement.)
- 3. Acoustical Study of loudness and reach of all train noise after elevation, trench or tunnel, <u>including</u> any required removal of sound barriers such as trees and structures
- Vibration Study on extent of travel of vibration once elevated and with concurrent removal of barriers such as trees and structures
- 5. Real Estate Financial Impact Study looking at local real estate prices over the time of construction and afterwards in terms of light, sound and visual implications
- 6. Eminent Domain Study looking removal of private property, plus structures, plus trees/vegetation.

1

7. Traffic Study looking at traffic flow and congestion impact of construction and required shoo-fly or other temporary requirements on traffic and residential access - closures and lost access in particular

I didn't include it here, but I recall discussion at the last meeting (or perhaps the one before) about gaining Caltrain and UP approval for grade changes >1% that might be important for a non-grade track.

Please let me know if you'd like to discuss any of this.

Also, just so you know, we are not planning to attend tonight's meeting, since it sounds like there isn't a need. We are all very appreciative of you keeping us informed and involved.

Best, Marcy

From: Debbie Hall Sent: Wednesday, January 9, 2019 9:29 PM Subject: Railroad grade separation

I am writing to express my strong opinion that Menlo Park should pursue grade separation at more than one intersection. The draft report on what options to study recommends separation on Ravenswood Ave., which experiences the highest number of car crossings, but I believe we also need it on Oak Grove and possibly on Glenwood. Separating at just one intersection will end up driving many more drivers to Ravenswood. I think we need two options to connect the two sides of our town without interference from the train schedule, not just one.

Thank you!

Debbie Hll

From: Aurelie Harou Sent: Friday, January 11, 2019 2:11 PM Subject: Ravenswood Ave Railroad crossing

Dear Angela,

I recently learned about the Ravenswood Avenue Railroad Crossing Project. I am pleased to hear about this project, especially considering the danger this intersection has posed in the past.

I am a new resident to Menlo Park and specifically to Linfield Oaks, living on Laurel. I have been deeply concerned by the amount of traffic that comes through Laurel, especially during work hours. I wonder why there are no plans to include an underpass at Willow Road so as to reduce the dangerous and heavy

2

traffic in this residential neighborhood (most traffic is not local but they are trying to get through to El Camino from 101).

Thank you for your attention, Aurélie Harou

From: David Wollenberg Sent: Friday, January 11, 2019 11:58 AM Subject: RE: Ravenswood Ave Railroad Crossing - FW: New Agenda 1/15/2019 for <u>www.menlopark.org</u>

Angela—I am not available to come to the meeting—however, from our perspective, the most desirable approach is to do a full underpass at Ravenswood. The alternative approaches will create an unsightly elevation of the tracks.

David

David A. Wollenberg President The Cortana Corporation

From: dana hendrickson Sent: Sunday, January 13, 2019 7:15 AM Subject: Fwd: Recommendations For Initial Menlo Park FEGS Study Attachments: FEGS Study Scope Recommendation – January 3, 2019.pdf

Hi Angela:

A follow-up email to the Jan 4 email to CC will be sent on Monday (January 20).

The mayor has agreed to meet and discuss our major concerns with the scope of the FEGS study.

These will be published in The Almanac this week.

The scope and recommended revisions should be reviewed by the NEW Rail Subcommittee before the entire NEW city council discusses it. This should be obvious.

Question: I am curious about how many residents provided feedback on grade separations - not tunnels – over the holidays.

What is the number? Where can I find their comments?

Dana

#### Support PolitiFact: Join the Truth Squad

------ Forwarded message ------From: dana hendrickson Date: Fri, Jan 4, 2019 at 11:58 AM Subject: Recommendations For Initial Menlo Park FEGS Study To: City Council <city.council@menlopark.org>

Menlo Park residents deserve a **politically unbiased** evaluation of fully elevated grade separations (FEGS) so all can judge the FACTUAL trade-offs between this alternative and the Ravenswood-only underpass approved by the previous City Council. To that end, the design of the FEGS study – and on-going evaluations – must reflect a genuine interest in identifying a FEGS solution that best accomplishes the following objectives.

- Improves vehicle traffic circulation and safety
- Improves east-west bike and pedestrian connectivity (convenience, safety)
- Improves the vitality of the up-and-coming Train Station Area Business District
- Minimizes the amount and duration of negative effects caused by construction
- Mitigates negative impacts on nearby neighborhoods
- Secures sufficient state and county funding
- Completed in the shortest possible calendar time, e.g. 2030, not many years later

Unfortunately, the scope of an initial FEGS study proposed by staff at the December 4, 2018 does NOT reflect this attitude. A group of residents believes city staff has artificially constrained the technical feasibility evaluation of rail profiles, and thereby, eliminated potentially desirable, practical FEGS solutions. This fact is clearly known by city staff and puts the very objectivity of the study scope into question.

"A track profile analysis to determine the maximum grade needed to provide sufficient elevation to avoid roadway excavation at Glenwood Avenue (span completely over the street); while simultaneously avoiding impact to Encinal Avenue. (Source: Staff Report: December 4, 2018)

A **positive approach** requires the City Council and staff to abandon its "traditional" negative attitudes towards elevating tracks above existing grades. These were formed with insufficient (a) facts about actual trade-offs and (b) informed feedback from current residents. **Our city council must ensure that residents have a clear and sound understanding of practical solutions, and their voices are heard.** 

The first step should be the completion of an initial FEGS study that evaluates the three primary areas of concern repeatedly raised by residents.

- The technical feasibility of various possible fully elevated rail profiles
- The noise implications of these profiles versus existing conditions
- The <u>aesthetic impacts</u> of these profiles

We believe the initial study should determine whether a FEGS solution could be designed that meets the following criteria:

- Fully elevated grade separations at least at Ravenswood and Oak Grove
- · Some type of separation at Glenwood, either fully elevated or hybrid with minor street lowering
- Built entirely within Menlo Park city boundaries
- Have maximum grades acceptable to Caltrain, greater than its standards.
- Acceptable visual and noise impacts on south end and north end neighborhoods
- Encinal might be closed to vehicle traffic only; pedestrian and bicyclist crossings would be provided

In addition to the proposed noise analysis, the study deliverables should include the following:

Rail profile designs that use 1%, 1.25% and 1.5% maximum average grades

• Elevation drawings and CAD images for the most promising rail profile (s) that illustrate

- o Train bridges
- o The northern and southern grades
- o A fully elevated structure that connects Ravenswood and Oak Grove.
  - Note: All elevation drawings should include "ghost tress" (current and planned) that visually screen the elevated structure and train electrification equipment.
- A preliminary layout for train station area

• Comparative matrices for Alternative A, C and FEGS similar to the ones in the enclosed document with clear explanations for all technical ratings.

Project cost estimates assuming grades can be either viaducts or stabilized embankments

Finally, this study should also identify all potential impacts to south end and north end neighborhoods and suggest design mitigation alternatives We encourage you to revise the scope and deliverables for the FEGS study and ensure its completion in the shortest possible time. We believe an FEGS alternative MIGHT be far superior to Alternative A, and our city should be well prepared for this outcome to avoid additional project delays.

We have spent at least a hundred volunteer hours in our efforts to assist our city during the past year, and we continue to welcome opportunities to discuss our findings with the Rail Subcommittee and other council members. Our invitation remains open.

#### Objective

Menlo Park residents deserve a *politically unbiased* evaluation of fully elevated grade separations (FEGS) so they can judge the FACTUAL trade-offs between this alternative and the Ravenswood-only underpass approved by the previous City Council. To that end, the design of the FEGS study must reflect a genuine interest in identifying the FEGS solution that best accomplishes the following objectives.

- Improves vehicle traffic circulation and safety
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- Mitigates negative impacts on nearby neighborhoods
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- Completed in the shortest possible calendar time, e.g. 2030, not many years later

#### Design Concept



#### **Track Profile**

- · Do NOT rule out practical technical designs, i.e., ignore politics
- · Base case: profile stays entirely within Menlo Park city boundaries
- · Variant: profile extends into Atherton but grade has little elevation there
- · Base case: Ravenswood, Oak Grove and Glenwood are fully elevated
- · Variants: Glenwood is lowered; no grade separation at Glenwood
- Caltrain maximum average grade standard (1%) CAN be exceeded. (e.g., 1.25%, 1.5%, 1.75%, 2.0%)

#### Traffic Circulation (Project Completion)

- Ravenswood, Oak Grove, Glenwood, Encinal
- El Camino, Middlefield
- Alma @ Ravenswood

#### Noise

- · Compare noise levels: FEGS versus existing conditions
- · Identify possible mitigation methods and estimate costs

#### Aesthetics

Unlike in most Peninsula cities, e.g., Palo Alto, San Carlos, Mountain View, the Caltrain tracks pass through a central commercial district with retail, restaurants, and offices on both sides. Therefore, the grade separation solution must meet both very high functional and aesthetic standards.

- Identify what people in world cities consider beautiful overhead rail structures
- Provide attractive elevated structure designs that are acceptable to Caltrain
  - Northern & southern grades
  - o Train bridges
  - Train Station Area (Oak Grove to Ravenswood)
  - o Glenwood to Oak Grove rail connector
- Illustrate visual impacts at ground level
  - o North of Glenwood
  - Glenwood to Ravenswood
  - South of Ravenswood
- Illustrate visual impact of best screening (trees, landscaping, ivy)

#### Impact on Private Property

- Locations
- Impact
- Ways to compensate property owners and likely costs

#### Construction

- Overall project duration
- Street closures
- Temporary traffic circulation Impacts (Ravenswood,

#### **Construction Costs**

- Breakdown major components
  - o Train bridges
  - Grades (stabilized berm, graduated viaduct)
  - Glenwood to Ravenswood connector
  - New train station (?)
  - o Shoofly, if required

#### Table 3. Capital Outlay Project and Support Estimate

	Cost E	stimate (Values	s shown in N	Aillions)	
Alternative	Construction	R/W & Utility	Support	Escalation^	Range #
А	\$90.2	\$21.8	\$33.5	\$33.4	\$160 to \$210
С	\$150.6	\$60.8	\$57.6	\$61.8	\$310 to \$380

^ Escalation to estimated mid-point of construction (2025)

# Range is based on +/- 10%, rounded up to the nearest \$10M.

The level of detail available to develop these capital outlay project estimates is only accurate to within the above ranges and is useful for long-range planning purposes only.

#### **Train Station Area Public Plaza**

- Proposed in Specific Plan
- Impact of open and elevated rail connector on appearance & potential functionality

## Major Project Risk Factors (Schedule and Cost)

Table 4. Milestone Schedule For Alternative A (Ravenswood Only)

Project Milestones	Estimated Scheduled Delivery Date (Month Year)
Draft PSR	August 2018
Final PSR	December 2018
*Preliminary Engineering and Environmental Review	March 2021
*PS&E (Final Design)	June 2023
*Begin Construction	October 2023
*End Construction	September 2027

\*Assuming funding is available/secured

#### **Grade Separation Risks**

- · Dependency Funding amount and timing
- Dependency Relocation of Hetch Hetchy pipeline)

#### **Comparison Grade Separation Alternatives**

Use the following Comparative Matrices to rank and support the rankings for how well each grade separation alternative meets individual project objectives.

# => Ratings

Matrix entries reflect our current assessments based on published consultant reports and our own research. These will be revised, as necessary, based on the actual FEGS study.

Relative mportance*	Alternatives	А	с	Fully Elevated	Likely
1 to 5	Grade Separations #	1	3	3	Absolute
	East-West Vehicle Flow (less congestion)		Without St.		Impact**
	North-South Vehicle Flow (less congestion)	and the second			and the second second
	Vehicle/Train Crashes				Improveme
	Alma-Ravenswood Vehicle Connectivity		Includes	and the second se	Greatest
	Train, Horn, Signal Noise			a Weard	Significant
	Bike Safety, Convenience, Comfort				Some
	Pedestrian Safety, Convenience, Comfort				Insignificar
	Potential Visual Impacts - Train Station Area	1.1.21			Some
	Potential Visual Impacts @Grade Separation			2012343	Significan
	Potential Visual Impacts - North of Oak Grove				Gretest
	Potential Visual Impacts - South of Ravenswood			TENT	Harm
	Impact on Private Property/Driveways		r z lon	NONE	
	Construction Disruption - Road Closures				
	Construction Disruption - Project Duration	3.5 Years	4-5 Years	3-4 Years	
	Order of Magnitude Cost	\$160M - \$200M	\$310M-\$390M	TBD	
-	Potential Civic Plaza (Specific Plan)			I Susal	

Grade Separation	on Alternatives	Matrix - Ratings
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Notes:

- Relative importance scores should be determined by Menlo Park <u>residents</u>, not the consultant or city staff.
- \*\* Compared to existing conditions (no grade separations)

#### => Ratings Support

Matrix entries reflect our current assessments based on published consultant reports and our own research. These will be revised, as necessary, during the FEGS study.

Alternatives	A 1 Grade Separation	C 3 Grade Separations	FEGS 3 Grade Separations	Notes
East-West Vehicle Flow (less congestion)	Ravenswood Only	Ravenswood, Oak Grove, Glenwood	Ravenswood, Oak Grove, Glenwood, Encinal Closed	
North-South Vehicle Flow (less congestion)	El Camino, Middlefield	El Camino, Middlefield	El Camino, Middlefield	
Reduced Vehicle/Train Accidents	Ravenswood Only	Ravenswood, Oak Grove, Glenwood	Ravenswood, Oak Grove, Glenwood, Encinal Closed	
Alma-Ravenswood Vehicle Connectivity	No Connection	Depends on a 4-way traffic light.		
Train, Horn, Signal Noise	Linfield Oaks	Felton Gables, Stone Pine, Linfield Oaks	Felton Gables, Stone Pine, Linfield Oaks	
Bike Safety, Convenience, Comfort	New bike lanes (Ravenswood only)	New bike lanes (@ 3 Separations)	New bike lanes @ 3 Separations + Train Area*	**
Pedestrian Safety, Convenience, Comfort	Ravenswood only	@ 3 Separations	@ 3 Separations + Train Area	**
Potential Visual Impacts - Train Station Area	Physical & Visual Separation	10-foot High Berm	20-foot Open Rail Structure	
Potential Visual Impacts @Grade Separation	Deep & Wide Underpass (Jefferson in Redwood City)	Less Deep But Wide Underpass	No Underpasses	
Potential Visual Impacts - North of Oak Grove	No change	Mature Tree Screen East Side Tall Buildings On ECR Side	Mature Tree Screen East Side Tall Buildings On ECR Side	
Potential Visual Impacts - South of Ravenswood	Mature Tree Screen East Side Tall Buildings On ECR Side	Mature Tree Screen East Side Tall Buildings On ECR Side	Mature Tree Screen East Side Tall Buildings On ECR Side	
Impact on Private Property/Driveways	None	Glenwood, Oak Grove, Ravenswood	None	
Construction Disruption - Road Closures	Single lane traffic - months long	Single lane traffic - months long	2-3 weekend closures	
Construction Disruption - Project Duration	3.5 Years	3-5 Years	3-4 years	
Order of Magnitude Cost	\$160M-\$200M	\$310M-\$390M	TBD	
Potential Central Plaza (Specific Plan)	Very limited - Tracks at Grade	No - Solid Berm	Yes - Open Rail Structure	

Grade Separation	Alternatives	Matrix -	Ratings	Support
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Project Risk (Major Dependencies)	Relocate Hetch Hetchy Pipeline	Relocate Hetch Hetchy Pipeline	None Identified
	Funding: Amount & Timing	Funding: Amount & Timing	Funding: Amount & Timing

#### Notes:

- \* Bicyclists and pedestrians can cross under elevated rail structure anywhere between Ravenswood and Oak Grove
- \*\* Ideally bike lanes would be physically separated from vehicle lanes and be at grade. Alternative A – Shared bike pedestrian sidewalk has 5% to 7% grade

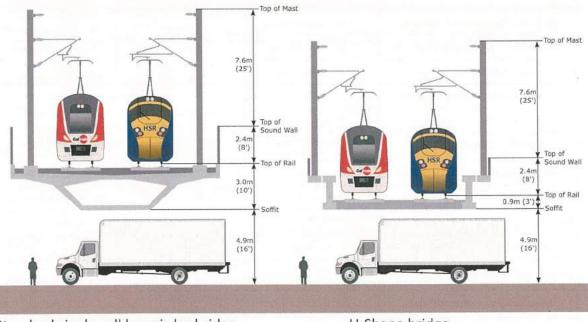
Alternative C – Ravenswood: separate sidewalk has 5% grade, Glenwood and Oak Grove bike lanes share street and have 7.5% grades

Alternative FEGS – no grade (0%) and should be physically separated from vehicles

# Exhibit 1 –Noise & Rail Height Impacts of Elevated Rail Structures

# Source: Clem Tiller – Caltrain-HSR Compatibility Blog www.caltrain-hsr.blogspot.com/

Since noise is probably the #1 or #2 concern raised by viaduct foes, AECOM should consider a U-shaped bridge/viaduct design.



# Standard single cell box girder bridge

U-Shape bridge

## The U-Shaped Grade Separation

Unlike other designs where the tracks are on top of the viaduct, it does two things by putting the tracks down inside the 'U' shape:

- Minimizes track/train elevation for any given desired clearance over roads below (minimizing grades and/or ramping length)
- Minimizes noise by shielding the track-wheel interface since the tracks are down inside the 'U' shape (see diagram)

While some cities and towns on the peninsula are still holding out for trenches or tunnels to bury the railroad tracks out of sight, the astronomical cost and difficulty of constructing such structures below the water table in seismically unstable soils makes it likely that above ground solutions will ultimately prevail, anywhere rail traffic needs to be separated from road traffic. An attractive above ground solution is the U-shaped grade separation. A U-shaped grade separation is a type of railroad bridge used to elevate the tracks above road traffic with as few community impacts as possible; there are no property takes and all

road turning movements are preserved. The bridge structure consists of sections made from two pre-stressed concrete side beams, forming the two sides of a U shape, connected by a flat slab forming the bottom of the U, on which the tracks are laid. The side beams bear the bending loads from the weight of the bridge and the trains that it carries. This is not a typical railroad bridge design; it is a specialized configuration used to quickly and efficiently build elevated urban metros in cities where systems are being built from scratch in a densely built environment.

While the peninsula rail corridor is not a new metro system, these U-shaped structures could still prove useful in a major push to grade-separate the 40 grade crossings that remain, enabling higher speeds and more train traffic while relieving road congestion and improving east-west access across the tracks.

#### What are the advantages of U-shaped grade separations?

U-shaped grade separations combine several attractive features that make them ideally suited for developed areas along the peninsula rail corridor, and certainly much better than the massive hollow core concrete box girder bridges considered standard issue by the HSR project as shown in the graphical

comparison on the previous page

- · Lower track elevation. The U shape minimizes the depth of the structure (measured from the underside of the bridge span to the top of the rails) to 3 feet or less. This allows the standard 16-foot road clearance to be provided by raising the tracks just 19 feet above the road surface, about 8 feet less than the large elevated concrete box-girder viaducts that were proposed during the 2010 Analysis of Alternatives for peninsula HSR. The rails are lowered thanks to the U shape, which places the structural support of the bridge to the sides, rather than under the trains.
- · Lower visual impacts. When the tracks don't need to rise as much, the rail approaches to a grade separation become correspondingly shorter and less obtrusive, impacting fewer views. The structures above rail level, such as overhead electrification poles, are also lowered. This reduces the so-called "Berlin Wall" effect of a grade separation structure.
- Lower train noise. The side beams function as natural sound walls, trapping rail noise before it has a chance to escape into adjacent neighborhoods. They are especially effective because they are thick and quite close to the train. This obviates the need to add sound walls on top of the bridge, making the finished structure less visually obtrusive.
- Better earthquake resistance. The lower profile of the bridge structure reduces bending moments applied to the piers and foundations, whether by earthquake forces or train braking and acceleration or wind loads. This makes the bridge piers less massive and integrates them better into the built environment.
- Better station integration. Where stations must be located on an elevated section. structures are simplified thanks to the lower profile of the track, which reduces the

reach of stairs, ramps, escalators or elevators, making for a more passengerfriendly environment. The side beams of a U-shaped viaduct have their top flange at the same height as the train floor and form the actual platform interface, 50 inches above the rail and 72 inches from the track center line, allowing the Ushaped structure to continue uninterrupted through the station.

- <u>Better safety in case of derailment</u>. The side beams are close to the train. In case
  of a derailment, train cars will be guided by the structure and will not topple off the
  bridge. This feature is known as "derailment containment."
- Lower construction cost. U-shaped elements can be prefabricated off-site and assembled with minimal disruption compared to traditional cast-in-place construction methods. Using standardized elements throughout the corridor, in dozens of locations, provides economies of scale. The decreased profile changes for both rail and road (whether the U-shaped bridge is elevated or at-grade with the road sunk underneath) require less excavation or fill.

The U-shaped design can minimize property takes, preserve turning movements for cars and trucks, cost much less to build than below-grade solutions, and tread more lightly through built-up neighborhoods than a conventional (box beam) viaduct or split-grade separation. U-shaped bridges are ideal for grade separation in dense areas like the peninsula.

## Exhibit 2 – Elevated Structure Aesthetics

Both the grade separations, i.e., train bridges, and the rail structures between them will run through a central city business district. Therefore, the structure design must meet high standards for BOTH functionality and aesthetics.

#### Design Criteria

- Graceful profile Low mass, thin spans, narrow columns, wide arches
- Unified design for grade separations and connecting structures
- Attractive materials on exterior
- Minimalist train platform
- Integrated train station (if existing is replaced)

# From Pedestrian Eye Level



Example: Broadway Main – Burlingame Design

# **Station Improvements**



San Mateo - Hillsdale Station Design



San Mateo - Elevated Platform

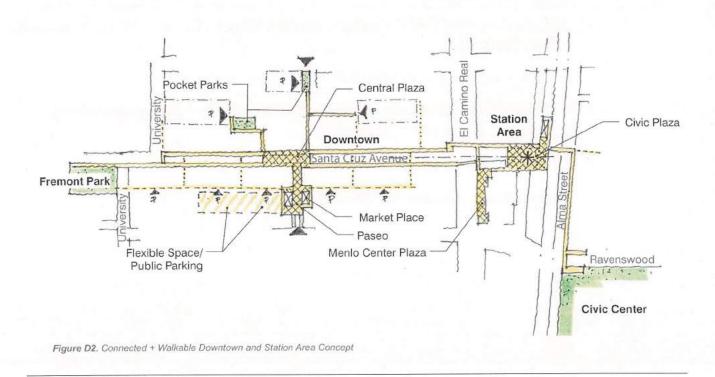
## Exhibit 3 – Some Perspectives on Viaducts AECOM Has Already Provided Palo Alto

- Does not require a shoofly (temporary set of tracks which may take one or more lanes from Alma). Is this possible in Menlo Park
- Does not require lowering and/or lengthy closures of any Alma intersections
- Does not require lowered or fenced roads across or under tracks (best bike/pedestrian experience)
- Does not require easements (such as trench tiebacks which require tree removals and prohibitions)
- Does not require any private property (home or yard) takings
- Does not divide community (allows continuous visual & physical connectivity, landscaping, linear parks, paths, etc.)
- · Does not require unduly steep grades
- Has the shortest & least disruptive construction period

# Exhibit 4 – Train Station Area Public Plaza

The Menlo Park community has proposed a central public plaza in the train station area and it is now included in the Downtown/EI Camino Specific Plan.

No evaluation of grade separations alternatives has considered this important resident feedback. Disregarding this feedback is a huge problem and reflects city government insensitivity to community wants and preferences!



Source: Downtown/El Camino Specific Plan (2012)

## Exhibit 5 – AECOM FEGS Study Scope Proposal

In May 2018 the City Council instructed city staff to develop a proposal for an FEGS study. Seven months later (December 4, 2018), the following was presented by AECOM, the technical feasibility consultant currently providing grade separation studies for Menlo Park.

## Task 7.1 Preliminary Engineering

<u>AECOM will develop preliminary engineering for a fully elevated alternative.</u> The track profile limits will begin just south of Encinal Avenue and end just north of San Francisquito Creek. This task will include the following:

- Engineering (track and road profiles, shoofly track alignment, etc.) to define the limits of construction and approximate quantities to complete an order-of-magnitude cost estimate.
- · Utility and Right-of-Way impacts.
- Preliminary cost estimate (using a similar format that was used for Alternatives A & C).
- A track profile analysis to determine the maximum grade needed to provide sufficient elevation to avoid roadway excavation at Glenwood Avenue (span completely over the street); while simultaneously avoiding impact to Encinal Avenue.

#### Task 7.2 Meetings

AECOM will attend and prepare PowerPoint slides for up to four (4) separate meetings; City Council (1), Rail Subcommittee (1), Planning Commission (1) and the Complete Streets Commission (1).

#### Task 7.3 Renderings

AECOM will prepare still image, 3D CAD renderings from up to three (3) vantage points.

#### Task 7.4 Technical Memorandum

AECOM will prepare a Technical Memorandum to summarize the items prepared as part of Task 7.1 and 7.3.

#### Task 8: Noise Study

AECOM will evaluate how each of the five proposed alternatives, noted below, would affect noise levels; both on a single event (pass-by) basis as well as average daily exposure (such as day-night noise level,) which would likely be used to assess environmental noise impacts as per Federal Transit Administration (FTA) noise impact criteria.

The study will include a round of noise measurements describing single event and daily noise exposure for existing conditions. The study will also include prediction of expected changes in noise level (single event and daily exposure) for the different alternatives. The alternatives to be studied are as follows:

- i. Existing (Baseline) Condition (No Build)
- ii. Alternative A
- iii. Alternative C
- iv. Alternative D Fully elevated with three grade separations
- v. Alternative E Multi-city, corridor-wide tunnel

#### Task 8.1 Review Project information

The AECOM noise team will review provided and relevant project information. At the conclusion of this review, the noise team will develop a data request to the City and/or Caltrain, for any additionally required information.

#### Task 8.2 Site Visit and Noise Measurements

Two AECOM noise specialists will visit the project area and conduct a series of long-and short-term measurements of current existing conditions. The long-term measurements will run for at least 24 hours at two different locations in the noise study area, and short-term measurements will be conducted for a shorter duration (typically 15-30 minutes each) to document ambient conditions and individual train events at another 4 to 8 locations representing a variety of noise-sensitive land uses throughout the study area. The noise team will also carefully identify and document other existing noise sources present as well as buildings, topography and other features that could influence acoustical propagation in the study area.

Depending on the preliminary tunnel concepts to be evaluated under Alternative E (Tunnel), some noise measurements may also be conducted at other locations outside of the study area to characterize noise sources associated with that alternative (such as passive tunnel vent shafts, or powered ventilation fan stations which may be identified on similar rail tunnels elsewhere.

#### Task 8.3 Analyze Noise Measurement Data

The noise measurement data will be analyzed and developed into charts and tables to represent the varying noise environment over the course of the day at each of the measurement locations as well as detailed noise levels for individual train events identifying individual contributions from train cars, locomotives and horn soundings on a per event basis (to the degree possible).

#### Task 8.4 Conduct FTA and CadnaA Noise Modeling

AECOM will conduct an FTA style spreadsheet analysis to predict and compare project related 24-hour (Ldn) noise levels consistent with methods described in the FTA Transit Noise and Vibration Impact Assessment Manual (FTA VA-90-1003-06), general noise assessment method, at up to 20 different point locations representing noise sensitive locations within the project area. The noise team will also develop more detailed noise models using the CadnaA noise model platform to produce noise contour data for typical maximum noise levels for each alternative.

#### Task 8.5 Develop Draft Noise Technical Memorandum

AECOM will prepare a technical noise memorandum reporting the methodology, results and conclusions of Tasks 8.1 to 8.4.

#### Task 8.6 Develop Final Noise Technical Memorandum

AECOM will provide responses to one set of agency comments and prepare a final technical memorandum.

#### DELIVERABLES LIST

The following deliverables will be provided as part of this extra work:

- · Draft & Final Technical Memorandum of Viaduct Alternative Analysis
- Draft & Final Noise Technical Memorandum

#### FEE ESTIMATE

A detailed level of effort per task for this Extra Work (Amendment 3) is provided as an attachment.

#### AECOM Presentation

https://www.menlopark.org/DocumentCenter/View/19063/I6-RAVENSWOOD-18-224

#### AECOM Contact:

Millette Litzinger, PE Deputy Project Manager 408.961.8417 millette.litzinger@aecom.com

#### Menlo Park City Council,

It has come to my attention that a restructuring plan is being considered for the Ravenswood-El Camino intersection that would include the blocking of vehicular traffic from Alma St. I know that many local residents, including myself, reacted strongly against the summer trials that closed Alma to vehicular traffic.

It seems obvious to local residents that the source of danger is from the crosswalk at Ravenswood that facilitates pedestrian access to the Menlo Park Caltrain station. As recently as October 2018 a vehicle was struck by a 78-MPH train at this intersection due to vehicles stopped for pedestrian crosswalk traffic with no room to provide safe egress for the blocking vehicle. Closing Alma will only exacerbate this dangerous issue, as it did during the trial.

As a member of the community and a frequent user of this intersection, I hereby request that the council count my vote against closing Alma St. to vehicular access from Ravenswood. This will be an obvious detriment to all vehicle traffic, as well as a threat to pedestrian crosswalk traffic.

Regards,

Vadim Konings



Matteson Realty Services, Inc. Matteson Real Estate Equities, Inc. Matteson Management Services, Inc. January 15, 2019

Via E-Mail Angela R. Obeso Senior Transportation Engineer City of Menlo Park <u>ARObeso@menlopark.org</u>

Re: Grade Separation Studies - Ravenswood Avenue

Dear Angela:

Please provide this letter to the members of the City Council as part of the Study Session occurring tonight regarding the Caltrain Grade Separation Studies. We have met before to discuss various issues related to the grade separation at Ravenswood Avenue. I am writing on behalf of the owners of Menlo Park Office Center, located at 1000 El Camino Real, on the corner of El Camino Real and Ravenswood Avenue in Menlo Park.

In our past discussions, I have related my concerns about the fact that the primary access to our parking garage, which is beneath the building and which contains the vast majority of our parking, comes from a driveway accessed from Ravenswood Avenue. I have expressed our opposition to any alternative that results in the elimination of our access to Ravenswood, which I understood would likely occur in the event that Ravenswood Avenue itself is recessed below the railroad tracks.

As the Council is aware, our waterproofing repair project at the property is currently under an appeal related to the necessary removal of redwood trees on the El Camino Real frontage. As has been explained to the appellants as well as those council members present at our recent open forum on the topic, the much larger redwood and oak trees on the Ravenswood Avenue property frontage will remain untouched by the project. Importantly, however, most of those trees are sited rather close to the sidewalk and to Ravenswood Avenue, and in its deliberations about which design alternative to select for grade separations, the Council should consider the detrimental impact that a Ravenswood Avenue to be recessed. To my knowledge, this has <u>not</u> been studied as a part of the grade separation would have to be, but I do know that the root systems of these trees are quite extensive, and given that they have been there for over 30 years, it should be expected that such a project could be quite detrimental to them.

The concerns expressed above lead us to strongly favor either a raised aqueduct or full tunneling of the railroad tracks as the preferred alternatives for grade separation rather than the recessing of Ravenswood Avenue itself.

Respectfully,

MPOC Investors, LLC By: JB Matteson, Inc., Managing Agent

Mat Mattern Matt Matteson

Co-President and COO 1510 Fashion Island Blvd., Suite 380 | San Mateo, California 94404 | 650.802.1800 PHONE | 650.802.1811 FAX www.JBMatteson.com

Matteson Realty Services, Inc. BRE Lic. 01193115 | Matteson Real Estate Equities, Inc. BRE Lic. 01787731 Matteson Management Services, Inc. BRE Lic. 01204246

# Proclamation

# **RECOGNIZING JOHN MCGIRR**

WHEREAS, on September 16, 1996, John McGirr joined the City of Menlo Park Finance team as a Revenue and Claims Coordinator before being promoted to Revenue and Claims Manager; and

WHEREAS, John was the chief administrator of the City's business license tax program, served as the main contact for transient occupancy tax collection, acted as chief architect of the City's master fee schedule, administered utility users' tax, and managed the general liability program for claims against the City, ultimately ensuring that during his tenure, John was sure to collect every penny the City was due and that the City never spent more than was necessary; and

WHEREAS, John's work in Menlo Park served as an example for revenue managers across the state with his involvement in the California Municipal Revenue and Tax Association, resulting in being elected to the board leadership position of treasurer and receiving the first ever CMRTA President's Award for extraordinary service; and

WHEREAS, John represented the City at the San Mateo Financial Officers Group; sat as a committee member on the Bay Cities Joint Powers Insurance Authority; served as the president of the American Federation of State, County, and Municipal Employees Local 829, the unit representing the City's supervisory staff; and

WHEREAS, John supervised, mentored, and developed staff in not only the finance division but also in other departments and won citywide employee recognition for Leadership and Professional Development in 2018; and

WHEREAS, John brought a larger-than-life personality to the office where his sharp wit set the standard for humor and where his everyday use of a tie set the standard for professionalism, particularly the one day a year when he would spice up the holidays with a festive version,

**NOW THEREFORE, BE IT PROCLAIMED** that I, Cecilia Taylor, Mayor Pro Tem of the City of Menlo Park, on behalf of the City Council, congratulate and express my sincere gratitude to John McGirr for his loyalty and service over the past 22 years.

Cecilia Taylor, Mayor Pro Ten January 2019



# Esteemed city council of Menlo Park

I am here to express my concerns about the growing noise pollution associated with gasoline powered leaf blowers in Menlo Park. In general, noise pollution in Menlo Park is on the rise. This is due in part to increased, traffic, increasing amounts of development, particularly teardowns, and the increased use of gasoline powered leaf blowers.

I would like to address the third of these sources of increased noise pollution: gasolilne powered leaf blowers. It is my personal experience that the use of these devices can be so obtrusive, that I am forced to seek shelter indoors when gardeners come to service neighboring properties. There are alternatives that are significantly quieter. First there is hand raking. I see no reason that hand raking cannot replace much of the work now done by polluting and obtrusive leaf blowers. In areas where hand raking is not practical or sufficient, electrically poweed leaf blowers (either corded or cordless) can be used. Therefore I am here to urge the council to explore the possibllity of implementing the following guidelines and regulations for commercial gardening services.

1. Menlo Park encourages the practice of hand raking

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# LIBRARY SYSTEM IMPROVEMENTS

Sean Reinhart, Interim Director of Library Services











# LIBRARY SYSTEM IMPROVEMENTS PROJECT



# Staff recommend approval of:

- Project scope
- Process
- Goals
- Timeline





## GOALS





## ettyor MENLO PARK

## **TWO OVERARCHING GOALS**

- Long Term Goals
  - Develop and Construct 21<sup>st</sup> Century Facilities
    - Reduce City maintenance costs/reduce carbon footprint
    - Eliminate design deficiencies that hinder services
    - Improve operational efficiency
    - Create flexible, tech-infused community spaces to serve Menlo Park children and families now and for the next 75 years
- Short Term and Ongoing Goals
  - Address and resolve current deficiencies
  - Improve services within existing facilities
    - Limitations



# SCOPE



CITY OF MENLO PARK



## **PROJECT SCOPE - MAJOR COMPONENTS**

#### **Priority 1: New Belle Haven Library**

 Develop and implement a comprehensive plan to design, finance, construct and operate a new public library facility to replace the Belle Haven Branch Library currently located on the Belle Haven School campus.

#### **Priority 2: New Main Library**

 Develop and implement a comprehensive plan to design, finance, construct and operate a new public library facility to replace the current Main Library on the Burgess campus.

#### **Priority 3: Short-term improvements**

 Identify and implement needed short-term improvements to current library facilities, services and operations to ensure the continuous provision of high-quality, modern and safe library facilities for Menlo Park residents pending the development of new facilities.





# PROCESS





## LIBRARY SYSTEM IMPROVEMENTS PROJECT (LSIP)

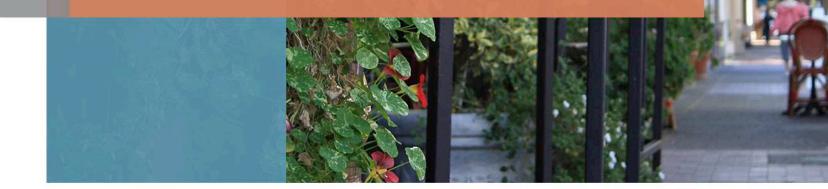
- Implemented at Council's direction Oct 2017
- \$1M LSIP capital/design fund, \$140K improvements fund
- Advisory group recommendations
  - Library Commission
  - Belle Haven Neighborhood Library Advisory Committee (BHNLAC)
  - Other stakeholders
- Incorporates broad community input
- Expert consultation, best practices, quality data, future trends

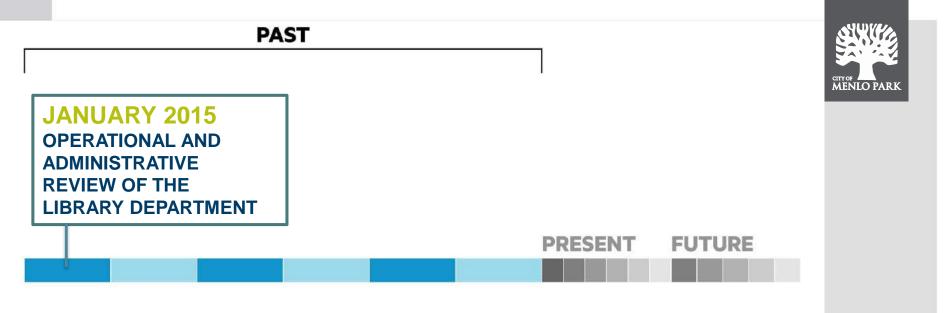


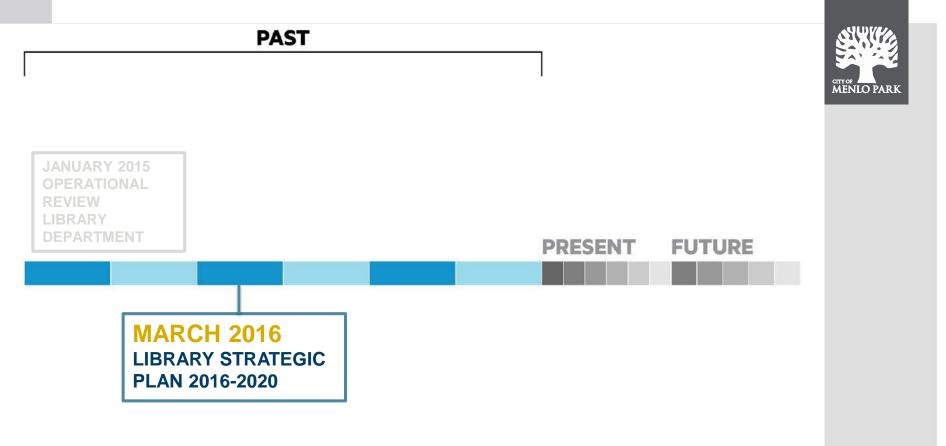


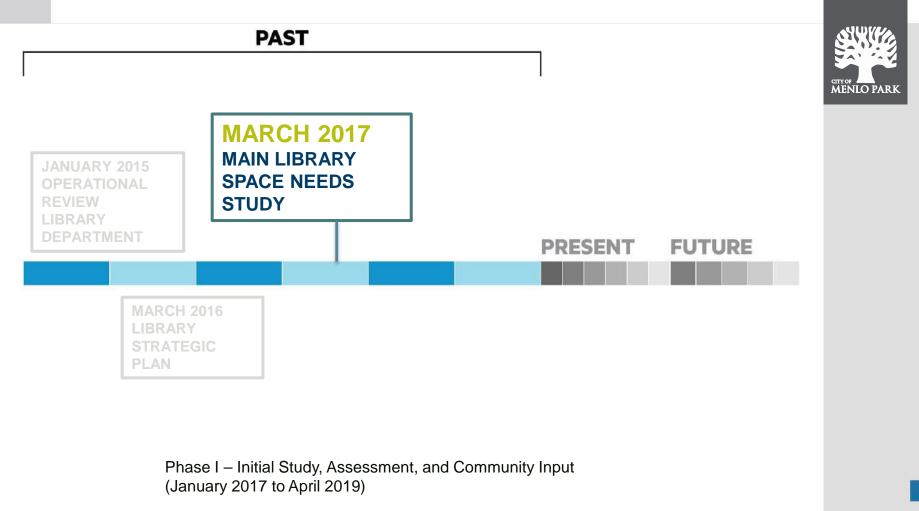
## **PROJECTED TIMELINE**

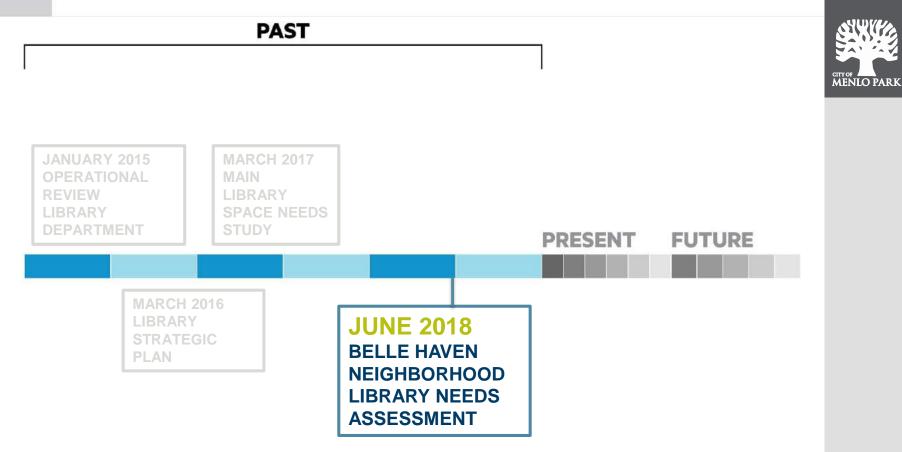
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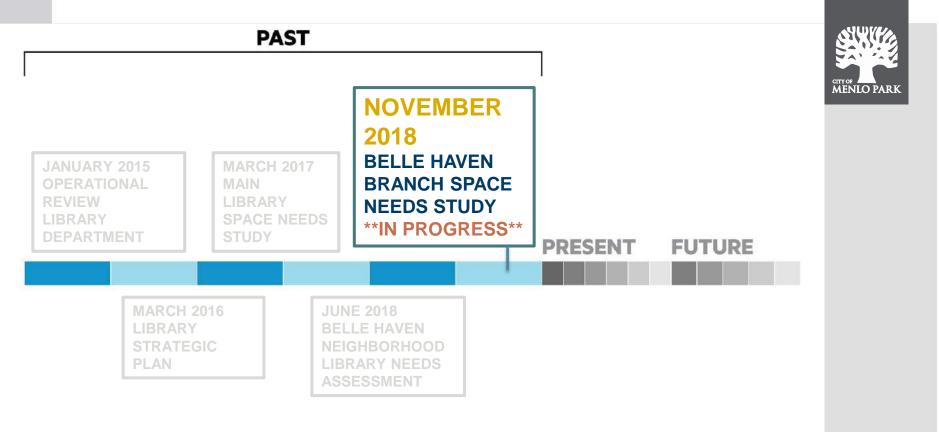


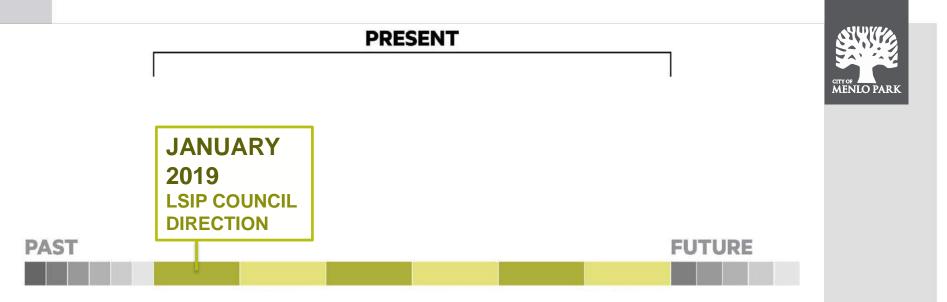


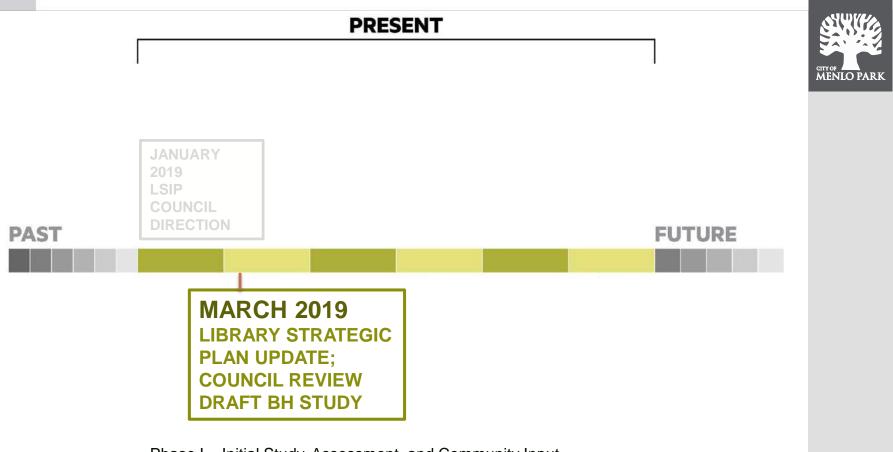




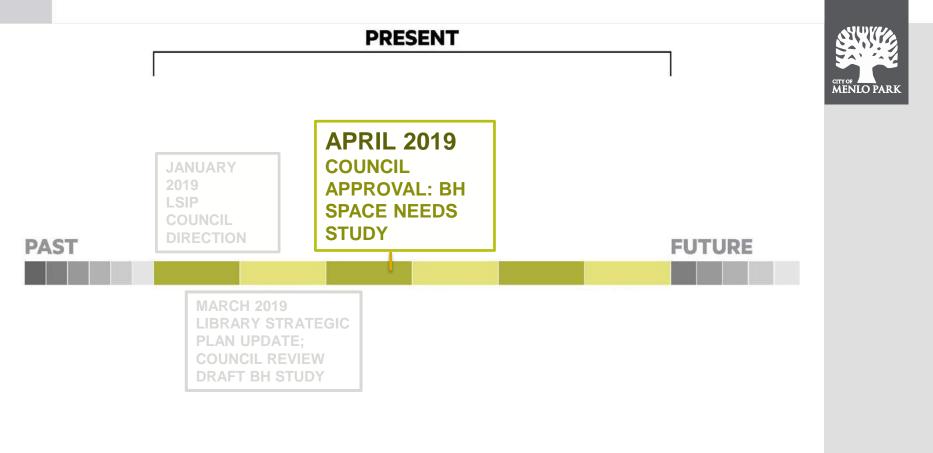




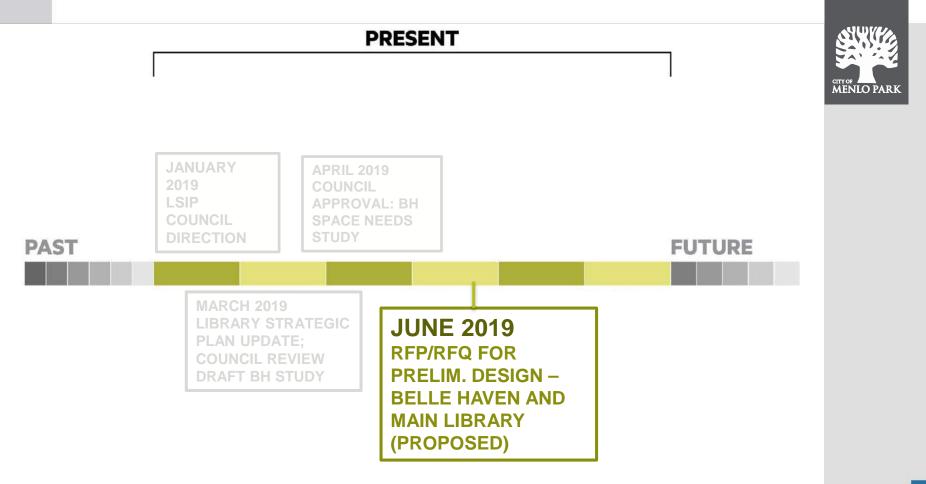


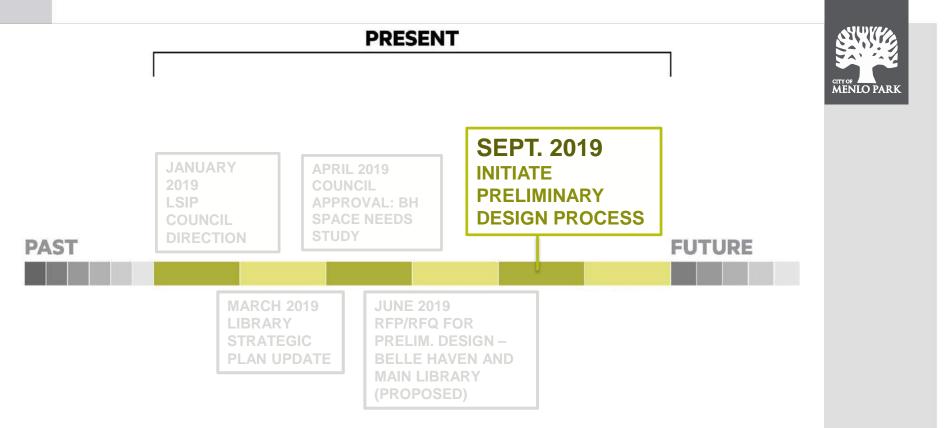


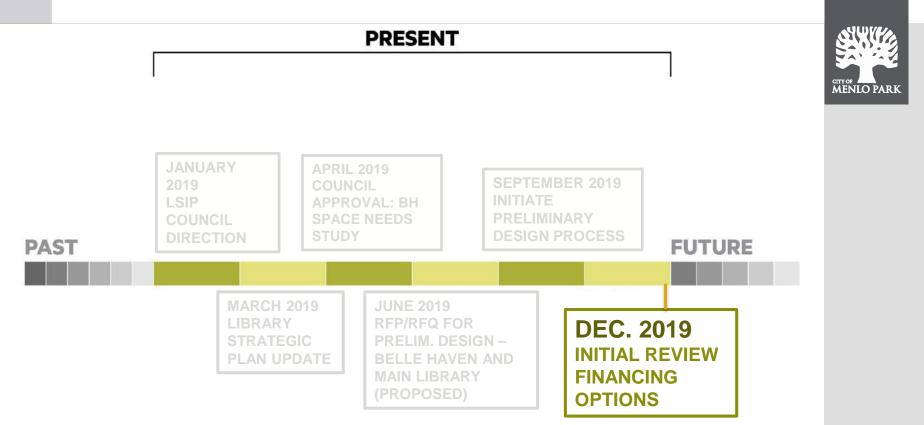
\* All dates are tentative and subject to change.



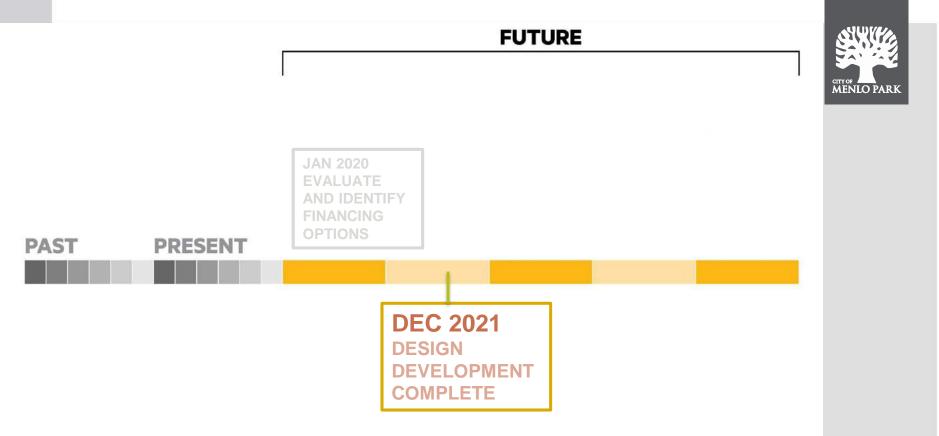
\* All dates are tentative and subject to change.









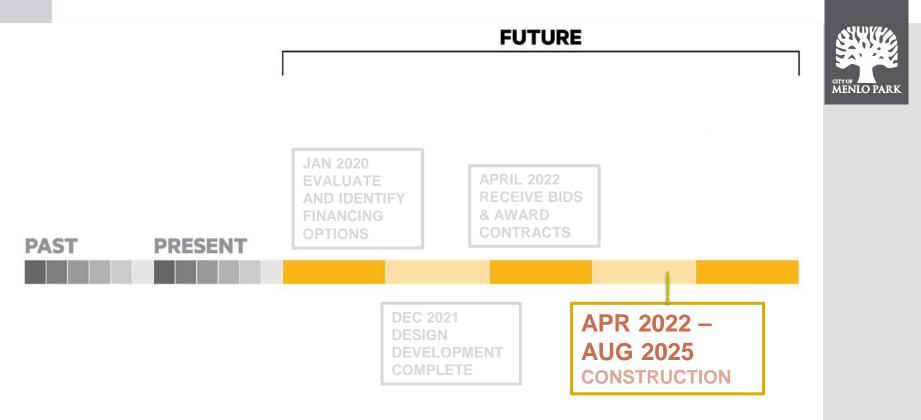


Phase III – Design Development and Financing (January 2020 to December 2021)

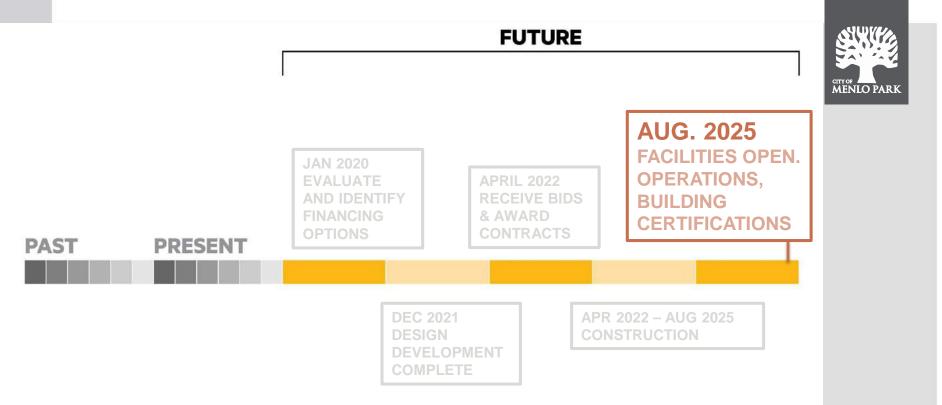
\* All dates are tentative and subject to change.



Phase IV – Construction (April 2022 – August 2025)



Phase IV – Construction (April 2022 – August 2025)





MENLO PARK

# **STATUS UPDATES**







### **MENLO PARK LIBRARY SYSTEM**

- Circulation per capita is 13th highest of all 183 California public library systems
- 2018 average 10 library visits per capita per year
- Library ranks #1 in City resident satisfaction survey
- Public support for library system improvements is strong – 76%





### **BELLE HAVEN BRANCH LIBRARY**

- Belle Haven Library Space Needs Study is well underway
- Numerous stakeholder interviews, focus groups and community workshops
- Participation is strong; feedback from community members about process has been positive
- A citywide survey is in the field now, in print and online
- Direct mailed to every Menlo Park household north/east of Bay Road
- Available in English and Spanish
- Over 800 responses received to date
- Library Commission will review the draft Space Needs Study on January 28 and February 25
- City Council will review the draft study March 12 and the final study April 9

## **MAIN LIBRARY**



- The withdrawal of John Arrillaga's philanthropic pledge is a financial setback; however
- Now that the pledge is no longer a driving factor, there is more time and flexibility to proceed with the next steps of the project in a way that actively involves and engages community members in every step of the process.
- The need to address the deficiencies of the old Main Library has not changed.
- Phase I (initial study) for the main library component of the LSIP project is complete.
- When the Belle Haven Space Needs Study is completed on April 9, the two major LSIP project components will be at the same stage of development at the same time.
- Opportunity exists to achieve efficiencies, system integration, and economy of scale in Phase II (preliminary design) by moving both LSIP project components forward under one design contract.
- Sufficient funding is available in the LSIP project fund for the Phase II preliminary design contract.
- Per Council direction, the Belle Haven Branch would remain the first priority.





### SHORT-TERM IMPROVEMENTS

- To ensure the continuous provision of high quality, modern and safe library facilities for Menlo Park residents pending the development of new facilities.
- Belle Haven Branch: City Council appropriated funds and directed staff to implement service and physical enhancements to the Belle Haven Branch Library on October 17, 2017.
- Belle Haven Branch: New carpeting and shelving, new furniture and interior paint, additional new books and DVDs for the collection were completed and operating hours extended in January 2018.
- Main Library: Multiple small maintenance projects completed by the Public Works department in 2018 to maintain and repair the building's aging furniture, equipment and systems infrastructure.
- Services: Automated renewals; Little Free Library Incentive Program; Student Success Initiative.
- Organization: Library Strategic Plan Update 2019-2020; comprehensive review/update of Library polices.











## LIBRARY SYSTEM IMPROVEMENTS PROJECT



# Staff recommend approval of:

- Project scope
- Process
- Goals
- Timeline







# **QUESTIONS?**



for leaf and litter removal. This produces no noise pollution and dramatically reduces the amount of dust, pollen, and other irritants that are blown into the air.

2. Menlo Park requires the use of electrcally powered leaf blowers when using a powered leaf blower. This will reduce noise pollution, as electricly powered leaf blowers are quieter than their gasoline powered counterparts. Two cycle gasoline engines also produce significant amounts of smog forming pollution, as well as particulate polution. Eliminating their use will contribute to cleaner air, as well as reduce the health risk to garden workers.

Many municipalities in California and around the country have taken steps similar to the guidelines that I am suggesting. I am aware that Menlo Park has a regulation on the books that limits the noise emmitted by garden tools. This regulation appears to be either not enforced, or otherwise completely ineffective. I am also aware, that Menlo Park has previously implemented a gasoline powered leaf blower ban in 1998, only to have it overturned by a narrow margin in a public referendum. I beleive that public sentiment has shifted in favor of such a

2

regulation.

Good alternatives to noisy and highly polluting gasonline powered leaf blowers are available. Why are we not insisting that these be used? We can make Menlo Park a better and quieter place by taking the actions that I have suggested. I respectfully ask that the city council take them into consideration.