REGULAR MEETING AGENDA

Date: 4/25/2022
Time: 7:00 p.m.
Location: Zoom.us/join – ID# 871 4022 8110

NOVEL CORONAVIRUS, COVID-19, EMERGENCY ADVISORY NOTICE
On March 19, 2020, the Governor ordered a statewide stay-at-home order calling on all individuals living in the State of California to stay at home or at their place of residence to slow the spread of the COVID-19 virus. Additionally, the Governor has temporarily suspended certain requirements of the Brown Act. For the duration of the shelter in place order, the following public meeting protocols will apply.

Teleconference meeting: In accordance with Government Code section 54953(e), and in light of the declared state of emergency, all members of the Planning Commission, city staff, applicants, and members of the public will be participating by teleconference.

How to participate in the meeting

- Submit a written comment online up to 1-hour before the meeting start time: PlanningDept@menlopark.org *
- Access the meeting real-time online at: zoom.us/join – Meeting ID# 871 4022 8110
- Access the meeting real-time via telephone (listen only mode) at: (669) 900-6833
  Regular Meeting ID # 871 4022 8110
  Press *9 to raise hand to speak

  *Written and recorded public comments and call-back requests are accepted up to 1 hour before the meeting start time. Written and recorded messages are provided to the Planning Commission at the appropriate time in their meeting. Recorded messages may be transcribed using a voice-to-text tool.

Subject to Change: Given the current public health emergency and the rapidly evolving federal, state, county and local orders, the format of this meeting may be altered or the meeting may be canceled. You may check on the status of the meeting by visiting the City's website www.menlopark.org. The instructions for logging on to the webinar and/or the access code is subject to change. If you have difficulty accessing the webinar, please check the latest online edition of the posted agenda for updated information (menlopark.org/agenda).

Regular Meeting

A. Call To Order

B. Roll Call

C. Reports and Announcements

D. Public Comment

Under "Public Comment," the public may address the Commission on any subject not listed on the agenda, and items listed under Consent Calendar. Each speaker may address the Commission once under Public Comment for a limit of three minutes. Please clearly state your name and address or political jurisdiction in which you live. The Commission cannot act on items not listed on the agenda and, therefore, the Commission cannot respond to non-agenda issues brought up under Public Comment other than to provide general information.

E. Consent Calendar

E1. Approval of minutes from the February 14, 2022, Planning Commission meeting. (Attachment)

21. Approval of minutes from the February 28, 2022, Planning Commission meeting. (Attachment)

F. Public Hearing

F1 and G1 are associated items with a single staff report

F1. Draft Environmental Impact Report (Draft EIR) Public Hearing/Signature Development Group and Peninsula Innovation Partners, LLC on behalf of Meta Platforms, Inc. (formerly Facebook, Inc.)/1350-1390 Willow Road, 925-1098 Hamilton Avenue, and 1005-1275 Hamilton Court (referred to as the Willow Village Master Plan):
Public hearing to receive comments on the Draft EIR to comprehensively redevelop an approximately 59-acre existing industrial, research and development (R&D), and warehousing campus (referred to as the main project site) with up to 1,730 housing units, up to 200,000 square feet of retail uses, an approximately 1,600,000 square feet office campus for Meta, formerly Facebook, (up to 1.25 million square feet of office space, with the balance [e.g., space for accessory uses, including meeting and collaboration space totaling 350,000 square feet if the office square footage is maximized] in multiple buildings), a 193 room hotel, and publicly accessible open space including an approximately 3.5-acre publicly accessible park, a dog park, a town square, and a 2-acre elevated park. A minimum of 15 percent (260 units), and up to 17.8 percent (308 units) if the commercial linkage units are constructed on-site, of the 1,730 units would be BMR units per the City's BMR Ordinance, including approximately 120 age-restricted senior units. The proposed project also includes a potential project variant that would increase the total number of housing units by up to 200 units for a total of 1,930 units, for consideration by decision makers as part of the requested land use entitlements. The proposed project includes a below grade publicly accessible tunnel that would connect the main project site with the West Campus for use by bicyclists, pedestrians, and Meta trams. The proposal includes a request for an increase in height, floor area ratio (FAR), and density under the bonus level development allowance in exchange for community amenities. The proposed project also includes the realignment of Hamilton Avenue and an elevated park to connect the main project site with the Belle Haven Neighborhood Shopping Center. The

master plan requires a General Plan Circulation Element and Zoning Map amendment to modify the locations of internal site circulation (public rights-of-ways and paseos). The proposed project includes adjustment requests from the City's design standards for specific buildings, modifications to the City's BMR guidelines, and an adjustment to the City's application of its transportation demand management (TDM) requirements. As a separate future project, the environmental analysis has considered reconstruction of an existing service station at 1399 Willow Road and an approximately 6,700 square foot expansion at the Belle Haven neighborhood shopping center (1401 Willow Road and 871-883 Hamilton Avenue) as a future separate phase that would require separate use permits and architectural control permits. These parcels across Willow Road are referred to as the Hamilton Avenue Parcels. The main project site encompasses multiple parcels zoned O-B (Office) and R-MU-B (Residential Mixed Use). The Hamilton Avenue Parcels are zoned C-2-S (Neighborhood Shopping, Restrictive). The proposed project includes a request to remove 266 heritage trees on the main project site and three heritage trees on the Hamilton Avenue Parcels. The proposed project also includes a request for the use and storage of hazardous materials (diesel fuel) for back up emergency generators on the main project site and the Hamilton Avenue Parcels. The Draft EIR was prepared to address potential physical environmental effects of the proposed project in the following areas: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, land use, noise, population and housing, public services, transportation, utilities and service systems, hydrology and water quality. In accordance with CEQA, the certified program-level ConnectMenlo EIR served as the first-tier environmental analysis. Further, this Draft EIR was prepared in compliance with the terms of the Settlement Agreement between the City of East Palo Alto and the City of Menlo Park. The Draft EIR identifies significant and unavoidable impacts in the following topic areas: air quality and noise. The City is requesting comments on the content of this Draft EIR. The project site does not contain a toxic release site, per Section 6596.2 of the California Government Code. Written comments on the Draft EIR may be also submitted to the Community Development Department (701 Laurel Street, Menlo Park) no later than 5:00 p.m. on May 23, 2022. (Staff Report #22-022-PC)

G. Study Session

G1. Study Session/Signature Development Group and Peninsula Innovation Partners, LLC on behalf of Meta Platforms, Inc. (formerly Facebook, Inc.)/1350-1390 Willow Road, 925-1098 Hamilton Avenue, and 1005-1275 Hamilton Court (referred to as the Willow Village Master Plan):
Request for a study session for a master plan to comprehensively redevelop an approximately 59-acre existing industrial, research and development (R&D), and warehousing campus (referred to as the main project site) with up to 1,730 housing units, up to 200,000 square feet of retail uses, an approximately 1,600,000 square feet office campus for Meta, formerly Facebook, (up to 1.25 million square feet of office space, with the balance [e.g., space for accessory uses, including meeting and collaboration space totaling 350,000 square feet if the office square footage is maximized] in multiple buildings), a 193 room hotel, and publicly accessible open space including an approximately 3.5-acre publicly accessible park, a dog park, a town square, and a 2-acre elevated park. A minimum of 15 percent (260 units), and up to 17.8 percent (308 units) if the commercial linkage units are constructed on-site, of the 1,730 units would be BMR units per the City's BMR Ordinance, including approximately 120 age-restricted senior units. The proposed project also includes a potential project variant that would increase the total number of housing units by up to 200 units for a total of 1,930 units, for consideration by decision makers as part of the requested land use entitlements. The proposed project includes a below grade publicly accessible tunnel that would connect the main project site with the West Campus for use by bicyclists, pedestrians, and Meta trams. The proposal includes a request for an increase in height, floor area ratio (FAR), and density under the bonus level development allowance in exchange for community amenities. The proposed project also includes the realignment of Hamilton Avenue and an elevated park to connect the main project site

with the Belle Haven Neighborhood Shopping Center. The masterplan requires a General Plan Circulation Element and Zoning Map amendment to modify the locations of internal site circulation (public rights-of-ways and paseos). The proposed project includes adjustment requests from the City's design standards for specific buildings, modifications to the City's BMR guidelines, and an adjustment to the City's application of its transportation demand management (TDM) requirements. As a separate future project, the environmental analysis has considered reconstruction of an existing service station at 1399 Willow Road and an approximately 6,700 square foot expansion at the Belle Haven neighborhood shopping center (1401 Willow Road and 871-883 Hamilton Avenue) as a future separate phase that would require separate use permits and architectural control permits. These parcels across Willow Road are referred to as the Hamilton Avenue Parcels. The main project site encompasses multiple parcels zoned O-B (Office) and R-MU-B (Residential Mixed Use). The Hamilton Avenue Parcels are zoned C-2-S (Neighborhood Shopping, Restrictive). The proposed project includes a request to remove 266 heritage trees on the main project site and three heritage trees on the Hamilton Avenue Parcels. The proposed project also includes a request for the use and storage of hazardous materials (diesel fuel) for back up emergency generators on the main project site and the Hamilton Avenue Parcels. (Staff Report #22-022-PC)

H. Informational Items

H1. Future Planning Commission Meeting Schedule – The upcoming Planning Commission meetings are listed here, for reference. No action will be taken on the meeting schedule, although individual Commissioners may notify staff of planned absences.

- Special Meeting: May 2, 2022
- Regular Meeting: May 9, 2022

I. Adjournment

At every regular meeting of the Planning Commission, in addition to the public comment period where the public shall have the right to address the Planning Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Planning Commission on any item listed on the agenda at a time designated by the chair, either before or during the Planning Commission's consideration of the item.

At every special meeting of the Planning Commission, members of the public have the right to directly address the Planning Commission on any item listed on the agenda at a time designated by the chair, either before or during consideration of the item. For appeal hearings, appellant and applicant shall each have 10 minutes for presentations.

If you challenge any of the items listed on this agenda in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City of Menlo Park at, or prior to, the public hearing.

Any writing that is distributed to a majority of the Planning Commission by any person in connection with an agenda item is a public record (subject to any exemption under the Public Records Act) and is available by request by emailing the city clerk at jaherren@menlopark.org. Persons with disabilities, who require auxiliary aids or services in attending or participating in Planning Commission meetings, may call the City Clerk's Office at 650-330-6620.

Agendas are posted in accordance with Government Code Section 54954.2(a) or Section 54956. Members of the public can view electronic agendas and staff reports by accessing the City website at menlopark.org/agenda and can receive email notification of agenda and staff report postings by subscribing to the "Notify Me" service at menlopark.org/notifyme. Agendas and staff reports may also be obtained by contacting City Clerk at 650-330-6620. (Posted: 04/20/22)

REGULAR MEETING DRAFT MINUTES

Date: **2/14/2022**
Time: **7:00 p.m.**
Location: **Zoom**

A. Call To Order -7:02 PM

B. Roll Call

Andrew Barnes, Chris DeCardy (Vice Chair), Michael Doran (Chair), Camille Gonzalez Kennedy Cynthia Harris, Henry Riggs, Michele Tate

Staff:

Ori Paz, Associate Planner

Corinna Sandmeier, Acting Principal Planner

Chris Turner, Assistant Planner

C. Reports and Announcements

Acting Principal Planner Corinna Sandmeier said she did not have any updates to report.

D. Public Comment

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Chair Doran opened Public Comment and closed it as there were no speakers.

Ryan Loh addressed the Commission under public comment regarding his project at 269 Willow Road. At the time of the last Commission meeting, the only thing left was the fence. He wanted to clarify at this time, the procedure for commenting on his project. Chair Doran reiterated that public comment at this time was for items *not* on the agenda. Mr. Loh will get a chance to speak after his item is presented.

E. Consent Calendar

E1. Approval of minutes from the December 13, 2021, Planning Commission meeting. (Attachment)

E2. Architectural Control/Audrey Bauer/133 Stone Pine Lane:
Request for architectural control to make exterior modifications to the front façade of an existing three-story townhouse in the R-3 (Apartment) zoning district, including the addition of new gross floor area. (Staff Report #22-008-PC)

ACTION: M/S (DeCardy, Tate) moved to approve the Consent Calendar.

During the vote count, Commissioner Riggs had a comment on the December 13, 2021 Minutes and apologized for not raising his hand sooner. He pointed out that there were two typos on page 13 and 14 of the minutes, however, he didn't think it affected overall the approval of the minutes, but offered to email those if appropriate.

Chair Doran said he thought that was appropriate.

Chair Doran continued with the vote count. Commissioner Barnes said that as he was late to the meeting, he was choosing to abstain from the vote on these items.

ACTION: M/S (DeCardy, Tate) to approve the Consent Calendar consisting of the minutes from the December 13, 2021 Planning Commission meeting as submitted and 133 Stone Pine Lane as presented in the staff report; passed 6-0-0-1, with Commissioner Barnes abstaining.

F. Public Hearing

F1. Use Permit/Charlene Cheng/269 Willow Road:
Request for a use permit to construct a new two-story residence with an attached garage on a substandard lot with regard to minimum lot depth in the R-1-U (Single Family Urban Residential) district. The parcel is a vacant panhandle lot with access via an easement over 267 and 275 Willow Road, and 269 Willow Road is proposed as the new address for the subject parcel. The proposal also includes a request for a use permit to allow seven-foot-tall fences within the front setback. (Staff Report #22-009-PC)

Chair Doran said that they do have a staff report on this and it was discussed previously at the last meeting. He believed there was a consensus on this item, the only question was the fence. At the last meeting there was not a use permit request for a 7-foot-tall fence. They have resubmitted the application with that use permit request, so he doesn't believe this needs a lengthy discussion.

Chair Doran asked if someone would make a motion to approve as submitted.

Associate Planner Paz reminded Chair Doran that at that last meeting, Commissioner Barnes had chosen to recuse himself from this vote and wondered if he would be doing the same at this meeting?

Commissioner Barnes thanked Mr. Paz for reminding him of this, and agreed that yes, he would like to again recuse himself from this particular vote.

Mr. Paz asked Ms. Sandmeier if they needed to open public comment for this since it included a new request for the fence height.

Chair Doran opened public comment. There was none, so Chair Doran continued with the motions.

ACTION: M/S (Riggs/Harris) to approve the item as presented in the staff report; passed 6-0-0-1 with Commissioner Barnes recused.

F2. Conditional Development Permit Major Modification/Heather Skeehan (citizenM)/ 300 Constitution Drive:
Request for review and approval of major modifications to an approved Conditional Development Permit (CDP) for interior and exterior changes to the previously approved hotel building and changes to the landscaping and on-site circulation. No changes are proposed to the number of rooms (240 rooms), the number of onsite parking spaces (118 parking spaces) or the shared parking agreement between the hotel use and the other site occupant, Meta (formerly Facebook). The proposed modifications would continue to comply with the floor area ratio, building coverage, and maximum height limits of the previously approved CDP. In 2016 the City Council certified an Environmental Impact Report (EIR) as part of its approval of the Meta Campus Expansion Project, which included a potential 200-room hotel. Subsequent revisions to the Meta Campus were previously analyzed through the Facebook Campus Expansion Project First Addendum. In February 2020 the City Council approved revisions to increase the number of hotel rooms to 240 rooms and approved a shared parking agreement, which was analyzed in a Second Addendum to the certified EIR. The currently proposed revisions have been reviewed against the analysis in the certified EIR, and First and Second Addendums, and the proposed revisions would not result in new impacts or an increase in the severity of previously identified impacts. ***Continued to February 28, 2022 Planning Commission Meeting***

As there were some items still outstanding from the applicant, this item is continued to the next Commission meeting. Chair Doran asked for a motion to continue this item.

ACTION: M/S (DeCardy, Harris) to continue the item; passed 7-0.

The public comment of tonight's session was closed.

G. Study Session

G1. Study Session/O'Brien Drive Portfolio LLC/1300-1320 Willow Road, 975-995 and 1001-1015 O'Brien Drive:
Study session for a request for a development agreement, architectural control, use permit, lot line adjustment, lot merger, Below Market Rate (BMR) housing agreement, and environmental review to demolish three existing, one-story commercial buildings on three parcels and construct one new five-story building for research and development (R&D), one new four-story building for R&D, and one new six-story parking structure with an attached two-story meeting space on two parcels located in the Life Science, Bonus (LS-B) zoning district. The proposed project would be constructed in two phases, with the five-story R&D building, parking structure, and meeting space to be developed in the first phase and the four-story R&D building in the second phase. The proposed total gross floor area of the project would be approximately 228,260 square feet of R&D space with a floor area ratio (FAR) of 1.24, and 9,600 square feet of commercial space (0.04 FAR). The proposal includes a request for an increase in height and FAR under the bonus level development allowance in exchange for community amenities. (Staff Report #22-010-PC)

Assistant Planner Turner said that he did have one update on this item. The applicant sent the Planning Commission a letter this morning as an update regarding the use of the meeting space building at the rear of the parking structure.

The applicant, Mr. John Tarlton was present to give the presentation on this project. Mr. Tarlton is President and CEO of Tarlton Properties, and the leader of the Menlo Park labs team. Mr. Tarlton gave a brief overview of the project and then introduced Elke MacGregor, the lead architect with DES Architects. Ms. MacGregor gave a more in-depth presentation of the project. Chair Doran asked Ms. MacGregor to talk more about the four plates and the ceiling heights. After that, Chair Doran called for clarifying questions from the Commissioners.

Commissioner Riggs asked Ms. MacGregor to clarify how the first two floors have a different set back than the upper floors. Is that simply defined by the canopy or is the curtain wall at a different grid line?

Ms. MacGregor explained that most of the glass is solar blue, so it has a slight tint, and the lower-level glass, like in almost all of the lobbies they have in the business park, those are clear glass so that it denotes the entry. They will use a bird-safe glass with little dots on it to help the birds recognize that there is glass there. The glass adjacent to that will be solar blue. The lobby glass will be set back slightly from the face of the building.

Commissioner Riggs asked if the upper floors actually cantilever beyond the lower floors? Ms. MacGregor said yes, and it is just in the lobby. Commissioner Riggs also asked if the curtain wall is four or five stories at the left end of the building? Ms. MacGregor confirmed it was five stories.

There being no more clarifying questions from the Commission, Chair Doran opened this up for public comment at this time.

The first public comment comes from Karen Eshoo, the Head of School at Mid-Peninsula High School, which has been referenced during this presentation. She wanted to comment on the project, especially the community meeting space. She met with John and his associate back in December and was really excited about the entire project, particularly the way they partnered with Mid-Peninsula High School to see how the school might benefit from some of the features there. They are a small school, they are full, and space on their campus is very tight. The opportunity for the school as well as others in the neighborhood to have a meeting space or maybe even space for small events would be really helpful for them. They are making great use of the space they have on their campus and they would like to have a little more in the future. At this time, however, they are very grateful to John and his associates for thinking of them as a group that could make great use of the new meeting space. Thank you very much.

The next public comment comes from Josh Arias, the English Pastor at Eternal Life Church, located at 965 O'Brien. He is one of the founding members of the church that was established in 1988. He is currently the Community and Operations Lead. His parents are the Senior Pastors of the church, and have been serving their community for 33 years and at this location since 2005. At the beginning of the pandemic, Facebook reached out to them to ask if they would be one of Facebook's main distribution centers to serve fresh produce and food to their community. They thought this would be a two-month outreach opportunity, but it has now been 87 weeks of constant giving back to their city, their community, with their dedicated volunteers. They still serve *every Saturday* from 11-

12:30, and they are humbled to lead this effort. That said, their passion and their heart for their city and their community is growing, and that's why their Senior Pastors and leadership team would like to express their support to the Tarlton project, in particular, building a new meeting center. As a church that has been part of this community, at this location for over 16 years, they are very excited about the opportunity this brings to their church. They believe that this gives them a voice to share similar passions and missions, and they believe that the Tarlton project will take this to the next level, and they are excited to partner with them, however they can. They think that this will be a very positive development for their local church and the neighborhood, and they are in agreement with what they are presenting to you tonight. Mr. Arias will also be following up with an email to the Commission, and thanks them very much.

There were no other public comments so Chair Doran closed public comment. He asked the Commissioners if they have any further questions or comments for the applicant.

Commissioner Kennedy said that she is continually impressed with the whole community approach that John and his team take to the life sciences district. It's meaningful and it's collaborative, and she thinks as a community partner, they are bringing something really great to Menlo Park.

Vice Chair DeCardy asked about the list of hazardous materials and whether they should approve that or if they should wait until there is a tenant. He asked Mr. Tarlton his point of view on that and why that is their preference.

Mr. Tarlton responded that he would answer this question. They take their stewardship of their little part of Menlo Park quite seriously. It is very important to consider how they deal with hazardous materials. He thinks, in large part, most of their projects are now approved for hazardous materials by the Fire Department and Planning Department staff members. They used to bring all their conditional permits for hazardous materials to the Planning Commission. There was a general agreement some years ago that that was not necessary for all conditional use permits. Some new rules were put in place for their incubators, and they have a couple of buildings that are incubators. They do have a master conditional use permit that they hold, allowing these small tenants to come into the building without having to take on the burden of an individual application for use and storage of hazardous materials. Mr. Tarlton will still come to the Commission for an application if they were going to build a new incubator as part of the project. For the rest of their buildings, it makes more sense that there be an individual application by the tenant. He believes that the smaller applications should be handled by the Fire Department and the Planning Staff, and only larger applications would come to the Planning Commission as the rules are set out now. Vice Chair DeCardy thanked Mr. Tarlton for the specific answer and the clarity on this.

Vice Chair DeCardy's next question was about the height of the lobby and wondering if the Tarlton team could clarify that issue for him.

Ms. MacGregor explained that with a three-story lobby, the scale is just a little bit too large so they decided on a two-story lobby with a canopy that extends a floor above that. This relates to the scale of the lobby space and bringing it to a human scale. You can stand in the two-story space and feel like it feels appropriately high. If they were to raise that up, they thought it would take the scale of the building off to being inappropriate for walking traffic to it. They haven't built any lobbies with three stories and it feel too big for what they are trying to build.

Given that this is a two-phase project, and the development agreement would approve both phases, and the second phase may not come until 10 years from now, Vice Chair DeCardy asked about the approval of the second phase of this project. Why would we want to get that approved now when things could change so drastically in 10 years, let alone the next two years? From Tarlton's perspective, what's the difference between approving phase two now or waiting?

Mr. Tarlton acknowledged that the request is unusual. He went on to explain that they have an existing tenant at 1320 Willow, a company called Wine Bank. They have a long-term lease. Tarlton Properties would like to work with Wine Bank to relocate them, to enable the second phase of the project to move forward. Without having approval for a new project to go in its place, it's not possible for us to provide them with financial assistance to relocate.

Vice Chair DeCardy clarified that Tarlton needs to have all of this project definitively approved so Mr. Tarlton knows what time frame they are operating under. This would allow Mr. Tarlton to know when they would need to have the funds available to help Wine Bank move to a new location.

Commissioner Tate said she has a couple of questions around the meeting space. She knows that Tarlton Properties has spoken with people previously that there were no meeting places in the neighborhood for groups such as churches and non-profits to meet in for free. Mr. Tarlton mentioned that they have spoken with the church and the school, but Commissioner Tate is wondering who else Mr. Tarlton has spoken with to get feedback on this issue. Also, what has Mr. Tarlton's outreach been in Belle Haven to get feedback for this project?

Mr. Tarlton thanked Commissioner Tate for this question and went on to explain that their outreach to Belle Haven on what they would like to see in the life science district goes back almost ten years now. While he can't recall the names of everyone he's spoken to over the past ten years, he is anticipating that potentially the Boy Scouts and the Girl Scouts might be able to use this space. As Commissioner Tate mentioned, there has been strong and consistent messaging both in private conversations and public outreach during the Connect Menlo process, about the need for public meeting space that is free of charge for the non-profits.

Commissioner Riggs had some questions for the Planning Staff, but did mention that he met with Mr. Tarlton last week regarding the project. Of the items the Commissioners are asked to comment on, Commissioner Riggs thinks that the trained and degreed staff have valuable reactions to an application, and, as a commissioner, he would like to get a sense of them. For example, the second item under Planning Commission Considerations, pages 7 and 8, architectural design and materials, the staff prompts the commission to comment if it seems appropriate to modify the building modulation requirement. In the absence of a specific concern, he wanted to make sure that there wasn't a concern staff had that wasn't being mentioned.

Mr. Turner responded that there are a certain set of design standards along with development regulations to try to give some visual interest to the area. There is provision in the code that allows applicants modifications. Ms. MacGregor explained that there were some functionality and design implications for complying with the modulation requirement to the 45-foot point on that specific building, and that's really up to the Planning Commission to comment and see if that is an acceptable modification for the reason that was given. They could go up to three stories with that manipulation and pretty easily avoid that use permit request. If that is something that the applicant

thinks would benefit the project and the desirability of that building, they can ask for the Planning Commission to discuss this.

Commissioner Riggs thanked Mr. Turner and Ms. MacGregor for this thorough answer and then asked if there was anything that comes to mind regarding the parking structure or the public open space? Mr. Turner said that they have had some discussions with the applicant about the public open space. There is a question about the location of the open space, whether the location at the northern section of the property, is a suitable location for the majority of the public open space to be. From an access standpoint, off of Willow Road, it's ok but off of O'Brien it's a little more difficult to reach it. It's not as easily seen from O'Brien. This is certainly something that is up for the Planning Commission's discussion.

Commissioner Riggs really appreciated these insights as staff spends a lot more time with the project than the commission does.

Regarding the site circulation, which would include connectivity with O'Brien Drive, is this consistent with our goals for the area? From Commissioner Riggs' view, it looks quite logical.

Mr. Turner responded that the Transportation Division also looked at this. Generally, it looks like it could be improving the circulation. You're going from one entrance on O'Brien Drive, to two entrances, as well as connecting the properties from Willow onto O'Brien, so there would be multiple outlets. This might alleviate some of the traffic coming in and out of the property.

Commissioner Riggs then took this opportunity to say that when he looks at the list, he has no issue with the building height because of the adjacency of the other uses. The architectural design and materials, including the interpretation of the lower two levels, versus the levels above, make very good design sense, and make an overall attractive project, both from the pedestrian level and from the distance that most of us will see the project, which at the very least is many hundreds of feet. And that is relevant.

Commissioner Riggs thinks the parking structure is attractive and the coordination with the materials on the Community building is terrific. He feels comfortable with the site access and layout. He has no issue with the outdoor chemical storage, after having reviewed many dozens of applications for these over the years. Additionally, Commissioner Riggs likes the fact that the public open space is adjacent to the Hetch Hetchy, which, thanks to the San Francisco Water District, has been available for public use. He also thinks that because this project abuts other uses, it makes the space seem larger. The most adjacent property will have the most immediate use of a public open space. He thinks the overall aesthetic is appropriate for the LS zone and he finds this project quite supportable for what they see at this point.

Commissioner Harris said that as the newest Commissioner, this is her first time seeing the Tarlton project. She thinks they are a very attractive set of buildings, and she is fine with the building heights. She really appreciated the explanation on the 10-year phasing. She could appreciate that the Wine Bank will be a little harder to relocate than some other types of companies, and she appreciates the clarity that was given. Regarding the community space, she appreciates Ms. Eshoo and Mr. Arias for calling in and helping the Commission understand how they might use that space. While it's wonderful to have this space available for community use as well, Commissioner Harris is concerned with details such as will it be open in the evening and on weekends, will Tarlton

Properties have someone there that will be opening the doors for the community members, is there going to be a kitchen, where will the community be on the list of people that can access it? Also, her understanding is that this space is not an amenity per se, but it is in addition to the space they would otherwise be granted. Could Mr. Tarlton please clarify that?

Mr. Tarlton then explained that they view their little part of Menlo Park as essentially a joint venture between the City and Tarlton Properties. In a venture or a partnership, he likes to think in terms of 50-50. In their ideal vision, the use of this facility will be shared between the community and their tenants. One of the best things about building this community center is that there are many uses – non-profits, the school, the church, scouts, etc., that are evening and weekend uses and therefore can make use of the facility that would otherwise be dormant. There will not be a kitchen because it would need to be a commercial kitchen, there are multiple agencies involved, the price is spectacular and the potential for challenges is enormous. However, there will be a sink and an area for food service. There will be a restaurant facility on campus, called Eats at 1440. He envisions that users of the space would potentially utilize their services to provide food or they could bring their own.

Commissioner Harris thanked Mr. Tarlton for this information and had a follow-up question for him. Mr. Tarlton mentioned non-profits that would potentially use the space, but would it also be available for community meetings that are not non-profits?

Mr. Tarlton answered that yes, absolutely, other groups could use it too. They would need to provide an insurance certificate because they couldn't have a situation where someone gets hurt and there is no responsible party.

Commissioner Harris also asked about parking. The Commission recently looked at another project, and the company found they didn't need as much parking as the city was requiring them to have. Part of the reason for this is that the nature of business has changed, there's not as much need for as much personnel and therefore, not a need for as much parking.

Mr. Tarlton went on to explain the differences in the tenants that will be using the space, which is quite different and certainly busier than some other local businesses and they don't want to underestimate any future potential parking needs.

Commissioner Harris interjected that she would feel more comfortable if his parking numbers were at the lower end. Additionally, since the second phase of this project is not being built for ten years, the way that society travels could be different. She hopes that we will have more transportation options by then, besides just cars with a single occupant. Therefore, Commissioner Harris requests that Mr. Tarlton take another look at those numbers.

Chair Doran took this opportunity to say that in the past, they have been encouraged by staff to encourage comments from all the Commission, so he ran through the considerations that staff asked them to address. Chair Doran is broadly in agreement with Commissioner Riggs, in that he thinks this project is eminently supportable, and it's a vast improvement over the tilt-ups that are there right now. It's the kind of building he would like to see in Menlo Park, going forward. He thinks the building height is very acceptable considering what's being built in the neighborhood. He thinks the architectural design and materials are attractive, it's a good-looking project. On the question of the modulation and height, he thinks it's easy to support the use permit for the 34-foot height. Because

of the city's building requirements, some believe that they are seeing cookie-cutter buildings in Menlo Park, where the same building is being built. Chair Doran thinks introducing a little bit more variety into it is easy to support from a conceptual standpoint. He thinks the applicants articulated good reasons to put the canopy at 34-feet rather than 45-feet, so he has no problem with that. With respect to parking, Chair Doran agrees with Commissioner Harris that ten years is a long time and we don't know how people will be getting to work in ten years. While he hopes we won't be using as much parking in ten years, if there is any mitigation that Mr. Tarlton can use to pare that down, that would be welcome. Site access and layout, he doesn't have a lot to add to that. He is sure the applicant wants to ensure easy access to their project, so he doesn't second guess that. Regarding the outdoor chemical storage and having approvals done now, the Tarlton plan makes sense to him. Chair Doran thinks the public open spaces are great, they provide more than is required and believes the location of it next to Hetch Hetchy, next to the high school, and a little further along the village is appropriate. He thinks that the overall aesthetic has already been addressed and it's a very attractive project overall. It's a welcome addition to a part of Menlo Park that, frankly, needs a facelift, so Chair Doran finds it easy to support.

Vice Chair DeCardy wanted to echo what Commissioner Harris and Chair Doran said. He appreciates that Tarlton needs to build parking for the upper end use. Looking at that whole area and what's happening with transportation over time, I think erring on the side of under parking as opposed to over parking is best. Because Tarlton has more experience than anybody with existing structures about parking usage and how shuttles work, Vice Chair DeCardy would appreciate hearing from Mr. Tarlton about usage rates and what they've seen over time. if they could help educate the Commission, and next time they speak about this, give them a sense of their recommendations. If they severely under-parked that lot, what would that look like and how could Tarlton Properties make that work, given their commitment to alternative transportation shuttles, etc.

Vice Chair DeCardy appreciates the meeting space and understands that Mr. Tarlton knows that this isn't an amenity, but it does allow them to build more space. It is right by the high school and the park. However, since the high school needs to be fenced in for security, the only access to the high school is one point of entry. For those wanting to access the public community space from the high school, they would need to come down Willow Road and around, correct? Because the campus is fenced in, they can't just zip across the soccer field.

Mr. Tarlton then explained that their connection to Mid-Peninsula High School goes back to John Northway, the original architect for the high school. He is a friend of Mr. Tarlton's. He has discussed with their architects, providing direct access to the public meeting space from the high school.

Vice Chair DeCardy clarified that this access would be in ways to work for the school's security needs and for keeping it a safe campus? Mr. Tarlton replied affirmatively.

Vice Chair DeCardy then asked if the high school would become a barrier to anyone from Willow Village coming over? Mr. Tarlton confirmed that yes, if people were coming from Willow Village, they would need to come down the sidewalk on Willow Road and then through the public open space.

Ms. MacGregor added that they have meandering paths in the bio retention areas that carry out through the whole space and the idea is that they draw you into the property as well.

Vice Chair DeCardy would echo Commissioner Tate regarding the meeting space. It would be fabulous to get an update on other organizations within the community who might actually be able to use it the space. He does understand them having to provide an insurance certificate. But this does become a huge barrier for smaller community groups that organize in different kinds of ways. He would be interested to know how to tackle that one to be able to make that work for all sorts of community organizations with different sizes and structures, as opposed to those who are most resourced and the most capable because they've got that type of capacity on staff. So, he loves this idea but is interested in how they can make this open even more to folks.

Finally, Vice Chair DeCardy would like to discuss the overall development that's ongoing in this area in Menlo Park. As a Planning Commission, they have worked on Willow Village, they are working on this project, there are a couple of other projects they've worked on. Basically, everything that's been there is going to get rebuilt. Vice Chair DeCardy is concerned that ten years from now when they look back on these projects, that they've actually got a big miss because they didn't get the connections between all these done right. Could Mr. Tarlton please address this?

Mr. Tarlton said that he would answer with the focus being on just the life science district portion. That's the portion that he is most familiar with and where they have property. He explained that Tarlton Properties is in the process of completing a public-private partnership with the city, on the installation of new water mains under O'Brien Drive and a continuous sidewalk from Willow to University along the southern side of O'Brien Drive as well as a chunk of Kavanaugh. This is part of a broader vision that they have for the life science district even though they are sort of dragging along some of the smaller owners to get them on board. There is a master vision for this whole life science district that they are implementing a piece at a time, and he feels confident the Commission would be proud of what you had approved on an incremental basis, because it is part of this broader vision.

Vice Chair DeCardy said that he knows Tarlton Properties isn't responsible for every section of the community, but he is concerned for the residents that live toward Highway 101, how they will navigate through some of these new building projects so they can get to all the amenities in Willow Village which is on the other side of this life sciences complex.

Mr. Tarlton said that there is a plan in place for that too. The nexus for the north-south is essentially at the S-bend of O'Brien Drive, where the main street of Willow Village will connect to O'Brien Drive. On the east-west axis, Tarlton is proposing on their 1125 project that there be a connection from the end of Kavanaugh to the West. Then turning North, connecting to Willow Village. He already mentioned the sidewalk that goes east-west along the southern edge of O'Brien Drive, that will connect people to that same S-bend. Tarlton has then proposed to staff, although it's early days yet, that they make a connection north-south at their 1140 O'Brien Drive project, which is also on the southern of the S-bend that would connect Ralmar Avenue and the two or three schools that are right there, along with the Boys and Girls Club, and allow those folks to have access to that nexus.

Vice Chair DeCardy thanked Mr. Tarlton and said how helpful this information was. He then had a suggestion for staff. He is aware that staff is very pressed, but Vice Chair DeCardy thinks it would be very valuable to have a study session where the Commission could be able to step back and look at this whole area and how it all goes together, before they, as the Planning Commission are looking at final approval on all these projects. He thinks that would be extremely valuable and believes they

would have much better insight when they are having conversations about where are the community access places, what are the community amenities, and what about open space. Vice Chair DeCardy stressed this and asked Ms. Sandmeier if she thought that was something that would be possible.

Ms. Sandmeier responded that, yes, this is something they could look into, given the number of projects in the area.

Before turning the floor over to Commissioner Tate, Vice Chair DeCardy said that everything else works for him – height, building design, modulation, he thinks they are on a really great path with all of those. He appreciated their approach on the chemical storage going forward, and he would defer to staff with their recommendations. He is very excited about this project.

Commissioner Tate thanked them for their presentation. Initially she wanted to say that the project is attractive to her and she would definitely walk over to the outdoor space. She would be excited to have something like that because it's definitely closer for her than having to hike over to Willow Village, and also to the new park at Facebook since she lives so much closer to Willow Road.

Commissioner Tate agrees with Vice Chair DeCardy about having a study session of the projects that are going on in the area, so the Commissioners can get a better understanding of all of them. Hopefully they can do that sometime soon. Additionally, and she knows this has been mentioned several times over the years, if there could be some sort of connection to get directly to Bayfront with all the new development in that particular area, it would be really a tremendous help in relieving some of the traffic. She hopes someone will study that and determine whether or not it's viable to have a connection directly to Bayfront without having to utilize either Willow Road or University. She added that she is happy they are doing something to make a connection from the Alberni side, so those folks in East Palo Alto don't have to walk all the way around to access this area.

Commissioner Kennedy said she really appreciates everything that everyone has said, but really appreciates the transparency with which Mr. Tarlton and his staff show up with every time. She does wonder if that level of transparency around a significant amount of urban design investment that has gone into this, would be met with other developers – if they would bring the same type of rigor to this. Commissioner Kennedy joins the others in expressing interest in a study session as well.

With no other comments from the Commission, Chair Doran asked Mr. Turner if staff got the input they needed from this study session? Mr. Turner said yes, they definitely got a lot of very helpful, constructive feedback, but will leave it open to the Commission if there's anything else they want to discuss. There was not so Chair Doran closed the study session.

Chair Doran and others thanked Mr. Tarlton and Ms. MacGregor again for coming tonight and for their presentation.

H. Informational Items

H1. Future Planning Commission Meeting Schedule – The upcoming Planning Commission meetings are listed here, for reference. No action will be taken on the meeting schedule, although individual Commissioners may notify staff of planned absences.

- Regular Meeting: February 28, 2022
- Regular Meeting: March 14, 2022

Ms. Sandmeier said that hopefully at the February 28 meeting they will have the citizenM project ready. There will also be two smaller projects scheduled.

Commissioner Harris thanked Ms. Sandmeier for the heads up on what's coming at the February 28 meeting and asked if she knew what was planned for the March 14 meeting? Ms. Sandmeier said that's a little farther out and nothing has been finalized yet.

I. Adjournment

Chair Doran adjourned the meeting at 8:39 p.m.

Staff Liaison: Corinna Sandmeier, Acting Principal Planner

Chris Turner, Assistant Planner

REGULAR MEETING DRAFT MINUTES

Date: 2/28/2022
Time: 7:00 p.m.
Location: Zoom

A. Call To Order

Chair Michael Doran called the meeting to order at 7:00 p.m.

At Chair Doran's request, Associate Planner Matt Pruter explained how applicants and the public would be able to participate in the virtual meeting.

B. Roll Call

Present: Andrew Barnes, Chris DeCardy (Vice Chair), Michael Doran (Chair), Camille Gonzalez Kennedy, Cynthia Harris, Henry Riggs, Michele Tate

Staff: Mike Noce, Acting Housing Manager; Ori Paz, Associate Planner; Matt Pruter, Associate Planner; Corinna Sandmeier, Acting Principal Planner; Chris Turner, Assistant Planner

C. Reports and Announcements

Acting Principal Planner Corinna Sandmeier said she did not have any updates to report.

D. Public Comment

Chair Doran opened Public Comment and closed it as there were no speakers.

E. Consent Calendar

E1. Approval of minutes from the January 10, 2022, Planning Commission meeting. (Attachment)

Commissioner Riggs had a question about the January 10 minutes. On Page 10 of the report, after a lengthy discussion there was a summary of the Motion, which hinged on landscaping. In the sixth paragraph it states that Commissioner Riggs would clarify that the landscape plan would be resubmitted to clarify the hedge was not based on trees. However, on Page 12, Item 4b, for project specific condition, the addition of one or two trees was listed, but the clarification of the hedge not being based on trees at 36 inches, is omitted. Commissioner Riggs admitted that after six weeks, he doesn't remember the exact conclusion of that very lengthy discussion, but it would appear that the clarification of the hedge was a consensus. Perhaps staff could clarify if 4b is meant to include that item. There was confusion over this point and Commissioner Riggs agreed to work with staff outside of this meeting to confirm that the hedge would not be based on trees at 36 inches. At this time, Chair Doran suggested a motion for approval of the January 10 minutes to be continued.

ACTION: M/S (Riggs/Harris) to continue the approval of the January 10, 2022 minutes; passed 7-0.

F. Public Hearing

F1. Use Permit/Joe Velasco/277 O'Connor Street:
Request for a use permit to demolish an existing one-story, single-family residence and detached garage, and construct a new two-story, single-family residence with an attached garage on a substandard lot with regard to minimum lot width in the R-1-U (Single Family Urban Residential) zoning district. The proposal includes an attached accessory dwelling unit (ADU), which is a permitted use. (Staff Report #22-011-PC).

Associate Planner Paz said that there was an item of correspondence that was forwarded to the Commission earlier today regarding this item, but other than that, staff have no updates, although the applicant is present at the meeting with a brief presentation.

Pearl Renaker is the project architect and wanted to provide a brief introduction to the project and some of the thinking behind her design choices. The owner of the property, Mr. Velasco, went door-to-door in his neighborhood to try to speak with his neighbors about his re-design plans. If they weren't home, he left a copy of the plans with an introductory letter, and asked for comments. There were no questions or comments until today, when the neighbor on his right responded.

The neighborhood is one that is in transition and has very mixed styles of older one-story homes and newer two-story homes, as well as mixed lot sizes. They tried to make design choices that would minimize impact to the neighborhood including a flat roof and neutral stucco and wood finishes.

There were no questions from the Commissioners on this plan and Chair Doran opened public comment. There were no comments so Chair Doran closed public comment. Chair Doran asked the Commission again if there were any comments or questions, and Vice Chair DeCardy said that he would like to recognize the long letter from the applicant and would like to ask the applicant how they considered two stories as it appears like the second story is looking down into a single-story home nearby.

The project architect answered that two-story homes are permitted in this neighborhood and all of the zoning, setbacks, daylight playing and all the distances from the property lines. There is about 14-feet separating the two homes. All of the windows are translucent privacy glass so there is no opportunity to look down into the neighbor's yard. While the neighbor is also concerned with the overall size of the home, the architect doesn't see how they can reach a reasonable compromise or accommodation here.

Chair Doran made a motion to approve the application, however Commissioner Riggs indicated he had a question. Chair Doran held the motion.

Commissioner Riggs had a question for staff about the obscured glass windows. Does this run with the use permit? Associate Planner Paz answered that yes, it does.

Chair Doran again made a motion to approve the application and asked for a second. Vice Chair DeCardy seconded the motion.

ACTION: M/S (Doran/DeCardy) to approve the item as presented in the staff report; passed 7-0.

F2. Use Permit/Steve Borlik/1125 San Mateo Drive:
Request for a use permit to perform interior and exterior modifications to an existing nonconforming, two-story, single-family residence in the R-E (Residential Estate) zoning district. The value of the proposed work would exceed 50 percent of the replacement value of the existing nonconforming structure in a 12-month period and requires approval of a use permit by the Planning Commission. (Staff Report #22-012-PC)

As this residence is within 500 feet of Chair Doran's property, he recused himself from this item and asked Vice Chair DeCardy to chair this item. Vice Chair DeCardy read the request and then turned it over to Assistant Planner Turner. Mr. Turner indicated that the Planning Commission received one email today and it is attached to the agenda. Generally, the email expresses concern with the conversion of the ADU. Mr. Turner clarified that the conversion is not within the scope of the use permit and will be reviewed when the building permit has been submitted. Vice Chair DeCardy called for questions. Seeing none, he welcomed the applicant to give his presentation.

Steve Borlik of Young and Borlik Architects, he is the architect for Shirley and Mike Orsak at 1125 San Mateo Drive. This is a 20 to 25-year-old home, still within the useful life of the structure. Most of the project has revolved around refinishing, interior remodeling, changing functional and aesthetic items. Additionally, they've had some problems with interior acoustics and they are updating some of the ability to improve the livability of the rear of the house from a lifestyle perspective that allows them better access to their rear yard and take advantage of the exterior space.

Mr. Borlik brought to the attention of the Commission, the very narrow overage on the 50% cut off for a two-story, and they considered a smaller scale project which would have left a couple of the upstairs kids bedrooms untouched, but they recognize that now is the time to refinish and update the house. They found that the home is a little bit over daylight plane, and has a tiny setback nonconformity. They took advantage of an ADU conversion, which allows for 800sf of flooring to be exempt. In remodeling some of the attic spaces, they were able to get the floor area of this home under the FAL limits so that it does comply. They are reducing the overall height of the house by reconfiguring the entry way of the house. While in some ways it's the same exact house as when we started but they've actually made vast improvements in the house and it's nothing similar to what it was.

At this time Vice Chair DeCardy provided the Commissioners with the opportunity for clarifying questions for Mr. Borlik. Commissioner Riggs mentioned the non-conformity of the fireplace, asking Assistant Planner Turner if the fireplace is not exempt from the setback requirements or is that under some other condition. Mr. Turner responded that fireplaces are considered architectural features and are allowed to encroach into the side setback a bit. The required setback is 10-feet or greater, the fireplace should be allowed to encroach up to 3-feet into the side setbacks, so it's not actually a nonconformity.

Vice Chair DeCardy now opened the meeting up for public comment. As there was no public comment for this item, the Vice Chair closed public comment.

The Commissioners again had no further comments or questions for Mr. Borlik. Commissioner Riggs moved to approve the project. Commissioner Kennedy seconded the motion.

ACTION: M/S (Riggs, Kennedy) to approve the item as presented in the staff report; passed 6-0-0-1 with Chair Doran recused.

F3. Conditional Development Permit Major Modification/Heather Skeehan (citizenM)/300 Constitution Drive:
Request for review and approval of major modifications to an approved Conditional Development Permit (CDP) for interior and exterior changes to the previously approved hotel building and changes to the landscaping and on-site circulation. No changes are proposed to the number of rooms (240 rooms), the number of onsite parking spaces (118 parking spaces) or the shared parking agreement between the hotel use and the other site occupant, Meta (formerly Facebook). The proposed modifications would continue to comply with the floor area ratio, building coverage, and maximum height limits of the previously approved CDP. In 2016 the City Council certified an Environmental Impact Report (EIR) as part of its approval of the Meta Campus Expansion Project, which included a potential 200-room hotel. Subsequent revisions to the Meta Campus were previously analyzed through the Facebook Campus Expansion Project First Addendum. In February 2020 the City Council approved revisions to increase the number of hotel rooms to 240 rooms and approved a shared parking agreement, which was analyzed in a Second Addendum to the certified EIR. The currently proposed revisions have been reviewed against the analysis in the certified EIR, and First and Second Addendums, and the proposed revisions would not result in new impacts or an increase in the severity of previously identified impacts. (Staff Report #22-013-PC). *Continued from the meeting of February 14, 2022*

Chair Doran asked Mr. Paz if he had any additions or corrections to the staff report. Mr. Paz had no additions or corrections at this time. While Planning staff are available to answer any questions, Mr. Ed Schaefer of the City Attorney's Office was also available to answer any questions the Commissioners may have had about this application.

There were no clarifying questions from the Commissioners. Speaking on behalf of the applicant is Heather Skeehan with citizenM Hotels, the developer for the project, and Principal Architect Brad Richards from Baskerville. They have been working with this client for some time now.

Mr. Richards showed an aerial view of the hotel and renderings of the elevations, showing external changes. He pointed out that the outdoor public amenities remain the hub of the site, with a lively and engaging community space. The restaurant space remains intact and will be at the heart of the development. The main entrance stays as approved. The programming shifted to condense and consolidate beneath the footprint of the building. They shifted the public accessible meeting space to the Chilco corner to take advantage of the Chilco sidewalk improvements at the Chilco and Constitution intersection.

On another slide, Mr. Richards showed a nighttime view of the new building, and pointed out the bright lights of the campus which he feels reflect the energy of the campus, enhancing the area not just for the employees but the community at large. The view from Chilco, the signature red staircase would be preserved on the Chilco frontage as well as the artwork and the engagement process is still being worked out and would be reviewed with the Community Director separately. They simplified wayfinding to the entrances, there is now direct pedestrian and bicycle connection from the Chilco sidewalk improvements. Condensed loading docks. Enhanced restaurant entry to enhance and activate.

Chair Doran asked the Commissioners for any clarifying questions. Commissioner Riggs asked Associate Planner Paz about the penthouse screening that has been removed. In lieu of a penthouse, what materials will be used to screen the equipment? Rooftop equipment generally

exceeds one story in height, so the materials used to screen this rooftop are fairly important, given the view angles along the expressway.

Mr. Paz explained that the front of the building is still in the conceptual and design phase. They have, however, tried to condense the mechanical units into a spine along the top. They've pushed it back and kept it as linear as they could in the middle of the building, so the views from various sides of the perimeter are limited. The materials will be the same materials as the rest of the building.

Not seeing any other questions or comments from the Commissioners, Chair Doran opened Public Comment. Mr. Pruter indicated that there was one question from Julie Long. Ms. Long asked what types of mitigations have been considered to minimize sound emanating from the building, either from the mechanical systems or reflected sound. Public comment was closed at this point and Chair Doran indicated that he has some questions as well.

First off, on the facade side where the public open spaces are, the open spaces look less open now that there are some rough structures there. All the changes look very nice but could you please explain the motivation behind some of the changes to the elevation?

Heather Skeehan answered that those are actually tent umbrellas out there which makes the area very flexible, and gives them the option to move the umbrellas out of the way on really nice days.

Chair Doran mentioned the Chilco side of the building and that he wasn't enamored with that side as much. The previous elevation showed a lot of glass on the lower floor and now you've got what looks like solid, flat, concrete block.

Mr. Richards responded that one reason is that they tried to condense the program underneath the bottom. There's also the way the stairs come down in terms of fire ratings and egress. Chair Doran clarified that he was referring to the long, low, concrete structure with windows on the lower right. Mr. Richards said that again, programs were shifted around to condense it a bit more on the back side of the hotel. We are actually seeing some of the fitness center, and a lot of it is the back of the house. There are trash cans, mechanical rooms, and electrical rooms in there.

Chair Doran noted he doesn't think it looks very attractive. Ms. Skeehan commented that previously there had been a building with a pretty large, bulbous shape. The way buildings with extensive mechanical space develop, sometimes the proportions don't seem as nice as they can be during schematic design, and she wondered if there was an opportunity for them to extend the height of the windows in this building.

Chair Doran asked if any other Commissioners had any questions or comments. Commissioner Riggs thanked the Chair for raising some aesthetic issues. He thinks that given the location and size of this project that the finer points will matter. He thinks that the pedestrian scale seems to have lost its attractiveness in a couple of ways. He appreciates moving the storefront out ahead of the columns, it does take away shape, depth, and scale. And the ends of the double-jointed forms, the lower 16-feet or so have just become blank. It also calls attention to the new surface treatment behind the stair, where it had been a large-scale running bond, it's now a vertical stacked block which is not as friendly. Of course, the other end of the building losing its stair, loses all its drama.

Ms. Skeehan expressed that this is a great opportunity for the architects to respond to the ideas of scale and texture, particularly on the back of house mass, perhaps if they go back to some of the early ideas they had. Their landscape architect had some great ideas for them several months ago.

They have a very transparent face to the hotel, but what's really cool is what happens inside the hotels. They are very active, they are filled with art, there's lots of texture and lots of color – there's a lot of different stuff inside. Ms. Skeehan said that they are trying to emphasize visibility through that. She thinks the nighttime view of the hotel hints at that, they've got some cool light fixtures outside.

Mr. Richards agreed that towards where the fitness center is, they could do something with the texture and scale and make it more pedestrian in scale and friendly there.

Commissioner Barnes remembered back to when the design came to the commission, some of the excitement for the design was that it was very much a mid-century type feel. He thinks that some of that has been lost along the way in some of these changes. It then became something between mid-century and the Jetsons type construction which has its own unique appeal. But they start to gravitate toward a Crowne Plaza at the airport look, and away from mid-century, it doesn't feel as innovative and its uniqueness has gone away.

Ms. Skeehan thanked Commissioner Barnes for his comments and loved the comparison between mid-century modern and the Jetsons. She would love to borrow that for the art brief for the building! When we think about the inside, there's a lot of innovativeness and texture, again, a lot that goes on inside and we picture our hotels that way. She thinks there are some great opportunities to emphasize some of the things he mentioned and are responding to.

Commissioner Tate spoke up to agree with the three commissioners that spoke before her. They did spend a lot of time discussing the art and the wall, and she thinks everyone liked the previous design better. This is in her neighborhood and she will be moving around in that area. She liked the openness and the glass from before versus the rendering now and she hopes there's some way they can get some of that back.

Vice Chair DeCardy thanked Mr. Richards for the update. Mr. Richards mentioned they would be seeking public input on the art. What are those steps and who will you be talking to?

Ms. Skeehan answered that they just started getting to the art brief, the first step obviously has been to make sure they have a building to put it on. Their art curator will be working with the Community Director and aligning with the preferred method of outreach there. They want to make it work for the community. They often put large pieces of public art up and it can become quite a public process in terms of reaching out to local artists, which they do primarily through Instagram. Depending upon the timeline for the building approval, that will drive the process for public input on the art.

Commissioner DeCardy thanked Ms. Skeehan and concurred with the other four commissioners who spoke before him. He encouraged Ms. Skeehan not to prejudice or warp that input. If you use Instagram you will hear from certain people. If you say this is mid-century meets the Jetsons, you will prejudice what you get out of this community. This is part of our community long before Meta came and this needs to serve everybody, the Meta employees, the people who are going to the hotel and it needs to serve the community. If there is a bias, it should be extensive outreach to the community. This will be highly visible. It's what you'll be able to see when you come in. If it does please some of that constituency and not all of it that will be a big miss.

Commissioner Kennedy thanked them for the presentation and she thought it was very interesting. She stated though that the iconography that is placed on any part of the building needs to reflect the community that it's in. Commissioner Kennedy's office is in this neighborhood and she passes by

this location every day. If they just put one big block against another big block and some red stairs on one side, that's great, but this community has been there a lot longer than Meta or anything else that will be there. Bring in some of the connection to what will be the rebuilt Onetta Harris Community Center. You could draw that in pretty simply with *something.* This is a real opportunity to create a palimpsest that means something to the people in the future and something that really respects the history of that neighborhood. When this goes up, this is the last corner, everything else is gone, so she would ask for that.

At this time, Chair Doran summarized that there seems to be a consensus among the Commission that there's not a lot of enthusiasm for the architectural changes presented today. The Commission has several findings they are being asked to make and some relate to the Environmental Impact Report (EIR). They are also asked to make findings about the architectural changes which he is less enthused about and he's considering asking the commission to split the approvals and ask the applicant to work on the architecture a little more before we approve any architectural changes.

Menno Hilbert of citizenM said it's clear that they don't have the votes for tonight and he was wondering if it makes sense to ask for a continuance to work with staff on incorporating what we heard from tonight and come back to you? Chair Doran agreed and thought this would be the best approach.

Commissioner Barnes added that if they do go to a continuance, what he would like to hear on the next go-around, is articulation of some of the trade-offs which are motivating some of the changes. If citizenM could please educate the commission on the 'why' with what they come back with, it will help with the decision making.

Chair Doran called for a motion to continue.

Before the vote, Commissioner DeCardy asked to clarify what functionally are they expecting to change by continuing, are they expecting something to change in Attachment A, or is this not essentially related to Attachment A?

Mr. Paz responded that the plan set that's referenced in Attachment A is what they have seen renderings that were excerpts from the plan. If there were considerations that the planning commission wished the applicant would implement in their design, he thinks it would be helpful to provide some general things they would like to see so those can be incorporated into a revised plan set. The majority of the comments have been focused on the north elevations, the view from Bayfront Expressway. If there were other elements of the design that the commission wished to see differently it would be helpful for staff and the applicant team to hear those enumerated.

Chair Doran agreed and gave a brief summary of the concerns the Commission had:

* The Chilco façade and the back of the house operations look particularly unattractive. As far as he's concerned there really is no back of the house here, every side is the front of the hotel due to high visibility.

* Losing the look of the building on the columns and having a straight curtain wall at the base, it loses some interest.

Commissioner Harris added that if the applicant could please provide a little more grounding and overall thinking about the art, she thinks that would be really helpful. Commissioner Tate echoed

this, adding that the last time they spoke about the art, it was quite an extensive conversation, so they would like to hear a little more explanation about the choices.

Mr. Richards had one or two questions but first said that he thinks the comments about the aesthetics, scale, and pedestrian aspects are all understandable. Is it fair to say that programmatically we are just working on the aesthetics at this point? He just wants to make sure they are dealing with this correctly.

Chair Doran answered yes, he believes they are just speaking of the architecture and the aesthetics. Commissioner Barnes said that if they need to move the gym back to the second floor in order to achieve the better aesthetics, then they might have to look at other options as well.

Commissioner Barnes said that he does not think massing is something he is concerned with. There has certainly been enough discussion around that. This is a well-designed project and we are just looking at changes on the ends here. The homework is for the applicant to figure out how to move things around. This is really an allocation of space and an aesthetic issue.

Mr. Hilbert mentioned that the art is something that came up twice that they would like to hear more detail on. He would like to know if that is process or the artwork itself? They are months away from selecting the artwork and they've already spent a lot of time with the city to figure out the best process for selecting great artwork.

Mr. Paz addressed the timing around the artwork, the CDP did outline a timeline for the community outreach process. An outreach plan would be verified by the Community Development Director and the artwork will be finalized prior to occupancy of the hotel. This would take place after this modification. The lighting and some of the elements of the art installation would be seen by the Planning Commission but unless deemed necessary by the Community Development Director, the Commission will not have final approval on the artwork itself.

Vice Chair DeCardy said that he thinks citizenM could still share a little bit about the art brief and what it looks like. He thinks they could also share a little about how they would do the community engagement, they would note the name of the Onetta Harris Community Center, and these would give Vice Chair DeCardy more confidence about these things.

Commissioner Tate echoed what Commissioner DeCardy said. They are very concerned about the community outreach. She understands that there is someone at the city that will be guiding this process, but given the lengthy conversations they've had about this – not knowing the name of the community center that's down the street and the means for reaching out to the community – she doesn't feel that Instagram is the way to reach the artists in this community.

ACTION: M/S (Doran/Tate) motion to continue, date to be determined, passed 7-0.

This closes the public hearing portion of tonight's meeting. The next item on the agenda is under regular business.

G. Regular Business

G1. Housing Element Annual Report/City of Menlo Park:
Opportunity to consider and provide comments and/or a recommendation to the City Council on the 2021 annual report on the status and implementation of the City's current 5th Cycle General Plan

Housing Element (2015-2023). (Staff Report #22-014-PC)

Presentation by Acting Principal Planner Tom Smith. Housing Element Annual Progress Report 2021. Mr. Smith and Mr. Tom Dolce will give the presentation of this report.

Since 1969, California has required all local governments to adequately plan to meet the housing needs of everyone in the Community. Each year they are required to produce an annual progress report (APR). This documents the housing production amounts and housing related activities that the city undertook in the previous year. They are currently in the fifth cycle of the housing element and that runs from 2015-2023. The housing element provides a blueprint for how the city is going to meet its housing needs. While the city does not need to produce the housing itself, they need to show that they've adequately zoned for the housing in the community. For the fifth cycle the allocation, the housing number assigned was 655 dwelling units. The APR that they submit to the state every year tracks the life cycle of housing applications that have come in. This includes entitlements, building permits, and final occupancy. For 2021, there were 96 new dwelling units produced. This is based on building permits for the calendar year.

Menlo Park had 13 Accessory Dwelling Units (ADU's) produced in 2020. This increased to 36 ADU's in 2021, an increase of 177%.

With regards to the overall development progress from 2015-2023, they are coming close to meeting their Regional Needs Housing Allocation (RHNA) totals for the 5th cycle. The total remaining RHNA units in the very low-income category is 16, in the low-income category it is 38 units, and in the moderate-income category, there are 121 units remaining. They exceeded their number in the above moderate-income category a few years back. They are well over the required amount there.

Acting Principal Planner Tom Smith went on to explain another chart in the report packet regarding potential future housing production. Those statistics can be found in the chart attached to the report.

Acting Housing Manager Mike Noce joined the presentation to discuss milestones in 2021 (Table D of the APR).

Notice of Funding Availability (NOFA) released for 2021, for $10 million

Three proposals received, all from non-profit organizations:

- $5.5 million, HIP Housing, for property at 68 Coleman Place
- $1.2 million, Homeownership Program, Habitat for Humanity Greater S.F.
- Pending $3.6 million, 335 Pierce Road, 12 low-income housing construction units, from Mid-Pen Housing

Here are the milestones for the Housing Assistance Program (formerly Rental Assistance Program):

- Expanded to include mortgage assistance
- Assists qualified households related to COVID or other emergency circumstances (administered by Samaritan House in San Mateo)
- Council approved $250,000 American Rescue Plan funds. Funding has assisted 32 households (86 persons).

Acting Principal Planner Tom Smith then gave a quick summary of the next housing cycle. The 6th Cycle Housing Element Update will cover the period 2023-2031. The RHNA including buffer is 3,830 dwelling units. Preparation for the 6th cycle is underway. The EIR is studying up to 4,000 units. For additional information please see Table attached to the Staff Report.

Commissioner Tate had some clarifying questions. Do you have a breakdown of the districts that the applications for ADU's went to? Regarding the mortgage assistance program, how was word circulated in the community that this program was available? Was this door-to-door or was there mailings? Commissioner Tate noted that she never received a mailing notifying her of this program.

Acting Principal Planner Smith said that they do not have a breakdown of what districts the ADU's were for. He will gather this information for the Commission.

Acting Housing Manager Noce answered that Samaritan House took the lead on distributing information regarding the mortgage assistance program. He believes more can be done and when some staffing issues at the City are resolved, he will be working with Samaritan House to have a more robust outreach. They are really just getting started with this program and there is plenty of funding still available.

At this time, Chair Doran opened the meeting for public comments.

Associate Planner Matt Pruter indicated there was one public comment.

Annie Hengehold from District 2, had a question about SB-35, Streamline Exemption. Menlo Park is one of the only cities that has an exemption. Her understanding is that if these projects get streamlined, the CEQA review, community input is much, much less if even involved at all, and a lot of these developers can go straight through with their projects. Ms. Hengehold wants to clarify if this is the case. Because Menlo Park is a city that is exempt, does that mean that they can say yes to a project but no to the streamline exemption so that some of those other things get triggered like the CEQA review or community input?

There is another public comment. Ms. Rini Sen Gupta from District 2. She understood from somewhere in this presentation that one of your roles is to change the zoning and what is the timeline to go through that and what should be aware of when we are hearing of zoning changes in our neighborhood?

There is another public comment. Steve Wong from District 2 had a follow up question to the first question. He would like to make sure, is the streamlining about design comments or safety comments or both?

Chair Doran asked Acting Principal Planner Smith to answer the public questions.

Mr. Smith explained that SB-35 is a state law that if a city is not meeting its prorated share of the Regional Housing Needs Allocation (RHNA), for any given year, then that city is subject to streamlining. What that means is if you have a multi-family development and you're offering a certain percentage of low-income units as part of that development; and a few other things like you can't be on an ecologically sensitive site, there are certain stipulations around it. But if you meet those requirements, then essentially you don't need to go through a design review type process, and if you meet objective standards such as the allowed density, allowed height, anything that's very black and white in the code. If you meet those requirements then the project is essentially approved. Menlo

Park is not subject to that because we are meeting our prorated RHNA share and we have been throughout this entire housing cycle. So streamlining is not in effect in Menlo Park and projects do go through reviews, CEQA's or if it needs a Planning Commission review or a City Council hearing. All projects that require those are subject to them in Menlo Park.

Mr. Smith then addressed the question about the zoning timeline. He thinks that question is getting to the 6th Cycle Housing Element and he wants to be clear that what they are discussing this evening is the 5th Cycle that they are currently in. The city is contemplating zoning changes as part of the upcoming 6th Cycle Housing Element update. They are continuing to do public outreach, public meetings, and engaging with stakeholders. That process will continue through the end of this year. The city's website: menlopark.org/housingelement will be posting all of our upcoming events and there's a lot of resources out there about work that they've done so far and he would continue to look there if you're interested in upcoming community meetings and events, to be kept up to date about those, and any changes that would happen as part of the sixth cycle.

Commissioner Barnes had some clarifying questions. The first question has to do with production up to now. How many of these projects have been 100% affordable and what are the barriers would you say exist in Menlo Park for getting 100% affordable projects, and by that, projects which would see tax credit financing and have some of the deeper affordability levels. Did we see any, and if not, why?

Mr. Smith answered that one of the largest projects that was on this year's list for 2021 was the1345 Willow Road project, and those were 100% affordable, and that's 58 net new, for a total of 140. In previous years, he believes that quite a few of the projects were a mix of income levels.

Acting Housing Manager Noce said here that he believes during the 2015-2016 cycle, that 85 units that were part of the Sequoia-Belle Haven development at 1221 Willow Road were 100% affordable, as was the veteran site at 605 Willow.

Mr. Smith then explained that they have had discussions with affordable housing developers and stakeholders, and the high cost of land in this area makes it very difficult. Also, they've heard that the more density they can offer – the more units that can be provided on a site, the more economical it is and makes for 100% affordable developments. This would equate to up to 200 units on a site. Reductions of parking contribute and any other financial incentives that the city can provide to help make those projects whole.

Vice Chair DeCardy had a couple of questions. It was really encouraging to get the update on the $10 million from the BMR housing fund and those three projects. How long was the money in the BMR fund from when it came in to when it got utilized on these projects?

Mr. Noce answered that this is a state law and the statute for this says that the city must use the funds within five years. This is something that the city tracks internally to make sure they are not in violation of those terms. The money is typically released on a 2-year cycle.

Commissioner DeCardy thanked Mr. Noce and asked how much is in the BMR housing fund right now? Mr. Noce answered that a little over $2 million is non-earmarked at the moment. Mr. Noce explained the difference between earmarked and non-earmarked funds. Even when a project is not yet approved by the City Council, Planning would reserve the funds, for example, $3.6 million for Mid-Pen 12 ownership units on Pierce Road, as ear-marked funds, so we know if that project does get approved, how much money is left available in the fund for other projects.

Vice Chair DeCardy asked if there was anything to preclude the City Council from determining that they could use in-lieu funds for community amenities to feed into the BMR housing fund if they wanted to? Mr. Noce wasn't sure of the answer to this but will follow up and get back to the Commission on that.

Vice Chair DeCardy appreciated the chart in Attachment A. In A-10 there's an item, H-2C, which looks into an ordinance to protect existing housing. This item looked like it wasn't being pursued at all, could Mr. Noce please comment on that?
Mr. Noce answered that typically what they've seen in the past is if there's an appetite from Council, or if a Commission is seeking staff to look into a certain tenant protection, then that is something we would follow up on.

Vice Chair DeCardy asked about item H-4b of Attachment A, the process for changes in the BMR guidelines. How are changes in the BMR guidelines related to the housing element, if at all, and what are the next steps in the sequence of that?

Mr. Noce answered that staff have been working with a BMR ad hoc subcommittee for the guidelines which is made up of members of the Housing Commission. That has gone through most of the 2021 year, and might be reflected in that Table D. They do have an item which is for Stage 1 of some changes to the BMR guidelines, and those will incorporate the preferences and general programming updates that are taking place within the guidelines. As far as staff looking at some of the commercial in-lieu fees or residential inclusionary standards, that is being defined as Stage 2. This is something they are working with their team and M-Group regarding how that process parallels with the housing element update.

Commissioner Barnes asked what happens if Menlo Park doesn't meet its RHNA numbers, and what are the implications for meeting or not meeting them?

Mr. Smith replied that the main implication if they do not meet their above moderate-income production and their low and very low-income production, then they are subject to the SB-35 streamlining that was discussed earlier. As long as they have a housing element that is in compliance that is zoned appropriately for the number of housing units they need. It's really up to the private market development community to produce those units. Aside from the SB-35 streamlining, there's not per se, a penalty or any sort of legal issue that the City gets itself into as long as it has a housing element that's in compliance and zone for enough units to be constructed – theoretically. Mr. Smith confirmed there is no financial penalty to not meeting their RHNA numbers.

Commissioner Barnes asked about the housing that's coming online, is there any coordination between this and the school district, and the burden of the school district as it relates to the burdens associated with increasing student count?

Mr. Smith replied that for the larger projects that he talked about, ones with over 100 dwelling units, those go through an EIR process and they also do a fiscal analysis. CEQA is looking at physical impact and impacts on the physical environment. Planning does reach out to the school district and have dialogue with them. They do fiscal impact analysis as required under CEQA.

Commissioner Barnes asked about financing and getting housing built. Did you notice if the County of San Mateo was playing an important role in gap financing and has it been important in the work that has gone on in the last couple of years?

Mr. Noce answered that typically on most of the Mid-Pen projects we do see the gap funding from the County being included. They are privy to that because the city is typically subordinate to most of those funding agreements that come through other sources, whether it be the state or county.

Commissioner Barnes asked a question about ADUs. In his anecdotal experience, he knows of no one that is building an ADU and renting it. It gets used as a home office. Is there any information that shows how these ADUs are used once they are built?

Mr. Smith said that they do not have tracking for that at the city. The city uses the Association of Bay Area Governments (ABAG). Their housing group has a technical assistance team that has performed surveys and looked at different information that's been collected on production in the area, and Mr. Smith thinks there are studies outside of UC Berkeley. They are finding that the ADUs may not be being used to rent them out but maybe to have a family member live with you for free. There are certainly cases where the ADUs are being rented out but then there are those that are not.

Commissioner Barnes asked about the Coleman acquisition, what was the price per unit on that? Mr. Noce did not have the exact price but believed it was somewhere around $7 million. It was 14 units, so that would be roughly $500,000 per unit.

Commissioner Harris asked if Planning does a retrospective on the sites that were listed in RHNA 5 or in previous RHNAs, that showed which types of land or properties resulted in development of homes versus where they were not successful? Can we look back and see what types of sites were successful and which weren't? Does that drive what types of sites are on the next RHNA list?

Mr. Smith said he didn't believe that he has any data like that. However, they are planning for the 6th Cycle and that is one of the considerations that's looked at in planning ahead.

As there were no further questions, Chair Doran said that he is hoping that there will be a resolution on the report to give to the City Council.

Commissioner Barnes made a motion that the City Council accept the Progress Report, as represented in Attachment A.

Commissioner Riggs seconds the motion. He would like to note, however, he thinks we should be building more ownership housing, not apartments.

Commissioner Tate would like to quickly add that she thinks the report is great but that going forward she thinks it would be helpful to report on the districts of the ADUs to the City Council, because she thinks they would find that information helpful as well.

Chair Doran asked if Commissioner Barnes would care to amend his motion to include this action by staff?

Commissioner Barnes made a motion that the City Council accept the Progress Report, as represented in Attachment A, and add a report on the districts of the ADUs.

ACTION: M/S (Barnes/Riggs) recommend that the City Council accept the Progress Report, as represented in Attachment A, and add a report on the districts of the ADUs, passed 7-0.

H. Informational Items

H1. Future Planning Commission Meeting Schedule

- Regular Meeting: March 14, 2022
- Regular Meeting: March 28, 2022

Commissioner DeCardy had a question for Acting Principal Planner Sandmeier. He wanted to follow up on a request he made at the last meeting. He would like to step back and look at all the connectivity between all of the projects that were at the intersection of Willow and O'Brien Street; life sciences, Facebook Village, etc. Is there any update on this?

Ms. Sandmeier explained that she has spoken to management about it. They would definitely like to do a study session or an informational item, but she's not sure when it would go to the Commission. It is something they are looking at.

Commissioner Riggs mentioned that he also, a few sessions back, had asked for some feedback from planners, if there were other ordinances that frequently required being bumped to a use permit. The Commission was hoping that staff could give them an idea of what items could be proposed for a relatively simple update of the zoning code.

Ms. Sandmeier clarified that this initially came up for permits for fences over seven feet. She thought they could do an informational item, but updating the zoning ordinance is a much larger project, and is something that would have to be initiated by the City Council.

Commissioner Riggs indicated it did not need to be an update to the zoning ordinance, but perhaps just a short informational meeting between the planners and a representative from the Commission to talk about what items come up. It may be just fences or it may be a few others also. He thought maybe this could be a part of a simple and brief zoning ordinance update that could be added to an agenda with a recommendation.

Ms. Sandmeier responded that with respect to discussions she's had with Planning Management, such an update becomes more involved and it's something that needs to be directed by the City Council generally, given the staff time that is involved.

Commissioner Harris had a quick comment. She went to the open house and then the opening of the Guild Theater and she wanted to thank her fellow Planning Commissioners who have been here before she was, as well as the staff. She's sure there was a lot of work. It was an exciting opening and it's really going to benefit Menlo Park. The opening night was a wonderfully diverse, happy, joyous audience. She wanted to make a quick note of that and thank everyone.

I. Adjournment

Chair Doran adjourned the meeting at 9:33 p.m.

Staff Liaison: Corinna Sandmeier, Acting Principal Planner

Recording Secretary: Lori Mrizek

CITY OF MENLO PARK

STAFF REPORT

Planning Commission
Meeting Date: **4/25/2022**
Staff Report Number: **22-022-PC**

Public Hearing and Study Session: **Draft Environmental Impact Report (Draft EIR) public hearing and study session for the proposed Willow Village master plan project**

Recommendation

Staff recommends that the Planning Commission:

- Conduct a public hearing to receive public testimony and provide comments on the Draft EIR; and
- Conduct a Study session to receive public comments and ask clarifying questions on the proposed project, including the overall master plan development approach and the specific architectural design plans for Phase 1.

The April 25th meeting will not include any project actions. The City Council will be the final decision-making body for certification of the environmental impact report (EIR) and most of the requested land use entitlements. The Planning Commission will be the final decision making body on the architectural control applications for each individual building. Therefore, the proposed project will be subject to additional review and action at future Planning Commission and City Council meetings.

Staff recommends the following meeting procedure for the two items, allowing the public and the Planning Commission to focus comments and discussion on the specific project components:

Draft EIR Public Hearing

- Introduction by staff
- Presentation by the applicant on the master plan
- Presentation by City's EIR consultant
- Public comments on Draft EIR
- Commissioner questions and comments on Draft EIR
- Close of public hearing

Project Proposal Study Session

- Introduction by staff
- Presentation by applicant on Phase 1 architectural design plans
- Commissioner questions
- Public comments on proposed project
- Commissioner comments and discussion

Standard practice for recent projects that include a Draft EIR public hearing and study session, has been to

include the applicant team's presentation during the Draft EIR public hearing instead of the study session to allow for the Planning Commission and community members to receive an overview of the project prior to providing comments on the Draft EIR. Given the scale of the proposed project, staff recommends the Planning Commission allow the applicant to present the overview of the master plan during the Draft EIR public hearing and then present the detailed design plans for the Phase 1 buildings during the study session.

Policy Issues

A public hearing on the Draft EIR provides an opportunity for the Planning Commission and the public to comment on the completeness and accuracy of the Draft EIR. A study session provides an opportunity for the Planning Commission and the public to ask clarifying questions on the proposed project's details and design. The Draft EIR public hearing and the study session should be considered as separate items, with comments and clarifying questions used to inform future consideration of the proposed project.

The proposed project would require the following actions:

1. **Environmental Review** to analyze potential environmental impacts and certify the EIR as legally compliant with CEQA;
2. **General Plan Circulation Element and Zoning Map amendments** to modify the locations of the public rights-of-way, new street connections, and paseos within the main project site;
3. **Rezone** entire site from O-B (Office Bonus) and R-MU-B (Residential Mixed-Use, Bonus) to O-B(X) (Office Bonus, Conditional Development) and R-MU-B(X) (Residential Mixed-Use Bonus, Conditional Development) to allow for a conditional development permit (CDP) to develop the main project site through the master plan process and establish the development regulations;
4. **Conditional Development Permit** to develop the proposed project through the master plan provisions outlined in the Zoning Ordinance, utilize the bonus level development allowances (increased height, density, and intensity) in exchange for community amenities, and outline the performance standards, development regulations (including adjustment requests), and project requirements for the implementation of the master plan;
5. **Development Agreement** for adequate regulations in exchange for vested rights and the provision of specific community amenities;
6. **Architectural Control** approval of the design of the individual buildings and associated site improvements;
7. **Vesting Tentative Map** to create new buildable parcels, dedicate public rights-of-way, identify public access easements, site infrastructure, and realign Hamilton Avenue;
8. **Heritage Tree Removal Permits** to remove 266 heritage trees on the main project site and 3 heritage trees on the Hamilton Avenue Parcels, and plant heritage tree replacements consistent with the City's code requirements; and
9. **Below Market Rate (BMR) Housing Agreement** approval for on-site BMR units (inclusionary units and commercial linkage fee units) in accordance with the City's BMR Ordinance.

In addition, the following documents are being prepared, and are now available or will be published in the near future, to analyze the proposed project and inform reviews by community members, the Planning Commission, and potentially the City Council:

- Housing Needs Assessment (HNA), including an analysis of the multiplier effect for indirect and induced employment from the proposed project, in compliance with the terms of the 2017 settlement agreement between the City of Menlo Park and the City of East Palo Alto (available now);
- Fiscal Impact Analysis (FIA) to inform decision makers and the public of the potential fiscal impacts of the

proposed project;
- Appraisal to identify the required value of the community amenity in exchange for bonus level development (available now); and
- Community amenities proposal evaluation to determine if the community amenities proposal meets the minimum required value.

These reports are not subject to specific City action, but provide background information for the conditional development permit, development agreement, and other land use entitlements.

After the close of the Draft EIR public comment period on May 23, 2022, the City and its environmental consultant will review and respond to all substantive comments received in what is referred to as a "Response to Comments" document, which along with the Draft EIR and any revisions, additions, or clarifications to the Draft EIR, will constitute the Final EIR. The City Council is charged with reviewing and certifying the Final EIR. Certifying the EIR as legally adequate and adopting findings to comply with CEQA must be completed prior to taking final action on the proposed project. After certifying the Final EIR, the City Council would then consider and take action on the requested land use entitlements. Certifying the EIR does not require approval of the project.

Background

Site location

The proposed project includes a main project site, the realignment of Hamilton Avenue and the associated parcels on the north and south sides of Hamilton Avenue, and the tunnel access on the Meta (formerly Facebook) West Campus adjacent to Building 20 along Willow Road. Each component is discussed below for reference.

Main project site

The approximately 59-acre main project site is generally located along Willow Road between Hamilton Avenue and Ivy Drive, previously referred to as the ProLogis Menlo Science and Technology Park. The main project site contains 20 existing buildings with approximately 1 million square feet of gross floor area, encompassing the following addresses 1350-1390 Willow Road, 925-1098 Hamilton Avenue and 1005-1275 Hamilton Court. Meta (formerly Facebook) Building 20 is located to the northwest and multifamily and neighborhood commercial uses are to the west, across Willow Road. The property is generally bordered by the San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy right of way and Mid-Peninsula High School to the south, the Dumbarton Corridor to the north, and properties within the Menlo Park Labs (formerly Menlo Business Park) to the east.

Hamilton Avenue Parcels

The proposed project includes the realignment of Hamilton Avenue west of Willow Road, and the environmental review for the proposed project studies potential redevelopment of the Chevron station on the parcel to the south of Hamilton Avenue (referred to as Hamilton Avenue Parcel South) and the potential expansion of retail uses on the parcel north of Hamilton Avenue (referred to as Hamilton Avenue Parcel North). Hamilton Avenue parcel north is bounded by Willow Road to the east, Hamilton Avenue to the south, and the Dumbarton Rail Corridor to the north. Multifamily dwelling units at the 777 Hamilton Avenue property are located to the west. Hamilton Avenue parcel south is bounded by Hamilton Avenue to the north, Willow Road to the east, and Carlton Avenue to the west. To the south of the site is a 140-unit multifamily below market rate residential project that is currently under construction.

Willow Road undercrossing and overcrossing
The main project site would be connected to the Meta West Campus by an undercrossing and an elevated parkway would connect the main project site with the Hamilton Avenue parcel north. Both the undercrossing and elevated park would include public access for bicyclists and pedestrians.

The location map in Attachment A identifies the main project site and the Hamilton Avenue parcels.

Project overview

The applicant, Signature Development Group (SDG) on behalf of Peninsula Innovation Partners, Inc., is proposing to redevelop the project site through the master plan process, as provided for in the Zoning Ordinance, by utilizing a CDP and entering into a development agreement (DA), to secure vested rights, with the city. As stated in the site location section, above, the proposed project includes a main project site and off-site components along Hamilton Avenue. The summary below is intended to provide an overview of the proposed project for the Planning Commission. More detailed information on the overall project, including open space, architectural design, transportation demand management (TDM), below market rate (BMR) housing, and sustainability are contained within the study session portion of this staff report. A table summarizing the previous project milestones and meetings is included in Attachment B.

Main project site
The proposed project would demolish existing on-site buildings and landscaping and construct new buildings within a town square district, a residential/shopping district, and a campus district. The campus district is intended to be occupied by Meta. The proposed site plan is included in Attachment C and a hyperlink to the master plan project plans is included in Attachment D. The proposed project would result in a net increase of approximately 800,000 square feet of nonresidential uses (office space and non-office commercial/retail,) for a total of approximately 1.8 million square feet of nonresidential uses at the project site. In addition, the proposed project would include multifamily housing units, a hotel, publicly accessible open space (i.e. elevated linear park, town square, dog park, and 3.5 acre publicly accessible park).

The project site is zoned O-B (Office, bonus) and R-MU-B (Residential mixed-use, bonus). Through the application of a CDP, the applicant is proposing to redevelop the project site through the master plan provisions of the Zoning Ordinance. These provisions allow a project to aggregate development potential across the entire site, including square footage, open space requirements, parking, etc. Table 1 summarizes proposed development at the project site.

Table 1: Main Project site Project Data

	Proposed project (CDP Standards)	Zoning Ordinance bonus level standards (maximums)*
Residential dwelling units	1,730 units**	1,730 units
Residential square footage	1,695,975 s.f.	1,695,975 s.f.
Residential floor area ratio	225%	225%
Commercial Retail square footage	200,000 s.f.	396,578 s.f.
Commercial Retail floor area ratio	12.6%	25%

Office square footage	1,600,000 s.f.*	1,774,755 s.f.
Office floor area ratio	113%	125%
Hotel rooms	193	n/a

*Proposed office square footage includes 1.25M s.f. of office use and 350,000 s.f. of meeting and collaboration space use (if office is maximized) within the Campus District; the total s.f. includes the 25% non-residential FAR permitted in the R-MU portion of the project site.
**The total units would include a minimum of 15 percent of the residential units as below market rate (BMR) units to satisfy the City's inclusionary requirements. Additional BMR units would be incorporated to comply with the commercial development requirement.

The proposed project would also include a minimum of approximately 19.6 acres of open space, including a minimum of approximately 8.2 acres of publicly accessible open space, both of which exceed the minimum required acreage set by the Zoning Ordinance. The proposed building heights would range from approximately 15 feet to approximately 117 feet for the glass dome enclosing the meeting and collaboration space. The proposed project includes modification requests for various design standards enumerated by the Zoning Ordinance and an increase in height above the maximum height for the mixed-use building identified as Residential Parcel 3. The proposed project would comply with the height (average) for all buildings within each respective zoning district.

Hamilton Avenue Parcels and Willow Road grade separated crossings

The proposed project includes off-site improvements, such as the realignment of Hamilton Avenue and the Willow Road undercrossing and elevated park (over Willow Road). The realignment of Hamilton Avenue would result in the demolition and potential reconstruction of the existing Chevron station (Hamilton Avenue Parcel South) and the potential future expansion of retail uses at the existing Belle Haven neighborhood shopping center (Hamilton Avenue Parcel North).

The realignment of Hamilton Avenue and resulting demolition of the Chevron station are components of the proposed project. However, the potential improvements on Hamilton Avenue Parcels North and South that could occur as a result of the realignment of Hamilton Avenue would be enabled through separate permitting processes. The conceptual site plans for the Hamilton Avenue Parcels are included in Appendix 7 of the masterplan plan set (link in Attachment D) for reference.

The table below summarizes the potential development on the two Hamilton Avenue Parcels and the maximum permitted by the underlying zoning district (C-2-S district). The potential future projects on each parcel are listed below and studied for environmental clearance in the project EIR; however, subsequent permitting would be required for each parcel individually, including use permits and architectural control permits. Specific designs for developments on each parcel have not been submitted at this time.

Table 2: Hamilton Avenue Parcels North and South Project Data

Project site	Potential Future Projects	Zoning Ordinance maximums*
Hamilton Avenue Parcel North	22,400 s.f.	48,134 s.f./(FAR 0.5)
Hamilton Avenue Parcel South	5,700 s.f.	21,126 s.f./(FAR 0.5)

*Zoning Ordinance maximums represent maximum development potential after realignment of Hamilton Avenue, which includes re-subdividing the parcels to reduce the size of Hamilton Avenue Parcel South and increase the size of Hamilton Avenue Parcel North.

Site layout

The main project site would be developed in three distinct districts: a new Residential/Shopping District, Town Square District, and Campus District. The three proposed districts would be situated as follows: the approximately 17.7-acre Residential/Shopping District in the southwestern portion of the main project site, the approximately 4.3-acre Town Square District in the northwestern portion of the project site, and the approximately 32-acre Campus District in the eastern portion of the main project site. The three districts are tied together with the proposed street network, parks and open space, and the design and layout of the buildings. The following list identifies some key components of the proposed site plan.

- Campus district including 1.6 million square feet of office and accessory uses, including meeting/collaboration space (a maximum of up to 1.25 million square feet of offices with balance for accessory uses, inclusive of meeting and collaboration space);
- Up to 200,000 square feet of retail/non-office commercial uses, including a grocery store, pharmacy services, entertainment and restaurant uses;
- The grocery store would be proximate to Willow Road at the intersection with Hamilton Avenue/Main Street;
- Up to 1,730 multifamily housing units, including 308 below market rate units (260 inclusionary units or 15 percent, plus 48 units per the city's commercial linkage fee/unit equivalency requirement);
- A 193-room hotel and associated retail/dining, proximate to the Town Square;
- 3.5-acre publicly accessible park (proximate to Willow Road at Park Street), a dog park (in the southeastern portion of the main project site) and additional public open space;
- 1.5-acre publicly accessible town square;
- 2-acre publicly accessible elevated park extending over Willow Road providing access at the Hamilton Avenue Parcel North (Belle Haven Shopping Center); and
- A publicly-accessible, below grade tunnel for Meta intercampus trams, bicyclists and pedestrians connecting the project with the West and East campuses

The Residential/Shopping District would include up to 1,730 dwelling units, the 3.5-acre publicly accessible park, dog park, grocery store, entertainment uses, and multiple ground floor retail and restaurant spaces. The Town Square District would include the town square/plaza, the retail pavilion within the plaza, the hotel, and the entrance to the meeting and collaboration/accessory use space for the Campus District. The Campus District would include office uses and amenity space, accessory uses, publicly accessible retail space, and a publicly accessible elevated park (i.e., the Elevated Park) that would connect the main project site to the adjacent Belle Haven neighborhood via an overpass at Willow Road. The proposed project would also include an undercrossing (Willow Road Tunnel) to provide tram and bicyclist/pedestrian access to the neighboring Meta campuses from the Campus District.

The main project site would be bisected by a new north–south street (Main Street) as well as an east–west street that would provide access to all three districts (Park Street). The proposed project would include a circulation network for vehicles, bicycles, and pedestrians, inclusive of both public rights-of-way and private streets that would be generally aligned to an east-to-west and a north-to-south grid.

The proposed project would also alter parcels west of the main project site, across Willow Road, on both the north and south sides of Hamilton Avenue (Hamilton Avenue Parcels North and South) to support realignment of the Hamilton Avenue right-of-way and provide access to the new Elevated Park. The realignment of Hamilton Avenue would require demolition and reconstruction of an existing Chevron gas station (with a potential increase in area of approximately 1,000 square feet) at Hamilton Avenue Parcel

South and enable the potential addition of up to 6,700 square feet of retail uses at the existing neighborhood shopping center (Belle Haven Retail Center) on Hamilton Avenue Parcel North.

Density, floor area ratio (FAR), and gross floor area (GFA)

The proposed project would be developed at a bonus-level FAR and density. The proposed project would aggregate development potential between the portions of the site zoned R-MU-B and O-B through a CDP. Refer to Table 1 and Table 2 for detailed density, FAR, and GFA details for the proposed project.

On the main project site, the Zoning Ordinance would permit up to approximately 1.75M square feet (125 percent FAR) of office uses and the applicant is proposing to develop the site with up to 1.6M square feet of office and accessory uses (113 percent FAR) in the Campus District, with a maximum of 1.25M square feet used for typical office use and the remainder (up to 350,000 square feet if the office use is maximized) for accessory uses. These accessory uses may include meeting/collaboration space, orientation space, training space, event space, a business partner center, incubator space, an event building (including pre-function space, collaboration areas, and meeting/event rooms), visitors center, product demonstration areas, a film studio, gathering terraces and private gardens, and space for other accessory uses for Meta.

The hotel would contain 193 rooms and approximately 172,000 square feet of GFA, which is well below the maximum GFA that could be proposed for the hotel use. The main project site would include up to 200,000 square feet of retail uses, which would be an FAR of approximately 12.6 percent, below the 25 percent maximum FAR allowed on the main project site.

The proposed project would be built at the maximum density of 100 dwelling units per acre for a total of 1,730 dwelling units. An equivalent maximum FAR of 225 percent for the residential uses is proposed. As discussed later in the report, the Draft EIR studied a potential project variant that would increase the number of housing units within the project to 1,930 units. These additional 200 units could be enabled through the City's BMR density bonus (which allows a minimum of one additional market rate unit for each BMR unit included in the project, up to a 15 percent density bonus) or State Density Bonus law. The proposed project does not currently include these additional units; however, studying these additional units through the variants analysis in the Draft EIR enables City decision makers to incorporate these units into the project if desired through the entitlement review process.

Height

The applicant has submitted an analysis in the master plan that documents preliminary compliance with the Zoning Ordinance height requirements for height (average) and maximum height for both the O-B and R-MU-B portions of the project, with the exception of the maximum height for the parcel bounded by Center Street, West Street, and Main Street (commonly referred to as Parcel 3), which could be enabled through the CDP. The proposed project heights are outlined in Table 3 below. The proposed illustrative heights identified in the master plan appear to be in compliance with the applicable requirements, with the granting of a modification through the CDP for Parcel 3. Given the master plan development, maximum and average height compliance would be determined by City staff with the review and issuance of each individual building permit. Overall compliance would be tracked by City staff.

Table 3: Building Height		
	Proposed	Zoning Ordinance standards*
Building Height (Maximum)**		
O-B Zoning	120 feet	120 feet
R-MU-B Zoning	80 feet	80 feet, 85 feet for the parcel bounded by Center, West, and Main Street (Building RS 3)***
Height (Average)**		
O-B Zoning	77.5 feet	77.5 feet
R-MU-B Zoning	62.5 feet	62.5 feet

* The height limits include the 10-foot height increase allowed for properties within the FEMA flood zone.
** Maximum height and average height do not include roof-mounted equipment, utilities and parapets used to screen mechanical equipment.
*** The additional height above the Zoning Ordinance maximums can be permitted through the CDP.

Site access and circulation

The main project site would include a new circulation network, consisting of approximately 5.64 acres of public rights-of-way and approximately 7.18 acres of private streets, generally aligned in an east-to-west or north-to-south grid. The internal street network at the main project site would include safety and multi-modal mobility features. In addition to accommodating vehicular and transit access, proposed streets would be bicyclist and pedestrian oriented and include a comprehensive streetscape, including street trees, plantings, green infrastructure, and sidewalks.

The main project site is currently accessible from a traffic signal-controlled intersection at Willow Road via Hamilton Avenue/Hamilton Court and two driveways off northbound Willow Road. Multiple curb-cut entrances off Hamilton Avenue/Hamilton Court lead into the primary parking area for each building. Hamilton Avenue Parcels North and South are both accessible via one driveway from southbound Willow Road and one driveway along Hamilton Avenue. To accommodate access to the main project site, the proposed project would include offsite improvements on Willow Road, Hamilton Avenue, O'Brien Drive, and Adams Court.

Willow Road

In order to provide adequate access to the main Project site, improvements to Willow Road are proposed, as follows:

- Right-of-way widening to accommodate additional left-turn pockets.
- Creation of one new signalized intersection (Park Avenue).
- Relocation of one signalized intersection (Hamilton Avenue).
- Construction of a portion of the Elevated Park from the Hamilton Avenue Parcel North over Willow Road to the main project site.
- Construction of Willow Road Tunnel from the main project site to the West Campus.
- Sidewalk and landscape improvements.
- Bicycle and pedestrian improvements along the project frontage and crossing improvements at the new intersections.

Hamilton Avenue
In conjunction with project site access and to improve traffic operations on Willow Road, the Hamilton Avenue/Willow Road intersection would be relocated approximately 150 feet south of the existing intersection and connect to Main Street on the main project site.

O'Brien Drive
At the southeast corner of the main project site, the proposed project would create a new four-legged roundabout at O'Brien Drive to accommodate site access and area circulation. This intersection would require realignment of O'Brien Drive where it passes through the roundabout. The southern half of the roundabout would then overlay the Hetch Hetchy right-of-way. The new roundabout would provide direct access to Main Street and East Loop Road.

Adams Court and East Loop Road
On the east side of the main project site, East Loop Road would facilitate north and south circulation for the length of the main project site and create a new intersection at Adams Court, which extends from Adams Drive to the eastern edge of the main project site. Currently, Adams Drive provides a connection to University Avenue east of the main Project site. A traffic signal would be installed at Adams Court and East Loop Road within the main project site.

Site parking
Parking throughout the main project site would be provided on streets and within a surface lot on Park Street, in aboveground parking structures (for the Campus District), and in podiums or underground parking garages. The illustrative parking plan from the masterplan includes approximately 6,476 parking spaces. The CDP standards would require a minimum of 5,960 parking spaces and up to a maximum of 6,516 parking spaces. Parking ratios, by use, are proposed at the main project site as follows:

- Shared Parking (for retail, hotel, office visitors, and residential visitors): currently anticipated to be between 1,052 to 1,080 spaces
- Residential: 1.0 to 1.5 stalls per unit (housing) and 0.5 stall per unit (for senior housing)
- Publicly Accessible Park: 10.0 stalls per acre, with approximately 38 to 41 stalls currently proposed
- Office and Accessory: up to 2.3 stalls per 1,000 sf

The master plan indicates that the Residential/Shopping District and Town Square District would include approximately 2,755 parking spaces for residential and retail uses. This parking would be below grade or in podiums. In addition, on-street parking for mixed uses would be provided on West Street, Center Street, East Street, Park Street, and Main Street and in areas surrounding the Town Square. The Town Square District's subgrade parking would provide parking for Meta visitors, hotel guests, retail patrons, and participants attending special events in the Campus District, as needed. In addition, one publicly accessible surface parking lot with up to 41 stalls would be provided north of the publicly accessible park, off Park Street, in the southwest portion of the main project site.

The master plan indicates that the Campus District would include worker parking within parking structures in the northeast and southeast corners of the main project site (North Garage and South Garage) and below Building O7. The structures are proposed to provide 3,680 parking spaces (a minimum of 3,200 parking spaces and a maximum of 3,700 spaces per the CDP), including stalls for electric vehicles. The electric-vehicle charging stations would be required to comply with Menlo Park Municipal Code requirements. Both structures would include a ground-level transit hub for commuter shuttles and inter-campus trams. No surface parking would be provided in the Campus District.

Hamilton Avenue Parcel North currently has 66 parking spaces, provided at a ratio of 4.20 spaces per 1,000

square feet. Hamilton Avenue Parcel South currently has 24 parking spaces, provided at a ratio of 5.03 spaces per 1,000 square feet. Upon implementation of the Proposed project, 93 parking spaces would be provided at Hamilton Avenue Parcel North (4.16 spaces per 1,000 sf) and 13 spaces at Hamilton Avenue Parcel South (2.26 spaces per 1,000 sf).

CEQA review

A Draft EIR evaluates potential environmental impacts that could result from implementation of the proposed project. Under CEQA, a significant environmental effect is a potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Potential environmental impacts under CEQA are only related to the physical environment, and do not evaluate potential social or economic effects of the proposed project. Each potential impact is determined based on criteria of significance, which are thresholds set by the CEQA Guidelines and applicable City policies to determine whether an impact is potentially significant.

As stated in the CEQA Guidelines, an EIR is an informational document that is intended to provide the City, responsible and trustee agencies, other public agencies, and community members with detailed information about the potential environmental effects that could result from implementing the proposed project, examine and implement mitigation measures to reduce or avoid potentially significant physical environmental impacts if the proposed project is approved, and consider feasible alternatives to the proposed project, including a required No Project Alternative. Members of the Planning Commission were previously provided a copy of the Draft EIR for the proposed project, which was released on April 8, 2022. The Draft EIR is included through the hyperlink in Attachment E.

The April 25, 2022 Planning Commission meeting falls within the Draft EIR comment period, which ends on Monday, May 23, 2022 and serves as a public hearing to receive comments from interested persons and the Planning Commission on the Draft EIR. The CEQA process recognizes that public agencies cannot produce a perfect Draft EIR and thus comments are solicited on the substantive analysis provided in the Draft EIR. Oral comments received during the public hearing and written comments received during the Draft EIR comment period will be considered while preparing the Final EIR for the proposed project. Responses to substantive comments on the Draft EIR will be included in the Final EIR.

Prior to development of the Draft EIR, and in accordance with CEQA Guidelines, a Notice of Preparation (NOP) was released on September 18, 2019, beginning the EIR process. The NOP is included via hyperlink in Attachment F. Following the release of NOP, the Planning Commission conducted a scoping session on October 7, 2019, to provide an opportunity early in the environmental review process for the Planning Commission and interested persons to provide comments on the scope and content of the EIR.

The Project site is within the General Plan and M-2 Area Zoning Update (ConnectMenlo) study area. ConnectMenlo, which updated the City's General Plan Land Use and Circulation Elements and rezoned land in the M-2 Area (now referred to as the Bayfront Area), was approved on November 29, 2016. Because the City's General Plan is a long range planning document, the ConnectMenlo Final EIR was prepared as a program EIR, pursuant to CEQA Guidelines Section 15168. Section 15168(d) of the CEQA Guidelines provides information for simplifying the preparation of subsequent environmental documents by incorporating by reference analyses and discussions. CEQA Guidelines Section 15162(d) states that where an EIR has been prepared and certified for a program or plan, the environmental review for a later activity consistent with the program or plan should be limited to effects that were not analyzed as significant in the prior EIR or susceptible to substantial reduction or avoidance. The Draft EIR was prepared in accordance with the terms of the settlement agreement between the cities of Menlo Park and East Palo Alto, which

allows for simplification in accordance with CEQA Guidelines Section 15168 for all topic areas, except housing and transportation. The analysis provided in the Draft EIR tiers from the ConnectMenlo Final EIR, as appropriate.

Analysis

Draft EIR

While the project-level Draft EIR tiers from the ConnectMenlo program-level EIR, most CEQA topic areas were included in the Draft EIR, including the following:

- Aesthetics
- Air quality
- Biological resources
- Cultural and Tribal cultural resources
- Energy
- Geology and soils
- Greenhouse Gas emissions
- Hazards and hazardous materials
- Land use and planning
- Noise
- Population and housing
- Public services
- Transportation
- Utilities and service systems
- Hydrology and water quality

Section 15128 of the CEQA Guidelines states that "an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." Implementation of the Proposed project would not result in significant environmental impacts on agricultural and forestry resources or mineral resources. These issues are not analyzed in the Draft EIR.

Impact analysis

For each of the analyzed topic areas, the Draft EIR describes the existing conditions (including regulatory and environmental settings) and analyzes the potential environmental impacts (noting the thresholds of significance and applicable methods of analysis). Impacts are considered both for the project individually, as well as cumulatively, for the project in combination with other reasonably foreseeable probable future projects and cumulative growth. The Draft EIR identifies and classifies the potential environmental impacts as:

- No Impact (NI)
- Less than Significant (LTS)
- Significant (S)
- Potentially Significant (PS)

Where a significant or potentially significant impact is identified, mitigation measures are considered to reduce, eliminate, or avoid the adverse effects (less than significant with mitigation). If a mitigation measure

cannot eliminate/avoid an impact, or reduce the impact below the threshold of significance, it is considered a significant and unavoidable impact. The following determinations are then applied to the impact.

- Less than Significant with Mitigation (LTS/M)
- Significant and Unavoidable (SU)

The Draft EIR prepared for the project identifies less than significant effects and effects that can be mitigated to a less-than-significant level in all topic areas except air quality and noise. The Draft EIR finds that impacts related to air quality and noise would be significant and unavoidable. The Proposed project would result in potentially significant impacts related to transportation, air quality, energy, greenhouse gas emissions, noise, cultural and tribal cultural resources, biological resources, geology and soils, hydrology and water quality, and hazards and hazardous materials, but these impacts would be reduced to a less-than-significant level with implementation of identified mitigation measures. Impacts related to land use, aesthetics, population and housing, public services and recreation, and utilities and service systems would be less than significant. Attachment G includes Table ES-1 from the executive summary of the Draft EIR for all impact areas and mitigation measures. A more detailed analysis of the proposed project's impacts and associated mitigation measures by topic area, is provided in the Draft EIR. Interested parties are encouraged to review the specific topics of interest in the Draft EIR (hyperlinked in Attachment E). Links to individual chapters and individual appendices are on the city-maintained project page (hyperlink in Attachment H).

Significant and unavoidable impacts

While identified impacts for most topic areas can be mitigated to a less than significant level with project-specific mitigation measures or the application of mitigation measures from the certified ConnectMenlo program level Final EIR, impacts related to air quality and noise remain significant and unavoidable even with the application of mitigation measures. CEQA Guidelines Section 15126.2(c) requires EIRs to include a discussion of the significant environmental effects that cannot be avoided if the Proposed project is implemented. More detailed analysis for each impact and associated mitigation measures (applied even if unable to fully reduce the impact to less than significant) are included in the air quality (Chapter 3.4) and noise (Chapter 3.7).

<u>Air Quality Impacts</u>

Impact AQ-1: Project operations would disrupt or hinder implementation of the Bay Area Air Quality Management District's (BAAQMD's) 2017 Clean Air Plan. Prior to adoption of the 2017 Clean Air Plan, the General Plan and M-2 Area Zoning Update (ConnectMenlo) EIR determined that emissions of criteria air pollutants and precursors associated with the operation of new development under ConnectMenlo would generate a substantial net increase in emissions that would exceed the BAAQMD regional significance thresholds and that operational impacts would be significant and unavoidable. Similarly, Project operations would exceed BAAQMD's operational reactive organic gasses (ROG) threshold (see Impact AQ-2 below). The proposed project would not result in a substantial change in the ConnectMenlo project and would not cause new or substantially more severe significant impacts than those analyzed in the ConnectMenlo EIR. However, as discussed under Impact AQ-2, below, implementation of Mitigation Measure AQ-1.2 would decrease the proposed project's full build-out operational ROG emissions, but there is no feasible mitigation available to reduce the proposed project's operational ROG emissions to a level below the BAAQMD threshold. The proposed project's ROG emissions would remain above the BAAQMD ROG threshold after implementation of all feasible mitigation measures.

Impact AQ-2: Operation of the proposed project would generate levels of net ROG that would exceed

BAAQMD's ROG threshold. As discussed above, the ConnectMenlo EIR determined that emissions of criteria air pollutants and precursors associated with operation of new development under ConnectMenlo would result in significant and unavoidable impacts. The proposed project would implement Mitigation Measure AQ-1.2, which would require use of super-compliant architectural coatings during operations at all buildings. However, ROG emissions from consumer products constitute most of the operational ROG emissions associated with the proposed project. The City of Menlo Park (City) and Applicant would have minimal control over what consumer products project users would purchase. There are no additional mitigation measures to reduce ROG from consumer products. Thus, although the proposed project would not result in a substantial change in the ConnectMenlo project and would not cause new or substantially more severe significant impacts than those analyzed in the ConnectMenlo EIR, net mitigated operational ROG emissions would still exceed BAAQMD's ROG threshold after implementation of all feasible mitigation measures.

Impact C-AQ-1: Cumulative development in the San Francisco Bay Area Air Basin (SFBAAB) would result in a significant and unavoidable cumulative impact with respect to air quality as a result of an exceedance of BAAQMD criteria pollutant thresholds, even with implementation of all feasible mitigation. The ConnectMenlo EIR determined that criteria air pollutant emissions generated by cumulative development would exceed BAAQMD's project-level significance thresholds and that cumulative impacts related to criteria air pollutants under ConnectMenlo would be significant and unavoidable. The proposed project would not result in a substantial change in the ConnectMenlo project and would not cause new or substantially more severe significant impacts than those analyzed in the ConnectMenlo EIR. As a result of its operational ROG emissions, in excess of the BAAQMD ROG threshold, even after implementation of all feasible mitigation (see Impact AQ-2 above), the proposed project would be a cumulatively considerable contributor to a significant and unavoidable cumulative impact on air quality with respect to criteria pollutants.

Noise Impacts

Impact NOI-1: Impacts related to construction during the day, construction during non-exempt daytime hours, construction during the night, potential intersection improvements, and construction of offsite improvements would be significant. The ConnectMenlo EIR determined that future projects in Menlo Park could result in construction-related noise levels that would exceed noise limits; however, with implementation of mitigation measures and compliance with the City Noise Ordinance, impacts would be less than significant. With respect to the proposed project, noise impacts on offsite uses from construction, including the construction of certain offsite improvements, would remain significant, even after implementation of feasible mitigation measures. In addition, construction noise impacts on onsite land uses during early morning and evening hours would be significant, even after implementation of feasible mitigation measures. Thus, the proposed project would cause a new or substantially more severe significant impact than that analyzed in the ConnectMenlo EIR.

Impact NOI-2: Offsite vibration levels may exceed applicable vibration-related annoyance thresholds at nearby sensitive uses during daytime and nighttime construction on the site. The impacts would be significant, even after implementation of feasible mitigation. Likewise, construction vibration from offsite improvements would exceed annoyance thresholds. The impacts would be significant, even after mitigation. The ConnectMenlo EIR determined that future projects in Menlo Park could expose people to or generate excessive ground-borne vibration or ground-borne noise levels, but that with implementation of mitigation measures, impacts would be less than significant. Thus, the proposed project could cause a new or substantially more severe significant impact than that analyzed in the ConnectMenlo EIR.

Project variants

The Draft EIR includes an environmental analysis of variants to the proposed project. Variants are variations of the proposed project at the same project site, with the same objectives, background, and development controls but with a specific variation. With the exception of the Increased Residential Density Variant (studied for policy purposes in the event the City decision makers desire to consider it), the variants are slightly different versions of the project that could occur based upon the action or inaction of agencies other than the City or of property owners outside the Project site. Because the variants could increase or reduce environmental impacts, the Variants Chapter of the Draft EIR describes and analyzes the associated environmental impacts for the following four variants to the Proposed project:

No Willow Road Tunnel Variant

This variant considers a scenario where the Willow Road Tunnel would not be constructed as part of the proposed project and Meta trams would continue to use the public street network, Bayfront Expressway, and Willow Road to access the proposed Campus District. Without the Willow Road Tunnel, bikes and pedestrians traveling between the main project site and the West/East Campus would need to use at grade crossings. All other development components of the proposed project would continue to be proposed under this variant. This variant is analyzed to disclose environmental impacts that would occur if agencies other than the City with jurisdiction over the Willow Road Tunnel do not approve the Willow Road Tunnel. In addition, because this option would avoid significant noise impacts associated with constructing the Willow Road Tunnel, this option is included as an alternative to the project that could be selected by the City Council, and is thus fully analyzed in Chapter 6, Alternatives, of the Draft EIR.

Increased Residential Density Variant

This variant would increase the number of residential dwelling units by approximately 200, for a total of 1,930 residential units at the main project site. All other components of the proposed project would remain. This variant is analyzed to disclose environmental impacts that would occur in the event that the City Council desires to increase the number of residential units in the proposed project.

No Hamilton Avenue Realignment Variant

This variant would alter the proposed circulation network east of Willow Road to accommodate retaining the Willow Road/Hamilton Avenue intersection in its current alignment. The overall development program for the proposed project would remain unchanged. This variant is analyzed to disclose environmental impacts that would occur if affected property owners and/or agencies other than the City with jurisdiction over the Hamilton Avenue realignment do not approve the Hamilton Avenue realignment.

Onsite Recycled Water Variant

This variant would provide recycled water to the main project site through onsite treatment of wastewater. The onsite treatment and production of recycled water would involve capturing wastewater, including blackwater (e.g., water from toilet flushing, food preparation drains), from all proposed buildings. All other proposed features of the project would remain the same. This variant is analyzed to disclose environmental impacts that would occur if West Bay Sanitary District does not construct its project that would provide recycled water to the main project site in time to serve the proposed project, and the applicant instead constructs onsite treatment facilities.

With the exception of the Increased Residential Density Variant, the impacts in each variant are the same or reduced compared to the proposed project. For the Residential Density Variant, air quality impacts related to reactive organic gases (ROG) would increase due to the increase in residential population. This variant, like the proposed project would result in a significant and unavoidable impact regarding obstruction of implementation of clean air plans and criteria pollutants. The Residential Density Variant, unlike the

proposed project, would exceed the Bay Area Air Quality Management District's (BAAQMD's) cancer risk and annual PM2.5 concentration thresholds for construction plus operations for on-site residents. Onsite residential units would be equipped with Minimum Efficiency Reporting Value (MERV) filtration systems which are expected to reduce concentrations of diesel particulate matter. However, there is still a possibility that onsite residents would be exposed to substantial pollutant concentrations and associated health risks. The impacts would be significant and unavoidable. This would be a new significant and unavoidable impact that would occur with implementation of the Residential Density Variant.

Project alternatives

The CEQA Guidelines require study of a reasonable range of alternatives to the proposed project; a "reasonable range" includes alternatives that could feasibly attain most of the project's basic objectives, while avoiding or substantially lessening any of the significantly adverse environmental effects of the project. An EIR does not need to consider every conceivable alternative to a project, but it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. Section 15126.6(e) of the State CEQA Guidelines requires the evaluation of a No Project Alternative. Other alternatives may be considered during preparation of the EIR and will comply with the State CEQA Guidelines. The Draft EIR alternatives analysis focused on potential alternatives to reduce the significant and unavoidable impacts associated with air quality (conflict with air quality plan, operation, and cumulative criteria air pollutants) and noise (construction noise levels, vibration annoyance, and cumulative noise and vibration impacts). The Draft EIR includes the following alternatives. For a summary and list of the alternatives considered but rejected, please review Chapter 6: Alternatives of the Draft EIR.

1. **No Project Alternative**: Under this alternative, no additional construction would occur at the project site with implementation of the No Project Alternative. The existing buildings and landscaping on the project site would not be demolished and would instead remain in place and be used and maintained the same as current conditions. The applicant would not construct the new buildings, establish open space area, or install infrastructure. There would be no realignment of Hamilton Avenue at Willow Road and no additional streets within the main project site.

2. **No Willow Road Tunnel Alternative:** Under this alternative, the proposed project would be implemented, but without the Willow Road Tunnel. The trams would use the public street network, Bayfront Expressway and Willow Road to access the proposed Campus District. Historically, three tram routes have served the Willow Village campus. Without the Willow Road Tunnel, the trams would continue to operate as they do under baseline conditions. Without the tunnel connection, the line that operates between the Classic and Willow campus would continue to use Willow Road, as it does under current conditions.

   Most pedestrians and bicyclists accessing the Willow Village Campus District would use the on-street bike lanes and sidewalk improvements to move along the Willow Road corridor and would cross at the Willow Road and Main Street/Hamilton Avenue intersection. Pedestrians and bicyclists desiring to access the Bay Trail or the other Meta campuses would use (i) the bike/pedestrian trail within the City public utility easement located adjacent to and immediately west of Willow Road or (ii) the Elevated Park. Pedestrians and bicyclists would access the Elevated Park using publicly accessible stairs and elevators located within or adjacent to Hamilton Avenue Parcel North and within Town Square. (This alternative was also studied as a project variant.)

3. **Base Level Development Alternative:** This alternative would consist of the proposed project but developed to be consistent with the "base-level" development standards in R-MU zoning district, which allow for a maximum density of up to 30 dwelling units per acre (du/acre) and a maximum height of up to 40 feet. For the O zoning district, the base-level development standards allow for a

floor area ratio (FAR) of 0.45 (plus 10 percent for non-office commercial uses and 175 percent for hotels) and a maximum height of 35 feet (110 feet for hotels). The proposed project proposes "bonus-level" development in exchange for providing community amenities, and the Base Level Development Alternative would not involve this exchange. Table 4 below summarizes the density and intensity of the proposed project and the Base Level Development Alternative. It is anticipated that publicly accessible and general open space would be constructed at the Zoning Ordinance required minimum in this alternative, where the proposed project would exceed the minimum requirement.

Table 4: Base Level Development Alternative Density and Intensity

	Base Level Alternative	Zoning Ordinance bonus level standards (maximums)*
Residential dwelling units	519 units	1,730 units
Residential square footage	678,390 s.f.	1,695,975 s.f.
Residential floor area ratio	90%	225%
Commercial Retail square footage	166,321	396,578 s.f.
Commercial Retail floor area ratio	10% of office zoned area	25%
Office square footage	826,906 s.f.*	1,600,000 s.f.*
Office floor area ratio	58.4%	113%
Hotel rooms	193	n/a

* Office includes the non-residential commercial square footage from the R-MU zoning district.

4. **Reduced Intensity Alternative:** Under this alternative scenario, the proposed project would be developed utilizing the bonus level development provisions but at a lower density and intensity. Both the total residential and non-residential square footage would be reduced compared to the proposed project. Construction of this alternative would also be conducted in one phase rather than in the two phases planned for the proposed project. Table 5 below summarizes the density and intensity of the proposed project and the Reduced Intensity Alternative. It is anticipated that publicly accessible and general open space would be constructed at the Zoning Ordinance required minimum in this alternative, where the proposed project would exceed the minimum requirement.

Table 5: Reduced Intensity Alternative Density and Intensity

	Reduced Intensity Alternative	Proposed project (CDP Standards)
Residential dwelling units	1,530 units	1,730 units
Residential square footage	1,499,909 s.f.	1,695,975 s.f.
Residential floor area ratio	220%	225%

Commercial Retail square footage	88,000	200,000 s.f.
Commercial Retail floor area ratio	5.5% of office zoned area	12.6%
Office square footage	1,225,000 s.f.*	1,600,000 s.f.*
Office floor area ratio	86.5%	113%
Hotel rooms	193	n/a

* Office includes the non-residential commercial square footage from the R-MU zoning district.

Table 6-12 from the Draft EIR contains a comparison of the impacts of the proposed project to the project alternatives. Table 6-12 is included in Attachment I. The No Project Alternative would be the environmentally superior alternative. State CEQA Guidelines Section 15126.6(e)(2) states that when the no-project alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives. Selection of an environmentally superior alternative necessitates weighing of numerous environmental considerations. No other alternative is environmentally superior for all resource areas, as shown in Table 6-12, and so the City must balance environmental impacts in determining which alternative is the environmentally superior alternative. The detailed analysis for the environmental superior alternative is included in Chapter 6 of the Draft EIR.

None of the alternatives (other than the No Project Alternative) would reduce the proposed project's significant and unavoidable construction noise and vibration impacts to a less-than-significant level. The Base Level Development Alternative and the Reduced Intensity Alternative would reduce the proposed project's project-level and cumulative operational air quality impacts related to ROG emissions to a less than-significant level with mitigation. The Base Level Development Alternative would result in the greatest reduction (19 net lbs/day of ROG compared to 53.6 net lbs/day under the Reduced Intensity Alternative). Therefore, the Base Level Development Alternative is the environmentally superior alternative. In considering the Base Level Development Alternative, the City will need to balance the tradeoff of a base level development that does not result in significant and unavoidable air quality impacts related to ROG with the lack of community amenities that would be provided with a bonus level project in exchange for the increased density, intensity, and height.

Next steps

As previously mentioned, the comment period on the Draft EIR is currently open through May 23, 2022. Once the Draft EIR comment period is completed, the environmental consultant will review and respond to all substantive comments received in what is referred to as a "Response to Comments" document or Final EIR. The Final EIR will be circulated a minimum of 10-days prior to the Planning Commission's review and recommendation on the Final EIR and associated entitlements to allow for public review and comments prior to the public hearings by the Planning Commission and City Council. The EIR must be certified before final action can be taken on the proposed project. Certification of the Final EIR does not require that the City Council approve the requested land use entitlements.

Study session

Please refer to the earlier section of this staff report for a general overview of the masterplan proposal. This portion of the report highlights a variety of topic areas for consideration during this study session.

Open space

The proposed project includes multiple parks, plazas, landscaping, and open space pathways throughout the project site. The proposal generally aggregates the publicly accessible open space into a 3.5-acre publicly accessible park, a town square plaza, 2-acre elevated linear park, and a dog park. The proposed master plan includes a minimum required open space (both publicly accessible and general/common open space) that the build out of the project would be required to comply with. However, the masterplan also includes an illustrative open space exhibit that shows the potential open space to be provided with the project. The amount of open space, as currently identified, would exceed the minimum standard proposed in the CDP. Please refer to the open space exhibit in master plan (Attachment D) for more details on the proposed open space.

In addition to the publicly accessible open space, the site plan includes a substantial amount of open space and landscaping within the mixed use and residential buildings for use by the residents and a series of landscaped areas, courtyards, and plazas within the Campus District for use by the employees. The private open space for the residents would include both common and private open space, consistent with the Zoning Ordinance requirements. Table 6 below identifies the minimum open space requirement for each district and the proposed open space for the project.

Table 2: Open Space and Landscaping Requirements

Zoning District	Base Level	Bonus Level	Min Req. Acres*	Proposed project (Current Project)
R-MU-B	25%	25%	4.3	
0-B	30%	30%	11	
Total	-	-	15.3	19.6

Approximately 8.2 acres of the 19.6 acres of minimum proposed open space, identified in the CDP, would be publicly accessible, which exceeds the approximately 6.6 acres of open space required to be publicly accessible (based on the aggregate of each zoning district standard). The project would include a publicly accessible 3.5 acre park, a dog park, a town square, and an elevated linear park. The elevated park would provide access from Hamilton Avenue Parcel North to the project site for bicyclists and pedestrians. This would provide an additional grade separated access to the main project site. In general, all currently proposed open space appears to the meet the requirements of the Zoning Ordinance, which are included in Attachment J for reference. Staff will be further evaluating the publicly accessible open space proposed for the project to ensure compliance with the Zoning Ordinance standards.

Publicly accessible open space
As defined in the Zoning Ordinance, paseos are pedestrian and bicycle paths that provide public access through one or more parcels and to public streets and/or other paseos. The adopted Zoning Map identifies the locations of new paseos in the Bayfront Area, including multiple paseo locations within the main project site. The applicant is requesting a General Plan Circulation Element and Zoning Map amendment to modify the locations of these paseos throughout the main project site. These include the multi-use pathway along the eastern edge of the site, connecting with an east-to-west pathway along the northern edge of the main project site that would link to the proposed Willow Road Tunnel. The elevated park would function as an east-to-west paseo and the enhanced streetscape along Main Street would also function similar to a paseo. Along the eastern edge of the main project site, the applicant is currently proposing to construct the entire minimum 20-foot width of the paseo (identified on the Zoning Map as shared between the main project site and the 1350 Adams Court/1305 O'Brien Drive parcel. The project plans identify details for the eastern

paseo, enhanced main street bike/pedestrian facilities, and the elevated park.

The majority of the publicly accessible open space would be located within a 3.5 acre publicly accessible park along Willow Road at the southwestern corner of the main project site. The applicant team has indicated that programming for the proposed publicly accessible park is underway and it could be developed as a passive or active open space. To provide flexibility the City studied the publicly accessible park as an actively programmed park in the Draft EIR.

Additionally, the proposed project would include a town square gathering space adjacent to the hotel, meeting and collaboration space, and office campus. The town square would include access to the elevated park and be located in a central site location bringing together the Campus District, hotel, and residential/retail uses.

Trees and landscaping

The main project site currently contains 784 trees, which are planted mainly in parkways and pavement cutouts adjacent to buildings, parking lots, and streets. Of the existing trees, 274 qualify as “heritage trees,” per the City’s Heritage Tree Ordinance. Per the most recent project plans, project arborist report, and heritage tree removal permits, 760 existing trees (266 heritage trees and 494 non-heritage trees) would be removed for construction of the proposed project, including the grading required to raise the main project site above the floodplain elevation. Eight heritage trees and 16 non-heritage trees would remain in place. Current site plans include planting approximately 822 new trees. Heritage tree replacements would meet the City’s replacement value requirements, based on the valuation of the existing heritage trees proposed to be removed. The main project site would include both native and adapted trees.

Hamilton Avenue Parcels North and South contain 141 trees, with 18 qualifying as heritage trees. The 18 heritage trees comprise two species: 13 coast redwoods and five coast live oaks. At Hamilton Avenue Parcels North and South, approximately 61 trees, including street trees and three heritage trees, would be removed to accommodate proposed changes; new landscaping would be provided along street frontages. Heritage tree removal permits have been filed by the applicant and are currently under review by the City Arborist and Planning Division.

Transportation demand management (TDM)

The City requires all new developments in the R-MU and O zoning districts to reduce their trip generation by 20 percent from standard trip generation rates via TDM strategies. The City has applied the 20 percent reduction after crediting for any trip reductions based on a project’s proximity to complementary land uses, alternative transportation facilities, as well as reductions based on a project’s mixed-use characteristics. As implemented by the City, this TDM ordinance is applied to daily trips, AM peak hour trips, and PM peak hour trips. Per the adjustment request submitted by the applicant team (Attachment K), the applicant is proposing the following regarding the TDM plan:

For the Campus District, the applicant proposes a daily trip cap of 18,237 trips, and a trip cap of 1,670 trips during the AM and PM peak hours.

- The daily trip cap represents a 20 percent reduction from gross ITE (institute of transportation engineers) trip generation.
- The peak hour trip cap represents a 35-40 percent reduction from gross ITE trip generation.

For the Residential/Shopping and Town Square Districts, the applicant proposes a 20 percent reduction from gross ITE trip generation for daily, and a 20 percent and 27 percent reduction from gross ITE trip

generation during the AM and PM peak hours of commute, respectively.

The applicant is requesting an adjustment, which could be enabled through the CDP, to calculate the 20 percent trip reduction from the gross ITE rates. The City's Transportation and Planning Divisions continue to evaluate this request to determine the appropriateness of this adjustment compared to the City's General Plan and Circulation Element goals, policies, and programs. The transportation impact analysis prepared for the proposed project applied the applicant's requested adjustment, studying the potential effects (CEQA and non-CEQA) with a higher number of trips.

The applicant is proposing a trip cap for the Campus District that would operate similar to the existing trip caps on the East and West Campus that would be monitored daily. For the non-Campus district uses (retail, residential, and hotel), the City is evaluating an appropriate monitoring plan, which is anticipated to include annual counts similar to recently approved and conditioned projects in the Bayfront Area. This annual monitoring would be different than the trip cap monitoring for the Campus District.

Level of service or roadway congestion analysis (non-CEQA transportation analysis)
As previously mentioned, LOS is no longer a CEQA threshold of significance; however, the City's TIA Guidelines require that the TIA also analyze LOS for planning purposes. The LOS analysis determines whether the project traffic would cause an intersection LOS to be potentially noncompliant with local policy if it degrades the LOS operational level or increases delay under near term and cumulative conditions. The LOS and delay thresholds vary depending on the street classifications as well as whether the intersection is on a State route or not. Attachment L includes an excerpt from the Transportation Chapter of the Draft EIR that further explains the LOS thresholds and the identified deficiencies and recommended improvements measures to comply with the TIA Guidelines. Where deficiencies are identified, the TIA Guidelines require consideration of improvement measures.

Near-term (2025) plus project conditions
Staff is currently evaluating the recommended improvement measures and will provide a more detailed analysis on which measures staff believes are feasible and which are infeasible for the Planning Commission and City Council's consideration of the entitlements and certification of the Final EIR. Potentially feasible improvement measures were identified at the following intersections (including intersections in East Palo Alto):

- Marsh Road and Bayfront Expressway (lane modifications)
- Chilco Street and Hamilton Avenue (signalization)
- Willow Road Corridor (adaptive signal timing)
- O'Brien Drive and Kavanaugh Drive (signalization or traffic calming measures)
- Adams Drive and O'Brien Drive (signalization)
- University Avenue and Bay Road (fair share contribution)
- US 101/University Avenue Interchange (fair share contribution)

Cumulative (2040) plus project conditions
For any potential intersection improvements to address cumulative impacts, the applicant would be required to pay its fair share contribution on the net increase in trips through the intersection, if incorporated as a condition in the CDP. Since improvements identified for the cumulative scenario would not be constructed by the project applicant directly, the improvements are not listed below. Please refer to Attachment L for more detailed discussion on the cumulative intersection improvements.

Below market rate (BMR) ordinance and BMR Guidelines

The City's BMR Housing Program Guidelines requires a minimum of 15 percent of the proposed dwelling units for residential development projects with 20 or more units be set aside for low-income households or an equivalent alternative. The proposed project includes commercial retail and office spaces that would be required to provide below market rate housing units on site or off site, or and/or pay the commercial linkage fee. The applicant is currently proposing 308 BMR units, inclusive of the 260 inclusionary units and 48 units associated with the non-residential square footage (based on the net increase in commercial office and non-office land uses).

The applicant's proposal includes a 120-unit stand-alone age-restricted senior BMR building. The senior units would be a mix of extremely low and very low income units. The balance (188 units) would be low and moderate income units distributed throughout the balance of the residential buildings. The applicant's proposal includes units with a mix of household incomes that are intended to average to low income equivalency; however, the majority of the remaining BMR units would be moderate income units. The applicant is requesting an adjustment to the BMR Guidelines, through the CDP, to allow for additional income limit tiers within the moderate income category. This would provide some additional affordability for households at the 90 percent, 100 percent, and 110 percent AMI; however, there could be implementation challenges with this request. The City's Housing Division is further evaluating the income mix of units and the requested adjustment for compliance with the City's adopted goals, policies, and programs of the Housing Element, General Plan, BMR Guidelines, and Zoning Ordinance.

In addition to the adjustment for additional income limits, the BMR proposal includes a request to remove the 75 percent rent cap limit for BMR units. The City has a requirement in the BMR Guidelines that in no instance can the rent for a BMR unit exceed 75 percent of the market rents for similar units within the proposed project. This is designed to ensure affordability, especially during market swings that may quickly and drastically affect the asking rent of market rate units. The applicant's proposal states that the removal of this limit would allow the applicant to broaden the range of income levels within the project to target more units at 80 percent AMI and lower tiers of moderate income levels (see earlier adjustment request). City staff in the Housing and Planning Division's continue to evaluate this request and will provide more information for the Housing Commission, Planning Commission, and City Council to consider at future public meetings. Please see the applicant's BMR proposal (Attachment M) for more information on the unit income breakdown, size of units, and the adjustment requests.

Design standards

In the R-MU-B and O zoning districts, all new construction and building additions of 10,000 square feet of GFA or more must meet design standards subject to architectural control review. The design standards regulate the siting and placement of buildings, landscaping, parking, and other features in relation to the street; building mass, bulk, size, and vertical building planes; ground floor exterior facades of buildings; open space, including publicly accessible open space; development of paseos to enhance pedestrian and bicycle connections between parcels and public streets in the vicinity; building design, materials, screening, and rooflines; and site access and parking. The applicant is requesting modifications from the Zoning Ordinance design standards that can be enabled through the CDP. The applicant's submitted materials refer to these modifications as adjustments and the staff report discussion below will refer to these modifications as "adjustment requests" for consistency with the applicant's submittal materials. With the exception of the requested adjustments, the proposed project would comply with the design standards of the Zoning Ordinance. As staff continues to review the master plan and individual architectural control packages, additional compliance documentation may be required to ensure compliance with the requirements of the Zoning Ordinance and/or the requested modifications in the CDP.

The applicant's study session presentation will provide the Planning Commission and members of the

community with an overview of the proposed architectural design and materials for the Phase 1 buildings on the main project site, which include the Hotel Site, Office Campus, Town Square, Meeting and Collaboration Space (MCS), Mixed Use Parcel 2, Mixed Use Parcel 3, Mixed Use Parcel 4, Mixed Use Parcel 5, Mixed Use Parcel 6, and Mixed Use Parcel 7. The Phase 2 buildings on the main project site would be reviewed at a later date by the Planning Commission. The reconstruction of the Chevron service station (Hamilton Avenue Parcel South) and any potential expansion of the retail uses on the Hamilton Avenue Parcel North are anticipated to be reviewed generally around the same time as the Phase 2 buildings for the main project site. The following section discusses the applicant's requested Zoning Ordinance adjustments, that could be enabled through the CDP. More details on the proposed building specific adjustment requests are included in the various attachments. The Planning Commission should use this opportunity to review and ask clarifying questions on these adjustment requests.

According to the applicant team, the adjustment requests on the following design elements are necessary to create architectural variation throughout the overall master plan (these may be recurring amongst buildings or building specific requests):

- Building Modulation (Minor and Major);
- Building Step-backs;
- Minimum Base Height;
- Roof Modulations;
- Building Projections;
- Building and Garage Entrances.
- Senior Parking Standards (Vehicles/bicycles);
- Above Ground Parking Structures (Campus District); and
- Retail Building Height (Mixed use buildings with retail uses).

For the above listed requests, the applicant has prepared detailed adjustment requests and justifications for consideration. The adjustment requests include a discussion of the building/site specific reason for the adjustment request, the applicant's proposed modification, and how the modification meets the intent of the design standard in the Zoning Ordinance. The following list of attachments includes the projects plans and the adjustment requests for the Commission's review.

Office Campus and Meeting and Collaboration Space

- Attachment N (Hyperlink to Office Campus architectural control plan set)
- Attachment O (Office Campus renderings, materials board, and adjustment request)
- Attachment P (Hyperlink to Meeting and Collaboration Space architectural control plan set)
- Attachment Q (Meeting and Collaboration Space renderings, materials board, and adjustment request)

Hotel and Town Square

- Attachment R (Hyperlink to Hotel architectural control plan set)
- Attachment S (Hotel renderings, materials board and adjustment request)
- Attachment T (Hyperlink to Town Square architectural control plan set)
- Attachment U (Town Square renderings, materials board, and adjustment request)

Residential and mixed use buildings

- Attachment V (Hyperlink to Parcel 2 architectural control plan set)
- Attachment W (Parcel 2 renderings, materials board, and adjustment request)

- Attachment X (Hyperlink to Parcel 3 architectural control plan set)
- Attachment Y (Parcel 3 renderings, materials board, and adjustment request)
- Attachment Z (Hyperlink to Parcel 6 architectural control plan set)
- Attachment AA (Parcel 6 architectural control plan set)
- Attachment BB (Hyperlink to Parcel 7 architectural control plan set)
- Attachment CC (Parcel 7 renderings, materials board, and adjustment request)

As staff develops the draft CDP, more detailed analysis of each adjustment request will be provided for the Planning Commission and City Council to review and consider in whether to approve the CDP.

Green and sustainable building regulations

The proposed project would, at a minimum, comply with the green and sustainable building requirements of the Zoning Ordinance, the City's Reach Code, and EV Charger Ordinance. The summary below includes the City's requirements for the proposed project:

- Meet 100 percent of its energy demand through any combination of on-site energy generation, purchase of 100 percent renewable electricity, and/or purchase of certified renewable energy credits;
- Be designed to meet LEED (Leadership in Energy and Environmental Design) Gold BD+C (Building Design + Construction);
- Comply with the electric vehicle (EV) charger requirements adopted by the City Council in November 2018;
- Meet water use efficiency requirements including the use of recycled water for all City-approved non-potable applications;
- Locate the proposed buildings 24 inches above the Federal Emergency Management Agency (FEMA) base flood elevation (BFE) to account for sea level rise;
- Plan for waste management during the demolition, construction, and occupancy phases of the project (including the preparation of the required documentation of zero waste plans); and
- Incorporate bird friendly design in the placement of the building and use bird friendly exterior glazing and lighting controls.

In addition, the proposed project would be required to use electricity as the only source of energy for all appliances used for space heating, water heating, cooking, and other activities, consistent with the City's reach code, with the exception of commercial kitchens that may appeal to use natural gas. The proposed project would be net zero for non-transportation operational greenhouse gas emissions. The project proposes to use natural gas for commercial kitchens but the on-site renewable energy generation would off-set any natural gas used in building operations (cooking), any tenants that do not purchase 100 percent renewable energy through PCE, and the routine testing of diesel generators.

The proposed project includes a request to modify the City's bird friendly design standard requirements, allowing for alternative applications to reduce the potential impacts to birds. The applicant submitted a Bird Safe Design Assessment that was peer reviewed by the City's environmental consultant and determined to meet the City's bird safe requirements. The alternate measures recommended by the assessment report are anticipated to be incorporated into the CDP. The report is included in Attachment DD.

Community amenities

Bonus level development is allowed in exchange for the provision of community amenities. Community amenities are intended to address identified community needs that result from the effect of the increased development intensity on the surrounding community. As part of the ConnectMenlo process, a list of

community amenities was generated based on robust public input and adopted by resolution of the City Council. The Zoning Ordinance identifies several mechanisms for providing amenities, including selecting an amenity from the Council-approved list as part of the proposed project, paying the community amenities in-lieu fee, or providing an amenity not on the approved list through a development agreement. The current list of Council approved community amenities is included as hyperlink Attachment EE. The value of the amenity to be provided must equal a minimum of 50 percent of the fair market value of the additional GFA of the bonus level development.

The City commissioned Fabbro, Moore & Associates, Inc. to perform a peer-appraisal of the applicant's proposed project. The City's draft peer-appraisal determined that the project's community amenities obligation would amount to $133,300,000 (hyperlink Attachment FF).

Staff anticipates bringing the applicant's community amenities proposal and the City's evaluation of the proposal to the City Council on May 10, 2022 for a study session on the proposed community amenities. The applicant's proposal and staff's evaluation will be available for review concurrent with the publication of the staff report for the May 10, 2022 City Council study session. Interested parties are encouraged to participate in the study session on May 10, 2022. The City Council will ultimately consider the proposed community amenities alongside the requested land use entitlements as part of the final actions on the proposed project. Through that review, the City Council will determine whether to approve the requested bonus level development intensity and density in exchange for the proposed community amenities.

Planning Commission considerations

The following key topics are provided by staff for the Planning Commission's consideration. The Commission should use the study session as an opportunity to review the project, receive public comment and ask clarifying questions.

- Site layout, including proposed open space
- Architectural design and Zoning Ordinance adjustment requests
- Project variant with increased residential units
- General Plan Circulation Element and Zoning Map amendment
- TDM adjustment request to utilize gross vs. net trips for the trip reductions
- BMR Proposal and associated adjustments to the BMR Guidelines
- Roadway Congestion (LOS) intersection improvements

Correspondence

As of the writing of this report, staff has received four items of correspondence on the Draft EIR or the project in general. The comment letters are included in Attachment GG. All substantive comments received on the Draft EIR will be included and addressed as part of the final EIR.

Impact on City Resources

The applicant is required to pay Planning, Building and Public Works permit fees, based on the City's Master Fee Schedule, to fully cover the cost of staff time spent on the review of the proposed project. The applicant is also required to fully cover the cost of work by consultants performing environmental review and additional analyses to evaluate potential impacts of the project.

Environmental Review

A Draft EIR has been prepared for the proposed project. Following the close of the comment period, staff and its consultant will compile the response to comments document, and will consider and respond to substantive comments received on the Draft EIR. Repeat comments may be addressed in Master Responses, and portions of the EIR may be revised in ~~strikethrough~~ (deleted text) and underline (new text) format. Once the responses and revisions are complete, the Final EIR will be released, consisting of the Response to Comments document plus the Draft EIR. The Final EIR will be considered for certification in compliance with CEQA by the City Council, with the Planning Commission providing a recommendation, prior to the final project actions.

Public Notice

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. Public notification also consisted of publishing a notice in the local newspaper and notification by mail of owners and occupants within a ¼ miles radius of the subject property.

Attachments

A. Location Map
B. Project milestones and meeting summary
C. Master plan site plan
D. Hyperlink Master plan project plans: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/december-2021/masterplan-plan-set-december-2021.pdf
E. Hyperlink Draft EIR: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/draft-eir/willow-village-master-plan-draft-environmental-impact-report.pdf
F. Hyperlink: Notice of Preparation: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/willow-campus_scoping-and-study-session-with-nop.pdf
G. Summary of Draft EIR impacts – Table ES-1 of Draft EIR
H. Hyperlink: City-maintained project page: https://beta.menlopark.org/Government/Departments/Community-Development/Projects/Under-review/Willow-Village
I. Project and alternatives impact comparison – Table 6-12 of Draft EIR
J. Zoning Ordinance open space requirements excerpt
K. Transportation Demand Management requested adjustment (Applicant proposal)
L. Non-CEQA LOS section of the Draft EIR excerpt
M. Below Market Rate housing proposal
N. Hyperlink to Office Campus architectural control plan set: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/september-2021/20220411-willow-village_architectural-control_office-campus.pdf
O. Office Campus renderings, materials board, and adjustment request
P. Hyperlink to Meeting and Collaboration Space architectural control plan set: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/september-2021/20220411-willow-village_architectural-control_meeting-and-collaboration-space.pdf
Q. Meeting and Collaboration Space renderings, materials board, and adjustment request
R. Hyperlink to Hotel architectural control plan set: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/september-2021/20220411-willow-village_architectural-control_hotel.pdf

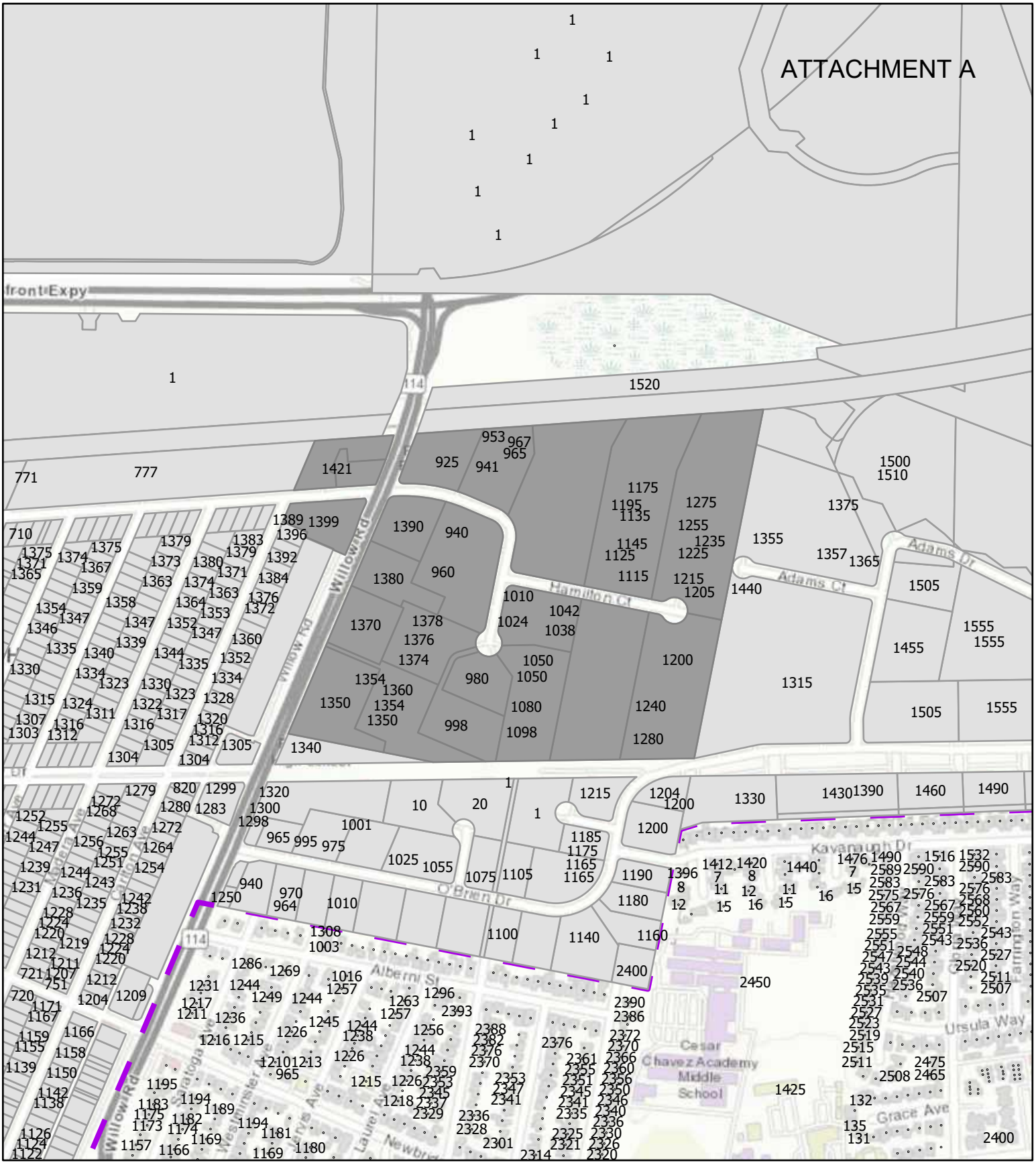
S. Hotel renderings, materials board and adjustment request
T. Hyperlink to Town Square architectural control plan set: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/september-2021/20220411-willow-village_architectural-control_town-square.pdf
U. Town Square renderings, materials board, and adjustment request
V. Hyperlink to Parcel 2 architectural control plan set: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/september-2021/20220411-willow-village_architectural-control_mixed-use-parcel-2.pdf
W. Parcel 2 renderings, materials board, and adjustment request
X. Hyperlink to Parcel 3 architectural control plan set: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/september-2021/20220411-willow-village_architectural-control_mixed-use-parcel-3.pdf
Y. Parcel 3 renderings, materials board, and adjustment request
Z. Hyperlink to Parcel 6 architectural control plan set: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/september-2021/20220411-willow-village_architectural-control_residential-parcel-6.pdf
AA. Parcel 6 renderings, materials board, and adjustment requests
BB. Hyperlink to Parcel 7 architectural control plan set: https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/september-2021/20220411-willow-village_architectural-control_residential-parcel-7.pdf
CC. Parcel 7 renderings, materials board, and adjustment request
DD. Bird Safe Design Assessment
EE. Hyperlink: Community Amenities List - https://www.menlopark.org/DocumentCenter/View/15009/6360---Community-Amenities?bidId
FF. Hyperlink: City's draft community amenities appraisal for bonus level development - https://beta.menlopark.org/files/sharedassets/public/community-development/documents/projects/under-review/willow-village/draft-willow-village-community-amenities-appraisal.pdf
GG. Correspondence

Disclaimer

Attached are reduced versions of maps and diagrams submitted by the applicants. The accuracy of the information in these drawings is the responsibility of the applicants, and verification of the accuracy by City Staff is not always possible. The original full-scale maps, drawings and exhibits are available for public viewing at the Community Development Department.

Report prepared by:
Kyle Perata, Acting Planning Manager

Report reviewed by:
Corinna Sandmeier, Acting Principal Planner
Leila Moshref-Danesh, Assistant City Attorney



CITY OF MENLO PARK

LOCATION MAP

WILLOW VILLAGE

Scale: 1:7,000 Drawn By: KTP Checked By: KTP Date:1/10/2022

N

A
A1

Attachment B: Project Meetings and Milestones	
Milestone	**Date**
Project submittal	July 2017
Planning Commission study session	February 2018
City Council study session	March 2018
Revised project submitted with current land uses and site plan	February 2019
Notice of Preparation for EIR released	September 18, 2019
Planning Commission EIR scoping session and study session	October 7, 2019
City Council review and confirmation on EIR scope and content	December 16, 2019
Draft EIR released for public review and comment	April 8, 2022
Planning Commission Draft EIR public hearing and study session	April 25, 2022

LEGEND	
1	Town Square
2	Grocery Store on Ground Level
3	Publicly Accessible Park
4	Publicly Accessible Dog Park
5	Elevated Park Access (Elevator and Stairs)
6	Elevated Park
7	Hotel
8	Mixed-Use Block
9	Residential Block
10a	Office Campus
10b	Meeting & Collaboration Space
11	Parking Garage with Transit Hub on Ground Level
12	Proposed Multi-use Pathway
13	Willow Road Tunnel
14	Realigned Hamilton Avenue
15	Hamilton Avenue Parcel North
16	Hamilton Avenue Parcel South

MASTER PLAN
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

G2.01
Conceptual Master Plan
December 23, 2021

Summary Tables

Information in Table ES-1, *Summary of Impacts and Mitigation Measures*, (a) describes impact topics considered in the EIR, (b) level of significance without mitigation, (c) recites recommended mitigation measures, and (d) recites level of significance with mitigation. Levels of significance are categorized as follows:

NI	No Impact
LTS	Less than Significant
PS	Potentially Significant
LTS/M	Less than Significant with Mitigation
SU/M	Significant and Unavoidable with Mitigation

For a complete description of potential impacts and recommended mitigation measures, please refer to the specific topic discussion in Chapter 3.

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
3.1 Land Use			
Impact LU-1: Conflicts with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect. The Proposed Project would not result in a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation with jurisdiction over the Proposed Project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	LTS	None required	N/A
Impact C-LU-1: Cumulative Land Use Impacts. Cumulative development would not result in a significant cumulative impact to land use, and the Proposed Project would not be a cumulatively considerable contributor to such cumulative impact.	PS	***ConnectMenlo Mitigation Measure LU-2:*** Prior to project approval, as part of the project application process, future development in Menlo Park is required to demonstrate consistency with the applicable goals, policies, and programs in the General Plan and the supporting Zoning standards to the satisfaction of the City of Menlo Park's Community Development Department. A future project is consistent with the General Plan and Zoning standards if, considering all its aspects, it will further the goals, policies and programs of the General Plan and supporting Zoning standards and not obstruct their attainment.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
3.2 Aesthetics			
Impact AES-1: Substantial Adverse Effect on Scenic Vista. The Proposed Project would not result in a substantial adverse effect on scenic vistas.	LTS	None required	N/A
Impact AES-2: Conflict with Applicable Zoning and Other Regulations Governing Scenic Quality. The Proposed Project would not conflict with applicable zoning or other regulations governing scenic quality.	LTS	None required	N/A
Impact AES-3: The Proposed Project would not create new Sources of Light and Glare. The Proposed Project would not create a new source of substantial light or glare that could adversely affect daytime or nighttime views in the area.	LTS	None required	N/A
Impact C-AES-1: Cumulative Aesthetic Impacts. Cumulative development would result in less than significant cumulative aesthetic impact, and thus the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact to aesthetic.	LTS	None required	N/A
3.3 Transportation			
Impact TRA-1: The Proposed Project would not conflict with Applicable Plans, Ordinances, or Policies. The Proposed Project would not conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact TRA-2: The Proposed Project would exceed an applicable VMT threshold of significance. The Proposed Project would exceed the applicable VMT threshold of significance for the residential land use and would result in a significant impact.	PS	***Mitigation Measure TRA-2*:** The residential land use of the Project Site will be required to implement a TDM Plan achieving 19% active TDM trip reduction from ITE trip generation rates equivalent to 6,023 daily trips. Should a different number of residential units be built, the total daily trips will be adjusted accordingly. The required residential TDM Plan will include annual monitoring and reporting requirements on the effectiveness of the TDM program. The Project applicant will be required to work with City staff to identify the details of the TDM plan. If the annual monitoring finds that the TDM reduction is not met (i.e. the Proposed Project exceeds 6,023 daily trips from the residential land use), the TDM coordinator will be required to work with City staff to detail next steps to achieve the TDM reduction.	LTS/M
Impact TRA-3: The Proposed Project would substantially increase hazards due to a design feature or incompatible uses. The Proposed Project includes a design feature that could increase hazards and would result in a significant impact.	PS	***Mitigation Measure TRA-3*:** Revise the North Garage access design to provide adequate sight distance for the eastern driveway or incorporate other design solutions to reduce hazards to the satisfaction of the Public Works Director. Potential solutions that would reduce hazards to a less than significant level include restricting the eastern driveway to inbound vehicles only or prohibiting exiting left turns, modifying landscaping or relocating the driveway to the west to allow for adequate sight distance for exiting vehicles, or installing an all-way stop or signal.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact TRA-4: The Proposed Project would not result in inadequate emergency access. The Proposed Project would not result in inadequate emergency access.	LTS	None required	N/A
Impact C-TRA-1: Conflicts with Applicable Plans, Ordinances, or Policies.	LTS	None required	N/A
Impact C-TRA-2: Vehicle Miles Traveled.	PS	Implement ***Mitigation Measure TRA-2*** above.	LTS/M
Impact C-TRA-3: Hazards or Incompatible Uses.	PS	Implement ***Mitigation Measure TRA-3***, above.	LTS/M
Impact C-TRA-4: Emergency Access.	LTS	None required	N/A
3.4 Air Quality			
Impact AQ-1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan. The Proposed Project would conflict with or obstruct implementation of the applicable air quality plan.	PS	***Project Mitigation Measure AQ-1.1: Use Clean Diesel-powered Equipment during Construction to Control Construction-related Emissions.*** The Project Sponsor shall either: • Ensure all off-road construction equipment with greater than 25 horsepower and operating for more than 20 hours total over the entire duration of construction activities have engines that meet or exceed either EPA or ARB Tier 4 Final off-road emission standards. The exception to this requirement allows a cumulative total of 618,028 horsepower-hours over the duration of construction activities before residents move onsite and 34,716 horsepower-hours over the duration of construction activities after residents move onsite from the operation of off-road construction equipment that meets standards less than Tier 4 Final; or • Prior to issuance of building permits, provide supplemental analysis prepared by a qualified air quality specialist to the City for approval that shows that	SU/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		emissions of ROG and NO_X, the excess lifetime cancer risk, and the $PM_{2.5}$ concentration would not exceed the thresholds from the 2017 BAAQMD CEQA Air Quality Guidelines using the mix of equipment proposed by the applicant. ***Project Mitigation Measure AQ-1.2: Architectural Coatings.*** The Project Sponsor shall use super-compliant architectural coatings during construction and operation for all buildings, which shall have VOC content that meet SCAQMD Rule 1113 Architectural Coatings as revised on February 5, 2016.	
Impact AQ-2: Cumulatively Considerable Net Increase in Criteria Pollutants. The Proposed Project would result in a cumulative net increase in a criteria pollutant for which the Project region is classified as a nonattainment area under an applicable federal or ambient air quality standard.	PS	Implement ***Mitigation Measures AQ-1.1 and AQ-1.2*****,** above, plus: ***ConnectMenlo Mitigation Measure AQ-2b1*****:** Prior to building permit issuance, the City shall require applicants for all development projects in the city to comply with the current Bay Area Air Quality Management District's (BAAQMD) basic control measures for reducing construction emissions of PM_{10} (Table 8-1, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the BAAQMD CEQA Guidelines). ***ConnectMenlo Mitigation Measure AQ-2b2*****:** Prior to issuance of a building permit, development projects in the City that are subject to CEQA and exceed the screening sizes in the BAAQMD's CEQA Guidelines shall prepare and submit to the City of Menlo Park a technical assessment evaluating potential project construction-related air quality impacts. The evaluation shall be prepared in conformance with the BAAQMD methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the BAAQMD thresholds of significance, as identified in the BAAQMD CEQA Guidelines,	SU/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		the project applicant is required to incorporate mitigation measures to reduce air pollutant emissions during construction activities to below these thresholds (e.g., Table 8-2, Additional Construction Mitigation Measures Recommended for projects with Construction Emissions Above the Threshold of the BAAQMD CEQA Guidelines, or applicable construction mitigation measures subsequently approved by BAAQMD). These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans), subject to the review and approval of the Planning Division prior to building permit issuance. (The AQTR prepared and submitted for the Proposed Project fulfills the air quality technical assessment requirement.)	
Impact AQ-3: Expose Sensitive Receptors to Substantial Pollutant Concentrations. The Proposed Project would expose sensitive receptors to substantial pollutant concentrations.	PS	Implement ***Project Mitigation Measure AQ-1.1 and ConnectMenlo Mitigation Measures AQ-2b1 and AQ-2b2***, above.	LTS/M
Impact AQ-4: Other Air Emissions. The Proposed Project would result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people.	PS	***Project Mitigation Measure AQ-4.1: Molecular Neutralizer for Odors.*** The Project Sponsor and West Bay Sanitary District shall install a molecular neutralizer at the proposed sanitary sewer pump station to convert hydrogen sulfide gas into a biodegradable effluent during sewer pump operations. The molecular neutralizer shall be installed prior to the commencement of sewer pump operations.	LTS/M
Impact C-AQ-1: Cumulative Air Quality Impacts. Cumulative development would result in a significant and unavoidable cumulative impact on air quality; thus, the Proposed Project would be a cumulatively considerable contributor to a significant cumulative impact on air quality.	PS	Implement ***Project Mitigation Measure AQ-1.1 and ConnectMenlo Mitigation Measures AQ-2b1 and AQ-2b2***.	SU/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
3.5 Energy			
Impact EN-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources. The Proposed Project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation.	LTS	None required.	N/A
Impact EN-2: Conflict with Energy Plan. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTS	None required	N/A
Impact C-EN-1: Cumulative Energy Impacts. Cumulative development would result in a less-than-significant cumulative impact on energy resources; thus, the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on energy resources.	LTS	None required	N/A
3.6 Greenhouse Gas Emissions			
Impact GHG-1a: Generation of GHG Emissions during Construction. Construction of the Proposed Project would not generate GHG emissions that may have a significant impact on the environment.	LTS	None required.	N/A
Impact GHG-1b: Generation of GHG Emissions during Operation. Operation of the Proposed Project would generate GHG emissions that may have a significant impact on the environment.	PS	Implement ***Mitigation Measure TRA-2***, above.	LTS/M
Impact GHG-2: Conflicts with Applicable Plans and Policies. The Proposed Project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions or GHGs.	PS	Implement ***Mitigation Measure TRA-2***, above.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
3.7 Noise			
Impact NOI-1a: Construction Noise. Construction of the Proposed Project would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.	PS	***Modified ConnectMenlo Mitigation Measure NOISE-1c.*** Project applicants for all development projects in the city shall minimize the exposure of nearby properties to excessive noise levels from construction-related activity through CEQA review, conditions of approval and/or enforcement of the City's Noise Ordinance. Prior to issuance of demolition, grading, and/or building permits for development projects, a note shall be provided on development plans indicating that during on-going grading, demolition, and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise: • All internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers, air intake silencers, and/or engine shrouds that are no less effective than as originally equipped by the manufacturer. • Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses. • Stockpiling is located as far as feasible from nearby noise-sensitive receptors. • Limit unnecessary engine idling to the extent feasible. • Limit the use of public address systems. • Construction traffic shall be limited to the haul routes established by the City of Menlo Park. ***Mitigation Measure NOI-1.1: Construction Noise Control Plan to Reduce Construction Noise.*** The Project applicant and/or the contractor(s) shall obtain a permit to complete work outside the	SU/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		exempt/standard construction hours outlined in the City of Menlo Park Municipal Code, which may be incorporated into the conditional development permit for the Proposed Project. In addition, the applicant and/or contractor(s) shall develop a construction noise control plan to reduce noise levels and comply with Municipal Code daytime (during non-exempt hours) and nighttime noise standards to the extent feasible and practical, subject to review and determination by the Community Development Department. The plan shall also include measures to reduce noise levels such that a 10-dB increase over the ambient noise level does not occur at nearby noise-sensitive land uses, such as schools and residences to the extent feasible and practical (as determined by the City). Finally, the plan shall include measures to reduce pile driving noise such that noise from this equipment does not exceed 85 dBA L_{eq} at a distance of 50 feet, as feasible. The plan shall demonstrate that, to the extent feasible and practical, noise from construction activities that occur daily between 7:00 and 8:00 a.m. or between 6:00 p.m. and 10:00 p.m. will comply with the applicable City of Menlo Park noise limit of 60 dBA at the nearest existing residential or noise-sensitive land use, and construction activities that occur between 10:00 p.m. and 7:00 a.m. will comply with the applicable City noise limit of 50 dBA at the residential or noise-sensitive land use. The plan shall also demonstrate that, to the extent feasible and practical (as determined by the City), noise from construction activities during all hours will not result in a 10 dB increase over the ambient noise level at the nearest noise-sensitive land uses, and that pile driving noise would not exceed 85 dBA L_{eq} at a distance	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		of 50 feet. This Noise Control Plan shall be approved by the City prior to the issuance of building permits to confirm the precise noise minimization strategies that will be implemented and to document that strategies will be employed to the extent feasible and practical. Measures to help reduce noise from construction activity to these levels shall be incorporated into this plan and may include, but are not limited to, the following: • To the extent feasible and practical, plan for the noisiest construction activities to occur during daytime hours when the quantitative standards are less stringent, existing ambient noise levels are generally louder, and when people are less sensitive to noise. • Require all construction equipment be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) that are in good condition (at least as effective as those originally provided by the manufacturer) and appropriate for the equipment. • Maintain all construction equipment to minimize noise emissions. • Locate construction equipment as far as feasible from adjacent or nearby noise-sensitive receptors. • Require all stationary equipment be located to maintain the greatest possible distance to the nearby existing buildings, where feasible and practical. • Require stationary noise sources associated with construction (e.g., generators and compressors) in proximity to noise-sensitive land uses to be muffled and/or enclosed within temporary enclosures and shielded by barriers, which can reduce construction noise by as much as 5 dB.	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• Install noise-reducing sound walls or fencing (e.g. temporary fencing with sound blankets) around noise-generating equipment, to the extent feasible and practical, where no perimeter wall is provided pursuant to Mitigation Measure NOI-1.2. • Prohibit idling of inactive construction equipment for prolonged periods during nighttime/non-standard hours (i.e., more than 2 minutes). • Provide advance notification in the form of mailings/deliveries of notices to surrounding land uses regarding the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period. • Provide the name and telephone number of an on-site construction liaison through on-site signage and on the notices mailed/delivered to surrounding land uses. If construction noise is found to be intrusive to the community (i.e., if complaints are received), the construction liaison shall take reasonable efforts to investigate the source of the noise and require that reasonable measures be implemented to correct the problem. • Use electric motors rather than gasoline- or diesel-powered engines to avoid noise associated with compressed air exhaust from pneumatically powered tools during nighttime hours, to the extent feasible and practical (as determined by the City). Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust could be used; this muffler can lower noise levels from the exhaust by about 10 dB. External jackets on the tools themselves could be used, which could achieve a reduction of 5 dB.	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		Mitigation Measure NOI-1.2: Construction of Temporary Noise Barrier along Project Perimeter. The Project contractor(s) shall install an 8-foot-high temporary noise barrier along the complete length of the western and southern perimeter (e.g., areas near residential and school land uses), and along the southernmost 500 feet of the eastern perimeter of the main Project Site. As project buildout occurs, removal and/or adjustment in the location of the perimeter noise barrier may occur because either the construction of project buildings (completion of core and shell) in alignment with said perimeter barrier and therefore the perimeter barrier is not needed or preparation of an acoustical analysis indicates the balance of the construction activities will not result in construction noise that exceeds the allowable limits. Regarding the Hamilton Avenue Parcel South, a similar noise barrier shall be installed around the complete length of the southern, western and northern perimeters as well as the southernmost 100 feet of the eastern perimeter of the Hamilton Avenue Parcel South, unless the Project Sponsor can demonstrate, through an acoustical analysis, that construction noise at this site would not exceed the allowable limits. The decision regarding the necessity of this barrier and location(s) shall be subject to review and approval of the City based on evidence and analyses providing by the applicant team. Regarding the Hamilton Avenue Parcel North, a similar noise barrier shall also be constructed along the complete length of the southern and western perimeters, along with the eastern most 100 feet of the northern perimeter of the Hamilton Avenue Parcel North, unless the Project Sponsor can demonstrate, through an acoustical analysis, that	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		construction noise at this site would not exceed the allowable limits. The decision regarding the necessity of this barrier and location(s) shall be subject to review and approval of the City based on evidence and analyses providing by the applicant team. The barriers shall be constructed of material that has an acoustical rating of at least 26 STC (Sound Transmission Class). This can include a temporary barrier constructed with plywood supported on a wood frame, sound curtains supported on a frame, or other comparable material.	
Impact NOI-1b: Operational Noise. Operation of the Proposed Project would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.	PS	***ConnectMenlo Mitigation Measure NOISE-1b.*** Stationary noise sources and landscaping and maintenance activities citywide shall comply with Chapter 8.06, Noise, of the Menlo Park Municipal Code. ***Mitigation Measure NOI-1.3: Mechanical Equipment Noise Reduction Plan.*** To reduce potential noise impacts resulting from Project mechanical equipment, including heating, cooling, and ventilation equipment, the Project applicant shall conduct a noise analysis to estimate noise levels of Project-specific mechanical equipment based on the final selected equipment models and design features. In addition to the analysis, a Mechanical Equipment Noise Reduction Plan shall be created to ensure noise levels of equipment, once installed, are below the applicable criteria described below. The Noise Reduction Plan shall include any necessary noise reduction measures required to reduce Project-specific mechanical equipment noise to a less-than-significant levels.. The plan shall also demonstrate that with the inclusion of selected measures, noise from equipment would be below the significance thresholds. Feasible noise reduction measures to reduce noise below the significance thresholdsinclude, but are not limited to,	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		selecting quieter equipment, utilizing silencers and acoustical equipment at vent openings, siting equipment farther from the roofline, and/or enclosing all equipment in a mechanical equipment room designed to reduce noise. This analysis shall be conducted and the results and final Noise Reduction Plan shall be provided to the City prior to the issuance of building permits for each building. The noise analysis and Noise Reduction Plan shall be prepared by persons qualified in acoustical analysis and/or engineering. The Noise Reduction Plan shall demonstrate with reasonable certainty that noise from mechanical equipment selected for the Project, including the attenuation features incorporated into the Project design, will not exceed the City of Menlo Park's property plane threshold of 60 dBA during daytime hours or 50 dBA during nighttime hours at nearby noise-sensitive land uses, as well as the 50 dBA at 50 feet threshold that applies to rooftop equipment in the City. The Project applicant shall incorporate all feasible methods to reduce noise identified above and other feasible recommendations from the acoustical analysis and Noise Reduction Plan into the building design and operations as necessary to ensure that noise sources meet applicable requirements of the respective noise ordinances at receiving properties. ***Mitigation Measure NOI-1.4: Emergency Generator Noise Reduction Plan (All Parcels).*** Prior to approval of a building permit for each building, the Project applicant shall conduct a noise analysis to estimate noise levels from the testing of Project-specific emergency generators, based on the actual generator makes and models proposed and the actual selected attenuation features. Based on the results of	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		the analysis, a Noise Reduction Plan shall be created to ensure noise levels of generator testing are below the applicable Code requirements. The results, methods, and final Noise Reduction Plan shall be provided to the City prior to the issuance of building permits. The analysis shall account for proposed noise attenuation features, such as specific acoustical enclosures and mufflers or silences, and the final Noise Reduction Plan shall demonstrate with reasonable certainty that proposed generator(s) will not exceed the City of Menlo Park noise thresholds of 60 dBA at the nearest noise-sensitive use during daytime hours, and/or 85 dBA at 50 feet for powered equipment, whichever is lower. Acoustical treatments may include, but are not limited to: • Enclosing generator(s); • Installing relatively quiet model generator(s); • Orienting or shielding generator(s) to protect noise-sensitive receptors to the greatest extent feasible; • Installing exhaust mufflers or silencers; • Increasing the distance between generator(s) and noise-sensitive receptors; and/or • Placing barriers around generator(s) to facilitate the attenuation of noise. In addition, all Project generator(s) shall be tested only between the hours of 7:00 a.m. and 10:00 p.m. Because no nighttime testing of generators will be allowed, compliance with the 50-dB nighttime noise threshold in the City need not be demonstrated. The Project applicant shall incorporate sufficient recommendations from the acoustical analysis into the building design and operations to ensure that noise sources meet applicable requirements of the noise ordinance.	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact NOI-2: Generation of excessive vibration or groundborne noise levels. The Proposed Project would generate excessive groundborne vibration or noise levels.	PS	***ConnectMenlo Mitigation Measure NOISE-2a.***[5] To prevent architectural damage citywide as a result of construction-generated vibration: • Prior to the issuance of a building permit for any development project requiring pile driving or blasting, the project applicant/developer shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. The maximum levels shall not exceed 0.2 in/sec, which is the level that can cause architectural damage for typical residential construction. If maximum levels would exceed the thresholds, alternative methods, such static rollers, non-explosive blasting, and pile drilling, as opposed to pile driving, shall be used to the extent feasible and practical, subject to review and determination by the Community Development Department. To prevent vibration-induced annoyance as a result of construction-generated vibration: • Individual projects that involve vibration-intensive construction activities, such as blasting or the use of pile drivers, jack hammers, or vibratory rollers, within 200 feet of sensitive receptors shall be evaluated for potential vibration impacts. A vibration study shall be conducted for individual projects where vibration-intensive impacts may occur. The study shall be prepared by an acoustical or vibration engineer holding a degree in engineering, physics, or an allied discipline who is able to demonstrate a minimum of 2 years of	SU/M

[5] This noise and vibration study for the Proposed Project has been prepared in accordance with ConnectMenlo Mitigation Measure NOISE-2a.

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		experience in preparing technical assessments regarding acoustics and/or ground-borne vibration. The study is subject to review and approval of the Community Development Department. Vibration impacts on nearby receptors shall not exceed the vibration annoyance levels (in RMS inches per second), as follows: • Workshop = 0.126 • Office = 0.063 • Residence, daytime (7:00 a.m.–10:00 p.m.) = 0.032 • Residence, nighttime (10:00 p.m. to 7:00 a.m.) = 0.016 If construction-related vibration is determined to be perceptible at vibration-sensitive uses, additional requirements, such as less vibration-intensive equipment or construction techniques, shall be implemented during construction (e.g., non-explosive blasting, pile drilling, as opposed to pile driving, preclusion for vibratory roller use, use of small or medium-sized bulldozers) to the extent feasible and practical. Vibration reduction measures shall be incorporated into the site development plan as a component of the Project and applicable building plans, subject to the review and approval of the Community Development Department. ***Mitigation Measure NOI-2.1: Vibration Control Measures for Annoyance from Daytime Pile Driving Activity.*** During daytime hours, pile driving activity shall take place no closer than 335 feet from residential land uses, 210 feet from office or school land uses, and 130 feet from workshops or retail land uses, to the extent feasible and practical. When pile driving work must take place closer than these distances from the aforementioned land uses, reduction measures shall be incorporated to the extent feasible and practical, such as the use of alternative pile	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		installation methods that do not require impact or vibratory pile driving. Examples of alternative pile installation methods include auger cast pressure grouted displacement (APGD) piles, stone columns, cast-in-drilled-hole (CIDH) piles, or press-in piles. These measures will be subject to review and approval of the Community Development Department. In addition, the construction contractor shall appoint a Project vibration coordinator who will serve as the point of contact for vibration-related complaints during project construction. Contact information for the Project vibration coordinator will be posted at the Project Site and on a publicly available Project website. Should complaints be received, the Project vibration coordinator shall work with the construction team to adjust activities (e.g., drilling instead of driving piles in closer proximity to certain land uses) to the extent feasible and practical to reduce vibration or to reschedule activities for a less sensitive time. The Project vibration coordinator shall notify the Community Development Department of all vibration-related complaints and actions taken to address the complaints. ***Project Mitigation Measure NOI-2.2: Vibration Control Measures for Annoyance from Daytime Construction Activities Excluding Pile Driving.*** During daytime hours, construction activity involving a vibratory roller shall take place no closer than 90 feet from residential land uses, 60 feet from office or school land uses, and 35 feet from workshops or retail land uses, to the extent feasible and practical, subject to review and approval by the Community Development Department. In addition, equipment that generates vibration levels similar to a large bulldozer shall take place no closer than 50 feet from	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		residential land uses, 35 feet from office or school land uses, and 20 feet from workshops or retail land uses, to the extent feasible and practical, subject to review and approval by the Community Development Department. Maintaining these distances between equipment and the nearest residential, school/office, or workshop land uses would ensure vibration levels would be below 0.032 PPV in/sec at the nearest residences, 0.063 PPV in/sec at the nearest school or office, and 0.126 PPV in/sec at the nearest workshop, per the requirements in ConnectMenlo Mitigation measure NOISE-2a. When construction would require the use of these equipment types at distances closer than these to nearby sensitive uses, reduction measures shall be incorporated to the extent feasible and practical, such as the use of smaller or less vibration-intensive equipment. For example, the vibration level from a large bulldozer at 10 feet would be approximately 0.352 PPV in/sec, whereas the vibration level from a large bulldozer at the same distance would be approximately 0.012 PPV in/sec. The vibration level from a small bulldozer at 10 feet would be below all daytime vibration thresholds from ConnectMenlo Mitigation Measure Noise-2a. The feasibility of reduction measures shall be subject to review and determination by the Community Development Department. In addition, the construction contractor shall appoint a Project vibration coordinator who will serve as the point of contact for vibration-related complaints during Project construction. Contact information for the Project vibration coordinator will be posted at the Project Site and on a publicly available Project website. Should complaints be received, the Project vibration coordinator shall work	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		with the construction team to adjust activities (e.g., drilling instead of driving piles in closer proximity to certain land uses) to the extent feasible and practical to reduce vibration or to reschedule activities for a less sensitive time. The Project vibration coordinator shall notify the Community Development Department of all vibration-related complaints and actions taken to address the complaints. ***Project Mitigation Measure NOI-2.3: Vibration Control Measures for Annoyance from Nighttime Pile Installation Activity.*** During the nighttime hours of 10:00 p.m. to 7:00 a.m., pile driving activity shall take place no closer than 540 feet from residential land uses to the extent feasible and practical. When pile installation work must take place closer than this distance to residences, alternative pile installation methods that do not require impact or vibratory pile driving shall be employed to the extent feasible and practical. Examples of alternative pile installation methods include auger cast pressure grouted displacement (APGD) piles, stone columns, cast-in-drilled-hole (CIDH) piles, or press-in piles. The feasibility of these alternative measures shall be subject to review and determination of the Community Development Department. In addition, the construction contractor shall appoint a Project vibration coordinator who will serve as the point of contact for vibration-related complaints during Project construction. Contact information for the Project vibration coordinator will be posted at the Project Site and on a publicly available Project website. Should complaints be received, the Project vibration coordinator shall work with the construction team to adjust activities (e.g., drilling instead of driving piles in closer proximity to certain land uses) to the extent feasible and practical to	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		reduce vibration or to reschedule activities for a less sensitive time. The Project vibration coordinator shall notify the Community Development Department of all vibration-related complaints and actions taken to address the complaints.	
Impact NOI-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose of people residing or working in the project area to excessive noise levels.	NI	None required	NI
Impact C-NOI-1: Cumulative Noise Impacts. Cumulative development would result in a significant and unavoidable cumulative noise impact; thus, the Proposed Project would be a cumulatively considerable contributor to a significant cumulative noise impact.	PS	Implement ***Mitigation Measure NOI-1.1, NOI-1.2, and NOI-1.3, and ConnectMenlo Mitigation Measure NOI-1c***, above.	SU/M
3.8 Cultural and Tribal Cultural Resources			
Impact CR-1: Historical Resources. The Proposed Project would cause a substantial adverse change in the significance of a historical resource, pursuant to Section 15064.5.	PS	***CR 1.1. Remove, Store, and Reinstall Dumbarton Cutoff Line Tracks.*** The Project Sponsor shall remove the Dumbarton Cutoff Line tracks, store them during construction of the Proposed Project, and reinstall them in their historic location without irreparable damage to their character-defining historic fabric. The Project Sponsor will prepare a preservation plan specifying the practices to be employed to preserve the historical integrity of the tracks during their removal, storage, and reinstallation. These methods may include the following: using straps to lift rails rather than chains or other "metal on metal" methods, marking or numbering the track components so they can be replaced in their original sequence, and ensuring secure	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		storage onsite or in a lay-down area. Following tunnel construction, the rail segments will be returned to their preconstruction location in Willow Road on new ballast and ties or other appropriate material for the rail crossing. The preservation plan shall be reviewed and approved by the City and Samtrans prior to the issuance of demolition permits related to construction activities within Willow Road, and the Project Sponsor will incorporate the recommended protective measures into construction specifications.	
Impact CR-2: Archaeological Resources. The Proposed Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	PS	***Mitigation Measure CR 2.1. Avoidance, Monitoring, and Treatment*** **Avoidance and Minimization of Ground-Disturbing Activities** The Project Sponsor shall avoid or minimize ground-disturbing excavation in CA-SMA-160/H to the extent feasible in both the high-sensitivity area[6] (1.77 acres) and revised site boundary (7.03 acres), as detailed below. The City of Menlo Park will review and confirm implementation of mitigation measures with each construction phase. • The Project Sponsor shall note on any plans that require ground-disturbing excavation that there is potential for exposing buried cultural resources, including Native American burials. Any archaeological site information supplied to the contractor shall be considered and marked confidential. • The Project Sponsor shall install a culturally sterile engineered cap to cover the archaeological deposit within the Hiller Mound Core and preserve the resource in place. The 4 to 7 feet of engineered fill will	LTS/M

[6] Defined here as the Hiller Mound Core.

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		function as a protective cover for cultural deposits within the Hiller Mound Core and raise the grade to accommodate future sea-level-rise above the 100-year flood elevation, consistent with surrounding areas where buildings will be constructed. • Onsite soil material is suitable as fill material provided it is processed to remove concentrations of organic material, debris, and particles greater than 6 inches in maximum dimension; oversized particles shall either be removed from the fill or broken down to meet the requirement. Imported fill material shall meet the above requirements and have a plasticity index of less than 20. Material used for engineered fill shall meet appropriate Department of Toxic Substances Control (DTSC) Environmental Screening Levels (ESLs), as determined by the environmental engineer. **Fill Placement within the Hiller Mound Core Boundary** Construction activities shall be conducted in a manner that protects against penetration of the core area and reduces the potential for disturbance from concentrated surface loads. The following measures shall be implemented within the Hiller Mound Core during fill placement and any subsequent construction to reduce potential impacts on subsurface archaeological materials. • An elevation contour plan shall be created to guide the surface preparation necessary to place the fill cap within the Hiller Mound Core boundaries. The plan shall show the top of the primary midden elevation, based on archaeological GeoProbe data, to establish a 6-inch-thick buffer zone above the primary midden layer, below which soil disturbance or penetration shall not be permitted.	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• Tree root balls from trees removed within the Hiller Mound Core boundary that have roots extending within an area 24 inches from the primary midden layer shall be left in place. Stumps may be ground flat with the existing grade. • Clearing of surface vegetation within the Hiller Mound Core boundary shall be performed through hand grubbing. • Ground surface preparation prior to fill placement within the Hiller Mound Core boundary shall use a walk-behind sheepsfoot roller to densify the 6-inch-thick buffer-zone material. The use of relatively light equipment (typical equipment weight of 3,000–5,000 pounds), such as a walk-behind roller, reduces potential for densification below the buffer zone. • A layer of geogrid reinforcement shall be placed over the prepared ground surface within the Hiller Mound Core boundary. Geogrid shall consist of a triaxial grid (e.g., TX140 or approved equivalent). A second layer of geogrid shall be placed to reinforce the engineered fill approximately 24 inches above the base geogrid layer. Geogrid shall be installed in accordance with the manufacturer's specifications. • Once the 6-inch-thick buffer zone has been prepared and reinforcement grid placed within the Hiller Mound Core boundary, engineered fill may be placed in 8-inch lifts and compacted using a single-drum ride-on sheepsfoot roller. The roller shall not be parked or left stationary on the Hiller Mound Core overnight. If yielding subgrade is encountered in the buffer zone, the geotechnical consultant may recommend placement of additional layers of reinforcement within the	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		engineered fill. This determination will be based on field observations during preparation of the ground surface. • In order to protect against construction damage to the primary midden, construction and construction vehicle traffic (with the exception of equipment necessary to place and compact engineered fill) shall not be permitted to rest on or pass over the Hiller Mound Core boundary until after the engineered fill placement is complete to provide a buffer between mound material and the concentrated vehicle loads. Once the fill placement is complete, the primary midden will be protected, but construction equipment and construction vehicle traffic within the Hiller Mound Core nonetheless shall continue to be limited to the minimum necessary to complete construction of the Proposed Project. Vehicles shall not be stationary or parked on the Hiller Mound Core overnight. The contractor shall ensure that vehicles and equipment do not leak fuel or other liquids when operating on the Hiller Mound Core. Leaking vehicles and equipment shall be promptly removed from the Hiller Mound Core area and repaired before use is resumed on the Hiller Mound Core. **Temporary Construction Loading – Installation of Temporary Scaffolding within the Hiller Mound Core Boundary** The following measures shall be implemented within the Hiller Mound Core boundary during scaffold erection to reduce potential impacts on subsurface archaeological materials.	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• Scaffolds within the Hiller Mound Core boundary shall be installed no earlier than 3 months after the engineered fill placement related to sea-level rise. • Scaffolds within the Hiller Mound Core boundary shall use 16-foot square bases on the engineered fill cap. Minor leveling of the fill cap shall be allowed at each scaffold installation, but excavation or other penetrations into the fill surface shall not be permitted. If equipment or the temporary auxiliary structures needed to install the atrium frame and associated glass would disturb more than 12 inches below the surface of the fill , the archeological consultant shall determine whether protective measures shall be required, including the installation of a wood or plastic mat around each scaffold. • Scaffolds within the Hiller Mound Core boundary shall be removed promptly after installation and inspection of the framework and glass within the atrium to remove pressure from the engineered fill over the Hiller Mound Core. ***Mitigation Measure CR 2.2. Train Workers to Respond to the Discovery of Cultural Resources and Prepare an Archaeological Monitoring Plan and Archeological Treatment Plan.*** If avoidance or preservation in place are not possible, the following measures will be followed: • Prior to the start of fill placement and other ground-disturbing construction, the archaeological consultant archaeological resources sensitivity training and Native American tribal representatives shall conduct tribal cultural sensitivity training for workers and construction superintendents. Training shall be required for all construction personnel	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		participating in ground-disturbing construction to alert them to the archaeological sensitivity of the area and provide protocols to follow in the event of a discovery of archaeological materials. The principal archaeological consultant and project archaeologist shall develop and distribute for job site posting a document ("ALERT SHEET") summarizing potential finds that could be exposed and the protocols to be followed as well as points of contact to alert in the event of a discovery. The ALERT SHEET and protocols shall be presented as part of the training. The contractor shall be responsible for ensuring that all workers requiring training are in attendance. Training shall be scheduled at the discretion of the Project Sponsor in consultation with the City. Worker training shall be required for all contractors and sub-contractors and documented for each permit and/or phase of permit that requires ground disturbing activities on-site. For work in the Hiller Mound Core, worker training shall also be included for workers who will work on the surface or who will drive across the Hiller Mound Core. • The archaeological consultant shall review, identify, and evaluate cultural resources that may be inadvertently exposed during construction to determine if a discovery is a historical resource and/or unique archaeological resource under CEQA. Significant resources shall be subject to treatment/mitigation that prevents an adverse effect on the resource, in accordance with PRC Section 15064.5. Mitigation could include avoidance, preservation in place, or the scientific removal, analysis, reporting, and curation of any recovered	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		cultural materials. If the discovery constitutes a tribal cultural resource, consultation shall be undertaken with the person the NAHC identifies as the MLD to determine appropriate treatment. • The Project Sponsor and archaeological consultant shall develop an Archaeological Monitoring Plan (AMP)7 to guide archaeological and tribal monitoring of ground-disturbing construction and protect any cultural materials and tribal cultural resources exposed during construction from further damage so they can be identified and evaluated for their potential eligibility for listing in the California Register and properly treated. The AMP's monitoring plan for tribal cultural resources shall be developed in consultation with Native American tribal representatives. The AMP will be submitted to the City of Menlo Park for review and approval prior to issuance of a building permit and/or implementation. **The AMP shall include, at a minimum:** • Background information and context data on the Project and cultural resource; • Monitoring requirements, including worker awareness training; a discussion of specific locations and the intensity of the monitoring effort for areas with potential for the discovery of unexpected cultural materials; and anticipated personnel, including retention of local Native American tribal representative(s) from lists maintained by the NAHC;	

7 *Archaeological monitoring r*efers to the controlled observation and regulation of construction operations on or in the vicinity of a known or potentially significant cultural resource in order to prevent or minimize impact to the resource.

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• Protocols for unexpected discoveries during construction, consistent with Modified ConnectMenlo EIR MM CULT-2a; • Pre-historic research design, identifying pertinent archaeological research issues and questions; anticipated property types; and data requirements for addressing each research issue to be used for significance evaluation; • Detailed procedures regarding unexpected significant discoveries made during construction, including a discussion of field and artifact analysis methods to be used. • Treatment of human remains (consistent with state burial law and recommendations of the NAHC MLD and Modified ConnectMenlo EIR MM CULT-4); • Laboratory methods, including artifact cataloging and special analyses. • The plan shall outline provisions for reporting (e.g., Monitoring Closure Report), artifact curation, and potential public outreach in the event of significant finds. • A formal Archaeological Treatment Plan (ATP), which may include data recovery, shall be prepared prior to any grading or ground-disturbing activity. • The ATP, similar to the AMP, shall detail the appropriate procedures, analytical methods, and reports to be completed if data recovery of significant archaeological Native American cultural materials, including Native American burials, is undertaken. Curation at an appropriate repository of recovered archaeological and Native American cultural materials shall be arranged once the extent of the collected	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		materials is known. The ATP will be developed and implemented by the project archaeologist; while the precise treatment for identified resources determined in consultation with the City and, for tribal cultural resources, Native American tribal representatives. • The ATP may be included within the AMP for a combined Archaeological Monitoring and Treatment Plan at the discretion of the archaeological consultant. ***ConnectMenlo Mitigation Measure CULT-2a (Modified) Stop Work if Archaeological Material or Features Are Encountered during Ground-Disturbing Activities.*** ○ If a potentially significant subsurface cultural resource is encountered during ground-disturbing activities on any parcel in the city, all construction activities within a 100-foot radius of the find shall cease until a qualified archeologist determines whether the resource requires further study. All developers in the Study Area shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction activities shall be recorded on appropriate DPR forms and evaluated for significance in terms of CEQA criteria by a qualified archeologist in accordance with Project Mitigation Measure CR 2.2.	
Impact CR-3. Human Remains. The Proposed Project could disturb human remains, including those interred outside of dedicated cemeteries.	PS	Implement ***Mitigation Measure CR-2.1 and CR-2.2***, above. ***ConnectMenlo Mitigation Measure CULT-4: (Modified) Comply with State Regulations Regarding the Discovery of Human Remains at the Project Site.*** Procedures of conduct following the discovery of human remains citywide have been mandated by Health and Safety Code Section 7050.5, PRC Section 5097.98, and the California Code of	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The San Mateo County Coroner shall be notified immediately. The coroner shall then determine whether the remains are Native American. If the coroner determines the remains are Native American, the coroner shall notify the NAHC within 24 hours, which will, in turn, notify the person the NAHC identifies as the MLD in connection with any human remains. Further actions shall be determined, in part, by the desires of the MLD. The Project Proponent, the Project Archaeologist, and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects, including those associated with known an unknown Native American burial locations (CEQA Guidelines Section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The MLD will have 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, or the owner does not accept the recommendation of the MLD in accordance with Pub. Res. Code 5097.98(e), the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact CR-4: Tribal Cultural Resources. The Proposed Project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is: a) Listed or eligible for listing in the California Register or local register of historical resources, as defined in PRC Section 5020.1(k), or b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native America tribe.	PS	Implement ***Mitigation Measure CR-2.1 and CR-2.2, and ConnectMenlo Mitigation Measure CULT-4 (modified)***, above.	LTS/M
Impact C-CR-1: Cumulative Impacts on Cultural and Tribal Cultural Resources. Cumulative development would result in a less-than-significant cumulative impact on cultural and tribal cultural resources, and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on cultural and tribal cultural resources.	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
3.9 Biological Resources			
Impact BIO-1: Direct Impacts on Special-Status Species. The Proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations.	LTS	None required	LTS
Impact BIO-2: Indirect Impacts on Special-Status Species. The Proposed Project would result in substantial predation among special-status bird and mammal species that breed in the nearby brackish marshes and may forage, in the case of special-status birds, in the Project area.	PS	***BIO-2.1: Feral Cat Management Program.*** The Project Sponsor shall implement a feral cat management program, similar to the program developed in conjunction with the Peninsula Humane Society and the Society for the Prevention of Cruelty to Animals for the East Campus in 2013. For one week every 3 months (i.e., each quarter), three live trap cages, designed to trap cats, shall be placed around the perimeter of the main Project Site in locations where feral cats are likely to prey upon native wildlife species. Each trap cage shall be monitored and maintained on a daily basis during the week when traps have been set to determine whether a feral cat has been caught and whether the trap has inadvertently captured a non-target species. If a feral cat is caught, a representative from a pest control operator (or a similar service organization/company) shall be contacted and dispatched to transport the trapped cat to the Humane Society of San Mateo County, a local cat shelter, a local cat rescue facility, or other local facility that accepts feral cats. If an animal other than a feral cat is caught in one of the traps, it shall be released immediately at the trap location.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact BIO-3: Impacts on Riparian Habitat and Other Sensitive Natural Communities. Project demolition and construction would affect riparian and other sensitive natural communities.	PS	***BIO-3.1: Avoid and Minimize Impacts on Riparian Habitat and Other Sensitive Natural Communities.*** To the extent feasible, construction activities should avoid or minimize the removal of wetland vegetation or the placement of fill in the wetlands immediately north and northeast of the Project Site. If all direct impacts on wetlands (i.e., vegetation removal and fill) are avoided, Mitigation Measures BIO-3.2 and BIO-3.3 would not need to be implemented. However, if any wetland vegetation needs to be removed from the wetlands, or any fill needs to be placed in the wetlands, Mitigation Measure BIO-3.2 (and Mitigation Measure BIO-3.3 if permanent impacts would occur) shall be implemented. ***BIO-3.2: In-Situ Restoration of Temporary Impacts.*** If impacts on the wetlands immediately north of the Project Site are temporary, resulting in vegetation removal or temporary fill within the wetland but no permanent fill, then the wetland area shall be restored by the Project Sponsor following construction. The herbaceous seasonal wetlands are likely to become recolonized easily without the need for seeding and planting as long as their existing hydrology and topography are restored following temporary impacts. There is some potential for the arroyo willow clumps in the isolated forested wetland to regrow from cut stumps. In such a case, the in-situ restoration shall involve simply protecting the area with exclusion fencing following construction to allow for regrowth of vegetation. For temporary impacts involving removed willow root masses where in-situ restoration is still an option, a more detailed restoration plan shall be developed. The mitigation shall, at a minimum, achieve no net loss of wetland acreage (i.e., jurisdictional wetlands lost to fill shall be replaced through the creation or restoration of wetland habitat of	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		the same type as the affected habitat [either forested or herbaceous seasonal] at a minimum ratio of 1:1 on an acreage basis or as otherwise required by any state or federal permitting agencies) or ecological functions and values through the restoration and enhancement of the affected wetlands to a level equal to or greater than the baseline condition of the existing wetlands. An in-situ restoration approach could involve salvaging wetland plant material prior to construction (e.g., willow cuttings or willow clumps, in the case of the isolated forested wetland) and then replanting the material if the seasonal timing of construction is appropriate. USACE and/or RWQCB approvals may be required to authorize temporary impacts on these features. ***BIO-3.3: Provide Compensatory Mitigation.*** If any permanent fill of the isolated forested wetland or the herbaceous seasonal wetlands occurs, the Project Sponsor shall provide new wetland habitat of the same type (either forested or herbaceous seasonal) to offset this impact, either through the creation, enhancement, or restoration of wetlands in an appropriate location or through the purchase of mitigation credits from a USACE- or RWQCB-approved wetland mitigation bank. The purchase of such credits shall serve as full mitigation for impacts on these wetland features.[8] If Project-specific creation, enhancement, or restoration of wetland habitat is implemented, habitat shall be restored or created at a minimum ratio of 2:1 (compensation: impact) on an acreage basis or as otherwise required by any state or	

[8] Refer to UC Army Corp of Engineers 33 C.F.R. Pt. 325 and California State Water Resources Control Board's State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (April 2, 2019) pages 28 to 29.

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		federal permitting agencies. This ratio is not higher because of the relatively low quality of the wetlands on the Project Site relative to the more extensive, less fragmented wetlands elsewhere in the region, and it is not lower because of the temporal loss of wetland functions and values that would result from the lag between impacts on the wetlands and maturation of the mitigation habitat. USACE and/or RWQCB approvals may be required to authorize permanent impacts on this feature. To the extent that compensatory mitigation is not provided by purchasing mitigation credits from a USACE- or RWQCB-approved wetland mitigation bank, then, if feasible, compensation shall be provided by creating, enhancing, or restoring wetland habitat so as to achieve the 2:1 ratio somewhere in San Mateo County or as otherwise required by any state or federal permitting agencies. A qualified biologist shall develop a wetland mitigation and monitoring plan that describes the mitigation, including the following components (or as otherwise modified by regulatory agency permitting conditions): • Summary of habitat impacts and proposed mitigation ratios; • Goal of the restoration to achieve no net loss of habitat functions and values; • Location of mitigation site(s) and description of existing site conditions; • Mitigation design; o Existing and proposed site hydrology; o Grading plan, if appropriate, including bank stabilization or other site stabilization features; o Soil amendments and other site preparation elements, as appropriate;	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		○ Planting plan; ○ Irrigation and maintenance plan; ○ Remedial measures and adaptive management; and • Monitoring plan, including final and performance criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. Success criteria shall include quantifiable measurements of wetland vegetation type (e.g., dominance by natives), the appropriate extent for the restoration location, and the provision of ecological functions and values equal to or exceeding those in the affected wetland habitat. At a minimum, success criteria shall include following: ○ At Year 5 post-mitigation, at least 75 percent of the mitigation site shall be dominated by native hydrophytic vegetation. The wetland mitigation and monitoring plan must be approved by the City and other applicable agencies prior to the wetland impacts and must be implemented within 1 year after the discharge of fill into wetland features. Alternately, offsite mitigation could be provided through the purchase of mitigation credits at an agency-approved mitigation bank, as noted above.	
Impact BIO-4: Impacts on State and/or Federally Protected Wetlands. Project demolition and construction could affect state and/or federally protected wetlands.	PS	Implement ***Mitigation Measures BIO-3.1, BIO-3.2, and BIO-3.3***, above.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact BIO-5: Impacts on Wildlife Movement and Native Wildlife Nursery Sites. The removal of buildings, trees, shrubs, or woody vegetation and the construction of new buildings and installation of lighting that could affect native migratory birds.	PS	***BIO-5.1: Avoidance and Pre-construction Surveys for Nesting Migratory Birds.*** The Project Sponsor shall implement the following measures to reduce impacts on nesting migratory birds: • To the extent feasible, construction activities shall be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31. • If it is not possible to schedule construction activities between September 1 and January 31, then preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests of migratory birds will be disturbed during Project implementation. Surveys shall be conducted no more than 7 days prior to the initiation of construction activities for each construction phase. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, California annual grasslands, buildings) in and immediately adjacent to the impact areas for migratory bird nests. • If an active nest is found within trees or other potential nesting habitats that would be disturbed by construction activities, a construction-free buffer zone (typically 300 feet for raptors and 100 feet for other species) will be established around the nest to ensure that species that are protected under the MBTA and California Fish and Game Code will not be disturbed during Project implementation. The ornithologist shall determine the extent of the buffer.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the Proposed Project may be removed prior to the start of the nesting season (i.e., prior to February 1). This would preclude the initiation of nests in this vegetation and prevent any potential delay for the Proposed Project because of the presence of active nests in these substrates. ***BIO-5.2: Atrium Bird-safe Design Requirements*.** The Project Sponsor shall implement the following measures to reduce impacts on migratory birds due to construction of the atrium: • The Project Sponsor shall treat 100 percent of the glazing on the dome-shaped portions of the atrium's façades (i.e., all areas of the north façade and all areas of the south façade above the Elevated Park) with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor of 15 or less.[9] Because a Threat Factor is a nonlinear index, its value is not equivalent to the percent reduction in collisions that a glazing product provides. However, products with lower Threat Factors result in fewer bird collisions.	

[9] A material's Threat Factor, as assigned by the American Bird Conservancy, refers to the level of danger posed to birds, based on the birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at https://abcbirds.org/wp-content/ uploads/2021/01/Masterspreadsheet-1-25-2021.xlsx.

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• The Project Sponsor shall treat 100 percent of the glazing on the atrium's east and west façades with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor of 15 or less. • Interior trees and woody shrubs shall be set back from the atrium's east, west, and non-sloped (i.e., vertical/perpendicular to the ground) portions of the south façades by at least 50 feet to reduce the potential for collisions with these facades due to the visibility of interior trees. This 50-foot distance is greater than the distance used in the project design for the north and sloped portions of the south facades (e.g., 20-25 feet for the north façade) due to the vertical nature of the east, west, and non-sloped portion of the south façades, as opposed to the articulated nature of the north and sloped portions of the south façades (which is expected to reduce the visibility of internal vegetation to some extent), as well as the direct line-of-sight views between interior and exterior vegetation through the east, west, and non-sloped portions of the south façades compared to the north façade (where internal vegetation is elevated above exterior vegetation). Interior trees and shrubs that are not visible through the east, west, and south façades may be planted closer than 50 feet to glass façades. • Because the glass production process can result in substantial variations in the effectiveness of bird-safe glazing, a qualified biologist will review physical samples of all glazing to be used on the atrium to confirm that the bird-safe frit will be visible to birds under various lighting conditions and expected to be effective.	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• The Project Sponsor shall monitor bird collisions around the atrium for a minimum of 2 years following construction to identify any collision "hot spots" (i.e., areas where collisions occur repeatedly). A monitoring plan for the atrium shall be developed by a qualified biologist and shall include focused surveys for bird collisions from late April through May (spring migration), September through October (fall migration), and mid-November through mid-January (winter) to maximize the possibility of detecting bird collisions that might occur. Surveys of the atrium shall be conducted daily for 3 weeks during each of these periods (i.e., 21 consecutive days during each season, for a total of 63 surveys per year). In addition, for the 2-year monitoring period, surveys of the atrium shall be conducted the day following nighttime events during which temporary lighting exceed would typical levels (i.e., levels specified in the International Dark-Sky Association's defined lighting zone, LZ-2 [Moderate Ambient], from dusk until 10:00 p.m., or 30 percent below these levels from 10:00 p.m. to midnight). The applicant can assign responsibility for tracking events and notifying the biologist when a survey is needed to a designated individual who is involved in the planning and scheduling of atrium events. The timing of the 63 seasonal surveys (e.g., morning or afternoon) shall vary on the different days to the extent feasible; surveys conducted specifically to follow nighttime events shall be conducted in the early morning. • At a frequency of no less than every 6 months, a qualified biologist shall review the bird collision data for the atrium in consultation with the City to	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		determine whether any potential hot spots are present (i.e., if collisions have occurred repeatedly at the same location). A "*potential hot spot"* is defined as a cluster of three or more collisions that occur within one of the 3-week monitoring periods described above at a given location on the atrium. The "*location"* shall be identified by the qualified biologist as makes sense for the observed collision pattern, and may consist of a single pane of glass, an area of glass adjacent to a landscape tree or light fixture, the 8,990-square-foot vertical façade beneath the Elevated Park, the façade adjacent to the vegetation at the Elevated Park, the atrium's east façade, the atrium's west façade, or another defined area where the collision pattern is observed. "Location" shall be defined based on observations of (1) collision patterns and (2) the architectural, lighting, and/or landscape features that contributed to the collisions and not arbitrarily determined (e.g., by assigning random grids). If any such potential hot spots are found, the qualified biologist shall provide an opinion as to whether the potential hot spots will affect bird populations over the long term to the point that additional measures (e.g., light adjustments, planting of vegetation) will be needed to reduce the frequency of bird strikes at the hot spot location in order to reduce impacts to a less-than-significant level under CEQA (i.e., whether it constitutes an actual "hotspot"). This determination shall be based on the number of birds and the species of birds that collide with the atrium over the monitoring period. In addition, a "hotspot" is automatically defined if a cluster of five or more collisions are identified at a	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		given "location" on the atrium within one of the three-week monitoring periods described above. If a hotspot is identified, additional measures will be implemented at the potential hotspot location at the atrium; these may include one or more of the following options in the area of the hotspot depending on the cause of the collisions: o Adding a visible bird-safe frit pattern, netting, exterior screens, art, printed sheets, interior shades, grilles, shutters, exterior shades, or other features to untreated glazing (i.e., on the façade below the Elevated Park) to help birds recognize the façade as a solid structure. o Installing interior or exterior blinds on buildings within the atrium to prevent light from spilling outward though glazed façades at night. o Reducing lighting by dimming fixtures, redirecting fixtures, turning lights off, and/or adjusting the programmed timing for dimming/shutoff. o Replacing certain light fixtures with new fixtures to increase shielding or redirect lighting. o Adjusting or reducing lighting during events. o Adjusting the timing of events to reduce the frequency during certain times of year (e.g., spring and/or fall migration) when relatively high numbers of collisions occur. o Adjusting landscape vegetation by removing, trimming, or relocating trees or other plants (e.g., moving them farther from glass) or blocking birds' views of vegetation through glazing (e.g., using a screen or other opaque feature).	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• If modifications to the atrium are implemented to reduce collisions at a hot spot, 1 year of subsequent focused monitoring of the hot-spot location shall be performed to confirm that the modifications effectively reduced bird collisions to a less-than-significant level under CEQA. In the event that a hot-spot is detected at a time when there is less than one year remaining of the initial 2-year monitoring period, then this one year of subsequent monitoring of that hot-spot would extend beyond the 2-year monitoring period described above. ***BIO-5.3: Lighting Design Requirements.*** The Project Sponsor shall implement the following measures to reduce lighting impacts on migratory birds**:** • To the maximum extent feasible, up-lighting (i.e., lighting that projects upward above the fixture) shall be avoided in the Project design. All lighting shall be fully shielded to prevent illumination from shining upward above the fixture. If up-lighting cannot be avoided in the Project design, up-lights shall be shielded and/or directed such that no luminance projects above/beyond the objects at which they are directed (e.g., trees and buildings) and no light shines directly into the eyes of a bird flying above the object. If the objects themselves can be used to shield the lights from the sky beyond, no substantial adverse effects on migrating birds are anticipated. • All lighting shall be fully shielded to prevent it from shining outward and toward Bay habitats to the north. No light trespass shall be permitted more than 80 feet beyond the Project Site's northern property line (i.e., beyond the Dumbarton Rail Corridor).	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• Exterior lighting shall be minimized (i.e., outdoor lumens shall be reduced by at least 30 percent, consistent with recommendations from the International Dark-Sky Association [2011]) from 10:00 p.m. until sunrise, except as needed for safety and City code compliance. • Temporary lighting that exceeds minimal site lighting requirements may be used for nighttime social events. This lighting shall be switched off no later than midnight. No exterior up-lighting (i.e., lighting that projects upward above the fixture, including spotlights) shall be used during events. • Lights shall be shielded and directed so as not to spill outward from the elevator/stair towers and into adjacent areas. • Interior or exterior blinds shall be programmed to close on north-facing windows of buildings within the atrium from 10:00 p.m. to sunrise to prevent light from spilling outward. • Accent lighting within the atrium shall not be used to illuminate trees or vegetation. Alternatively, the applicant shall provide documentation to the satisfaction of a qualified biologist that the illumination of vegetation and/or structures within the atrium by accent lighting and/or up-lighting will not make these features more conspicuous to the human eye from any elevation outside the atrium compared to ambient conditions within the atrium. The biologist shall submit a report to the City following completion of the lighting design, documenting compliance with this requirement.	

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		• Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30 percent or extinguished, consistent with recommendations from the International Dark Sky Association [2011]) from midnight until sunrise, except as needed for safety and compliance with Menlo Park Municipal Code.	
Impact BIO-6: Conflicts with Any Local Policies or Ordinances that Protect Biological Resources. The Project would result in conflicts with the Menlo Park Municipal Code.	PS	Implement ***Mitigation Measures BIO-2.1, BIO-3.1 through BIO-3.3, and BIO-5.2***, above.	LTS/M
Impact C-BIO-1: Cumulative Biological Resources Impacts. Cumulative development would not result in a significant cumulative impact on biological resources, and the Proposed Project would not be a cumulatively considerable contributor to such a cumulative impact.	PS	Implement ***ConnectMenlo Mitigation Measure BIO-***1, above.	LTS/M
3.10 Geology and Soils			
Impact GS-1: Strong Seismic Ground Shaking and Seismically Related Ground Failure. The Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving (1) strong seismic ground shaking and (2) seismically related ground failure, including liquefaction.	LTS	None required	N/A
Impact GS-2: Substantial Soil Erosion. The Proposed Project would not result in substantial soil erosion.	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact GS-3: Unstable Soils or Geologic Units. The Proposed Project would not be located on a geologic unit or soil that is unstable or would become unstable as a result of the Proposed Project and potentially result in subsidence, liquefaction, or collapse.	LTS	None required	N/A
Impact GS-4: Expansive Soils. The Proposed Project would not be located on expansive soils, creating substantial direct or indirect risks to life or property.	LTS	None required	N/A
Impact GS-5: Paleontological Resources. The Proposed Project could destroy a unique paleontological resource or site.	PS	***ConnectMenlo Mitigation Measure CULT-3: Conduct Protocol and Procedures for Encountering Paleontological Resources.*** In the event that fossils or fossil-bearing deposits are discovered during ground-disturbing activities anywhere in the City, excavations within a 50-foot radius of the find shall be temporarily halted or diverted. Ground disturbance work shall cease until a City-approved, qualified paleontologist determines whether the resource requires further study. The paleontologist shall document the discovery as needed (in accordance with Society of Vertebrate Paleontology standards [Society of Vertebrate Paleontology 1995]), evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine the procedures that would be followed before construction activities would be allowed to resume at the location of the find. If avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The excavation plan shall be submitted to the City of Menlo Park for review and approval prior to implementation, and all construction activity shall adhere to the recommendations in the excavation plan.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		PALEO-1: Conduct Worker Awareness Training. Before the start of any excavation or grading activities, the construction contractor will retain a qualified paleontologist, as defined by the SVP, who is experienced in teaching non-specialists. The qualified paleontologist will train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, and proper notification procedures should fossils be encountered. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who will evaluate the significance. The qualified paleontologist will also make periodic visits during earthmoving in high sensitivity sites to verify that workers are following the established procedures.	
Impact C-GS-1: Cumulative Geology and Soil Impacts. Cumulative development would result in a less than significant cumulative impact to geology, soils, and seismicity, and thus the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact to geology, soils, and seismicity. Cumulative development would result in a less-than-significant cumulative impact with mitigation to paleontological resources and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact.	PS	Implement ***ConnectMenlo Mitigation Measure CULT-3***, above.	LTS, LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
3.11 Hydrology and Water Quality			
Impact HY-1: Water Quality. The Proposed Project could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality.	PS	***HY-1.1: Implement Construction Dewatering Treatment (if necessary).*** If dewatering is needed to complete the Proposed Project, and if water from dewatering is discharged to a storm drain or surface water body, dewatering treatment may be necessary if groundwater exceeding water quality standards is encountered during excavation. Because there is potential for groundwater to be contaminated with VOCs or fuel products at the Project Site, the Project Sponsor would be required to comply with the San Francisco Bay Regional Water Board's VOC and Fuel General Permit (Order No. R2-2018-0050) if groundwater exceeding water quality standards is encountered. If dewatering requires discharges to the storm drain system or other water bodies, the water shall be pumped to a tank and tested using grab samples and sent to a certified laboratory for analysis. If it is found that the water does not meet water quality standards, it shall be treated as necessary prior to discharge so that all applicable water quality objectives (as noted in Table 3.11-2) are met or it shall be hauled offsite instead for treatment and disposed of at an appropriate waste treatment facility that is permitted to receive such water. The water treatment methods selected shall remove contaminants in the groundwater to meet discharge permit requirements while achieving local and state requirements, subject to approval by the San Francisco Bay Regional Water Board. Methods may include retaining dewatering effluent until particulate matter has settled before discharging it or using infiltration areas, filtration techniques, or other means. The contractor shall perform routine inspections of the construction area to	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		verify that water quality control measures are properly implemented and maintained, observe the water (i.e., check for discoloration or an oily sheen), and perform other sampling and reporting activities prior to discharge. The final selection of water quality control measures shall be submitted in a report to the San Francisco Bay Regional Water Board for approval prior to construction. If the results from the groundwater laboratory do not meet water quality standards and the identified water treatment measures cannot ensure that treatment meets all standards for receiving water quality, then the water shall be hauled offsite instead for treatment and disposal at an appropriate waste treatment facility that is permitted to receive such water.	
Impact HY-2: Groundwater Supply and Recharge. The Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded.	LTS	None required	N/A
Impact HY-3: Drainage and Flooding. The Proposed Project would not substantially alter the existing drainage pattern of the Project Site in a manner that would result in substantial erosion or flooding, impede or redirect flood flows, contribute runoff that would exceed the capacity of the stormwater system, or provide substantial additional sources of polluted runoff.	LTS	None required	N/A
Impact HY-4: Pollutant Release due to Project Inundation. In a flood hazard, tsunami, or seiche zones, the Proposed Project would not result in the release of pollutants due to inundation.	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact HY-5: Conflict or Obstruct a Water Resource Management Plan. The Proposed Project could conflict with obstruct implementation of a water quality control plan or sustainable groundwater management plan.	PS	Implement ***Mitigation Measure HY-1.1***, above.	LTS/M
Impact C-HY-1: Cumulative Hydrology and Water Quality Impacts. Cumulative development would result in a less than significant cumulative impact to hydrology and water quality, and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact to hydrology and water quality.	LTS	None required	N/A
3.12 Hazards and Hazardous Materials			
Impact HAZ-1: Routine Hazardous Materials Use. The Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	None required	N/A
Impact HAZ-2: Upset and Accident Conditions Involving Hazardous Materials. The Propose Project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	PS	***ConnectMenlo Mitigation Measure HAZ-4a: Environmental Site Management Plan.*** Construction of any site in the City with known contamination shall be conducted under a Project-specific Environmental Site Management Plan (ESMP) prepared in consultation with the Regional Water Quality Control Board (RWQCB) or the Department of Toxic Substances Control (DTSC), , as appropriate. The purpose of the ESMP is to protect construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and address the possibility of encountering unknown contamination or hazards in the subsurface. The ESMP	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		shall summarize soil and groundwater analytical data collected on the site during past investigations; identify management options for excavated soil and groundwater, if contaminated media are encountered during deep excavations; and identify monitoring, irrigation, or wells that require proper abandonment in compliance with local, state, and federal laws, policies, and regulations. The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during excavation and dewatering activities, respectively; 2) describe required worker health and safety provisions for all workers who could be exposed to hazardous materials, in accordance with state and federal worker safety regulations; and 3) designate the personnel responsible for implementation of the ESMP. ***HAZ-2.1: Phase I Environmental Site Assessment for the Willow Road Tunnel under Dumbarton Rail Corridor and Willow Road.*** For the offsite improvement in the area where the Willow Road Tunnel passes under the Dumbarton Rail Corridor and Willow Road, a Phase I ESA shall be performed by a licensed environmental professional. The Phase I ESA shall identify RECs at the site and indicate whether a Phase II ESA is required in order to evaluate contamination at the site.	
Impact HAZ-3: Exposure to Schools. The Proposed Project would not emit hazardous emissions or involving handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	PS	Implement ***Mitigation Measure HAZ-2.1 and ConnectMenlo Mitigation Measure HAZ-4a***, above.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact HAZ-4: Impairment of Emergency Response or Evacuation Plans. The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan.	LTS	None required	N/A
Impact C-HAZ-1: Cumulative Hazards and Hazardous Materials Impacts. Cumulative development would not result in a significant cumulative impact from hazards and hazardous materials, and the Proposed Project would not be a cumulatively considerable contributor to such a cumulative impact.	PS	Implement ***ConnectMenlo Mitigation Measure HAZ-4a***, above.	LTS/M
3.13 Population and Housing			
Impact POP-1: Unplanned Population Growth. The Proposed Project would not induce substantial unplanned direct or indirect population growth.	LTS	None required	N/A
Impact POP-2: Displacement of People or Housing. The Proposed Project would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere.	LTS	None required	N/A
Impact C-POP-1: Cumulative Population and Housing Growth. Cumulative development would result in a less than significant cumulative impact related to population and housing growth, and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact regarding population and housing.	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
3.14 Public Services and Recreation			
Impact PS-1: Impacts on Fire Services. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered fire service facilities.	LTS	None required	N/A
Impact PS-2: Impacts on Police Services. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered police service facilities.	LTS	None required	N/A
Impact PS-3: Impacts on School Facilities. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered school facilities.	LTS	None required	N/A
Impact PS-4: Impacts on Parks and Recreational Facilities. The Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, nor include the construction of, or require construction or expansion of, recreation facilities that would have an adverse physical effect on the environment.	LTS	None required	N/A
Impact PS-5: Impacts on Library Facilities. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered library facilities.	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact C-PS-1: Cumulative Public Services Impacts. Cumulative development would result in a less-than-significant cumulative impact on public services and would not trigger physical impacts associated with new or altered facilities; the Proposed Project would not be a cumulatively considerable contributor.	LTS	None required	N/A
3.15 Utilities and Service Systems			
Impact UT-1: Construction or Relocation of Utilities. The Proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which would cause significant environmental effects.	LTS	None required	N/A
Impact UT-2: Water Supply. The Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years.	LTS	None required	N/A
Impact UT-3: Generation of Wastewater. The Proposed Project would not result in a determination by the wastewater treatment providers that they have inadequate capacity to serve the Proposed Project's projected demand in addition to the providers' existing commitments.	LTS	None required	N/A
Impact UT-4: Generation of Solid Waste. The Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact UT-5: Compliance with Solid Waste Regulations. The Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	LTS	None required	N/A
Impact C-UT-1: Cumulative Water Service and Infrastructure Impacts. Cumulative development would result in less-than-significant cumulative impact on water service and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on water service.	LTS	None required	N/A
Impact C-UT-2: Cumulative Wastewater Service and Infrastructure Impacts. Cumulative development would result in a less-than-significant cumulative impact on wastewater service and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on wastewater service.	LTS	None required	N/A
Impact C-UT-3: Cumulative Solid Waste Impacts. Cumulative development would result in a less-than-significant cumulative impact on solid waste service and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on solid waste service.	LTS	None required	N/A
Impact C-UT-4: Cumulative Stormwater Service and Infrastructure Impacts. Cumulative development would result in a less-than-significant cumulative impact on stormwater service, and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on stormwater service and infrastructure.	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
Impact C-UT-5: Cumulative Natural Gas and Electrical Service Impacts. Cumulative development would result in a less-than-significant cumulative impact on natural gas and electrical, and the Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on natural gas and electrical service and infrastructure.	LTS	None required	N/A
Impact C-UT-6: Cumulative Telecommunication Impacts. The Proposed Project would not be a cumulatively considerable contributor to any significant cumulative impact on telecommunication facilities and infrastructure.	LTS	None required	N/A

Notes:
LTS = Less than significant
LTS/M = Less than significant with mitigation
SU = Significant and unavoidable
N/A = not applicable

Table 6-12. Comparison of Impacts to Proposed Project among Project Alternatives

Environmental Issue	Project	No Project Alternative Significance (Comparison)	No Willow Road Tunnel Alternative Significance (comparison)	Base Level Intensity Alternative Significance (Comparison)	Reduced Intensity Alternative Significance (Comparison)
Land Use					
Impact LU-1	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact C-LU-1	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Aesthetics					
Impact AES-1	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact AES-2	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact AES-3	LTS	NI (less)	LTS (less)	LTS (less)	LTS (less)
Impact C-AES-1	LTS	NI (less)	LTS (less)	LTS (less)	LTS (less)
Transportation					
Impact TR-1	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact TR-2	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact TR-3	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact TR-4	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact C-TR-1	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact C-TR-2	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact C-TR-3	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact C-TR-4	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Air Quality					
Impact AQ-1	SU	NI (less)	SU (less)	LTS/M (less)	LTS/M (less)
Impact AQ-2	SU	NI (less)	SU (less)	LTS/M (less)	LTS/M (less)
Impact AQ-3	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact AQ-4	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact C-AQ-1	SU	NI (less)	SU (less)	LTS/M (less)	LTS/M (less)

Environmental Issue	Project	No Project Alternative Significance (Comparison)	No Willow Road Tunnel Alternative Significance (comparison)	Base Level Intensity Alternative Significance (Comparison)	Reduced Intensity Alternative Significance (Comparison)
Energy					
Impact EN-1	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact EN-2	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact C-EN-1	LTS	NI (less)	LTS (less)	LTS (less)	LTS (less)
Greenhouse Gas Emissions					
Impact GHG-1a	LTS	NI (less)	LTS (less)	LTS (less)	LTS (less)
Impact GHG-1b	LTS/M	NI (less)	LTS/M (similar)	LTS/M (less)	LTS/M (less)
Impact GHG-2	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Noise					
Impact NOI-1	SU	NI (less)	SU (less)	SU (less)	SU (less)
Impact NOI-2	SU	NI (less)	SU (less)	SU (similar)	SU (similar)
Impact NOI-3	NI	NI (similar)	NI (similar)	NI (similar)	NI (similar)
Impact-C-NOI-1	SU	NI (less)	SU (less)	SU (less)	SU (less)
Cultural Resources					
Impact CR-1	LTS/M	NI (less)	NI (less)	LTS/M (less)	LTS/M (less)
Impact CR-2	LTS/M	NI (less)	LTS/M (less)	LTS/M (less)	LTS/M (less)
Impact CR-3	LTS/M	NI (less)	LTS/M (less)	LTS/M (less)	LTS/M (less)
Impact CR-4	LTS/M	NI (less)	LTS/M (less)	LTS/M (less)	LTS/M (less)
Impact C-CR-1	LTS	NI (less)	LTS (less)	LTS (less)	LTS (less)
Biological Resources					
Impact BIO-1	LTS	NI (less)	LTS (less)	LTS (less)	LTS (less)
Impact BIO-2	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact BIO-3	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact BIO-4	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)
Impact BIO-5	LTS/M	NI (less)	LTS/M (similar)	LTS/M (less)	LTS/M (less)
Impact BIO-6	LTS/M	NI (less)	LTS/M (similar)	LTS/M (less)	LTS/M (less)
Impact C-BIO-1	LTS/M	NI (less)	LTS/M (similar)	LTS/M (similar)	LTS/M (similar)

Environmental Issue	Project	No Project Alternative Significance (Comparison)	No Willow Road Tunnel Alternative Significance (comparison)	Base Level Intensity Alternative Significance (Comparison)	Reduced Intensity Alternative Significance (Comparison)
Geology and Soils					
Impact GS-1	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact GS-2	LTS	NI (less)	LTS (less)	LTS (similar)	LTS (similar)
Impact GS-3	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact GS-4	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact GS-5	LTS/M	NI (less)	LTS/M (less)	LTS/M (less)	LTS/M (less)
Impact C-GS-1	LTS/M	NI (less)	LTS/M (less)	LTS/M (less)	LTS/M (less)
Hydrology and Water Quality					
Impact HY-1	LTS/M	NI (less)	LTS/M (less)	LTS/M (similar)	LTS/M (similar)
Impact HY-2	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact HY-3	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact HY-4	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact HY-5	LTS/M	NI (less)	LTS/M (less)	LTS/M (similar)	LTS/M (similar)
Impact C-HY-1	LTS	NI (less)	LTS (less)	LTS (less)	LTS (less)
Hazards and Hazardous Materials					
Impact HAZ-1	LTS	NI (less)	LTS (less)	LTS (less)	LTS (less)
Impact HAZ-2	LTS/M	NI (less)	LTS/M (less)	LTS/M (less)	LTS/M (less)
Impact HAZ-3	LTS/M	NI (less)	LTS (less)	LTS (less)	LTS (less)
Impact HAZ-4	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact C-HAZ-1	LTS/M	NI (less)	LTS/M (less)	LTS/M (less)	LTS/M (less)
Population and Housing					
Impact POP-1	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact POP-2	LTS	NI (less)	LTS (similar)	LTS (similar)	LTS (similar)
Impact C-POP-1	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)

Environmental Issue	Project	No Project Alternative Significance (Comparison)	No Willow Road Tunnel Alternative Significance (comparison)	Base Level Intensity Alternative Significance (Comparison)	Reduced Intensity Alternative Significance (Comparison)
Public Services					
Impact PS-1	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact PS-2	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact PS-3	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact PS-4	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact PS-5	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact C-PS-1	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Utilities and Service Systems					
Impact UT-1	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact UT-2	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact UT-3	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact UT-4	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact UT-5	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact C-UT-1	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact C-UT-2	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact C-UT-3	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact C-UT-4	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact C-UT-5	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)
Impact C-UT-6	LTS	NI (less)	LTS (similar)	LTS (less)	LTS (less)

Notes:
Project-Level Impacts
NI = No Impact; LTS = Less than Significant; SU = Significant Unavoidable; LTS/M = Less than Significant with Mitigation
Cumulative Impacts
NI = No Cumulative Impact; LTS = Less than Significant Cumulative Impact; LTS/M = Less than Significant Cumulative Impact with Mitigation;

Standard	Definition	Base Level	Bonus Level Fronting a Local Street*	Bonus Level Fronting a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street*	Notes/Additional Requirements
Awnings, Signs, and Canopies **Figure 4, label D**	The maximum depth of awnings, signs, and canopies that project horizontally from the face of the building.	7 feet	7 feet	7 feet	Horizontal projections shall not extend into the public right-of-way. A minimum vertical clearance of 8 feet from finished grade to the bottom of the projection is required.

* See the general plan circulation element street classification map for street types.

Figure 4. Ground Floor Exterior

(4) Open Space. All development in the office district shall provide a minimum amount of open space equal to thirty percent (30%) of the total lot area, with a minimum amount of publicly accessible open space equal to fifty

percent (50%) of the total required open space area.

(A) Publicly accessible open space consists of areas unobstructed by fully enclosed structures with a mixture of landscaping and hardscape that provides seating and places to rest, places for gathering, passive and/or active recreation, pedestrian circulation, or other similar use as determined by the planning commission. Publicly accessible open space types include, but are not limited to, paseos, plazas, forecourts and entryways, and outdoor dining areas. Publicly accessible open space must:

(i) Contain site furnishings, art, or landscaping;

(ii) Be on the ground floor or podium level;

(iii) Be at least partially visible from a public right-of-way such as a street or paseo;

(iv) Have a direct, accessible pedestrian connection to a public right-of-way or easement.

(B) Quasi-public and private open spaces, which may or may not be accessible to the public, include patios, balconies, roof terraces, and courtyards.

(C) All open spaces shall:

(i) Interface with adjacent buildings via direct connections through doors, windows, and entryways;

(ii) Be integrated as part of building modulation and articulation to enhance building facade and should be sited and designed to be appropriate for the size of the development and accommodate different activities, groups and both active and passive uses;

(iii) Incorporate landscaping design that includes:

a. Sustainable stormwater features;

b. A minimum landscaping bed no less than three (3) feet in length or width and five (5) feet in depth for infiltration planting;

c. Native species able to grow to their maximum size without shearing.

(D) All exterior landscaping counts towards open space requirements.

(5) Paseos. A "paseo" is defined as a pedestrian and bicycle path, as shown on the adopted city of Menlo Park zoning map, that provides a member of the public access through one (1) or more parcels and to public streets and/or other paseos. Paseos must meet the following standards:

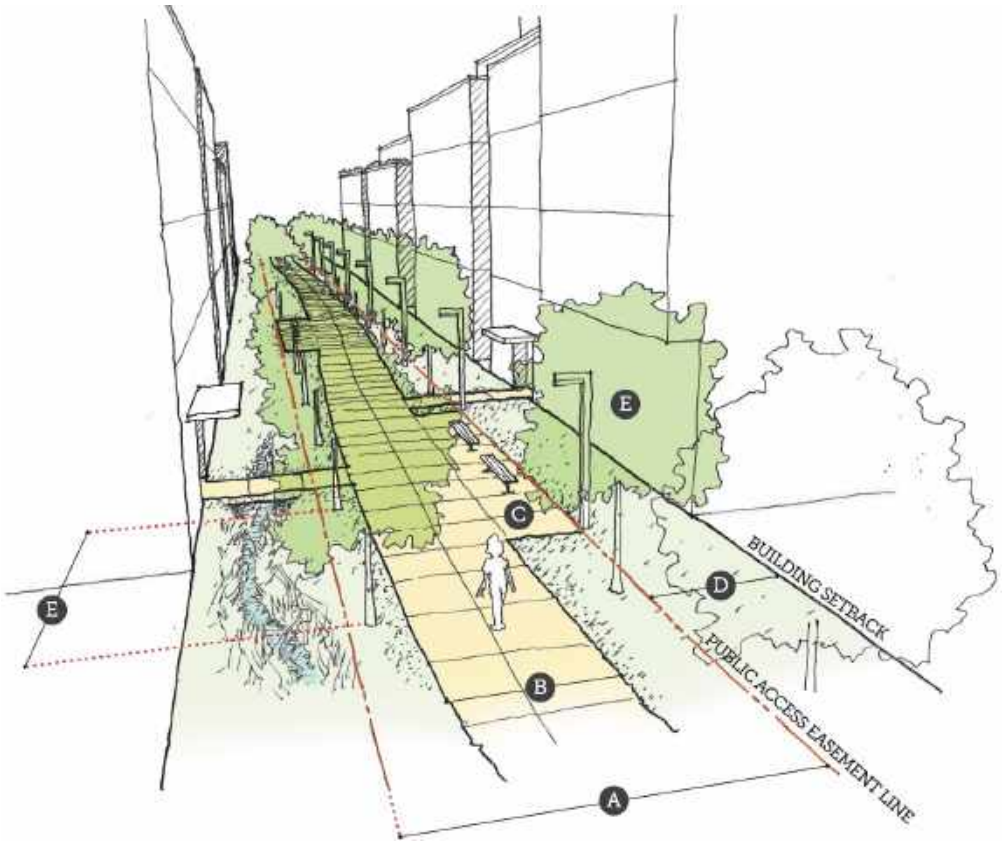
(A) Paseos must be publicly accessible, established through a public access easement, but they remain private property;

(B) Paseos count as publicly accessible open space.

Standard	Definition	Base and Bonus Levels	Notes/Additional Requirements
Paseo Width **Figure 5, label A**	The minimum dimension in overall width of the paseo, including landscaping and hardscape components.	20 feet	
Pathway Width **Figure 5, label B**	The minimum and maximum width of the paved, hardscape portion of the paseo.	10 feet minimum; 14 feet maximum	The paseo pathway shall be connected to building entrances with hardscaped pathways. Pathways may be used for emergency vehicle access use and allowed a maximum paved width exemption to accommodate standards of the Menlo Park Fire Protection District with prior approval by transportation manager.
Furnishing Zones **Figure 5, label C**	Requirements for pockets of hardscape areas dedicated to seating, adjacent to the main pedestrian pathway area.	Minimum dimension of 5 feet wide by 20 feet long, provided at a minimum interval of 100 feet	Furnishing zones must include benches or other type of seating and pedestrian-scaled lighting.
Paseo Frontage Setback **Figure 5, label D**	The minimum setback for adjacent buildings from the edge of the paseo property line.	10 feet	A minimum of 50% of the setback area between the building and paseo shall be landscaped (50% of which should provide on-site infiltration of stormwater runoff.) Plants should be climate-adapted species up to 3 feet in height.
Trees **Figure 5, label E**	The size and spacing of trees that are required along the paseo.	Small canopy trees with a maximum mature height of 40 feet and canopy diameter of 25 feet, planted at maximum intervals of 40 feet	Trees must be planted within the paseo width, with the tree canopy allowed to overhang into the setback.

Standard	Definition	Base and Bonus Levels	Notes/Additional Requirements
Landscaping	The minimum percentage of the paseo that is dedicated to vegetation.	20%	On-site infiltration of stormwater runoff is required.
Lighting	Pedestrian-oriented street lamps.	One light fixture every 40 feet	Use energy-efficient lighting per Title 24. Lights shall be located a minimum of 20 feet from trees.

Figure 5. Paseos



(6) Building Design.

(A) Main building entrances shall face the street or a publicly accessible courtyard. Building and/or frontage landscaping shall bring the human scale to the edges of the street. Retail building frontage shall be parallel to the street.

(B) Utilities, including meters, backflow prevention devices, etc., shall be concealed or integrated into the building design to the extent feasible, as determined by the public works director.

(C) Projects shall include dedicated, screened, and easily accessible space for recycling, compost, and solid waste storage and collection.

(D) Trash and storage shall be enclosed and attractively screened from public view.

Standard	Definition	Base Level	Bonus Level Fronting a Local Street*	Bonus Level Fronting a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street*	Notes/Additional Requirements
Awnings, Signs, and Canopies **Figure 4, label D**	The maximum depth of awnings, signs, and canopies that project horizontally from the face of the building.	7 feet	7 feet	7 feet	Horizontal projections shall not extend into the public right-of-way. A minimum vertical clearance of 8 feet from finished grade to the bottom of the projection is required.

* See the general plan circulation element street classification map for street types.

Figure 4. Ground Floor Exterior

(4) Open Space. All development in the residential mixed use district shall provide a minimum amount of open space equal to twenty-five percent (25%) of the total lot area, with a minimum amount of publicly accessible

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open space equal to twenty-five percent (25%) of the total required open space area.

(A) Publicly accessible open space consists of areas unobstructed by fully enclosed structures with a mixture of landscaping and hardscape that provides seating and places to rest, places for gathering, passive and/or active recreation, pedestrian circulation, or other similar use as determined by the planning commission. Publicly accessible open space types include, but are not limited to, paseos, plazas, forecourts and entryways, and outdoor dining areas. Publicly accessible open space must:

(i) Contain site furnishings, art, or landscaping;

(ii) Be on the ground floor or podium level;

(iii) Be at least partially visible from a public right-of-way such as a street or paseo;

(iv) Have a direct, accessible pedestrian connection to a public right-of-way or easement.

(B) Quasi-public and private open spaces, which may or may not be accessible to the public, include patios, balconies, roof terraces, and courtyards.

(C) Residential developments shall have a minimum of common open space and private open space. These requirements are counted towards the minimum amount of open space equal to twenty-five percent (25%) of the total lot area.

(i) One hundred (100) square feet of open space per unit shall be created as common open space or a minimum of eighty (80) square feet of open space per unit created as private open space, where private open space shall have a minimum dimension of six (6) feet by six (6) feet;

(ii) In the case of a mix of private and common open space, such common open space shall be provided at a ratio equal to one and one-quarter (1.25) square feet for each one (1) square foot of private open space that is not provided.

(iii) Depending on the number of dwelling units, common open space shall be provided to meet the following criteria:

a. Ten (10) to fifty (50) units: minimum of one (1) space, twenty (20) feet minimum dimension (four hundred (400) square feet total, minimum);

b. Fifty-one (51) to one hundred (100) units: minimum of one (1) space, thirty (30) feet minimum dimension (nine hundred (900) square feet total, minimum);

c. One hundred one (101) or more units: minimum of one (1) space, forty (40) feet minimum dimension (one thousand six hundred (1,600) square feet total, minimum).

(D) All open spaces shall:

(i) Interface with adjacent buildings via direct connections through doors, windows, and entryways;

(ii) Be integrated as part of building modulation and articulation to enhance building facade and should be sited and designed to be appropriate for the size of the development and accommodate different activities, groups and both active and passive uses;

(iii) Incorporate landscaping design that includes:

a. Sustainable stormwater features;

b. A minimum landscaping bed no less than three (3) feet in length or width and five (5) feet in depth for infiltration planting;

c. Native species able to grow to their maximum size without shearing.

(E) All exterior landscaping counts towards open space requirements.

(5) Paseos. A "paseo" is defined as a pedestrian and bicycle path, as shown on the adopted city of Menlo Park zoning map, that provides a member of the public access through one (1) or more parcels and to public streets and/or other paseos. Paseos must meet the following standards:

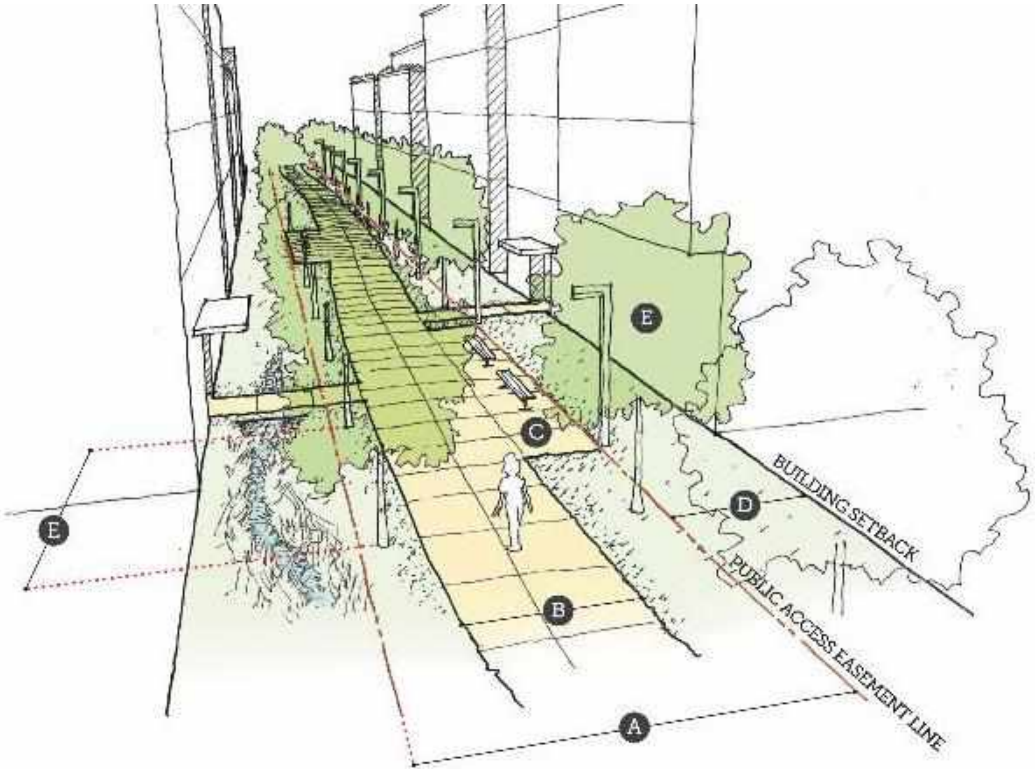
(A) Paseos must be publicly accessible, established through a public access easement, but they remain private property;

(B) Paseos count as publicly accessible open space.

Standard	Definition	Base and Bonus Levels	Notes/Additional Requirements
Paseo Width **Figure 5, label A**	The minimum dimension in overall width of the paseo, including landscaping and hardscape components.	20 feet	
Pathway Width **Figure 5, label B**	The minimum and maximum width of the hardscape portion of the paseo.	10 feet minimum; 14 feet maximum	The paseo pathway shall be connected to building entrances with hardscaped pathways. Pathways may be used for emergency vehicle access use and allowed a maximum paved width exemption to accommodate standards of the Menlo Park Fire Protection District with prior approval by transportation manager.

Standard	Definition	Base and Bonus Levels	Notes/Additional Requirements
Furnishing Zones **Figure 5, label C**	Requirements for pockets of hardscape areas dedicated to seating, adjacent to the main pedestrian pathway area.	Minimum dimension of 5 feet wide by 20 feet long, provided at a minimum interval of 100 feet	Furnishing zones must include benches or other type of seating and pedestrian-scaled lighting.
Paseo Frontage Setback **Figure 5, label D**	The minimum setback for adjacent buildings from the edge of the paseo property line.	5 feet	A minimum of 50% of the setback area between the building and paseo shall be landscaped (50% of which should provide on-site infiltration of stormwater runoff). Plants should be climate-adapted species, up to 3 feet in height.
Trees **Figure 5, label E**	The size and spacing of trees that are required along the paseo.	Small canopy trees with a maximum mature height of 40 feet and canopy diameter of 25 feet, planted at maximum intervals of 40 feet	Trees must be planted within the paseo width, with the tree canopy allowed to overhang into the setback.
Landscaping	The minimum percentage of the paseo that is dedicated to vegetation.	20%	On-site infiltration of stormwater runoff is required.
Lighting	Pedestrian-oriented street lamps.	One light fixture every 40 feet	Use energy-efficient lighting per Title 24. Lights shall be located a minimum of 20 feet from trees.

Figure 5. Paseos



(6) Building Design.

(A) Main building entrances shall face the street or a publicly accessible courtyard. Building and/or frontage landscaping shall bring the human scale to the edges of the street. Retail building frontage shall be parallel to the street.

(B) Utilities, including meters, backflow prevention devices, etc., shall be concealed or integrated into the building design to the extent feasible, as determined by the public works director.

(C) Projects shall include dedicated, screened, and easily accessible space for recycling, compost, and solid waste storage and collection.

(D) Trash and storage shall be enclosed and attractively screened from public view.

(E) Materials and colors of utility, trash, and storage enclosures shall match or be compatible with the primary building.

(F) Building materials shall be durable and high quality to ensure adaptability and reuse over time. Glass paneling and windows shall be used to invite outdoor views and introduce natural light into interior spaces. Stucco shall not be used on more than fifty percent (50%) of the building facade. When stucco is used, it must be smooth troweled.

(G) Rooflines and eaves adjacent to street-facing facades shall vary across a building, including a four (4) foot minimum height modulation to break visual monotony and create a visually interesting skyline as seen from public streets (see Figure 6). The variation of the roofline's horizontal distance should match the required modulations and stepbacks.

WILLOW VILLAGE ADJUSTMENT REQUEST: TRANSPORTATION DEMAND MANAMAGEMENT

Summary of Adjustment Request

Request for adjustment to staff's interpretation of the Transportation Demand Management ("TDM") provisions of the City of Menlo Park ("City") Zoning Code (Zoning Code §§16.43.100 and 16.45.090) to allow the Willow Village Master Plan Project ("Willow Village") to achieve the greater reduction of (i) a 20 percent trip reduction from gross trip generation rates, and (ii) the proposed Trip Cap for the Office component of Willow Village.

Using gross trip generation rates and the proposed Trip Cap, Willow Village overall would achieve a 20 percent reduction in average daily trips and a 31/35 percent reduction in AM/PM peak hour trips. The Office component of Willow Village would achieve a 35/40 percent reduction in AM/PM peak hour trips. These reductions would meet or exceed the Zoning Code requirement for a 20 percent reduction.

Code Requirements

Zoning Code Provisions - Zoning Code §§16.43.100 (Office District) and 16.45.090 (R-MU District)

"New construction and additions to an existing building involving ten thousand (10,000) or more square feet of gross floor area, or a change of use of ten thousand (10,000) or more square feet of gross floor area shall develop a transportation demand management (TDM) plan necessary to reduce associated vehicle trips to at least twenty percent (20%) below standard generation rates for uses on the project site."

Menlo Park Transportation Demand Management (TDM) Program Guidelines ("TDM Guidelines")

The City's TDM Guidelines provide list of recommended potential TDM measures and their associated trip credit is maintained by the San Mateo County City/County Association of Governments ("C/CAG") as part of the San Mateo County Congestion Management Program ("CMP"). The TDM Guidelines do not provide specific guidance on the measurement of the Zoning Code-required 20 percent reduction in standard trip generation rates.

Staff Interpretation

Staff has made three significant interpretations of the TDM provisions of the Zoning Code:

1. *Standard Generation Rates*: Staff interprets the term "standard generation rates" as used in the TDM provisions of the Zoning Code to mean:

   The trip generation rates set forth in the current edition of the Institute of Traffic Engineers ("ITE") *Trip Generation Manual* (referred to herein as "Gross Trip Generation Rates")

MINUS

Reductions for "Land Use Efficiency" (*i.e.*, the portion of trips generated by a mixed-use development that both begin and end within the development, also referred to as "internal capture");

AND

Reductions for "Location Efficiency" (*i.e.,* the portion of trips generated within a development that will be pedestrian/bicycle/transit trips as a result of proximity to other uses or transit).

The reduced trip generation rates as interpreted by staff are referred to herein as "Net Trip Generation Rates."

2. *Reduction Period*: Staff interprets the TDM provisions of the Zoning Code to require a 20 percent reduction in both peak hour trips and average daily total ("ADT") trips.

Requested Adjustment

Peninsula Innovation Partners requests for adjustment to staff's interpretation of the TDM provisions of the Zoning Code (Zoning Code §§16.43.100 and 16.45.090) to allow Willow Village to achieve the greater reduction of (i) a 20 percent reduction from Gross Trip Generation Rates, and (ii) the proposed Trip Cap for Willow Village, as detailed in Row D of Table 1, below.

Using Gross Trip Generation Rates, these reductions would meet or exceed the Zoning Code requirement for a 20 percent reduction.

Table 1 details the Adjustment Request.

Row A depicts the ITE Gross Trip Generation Rates for Willow Village developed by the City's transportation consultant, Hexagon Transportation Consultants.

Row B depicts a 20 percent reduction from Gross Trip Generation Rates.

Row C depicts the proposed Office Trip Cap for the Office component of Willow Village.

Row D depicts the proposed TDM reduction requirement for Willow Village, based on the greater reduction of **Row B** and **Row C**. As proposed, Willow Village would achieve a 20 percent reduction in ADT trips and a 31/35 percent reduction in AM/PM peak hour Trips. The Office component of Willow Village would achieve a 35/40 percent reduction in AM/PM peak hour trips.

Row E depicts the trip reduction that would be required for Willow Village based on staff's interpretation of the TDM provisions of the Zoning Code, also assuming implementation of the proposed Office Trip Cap.

Table 1: Trip Generation Summary – Office, Mixed Use, & Total

	Daily Totals			AM Peak Hour			PM Peak Hour		
	Office	Mixed-Use	Total	Office	Mixed-Use	Total	Office	Mixed-Use	Total
A. Standard (Gross) ITE Trip Generation[1] (based on ITE rate for each land use)	22,796	18,783	41,579	2,572	904	3,476	2,780	1,688	4,468
B. Standard ITE Trip Generation Less 20% TDM Reduction	**18,237**	**15,026**	**33,263**	2,058	**723**	2,781	2,224	**1,350**	3,574
Reduction from Standard ITE Rates	*-20%*	*-20%*	*-20%*	*-20%*	*-20%*	*-20%*	*-20%*	*-20%*	*-20%*
C. Office Proposed Trip Cap (Existing Trip Cap KSF rate for 1,250 KSF)	19,280	NA	NA	**1,670**	NA	NA	**1,670**	NA	NA
Reduction from Standard ITE Rates	*-15%*			*-35%*			*-40%*		
D. Proposed Project Trip Generation (using highest % reduction from B or C)	**18,237**	**15,026**	**33,263**	**1,670**	**723**	**2,393**	**1,670**	**1,350**	**3,020**
Reduction from Standard ITE Rates	*-20%*	*-20%*	*-20%*	*-35%*	*-20%*	*-31%*	*-40%*	*-20%*	*-35%*
E. Hexagon Project Trip Generation (Net Location & Land Use Efficiency Reduction) Less 20% TDM Programs[1,2,3]	15,837	13,048	32,328	1,670	644	2,314	1,670	1,100	2,770
Reduction from Standard ITE Rates	*-31%*	*-31%*	*-31%*	*-35%*	*-29%*	*-33%*	*-40%*	*-35%*	*-38%*

1 – Calculated using the trip generation data summarized in **Table 2A** Trip Generation for Development Phases of the Proposed Facebook Willow Village Campus in Menlo Park, California, Hexagon Transportation Consultants, June 14, 2021.

2 - The office AM & PM peak hour trip generation is based on the proposed trip cap and reflects the Facebook TDM program effectiveness.

3 - Does not include pass by trip reduction for retail.

Justification for Adjustment

The proposed Adjustment would be consistent with *ConnectMenlo* and would avoid penalizing Willow Village for embracing the City's vision for a truly mixed-use project.

Consistency with ConnectMenlo

The proposed Adjustment would be consistent with *ConnectMenlo* vision for mixed-use development in the Bayfront Area.

General Plan. The *ConnectMenlo* General Plan encourages office, residential, commercial, and hotel uses "in close proximity or integrated with one another" in order to "promote the creation of an employment district with travel patterns that are oriented toward pedestrian, transit, and bicycle use." (General Plan Land Use Element, p. LU-15). *ConnectMenlo* therefore promotes mixed-use development to increase alternative modes of travel and to decrease vehicle trips that are otherwise necessary with single-use development. Willow Village's proposed mix of office, residential, commercial, and hotel uses would directly accomplish *ConnectMenlo's* mixed-use vision by increasing the amount of walking, biking, and transit use and, in turn, decreasing vehicle trips. Willow Village's travel benefits are a key element of its TDM program and should be credited, rather than discounted, in accordance with *ConnectMenlo*'s vision.

Zoning Code. As noted above, the TDM provisions of the Zoning Code require a 20 percent reduction from "standard trip generation rates." ITE's standard trip generation rates are gross trip rates, before any reductions for Land Use Efficiency and Location Efficiency. While ITE and other national organizations (such as the American Planning Association) have developed recommended methodologies for calculating Land Use Efficiency and Location Efficiency, these reductions are not "standard," but instead are calculated based on project land uses, local conditions, and engineering judgment.*TDM Guidelines.* The City's TDM Guidelines support the approach of including Land Use Efficiency and Location Efficiency with the TDM measures that count toward the required 20 percent trip reduction. For example, the TMD Guidelines recommend TDM credits for:

- Providing on-site amenities/accommodations (e.g., banking, grocery) that encourage people to stay on site during the workday, making it easier for workers to leave their automobiles at home (a form of Land Use Efficiency);

- Encouraging infill development (a form of Location Efficiency); and

- Making roads and streets more pedestrian and bicycle friendly (a form of both Land Use and Location Efficiency).

Indeed, the TDM Guidelines recognize that the trip reduction benefits of mixed-use/infill development are considered "generally acceptable TDM practices" consistent with industry standards. (TDM Program Guidelines, at p. 7). In other words, the TDM Guidelines support treating Land Use Efficiency and Location Efficiency as part of the TDM reductions from Gross Trip Generation Rates.

Avoiding Penalizing Mixed-Use Projects

Staff's interpretation of applying the 20 percent reduction to Net Trip Generation Rates would penalize Willow Village and other mixed-use projects[1] for implementing *ConnectMenlo's* vision by proposing a true mix of uses. As shown in Table 1:

- *Mixed-Use Reduction*: Under staff's interpretation (Row E), the Mixed-Use component of Willow Village would be required to achieve 31% ADT/29% AM/35% PM trip reduction, as opposed to 20% ADT/20% AM/20% PM trip reduction when using Gross Trip Generation Rates (Row D).
    - Achieving reductions of the magnitude proposed by staff is infeasible for retail and residential projects in locations similar to Menlo Park. Requiring this magnitude of reduction would render important Willow Village components infeasible, especially the grocery store and other community amenities.

- *Office Reduction:* Under staff's interpretation (Row E), the Office component of Willow Village would be required to achieve 31% ADT trip reduction, as opposed to 20% ADT trip reduction when using Gross Trip Generation Rates (Row D). (The required reduction for peak hour trips would be the same as with the proposed Adjustment, because the Office Trip Cap is more stringent than the 20 percent reduction regardless of whether it is taken from Gross Trip Generation Rates or Net Trip Generation Rates.)

    - Standard industry practice is that most TDM programs are geared toward reducing peak hour trips, not ADT trips. The *Connect Menlo* General Plan explains that TDM programs "are intended to reduce vehicle trips and parking demand by promoting the use of a variety of transportation options and *shifting travel mode and time of day* to take advantage of available capacity to reduce crowding and congestion." (GP Circulation Element, p. CIRC-13). (Nonetheless, the full impacts of daily trip generation are addressed in other aspects of EIRs, such as air quality and GHG.)
    - Likewise, the TDM provisions of the Zoning Code include "alternative work schedules" and the TDM Guidelines include "flextime" as acceptable TDM measures.
    - Achieving ADT reductions of the magnitude proposed by staff is infeasible for office projects in locations similar to Menlo Park.

- *Total Reduction:* Under staff's interpretation (Row E), Willow Village overall would be required to achieve 31% ADT/33% AM/38% PM trip reduction, as opposed to 20% ADT/31% AM/35% PM trip reduction when using Gross Trip Generation Rates and the proposed Trip Cap (Row D).

    - By requiring substantially higher trip reductions based on the mixed-use nature of the project (because of higher Land Use Efficiencies), staff's interpretation would punish Willow Village for implementing *ConnectMenlo's* mixed use vision.

[1] Unlike mixed-use projects, single-use projects would not be subject to Land Use Efficiency reductions. Likewise, predominantly single use projects with a small area devoted to a secondary use (such as an office building with a café or a residential building with an incubator office space) would be subject to a far less acute penalty, because the Land Use Efficiency of such projects is much lower than for a large, truly mixed-use project such as Willow Village.

The Applicant respectfully requests that the City grant the proposed Adjustment to staff's interpretation of the TDM provisions of the Zoning code.

Assuming implementation of Mitigation Measure TRA-3, this Project, in combination with cumulative projects, consistent with the findings of the ConnectMenlo Final EIR, would have a **less-than-significant (LTS)** cumulative impact with respect to hazards or incompatible uses.

Emergency Access

Future development, as part of the City's project approval process, would be required to comply with existing regulations, including General Plan policies and zoning regulations that have been prepared to minimize impacts related to emergency access. The City, throughout the 2040 buildout horizon, would implement the General Plan programs that require the City's continued coordination with MPPD and MPFPD to establish circulation standards, adopt an emergency response routes map, and equip all new traffic signals with pre-emptive traffic signal devices for emergency services. Furthermore, the implementation of the zoning regulations would help to minimize traffic congestion that could impact emergency access. As mentioned above, the Project would be required, as a condition of Project approval, to submit event traffic plans for large events for City approval to demonstrate measures that would be taken to minimize the events' effect on roadway traffic conditions and ensure adequate emergency vehicle access.

For these reasons, the Proposed Project, in combination with cumulative projects, would have a **less-than-significant (LTS)** cumulative impact with respect to emergency access.

Non-CEQA Analysis

Intersection Level of Service (LOS) Analysis

The findings of the intersection LOS compliance analysis are summarized in this section for informational purposes. The analysis scope and methodology, analysis scenarios, data collection, and level of service policy standards are detailed in Appendix 3.3, Transportation, of this EIR.

As stated above, LOS is no longer a CEQA threshold. However, the General Plan and City's TIA Guidelines require that the TIA also analyze LOS for local planning purposes (per General Plan Program Circ-3.A Transportation Impact Metrics):

Supplement Vehicle Miles Traveled (VMT) and greenhouse gas emissions per service population (or other efficiency metric) metrics with Level of Service (LOS) in the transportation impact review process, and utilize LOS for identification of potential operational improvements, such as traffic signal upgrades and coordination, as part of the Transportation Master Plan.

The LOS analysis would determine whether the project traffic would cause an intersection LOS to exceed the City's LOS thresholds or cause either the average delay or average critical delay to exceed the City's intersection delay thresholds under near term and cumulative conditions. The LOS and delay thresholds vary depending on the street classifications as well as whether the intersection is on a State route or not.

The City's TIA Guidelines further require an analysis of the Proposed Project in relation to relevant policies of the Circulation Element and consideration of specific measures to address noncompliance with local policies which may occur as a result of the addition of project traffic. The TIA identifies measures that could be applied as conditions of approval that would bring operations back to pre-Project levels. Although not included in the TIA for purposes of this EIR, an analysis may be prepared separately to determine if there are potential measures that could bring the Proposed Project into conformance with the LOS goals of Circulation Policy 3.4. Implementation of any such measures would require review and approval by City decision makers.

Intersection Level of Service Standards and Adverse Effect Criteria

City of Menlo Park Definition of Adverse Effect

The following thresholds are from the City of Menlo Park's TIA Guidelines and the Proposed Project's compliance with local policies was evaluated based on these thresholds.

- A project is considered potentially noncompliant with local policies if the addition of project traffic causes an intersection on a collector street operating at LOS "A" through "C" to operate at an unacceptable level (LOS "D," "E" or "F") or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first. Potential noncompliance shall also include a project that causes an intersection on arterial streets or local approaches to State controlled signalized intersections operating at LOS "A" through "D" to operate at an unacceptable level (LOS "E" or "F") or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.
- A project is also considered potentially noncompliant if the addition of project traffic causes an increase of more than 0.8 seconds of average delay to vehicles on all critical movements for intersections operating at a near-term LOS "D" through "F" for collector streets and at a near-term LOS "E" or "F" for arterial streets. For local approaches to State controlled signalized intersections, a project is considered to be potentially noncompliant if the addition of project traffic causes an increase of more than 0.8 seconds of delay to vehicles on the most critical movements for intersections operating at a near-term LOS "E" or "F."

State (Caltrans) Controlled Intersections Definition of Adverse Effect

For signalized intersections involving two state routes, the proposed project is considered potentially non-compliant with local policies if for any peak hour:

- The level of service degrades from an acceptable LOS D or better under existing conditions to an unacceptable LOS E or F under existing plus project conditions, and the average delay per vehicle increases by four seconds or more, or
- The level of service is an unacceptable LOS E or F under existing conditions and the addition of project trips causes an increase in the average control delay at the intersection by four seconds or more.

City of East Palo Alto Definition of Adverse Effect

The following thresholds are used in East Palo Alto, and the proposed project's compliance with local policies was evaluated based on these thresholds:

At a signalized intersection, the project is considered to have an adverse effect if it:

- Causes operations to degrade from LOS D (or better) to LOS E or F; or
- Exacerbates LOS E or F conditions by both increasing critical movement delay by four or more seconds and increasing volume-to-capacity ratio (V/C ratio) by 0.01 at an intersection evaluated using the TRAFFIX software; or
- Increases the V/C ratio by > 0.01 at an intersection that exhibits unacceptable operations, even if the calculated LOS is acceptable; or
- Causes planned future intersections to operate at LOS E or F.

At an unsignalized intersection, the proposed project is considered to have an adverse effect if it:

- Causes operations to degrade from LOS D or better to LOS E or F; or
- Exacerbates LOS E or F conditions by increasing control delay by five or more seconds; and
- Causes volumes under project conditions to exceed the Caltrans Peak-Hour Volume Warrant Criteria.

Near-Term (2025) Plus Project Intersection Levels of Service

The results of the intersection level of service analysis under near term (2025) plus project conditions are summarized in Table 3.3-10 and 3.3-11. The Willow Road corridor and 101/University Avenue interchange were analyzed using the Simtraffic microsimulation model as described in Appendix 3.3, Transportation, of this EIR. The microsimulation model indicates that the intersections would experience capacity issues where the demand cannot be served by the intersections. Oversaturated conditions would operate at LOS F and are indicated using 'OVERSAT' in the tables below. Vistro and Traffix were used to calculate critical delay and volume to capacity ratio at the Willow Road and 101/University Avenue intersections, respectively. The intersection LOS calculation sheets are included in Appendix 3.3, Transportation, of this EIR. Under near-term plus project conditions, the following intersections (see Figure 3.3-7, Near-Term [2025] Plus Project Intersection Level of Service Summary) would be non-compliant with the TIA Guidelines during either the AM or the PM peak hour as compared to near term conditions:

1. Marsh Road and Bayfront Expressway (AM peak hour)

13. Chilco Street and Hamilton Avenue (PM peak hour)

16. Willow Road and Bayfront Expressway (AM peak hour)

17. Willow Road and Hamilton Avenue (AM and PM peak hours)

18. Willow Road and Park Street (AM and PM peak hours)

21. Willow Road and Newbridge Street (AM and PM peak hours)

23. Willow Road and US 101 Southbound Ramps (AM peak hour)

24. Willow Road and Bay Road (AM peak hour)

30. O'Brien Drive and Kavanaugh Drive (AM and PM peak hours)

32. Adam's Drive and O'Brien Drive (AM and PM peak hours)

39. University Avenue and Bay Road (PM peak hour)

42. University Avenue and Donohoe Street (AM peak hour)

43. US 101 Northbound Off-Ramp and Donohoe Street (AM and PM peak hours)

44. Cooley Avenue and Donohoe Street (AM and PM peak hours)

45. University Avenue and US 101 Southbound Ramps (AM peak hour)

47. E. Bayshore Road and Donohoe Street (AM and PM peak hours)

Bold indicates intersections that already (i.e., without the Proposed Project) operate unacceptably under near-term conditions.

Table 3.3-10. Near-Term (2025) Intersection Levels of Service (Menlo Park)

				Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
1	Marsh Road & Bayfront Expressway*	AM	Signal	52.0	D	**56.2**	**E**	**4.2**	**5.4**	50.2	D	-
	Haven Avenue Southbound			***71.2***	***E***	***70.6***	***E***	***<4***	***<0.8***			
		PM	Signal	34.9	C	38.7	D	<4	4.7	38.9	D	-
	Haven Avenue Southbound			***66.9***	***E***	***65.6***	***E***	***<4***	***<0.8***			
2	Marsh Road & US 101 Northbound Off-Ramp	AM	Signal	23.1	C	39.0	D	15.9	25.1			
		PM		15.8	B	16.8	B	<4	1.6			
3	Marsh Road & US 101 Southbound Off-Ramp	AM	Signal	20.7	C	20.7	C	<4	<0.8			
		PM		17.6	B	17.6	B	<4	<0.8			
4	Marsh Road & Scott Drive	AM	Signal	20.3	C	20.5	C	<4	<0.8			
		PM		15.9	B	15.9	B	<4	<0.8			
5	Marsh Road & Bohannon Drive/Florence Street	AM	Signal	40.0	D	41.6	D	<4	2.3			
		PM		36.3	D	37.3	D	<4	2.2			
6	Marsh Road & Bay Road	AM	Signal	23.6	C	25.2	C	<4	2.8			
		PM		18.7	B	19.1	B	<4	<0.8			
7	Chrysler Drive & Bayfront Expressway	AM	Signal	9.1	A	9.4	A	<4	<0.8			
		PM		17.3	B	18.3	B	<4	1.5			
8	Chilco Street & Bayfront Expressway	AM	Signal	23.7	C	25.6	C	<4	5.3			
		PM		34.1	C	35.9	D	<4	4.5			
9	MPK 21 Driveway & Bayfront Expressway	AM	Signal	7.3	A	7.4	A	<4	<0.8			
		PM		13.7	B	15.0	B	<4	1.4			

				Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
10	MPK 20 Driveway (east) & Bayfront Expressway	AM	Signal	7.3	A	7.5	A	<4	<0.8			
		PM		9.7	A	9.4	A	<4	<0.8			
11	Chrysler Drive & Constitution Drive	AM	Signal	**59.8**	**E**	**55.1**	**E**	**<4**	**<0.8**			
		PM		28.5	C	30.4	C	<4	1.6			
12	Chilco Street & Constitution Drive/MPK 22 Driveway[2]	AM	Signal	24.8	C	24.6	C	<4	<0.8			
		PM		**42.9**	**D**	**54.3**	**D**	**11.4**	**11.4**			
13	Chilco Street & Hamilton Avenue	AM	AWSC	10.5	B	10.8	B	<4	<0.8	*Traffic signal potentially feasible*		
		PM		19.0	C	**38.0**	**E**	**19.0**	**19.0**			
14	Ravenswood Avenue & Middlefield Road	AM	Signal	43.1	D	44.9	D	<4	3.0			
		PM		17.6	B	17.9	B	<4	<0.8			
15	Ringwood Avenue & Middlefield Road	AM	Signal	13.2	B	13.7	B	<4	<0.8			
		PM		15.2	B	15.4	B	<4	<0.8			
16	Willow Road & Bayfront Expressway*[1]	AM	Signal	**OVER SAT**	**F**	**OVERSAT**	**F**	**14.0**	**6.7**	***No feasible Improvement***		
		PM		**OVER SAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
17	Willow Road & Hamilton Avenue[1]	AM	Signal	**OVER SAT**	**F**	**OVERSAT**	**F**	**44.1**	**54.0**	***No feasible Improvement***		
	Hamilton Avenue Southbound			***64.9***	***E***	***>120***	***F***	***117.9***	***<0.8***			
	Main Street Northbound			***83.3***	***F***	***113.7***	***F***	***30.4***	***>120***			
		PM	Signal	**OVER SAT**	**F**	**OVERSAT**	**F**	**>120**	**>120**	***No feasible Improvement***		

				Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
	Hamilton Avenue Southbound			***>120***	***F***	***>120***	***F***	***>120***	***<0.8***			
	Main Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***>120***			
18	Willow Road & Park Street (future intersection)[1]	AM	Signal	Project Intersection		**OVERSAT**	**F**	**36.8**	**53.0**	***No feasible Improvement***		
		PM				**OVERSAT**	**F**	**17.5**	**23.1**			
19	Willow Road & Ivy Drive[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**20.9**	**46.6**			
	Ivy Drive Southbound	*AM*		***88.2***	***F***	***75.0***	***E***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**50.1**	**70.9**			
	Ivy Drive Southbound	*PM*		***68.4***	***E***	***66.1***	***E***	***<4***	***<0.8***			
20	Willow Road & O'Brien Drive[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound			***72.6***	***E***	***66.4***	***E***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
21	Willow Road & Newbridge Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**40.3**	**49.7**	**OVERSAT**	**F**	
	Newbridge Street Southbound			***69.3***	***E***	***104.2***	***F***	***34.9***	***43.0***	***79.6***	***F***	***9.0***
	Newbridge Street Northbound			***>120***	***F***	***>120***	***F***	***4.4***	***64.0***	*42.1*	*D*	*<0.8*
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Newbridge Street Southbound			***60.8***	***E***	***59.1***	***E***	***<4***	***1.5***	***74.5***	***E***	***26.0***
	Newbridge Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***	*51.3*	*D*	*<0.8*

				Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
22	Willow Road & US 101 Northbound Ramps[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**11.5**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
23	Willow Road & US 101 Southbound Ramps[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**18.3**	**<0.8**	***No feasible Improvement***		
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
24	Willow Road & Bay Road[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**38.3**	**OVERSAT**	**F**	
	Bay Road Southbound			***104.3***	***F***	***>120***	***F***	***31.7***	***31.7***	*27.0*	*C*	*<0.8*
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**6.6**	**6.7**	**OVERSAT**	**F**	
	Bay Road Southbound			*49.2*	*D*	*53.5*	*D*	*4.3*	*4.3*	*23.9*	*C*	*<0.8*
25	Willow Road & Hospital Plaza/Durham Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	VA Medical Center Southbound			***73.2***	***E***	***69.5***	***E***	***<4***	***<0.8***			
	Durham Street Northbound			***93.6***	***F***	***79.6***	***E***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	VA Medical Center Southbound			***72.2***	***E***	***70.2***	***E***	***<4***	***<0.8***			
	Durham Street Northbound			***84.6***	***F***	***79.8***	***E***	***<4***	***<0.8***			
26	Willow Road & Coleman Avenue	AM	Signal	25.1	C	23.9	C	<4	<0.8			
		PM		11.0	B	10.8	B	<4	<0.8			

				Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
27	Willow Road & Gilbert Avenue	AM	Signal	20.0	C	19.9	B	<4	<0.8			
		PM		13.0	B	12.4	B	<4	<0.8			
28	Willow Road & Middlefield Road	AM	Signal	**62.3**	**E**	**62.5**	**E**	**<4**	**<0.8**			
	Middlefield Road Southbound			***69.8***	***E***	***70.1***	***E***	***<4***	***<0.8***			
	Middlefield Road Northbound			***67.7***	***E***	***67.7***	***E***	***<4***	***<0.8***			
		PM	Signal	34.5	C	34.7	C	<4	<0.8			
	Middlefield Road Southbound			*34.5*	*C*	*34.7*	*C*	*<4*	*<0.8*			
	Middlefield Road Northbound			*34.3*	*C*	*34.7*	*C*	*<4*	*<0.8*			
29	O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)	AM	Rdbt	Project Intersection		7.4	A	7.4	7.4			
		PM				9.2	A	9.2	9.2			
30	O'Brien Drive & Kavanaugh Drive	AM	AWSC	12.7	B	**107.7**	**F**	**95.0**	**95.0**	*Traffic signal potentially feasible*		
		PM		**29.6**	**D**	**73.7**	**F**	**44.1**	**44.1**			
31	Adams Drive & Adams Court	AM	TWSC	11.5	B	11.6	B	<4	<0.8			
		PM		11.9	B	11.9	B	<4	<0.8			
32	Adams Drive & O'Brien Drive	AM	TWSC	17.6	C	**62.5**	**F**	**44.9**	**44.9**	*Traffic signal potentially feasible*		
		PM		**34.0**	**D**	**>120**	**F**	**>120**	**>120**			
33	University Avenue & Bayfront Expressway*	AM	Signal	13.9	B	12.1	B	<4	<0.8			
		PM		**105.8**	**F**	**108.7**	**F**	**<4**	**3.0**			

* Denotes CMP Intersection

				Near-Term (2025) Conditions								
				No Project		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]

AWSC - All Way Stop Control; TWSC - Two Way Stop Control; Rdbt - Roundabout

[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported

"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.

[1]Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in average delay and critical delay calculated using Vistro.

[2]The intersection is not considered as non-compliant under background plus project conditions because the critical movement of the local approach shifts with the addition of project traffic.

Bold indicates substandard level of service

Bold	indicates noncompliance. The project exceeds thresholds in the City of Menlo Park's TIA Guidelines. These are not CEQA thresholds.

Table 3.3-11. Near-Term (2025) Intersection Levels of Service (East Palo Alto)

				Near-Term (2025) Conditions							
				No Project		with Project				With Improvement	
#	Intersection	Peak Hour	Traffic Control	Avg Delay (secs)[1]	LOS	Avg Delay (secs)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Crit V/C	Avg Delay (secs)[1]	LOS
34	University Avenue & Purdue Avenue	AM	TWSC	19.7	C	29	D		0.118		
		PM		**>120**	**F**	**>120**	**F**	**3.8**	**-0.033**		
35	University Avenue & Adams Drive	AM	TWSC	**91.5**	**F**	**>120**	**F**	**0.4**	**0.084**		
		PM		**>120**	**F**	**>120**	**F**	**-2.8**	**-0.070**		
36	University Avenue & O'Brien Drive	AM	Signal	9.5	A	28.9	C	26.1	0.261		
		PM		15.4	B	30.5	C	16.7	0.275		
37	University Avenue & Notre Dame Avenue	AM	Signal	4.1	A	7.8	A	5.0	0.093		
		PM		9.4	A	10.2	B	1.4	0.012		
38	University Avenue & Kavanaugh Drive	AM	Signal	6.9	A	7.9	A	1.3	0.014		
		PM		15.1	B	16.5	B	1.6	0.015		
39	University Avenue & Bay Road	AM	Signal	52.4	D	54.7	D	6.7	0.046	40.4	D
		PM		**60.9**	**E**	**70.6**	**E**	**18.6**	**0.063**	**57.0**	**E**
40	University Avenue & Runnymede Street	AM	Signal	6.4	A	6.6	A	1.5	0.053		
		PM		8.8	A	8.8	A	-0.1	-0.009		
41	University Avenue & Bell Street	AM	Signal	11.7	B	11.6	B	0.0	0.006		
		PM		18.3	B	18.8	B	1.1	0.038		
42	University Avenue & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**7.1**	**0.017**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**3.0**	**0.008**		
43	US 101 Northbound Off-Ramp & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**71.7**	**0.171**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**56.4**	**0.130**		
44	Cooley Avenue & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**8.7**	**0.091**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**18.8**	**0.074**		
45	University Avenue & US 101 Southbound Ramps*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**7.8**	**0.019**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**1.6**	**0.004**		

				Near-Term (2025) Conditions							
				No Project		with Project				With Improvement	
#	Intersection	Peak Hour	Traffic Control	Avg Delay (secs)[1]	LOS	Avg Delay (secs)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Crit V/C	Avg Delay (secs)[1]	LOS
46	University Avenue & Woodland Avenue*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**0.1**	**0.000**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-7.8**	**-0.018**		
47	University Avenue & Middlefield Road	AM	Signal	34.8	C	34.8	C	0.0	-0.001		
		PM		35.3	D	35.4	D	0.2	0.007		
48	Lytton Avenue & Middlefield Road	AM	Signal	49.3	D	49.2	D	-0.1	-0.001		
		PM		**69.1**	**E**	**70.6**	**E**	**1.6**	**0.006**		
47	E. Bayshore Road & Donahoe Street*	AM	Signal	**OVERSAT**	**F**	**>120**	**F**	**5.7**	**0.013**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**>120**	**F**	**5.8**	**0.015**		
48	E. Bayshore Road & Holland Street	AM	TWSC	8.8	A	8.8	A	0.0	0.000		
		PM		10	A	10	A	0.0	0.000		
49	Saratoga Avenue & Newbridge Street	AM	TWSC	17.9	C	18.2	C	0.9	0.074		
		PM		22.0	C	21.0	C	0.0	-0.024		
50	E. Bayshore Road & Euclid Avenue*	AM	AWSC	**OVERSAT**	**F**	**OVERSAT**	**F**	**3.6**	**0.028**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.5**	**-0.016**		
51	Clarke Avenue & E. Bayshore Road	AM	Signal	13.9	B	14	B	0.2	0.008		
		PM		10.7	B	12.5	B	1.7	0.031		
52	Puglas Avenue & E. Bayshore Road	AM	Signal	20.9	C	21.7	C	1.7	0.042		
		PM		33.1	C	37.6	D	5.7	0.034		

*Denotes a CMP intersection

AWSC - All Way Stop Control; TWSC - Two Way Stop Control

[1]Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported.

[2]Intersection is signalized under cumulative conditions.

"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.

*Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in critical delay and v/c calculated using Traffix.

Bold indicates substandard level of service

Bold	indicates adverse effect

L11

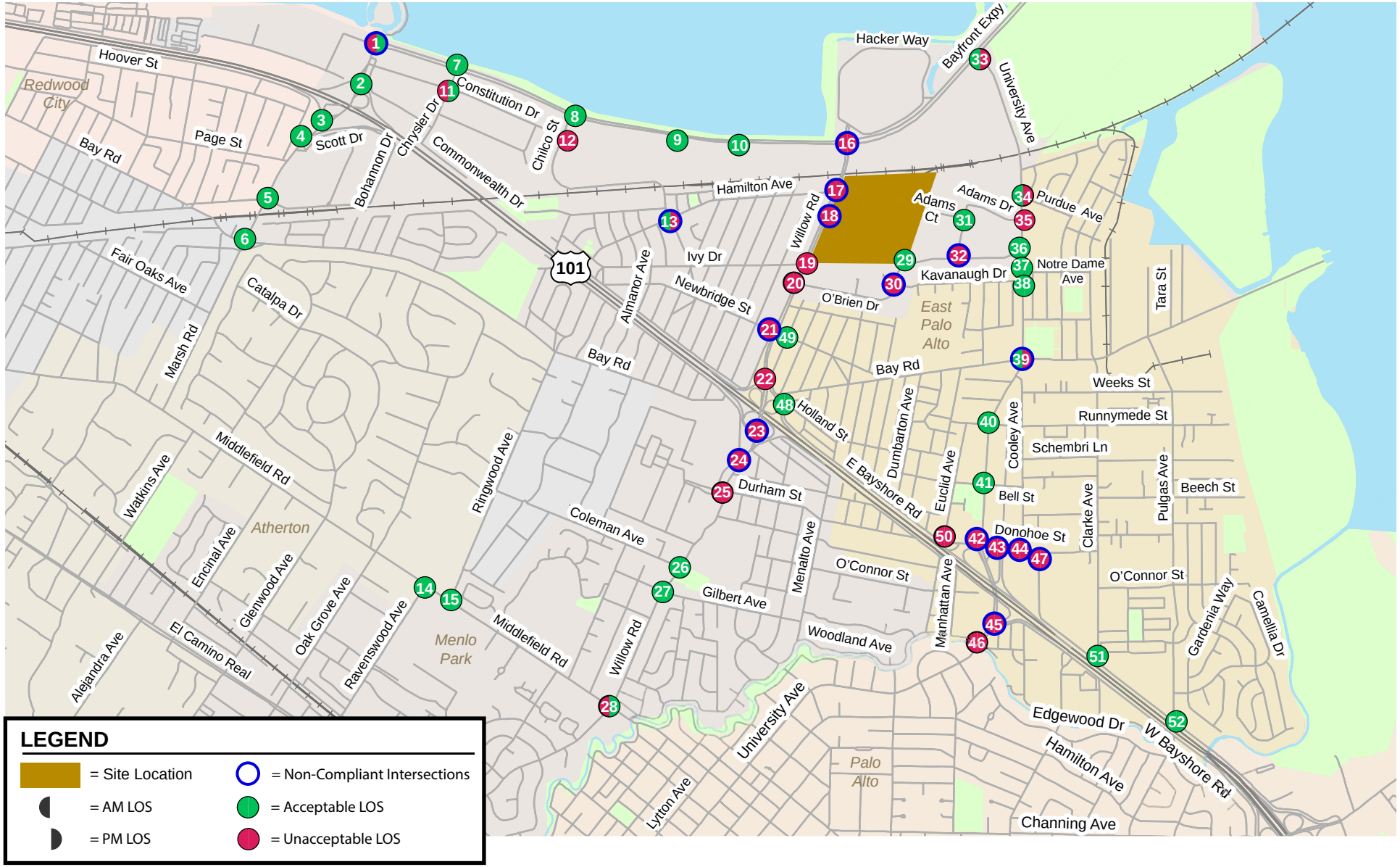


Figure 3.3-7
Near-Term (2025) Plus Project Intersection Level of Service Summary

It should be noted that at some intersections the average delay is shown to decrease with the addition of Project traffic. This occurs because the intersection delay is a weighted average of all intersection movements. When traffic is added to movements with delays lower than the average intersection delay, the average delay for the entire intersection can decrease. Furthermore, the congestion and queue spillback at an adjacent intersection can constrain the traffic volume at some intersections resulting in a small decrease in average delay.

Adverse Effects and Recommended Improvements

The intersection effects and recommended modifications to improve the intersections to pre-Project conditions or better are described below. It should be noted that the intersection analysis accounts for the Project's proposed trip reductions from gross ITE trip generation. The residential component's required TDM reduction to eliminate the VMT impact is partially accounted for as well (peak-hour trip generation assumed 10% active TDM reduction). The additional residential TDM reduction during the peak-hour resulting from the VMT impact mitigation would have resulted in approximately 50 (13 inbound and 37 outbound) fewer trips during the AM peak hour and 56 (34 inbound and 22 outbound) fewer trips during the PM peak hour. This level of trip reduction would not address any intersection adverse effects alone.

Marsh Road and Bayfront Expressway

This intersection is expected to operate at an acceptable LOS D during the AM peak hour and LOS C during the PM peak hour under near term conditions. The addition of Project traffic would cause the level of service at the intersection to worsen to an unacceptable LOS E during the AM peak hour. The intersection would operate at an acceptable LOS D during the PM peak hour. The deterioration of LOS from D to E constitutes non-compliance during the AM peak hour according to the thresholds established by the City of Menlo Park.

The recommended modification for this location is to modify the southbound approach to a shared left-through lane, shared through-right lane, and a right turn only lane. With this improvement, the intersection would operate acceptably at LOS D during both peak hours under near-term plus project conditions. This improvement is in Menlo Park's traffic impact fee (TIF) program. With implementation of these intersection modifications, the intersection would be in compliance with the TIA Guidelines and address the Proposed Project's share of the non- compliant operation.

Chilco Street and Hamilton Avenue

This intersection is expected to operate at an acceptable LOS B during the AM peak hour and LOS C during the PM peak hour under near term conditions. The addition of Project traffic would cause the level of service at the intersection to worsen to an unacceptable LOS E during the PM peak hour. The intersection would operate at an acceptable LOS B during the AM peak hour. The deterioration of LOS from C to E constitutes non-compliance during the PM peak hour according to the thresholds established by the City of Menlo Park.

Since the intersection currently operates as all-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it. However, the intersection does not meet the signal warrant during either peak hour under near term plus project conditions. A traffic signal is not recommended for construction until signal warrants conducted with a future year's actual counts have been met. The recommended improvement includes conducting a signal warrant analyses for a period of five years after full Project completion to determine if a signal would be warranted and if warranted, install a new signal. This improvement is included in the City's TIF program.

Should the City pursue implementation of this improvement, the improvement would include new traffic signal and appropriate pedestrian and bicycle accommodation at this intersection including pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops. Signalization of this intersection could also encourage cut-through traffic along Chilco Street and on Hamilton Avenue when regional routes such as Bayfront Expressway, Willow Road or US 101 become congested. Potential traffic calming measures should also be considered in conjunction with a traffic signal if signal warrants are met in a future year.

With implementation of these intersection modifications (e.g. signal warrant analysis, potential signal installation, and related bicycle and pedestrian accommodations), the intersection would be in compliance with the TIA Guidelines which would address the Proposed Project's share of the non-compliant operation.

Willow Road Corridor

Willow Road between Bayfront Expressway and Hospital Plaza/Durham Street is expected to experience capacity issues due to unserved demand at the intersections. These intersections would operate unacceptably under near term conditions during both peak hours. With the addition of Project traffic, intersections along the corridor would continue to operate unacceptably during both peak hours.

The intersections of Willow Road and Bayfront Expressway and Willow Road and US 101 southbound ramps would experience an increase in delay of over four seconds with the addition of project traffic in the AM peak hour and PM peak hour, respectively, and would be non-compliant per Menlo Park's guidelines for state-controlled intersections.

The intersections of Hamilton Avenue and Newbridge Street at Willow Road would experience an increase in delay of over 0.8 seconds with the addition of project traffic on the local approach to the intersection in both peak hours and the intersection of Bay Road at Willow Road would experience an increase in delay of over 0.8 seconds with the addition of Project traffic on the local approach to the intersection during the AM peak hour and would be non-compliant per Menlo Park's guidelines. Willow Road and Park Street, which is a new intersection under project conditions is also assumed to be non-compliant during both peak hours due to unserved demand at this intersection as determined in the microsimulation model developed for this corridor and described in Appendix 3.3, Transportation, of this EIR.

The City of Menlo Park is implementing an adaptive traffic signal coordination system on the Willow Road corridor to improve traffic flow. Adaptive traffic control is a technology that automatically adjusts traffic signal timing based on actual traffic demand at an intersection. This measure will improve the intersection operations and could reduce the intersection delay. The reduction in delay due to adaptive signal coordination is not expected to bring the corridor intersections into compliance with the City's TIA guidelines or to substantially reduce the delay caused by the Project.

Physical intersection improvements (identified in the City's TIF program) that would improve intersection operations at the non-compliant intersections are:

- Willow Road and Newbridge Street - The TIF program proposes to modify the signal timing to a protected left-turn phasing operation on Newbridge Street, provide a leading left-turn phase on the southbound movement and a lagging left-turn phase on the northbound movement, and optimize signal timing. With implementation of these intersection modifications under project conditions, the critical movement delay would be reduced for the northbound movement to lower than no project conditions. However, the improvement would not address the southbound deficiency. Further improvements to address the southbound deficiency are not feasible.

- Willow Road and Bay Road – The TIF program proposes to modify the southbound approach at this intersection to two left-turn lanes and one right-turn lane and to modify the westbound approach to add a right-turn lane. With these improvements under project conditions, the critical movement delay at the local approach would be reduced to lower than no project conditions. This improvement would address the adverse effect on the intersection due to Project traffic. With implementation of these intersection modifications, the Willow Road and Bay Road intersection would be in compliance with the TIA Guidelines which would address the Proposed Project's share of the non- compliant operation. With implementation of the recommended improvements from the TIF program for the Willow Road and Bay Road intersection the deficiency attributable to the Proposed Project would be addressed. As mentioned previously, these improvements are included in the City's TIF program.
- The Metropolitan Transportation Commission (MTC) Dumbarton Forward project would restripe Bayfront Expressway to add bus-only lanes on the shoulders during peak periods and implement signal timing improvements. The bus-only lanes would generally help the progression of shuttles and buses along the corridor. The signal timing improvements are also assumed to help with the general progression along Bayfront. However, specific details are unknown at this time regarding the improvements at the Willow Road and Bayfront Expressway intersection. The improvements' effectiveness in addressing the Project traffic generated adverse effect on traffic operations at this intersection cannot be determined. Furthermore, since this project is not led by the City of Menlo Park, implementation cannot be guaranteed.

Physical improvements are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel at the intersections of Willow Road and Bayfront Expressway, Willow Road and US 101 southbound ramps, Willow Road and Hamilton Avenue, and Willow Road and Park Street.

The TIF program also proposes multimodal improvements along this section of Willow Road. These include an eastbound Willow Road one-way Class IV separated bikeway between Hamilton Avenue and the US 101/Willow Road Interchange, a westbound Willow Road one-way Class IV separated bikeway between the Dumbarton Rail Corridor and the US 101/Willow Road Interchange, high-visibility crosswalks and pedestrian signals on all legs at the intersection of Willow Road and O'Brien Drive, Class II bicycle lanes on eastbound Willow Road from O'Keefe Street to Bay Road, and Class II bicycle lanes on westbound Willow Road from Bay Road to Durham Street.

Implementing recommended multi-modal facilities along the corridor (from the City's TIF program) could shift some motor vehicle traffic to alternative modes of travel and reduce congestion. With implementation of these multi-modal improvements, the intersection deficiencies could be further reduced and partially address the Proposed Project's share of the non- compliant operations along Willow Road.

O'Brien Drive and Kavanaugh Drive

This intersection is expected to operate at an acceptable LOS B during the AM peak hour and an unacceptable LOS D during the PM peak hour under near term conditions. With the addition of project traffic, the intersection would operate at an unacceptable LOS F during both peak hours. This constitutes non-compliance during both peak hours according to the thresholds established by the City of Menlo Park.

Since the intersection currently operates as all-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it. The intersection would meet the MUTCD signal warrant during both peak hours under project conditions (See Appendix 3.3, Transportation, of this EIR). The intersection lane configuration would need to be modified to a westbound left-turn lane and

through lane, northbound left turn lane and right turn lane, and eastbound shared through-right lane. With this improvement, the intersection would operate acceptably at LOS B during the AM peak hour and LOS C during the PM peak hour under near term plus project conditions.

The recommended improvement to bring this intersection back to pre-Project conditions is the installation of the new traffic signal and appropriate pedestrian and bicycle accommodation. This includes the proposed Class II bicycle lanes along O'Brien Drive between Willow Road and University Avenue, pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops. However, a decision for signalization should not be made until signal warrants conducted with a future year's actual counts have been met. It is important to note that the intersection would be located approximately 300 feet west of the proposed roundabout at O'Brien Drive and Loop Road. Prior to a decision for signalizing this intersection, further analysis should be conducted to ensure that queues resulting from the signal would not back into the roundabout and cause a gridlock situation.

Alternatively, traffic calming measures could be installed to discourage the use of Kavanaugh Drive, which is a residential street, and encourage vehicles to use O'Brien Drive and Adam's Drive instead. Kavanaugh Drive is located within the City of East Palo Alto, and the City of Menlo Park does not have jurisdiction to install traffic calming along this street. Other measures such as peak period turning movement restrictions could be considered to discourage traffic from using Kavanaugh Drive and improve intersection operations.

Monitoring of traffic operations at this intersection for a period of five years after full Project completion should be conducted to determine if signalization or alternative improvements are needed. If warranted, implementation of the new traffic signal would address the Proposed Project's share of the non-compliant operation and bring the intersection into compliance with the TIA Guidelines. If the alternative measures are implemented, the intersection may or may not be brought into compliance with the TIA Guidelines and address the Proposed Project's share of the non-compliant operation.

Adams Drive and O'Brien Drive

This intersection is expected to operate at an acceptable LOS C during the AM peak hour and an unacceptable LOS D during the PM peak hour under near term conditions. With the addition of Project traffic, the intersection would operate at an unacceptable LOS F during both peak hours. This constitutes non-compliance during both peak hours according to the thresholds established by the City of Menlo Park.

Since the intersection currently operates as two-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it. The intersection would meet the MUTCD signal warrant during the PM peak hour under project conditions (see Appendix 3.3, Transportation, of this EIR). The intersection lane configuration would need to be modified to a westbound shared left-right lane, southbound left-turn lane and through lane, and northbound shared through-right lane. With this improvement, the intersection would operate acceptably at LOS B during the AM peak hour and LOS C during the PM peak hour under near term plus project conditions.

The recommended improvement to bring this intersection back to pre-Project conditions is the installation of the new traffic signal and appropriate pedestrian and bicycle accommodations at this intersection and within the vicinity. This includes the proposed Class II bicycle lanes along O'Brien Drive between Willow Road and University Avenue, pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops.

The expected intersection operational issues under background plus project conditions would be due to the increased through traffic on O'Brien Drive between the Project Site and University Avenue. Menlo Park's TIF program identifies an improvement to signalize the nearby intersection at University Avenue and Adams Drive in East Palo Alto. This improvement may provide an alternative route for Project vehicles to access the Project Site via University Avenue.

Monitoring of traffic operations at this intersection for a period of five years after full Project completion should be conducted to determine if signalization or alternative improvements are needed. If warranted, implementation of the new traffic signal would address the Proposed Project's share of the non-compliant operation and bring the intersection into compliance with the TIA Guidelines. If the alternative measures are implemented, the intersection may or may not be brought into compliance with the TIA Guidelines and address the Proposed Project's share of the non-compliant operation.

University Avenue and Bay Road

This intersection is expected to operate at an acceptable LOS D during the AM peak hour and an unacceptable LOS E during the PM peak hour under near term conditions. With the addition of Project traffic, the intersection would continue to operate acceptably in the AM peak hour. In the PM peak hour, the increase in the average critical delay would be greater than four seconds. This constitutes non-compliance during the PM peak hour according to the thresholds established by the City of East Palo Alto.

Potential modification to bring the intersection to pre-Project conditions would be to add an exclusive eastbound right-turn lane and a second eastbound left-turn lane on University Avenue, add a second northbound left-turn lane on Bay Road, add a second westbound left-turn lane on University Avenue, and modify signal phasing. This is also a mitigation measure identified in the Ravenswood/4 Corners TOD Specific Plan Environmental Impact Report (February 22, 2013), which would be implemented under cumulative conditions. With this improvement under project conditions, the average delay at the intersection would be better than under near term no project conditions. Since this intersection is located within the City of East Palo Alto, the recommended measure to bring the intersection back to pre-Project conditions and address the Project's share of the non-compliant operation would be to make a fair share (34%) contribution towards this improvement. Fair share is calculated as the percentage of net project traffic generated divided by the overall cumulative traffic growth at this intersection. The Menlo Park TIF includes improvements at the University Avenue and Bay Road intersection, but not sufficient improvements to bring the intersection back to pre-Project conditions, as described above. However, the Project's fair share contribution towards this intersection would be calculated considering credit from its TIF payment.

US 101/University Avenue Interchange

The US 101/University Avenue interchange is expected to experience capacity issues due to unserved demand at the intersections in its vicinity including University Avenue and Donohoe Street, US 101 northbound off-ramp and Donohoe Street, Cooley Avenue and Donohoe Street, University Avenue and US 101 southbound ramps, University Avenue and Woodland Avenue, E. Bayshore Road and Donohoe Street, and E. Bayshore Road and Euclid Avenue. These intersections would operate unacceptably under near term conditions during both peak hours. With the addition of Project traffic, these intersections would continue to operate unacceptably during both peak hours. The increase in delay is expected to be greater than four seconds, and the increase in the volume to capacity ratio is expected to be greater than 0.01 under project conditions at University Avenue and Donohoe Street in the AM peak hour, US 101 northbound off-ramp and Donohoe Street during both peak hours, Cooley Avenue and Donohoe Street during both peak hours, E. Bayshore Road and Donohoe Street during both peak hours, and University Avenue and US 101 southbound ramps in the AM peak hour. This constitutes non-compliance according to the thresholds established by the City of East Palo Alto.

East Palo Alto plans to widen the northbound approach on Donohoe Street at the US 101 northbound off-ramp to accommodate four through lanes to improve the vehicular throughput at this intersection. This improvement will require median modifications and narrowing the southbound Donohoe Street approach to Cooley Avenue to include two through lanes and a full length left-turn lane. In addition, the traffic signals will be coordinated with adjacent traffic signals on Donohoe Street.

East Palo Alto also plans to install a new traffic signal at the US 101 northbound on-ramp and Donohoe Street and Bayshore Road and Euclid Avenue to coordinate with other closely spaced traffic signals along Donohoe Street. Along with new traffic signals, appropriate pedestrian and bicycle accommodation will be provided. This includes pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops. In order to align with the proposed driveway for the University Plaza Phase II site on the north side of Donohoe Street, the US 101 on-ramp will be shifted approximately 30 feet to the south. In addition, the northbound approach on Donohoe Street will be restriped to accommodate a short exclusive left-turn pocket (approximately 60 feet in length), a shared left-through lane, and a shared through-right lane. These improvements would require widening of the US 101 northbound on-ramp to accommodate two lanes that taper down to a single lane before this ramp connects with the loop on-ramp from eastbound University Avenue. A northbound right turn only will also be added to Bayshore Road and Euclid Avenue. Planned Donohoe Street improvements are included in Appendix 3.3, Transportation, of this EIR.

With these improvements, average delay at these intersections would be below that under near term conditions without the Project. Since this intersection is located within the City of East Palo Alto, the recommended improvement measure to bring the intersection/interchange back to pre-Project conditions and address the Project's share of the non- compliant operation would be for the Project sponsor to make a fair share contribution towards these improvements. Because the improvements in this corridor are all interconnected and dependent on each other to work, the recommended improvement measure would be for the Project sponsor to contribute its fair share to improvements at all six intersections in this corridor. Fair share is calculated as the percentage of net project traffic generated of the overall cumulative traffic growth at this intersection.

- Donohoe Street & Cooley Avenue: 10% fair share
- Donohoe Street & US 101 Northbound Off-Ramp: 24% fair share
- Donohoe Street & University Avenue: 31% fair share
- Donohoe Street & US 101 Northbound On-Ramp: 8% fair share
- Donohoe Street/Bayshore Road & Euclid Avenue: 2% fair share
- US 101 Southbound Ramps & University Avenue: 33% fair share

The Menlo Park TIF includes improvements at the University Avenue and Donohoe Street and University Avenue and US 101 southbound ramps intersections, which funding would go toward the planned coordinated system of intersections. The Project's fair share contribution towards these two intersections would be calculated considering credit from its TIF payment.

Cumulative (2040) Plus Project Intersection Levels of Service

The results of the intersection level of service analysis under cumulative (2040) plus project conditions are summarized in Tables 3.3-12 and 3.3-13. The intersection LOS calculation sheets are included in Appendix 3.3, Transportation, of this EIR. Under cumulative plus project conditions, the following intersections (see Figure 3.3-8, Cumulative [2040] Plus Project Intersection Level of Service Summary) would be non-compliant with City of Menlo Park TIA Guidelines and/or local polices during either the AM or the PM peak hour as compared to cumulative conditions. All of these intersections would already be operating at unacceptable levels of service under cumulative conditions.

5. Marsh Road and Bohannon Drive/Florence Street (AM peak hour)

13. Chilco Street and Hamilton Avenue (AM and PM peak hours)

18. Willow Road and Park Street (AM and PM peak hours)

19. Willow Road and Ivy Drive (PM peak hour)

21. Willow Road and Newbridge Street (AM and PM peak hours)

24. Willow Road and Bay Road (AM and PM peak hours)

25. Willow Road and Hospital Plaza/Durham Street (AM and PM peak hours)

30. O'Brien Drive and Kavanaugh Drive (AM peak hour)

32. Adam's Drive and O'Brien Drive (AM and PM peak hours)

43. US 101 Northbound Off-Ramp and Donohoe Street (AM and PM peak hours)

44. Cooley Avenue and Donohoe Street (PM peak hour)

45. University Avenue and US 101 Southbound Ramps (PM peak hour)

46. University Avenue and Woodland Avenue (AM and PM peak hours)

49. Saratoga Avenue and Newbridge Street (AM peak hour)

50. East Bayshore Road and Euclid Avenue (AM peak hour)

Bold denotes intersections that would be non-compliant under cumulative plus project conditions during either AM or PM peak hours but are compliant under near-term plus project conditions during both peak hours.

It should be noted that at some intersections the average delay is shown to decrease with the addition of Project traffic. This occurs because the intersection delay is a weighted average of all intersection movements. When traffic is added to movements with delays lower than the average intersection delay, the average delay for the entire intersection can decrease. Furthermore, the congestion and queue spillback at an adjacent intersection can constrain the traffic volume at some intersections resulting in a small decrease in average delay.

Table 3.3-12. Cumulative (2040) Intersection Levels of Service (Menlo Park)

				Cumulative (2040) Conditions								
				GP Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
1	Marsh Road & Bayfront Expressway*	AM	Signal	**68.7**	**E**	**65.6**	**E**	**<4**	**<0.8**			
	Haven Avenue Southbound			***71.2***	***E***	***73.4***	***E***	***<4***	***<0.8***			
		PM	Signal	**65.0**	**E**	**77.9**	**E**	**12.9**	**12.5**			
	Haven Avenue Southbound			***67.7***	***E***	***67.7***	***E***	***<4***	***<0.8***			
2	Marsh Road & US 101 Northbound Off-Ramp	AM	Signal	**60.9**	**E**	**62.2**	**E**	**<4**	**1.5**			
		PM		22.9	C	22.8	C	<4	<0.8			
3	Marsh Road & US 101 Southbound Off-Ramp	AM	Signal	22.8	C	24.4	C	<4	2.0			
		PM		19.2	B	18.8	B	<4	<0.8			
4	Marsh Road & Scott Drive	AM	Signal	31.9	C	31.8	C	<4	<0.8			
		PM		17.9	B	18.1	B	<4	<0.8			
5	Marsh Road & Bohannon Drive/Florence Street	AM	Signal	**58.0**	**E**	**60.4**	**E**	**<4**	**4.9**	**56.7**	**E**	**<0.8**
		PM		52.5	D	53.6	D	<4	1.6	48.3	D	<0.8
6	Marsh Road & Bay Road	AM	Signal	**64.2**	**E**	**64.8**	**E**	<4	<0.8			
		PM		47.6	D	54.9	D	7.3	14.4			
7	Chrysler Drive & Bayfront Expressway	AM	Signal	13.1	B	12.8	B	<4	6.4			
		PM		39.5	D	36.3	D	<4	<0.8			
8	Chilco Street & Bayfront Expressway	AM	Signal	44.5	D	49.2	D	4.7	13.5			
	Chilco Street Eastbound			***112.4***	***F***	***108.9***	***F***	***<4***	***<0.8***			
		PM	Signal	**69.6**	**E**	**66.9**	**E**	**<4**	**<0.8**			

				Cumulative (2040) Conditions								
				GP Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
	Chilco Street Eastbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
9	MPK 21 Driveway & Bayfront Expressway	AM	Signal	5.7	A	5.6	A	<4	<0.8			
		PM		36.3	D	36.1	D	<4	<0.8			
10	MPK 20 Driveway (east) & Bayfront Expressway	AM	Signal	10.0	B	9.9	A	<4	<0.8			
		PM		18.7	B	18.8	B	<4	<0.8			
11	Chrysler Drive & Constitution Drive	AM	Signal	**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
		PM		**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
12	Chilco Street & Constitution Drive/MPK 22 Driveway[2]	AM	Signal	**52.9**	**D**	**51.1**	**D**	**<4**	**<0.8**			
		PM		**113.5**	**F**	**101.8**	**F**	**<4**	**<0.8**			
13	Chilco Street & Hamilton Avenue	AM	AWSC	24.5	C	**27.1**	**D**	<4	2.6	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**24.7**	**24.7**			
14	Ravenswood Avenue & Middlefield Road	AM	Signal	49.7	D	49.7	D	<4	<0.8			
		PM		20.2	C	19.5	B	<4	<0.8			
15	Ringwood Avenue & Middlefield Road	AM	Signal	13.2	B	13.2	B	<4	<0.8			
		PM		21.0	C	21.1	C	<4	<0.8			
16	Willow Road & Bayfront Expressway*[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
17	Willow Road & Hamilton Avenue[1][2]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			

				Cumulative (2040) Conditions								
				GP Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
	Hamilton Avenue Southbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
	Main Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	Hamilton Avenue Southbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
	Main Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***>120***			
18	Willow Road & Park Street (future intersection)[1]	AM	Signal	Project Intersection		**OVERSAT**	**F**	**34.2**	**49.1**	***No feasible Improvement***		
		PM				**OVERSAT**	**F**	**17.2**	**23.1**			
19	Willow Road & Ivy Drive[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**46.2**	**98.7**	**OVERSAT**	**F**	
	Ivy Drive Southbound			***70.9***	***E***	***69.6***	***E***	***<4***	***<0.8***	***61.2***	***E***	***<0.8***
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**80.8**	**102.4**	**OVERSAT**	**F**	
	Ivy Drive Southbound			***68.1***	***E***	***71.7***	***E***	***<4***	***3.6***	*49.0*	*D*	*<0.8*
20	Willow Road & O'Brien Drive[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound			***>120***	***F***	***80.4***	***F***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
21	Willow Road & Newbridge Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**25.9**	**74.2**	**OVERSAT**	**F**	
	Newbridge Street Southbound			***>120***	***F***	***108.8***	***F***	***<4***	***<0.8***	***>120***	***F***	***67.3***
	Newbridge Street Northbound			***>120***	***F***	***>120***	***F***	***101.4***	***>120***	***73.5***	***E***	***<0.8***

#	Intersection	Peak Hour	Traffic Control	Cumulative (2040) Conditions								
				GP Conditions		Project Conditions				With Improvement		
				Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Newbridge Street Southbound			***84.3***	***F***	***>120***	***F***	***47.1***	***74.2***	***>120***	***F***	***>120***
	Newbridge Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***	*50.7*	*D*	*<0.8*
22	Willow Road & US 101 Northbound Ramps[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
23	Willow Road & US 101 Southbound Ramps[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
24	Willow Road & Bay Road[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**5.4**	**OVERSAT**	**F**	
	Bay Road Southbound			***>120***	***F***	***>120***	***F***	***30.3***	***30.3***	*27.8*	*C*	*<0.8*
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Bay Road Southbound			***75.6***	***E***	***82.7***	***F***	***7.0***	***7.0***	*26.5*	*C*	*<0.8*
25	Willow Road & Hospital Plaza/Durham Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**11.0**	**OVERSAT**	**F**	
	VA Medical Center Southbound			***74.8***	***E***	***74.7***	***E***	***<4***	***<0.8***	***74.7***	***E***	***<0.8***
	Durham Street Northbound			***>120***	***F***	***>120***	***F***	***6.0***	***5.4***	***>120***	***F***	***<0.8***
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**1.3**	**OVERSAT**	**F**	
	VA Medical Center Southbound			***74.2***	***E***	***74.5***	***E***	***<4***	***<0.8***	***69.4***	***E***	***<0.8***
	Durham Street Northbound			***88.1***	***F***	***90.3***	***F***	***<4***	***2.8***	***59.9***	***E***	***<0.8***
26	Willow Road & Coleman Avenue	AM	Signal	34.9	C	34.3	C	<4	<0.8			

				Cumulative (2040) Conditions								
				GP Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
		PM		13.1	B	13.2	B	<4	<0.8			
27	Willow Road & Gilbert Avenue	AM	Signal	24.4	C	23.9	C	<4	<0.8			
		PM		14.2	B	14.1	B	<4	<0.8			
28	Willow Road & Middlefield Road	AM	Signal	**64.5**	**E**	**65.0**	**E**	**<4**	**<0.8**			
	Middlefield Road Southbound			***69.9***	***E***	***70.4***	***E***	***<4***	***<0.8***			
	Middlefield Road Northbound			***67.4***	***E***	***67.2***	***E***	***<4***	***<0.8***			
		PM	Signal	42.5	D	42.4	D	<4	<0.8			
	Middlefield Road Southbound			*42.1*	*D*	*42.2*	*D*	*<4*	*<0.8*			
	Middlefield Road Northbound			*40.6*	*D*	*40.8*	*D*	*<4*	*<0.8*			

				Cumulative (2040) Conditions								
				GP Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]
29	O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)	AM	Rdbt	Project Intersection		8.8	A	8.8	8.8			
		PM				11.0	B	11.0	11.0			
30	O'Brien Drive & Kavanaugh Drive	AM	AWSC	**>120**	**F**	**>120**	**F**	**105.8**	**105.8**	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
31	Adams Drive & Adams Court	AM	TWSC	20.1	C	17.8	C	<4	<0.8			
		PM		16.4	C	12.7	B	<4	<0.8			
32	Adams Drive & O'Brien Drive	AM	TWSC	**62.4**	**F**	**>120**	**F**	**>120**	**>120**	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**>120**	**>120**			
33	University Avenue & Bayfront Expressway*	AM	Signal	14.8	B	13.3	B	<4	<0.8			
		PM		**>120**	**F**	**>120**	**F**	**<4**	**2.9**			

* Denotes CMP Intersection

AWSC - All Way Stop Control; TWSC - Two Way Stop Control; GP - General Plan; Rdbt = Roundabout

[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported

"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.

[1]Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in average delay and critical delay calculated using Vistro.

[2]The intersection is not considered as non-compliant under cumulative plus project conditions because the critical movement of the local approach shifts with the addition of project traffic.

Bold indicates substandard level of service

Bold indicates noncompliance. The project exceeds thresholds in the City of Menlo Park's TIA Guidelines. These are not CEQA thresholds.

Table 3.3-13. Cumulative (2040) Intersection Levels of Service (East Palo Alto)

				Cumulative (2040) Conditions							
				General Plan Conditions		with Project				With Improvement	
#	Intersection	Peak Hour	Traffic Control	Avg Delay (secs)[1]	LOS	Avg Delay (secs)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Crit V/C	Avg Delay (secs)[1]	LOS
34	University Avenue & Purdue Avenue	AM	Signal	25.9	C	28	C	0.8	0.017		
		PM		37.1	D	40.8	D	4.2	0.031		
35	University Avenue & Adams Drive	AM	TWSC	**>120**	**F**	**>120**	**F**	**1.4**	**0.253**		
		PM		**>120**	**F**	**>120**	**F**	**-7.3**	**-0.130**		
36	University Avenue & O'Brien Drive	AM	Signal	21.1	C	43.1	D	29.3	0.245		
		PM		21.3	C	32.6	C	14.1	0.175		
37	University Avenue & Notre Dame Avenue	AM	Signal	8.0	A	10.6	B	3.1	0.070		
		PM		12.2	B	15.6	B	4.1	0.038		
38	University Avenue & Kavanaugh Drive	AM	Signal	26.8	C	17.5	B	-12.1	-0.110		
		PM		23.1	C	24.8	C	0.8	0.009		
39	University Avenue & Bay Road	AM	Signal	48.8	D	53.5	D	8.9	0.054		
		PM		**68.3**	**E**	**69.0**	**E**	**-1.9**	**-0.008**		
40	University Avenue & Runnymede Street	AM	Signal	9.7	A	11.7	B	11	0.075		
		PM		8.9	A	8.9	A	3.6	0.102		
41	University Avenue & Bell Street	AM	Signal	14.9	B	16.2	B	2	0.067		
		PM		26.4	C	34.8	C	13.4	0.069		
42	University Avenue & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**-1.4**	**-0.002**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-4.9**	**-0.009**		
43	US 101 Northbound Off-Ramp & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**77.2**	**0.158**		
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**46.5**	**0.102**	***Corridor Improvement***	
44	Cooley Avenue & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**29.3**	**0.091**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**63.7**	**0.143**		

				Cumulative (2040) Conditions							
				General Plan Conditions		with Project				With Improvement	
#	Intersection	Peak Hour	Traffic Control	Avg Delay (secs)[1]	LOS	Avg Delay (secs)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Crit V/C	Avg Delay (secs)[1]	LOS
45	University Avenue & US 101 Southbound Ramps*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.0**	**-0.004**		
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**6.7**	**0.016**	***Corridor Improvement***	
46	University Avenue & Woodland Avenue*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**14.1**	**0.040**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**19.1**	**0.045**		
47	University Avenue & Middlefield Road	AM	Signal	36.3	D	36.2	D	0	0.007		
		PM		37.0	D	37.0	D	0.1	0.006		
48	Lytton Avenue & Middlefield Road	AM	Signal	50.8	D	50.8	D	0.1	0.001		
		PM		**88.7**	**F**	**90.0**	**F**	**1.6**	**0.004**		
47	E. Bayshore Road & Donahoe Street*	AM	Signal	**>120**	**F**	**>120**	**F**	**-22.4**	**-0.048**	***Corridor Improvement***	
		PM		**>120**	**F**	**>120**	**F**	**-5.3**	**-0.011**		
48	E. Bayshore Road & Holland Street	AM	TWSC	8.8	A	8.8	A	0.0	0.000		
		PM		10.0	A	10.0	A	0.0	0.000		
49	Saratoga Avenue & Newbridge Street	AM	TWSC	**>120**	**F**	**>120**	**F**	**9.8**	**0.061**	***No Feasible Improvement***	
		PM		**40.0**	**E**	28.6	D	**-2.2**	**-0.120**		
50	E. Bayshore Road & Euclid Avenue*	AM	AWSC	**OVERSAT**	**F**	**OVERSAT**	**F**	**53.8**	**0.057**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.7**	**-0.009**		
51	Clarke Avenue & E. Bayshore Road	AM	Signal	14.1	B	14.2	B	0.2	0.014		
		PM		13.9	B	14.0	B	0.2	0.007		
52	Pulgas Avenue & E. Bayshore Road	AM	Signal	25.4	C	26.5	C	1.4	0.017		
		PM		48.1	D	47.3	D	-0.4	-0.002		

*Denotes a CMP intersection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control

				Cumulative (2040) Conditions							
				General Plan Conditions		with Project				With Improvement	
#	Intersection	Peak Hour	Traffic Control	Avg Delay (secs)[1]	LOS	Avg Delay (secs)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Crit V/C	Avg Delay (secs)[1]	LOS

[1]Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported.

[2]Intersection is signalized under cumulative conditions.
"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.
*Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in critical delay and v/c calculated using Traffix.

Bold indicates substandard level of service

Bold indicates adverse effect

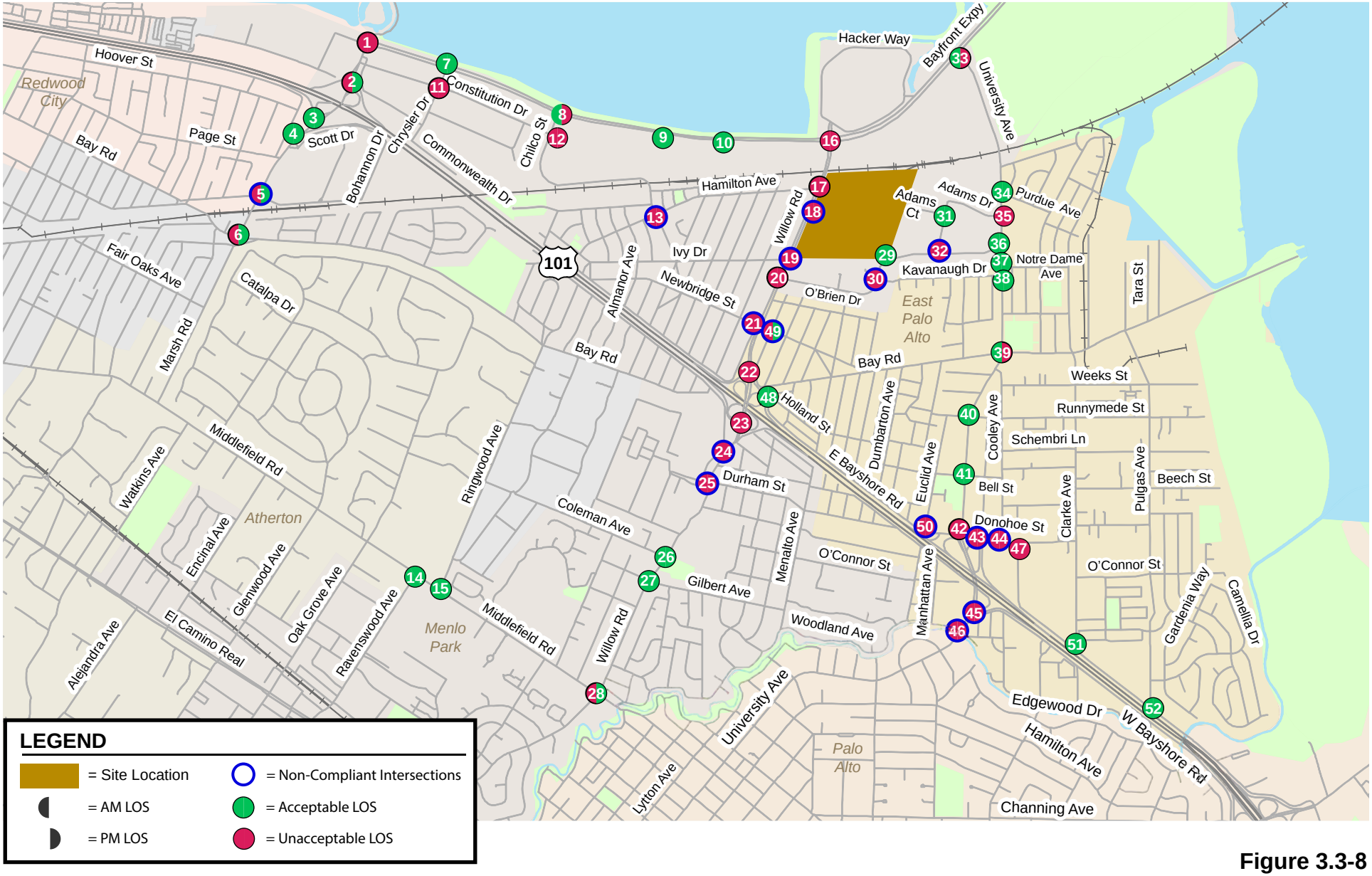


Figure 3.3-8
Cumulative (2040) Plus Project Intersection Level of Service Summary

Adverse Effects and Recommended Improvements

For intersections that are non-compliant under both near-term plus project conditions and cumulative plus project conditions, the recommended improvements proposed under near term plus project conditions would be sufficient to address cumulative non-compliance. Improvements for intersections that are non-compliant only under cumulative plus project conditions are described below.

Marsh Road and Bohannon Drive/Florence Street

This intersection is expected to operate at an unacceptable LOS E during the AM peak hour and an acceptable LOS D during the PM peak hour under cumulative conditions. The addition of Project traffic would cause the average critical delay to increase by more than 0.8 during the AM peak hour. The intersection would continue to operate at an acceptable LOS D during the PM peak hour. This constitutes non-compliance during the AM peak hour according to the thresholds established by the City of Menlo Park.

Modification of the westbound approach at this intersection to a left-turn lane, two through lanes, and a right-turn lane would improve the average delay to better than cumulative no project conditions. Menlo Park's TIF program proposes Class II buffered bike lanes along Marsh Road from Bay Road to Scott Road in both directions and the removal of on-street parking in the eastbound direction. The restriping of the vehicle travel lanes to include a westbound right-turn only lane and the proposed Class II buffered bike lane would require narrowing the travel lanes to 11 feet and removal of the median. While this is possible, removal of the median would require removing at least one tree as well as the signal pole in the median. Upgrades to at least one mast arm would be required to replace the removed median signal. Physical improvements at this intersection are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel. The City's TIF program includes multi-modal improvements along the Marsh Road corridor such as Class II buffered bike lanes along Marsh Road from Bay Road to Scott Road, and installing sidewalks along the north-side of Marsh Road between Page Street and Bohannon Drive/Florence Street. Implementing recommended multi-modal facilities along the corridor (from the City's TIF program) could shift some motor vehicle traffic to alternative modes of travel and reduce congestion. With implementation of these multi-modal improvements, the intersection deficiencies could be further reduced and partially address the Proposed Project's share of the non-compliant operations at this intersection.

Willow Road and Ivy Drive

Willow Road and Ivy Drive is an intersection on the Willow Road Corridor, which is expected to experience capacity issues due to unserved demand at the intersections. This intersection would operate unacceptably under cumulative conditions during both peak hours. With the addition of Project traffic, it would continue to operate unacceptable during both peak hours. In the PM peak hour, the increase in the critical movement delay of the local approach would be greater than 0.8 seconds. This constitutes non-compliance during the PM peak hour according to the thresholds established by the City of Menlo Park.

The Menlo Park TIF proposes to install a right-turn overlap phase on southbound Ivy Drive and restrict eastbound Willow Road U-turns. This would improve the critical movement delay of the local approach to better than cumulative no project conditions. The Project is required to pay traffic impact fees according to the City's current TIF schedule.

Willow Road and Hospital Plaza/Durham Street

Willow Road and Hospital Plaza/Durham Street is an intersection on the Willow Road Corridor, which is expected to experience capacity issues due to unserved demand at the intersections. This intersection would operate unacceptably under cumulative conditions during both peak hours. With the addition of Project traffic, it would continue to operate unacceptably during both peak hours. In the AM and PM peak hour, the increase in the critical movement delay of the local approach would be greater than 0.8 seconds. This constitutes non-compliance during both peak hours according to the thresholds established by the City of Menlo Park.

The recommended improvement measure for this intersection is restriping northbound Durham Street as a shared left-through lane and right-turn lane, and adding a northbound right turn overlap phase. With this improvement, the critical movement delay of the local approach would improve to better than cumulative no project conditions in the AM peak hour. The PM peak hour would continue to be non-compliant. If this recommended improvement measure is implemented, the Project should contribute its fair share (25%) towards the improvement. Fair share is calculated as the percentage of net project traffic generated of the overall cumulative traffic growth at this intersection.

University Avenue and Woodland Avenue

University Avenue and Woodland Avenue is in the vicinity of the US 101/University Avenue interchange and is expected to experience capacity issues due to unserved demand at the intersections. This intersection would operate unacceptably under cumulative conditions during both peak hours. With the addition of Project traffic, it would continue to operate unacceptably during both peak hours. In the AM and PM peak hour, the increase in the average critical delay would be greater than four seconds and the increase in the volume to capacity ratio would be greater than 0.01. This constitutes non-compliance during both peak hours according to the thresholds established by the City of East Palo Alto.

The recommended Donohoe Street improvements (see Appendix 3.3, Transportation, of this EIR) at Euclid Avenue and at the US 101 northbound on-ramp would improve traffic flow on University Avenue and eliminate the queue spillback that extends from Donohoe Street past Woodland Avenue. While the University Avenue and Woodland Avenue intersection is expected to continue to operate at LOS F during both peak hours, the Donohoe Street improvements would reduce the average delay at the intersection below cumulative conditions without the Project. With these improvements, the intersection would comply with the City of East Palo Alto's level of service policy. As discussed under the background plus Project discussion above, the project would pay its fair share costs towards the intersection improvements at the 6 intersections of the University Avenue/Donohoe Street/US 101 corridor.

Saratoga Avenue and Newbridge Street

This intersection is expected to operate at an acceptable LOS F during the AM peak hour and an unacceptable LOS E during the PM peak hour under cumulative conditions. With the addition of Project traffic, the intersection average critical delay at the intersection would increase by four seconds and the volume to capacity ratio would increase by 0.01 during the AM peak hour. This constitutes as non-compliance during the AM peak hour according to the thresholds established by the City of East Palo Alto.

Since the intersection currently operates as two-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it. The intersection would meet the MUTCD signal warrant during both peak hours under project conditions (see Appendix 3.3, Transportation, of this EIR). With this improvement, the intersection would operate acceptably at LOS C during the AM peak hour

and LOS B during the PM peak hour under cumulative plus project conditions. However, since the intersection is located only 200 feet south of Willow Road, signalization is not recommended. Short of signalization, no other improvements are feasible. Furthermore, given this intersection is located outside of the City of Menlo Park, the City cannot ensure implementation of any improvements. This intersection is also not listed with improvements in the City of East Palo Alto TIF.

Bayshore Road and Euclid Avenue

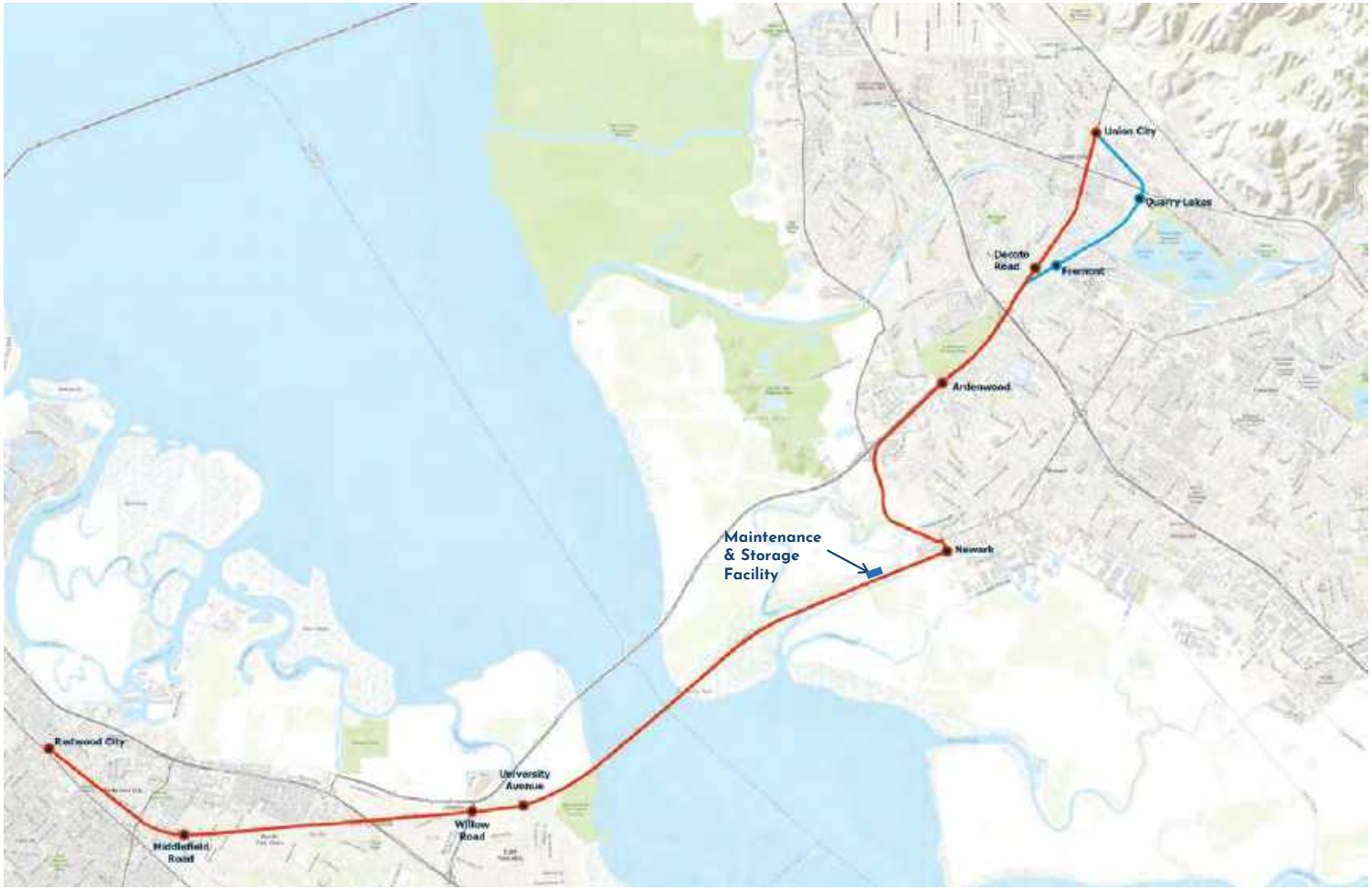
Bayshore Road and Euclid Avenue is in the vicinity of the US 101/University Avenue interchange and is expected to experience capacity issues due to unserved demand at the intersections. This intersection would operate unacceptably under cumulative conditions during both peak hours. With the addition of Project traffic, it would continue to operate unacceptably during both peak hours. In the AM peak hour, the increase in the average critical delay would be greater than four seconds and the increase in the volume to capacity ratio would be greater than 0.01. This constitutes non-compliance during the AM peak hour according to the thresholds established by the City of East Palo Alto.

Since the intersection currently operates as all-way-stop-controlled, potential modification to bring the intersection to pre-project conditions would be to signalize it and add a westbound right turn only lane. This improvement is included in the recommended Donohoe Street improvements (see Appendix 3.3, Transportation, of this EIR). The proposed improvements at Euclid Avenue and at the US 101 northbound on-ramp would improve traffic flow on University Avenue and eliminate the queue spillback that extends from Donohoe Street past Woodland Avenue. This would reduce the average delay at the intersection below cumulative conditions without the project. With these improvements, the intersection would be in compliance with the City of East Palo Alto's level of service policy. As discussed under the background plus project discussion above, the Project would pay its fair share costs towards the intersection improvements at the 6 intersections of the University Avenue/Donohoe Street/US 101 corridor, which includes the intersection at Bayshore Road and Euclid Avenue.

Cumulative (2040) Plus Project with Dumbarton Rail Intersection Levels of Service

Dumbarton rail service has not been designed, subjected to environmental review, approved, or funded. As a result, future Dumbarton rail service is speculative at this time and might or might not occur. If it does occur, capacity, frequency, ridership and other operational features are unknown at this time. As a result, any forecast of potential future traffic with Dumbarton rail service is speculative. The following analysis is provided for informational purposes to give the public and decision makers an idea of what impact Dumbarton rail might have on traffic based on a specific set of ridership assumptions. These impacts would occur instead of the impact identified above under Cumulative (2040) Plus Project Intersection Levels of Service.

Based on the *Dumbarton Rail Corridor Update* in March 2021, preliminary forecasts suggest that under 2040 conditions, the high-end ridership projections for the highest-ridership alternative would be around 24,300 riders per day. In comparison, the low-end ridership projections for the lowest-ridership alternative would be around 14,600 riders per day. As shown in Figure 3.3-9, Potential Dumbarton Rail Corridor Alignment, this highest ridership forecast would be realized over a potential corridor with 10 stations located between downtown Redwood City and the Union City BART station. It should be noted that this potential corridor includes a stop on Willow Road just north of the proposed Project Site. At the time of this study's initiation, the ability to park-and-ride at the stations along this potential corridor was not available.



San Mateo County TRANSIT DISTRICT

LEGEND

= Primary Alignment

= Alternative Alignment

LRT, BRT, & AVT Alignment

Note: Alignments and stations are being studied for technical feasibility in regards to engineering, operations, land use, city and agency coordination

Figure 3.3-9
Proposed Dumbarton Rail Corridor Alignment

NORTH
Not to Scale

This study assumed the highest ridership projections as well as no park-and-ride capability at the stations. More ridership along the Dumbarton Rail corridor would mean lower traffic volumes. Therefore, the assumptions of this study would equate to evaluating the largest potential reduction in traffic volumes assuming the operation of Dumbarton Rail service.

To represent the daily ridership in the model, daily travel between TAZs within a quarter-mile radius of the stations was reduced by 24,300 daily person-level driving trips, or roughly 19,000 daily vehicular-trips. During a one-hour peak hour, based on the highest ridership projections, the Dumbarton Rail corridor would reduce approximately 1,900 peak hour vehicular trips, of which approximately half of the trip reduction would occur within the study area. These trips are assumed to be between TAZ sets within a quarter-mile radius of different stations, as the stations are assumed to not contain park-and-ride capabilities. A quarter-mile radius from the stations represents walkable distances to the stations.

A cumulative with Dumbarton rail scenario was evaluated where the model assumed the operation of potential Dumbarton Rail service. The purpose of this scenario was to provide information on the possible effects of future Dumbarton Rail on the transportation network based on the assumptions made herein about such future service. The Dumbarton Rail was estimated to reduce the Proposed Project's vehicular trip generation by approximately 4%. A cumulative plus project with Dumbarton Rail scenario was compared against the cumulative with Dumbarton Rail scenario to inform the potential effects of the Project-generated traffic assuming potential Dumbarton Rail service. Assumptions included in the Dumbarton rail scenarios are detailed in Appendix 3.3, Transportation, of this EIR.

The results of the intersection level of service analysis under near cumulative (2040) plus project conditions with the Dumbarton rail are summarized in Tables 3.3-14 and 3.3-15. Compared to cumulative plus project conditions without the Dumbarton Rail, the delay at all of the intersections would improve with Dumbarton Rail. While the overall motor vehicle operations would experience reduced delay with Dumbarton Rail, when evaluating for intersection LOS compliance, the determination is based on the relative increase in delay due to the Project compared to no project conditions (cumulative conditions with Dumbarton Rail). Comparing "cumulative plus project with Dumbarton Rail" conditions to "cumulative plus project without Dumbarton Rail" conditions, the following study intersection would no longer be non-compliant:

25. Willow Road & Durham Street

The following additional study intersections would be non-compliant under cumulative plus project conditions with the Dumbarton rail as compared to cumulative plus project conditions without the Dumbarton Rail:

6. Marsh Road and Bay Road (AM peak hour)

11. Chrysler Drive and Constitution Drive (AM peak hour)

16. Willow Road and Bayfront Expressway (AM peak hour)

Under cumulative conditions with or without the Project, the road network is over saturated. Since the Dumbarton rail would reduce vehicular traffic (i.e. 1,900 peak hour trips) in the area due to the increase in transit mode share, the Menlo Park Travel Demand model assigns more Project-generated traffic at some intersections where vehicular capacity is now available. Menlo Park's level of service standards and adverse effect criteria are very stringent where a small change in traffic can trigger a non-compliance at an intersection. Therefore, the relative increase in delay due to the Project at some intersections between "cumulative with Dumbarton Rail" and "cumulative plus project with Dumbarton Rail" would be greater than the Menlo Park threshold, causing additional intersections to be non-compliant under cumulative plus project conditions with the Dumbarton rail.

Table 3.3-14. Cumulative (2040) With Dumbarton Rail Intersection Levels of Service (Menlo Park)

				Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
1	Marsh Road & Bayfront Expressway*	AM	Signal	**68.5**	**E**	**65.3**	**E**	**<4**	**<0.8**			
	Haven Avenue Southbound			***70.5***	***E***	***71.7***	***E***	***<4***	***<0.8***			
		PM	Signal	**63.2**	**E**	**72.8**	**E**	**9.6**	**11.4**			
	Haven Avenue Southbound			***67.6***	***E***	***67.6***	***E***	***<4***	***<0.8***			
2	Marsh Road & US 101 Northbound Off-Ramp	AM	Signal	**60.7**	**E**	**61.9**	**E**	**<4**	**1.4**			
		PM		22.9	C	22.7	C	<4	<0.8			
3	Marsh Road & US 101 Southbound Off-Ramp	AM	Signal	22.8	C	22.6	C	<4	<0.8			
		PM		19.2	B	18.7	B	<4	<0.8			
4	Marsh Road & Scott Drive	AM	Signal	31.2	C	30.4	C	<4	<0.8			
		PM		17.8	B	17.8	B	<4	<0.8			
5	Marsh Road & Bohannon Drive /Florence Street	AM	Signal	**57.8**	**E**	**58.7**	**E**	**<4**	**2.7**	**55.1**	**E**	**<0.8**
		PM		51.5	D	53.1	D	<4	2.7	48.1	D	<0.8
6	Marsh Road & Bay Road	AM	Signal	54.5	D	**63.5**	**E**	**9.0**	**18.9**	***No feasible Improvement***		
		PM		47.9	D	51.2	D	<4	6.8			
7	Chrysler Drive & Bayfront Expressway	AM	Signal	13.0	B	12.5	B	<4	6.0			
		PM		38.3	D	33.5	C	<4	<0.8			
8	Chilco Street & Bayfront Expressway	AM	Signal	43.2	D	45.5	D	<4	7.3			

				Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
	Chilco Street Eastbound			***116.3***	***F***	***108.8***	***F***	***<4***	***<0.8***			
		PM	Signal	**68.3**	**E**	**65.6**	**E**	**<4**	**<0.8**			
	Chilco Street Eastbound			*>120*	*F*	***>120***	***F***	***<4***	***<0.8***			
9	MPK 21 Driveway & Bayfront Expressway	AM	Signal	5.7	A	5.6	A	<4	<0.8			
		PM		36.3	D	36.1	D	<4	<0.8			
10	MPK 20 Driveway (east) & Bayfront Expressway	AM	Signal	10.1	B	9.9	A	<4	<0.8			
		PM		18.6	B	18.8	B	<4	<0.8			
11	Chrysler Drive & Constitution Drive	AM	Signal	**>120**	**F**	**>120**	**F**	**31.2**	**50.3**	***No feasible Improvement***		
		PM	Signal	**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			
12	Chilco Street & Constitution Drive/MPK 22 Driveway[2]	AM	Signal	**50.1**	**D**	**53.9**	**D**	**<4**	**<0.8**			
		PM		**111.8**	**F**	**99.2**	**F**	**<4**	**<0.8**			
13	Chilco Street & Hamilton Avenue	AM	AWSC	23.6	C	24.3	C	<4	<0.8	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**18.2**	**18.2**			
14	Ravenswood Avenue & Middlefield Road	AM	Signal	49.7	D	49.7	D	<4	<0.8			
		PM		20.3	C	19.5	B	<4	<0.8			
15	Ringwood Avenue & Middlefield Road	AM	Signal	13.2	B	13.2	B	<4	<0.8			
		PM		21.0	C	21.1	C	<4	<0.8			

				Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
16	Willow Road & Bayfront Expressway*[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**5.3**	**<0.8**	***No feasible Improvement***		
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
17	Willow Road & Hamilton Avenue[1][2]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	Hamilton Avenue Southbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
	Main Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	Hamilton Avenue Southbound			***>120***	***F***	***>120***	***F***	***27.4***	***<0.8***			
	Main Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***>120***			
18	Willow Road & Park Street (future intersection)[1]	AM	Signal	Project Intersection		**OVERSAT**	**F**	**33.6**	**47.8**	***No feasible Improvement***		
		PM				**OVERSAT**	**F**	**16.2**	**21.7**			
19	Willow Road & Ivy Drive[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**52.0**	**105.8**	**OVERSAT**	**F**	
	Ivy Drive Southbound			***72.8***	***E***	***69.6***	***E***	***<4***	***<0.8***	***61.3***	***E***	***<0.8***
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**85.2**	**107.3**	**OVERSAT**	**F**	
	Ivy Drive Southbound			***65.2***	***E***	***71.7***	***E***	***6.5***	***7.9***	***60.4***	***E***	***<0.8***
20	Willow Road & O'Brien Drive[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	O'Brien Drive Northbound			***108.2***	***F***	***80.4***	***F***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			

				Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
	O'Brien Drive Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
21	Willow Road & Newbridge Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**31.5**	**97.3**	**OVERSAT**	**F**	
	Newbridge Street Southbound			***115.1***	***F***	***108.8***	***F***	***<4***	***<0.8***	***>120***	***F***	***103.1***
	Newbridge Street Northbound			***>120***	***F***	***>120***	***F***	***>120***	***>120***	*23.2*	*C*	*<0.8*
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Newbridge Street Southbound			***83.5***	***F***	***>120***	***F***	***42.8***	***67.4***	***>120***	***F***	***101.1***
	Newbridge Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***	*31.2*	*C*	*<0.8*
22	Willow Road & US 101 Northbound Ramps[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
23	Willow Road & US 101 Southbound Ramps[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
24	Willow Road & Bay Road[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**6.7**	**OVERSAT**	**F**	
	Bay Road Southbound			***>120***	***F***	***>120***	***F***	***36.1***	***36.1***	*27.6*	*C*	*<0.8*
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**	**OVERSAT**	**F**	
	Bay Road Southbound			***74.5***	***E***	***81.7***	***F***	***7.2***	***7.2***	*26.5*	*C*	*<0.8*
25	Willow Road & Hospital Plaza/ Durham Street[1]	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			

				Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
	VA Medical Center Southbound			***74.7***	***E***	***74.7***	***E***	***<4***	***<0.8***			
	Durham Street Northbound			***>120***	***F***	***>120***	***F***	***<4***	***<0.8***			
		PM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**<4**	**<0.8**			
	VA Medical Center Southbound			***74.2***	***E***	***74.0***	***E***	***<4***	***<0.8***			
	Durham Street Northbound			***88.1***	***F***	***88.1***	***F***	***<4***	***<0.8***			
26	Willow Road & Coleman Avenue	AM	Signal	33.9	C	33.6	C	<4	3.4			
		PM		13.1	B	13.2	B	<4	<0.8			
27	Willow Road & Gilbert Avenue	AM	Signal	23.7	C	23.4	C	<4	<0.8			
		PM		14.1	B	13.9	B	<4	<0.8			
28	Willow Road & Middlefield Road	AM	Signal	**64.4**	**E**	**64.8**	**E**	**<4**	**0.8**			
	Middlefield Road Southbound			***69.8***	***E***	***70.0***	***E***	***<4***	***<0.8***			
	Middlefield Road Northbound			***67.4***	***E***	***67.2***	***E***	***<4***	***<0.8***			
		PM	Signal	42.5	D	42.3	D	<4	<0.8			
	Middlefield Road Southbound			*42.1*	*D*	*42.1*	*D*	*<4*	*<0.8*			
	Middlefield Road Northbound			*40.6*	*D*	*40.7*	*D*	*<4*	*<0.8*			
29	O'Brien Drive/Loop Road & Main Street/O'Brien Drive (future intersection)	AM	Rdbt	Project Intersection		8.4	A	8.4	8.4			
		PM				10.2	B	10.2	10.2			

				Cumulative Conditions (With Dumbarton Rail)								
				No Project Conditions		Project Conditions				With Improvement		
#	Intersection	Peak Hour	Traffic Control	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Delay	Incr. in Avg. Critical Delay	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Critical Delay
30	O'Brien Drive & Kavanaugh Drive	AM	AWSC	**>120**	**F**	**>120**	**F**	**>120**	**>120**	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**10.9**	**10.9**			
31	Adams Drive & Adams Court	AM	TWSC	18.9	C	17.3	C	<4	<0.8			
		PM		15.8	C	12.6	B	<4	<0.8			
32	Adams Drive & O'Brien Drive	AM	TWSC	**47.2**	**E**	**>120**	**F**	**>120**	**>120**	*Traffic signal potentially feasible*		
		PM		**>120**	**F**	**>120**	**F**	**>120**	**>120**			
33	University Avenue & Bayfront Expressway*	AM	Signal	14.7	B	13.1	B	<4	<0.8			
		PM		**>120**	**F**	**>120**	**F**	**<4**	**<0.8**			

* Denotes CMP Intersection

AWSC - All Way Stop Control; TWSC - Two Way Stop Control; GP - General Plan; Rdbt - Roundabout

[1] Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported

"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.

[1]Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in average delay and critical delay calculated using Vistro.

[2]The intersection is not considered as non-compliant under cumulative plus project conditions because the critical movement of the local approach shifts with the addition of project traffic.

Bold indicates substandard level of service

Bold indicates noncompliance. The project exceeds thresholds in the City of Menlo Park's TIA Guidelines. These are not CEQA thresholds.

Table 3.3-15. Cumulative (2040) With Dumbarton Rail Intersection Levels of Service (East Palo Alto)

				Cumulative (2040) Conditions (Dumbarton Rail)							
				No Project		with Project				With Improvement	
#	Intersection	Peak Hour	Traffic Control	Avg Delay (secs)[1]	LOS	Avg Delay (secs)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Crit V/C	Avg Delay (secs)[1]	LOS
34	University Avenue & Purdue Avenue	AM	Signal	25.9	C	22.3	C	-3.8	-0.071		
		PM		28.0	C	24.2	C	-3.6	-0.081		
35	University Avenue & Adams Drive	AM	TWSC	**>120**	**F**	**>120**	**F**	**1.5**	**0.322**		
		PM		**>120**	**F**	**>120**	**F**	**-6.9**	**-0.122**		
36	University Avenue & O'Brien Drive	AM	Signal	20.4	C	38.7	D	24.3	0.225		
		PM		20.1	C	31.4	C	14.4	0.176		
37	University Avenue & Notre Dame Avenue	AM	Signal	8.0	A	10.6	B	3.1	0.070		
		PM		11.3	B	14.8	B	4.1	0.036		
38	University Avenue & Kavanaugh Drive	AM	Signal	24.7	C	17.5	B	3.1	0.070		
		PM		22.7	C	23.5	C	4.4	0.039		
39	University Avenue & Bay Road	AM	Signal	47.4	D	52	D	8.4	0.056		
		PM		**64.0**	**E**	**67.7**	**E**	**3.7**	**0.012**		
40	University Avenue & Runnymede Street	AM	Signal	9.4	A	10.9	B	8.1	0.062		
		PM		8.9	A	8.9	A	3.5	0.100		
41	University Avenue & Bell Street	AM	Signal	14.9	B	15.9	B	1.6	0.055		
		PM		26.1	C	32.9	C	10.9	0.062		
42	University Avenue & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**4.6**	**0.011**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-4.9**	**-0.009**		
43	US 101 Northbound Off-Ramp & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**77.2**	**0.158**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**48.9**	**0.108**		
44	Cooley Avenue & Donohoe Street*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**27.2**	**0.085**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**62.9**	**0.143**		

				Cumulative (2040) Conditions (Dumbarton Rail)							
				No Project		with Project				With Improvement	
#	Intersection	Peak Hour	Traffic Control	Avg Delay (secs)[1]	LOS	Avg Delay (secs)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Crit V/C	Avg Delay (secs)[1]	LOS
45	University Avenue & US 101 Southbound Ramps*	AM	Signal	**OVERSAT**	**F**	**OVERSAT**	**F**	**-2.5**	**-0.005**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**7.0**	**0.017**		
46	University Avenue & Woodland Avenue*	AM	Signal	**OVERSAT**	**E**	**OVERSAT**	**E**	**14.1**	**0.040**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**12.0**	**0.028**		
47	E. Bayshore Road & Donahoe Street*	AM	Signal	**>120**	**F**	**>120**	**F**	**-8.8**	**-0.019**	***Corridor Improvement***	
		PM		**>120**	**F**	**>120**	**F**	**-4.9**	**-0.010**		
48	E. Bayshore Road & Holland Street	AM	TWSC	8.8	A	8.8	A	0.0	0.000		
		PM		10.0	A	10.0	A	0.0	0.000		
49	Saratoga Avenue & Newbridge Street	AM	TWSC	**>120**	**F**	**>120**	**F**	**4.7**	**0.075**	***No Feasible Improvement***	
		PM		**37.2**	**E**	25.0	D	-2.6	-0.103		
50	E. Bayshore Road & Euclid Avenue*	AM	AWSC	**OVERSAT**	**F**	**OVERSAT**	**F**	**42.4**	**0.062**	***Corridor Improvement***	
		PM		**OVERSAT**	**F**	**OVERSAT**	**F**	**-5.7**	**-0.016**		
51	Clarke Avenue & E. Bayshore Road	AM	Signal	14.1	B	14.2	B	0.1	0.008		
		PM		13.9	B	14.0	B	0.1	0.007		
52	Pulgas Avenue & E. Bayshore Road	AM	Signal	25.4	C	26.2	C	1.1	0.013		
		PM		47.4	D	47.2	D	0.2	0.001		

*Denotes a CMP intersection
AWSC - All Way Stop Control; TWSC - Two Way Stop Control

[1]Average delay is reported for signalized and AWSC intersections. For TWSC intersections, the delay for the worst stop-controlled movement is reported.

				Cumulative (2040) Conditions (Dumbarton Rail)							
				No Project		with Project				With Improvement	
#	Intersection	Peak Hour	Traffic Control	Avg Delay (secs)[1]	LOS	Avg Delay (secs)[1]	LOS	Incr. in Avg/Crit Delay (sec)[1]	Incr. in Crit V/C	Avg Delay (secs)[1]	LOS

"OVERSAT" indicates that the SimTraffic microsimulation model indicates that the intersection would experience capacity issues where the demand cannot be served by the intersection. Oversaturated intersections would operate at LOS F.

*Intersections were analyzed using Synchro/SimTraffic software due to the close proximity of these intersections. Changes in critical delay and v/c calculated using Traffix.

Bold indicates substandard level of service

Bold indicates adverse effect

Adverse Effects and Recommended Improvements

For intersections that are non-compliant under cumulative plus project conditions and cumulative plus project with Dumbarton rail conditions, the improvements proposed under cumulative plus project conditions would be sufficient to address cumulative non-compliance. Improvements for intersections that are non-compliant only under cumulative plus project with Dumbarton rail conditions are described below. As noted below, no additional feasible improvements are identified and the improvement measures identified below are for informational purposes only.

Marsh Road and Bay Road

This intersection is expected to operate at an acceptable LOS D during both peak hours under cumulative conditions with the Dumbarton rail. The addition of Project traffic would cause the intersection to operate at LOS E during the AM peak hour. The intersection would continue to operate at an acceptable LOS D during the PM peak hour. This constitutes non-compliance during the AM peak hour according to the thresholds established by the City of Menlo Park.

Physical improvements at this intersection are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel. Menlo Park's TIF program proposes Class II buffered bike lanes along Marsh Road from Bay Road to Scott Road in both directions. The improvement may lead to an overall increase in bicycle mode share but would not offset the Project traffic.

Chrysler Drive and Constitution Drive

This intersection is expected to operate at an unacceptable LOS F during both peak hours under cumulative conditions with Dumbarton rail. With the addition of Project traffic, the average critical delay would increase by more than 0.8 seconds during the AM peak hour. The intersection would continue to operate acceptably during the PM peak hour. This constitutes non-compliance during the AM peak hour according to the thresholds established by the City of Menlo Park.

Physical improvements at this intersection are considered infeasible due to right-of-way constraints and/or adverse effects on pedestrian and bicycle travel.

Willow Road and Bayfront Expressway

Improvements for this intersection are discussed under the near term plus project section as part of the Willow Road corridor improvements, and is not repeated here.

Intersection Vehicle Queuing

The analysis of intersection levels of service was supplemented with a vehicle queuing analysis for intersection left-turning movements where the Proposed Project would add significant trips per lane in the vicinity of the Project Site and affect intersection operations. This analysis provides a basis for estimating future storage requirements at these intersections (see Table 3.3-16). Vehicle queues were estimated using the methodology described in Appendix 3.3, Transportation, of this EIR.

Locations where the estimated 95th percentile queues would exceed the available storage capacity for the movement are discussed below. Queuing issues are operational issues resulting from signal timing and queue storage provisions. Queuing issues are not considered a CEQA issue related to hazards.

Below Market Rate Housing Proposal – Willow Village Master Plan Project

1350 Willow Road

September 3, 2021

Peninsula Innovation Partners, LLC ("Peninsula") is pleased to provide this Below Market Rate ("BMR") Proposal for the Willow Village Master Plan Project, located at 1350 Willow Road. We believe the Willow Village BMR proposal will play a role in addressing the ongoing housing crisis by reaching deeper affordability levels than what is required, while also providing all the units on-site. Peninsula intends to provide on-site BMR units as outlined below.

General Description

The *ConnectMenlo* General Plan requires developers to participate in the City's BMR Program. The General Plan also encourages applicants to build affordable housing for groups with special needs, including seniors, with an emphasis on facilitating development of housing for seniors with very low, low, and moderate incomes. Further, the General Plan identifies the benefits of market rate developers partnering with affordable housing developers to provide BMR units, noting that units developed in this manner are more likely to serve lower income households. The General Plan emphasizes the need for units at a range of affordability levels, highlighting that an estimated 50 percent of the City's very low-income housing need for the 2015-2023 planning period was for extremely low-income households. Additionally, the latest City of Menlo Park Housing Element (2015-2023) promotes the development of a balanced mix of housing types and densities for all economic segments throughout the community.

The purpose of the City's BMR Program is to increase the housing supply for households that have very low, low, and moderate incomes, with a primary objective of creating actual housing units rather than collecting fees. According to the City's BMR Program, residential development projects that include 20 or more units must provide not less than 15 percent of these units at below market rates to very low, low and moderate-income households. In addition, the BMR Program requires commercial developers to mitigate the demand for affordable housing created by their projects by providing BMR housing on or off-site, or if that is not feasible, paying a fee. Mixed use projects must comply with the commercial and residential requirements as applicable to each portion of the development. The BMR Program permits BMR units to be provided across the full range of affordability levels, provided that the provision of units at extremely low, very low, low and/or moderate income is "roughly equivalent" to the provision of all of the units at the low-income level.

For both residential and commercial projects, the applicant must enter into a BMR agreement with the City. The City's BMR Guidelines require the applicant to submit a proposal for meeting the requirements of the BMR Program.

Willow Village proposes 1,730 residential rental units, necessitating 260 BMR units at full buildout. Additionally, a BMR unit equivalency for the commercial component of Willow Village would apply, calculated at 48 units (staff calculation is attached as **Attachment A**). The total BMR units proposed at Willow Village at maximum buildout is 308 rental units (260 units + 48 units). Notably, the 48 units reflect an application of the commercial linkage calculation to the full 1.6M SF maximum of office and accessory space. This approach results in a higher affordable unit calculation than traditionally required, because it calculates a linkage requirement on the uniquely proposed accessory space. This space is not anticipated to generate any employment or housing demand in excess of the maximum 1.25M SF of office space. If the entire amount of accessory space were excluded, the commercial linkage calculation would result in a requirement for a maximum of 281 units; if only the unusable covered garden space were excluded, the commercial linkage calculation would result in a requirement for a maximum of 291 units. In addition, the 48 units reflects application of the commercial linkage fee to the full 200K SF of retail and the hotel at 172K SF, whereas the currently proposed architectural control packages contemplate less retail and hotel square footage.

Willow Village is not seeking a State Density Bonus or a City density affordable housing bonus in conjunction with this proposal.

Program Breakdown

The proposed Willow Village BMR Program is comprised of a senior affordable building, in a to-be developed in partnership with non-profit housing developer Mercy Housing, and the remaining inclusionary units will be placed throughout the market rate buildings. The inclusionary units will be floating and the senior affordable units will be provided in a dedicated building. A diagram identifying the number of BMR units by building will be forthcoming.

Program Breakdown at Full Buildout	
Senior Affordable Building	120
Inclusionary Units	188
Total Units	**308**

Senior Affordable Housing

As noted above, the General Plan supports provision of affordable senior housing, including maximizing the use of available funding mechanisms, partnering with non-profits, and allowing smaller unit sizes and common dining areas. The City of Menlo Park Housing Element (2015-2023) also identifies two goals that acknowledge the need for affordable senior housing:

- Goal H3 — SPECIALIZED HOUSING NEEDS: Provide Housing for Special Needs Populations that is Coordinated with Support Services. Goal H3 is intended to proactively address the special housing needs of the community, including seniors, disabled individuals and the homeless.

- Goal H4 — NEW HOUSING: Use Land Efficiently to Meet Community Housing Needs at a Variety of Income Levels, Implement Sustainable Development Practices and Blend Well-Designed New Housing into the Community. Goal H4 is intended to: (1) promote the development of a balanced mix of housing types and densities for all economic segments throughout the community, (2) remove governmental and non-governmental constraints on the production, rehabilitation and/or cost of housing where appropriate, and (3) to encourage energy efficiency in both new and existing housing.

The City of Menlo Park Housing Element cites that the senior housing population in Menlo Park is on the rise, seniors are increasingly not able to afford housing in Menlo Park, and as such, creating affordable housing options for seniors is a goal for the city. Per the housing element, Menlo Park has a higher percentage of seniors than the county or the state. Of the 1,740 residents that the Housing Element identifies as extremely low income, the majority are seniors.

The need for affordable senior housing is further documented in the following additional sources:

- According to the Menlo Park Senior Housing Needs Assessment, City of Menlo Park, 2009, there are only 123 senior income restricted rental units in Menlo Park, while the future demand for senior housing in Menlo Park and San Mateo County continues to grow.

- A 2008 report by the *Livable Communities for Successful Aging* states that the population over 65 is projected to increase 73% between 2005 and 2030, from about 91,000 to more than 157,000. The problem of housing affordability for San Mateo County seniors is two-fold. Some seniors are living on such modest incomes that they require subsidized affordable housing. Others own their homes but may find it too demanding and costly to maintain a single-family home later in life. These seniors might relocate if they could find suitable alternative housing in their communities that they consider affordable.

- According to a 2017 Study done by *Get Healthy San Mateo County*, while 47% of San Mateo County residents overall pay more than 30% of their income to rent, 64% of the population 65 years and over-pays this percentage. Of those who are receiving retirement income (49%), their mean income is $30,833, and of the 87% receiving Social Security income, their mean income is $20,847. With median monthly rent for those aged 65 and over in San Mateo County around $1,434, housing affordability for this group will continue to be an issue, especially as this population group increases and more people are seeking out affordable housing options.

In response to these identified needs and strong community input, Peninsula intends to partner with Mercy Housing to deliver 120 units of affordable senior housing in a dedicated senior living building. This model is successfully seen throughout the Bay Area.

The BMR Program generally requires that units be distributed throughout the development, but explicitly authorizes the City to waive this requirement in order to carry out the purposes of the BMR Housing Program and the Housing Element. As noted above, the Housing Element policies support the provision of affordable, senior housing, which can only be accomplished in a standalone project to comply with fair housing laws. Providing senior units together in a dedicated building allows the provision of much needed services in a much more efficient manner than possible with dispersed inclusionary units, allowing residents to age in place. Services may include programs such as health education and risk reduction, on-site planned physical activities such as yoga and tai-chi, and financial literacy education (a more detailed explanation of the some of the services that could be provided is included as **Attachment B.)** These services are not typical of market rate buildings and provide a higher quality of life for the seniors, helping them live independently and averting/delaying relocation to more institutional care environments. There is great need for deeply affordable senior housing in the Bay Area, which our proposal will help fill. Providing senior units in a dedicated building also allows units to be restricted to age qualified individuals in accordance with applicable fair housing laws. Peninsula also intends to market these units in accordance with the BMR Guidelines regarding City of Menlo Park worker and resident preference, subject to compliance with fair housing laws.

Depending on the different state and federal financing programs available to build affordable senior housing, the age restriction is 55 and over or 62 and over. Currently, Peninsula and Mercy Housing are exploring a variety of federal and state funding programs including the Federal Tax Credit Program, State Multifamily Housing Program, State Infill and Infrastructure Grant, Affordable Housing Program (through the Federal Home Loan Bank), Project Based Section 8, and other local subsidies. Peninsula also intends to contribute the land for the senior building, which is appraised at $11,400,000.

The major source of affordable housing financing is the Federal Tax Credit Program, which is a competitive allocation. This funding source is the final to be secured to complete the financing and proceed into construction. The senior project would apply for tax credit financing September 2023 and receive an award in December of 2023. The project would make up any gap in funding remaining from the total costs and the financing amounts above by marshalling a combination of sources, such as: county grants, private sector grants, land contribution and direct Peninsula investment. Construction would commence in January 2024 and take about 20-24 months to complete. The project may apply for an initial round of tax credit financing in May of 2023 if it can satisfy all the readiness criteria, and if successful, would receive an award in August 2023. The senior housing project will be delivered close after amenities (grocery and other neighborhood serving retail) are established, as having such amenities already in place in the community for seniors is important.

Inclusionary Housing

The inclusionary BMR units will be of the same proportionate size (number of bedrooms and square footage) as the market-rate units, will be distributed throughout the Willow Village

Residential/Shopping District, and will be indistinguishable from the exterior (floor plan layouts will follow at a later date). Design and materials to be used in construction of the BMR units will be of comparable quality to the other new units constructed in the development. Based on the current Willow Village phasing plan, Willow Village would deliver 212 BMR units at full buildout of Phase 1, representing over 20 percent of all units in Phase 1, and 96 BMR units at full buildout of Phase 2, representing 14 percent of all units in Phase 2. This proposal front loads the affordable units to be brought on early in the project. Peninsula, however, would be seeking a CDP modification to the timing requirements of Section 5.3.1 of the BMR Guidelines, as the proposed phasing differs slightly in timing, but not substance, from the guidelines. An illustrative program breakdown, BMR income breakdown, proposed unit mix and phasing plan are included as **Attachment C.**

Proposed Income Levels

The BMR ordinance requires the provision of BMR units for very-low, low, and moderate-income households, the BMR Guidelines allow the City to approve variations in the affordability mix to assist in meeting RHNA requirements, subject to a finding that the mix is "roughly equivalent to the provision of all of the affordable units at the low-income level." The following table demonstrates how the BMR units proposed at Willow Village addresses the City of Menlo Park's obligations under the most current RHNA:

Income Levels	RNHA Menlo Park	Willow Village Proposal	Remaining
Very Low (<50%)	740	120	620
Low (50-80%)	426	38	388
Moderate (80-120%)	496	150	346
TOTAL	1,662	308	1,364

Source: ABAG Draft RHNA 2023-2031 for Menlo Park

Peninsula proposes a BMR program with a mix of income levels to help meet RHNA requirements, at an average affordability of 74.6 percent of Area Media Income (AMI), which is well below the City's required low-income level of 80 percent of AMI. The senior units would consist of a mix of extremely-low, very low, and low income units, while the inclusionary units would be distributed evenly between 80 percent to 120 percent AMI levels.

BMR Income Breakdown at Full Buildout		
Category	**AMI**	**# Units**
Extremely Low (Senior)	25%	30
Very Low (Senior)	30%	53
Low (Senior)	50%	37
Low (Inclusionary)	80%	38
Moderate (Inclusionary)	90%	37
Moderate (Inclusionary)	100%	38
Moderate (Inclusionary)	110%	37
Moderate (Inclusionary)	120%	38
TOTAL BMR Units		**308**
TOTAL PROJECT UNITS	**1730**	
Affordable %	**17.8%**	
PROJECT WIDE Avg. Affordability	**74.6% of AMI**	
City of Menlo Park Required Affordability	**80.0% of AMI**	
Senior Building Avg. Affordability	34.9% of AMI	
Inclusionary Avg. Affordability	100.0% of AMI	

The City's BMR Guidelines generally prohibit monthly BMR unit rents from exceeding 75 percent of comparable market rents. In 2018, the City considered adding an exception to the 75 percent limit. At the time, staff indicated the change was not necessary because moderate rents were less than 75 percent of comparable market rents but indicated that the issue could be revisited if that changed. The rental market is dynamic; if we look at a snapshot of current rent conditions, it shows that the 75% of Market cap would likely limit maximum rents to the 100% of AMI to 110% of AMI category levels. This would likely change over time, as pre-pandemic rents were higher. As such, Peninsula is requesting the modification of the 75 percent of market rate rent limit as part of this BMR proposal.

The removal of this limit would allow us to broaden the range of income levels within the project to target more units at 80 percent of AMI and lower tiers of moderate-income levels. We believe this proposal would allow us to target deeper levels of affordability, provide much-needed housing for seniors, and serve the "missing middle" income levels that typically are left out of affordable housing opportunities.

A low-income equivalency calculation, as requested by staff, is provided in **Attachment D.** This calculation is modeled after the closest comparable projects low-income equivalency analysis included in Greystar Menlo Portal BMR Proposal, attached for reference as **Attachment E.** The projected market rate rent in this analysis is equivalent to the proposed market rent for the Greystar Menlo Portal project for modelling purposes. The final unit/BMR mix will be determined along with the architectural control approvals.

Conclusion

In summary, this Willow Village BMR proposal achieves deep affordability at extremely low income levels, provides critical housing opportunities for seniors, provides all of the units on-site versus paying an in-lieu fee, targets the "missing-middle" with housing opportunities that are desperately needed and rarely provided, front-loads affordable units to Phase 1, and surpasses the requirements of Menlo Park when it comes to average affordability of the BMR units across the project site.

Below Market Rate Comercial Linkage Fee/Unit Calculations

Existing Credits (Existing Gross Floor Area and Land Uses)				
	Current Rate	Existing gross floor area	dollar amount (credits)	BMR units (unit/sf calculation)
Group A	$ 19.61	515,169	$ 10,102,464.09	25.01
Group B	$ 10.64	564,150	$ 6,002,556.00	14.92
Total		1,079,319	$ 16,105,020.09	39.93
Proposed Project Commercial Components				
	Current Rate	Proposed gross floor area	dollar amount	BMR units (unit/sf calculation)
Group A	$ 19.61	1,600,000.00	$ 31,376,000.00	77.67
Group B	$ 10.64	372,000.00	$ 3,958,080.00	9.84
Total		1,972,000.00	$ 35,334,080.00	87.51

Proposed Commercial Linkage Fee		
	payment	**units**
Commercial Linkage Fee (Proposed project net credits)	**$ 19,229,059.91**	
BMR Unit Equivelency Calculation		**48**

Factors for unit conversion

Group A	20,600	sf per unit
Group B	37,800	sf per unit

Mercy Housing Resident Services
ATTACHMENT B

Mercy Housing California (MHC) is a leader in an integrated, mission-based approach that couples the delivery of customized resident and community service enrichments with quality development, management, and maintenance to create healthy communities. MHC has a robust Resident Services Program that serves over 4,715 seniors and is implemented at 49 senior properties throughout California. Resident Services Coordinators (RSCs) are onsite and oversee the delivery of quality programming and services to a culturally diverse group of seniors and individuals with disabilities.

The essential services include a wellness model that has been selected to be responsive to the needs of older adults wishing to "age in place". Service-enriched housing further addresses the critical factors associated with averting and delaying institutionalization such as continuously monitoring cognitive, functional, and other risk factors; providing wellness services; teaching chronic disease management strategies; and actively coordinating transitions to and from the hospital. The Resident Services Program is designed to include four priority program models: 1) Health and Wellness 2) Economic Development/Housing Stability 3) Education 4) Community Participation.

Health & Wellness

MHC delivers health services coordination to all its residents, offering the following services: basic health & needs assessments, ADL support & screening, health benefit acquisition, health education & risk reduction, physical activities, access to food, wellbeing checks, transition planning, and linkages to preventative and behavioral health care. Service enriched housing requires strong partnerships with health care providers.

Recognizing that there may be a lack of resources available to residents in the 40-50% AMI category, MHC will continue to create partnerships that leverage both private and public health agencies to ensure service delivery is enhanced. Current creative partnerships have included working with California State University to implement a Preventative Health Screenings Program on site at all MHC's senior properties in San Francisco. MHC has also partnered with the Institute on Aging to provide a wellness nurse at three of our senior properties in San Francisco. The wellness nurse provides the following onsite services: comprehensive psychosocial and health assessments and monitoring, blood pressure screening, glucose monitoring, hospital transition planning, and home visits.

All RSCs are trained to be workshop facilitators in Stanford's Chronic Disease Self-Management (CDSMP) Class and Matter of Balance. The CDSMP workshop focuses on a self-management approach in dealing with chronic conditions such as heart disease, arthritis, diabetes, depression, asthma, and other physical and mental health conditions. Residents who have participated in the program have reported improvements in their condition and general well-being and continue engage in physical activity and exercises. Also, 80% of residents that have participated in fall prevention workshop report viewing falls and fear of falling as controllable.

Economic Development/Housing Stability

MHC's long-term impact it to create households that have safe and stable housing, and where renters are in good standing. In order to achieve housing stability, MHC's services staff work closely with residents, and provide the following services: eviction prevention coaching, lease education, housing options, housing inspection, linkages with financial resources, and referrals. Housing stability activities are provided proactively before any risk of instability of housing occurs or following an incident that increases the resident's risk of eviction. MHC understands the complex needs of our residents, and therefore we position our residents with the best of resources, so that they can maintain their housing stability.

Education

MHC believes that education plays an important part in empowering residents with the knowledge to make good decisions. The focus of MHC's education programming is focused around creating Financial Stability. In addition to referrals, Resident Services Coordinators provide the following services: financial stability seminars, financial benefit acquisition, employment and job readiness support, and technology literacy. MHC requires that all properties implement at least one education seminar every month.

Community

Community participation is a vehicle for preventing isolation, reducing conflict, enhancing safety, promoting property and neighborhood pride, and building leadership skills in individual residents. MHC supports strong resident participation and feedback in all areas of programming and services. In order to achieve this, MHC encourages residents to participate in community events, and join tenant councils and volunteer groups. Resident Services encourages community participation in order to enhance social connections and build community among residents and between and property and the surrounding community.

WILLOW VILLAGE SUMMARY BMR PROGRAM
Attachment C

Program Breakdown	
Senior Affordable Building	120
Inclusionary Units	188
Total Units	**308**

Illustrative BMR Income Breakdown at Full Buildout		
Category	**AMI**	**# Units**
Extremely Low (Senior)	25%	30
Very Low (Senior)	30%	53
Low (Senior)	50%	37
Low (Inclusionary)	80%	38
Moderate (Inclusionary)	90%	37
Moderate (Inclusionary)	100%	38
Moderate (Inclusionary)	110%	37
Moderate (Inclusionary)	120%	38
TOTAL BMR Units		**308**
TOTAL PROJECT UNITS	**1730**	
Affordable %	**17.8%**	
PROJECT WIDE Avg. Affordability	**74.6%**	
City of Menlo Park Required Affordability	**80.0%**	
Senior Building Avg. Affordability	34.9%	
Inclusionary Avg. Affordability	100.0%	

Illustrative Phase 1 at Full Buildout					
Phase 1 % Affordable Units	**20.3%**				
Parcel 7 (Senior Building)	BMR Units	Total Units	BMR Unit Mix%	Parcel Total Unit Mix %	Average Unit Size
studio	108	108	90%	90%	466
one-bedroom	11	11	9%	9%	633
two-bedroom	1	1	1%	1%	929
three-bedroom					
TOTAL BMR Units	120	120	100%	100%	485
PARCEL TOTAL UNITS	120				
% BMR	100%				
Parcel 2	BMR Units	Total Units	BMR Unit Mix%	Parcel Total Unit Mix %	Average Unit Size
studio	11	100	34%	31%	489
one-bedroom	10	113	31%	35%	650
two-bedroom	10	105	31%	32%	999
three-bedroom	1	9	3%	3%	1252
TOTAL BMR Units	32	327	100%	100%	729
PARCEL TOTAL UNITS	327				
% BMR	10%				
Parcel 3	BMR Units	Total Units	BMR Unit Mix%	Parcel Total Unit Mix %	Average Unit Size
studio	12	118	29%	28%	503
one-bedroom	17	170	40%	41%	723
two-bedroom	13	131	31%	31%	1078
three-bedroom					
TOTAL BMR Units	42	419	100%	100%	772
PARCEL TOTAL UNITS	419				
% BMR	10%				
Parcel 6	BMR Units	Total Units	BMR Unit Mix%	Parcel Total Unit Mix %	Average Unit Size
studio	3	25	17%	14%	500
one-bedroom	6	61	33%	34%	691
two-bedroom	8	77	44%	43%	867
three-bedroom	1	15	6%	8%	1281
TOTAL BMR Units	18	178	100%	100%	790
PARCEL TOTAL UNITS	178				
% BMR	10%				

TOTAL UNITS PHASE 1	1044
TOTAL BMR UNITS PHASE 1	212

Illustrative Phase 2 at Full Buildout					
Phase 2 % Affordable Units	**14.0%**				
Parcel 4	BMR Units	Total Units	BMR Unit Mix%	Parcel Total Unit Mix %	Average Unit Size
studio	13	106	21%	24%	450
one-bedroom	33	231	53%	53%	703
two-bedroom	13	88	21%	20%	1149
three-bedroom	3	15	5%	3%	1199
TOTAL BMR Units	62	440	100%	100%	748
PARCEL TOTAL UNITS	440				
% BMR	14%				
Parcel 5	BMR Units	Total Units	BMR Unit Mix%	Parcel Total Unit Mix %	Average Unit Size
studio	8	50	24%	20%	450
one-bedroom	17	127	50%	52%	764
two-bedroom	8	57	24%	23%	1030
three-bedroom	1	12	3%	5%	1260
TOTAL BMR Units	34	246	100%	100%	786
PARCEL TOTAL UNITS	246				
% BMR	14%				

TOTAL UNITS PHASE 2	686
TOTAL BMR UNITS PHASE 2	96

Comparison of low income inclusionary requirement to alternate mix proposed (for illustrative purposes)
ATTACHMENT D

Original (Per BMR ordinance requirement of 15% low income)

Unit Type	AMI (<80%)		Comparable Market Rents*	San Mateo Rent Limts	Number Proposed units	Subsidy per unit	Total Subsidy
studio	LI		2,975	2,557	155	418	64,821
one-bedroom	LI		3,475	2,741	95	734	69,749
two-bedroom	LI		4,250	3,290	52	960	49,941
three-bedroom	LI		5,000	3,800	6	1,200	7,200
TOTAL					**308**		**191,711**
						avg/unit	622

Alternative Proposed

Unit Type	AMI	Senior/ Inclusionary	Comparable Market Rents*	San Mateo Rent Limts	Number Proposed units	Subsidy per unit	Total Subsidy
studio	25%	Senior	2,975	799	26	2,176	56,576
studio	30%	Senior	2,975	959	49	2,016	98,794
studio	50%	Senior	2,975	1,598	33	1,377	45,441
studio	80%	Inclusionary	2,975	2,557	10	418	4,182
studio	90%	Inclusionary	2,975	2,876	9	99	887
studio	100%	Inclusionary	2,975	3,196	10	(221)	(2,210)
studio	110%	Inclusionary	2,975	3,516	9	(541)	(4,865)
studio	120%	Inclusionary	2,975	3,835	9	(860)	(7,742)
one-bedroom	25%	Senior	3,475	857	4	2,619	10,474
one-bedroom	30%	Senior	3,475	1,028	4	2,447	9,789
one-bedroom	50%	Senior	3,475	1,713	4	1,762	7,048
one-bedroom	80%	Inclusionary	3,475	2,741	17	734	12,481
one-bedroom	90%	Inclusionary	3,475	3,083	16	392	6,266
one-bedroom	100%	Inclusionary	3,475	3,426	17	49	833
one-bedroom	110%	Inclusionary	3,475	3,769	16	(294)	(4,698)
one-bedroom	120%	Inclusionary	3,475	4,111	17	(636)	(10,815)
two-bedroom	80%	Inclusionary	4,250	3,290	10	960	9,604
two-bedroom	90%	Inclusionary	4,250	3,701	11	549	6,041
two-bedroom	100%	Inclusionary	4,250	4,112	10	138	1,380
two-bedroom	110%	Inclusionary	4,250	4,523	11	(273)	(3,005)
two-bedroom	120%	Inclusionary	4,250	4,934	10	(684)	(6,844)
three-bedroom	80%	Inclusionary	5,000	3,800	1	1,200	1,200
three-bedroom	90%	Inclusionary	5,000	4,275	1	725	725
three-bedroom	100%	Inclusionary	5,000	4,750	1	250	250
three-bedroom	110%	Inclusionary	5,000	5,225	1	(225)	(225)
three-bedroom	120%	Inclusionary	5,000	5,700	2	(700)	(1,400)
TOTAL					**308**		**230,167**
						avg/unit	747

San Mateo Rent Limits (HCD Published Limits 2021)

AMI level		studio	one	two	three
25%		799	857	1028	1188
30%		959	1028	1234	1425
50%		1598	1713	2056	2375
80%		2557	2741	3290	3800
90%		2876	3083	3701	4275
100%		3196	3426	4112	4750
110%		3516	3769	4523	5225
120%		3835	4111	4934	5700

*Comparable Market Rents are from the Greystar Menlo Portal BMR Proposal

ATTACHMENT E - GREYSTAR MENLO PORTAL LOW INCOME EQUIVALENCY CALCULATION

Comparison of low income inclusionary requirement to alternative mix proposed by developer
Project: Menlo Portal - Scenario 1 and Alternative

Original (Per BMR ordinance requirement of 15% Low Income)

Unit size (e.g 1 bedroom)	AMI	Market Rents	Affordable rents	Number proposed units	Subsidy per unit	Total subsidy
Studio	LI	2975	*2231*	18	744	13392
1 BDRM	LI	3475	*2606*	21	869	18249
2 BDRM	LI	4250	3137	8	1113	8904
3 BDRM	LI	5000	3625	1	1375	1375
Total				**48**		**41920**

873.33 (AVG/UNIT)

NOTES:

Affordable rents based on 2020 San Mateo County Area Median Income

Affordable rent calculation assumes family size for each unit: Studio: 1 person; one-bedroom: 1.5 persons; two-bedroom: 3 persons; three-bedroom: 4.5 persons

Junior one bedrooms are included in the studio unit count

Maximum affordable rents were adjusted not to exceed 75% of market rent for unit size

Alternative Proposed

Unit size (e.g 1 bedroom)	AMI	Market Rents	Affordable rents	Number proposed units	Subsidy per unit	Total subsidy
Studio	VLI	2975	1522	3	1453	4359
Studio	LI	2975	*2231*	10	744	7440
Studio	MI	2975	*2231*	5	744	3720
1 BDRM	VLI	3475	1631	0	1844	0
1 BDRM	LI	3475	*2606*	4	869	3476
1 BDRM	MI	3475	*2606*	17	869	14773
2 BDRM	VLI	4250	1957	0	2293	0
2 BDRM	LI	4250	3137	0	1113	0
2 BDRM	MI	4250	*3187*	8	1063	8504
3 BDRM	MI	5000	*3750*	1	1250	1250
Total				**48**		**43522**

906.71 (AVG/UNIT)

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

SCALE:

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MILESTONES

DATE	ISSUE
04/11/2022	ACP

REVISIONS

NO.	DATE	ISSUE

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Perspective - Entry

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

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Perspective - Main Street

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

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Perspective - Central Campus Path

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

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DATE	ISSUE
04/11/2022	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
Perspective - Town Square Pavilion 3

DRAWING NO:
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BIRD-FRIENDLY GLAZING SHALL HAVE THE FOLLOWING SPECIFICATIONS:

a. VERTICAL ELEMENTS OF THE WINDOW PATTERNS SHOULD BE AT LEAST 0.25 INCH WIDE AT A MAXIMUM SPACING OF FOUR INCHES AND/OR HAVE HORIZONTAL ELEMENTS AT LEAST 0.125 INCH WIDE AT A MAXIMUM SPACING OF TWO INCHES;

OR

b. BIRD-SAFE GLAZING SHALL HAVE A THREAT FACTOR LESS THAN OR EQUAL TO 30.

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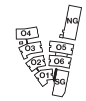

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 (Portion)

Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DATE	ISSUE
04/11/2022	ACP

REVISIONS		
NO.	DATE	ISSUE

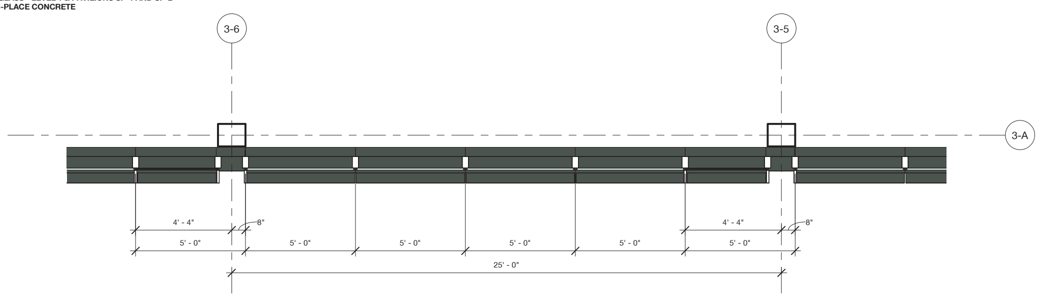
DRAWING TITLE:

Materials and Color Board

DRAWING NO:

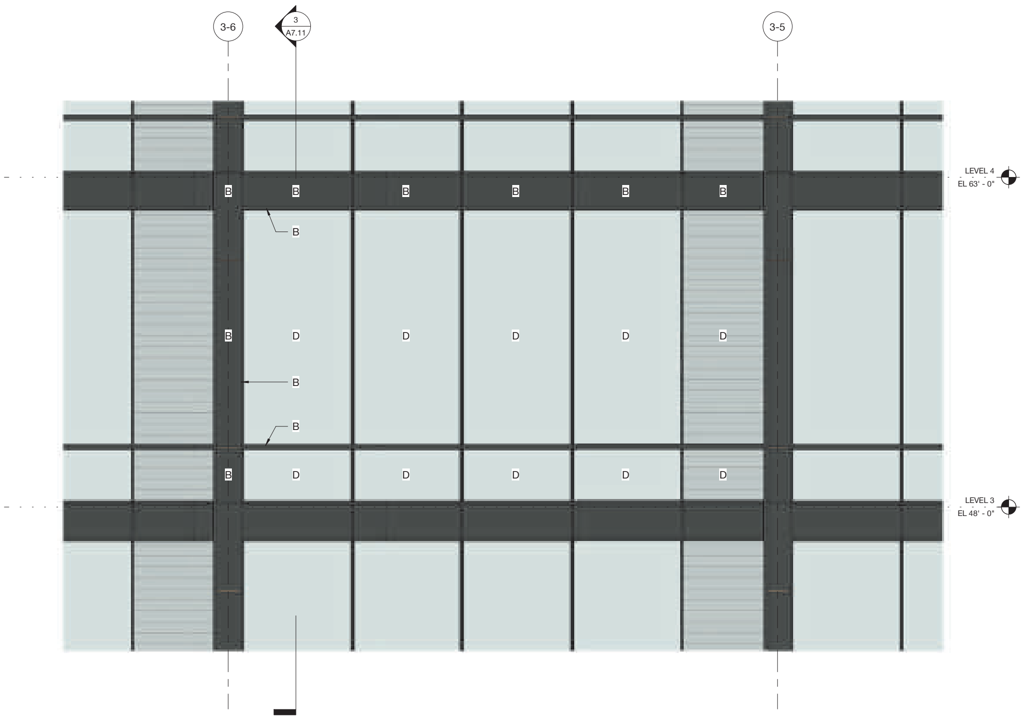
A7.00

A - PAINTED METAL + METAL PANEL
B - PAINTED METAL + METAL PANEL
C - EXPOSED HEAVY TIMBER STRUCTURE
D - TYPICAL VISION GLASS
E - ARCHITECTURAL LOUVER - PAINTED TO MATCH ADJACENT MATERIAL
F - GLASS CANOPY
G - SIGHT PROOF MECH LOUVER
H - EXPOSED STEEL PAINTED TO MATCH PAINTED METAL PANEL
I - FIBER CEMENT BOARD
J - PAINTED METAL GUARDRAIL
K - PERFORATED METAL PANEL GUARDRAIL
L - SCREEN COLORED TO MATCH MATERIAL "I"
M - VISION GLASS - LEVEL 1 & PAVILIONS SP-1 AND SP-2
N - CAST-IN-PLACE CONCRETE

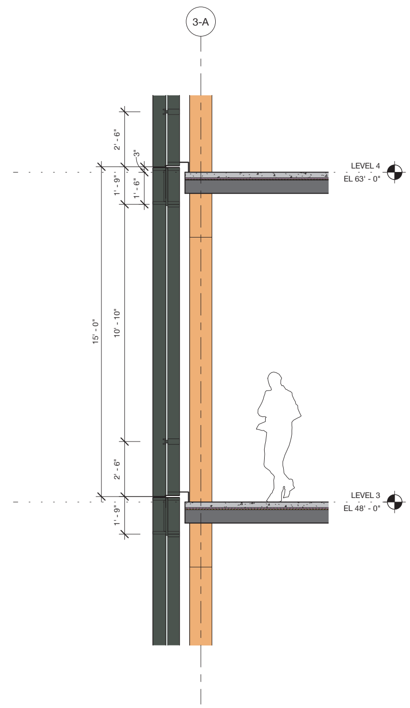


1 Typical Office Enclosure - Plan
3/8" = 1'-0"

4 Typical Office Enclosure - Axon



2 Typical Office Enclosure - Elevation
3/8" = 1'-0"



3 Typical Office Enclosure - Section
3/8" = 1'-0"

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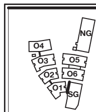

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

SCALE: 3/8" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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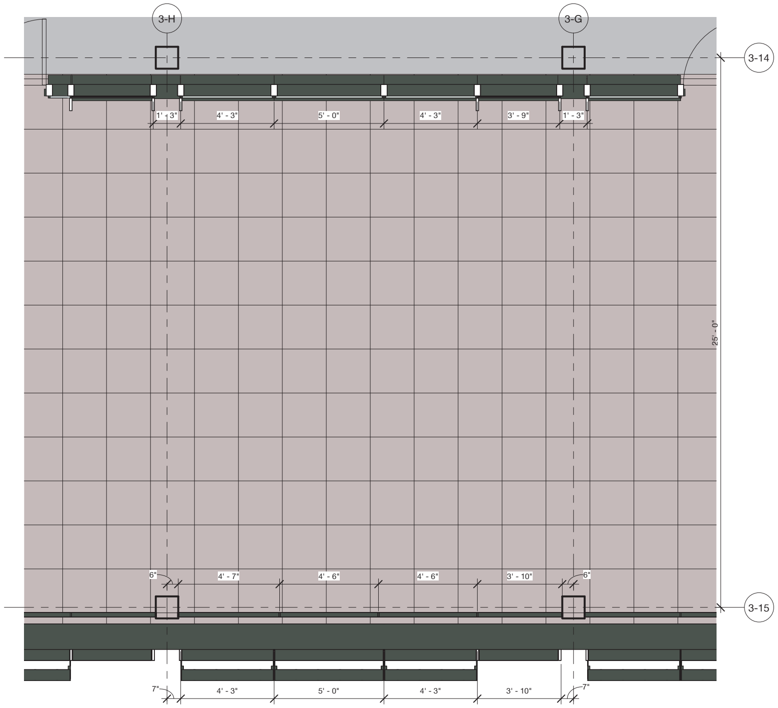
DRAWING TITLE:
Typical Office Enclosure

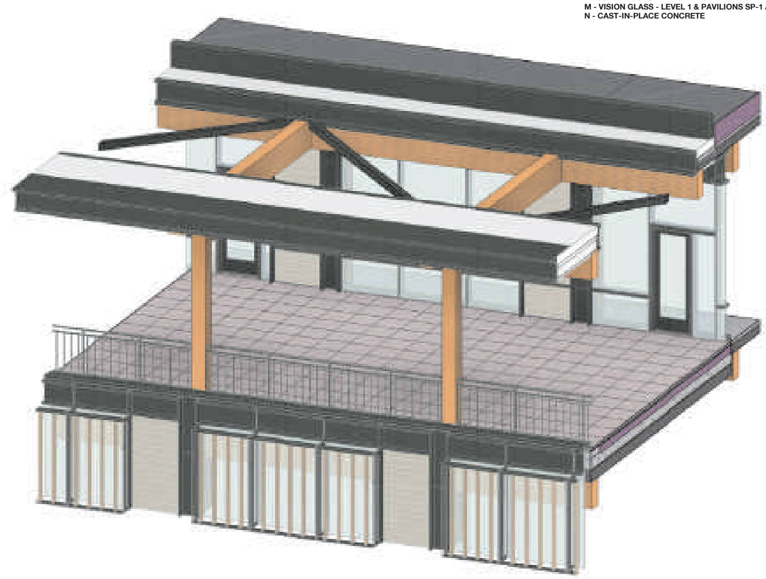
DRAWING NO:
A7.11

O6

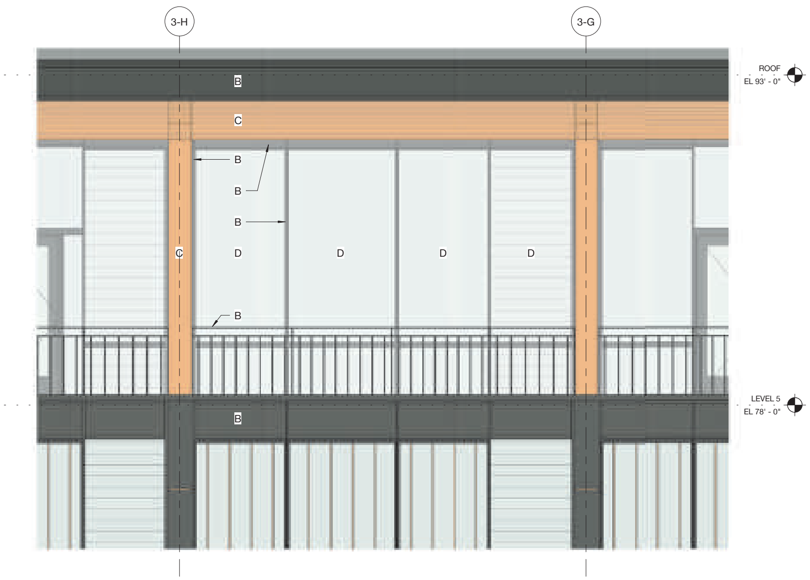


1 Typical Office Enclosure at Terrace - Plan
3/8" = 1'-0"

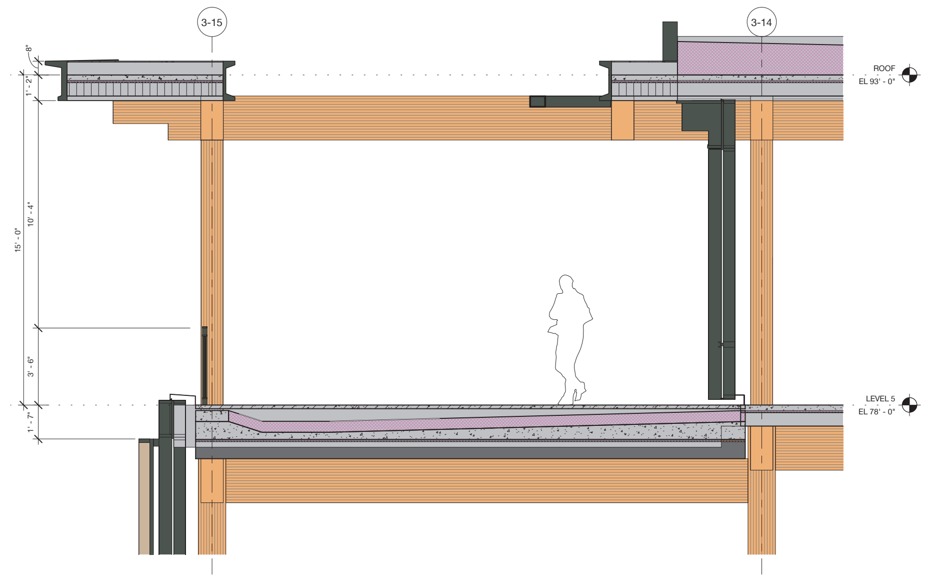
A - PAINTED METAL + METAL PANEL
B - PAINTED METAL + METAL PANEL
C - EXPOSED HEAVY TIMBER STRUCTURE
D - TYPICAL VISION GLASS
E - ARCHITECTURAL LOUVER - PAINTED TO MATCH ADJACENT MATERIAL
F - GLASS CANOPY
G - SIGHT PROOF MECH LOUVER
H - EXPOSED STEEL PAINTED TO MATCH PAINTED METAL PANEL
I - FIBER CEMENT BOARD
J - PAINTED METAL GUARDRAIL
K - PERFORATED METAL PANEL GUARDRAIL
L - SCREEN COLORED TO MATCH MATERIAL "I"
M - VISION GLASS - LEVEL 1 & PAVILIONS SP-1 AND SP-2
N - CAST-IN-PLACE CONCRETE



4 Typical Office Enclosure at Terrace - Axon



2 Typical Office Enclosure at Terrace - Elevation
3/8" = 1'-0"



3 Typical Office Enclosure at Terrace - Section
3/8" = 1'-0"

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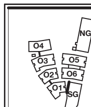

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

SCALE: 3/8" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DRAWING TITLE:
Typical Office Enclosure at Terrace

DRAWING NO:
A7.12

A - PAINTED METAL + METAL PANEL
B - PAINTED METAL + METAL PANEL
C - EXPOSED HEAVY TIMBER STRUCTURE
D - TYPICAL VISION GLASS
E - ARCHITECTURAL LOUVER - PAINTED TO MATCH ADJACENT MATERIAL
F - GLASS CANOPY
G - SIGHT PROOF MECH LOUVER
H - EXPOSED STEEL PAINTED TO MATCH PAINTED METAL PANEL
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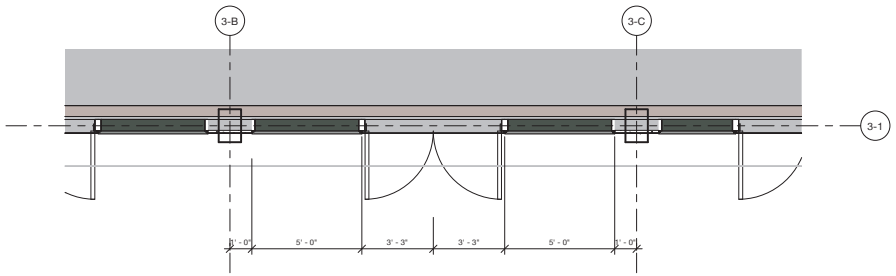
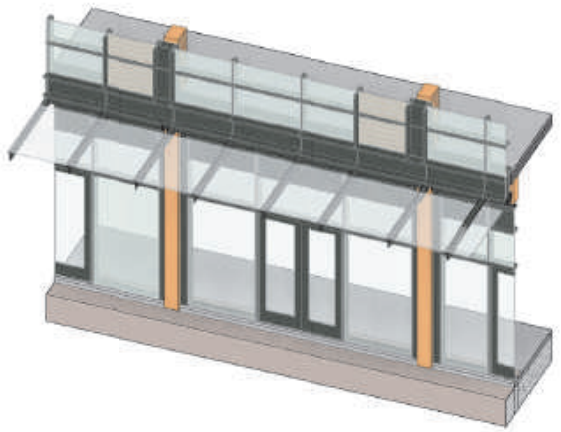
K - PERFORATED METAL PANEL GUARDRAIL
L - SCREEN COLORED TO MATCH MATERIAL "I"
M - VISION GLASS - LEVEL 1 & PAVILIONS SP-1 AND SP-2
N - CAST-IN-PLACE CONCRETE

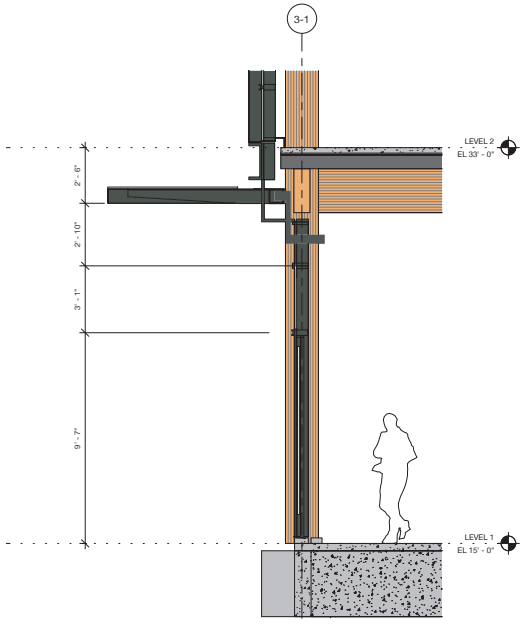


1 Ground Level Enclosure - Plan
3/8" = 1'-0"



4 Ground Level Enclosure - Axon

2 Ground Level Enclosure - Elevation
3/8" = 1'-0"



3 Ground Level Enclosure - Section
3/8" = 1'-0"

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O8

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

SCALE: 3/8" = 1'-0"

NOTE: THIS DRAWING IS SCALED. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DRAWING TITLE:
Ground Level Enclosure at Main Street

DRAWING NO:
A7.13

A - PAINTED METAL + METAL PANEL
B - PAINTED METAL + METAL PANEL
C - EXPOSED HEAVY TIMBER STRUCTURE
D - TYPICAL VISION GLASS
E - ARCHITECTURAL LOUVER - PAINTED TO MATCH ADJACENT MATERIAL
F - GLASS CANOPY
G - SIGHT PROOF MECH LOUVER
H - EXPOSED STEEL PAINTED TO MATCH PAINTED METAL PANEL
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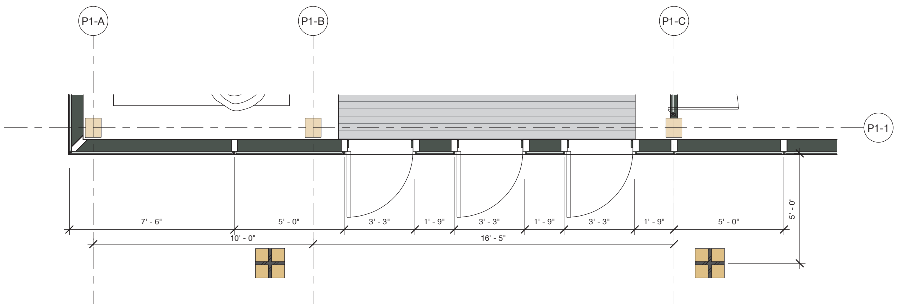
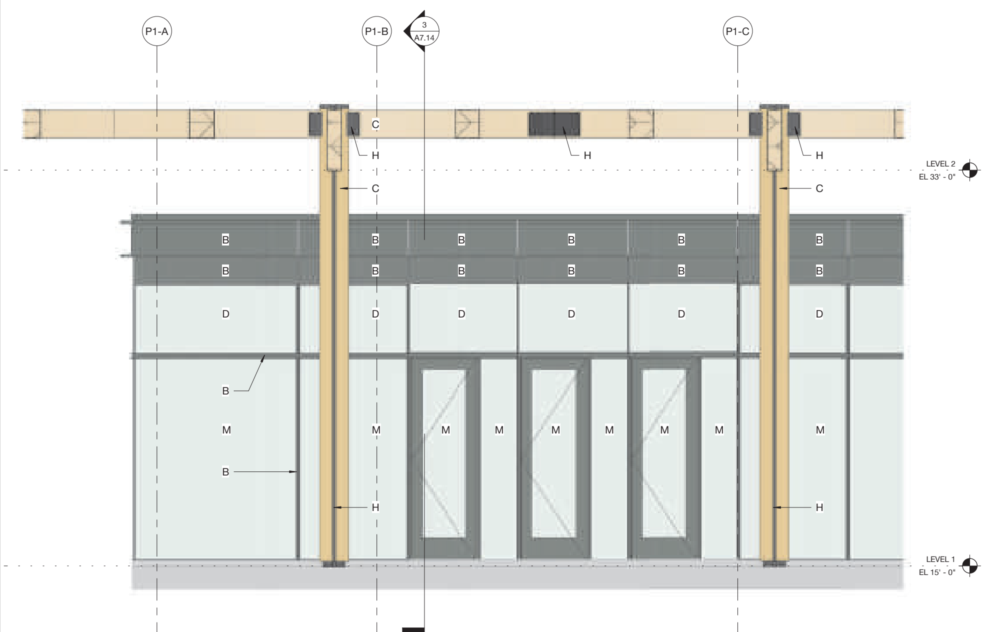
L - SCREEN COLORED TO MATCH MATERIAL "I"
M - VISION GLASS - LEVEL 1 & PAVILIONS SP-1 AND SP-2
N - CAST-IN-PLACE CONCRETE

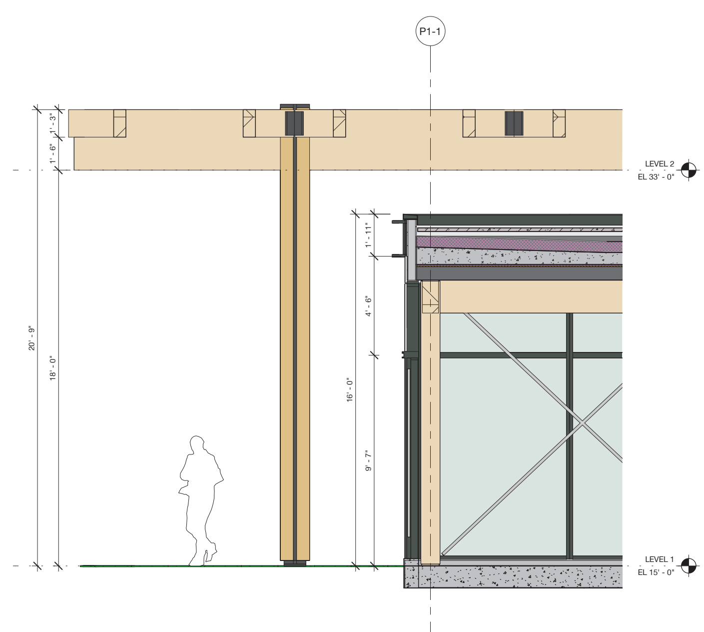


1 Entry Pavilion Enclosure - Plan
3/8" = 1'-0"

4 Entry Pavilion Enclosure - Axon



2 Entry Pavilion Enclosure - Elevation
3/8" = 1'-0"



3 Entry Pavilion Enclosure - Section
3/8" = 1'-0"

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

SCALE: 3/8" = 1'-0"

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DRAWING TITLE:
Entry Pavilion Enclosure

DRAWING NO:
A7.14

A - PAINTED METAL + METAL PANEL
B - PAINTED METAL + METAL PANEL
C - EXPOSED HEAVY TIMBER STRUCTURE
D - TYPICAL VISION GLASS
E - ARCHITECTURAL LOUVER - PAINTED TO MATCH ADJACENT MATERIAL
F - GLASS CANOPY
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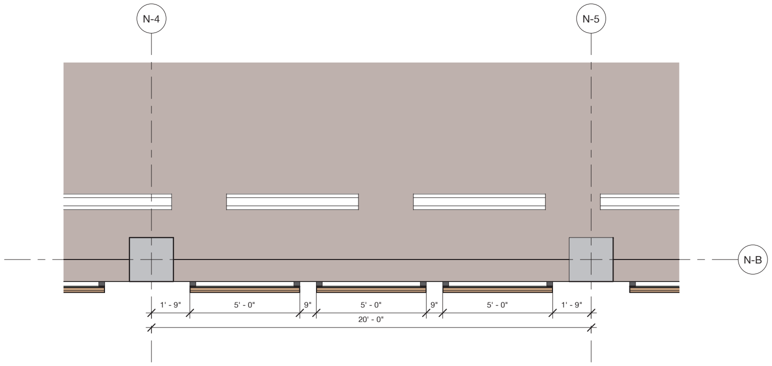
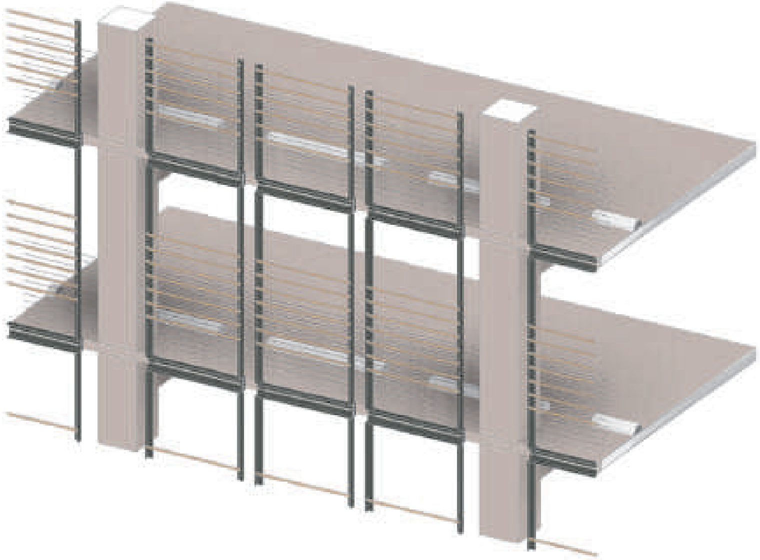
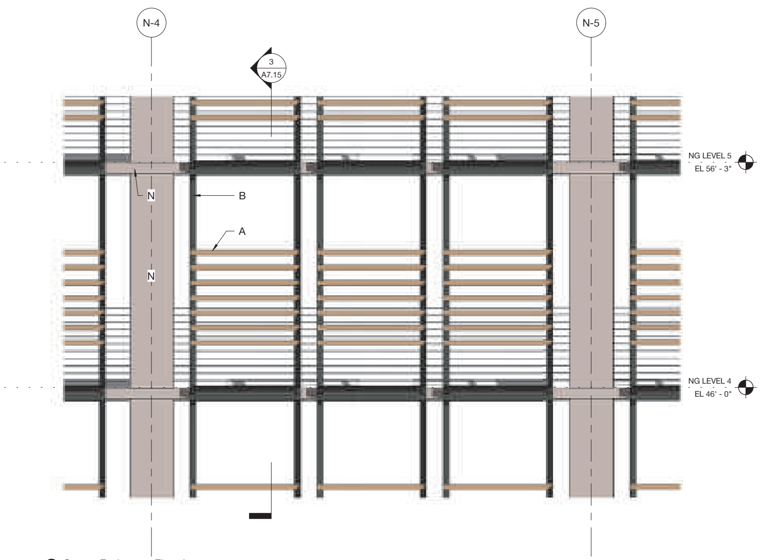
L - SCREEN COLORED TO MATCH MATERIAL "I"
M - VISION GLASS - LEVEL 1 & PAVILIONS SP-1 AND SP-2
N - CAST-IN-PLACE CONCRETE



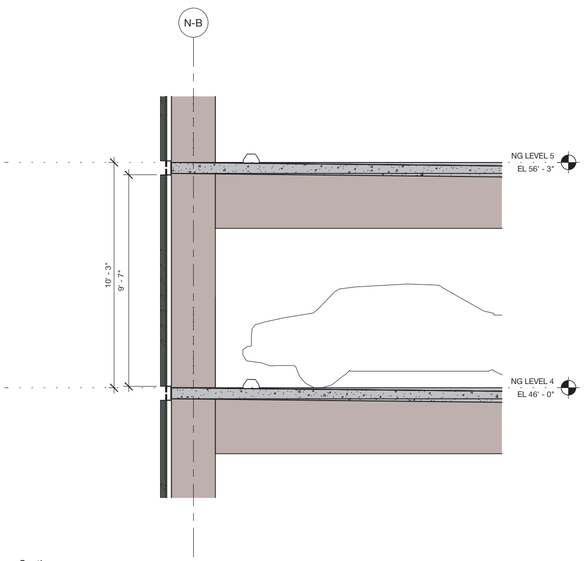
1 Garage Enclosure - Plan
3/8" = 1'-0"



4 Garage Enclosure - Axon



2 Garage Enclosure - Elevation
3/8" = 1'-0"



3 Garage Enclosure - Section
3/8" = 1'-0"

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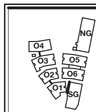

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

SCALE: 3/8" = 1'-0"

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DRAWING TITLE:
Garage Enclosure

DRAWING NO:
A7.15

A - PAINTED METAL + METAL PANEL
B - PAINTED METAL + METAL PANEL
C - EXPOSED HEAVY TIMBER STRUCTURE
D - TYPICAL VISION GLASS
E - ARCHITECTURAL LOUVER - PAINTED TO MATCH ADJACENT MATERIAL
F - GLASS CANOPY
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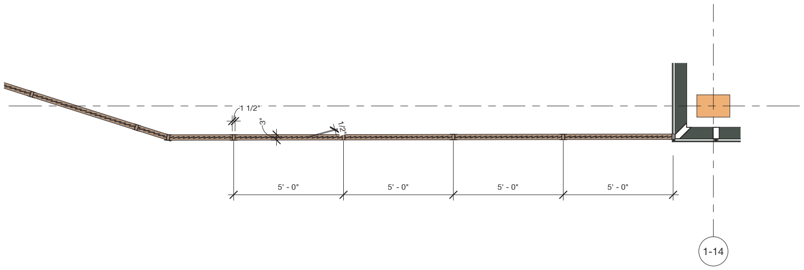
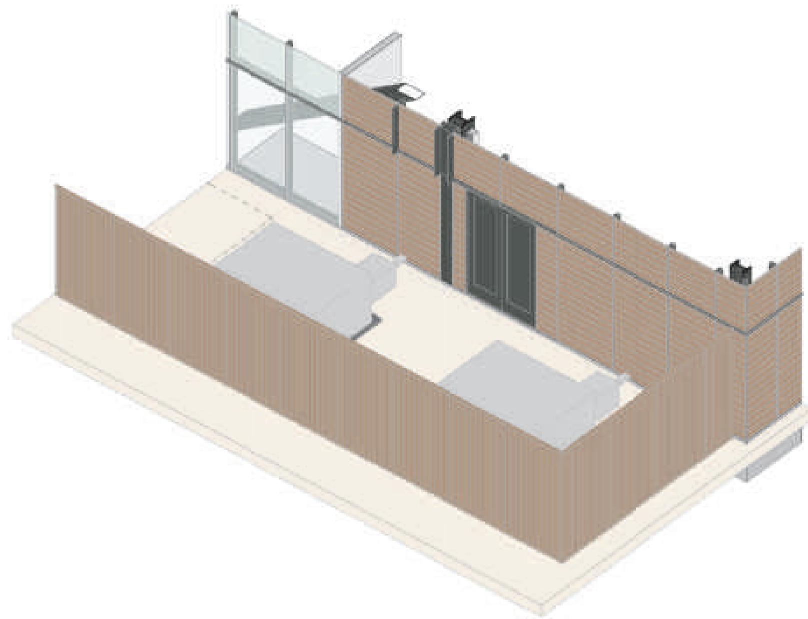
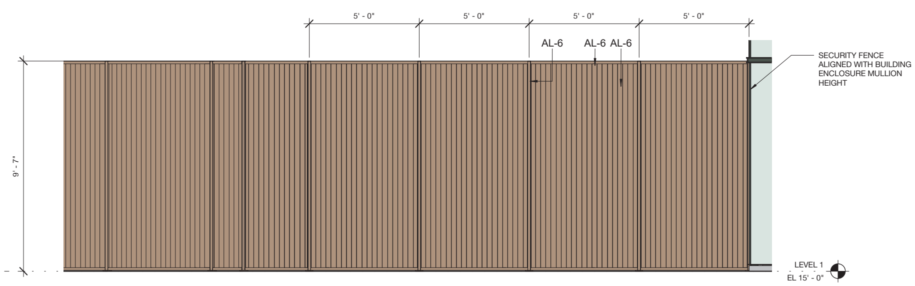
L - SCREEN COLORED TO MATCH MATERIAL "I"
M - VISION GLASS - LEVEL 1 & PAVILIONS SP-1 AND SP-2
N - CAST-IN-PLACE CONCRETE



2 Security Fence - Plan
3/8" = 1'-0"



3 Security Fence - Axon



1 Security Fence - Elevation
3/8" = 1'-0"

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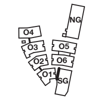


PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 (Portion)
Menlo Park, CA

SCALE: 3/8" = 1'-0"

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
04/11/2022	ACP

REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE: Security Fence

DRAWING NO: A7.16

Parcel 1 Office – Adjustment #1
Minimum Stepback

Adjustment Request
Allow adjustments to Zoning Code Section 16.43.130(2) to:

Allow whole building setbacks and modulation to satisfy code intent.

Code Requirements

16.43.130(2): Building Mass and Scale

Minimum Stepback: The horizontal distance a building's upper story(ies) must be set back above the base height.

Bonus Level Fronting a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street: 10 feet for a minimum of 75% of the building face along public street(s).

A maximum of 25% of the building face along public streets may be excepted from this standard in order to provide architectural variation.

Subject Site Description

Parcel 1 spans from O'Brien Street to North Loop Road, between Main Street and East Loop Road. The Campus District is organized to respond to the pedestrian-focused, mixed-use development along Main Street and vehicular friendly East Loop Road. Two garages are located on East Loop Road to allow efficient traffic diversion away from Main Street. Office buildings are positioned on an east-west axis to optimize solar orientation, placing short facades on the street frontage and publicly accessible courtyards between the buildings. The design features setbacks, stepbacks, and variation in height from 1 to 5 stories.

Two office buildings and the smaller of the two garages are located on the portion of East Loop Road that is proposed to be a public street, between Adams Court and O'Brien Street. All structures are sited beyond the minimum required setback of 5'-0"and adhere to the maximum required setback of 25'-0" for the required street frontage.

The office buildings are modulated to reduce bulk and create variation along the frontage through stepbacks above the base height of 55' and whole building setbacks. All office buildings feature façade modulation through a full building setback for approximately 30% of the public facing facade, and stepbacks at multiple levels for approximately 30%.

The garages are designed to maximize efficiency of the parking and structural layouts in order to keep the height and scale of the structures low. The south garage steps back above the base height of 55' at the southwest corner facing the O'Brien intersection. The structure is not proposed to stepback above the base height of 55' along the east façade facing East Loop Road due to the significant impact a stepback would have on the efficiency and function of the garage. The south garage has been designed with a façade expression that creates a base, middle, and top composition to break down the scale of the structure, and façade modulation to reduce visual monotony. The modulated projections are treated with a green screen of climbing vines that will create a varied roofline along the garage and enhance the lush and climate appropriate landscape that has been proposed along East Loop Road.

Modifications:

Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments:

Illustrative Adjustment Exhibit A-F: Base Height and Stepback Sections / Elevations

Parcel 1 Office – Adjustment #2

Base Height

Adjustment Request

Allow adjustments to Zoning Code Section 16.43.130(2) to:

Allow office buildings to have a consistent roofline as long as height modulation is provided through stepping of the masses through terraces.

Code Requirements

16.43.130(2) Base Height.

The maximum height of a building at the minimum setback at street or before the building steps back the minimum horizontal distance required. Properties within the flood zone or subject to flooding and sea level rise are allowed a 10' increase.

Base Height = 55’

Subject Site Description

Parcel 1 spans from O’Brien Street to North Loop Road, between Main Street and East Loop Road. The Campus District is organized to respond to the pedestrian-focused, mixed-use development along Main Street and vehicular friendly East Loop Road. Two garages are located on East Loop Road to allow efficient traffic diversion away from Main Street. Office buildings are positioned on an east-west axis to optimize solar orientation, placing short facades on the street frontage and publicly accessible courtyards between the buildings. The design features setbacks, stepbacks, and variation in height from 1 to 5 stories.

Office buildings O2, O3, O5, O6, South Garage and North Garage do not comply with the 55’ base height measured from natural grade. Office buildings O1 and O4 comply. All buildings on the office campus are sited beyond the minimum setback to create a more generous open space which will enhance the active use along the street edge. The office buildings are modulated to reduce bulk and create variation along the frontage. Each office building features façade modulation through a full building setback for approximately 30% of the public facing facade, and stepbacks at multiple levels for approximately 30%. The garages feature façade modulation along East Loop Road at a minimum of 1 per 200 feet or less as prescribed by code.

Stepping back at 55’ for both office buildings and the garages would create a considerable inefficiency of the interior programs resulting in longer and taller buildings

Modifications:

Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments:

Illustrative Adjustment Exhibits A-F: Base Height and Stepback Sections / Elevation

Parcel 1 Office – Adjustment #3

Roofline

Adjustment Request

Allow adjustments to Zoning Code Section 16.43.130(6)(G) to:

Allow office buildings to have a consistent roofline as long as height modulation is provided through stepping of the masses through terraces.

Code Requirements

16.43.130(6) Building Design.

(G) Rooflines and eaves adjacent to street-facing facades shall vary across a building, including a four (4) foot minimum height modulation to break visual monotony and create a visually interesting skyline as seen from public streets (see Figure 6). The variation of the roofline's horizontal distance should match the required modulations and step backs.

Subject Site Description

Parcel 1 spans from O'Brien Street to North Loop Road, between Main Street and East Loop Road. The Campus District is organized to respond to the pedestrian-focused, mixed-use development along Main Street and vehicular friendly East Loop Road. Two garages are located on East Loop Road to allow efficient traffic diversion away from Main Street. Office buildings are positioned on an east-west axis to optimize solar orientation, placing short facades on the street frontage and publicly accessible courtyards between the buildings. The design features setbacks, stepbacks, and variation in height from 1 to 5 stories.

Office buildings O2, O3, O4, O5, and O6 have a consistent rooftop canopy that does not vary in height. Office building O1 follows a similar aesthetic and is one story shorter. The consistent roofline is designed to provide passive shading that is essential in reducing solar heat gain and energy usage for each building. It is the most effective way to reduce energy consumption related to thermal comfort. In addition to mitigating solar heat gain, the canopies are designed to assist with the bird friendly design standards by creating overhangs on all facades.

The roofs of the office buildings are designed to celebrate the timber construction typology and contribute to biophilic design that can be seen from the street through exposed heavy timber columns and wood soffits.

Variation is provided along the street frontage by stepping the buildings from a single-story pavilion to terraces at various levels from 2 to 5 stories which carve away mass of the office buildings.

The north garage and south garage comply through the design of a rooftop solar array and façade modulation. Both structures are designed to feature PV arrays at the top of the structures that will create a scalloped canopy (informed by the optimal solar angle for the site) at the rooftop and reinforce the idea of a distinct base, middle, and top. Façade modulation on the south and west facades also creates a varied expression and reduces visual monotony along Main Street and East Loop Road.

Modifications:

Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments:

Illustrative Adjustment Exhibit G: Roofline Modulation

Parcel 1 Office – Adjustment #4
Aboveground Garages

Adjustment Request
Allow adjustments to Zoning Code Section 16.43.130(7) to:

Allow above ground garage on Main Street with enhanced façade treatment.

Code Requirements
16.43.130(7) Aboveground Garages.

Aboveground garages shall be screened or located behind buildings that are along public streets.

Subject Site Description
Parcel 1 spans from O'Brien Street to North Loop Road, between Main Street and East Loop Road. The Campus District is organized to respond to the pedestrian-focused, mixed-use development along Main Street and vehicular friendly East Loop Road. Two garages are located on East Loop Road to allow efficient traffic diversion away from Main Street. Office buildings are positioned on an east-west axis to optimize solar orientation, placing short facades on the street frontage and publicly accessible courtyards between the buildings. The design features setbacks, stepbacks, and variation in height from 1 to 5 stories.

The South Garage is sited at the south side of the campus for efficient traffic flow along East Loop Road and to allow Office Buildings O5 and O6 to front East Loop Road and create visual breaks along the street edge. The mass of the South Garage has been designed to stepback 15' for approximately 50% of the façade at the southeast corner of Main Street facing the adjacent neighborhood. The stepback reduces to 10' as it wraps the corner on East Loop Road.

The facades of the garages are designed to be broken into a base, middle, and top composition to reduce bulk and create visual interest. Parking levels below 67' are screened with an architectural louvered panel and broken up with a full building facade modulation which incorporates a green screen. Façade articulation is created through changes in material and the introduction of a projection over level 1 that reduces the scale of the garage along the pathway at Main Street.

The base or ground floor along Main Street features façade transparency for 50% of the street frontage and wraps the southeast corner facing the O'Brien intersection. Trees and plantings line the mixed-use pathway on Main Street to soften the pedestrian experience and create a lush, climate appropriate landscape.

Modifications:
Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments:
Illustrative Adjustment Exhibits H & I: Above Ground Garages

Parcel 1 Office – Adjustment #5
Building Entrances

Adjustment Request
Allow adjustments to Zoning Code Section 16.43.130(3) to:

Allow office buildings along East Loop Road and South Garage to not include building entrances on the public street frontage.

Code Requirements
16.43.130(3) Building Entrances.

Minimum ratio of entrances to building length along a public street or paseo. One entrance per public street frontage. Entrances at building corner satisfy requirement for both frontages. Stairs must be conveniently located.

Subject Site Description
Parcel 1 spans from O'Brien Street to North Loop Road, between Main Street and East Loop Road. The Campus District is organized to respond to the pedestrian-focused, mixed-use development along Main Street and vehicular friendly East Loop Road. Two garages are located on East Loop Road to allow efficient traffic diversion away from Main Street. Office buildings are positioned on an east-west axis to optimize solar orientation, placing short facades on the street frontage and publicly accessible courtyards between the buildings. The design features setbacks, stepbacks, and variation in height from 1 to 5 stories.

Office buildings O5 and O6 feature façade transparency and landscaping along East Loop Road. No building entries are provided on East Loop Road as all pedestrian entries into the campus are located along Main Street or through the garages.

The South Garage features ground floor transparency at the southeast corner of Main Street. Façade articulation is created through the change in material and the introduction of a projection over level 1 to reduce the scale of the garage along the pathway. No building entry is provided due to the mechanical program beyond.

Modifications:
Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments:
Illustrative Adjustment Exhibits J & K: Building Entrance

Parcel 1 Office – Adjustment #6
Building Modulations

Adjustment Request
Allow adjustments to Zoning Code Section 16.43.130(2) to:

Allow garages along East Loop Road not include a 15-foot x 10-foot deep inset.

Code Requirements

16.43.130(2) Building Modulation.

A building modulation is a break in the building plane from the ground level to the top of the building's base height that provides visual variety, reduces large building volumes and provides spaces for entryways and publicly accessible spaces.

One every 200 feet, with a minimum of one per façade. Modulation is required on the building facade(s) facing publicly accessible spaces (streets, open space, and paseos). Parking is not allowed in the modulation recess.

Subject Site Description

Parcel 1 spans from O'Brien Street to North Loop Road, between Main Street and East Loop Road. The Campus District is organized to respond to the pedestrian-focused, mixed-use development along Main Street and vehicular friendly East Loop Road. Two garages are located on East Loop Road to allow efficient traffic diversion away from Main Street. Office buildings are positioned on an east-west axis to optimize solar orientation, placing short facades on the street frontage and publicly accessible courtyards between the buildings. The design features setbacks, stepbacks, and variation in height from 1 to 5 stories.

The South Garage and North Garage feature three façade articulations on East Loop Road that range in width from approximately 37 feet to 62 feet in length. Articulations are nominally 2 feet deep and span from the ground level to the topmost level of both garages. An additional articulation is located on the south side of the South Garage on Main Street. Each articulation features a cable system that will support climbing vegetation from levels 2-6 on the North Garage and levels 2-5 on the South Garage.

While section 16.43.130(2) does not specify a width and depth for the required offset or recesses, the city comments have noted that a 15-foot by 10-foot recess or offset would be required every 200 feet, and an adjustment should be requested.

The garages are designed to maximize the efficiency of the parking and structural layouts to keep the height and scale of the structures low. The structure is not proposed to incorporate recesses of the size requested due to the significant impact a recess would have on the efficiency and function of the garage. Similarly, an offset is not incorporated due to the limitation of the required setbacks on East Loop Road and Main Street.

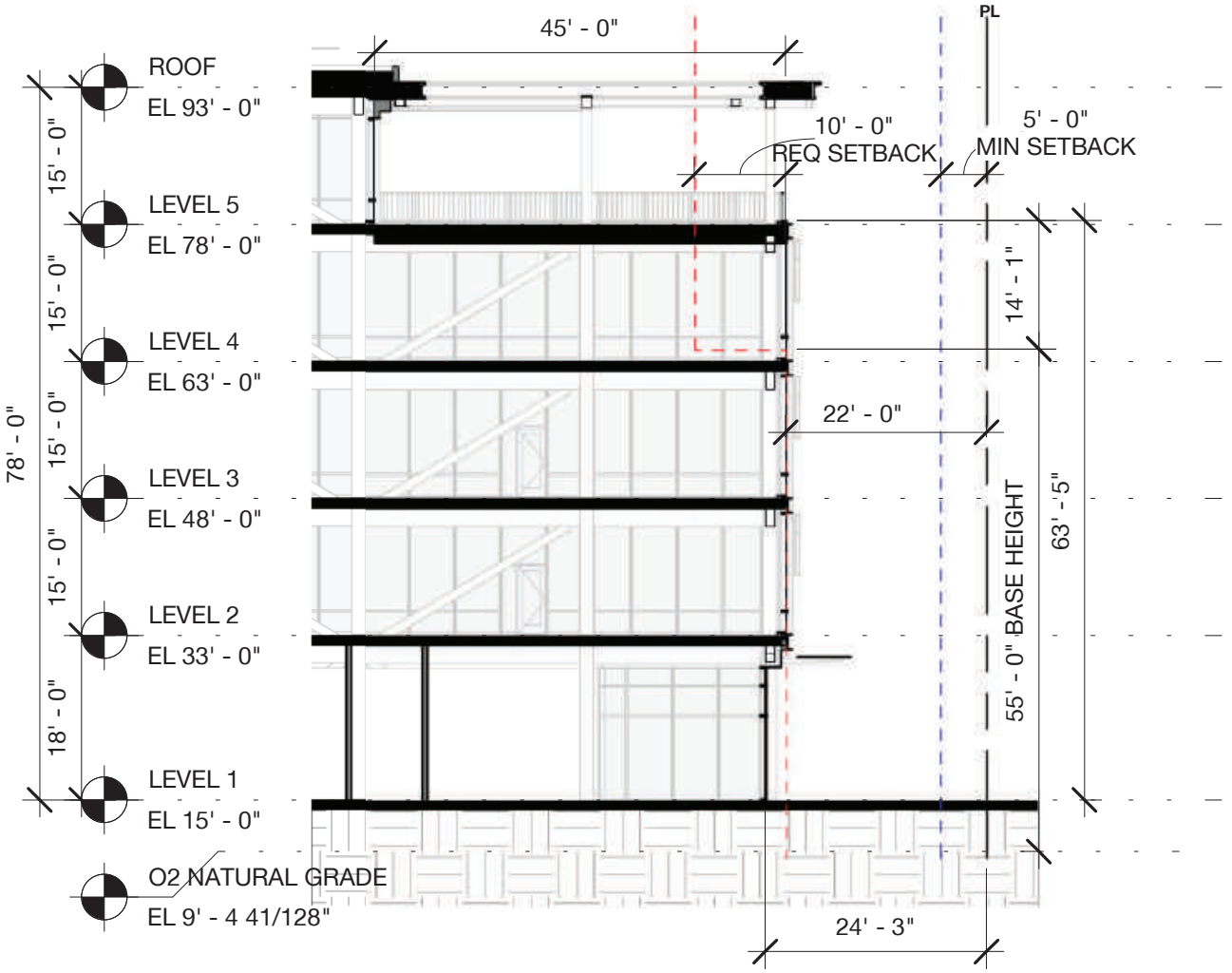
Modifications:

Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments:

Illustrative Adjustment Exhibit L: Building Modulations

Illustrative Adjustment Exhibit A:
Base Height and Stepback Sections / Elevations

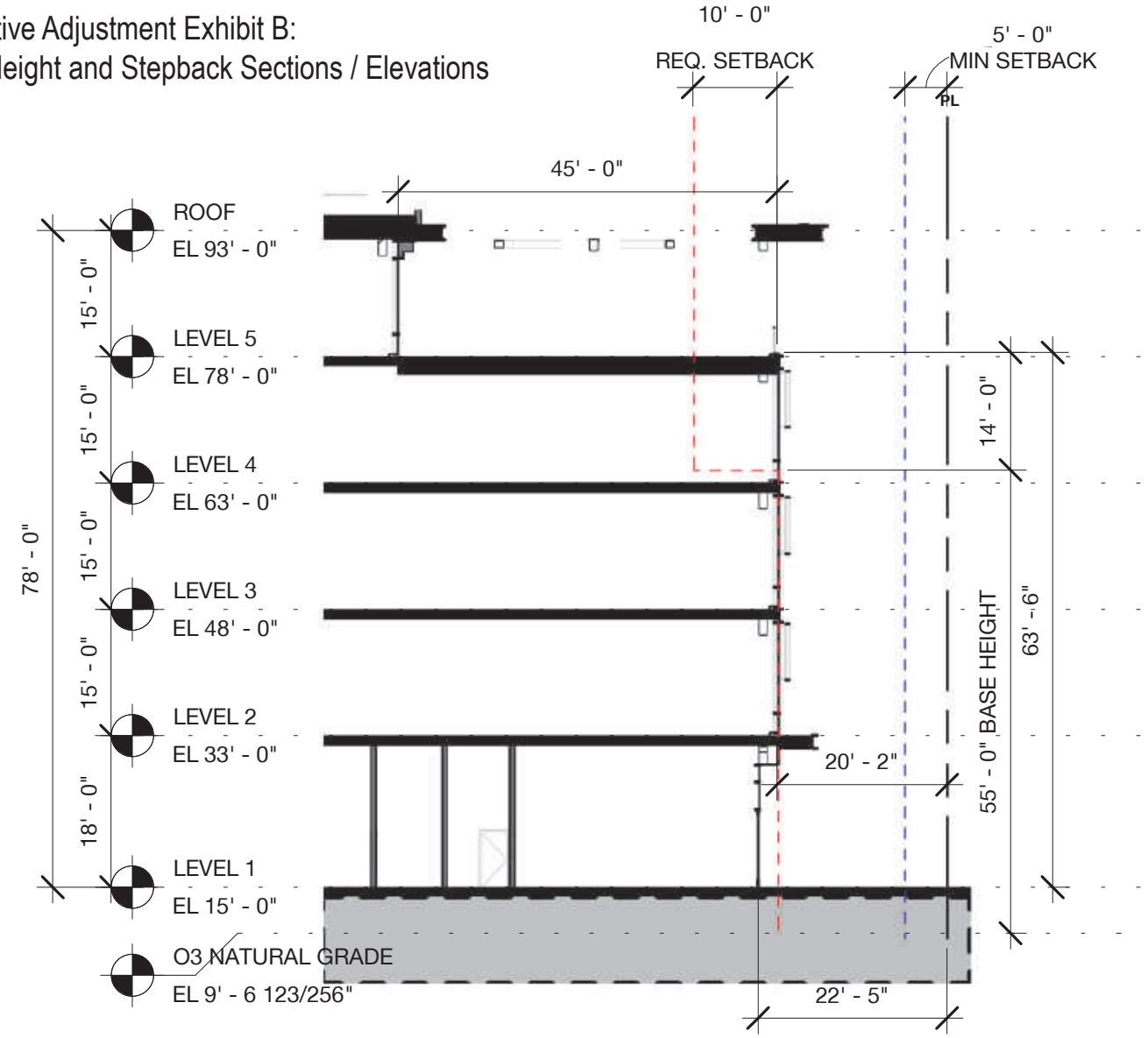


1 Building 2- Section
1" = 20'-0"

2 Building 2- Elevation- Main Street
1" = 40'-0"

FACADE SETBACK

Illustrative Adjustment Exhibit B:
Base Height and Stepback Sections / Elevations

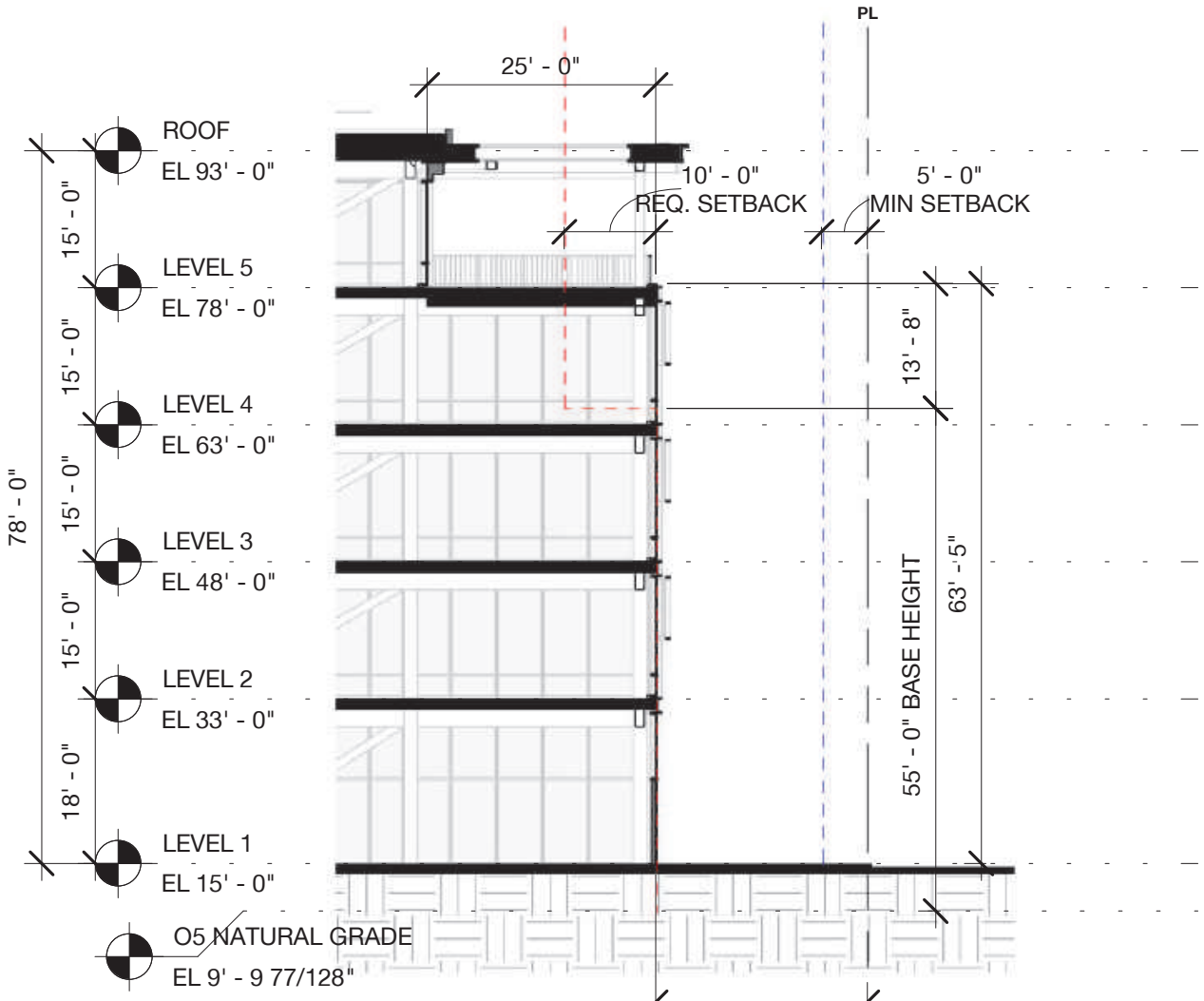


2 Building 3- Section
1" = 20'-0"

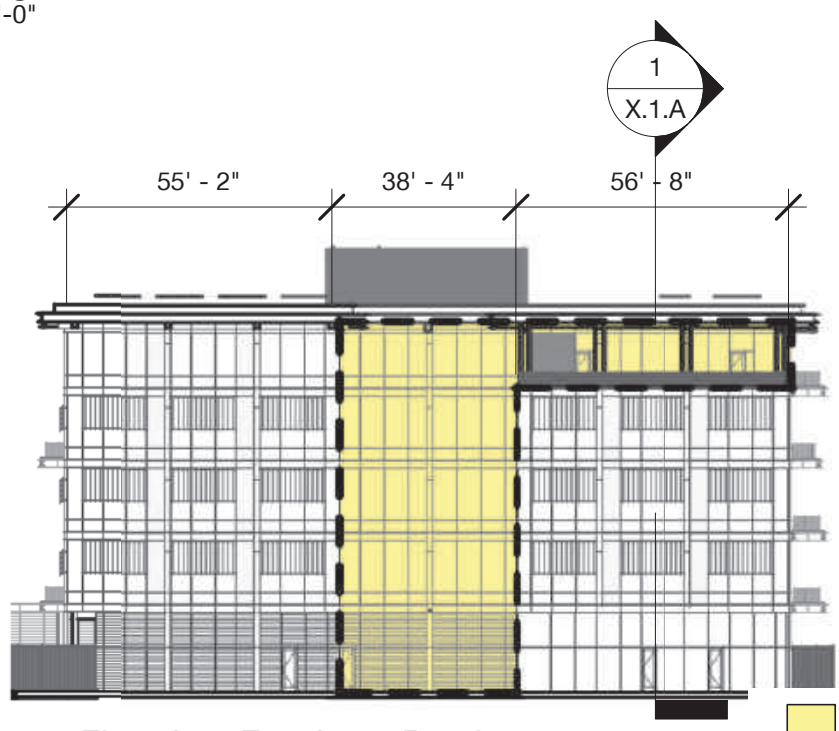
1 Building 3- Elevation- Main Street
1" = 40'-0"

FACADE SETBACK

Illustrative Adjustment Exhibit C:
Base Height and Stepback Sections / Elevations



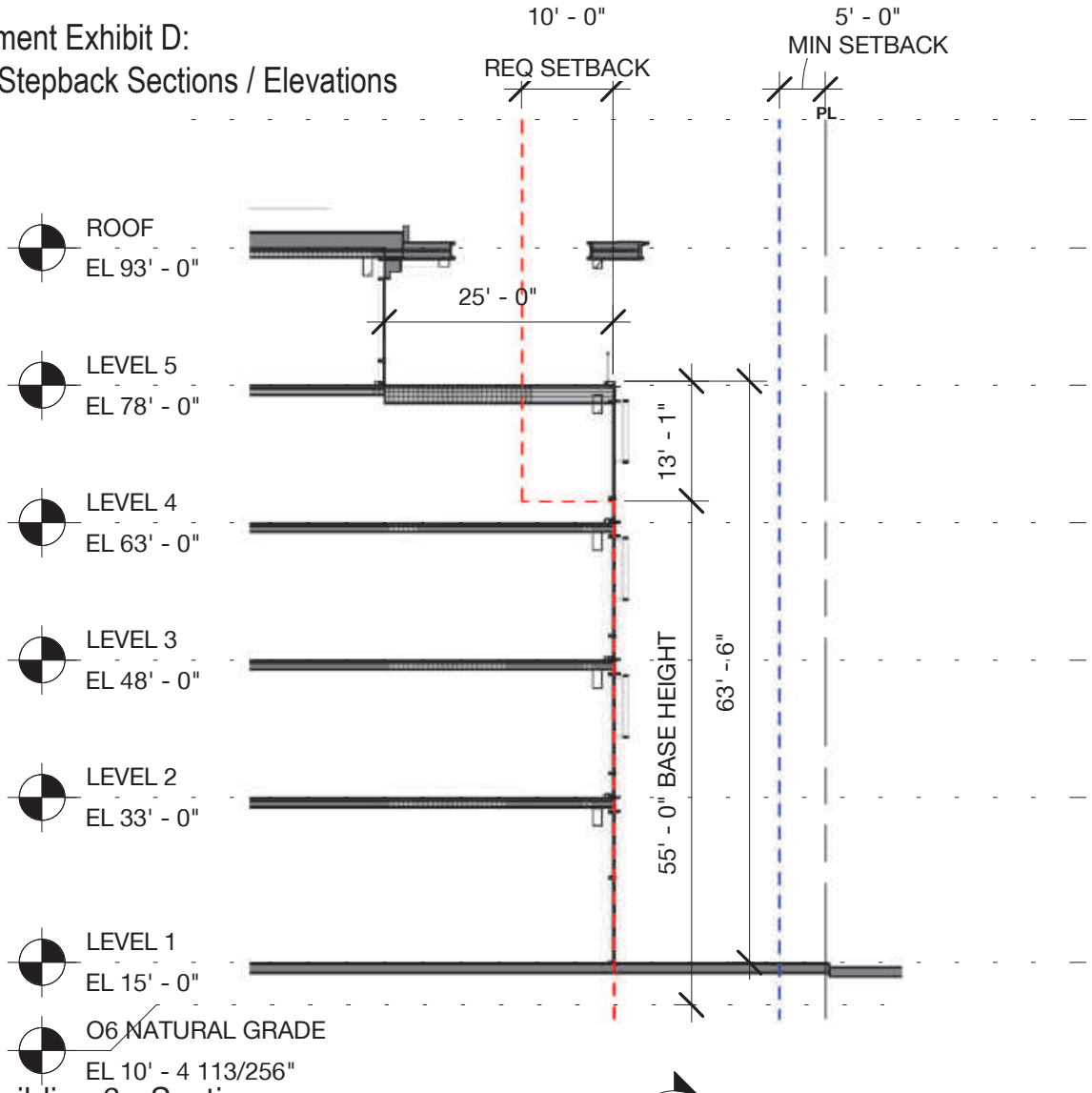
1 Building 5- Section
1" = 20'-0"



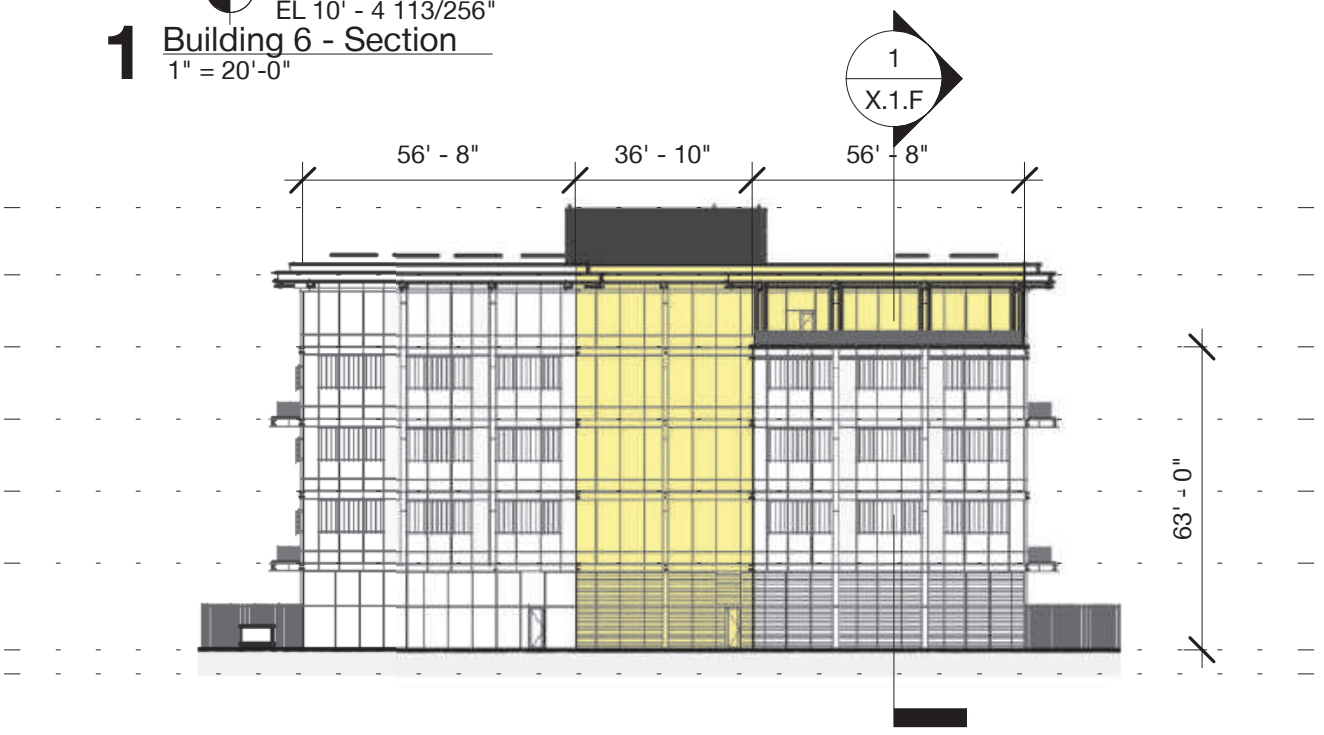
2 Building 5- Elevation- East Loop Road
1" = 40'-0"

FACADE SETBACK

Illustrative Adjustment Exhibit D:
Base Height and Stepback Sections / Elevations



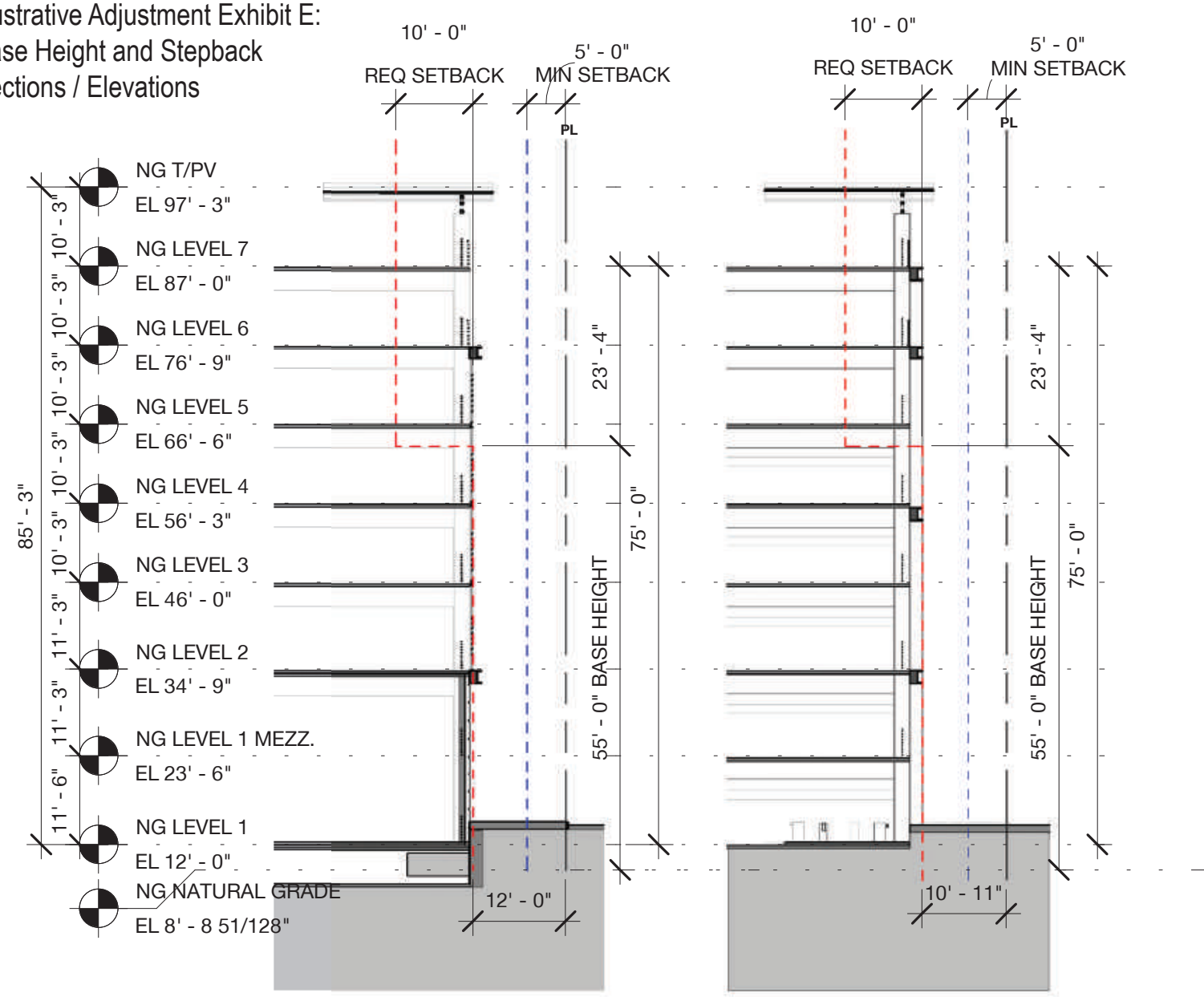
1 Building 6 - Section
1" = 20'-0"



2 Building 6 - East Elevation - Section 3 - East Loop Road
1" = 40'-0"

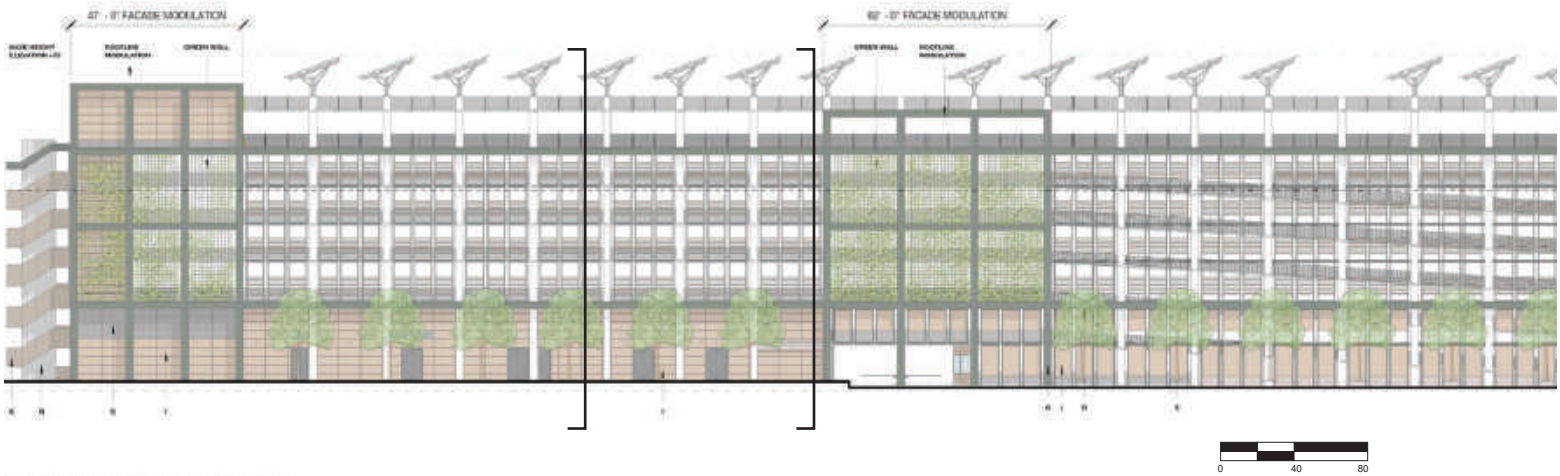
FACADE SETBACK

Illustrative Adjustment Exhibit E:
Base Height and Stepback
Sections / Elevations



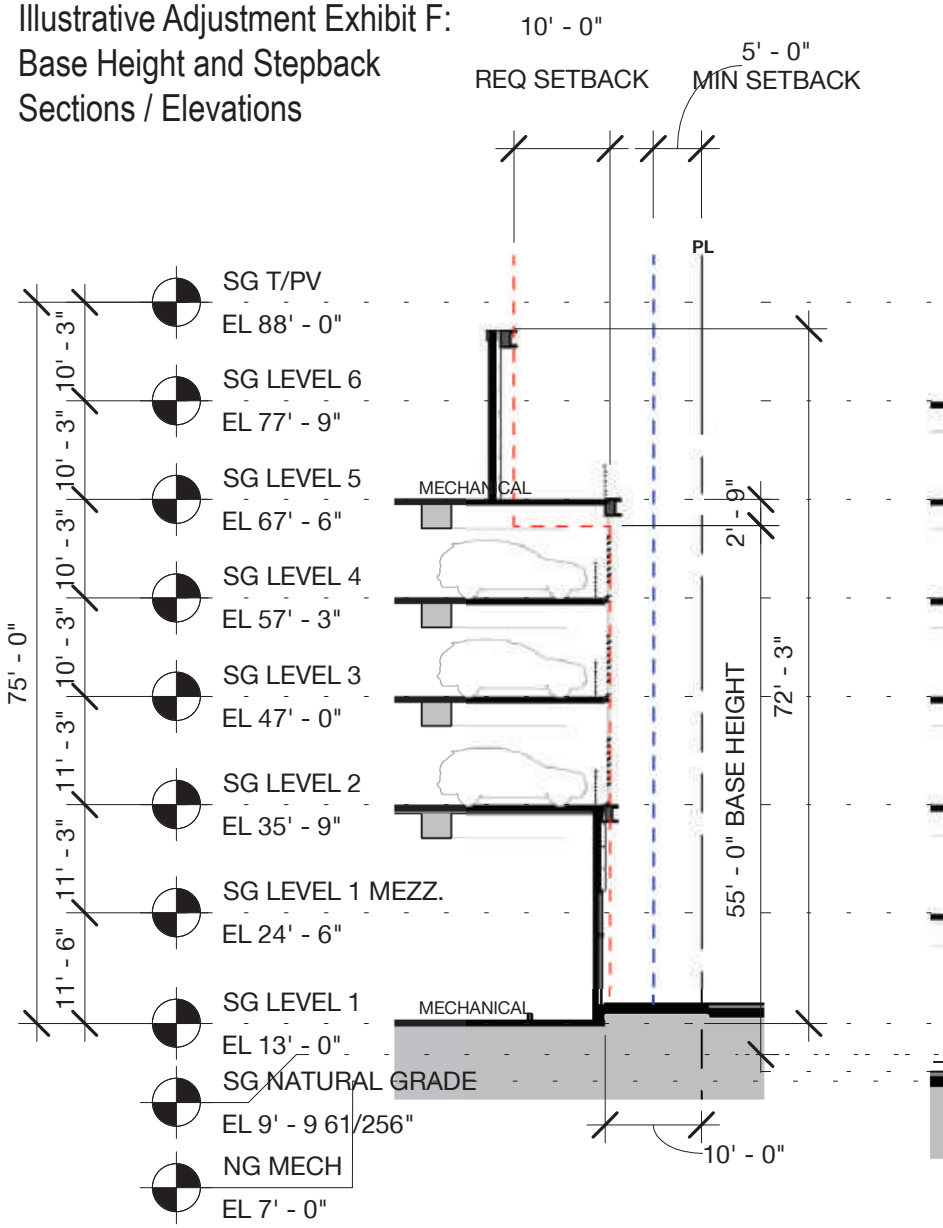
1 North Garage- Section 1
1" = 20'-0"

2 North Garage- Section 2
1" = 20'-0"



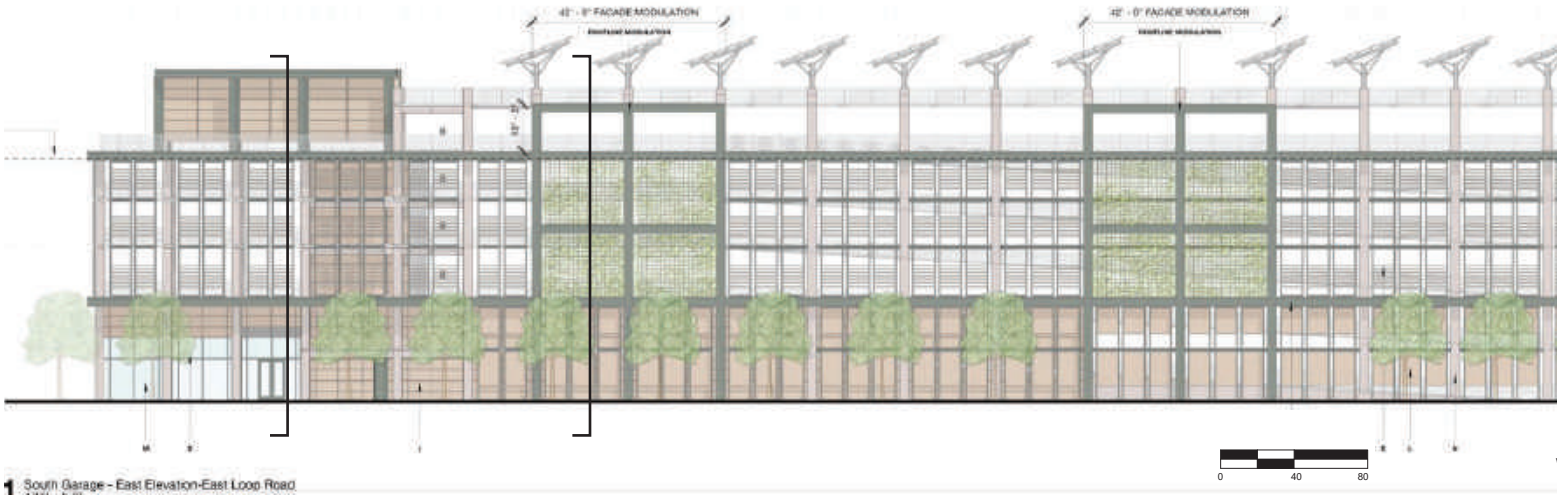
North Garage - East Elevation-East Loop Road
1" = 20'-0"

Illustrative Adjustment Exhibit F: Base Height and Stepback Sections / Elevations



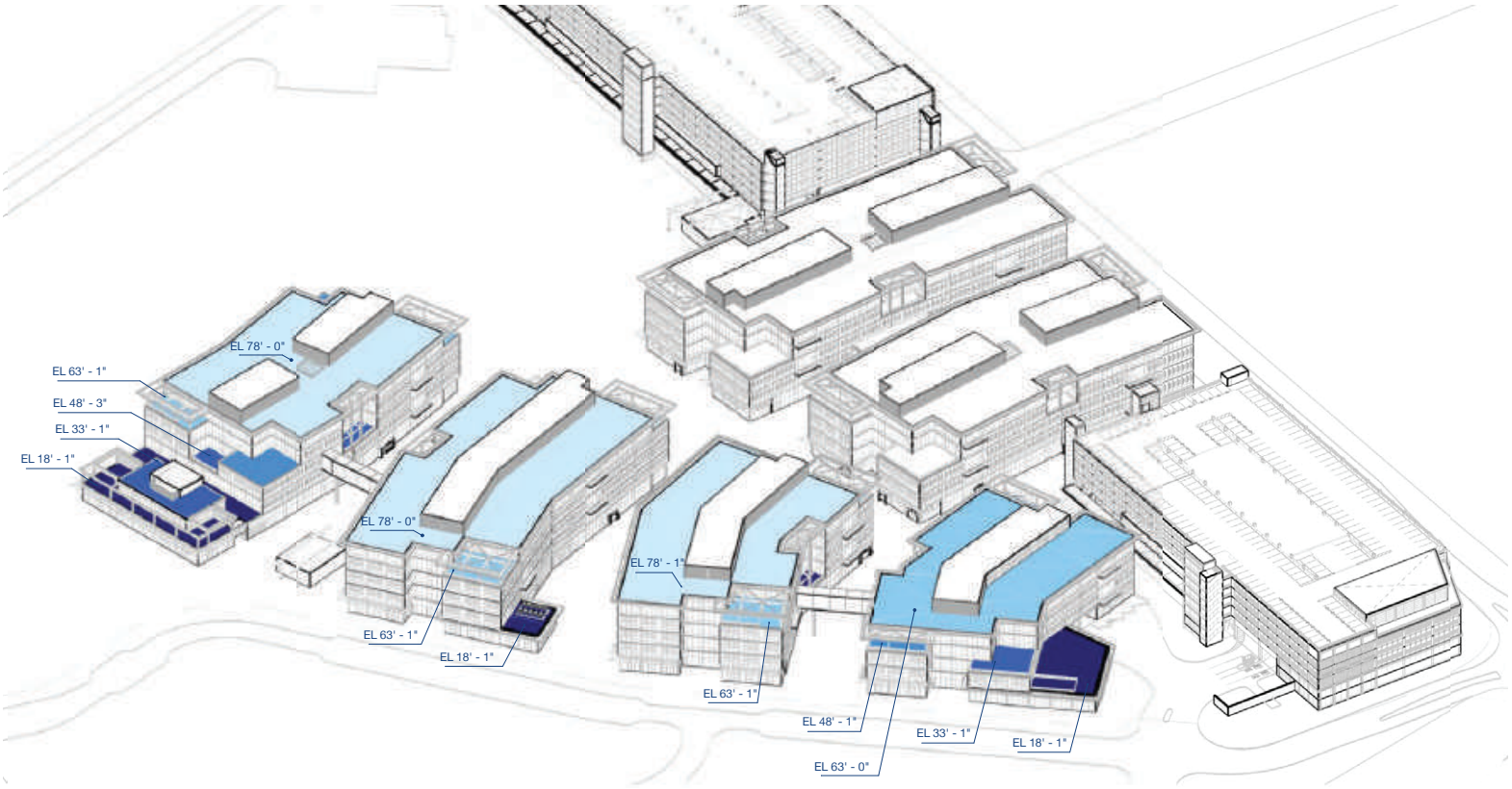
1 South Garage Section
1" = 20'-0"

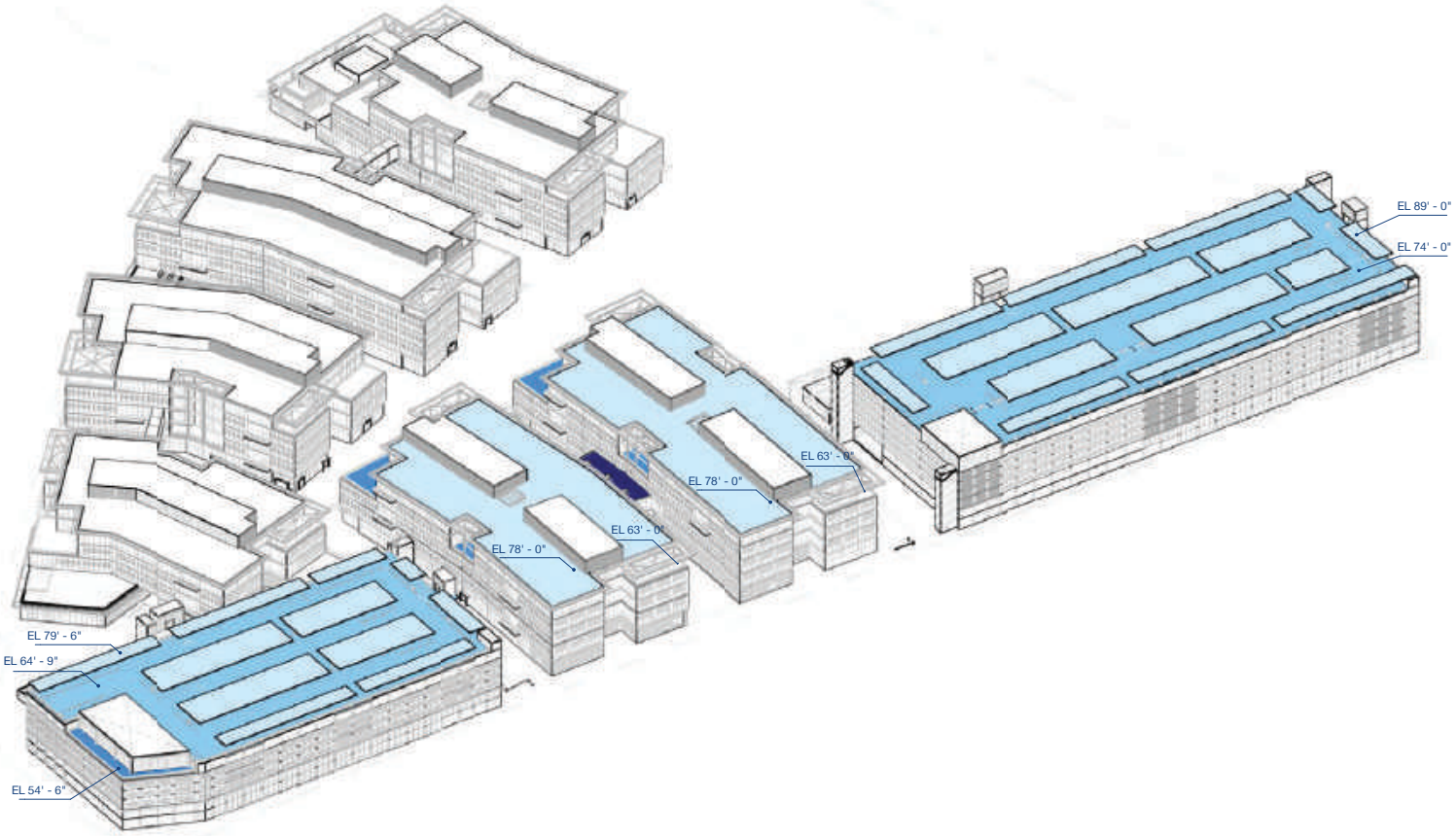
2 South Garage Section
1" = 20'-0"



1 South Garage - East Elevation-East Loop Road

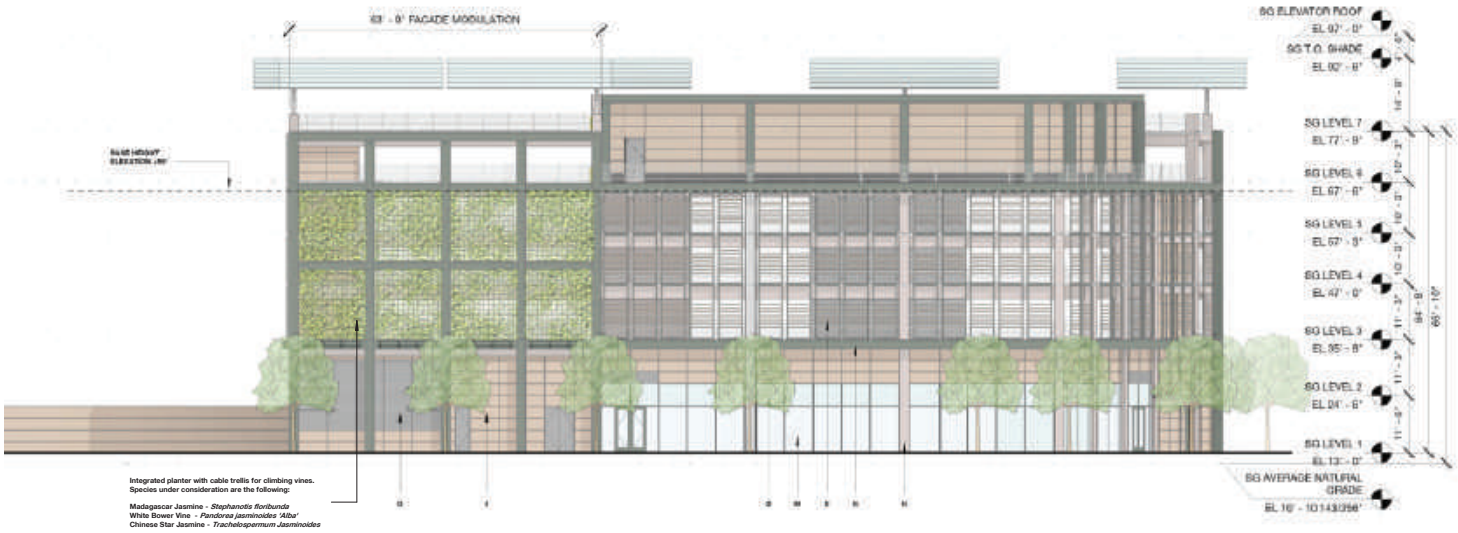
Illustrative Adjustment Exhibit G: Roofline Modulation



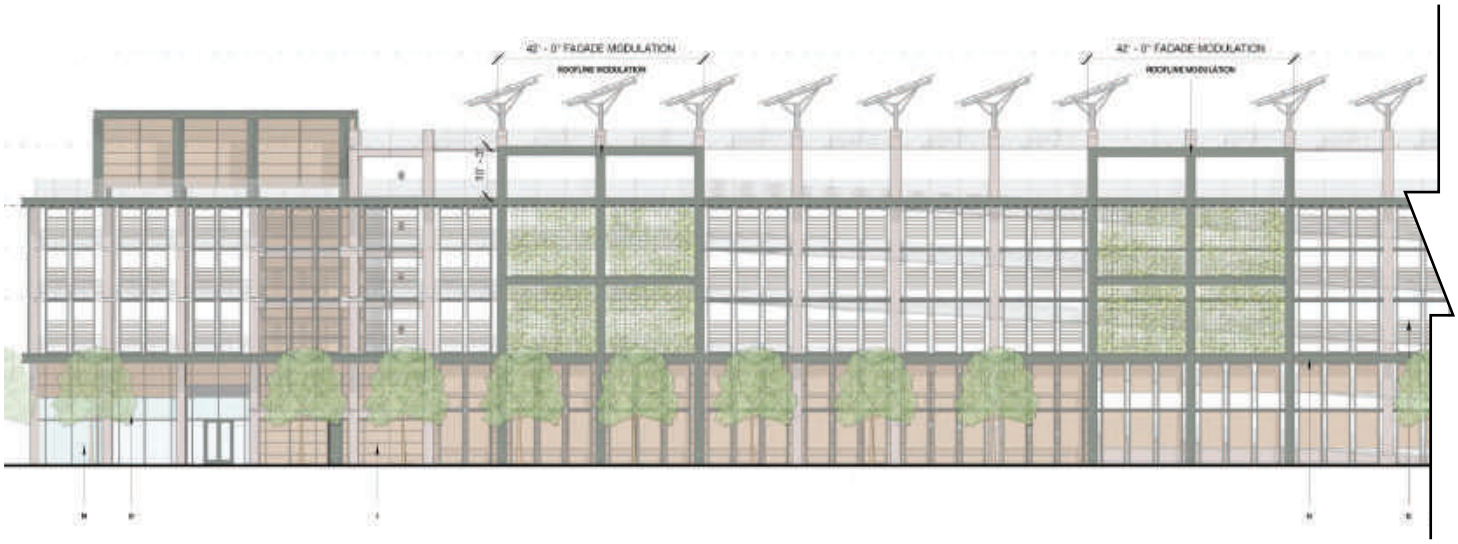


Illustrative Adjustment Exhibit H: Above Ground Garages

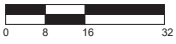
Illustrative Adjustment Exhibit I: Above Ground Garages

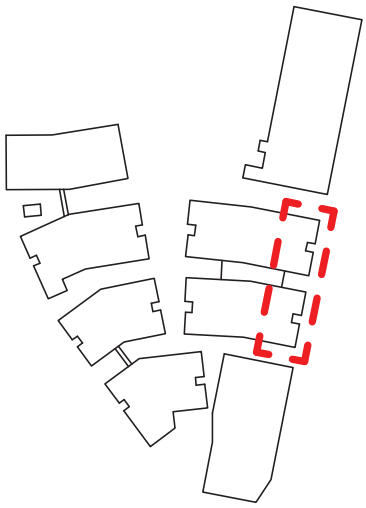


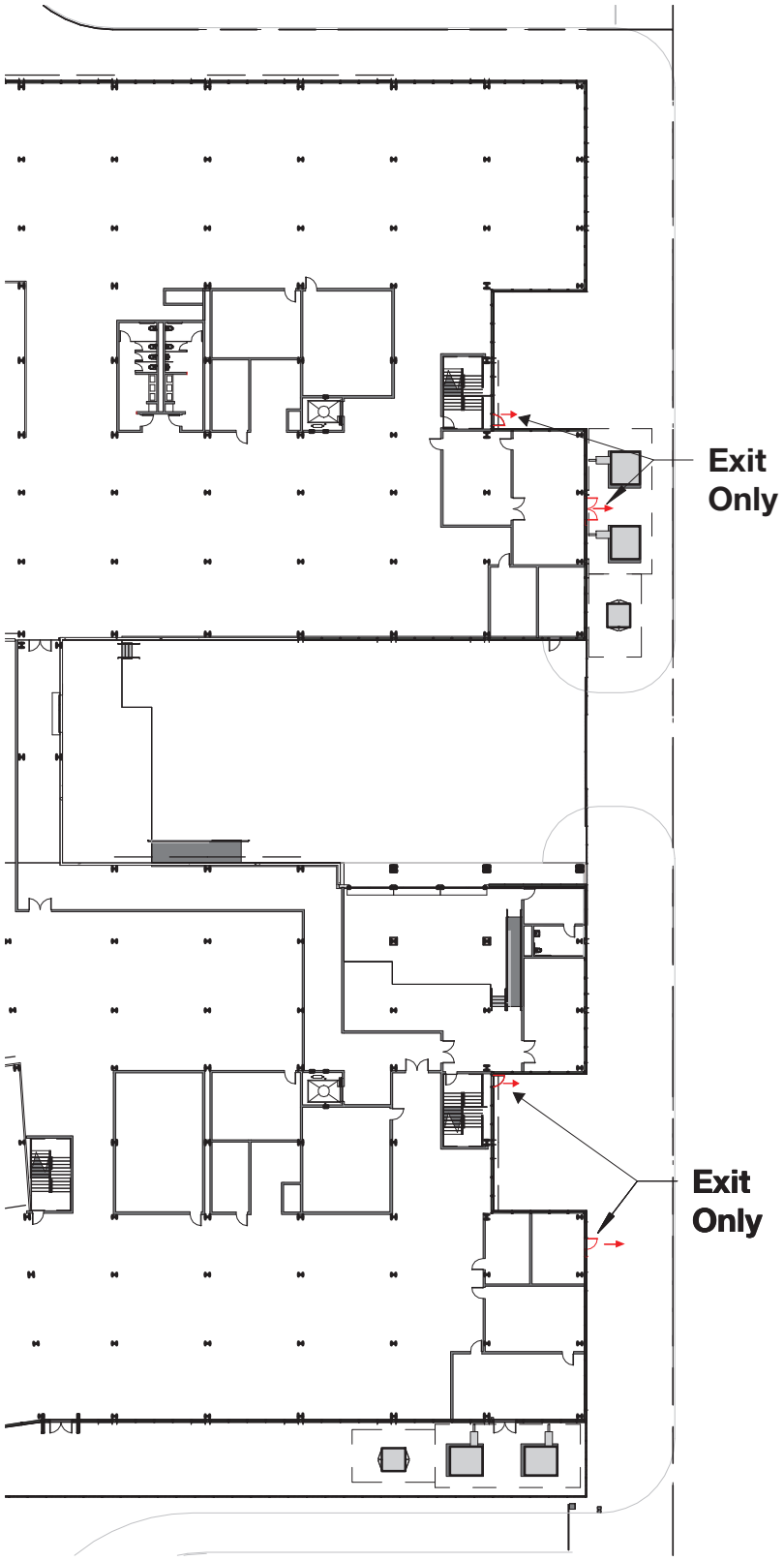
1 South Elevation - Main Street



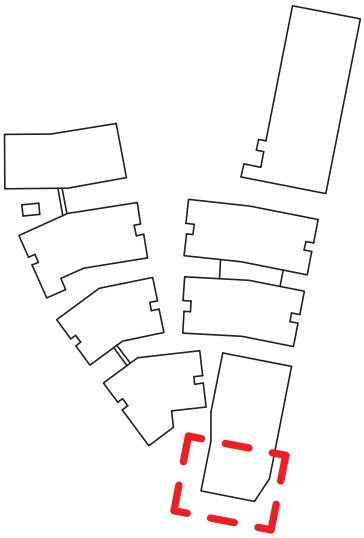
2 East Elevation - East Loop Road

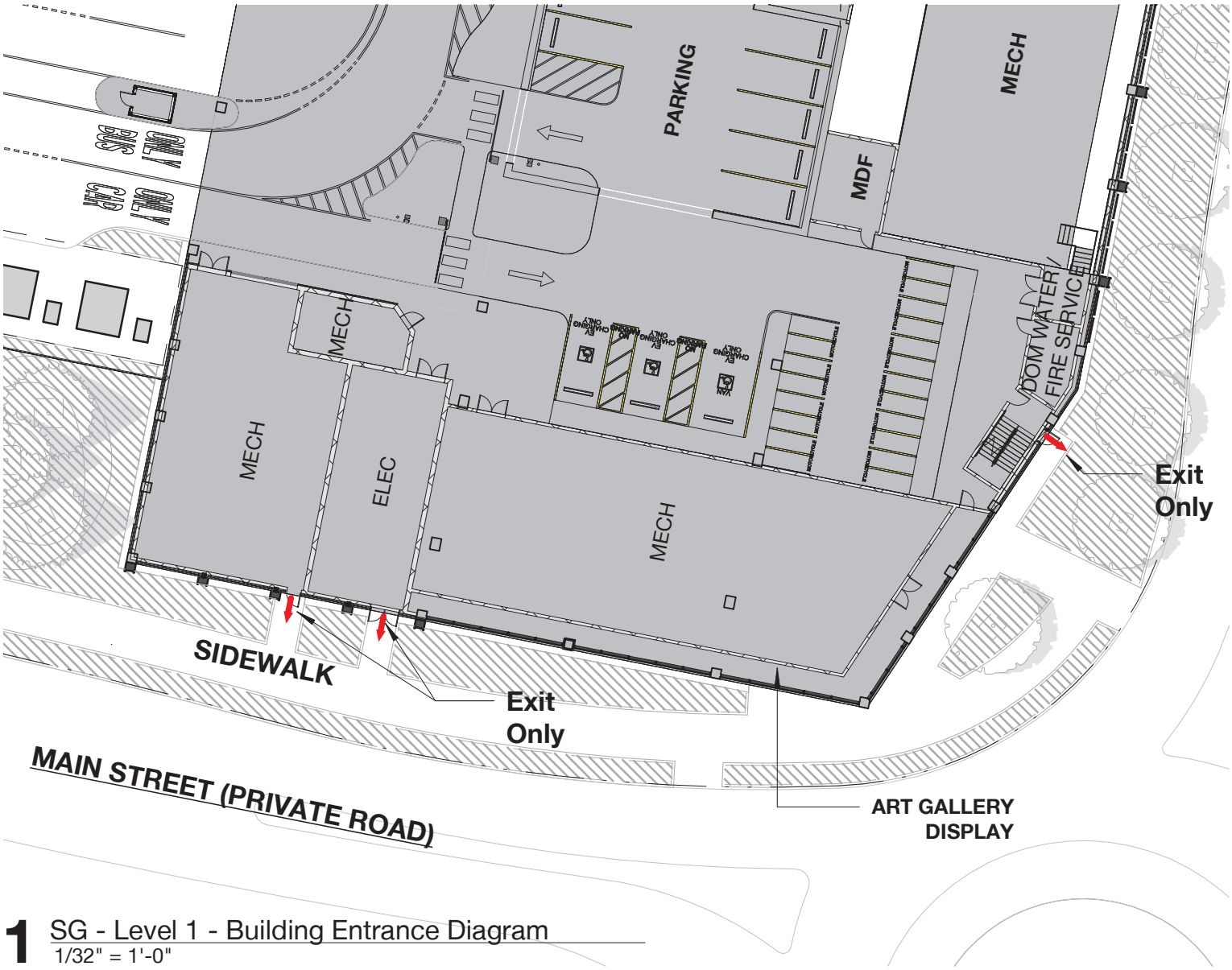






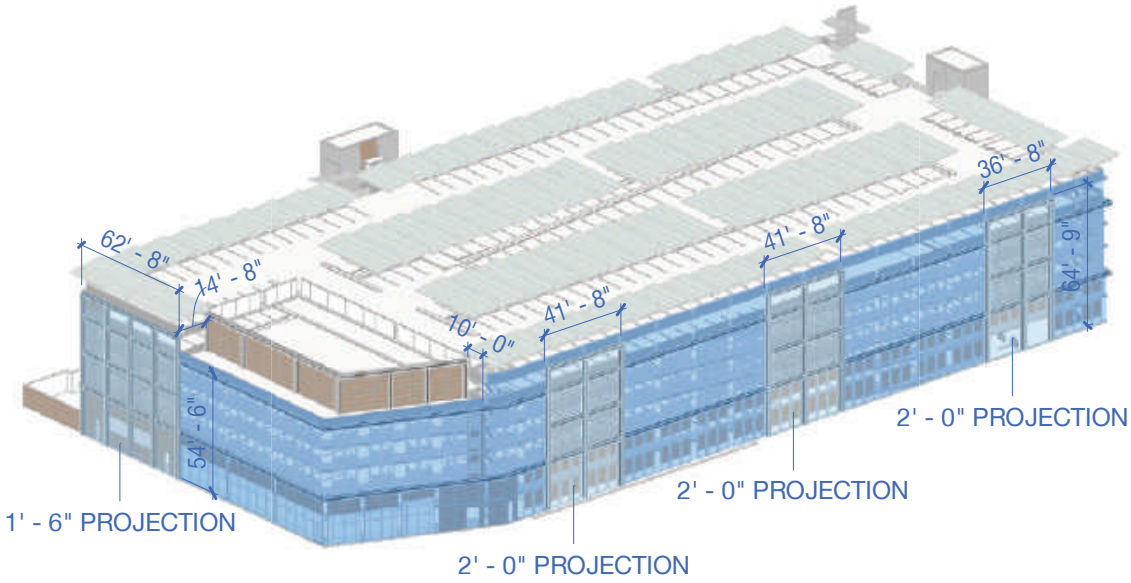
1 Building 05 and 06 - Level 1 - Entrance Diagram
1" = 50'-0"



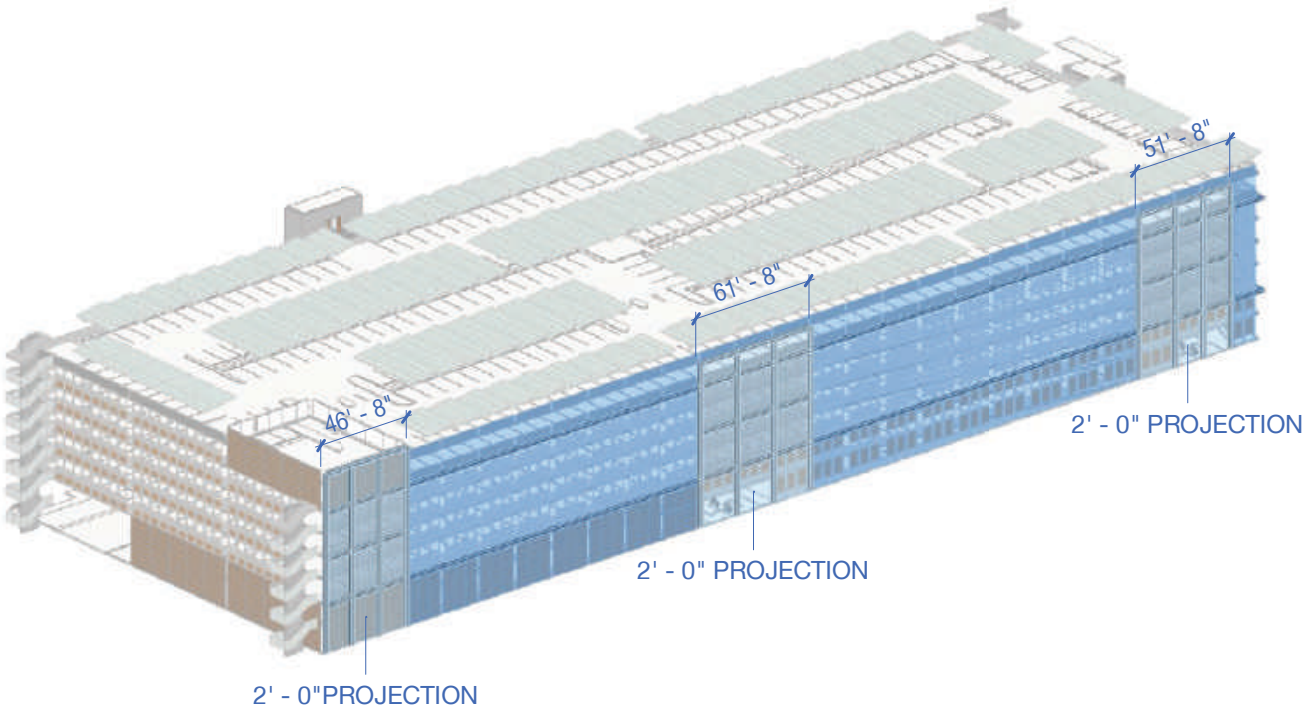


1 SG - Level 1 - Building Entrance Diagram
1/32" = 1'-0"

Illustrative Adjustment Exhibit L:
Building Modulations



South Garage Modulation Diagram



North Garage Modulation Diagram

VIEW FROM ELEVATED PARK

VIEW FROM TOWN SQUARE

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SCALED. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY. OBTAIN CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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PERSPECTIVES

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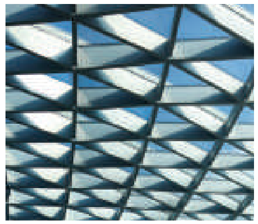
GLASS & STEEL GRID SHELL PAINTED FINISH

STEEL GRID SHELL PAINTED FINISH



VISION GLASS WILL HAVE A HIGH-PERFORMANCE COATING AND FOLLOW THE BIRD SAFETY GUIDELINES DESCRIBED IN THE ACP SUBMITTAL. GLASS ON THE ATRIUM COVER AND EVENT HALL WILL BE FRITTED FOR BIRD PROTECTION AND SOLAR CONTROL WITH A VISIBLE REFLECTANCE IN THE RANGE OF 7 – 15%. DEPENDING ON THE LEVEL OF FRIT, GLASS WILL HAVE A TRANSPARENCY BETWEEN 35-70%.

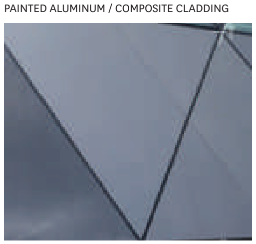
STONE PAVING

CONCRETE PANEL CLAD WITH TIMBER TRELLIS

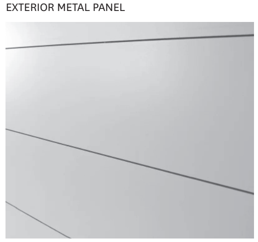
CONCRETE PANEL

VINE WALL

PAINTED ALUMINUM / COMPOSITE CLADDING



EXTERIOR METAL PANEL

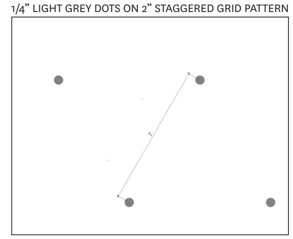


METAL PANELS ON THE ELEVATED PARK AND EVENT HALL WILL PAINTED WITH A SOLID OR METALLIC COATING THAT HAS A SEMI-GLOSS OR MATTE FINISH WITH A NOMINAL REFLECTANCE IN THE RANGE OF UP TO 19%.

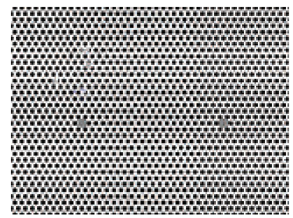
BIRD-FRIENDLY GLAZING

TYPE 1: ATRIUM COVER

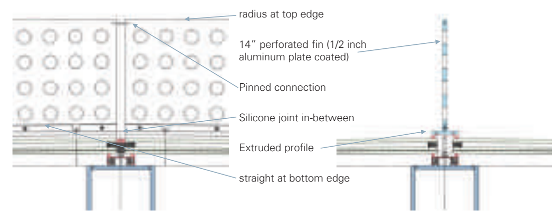
BIRD PROTECTION FRIT PATTERN
1/4" LIGHT GREY DOTS ON 2" STAGGERED GRID PATTERN



BIRD PROTECTION AND SOLAR CONTROL FRIT PATTERN
1/4" LIGHT GREY DOTS ON 2" STAGGERED GRID PATTERN
1/16" DARK GREY/ BLACK DOTS IN VARYING DENSITY (5%-45% COVERAGE)



METAL FIN AT ATRIUM COVER



TYPE 2: EVENT HALL, ELEVATOR TOWERS; LEVEL 1 (WHERE INDICATED)

VERTICAL ELEMENTS OF THE WINDOW PATTERNS WILL BE AT LEAST 0.25 INCHES WIDE AT A MAXIMUM SPACING OF 4 INCHES AND/ OR HAVE HORIZONTAL ELEMENTS AT LEAST 0.125 INCHES WIDE AT A MAXIMUM SPACING OF 2 INCHES

OR

BIRD SAFE GLAZING SHALL HAVE A THREAT FACTOR ≤ 30 AND VISIBLE REFLECTANCE ≤ 15%

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1
Menlo Park, CA

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DRAWING TITLE:
MATERIALS AND COLORS BOARD

DRAWING NO:
A7.01

Q2

Parcel 1 - MCS - Adjustment Request #1
Building Modulations

Adjustment Request

Allow adjustments to Zoning Code Section 16.43.130(2)

Allow 3 dimensional curving facade in lieu of building modulation on requirement; major modulation on every 200 feet, with a minimum of one per facade.

Code Requirements
16.43.130 Design Standards - Building Mass and Scale
Building Modulations
Definition: A building modulation is a break in the building plane from the ground level to the top of the building's base height that provides visual variety, reduces large building volumes and provides spaces for entryways and publicly accessible spaces.
Base Level: One every 200 feet, with a minimum of one per facade
Bonus Level: One every 200 feet, with a minimum of one per facade
Bonus Level Fronting a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street: One every 200 feet, with a minimum of one per facade
Notes/Additional Requirements: Modulation is required on the building facade(s) facing publicly accessible spaces (streets, open space, and paseos). Parking is not allowed in the modulation recess. When more than 50% of an existing building facade that faces a publicly accessible space is altered, it must comply with these modulation requirements.

Subject Site and Proposed Building Description
The MCS will serve as a meeting and collaboration space for Meta as well as provide a visitor center open to the public. The facility will feature a curving 3-dimensional glass and steel cover, an elevated publicly-accessible park and an Event Building with a planted trellis covered colonnade and vaulted metal roof. The MCS will occupy the northern portion of the Masterplan providing the north boundary to Town Square and the Offi ce campus. North Loop Road will be the northern boundary of MCS.
The building facade along North Loop Road will consist of the atrium cover whose curvature in plan varies by 65'-0" along its 835'-0" length and varies by approximately 80'-0" in elevation. Between North Loop Road and the building will be a planted landscape zone that varies in width as the building's curvature varies. The glass and steel cover features articulated "fins" that traverse the building diagonally in the east to west direction.
The project proposes an adjustment to the zoning requirement for a modulation every 200', with a minimum of one per facade, in the MCS facade on North Loop Road. The proposed facade as designed is an ever changing shape in relation to the public road with articulated fins to create modulated shadows and relief that adjust with the time of day. As one traverses the length of the facade, every vantage point will be substantially different from another. We believe that the facade as designed meets the intent of the zoning, i.e., to avoid monotonous long facades.

Modifications
Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments
Illustrative Attachment Exhibit
Parcel 1 - Adjustment Request #1, Illustration 1, Level 1 Floor Plan
Parcel 1 - Adjustment Request #1, Illustration 2, North Elevation

Parcel 1 - Adjustment Request #1
Illustration 1
Level 1 Floor Plan

Parcel 1 - Adjustment Request #1
Illustration 2
North Elevation

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1
Menlo Park, CA

SCALE: 1"=40'-0"

NOTE: THIS DRAWING IS 30 X 42. DO NOT SCALE DRAWING. USE DIMENSIONS ONLY. SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DRAWING TITLE: ADJUSTMENT REQUEST #1

DRAWING NO: **ADJ 1**

Q3

VIEW FROM TOWN SQUARE

3/21/2022 4:50:34 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SIZED A1. DO NOT SCALE. VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE. CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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NO.	DATE	ISSUE

DRAWING TITLE:
Willow Village Hotel
Perspective

DRAWING NO:
A6.01

VIEW FROM VILLOW AVE.

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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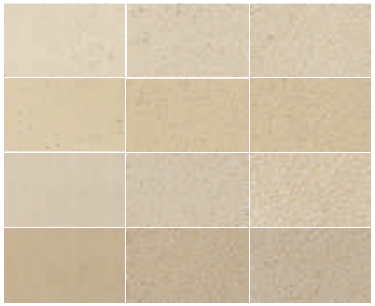
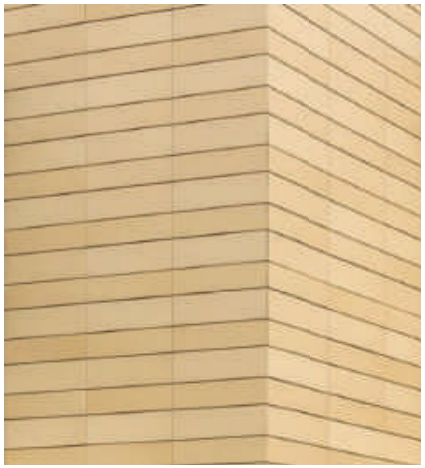
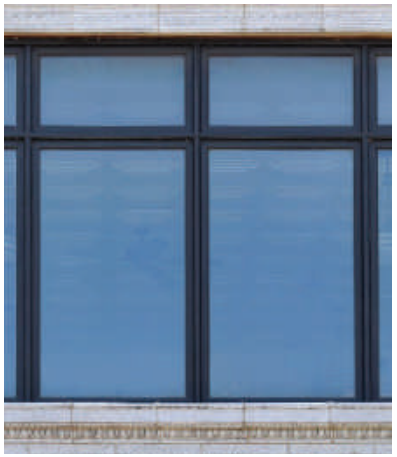
DRAWING TITLE:
Willow Village Hotel
Perspective

DRAWING NO:
A6.02



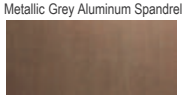
Horizontally oriented, Buff colored, GFRC or Panelized Cement Board





Bronze Finish Aluminum Mullions

Metallic Grey Aluminum Spandrel Panels



Bronze Finish Aluminum Mullions

Vision glass

Off White Aluminum
Spandrel Panel

GFRC or Cement Board
off-white Accent Panels

Extruded Aluminum off-white window surrounds

Engineered Wood trellis
Species and Finish TBD

Wood Slat Screen Wall
Orientation, Species, and Finish TBD

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SIZED AS: DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY. OBTAIN SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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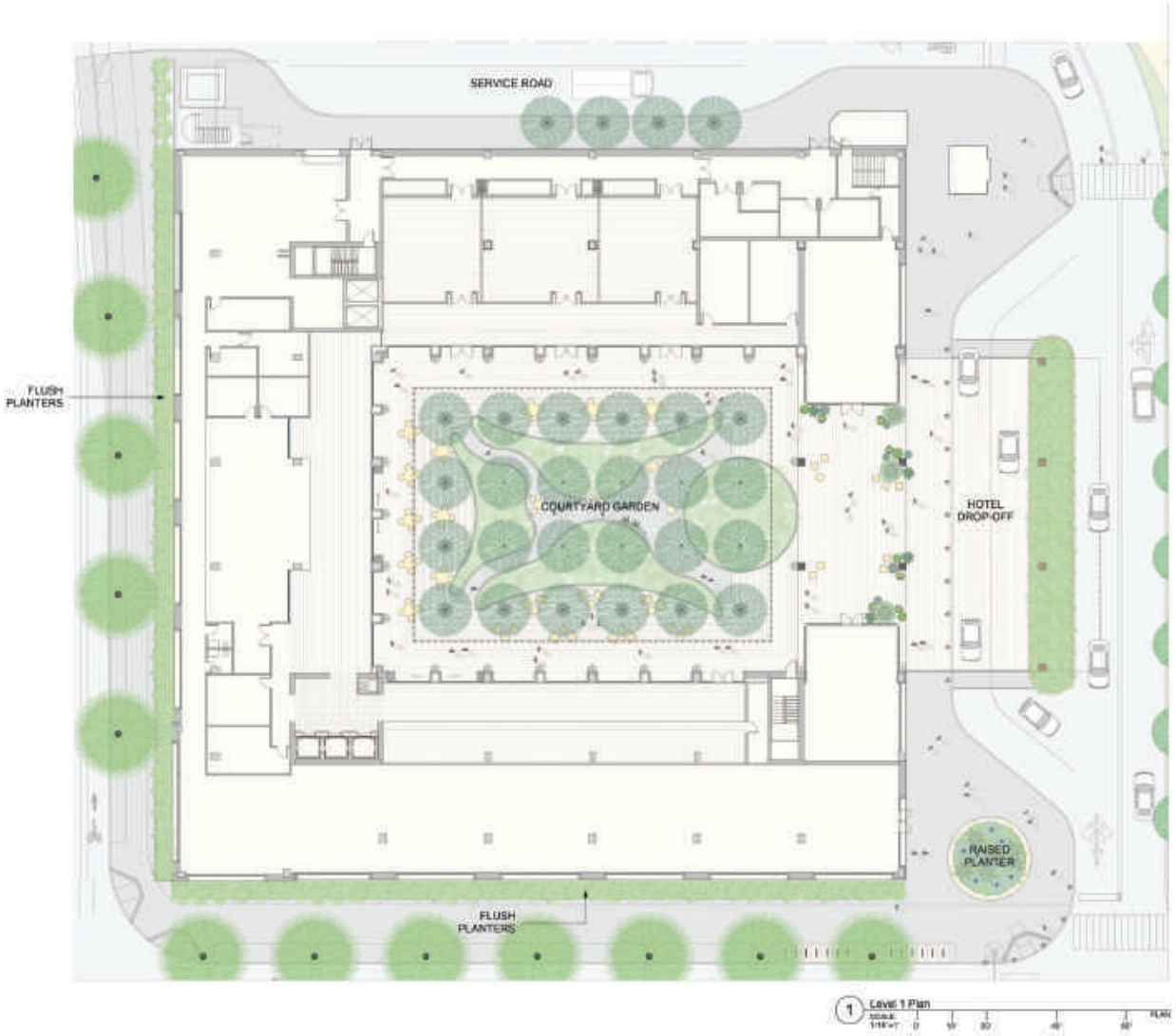
Willow Village Hotel
Material Board

DRAWING NO:
A7.01

8/10/2021 3:31:58 PM



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE: 1/16" = 1'

MILESTONES

DATE	ISSUE
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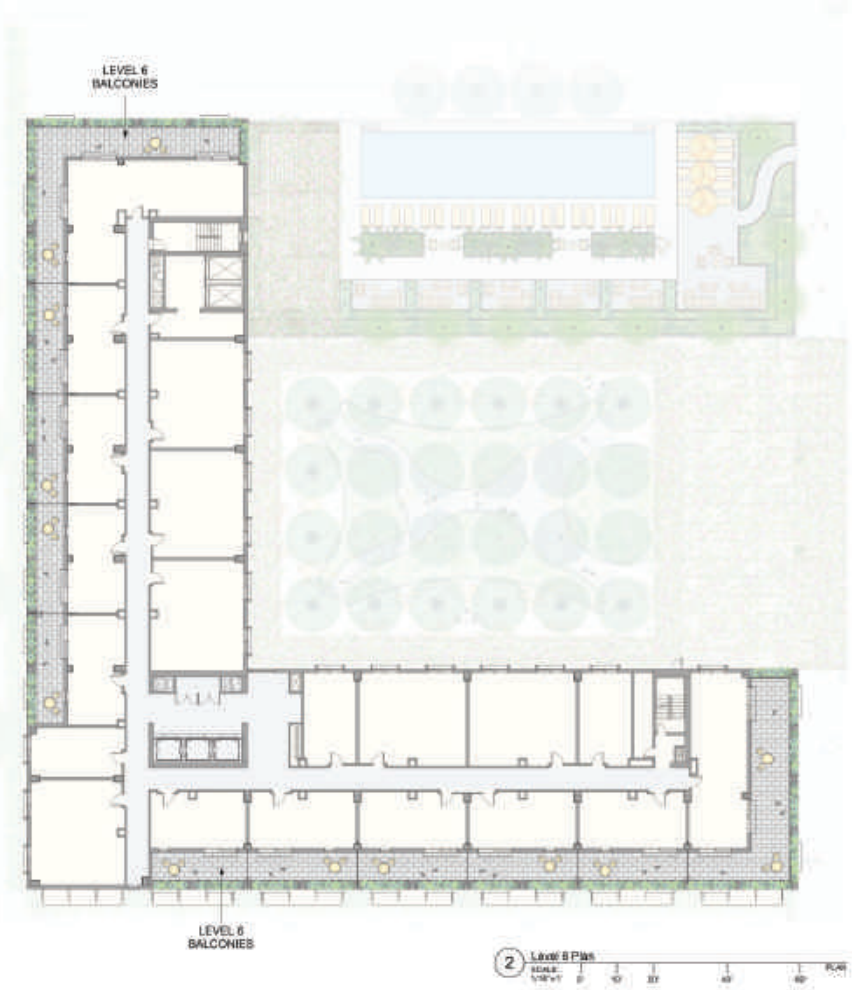
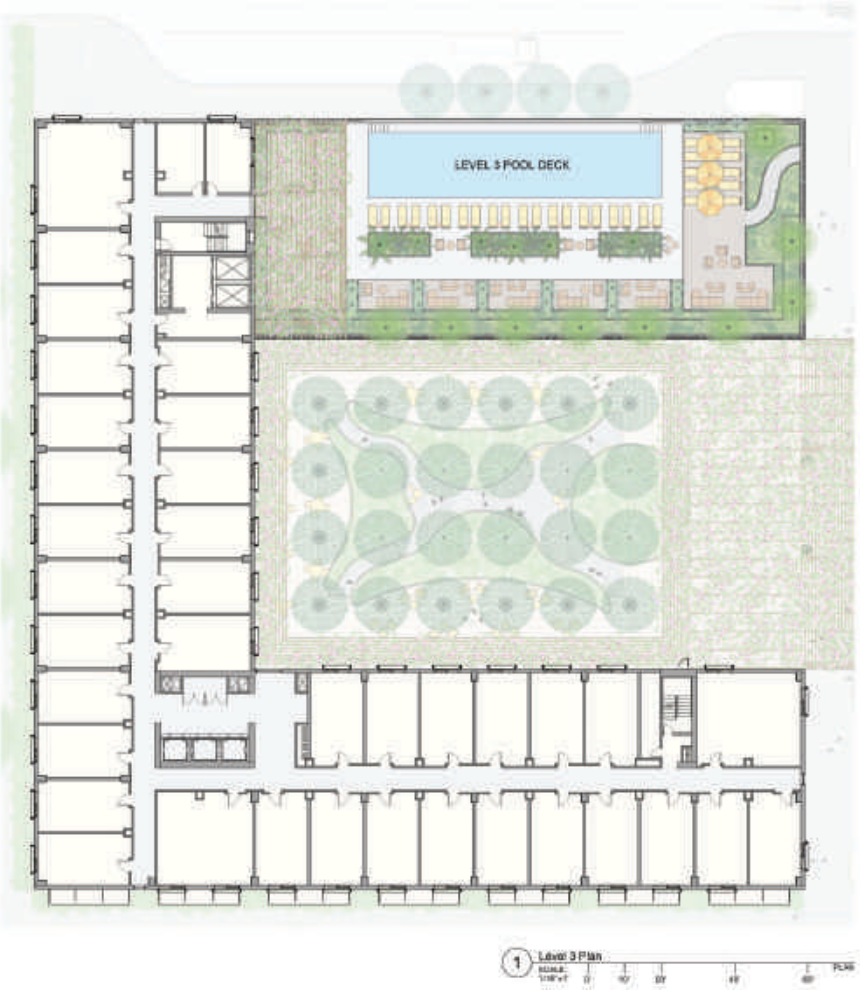
NO	DATE	ISSUE

DRAWING TITLE
WILLOW VILLAGE HOTEL
LEVEL 1 PLAN

DRAWING NO.
L1.01





PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

SCALE: 1/16" = 1'

MILESTONES

DATE	ISSUE
04.11.2022	ACP

REVISIONS

NO	DATE	ISSUE

DRAWING TITLE
WILLOW VILLAGE HOTEL
LEVEL 3 PLAN - POOL DECK

DRAWING NO.
L1.02

COURTYARD SHADE GARDEN MIX:
- 5 GALLON PLANTS
- SPACING: 2' ON CENTER

POSSIBLE SPECIES:
Agave attenuata 'Nova' (Foxtail Agave)
Ceanothus occidentalis (Spice Bush)
Correlia tasmanica (Tasmanian Fax-lily)
Dryopteris erythrosora (Autumn Fern)
Eriocapitella hupehensis (Japanese Anemone)
Euphorbia amygdaloides (Wood Spurge)
Galium odoratum (Sweet Woodruff)
Helleborus foetidus (Stinking Hellebore)
Iris douglasiana (Douglas Iris)
Microlepia strigosa (Lace Fern)
Polystichum munitum (Western Sword Fern)
Rhamnus californica 'Mound San Bruno' (Coffeeberry)
Ribes sanguineum glutinosum (Pink Flowering Currant)
Vinca major (Periwinkle)
Woodwardia fimbriata (Giant Chain Fern)

PORTE COCHERE PLANTER MIX:
- 5 GALLON PLANTS
- SPACING: 3' ON CENTER

POSSIBLE SPECIES:
Agave attenuata 'Nova' (Foxtail Agave)
Ceanothus horizontalis
Rhamnus californica (Coffeeberry)

RAISED CIRCULAR PLANTER MIX:

LARGE PLANTS
- 15 GALLON PLANTS
- SPACING: 6-8' ON CENTER

POSSIBLE SPECIES:
Agave attenuata 'Nova' (Foxtail Agave)
Chamaerops

SMALL PLANTS
- 5 GALLON PLANTS
- SPACING: 2' - 4' ON CENTER

POSSIBLE SPECIES:
Achillea spp. (Yarrow)
Aeonium spp.
Anigozanthos spp. (Kangaroo Paw)
Artemisia (Wormwood)
Echeveria spp.
Euphorbia characias (Mediterranean Spurge)
Lavandula spp. (Lavender)
Salvia spp. (Sage)

FLUSH SIDEWALK PLANTER MIX:
- 5 GALLON PLANTS
- SPACING: 2' - 4' ON CENTER

POSSIBLE SPECIES:
Dianella spp. (Flax Lilies)
Muhlenbergia rigens (Deer Grass)
Phormium 'Maori Chief' (New Zealand Flax)
Aeonium spp.

* California native species

COURTYARD TREES:
- HEIGHT: 18-20'

POSSIBLE SPECIES:
Acer palmatum (Japanese Maple)
Cercis canadensis (Eastern Redbud)
Lagerstroemia 'Natchez' (Natchez Crepe Myrtle)
Trachelos laurina (Water Gum)

VINES:
- HEIGHT: 12 - 15'
- 36" BOX

POSSIBLE SPECIES:
Wisteria floribunda (Japanese Wisteria)
* Bougainvillea 'Barbara Karst'

SIDEWALK VINES:
- HEIGHT: 8-10'

POSSIBLE SPECIES:
Wisteria floribunda (Japanese Wisteria)
Bougainvillea 'Barbara Karst'

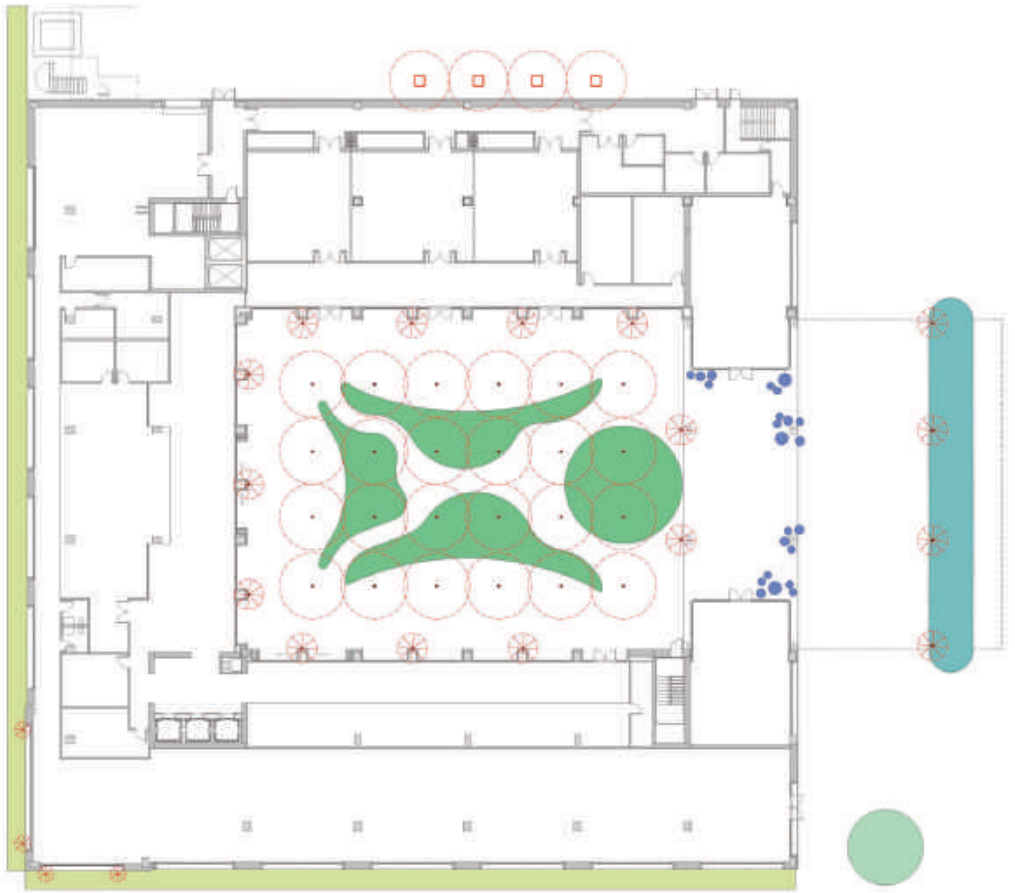
SERVICE ROAD TREES:

POSSIBLE TREE SPECIES:
- 60" BOX
Lophostemon confertus (Brisbane Box)

ALTERNATE PALM SPECIES:
- 25' CLEAR BROWN TRUNK (CBT)
Butia capitata (Jelly Palm)
Phoenix dactylifera (male) (Date Palm)

POTTED PLANTS:
- 18" - 36" POTS

POSSIBLE SPECIES:
Ficus spp.
Chamaedorea elegans
Davallia spp.
Nephrolepis exaltata
Howea forsteriana (Kentia Palm)



1 Level 1 Planting Plan

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Hotel
Menlo Park, CA

PENINSULA INNOVATION PARTNERS

DRAWING TITLE:
WILLOW VILLAGE HOTEL
LEVEL 1 PLANTING PLAN

DRAWING NO:
L2.01

VIEW FROM WEST ST EDGE

VIEW FROM WEST ST AND MAIN ST INTERSECTION

3/21/2022 9:28:11 PM

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Town Square
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SIZED A1. DO NOT SCALE. VERIFY ALL DIMENSIONS AND CONDITIONS AND SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES

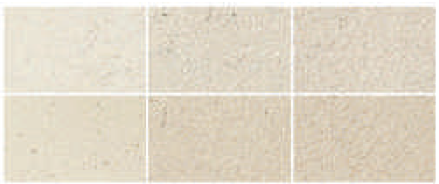
DATE	ISSUE
04/11/2022	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
WILLOW VILLAGE TOWN SQUARE
Perspectives

DRAWING NO:
A6.01



GFRC or Panelized Cement Board

GFRC or Panelized Cement Board

Engineered Wood Trellis, Species and Finish TBD

Operable Folding Glass Panels

Vision glass

Metallic Grey Aluminum Mullions

Bronze Finish Aluminum Spandrel Panels

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 1 - Town Square

Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
04/11/2022	ACP

REVISIONS

NO.	DATE	ISSUE

DRAWING TITLE:
WILLOW VILLAGE TOWN SQUARE
Material Board

DRAWING NO:
A7.01

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Parcel 1 - Town Square - Adjustment Request #2
Building Modulations - Roofline

Adjustment Request

Allow adjustments to Zoning Code Section 16.43.130(6.G)

Allow planted wood trellis over open rooftop colonnade in lieu of 4'-0" roofline height modulation

Code Requirements

16.43.130 Design Standards - - Building Mass and Scale

Building Modulations

Definition: Rooflines and eaves adjacent to street-facing facades shall vary across a building, including a four (4) foot minimum height modulation to break visual monotony and create a visually interesting skyline as seen from public streets. The variation of the roofline's horizontal distance should match the required modulations and step backs.

Base Level: 4'-0" height modulation

Bonus Level: 4'-0" height modulation

Bonus Level Fronting a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street: 4'-0" height modulation

Notes/Additional Requirements: Modulation is required on the building facade(s) facing publicly accessible spaces (streets, open space, and paseos). When more than 50% of an existing building facade that faces a publicly accessible space is altered, it must comply with these modulation requirements.

Subject Site and Proposed Building Description

The Willow Village Town Square is a publicly accessible landscaped and hardscaped outdoor amenity space that will serve as a gathering place and event plaza for the general public at ground level. The Town Square is built over a parking garage that serves the hotel, retail, and general visitor populations. At plaza level along the southern Main Street edge will be a one story retail Pavilion. The eastern and northern edges of Town Square are defined by Office Building 4 and the MCS building while West St and the Hotel air rights parcel define the western boundary.

The architecture of the pavilion features a planted wood trellis roofline with a generous cantilevered curving geometry that relates to the Hotel drop off canopy across West Street. The Retail pavilion will have a slight curve in plan that gives shape to the Town Square plaza's center, a large semi-circular event space with built in steps that also serve as seating elements. Plantings will be used to define the edges creating spaces for smaller group gatherings. Several seating areas are provided for the retail amenities of the pavilion and the adjacent bordering buildings activating the Town Square plaza all times of day.

The project proposes an adjustment to the zoning requirement for a roofline height modulation of 4'-0" minimum, in the pavilion Main Street facade. The proposed roof as designed has a planted wood trellis over an open colonnade above the parapet line. The play of light and shadow, surface and void that will result from the design is the dominant visual interest of the retail pavilion architecture. We believe that the roofline as designed substantially meets the intent of the zoning, i.e., to avoid visual monotony and create a visually interesting skyline.

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

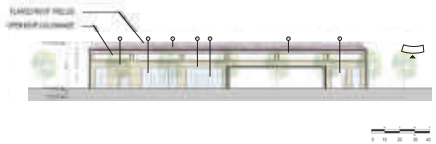
Attachments

Illustrative Attachment Exhibit

Parcel 1 - Adjustment Request #2, Illustration 1, West Elevation

Parcel 1 - Adjustment Request #2, Illustration 2, South Elevation

Parcel 1 - Adjustment Request #2
Illustration 1
West Elevation



Parcel 1 - Adjustment Request #2
Illustration 2
South Elevation

Parcel 1 - Town Square - Adjustment Request #1
Building Modulations

Adjustment Request

Allow adjustments to Zoning Code Section 16.43.130(2)

Allow large Ground Floor opening through full depth of single story building in lieu of building modulation requirement; major modulation every 200 feet, with a minimum of one per facade.

Code Requirements

16.43.130 Design Standards - Building Mass and Scale

Building Modulations

Definition: A building modulation is a break in the building plane from the ground level to the top of the building's base height that provides visual variety, reduces large building volumes and provides spaces for entryways and publicly accessible spaces.

Base Level: One every 200 feet, with a minimum of one per facade

Bonus Level: One every 200 feet, with a minimum of one per facade

Bonus Level Fronting a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street: One every 200 feet, with a minimum of one per facade

Notes/Additional Requirements: Modulation is required on the building facade(s) facing publicly accessible spaces (streets, open space, and paseos). Parking is not allowed in the modulation recess. When more than 50% of an existing building facade that faces a publicly accessible space is altered, it must comply with these modulation requirements.

Subject Site and Proposed Building Description

The Willow Village Town Square is a publicly accessible landscaped and hardscaped outdoor amenity space that will serve as a gathering place and event plaza for the general public at ground level. The Town Square is built over a parking garage that serves the hotel, retail, and general visitor populations. At plaza level along the southern Main Street edge will be a one story retail Pavilion. The eastern and northern edges of Town Square are defined by Office Building 4 and the MCS building while West St and the Hotel air rights parcel define the western boundary.

The architecture of the pavilion features a planted wood trellis roofline with a generous cantilevered curving geometry that relates to the Hotel drop off canopy across West Street. The Retail pavilion will have a slight curve in plan that gives shape to the Town Square plaza's center, a large semi-circular event space with built in steps that also serve as seating elements. Plantings will be used to define the edges creating spaces for smaller group gatherings. Several seating areas are provided for the retail amenities of the pavilion and the adjacent bordering buildings activating the Town Square plaza all times of day.

The project proposes an adjustment to the zoning requirement for a full building height modulation every 200', with a minimum of one per facade, in the Pavilion's Main Street facade. The proposed facade as designed has a large through-building passageway from Main St to the Town Square central plaza. The passageway provides ample views as well as access through the plaza from Main St. It occurs within 200' from either edge of the pavilion. We believe that the facade as designed substantially meets the intent of the zoning, i.e., to avoid monotonous long façades.

Modifications

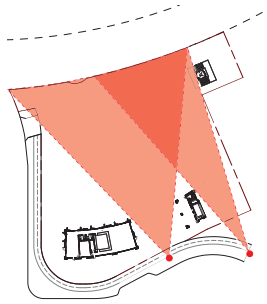
Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

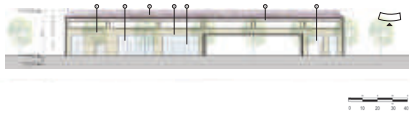
Illustrative Attachment Exhibit

Parcel 1 - Adjustment Request #1, Illustration 1, Site Plan - View Corridors from Main St.

Parcel 1 - Adjustment Request #1, Illustration 2, South Elevation



Parcel 1 - Adjustment Request #1
Illustration 1
Site Plan - View Corridors from Main St.



Parcel 1 - Adjustment Request #1
Illustration 2
South Elevation

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 1 - Town Square
Menlo Park, CA

SCALE:

NOTE: THE DRAWING IS SCALED. DO NOT SCALE DRAWINGS OR ADJUST DRAWINGS ONLY. DIMENSIONS OR CLARIFICATIONS SHOULD BE REQUESTED FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
04/11/2022	ACP

REVISIONS		
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DRAWING TITLE:
WILLOW VILLAGE TOWN SQUARE
Adjustment Requests

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SIZE A1. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DATE	ISSUE
4/11/2022	ACP

REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
PERSPECTIVE - SW CORNER

DRAWING NO:
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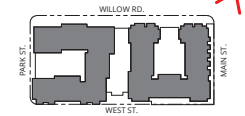

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

PENINSULA INNOVATION PARTNERS

SCALE:

NOTE: THIS DRAWING IS SIZE A1. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
4/11/2022	ACP

REVISIONS		
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DRAWING TITLE:
PERSPECTIVE - NW CORNER

DRAWING NO:
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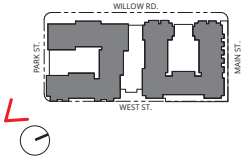

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SIZE A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
4/11/2022	ACP

REVISIONS		
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DRAWING TITLE:
PERSPECTIVE - SE CORNER

DRAWING NO:
*A6.03

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE:

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MILESTONES	
DATE	ISSUE
4/11/2022	ACP

REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
PERSPECTIVE - NE CORNER

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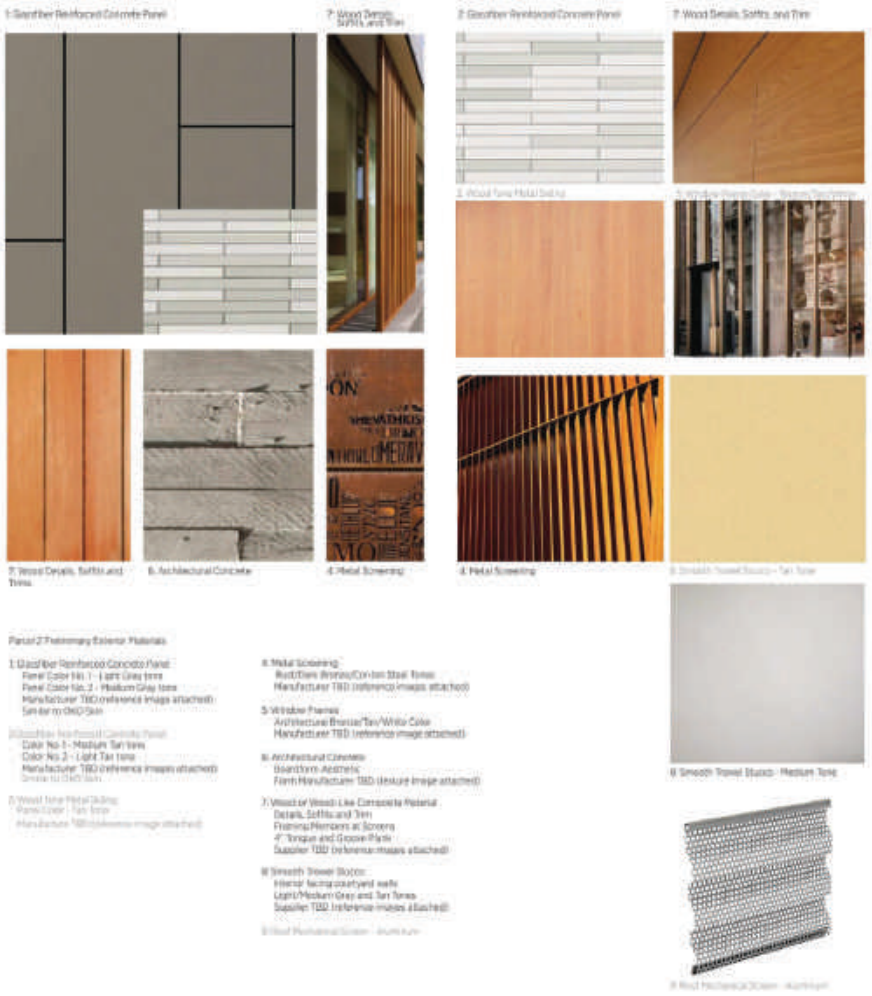

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SIZE A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

MILESTONES	
DATE	ISSUE
4/11/2022	ACP

REVISIONS		
NO.	DATE	ISSUE

DRAWING TITLE:
MATERIALS & COLOR BOARD

DRAWING NO:
*A7.01

Parcel 2 – Adjustment #1

Base Height & Stepback

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow the base height (excluding 10-foot increase within the Flood zone) to be measured at the top of Level 6, or about 93'-6" above finished grade.

Allow roof trellises supported by posts within stepback areas.

Code Requirements:
16.45.120(2) Building Mass and Scale

Base Height: The maximum height of a building at the minimum setback or closer to or before the building mass back (the minimum horizontal distance required) facing a Local Street or a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street - 85'. Properties within the flood zone or subject to flooding and sea level rise are allowed a 10' increase. Maximum Base Height for Project: 85' + 10' (increase = 95'

Building Projections: The maximum depth of allowable building projections from the required stepback for portions of the building above the ground floor: 6'

Subject Site and Proposed Building Description:

Parcel 2 spans two City Blocks in length and one City block in width. The proposed building design is characterized by varying stepbacks, setbacks, and modulations that create an overall impression of distinct adjacent masses, rather than one monolithic mass. Modulations occur around the building for private and shared terraces. There are large podium level stepbacks on Willow Road, Park Street, and West Street where apartments open out to the street. There are stepbacks at levels 5 and 6 around the rest of the building to provide relief and articulation.

Parcel 2 proposes the use of a non-required building setback that ranges from 4' to 10' to achieve the code results in the required minimum stepback in the following ways:

- Providing a greater volume of space between the upper stories of buildings.
- Providing allowance for more light at the pedestrian level.

In addition:

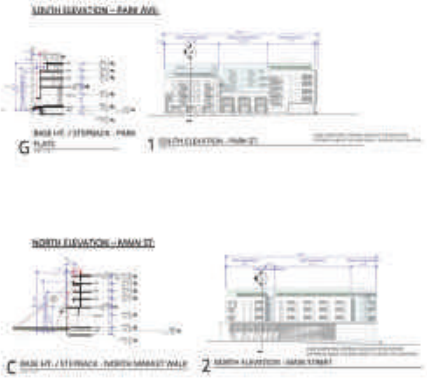
- Stepbacks provided a permanent fixed building height. Parcel 2 (in areas of a building without) proposes to place the required stepback one level higher than the otherwise maximum base height, thus achieving comparable view angles to a consistent stepback profile.
- Varying levels of stepbacks allow relief from the monotony of standard development over the long frontage lengths of the block.

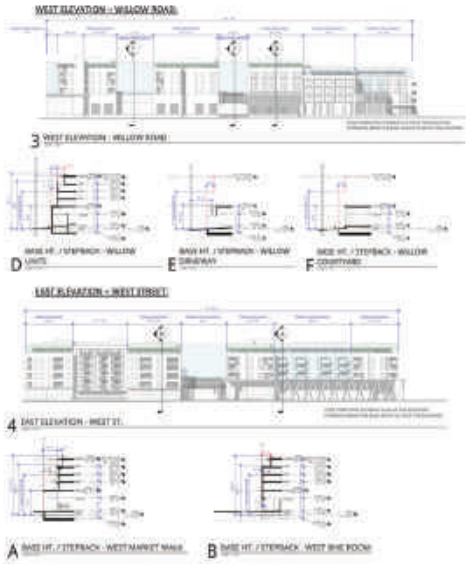
Parcel 2 Design seeks to achieve a highly articulated massing with variable stepback heights at each elevation, so as to not read as "prescriptive" and act to meet the intent of the stepback requirement in the zoning code. For Parcel 2, the applicant requests that the required stepback base height be allowed to increase from Level 5 (about 76' above existing grade) to Level 6 (about 93'-6" above existing grade) or a holistic design consideration other than a specific numbers, in order to establish a consistent rhythm the variability is still occurring within. Without the adjustment, the Parcel 2 frontages face code complying stepbacks for an average of 40% of their length (see attached exhibit for details). If the adjustment is approved, they will have complying stepbacks on an average of 66% of their length.

The Parcel 2 design also proposes to include a condition on Level 6 at the northeast corner, where a trellis supported on post extends from the stepped back mass to wall into the stepback area more than the 6' maximum allowed by 16.45.120(2) Building Projections. This is done to increase variation of the roofline when viewed from the ground, highlight the corner of the building, and improve ventilation on that 6th floor wall deck at that corner.

Attachments:
Illustrative Adjustment Exhibit #1 Attached

Parcel 2 – Illustrative Adjustment Exhibit #1





PARCEL 2 –Adjustment #2

Major Building Modulations

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow a major modulation on Park St. that is 8 feet deep instead of 10 feet deep.

Code Requirements:
16.45.120(2) Building Mass and Scale

Major Building Modulations:

A major modulation is a break in the building plane from the ground level to the top of the building's base height that provides visual variety, reduces large building volumes, and provides spaces for entryways and public or semi-public spaces.

Modulation Required: Minimum of one recess of 25 feet wide by 10 feet deep per 200 feet of façade length

Additional Rules: Modulation is required on the building façade(s) facing publicly accessible spaces (streets, open areas, and paseos). Parking is not allowed in the modulation recess. When more than 50% of an existing building is demolished, it must provide accessible space as shared. It must comply with these modulation requirements.

Subject Site and Proposed Building Description:

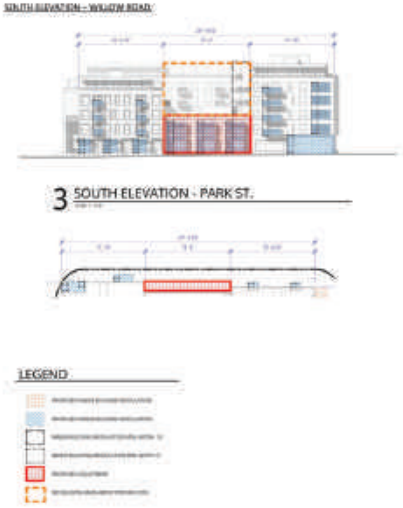
Parcel 2 spans two City blocks in length and one City block in width. The proposed building design is characterized by varying stepbacks, setbacks, and modulations that create an overall impression of distinct adjacent masses, rather than one monolithic mass. On the South Elevation, facing Park St and, this design was likely as one tall building mass at the corner with Willow Road. A clear mass in the middle of the block that is set back, and a taller building mass at the corner with West Street. The articulation of the southern façade is based on this massing concept along with the residential and layout and street orientation with access to these units.

The recessed center portion is 74 feet wide and set back 8 feet from the massing element at the West Street corner, which provided visual relief but is less than the 10 feet required by the major building modulation code section. To not break up as a massing break, this recent portion is only two stories high, the courtyard opens to Park Street at the pedestrian level above, providing a 74 foot wide by 145 foot deep massing relief modulation extending from the podium level to the full height of the building.

The Parcel 2 design proposes to satisfy the major modulation requirements for the south elevation along Park Avenue with this 8' deep and 74' wide massing modulation that recesses in depth to 145 feet at the podium level. The Parcel 2 building design is highly articulated and modulated on all frontages. The request to consider the shallower recessing break, in combination with the reach deeper level above, as meeting the major modulation requirement along Park Street is intended to allow relief from the monotony of standard development, to permit the application of new and desirable development techniques.

Attachments:
Illustrative Adjustment Exhibit #2 Attached

Parcel 2 – Illustrative Adjustment Exhibit #2



PARCEL 2 – Adjustment #3

Garage Entrances

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(3) to:

Allow two-way garage entrances to be 28 feet wide, instead of the code limit of 22 feet.

Code Requirements:
16.45.120(3) Street Wall Setback

Garage Entrances:

Width of garage entry/drive along street frontage.
Retail Level Fronting a Local Street or Boulevard: Three garage, Mixed Use Collector, or Neighborhood Street: Maximum 12-foot opening for one-way entrance; maximum 22-foot opening for two-way entrance

Subject Site and Proposed Building Description:

Parcel 2 spans two city blocks in length and one city block in width. It is bisected on each long side by two-way entrances to a parking garage that serves residents, public retail visitors, and commercial loading associated with the grocery store. Both garage openings are proposed to be 28 feet in width, wider than the code limit of 24 feet for a two-way entrance. The garage entrances will be clear openings, and recede 4ft by doors, allowing for an unimpeded extension of the public realm into the shared commercial areas.

The proposed garage openings are for vehicle entry/exit for both commercial and residential traffic. The commercial exit of the garage supports the 4 valet entry and 4 for a convenience for drivers unfamiliar with the garage, and makes it possible for a WB-70 delivery truck to enter the garage off of Willow Road, meaning the building can avoid a separate loading dock access off Willow, which would disrupt the pedestrian experience to an extent that the proposed mass adjustment of the code requirement. The design proposal allows for a large buffer of area to the right and left of the garage opening to create a safe & pedestrian place, the idea being that the garage entry would not feel overwhelming or intimidating at the pedestrian level. Much like the Willow Road garage opening, the West Street garage opening is detailed with warm materials and is fully integrated into the overall design of the façade and to the seating areas at the podium level. The garage opening on West Street is located at the terminus of Center Street and is designed to read as both a vehicular and visual gateway to the building. The garage opening along Willow Road would be aligned with the garage opening along West Street, allowing daylight and interesting views through the building. Additionally, both garage entries are aligned to a street, in this massing plane, which further emphasizes the successful design around the garage openings.

Attachments:
Illustrative Adjustment Exhibit #3 Attached

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SET #1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. OBTAIN CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DRAWING TITLE: ADJUSTMENT SHEETS

DRAWING NO: *APP1.01

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Parcel 2 – Illustrative Adjustment Exhibit #3

PARCEL 2 –Adjustment #4

Building Entrances

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(3) to:

Allow spacing of greater than 100' between two building entrances

Code Requirements
16.45.120(3) Use and Floor Interior

Building Entrances

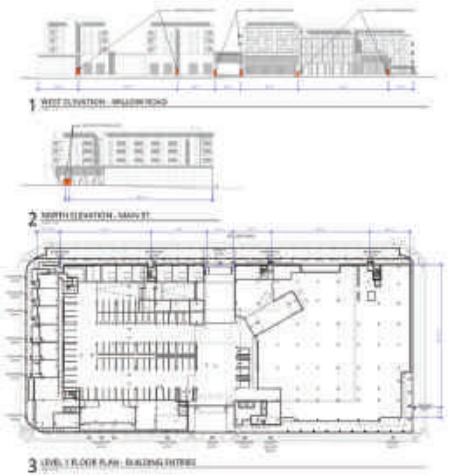
The maximum ratio of entrances to building length along a public street or plaza.
One entrance every 100 feet of building length along a public street or plaza. A minimum of one is required along each length. Entrances at a building corner may be used to satisfy the requirement for both frontages. Retail must be in business conformance to building users.

Subject Site and Proposed Building Description

Parcel 2 spans two city blocks in length and one city block in width. It is located on each long side by entrances to a parking garage that serves residents, public retail visitors, and commercial loading associated with the grocery store. The perimeter of the building contains portions with commercial grocery store uses, residential ground floor units, resident common areas, and several utility access points. The residential portions of the ground floor include regular building entrances and/or DOT of each other whether for lobby access, individual unit access, or residential common area access. Retail frontages on West Street and on Main Street near the corner with Main Street have frequent entrances as well, but to avoid disruptions to the operational requirements of the grocery store, the western end of Main Street and the northern part of the Willow Road frontage do not have entrances every 100 feet. The proposed design also groups the transformers that are required on the right of way together on the western elevation, facing Willow Road, to maximize transparency and activation on the other streets, which are more pedestrian oriented. This, in combination with the grade differential of the site creates a stretch of the W Willow Road frontage where it is not useful or efficient to locate an entrance in between transformer rooms. This section of the Willow Road façade is enhanced through wall art, architectural "fins," texture glazed architectural elements, and landscaping to make sure that frontage feels engaged with the building.

Attachments
Illustrative Adjustment Exhibit #4 Attached

Parcel 2 – Illustrative Adjustment Exhibit #4



PARCEL 2 –Adjustment #5

Roof Modulation

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(6)(G) to:

Waive the 3 foot roof modulation requirement for the West St. and Main St. elevations.

Code Requirements
16.45.120(6)(G)

Rooflines and lower adjacent to street-facing facades shall vary across a building, including a 4-foot minimum height modulation to break visual monotony and create a visually interesting skyline as seen from public streets. The variation of the roofline's horizontal distance should match the required modulations and setbacks.

Subject Site and Proposed Building Description

Parcel 2 spans two city blocks in length and one city block in width. The massing of the proposed building resembles two U-shaped buildings separated by a roughly street-width gap across a shared podium. The podium is bisected by open garage entrances on each long side, aligned with the gap between the massing above. A portion of the southwest corner which is one story taller that the rest of the building provides the required 4' minimum height modulation to the rooflines for the Willow Road and Park Street elevations, while also providing a transition in scale from the lower density development patterns to the south and west of the project site.

The West Street and Main Street elevations have rooflines that are more consistent to match the surrounding density within Willow Village and enhance the urban village character of the public space in the development. Horizontal modulations, articulation, the massing gap, and a variety of overhang and trellis conditions ensure that the roofline will be visually interesting and not appear monotonous to pedestrians on nearby public streets.

For Parcel 2, the applicant requests that the requirement for a 4-foot roof modulation on the West Street and Main Street elevations be waived, in recognition of the residential unit Parcel 2 plays in the overall fabric of Willow Village as well as the other design measures that have been taken to make sure these elevations will be visually interesting and interesting for people walking by.

Attachments
Illustrative Adjustment Exhibit #5 Attached

Parcel 2 – Illustrative Adjustment Exhibit #5

PARCEL 2 –Adjustment #6

Minor Modulation

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(2)to:

Waive the 1 x minor modulations per 50' of façade length requirement for the southern half of the Willow Road elevation.

Code Requirements
16.45.120(2)

Minimum recess of 5' wide by 8' deep per 50' of façade length; building projections spaced no more than 50' apart with a minimum depth of 1' and width of 5' may satisfy this requirement in lieu of a recess.

Subject Site and Proposed Building Description

Parcel 2 spans two city blocks in length and one city block in width. The massing of the proposed building resembles two U-shaped buildings separated by a roughly street-width gap across a shared podium. The podium is bisected by open garage entrances on each long side, aligned with the gap between the massing above. The proposed building design is characterized by varying elevations, setbacks, and modulations that contain an overall impression of distinct adjacent masses rather than one monolithic mass. To strengthen this concept the proposed design complies with the minor modulation requirement through varying recesses at different lengths across the building. These include vertically aligned projecting or recessed balconies as well as corresponding notches in the exterior building walls.

As part of the overall strategy based on breaking down the large scale of the West through a variety of architectural expression, the southern half of the Willow Road elevation was moving shifts in order to achieve the perceived scale of the mass. There are recesses provided at different locations at the 6th, 5th, and 4th floors. There are horizontal shifts in the massing above the podium which are expressed at the way down to the ground. In some places the podium level is expressed on the façade and in some places it is not. The dynamic composition created by these varying recess ratios or the views through richly textured planes of the building facade for its project introducing smaller corridors or balconies, whether projecting or recessed, would provide the impact of the massing mass and result in a mass that looked more homogeneous. Therefore, the project proposes that the requirement for a minor modulation for every 50' of façade length be waived for the southern half of the Willow Road elevation.

Attachments
Illustrative Adjustment Exhibit #6 Attached

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

SCALE:

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DRAWING NO:
*APP1.02

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Parcel 2 – Illustrative Adjustment Exhibit #6

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WILLOW VILLAGE
Architectural Control Package - Parcel 2
Menlo Park, CA

PENINSULA INNOVATION PARTNERS

SCALE:

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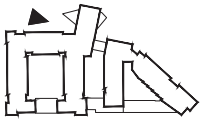
ADJUSTMENT SHEETS

DRAWING NO:
*APP1.03

MAIN STREET WEST

KEY PLAN



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

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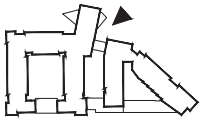
BUILDING PERSPECTIVES

DRAWING NO:
A6.01

MAIN ST EAST

KEY PLAN



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

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BUILDING PERSPECTIVES

DRAWING NO:
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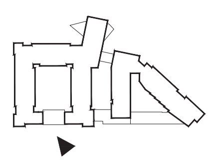
Y2

CENTER STREET

KEY PLAN



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

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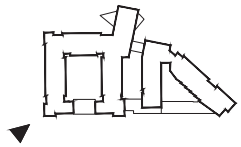
BUILDING PERSPECTIVES

DRAWING NO:
A6.03

CORNER OF WEST ST & CENTER ST

KEY PLAN



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

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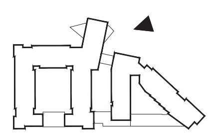
BUILDING PERSPECTIVES

DRAWING NO:
A6.04

Y4

MAIN ST EAST

KEY PLAN



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
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Menlo Park, CA

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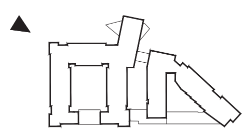
DRAWING TITLE:
BUILDING PERSPECTIVES

DRAWING NO:
A6.05

CORNER OF MAIN ST & WEST ST

KEY PLAN



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

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DRAWING TITLE:
BUILDING PERSPECTIVES

DRAWING NO:
A6.06

3. DETAIL ELEVATION AT MAIN STREET, FACING TOWN SQUARE

2. DETAIL ELEVATION AT CENTER STREET, WEST CORNER

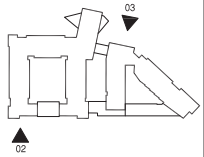
GENERAL NOTES

A. LESS THAT 50% OF THE TOTAL BUILDING FACADE WILL BE CLAD IN SMOOTH TROWELED STUCCO IN COMPLIANCE WITH ZONING ORDINANCE 16.45.120(6)F.

KEYNOTES

1. SIDING - DARK BRONZE COLOR
2. TILE BASE
3. "WOOD-LOOK" SCREEN
4. STUCCO - SMOOTH TROWEL FINISH
5. BRICK - GRAY
6. STOREFRONT WINDOW SYSTEM
7. WINDOW SYSTEM WITH MEDIUM DARK OR WHITE COLOR FRAME
8. BAY WINDOWS
9. ALUMINUM FASCIAS AND COLUMN WRAPPERS
10. AWNING - METAL
11. AWNING - FABRIC
12. RAILINGS
13. METAL GARAGE DOOR
14. METAL SCREEN WALL
15. CONCRETE

KEY PLAN



01. SIDING DARK BRONZE COLOR

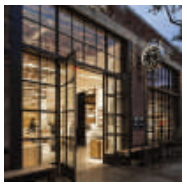
02. TILE (LIGHT)

02. TILE (DARK)

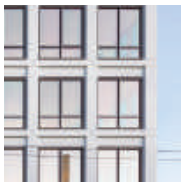
03. "WOOD-LOOK" SCREEN

04. STUCCO - SMOOTH TROWEL FINISH

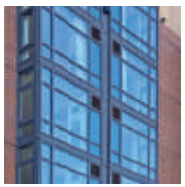
05. BRICK - GRAY



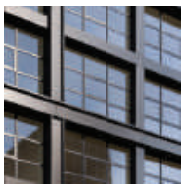
06. STOREFRONT WINDOW SYS.



07. WINDOW SYSTEM WITH MEDIUM DARK , WHITE, OR TAN COLOR FRAME



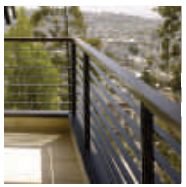
08. BAY WINDOW



09. ALUMINUM - FASCIAS AND COLUMN WRAPPERS

10. AWNING - METAL

11. AWNING - FABRIC



12. RAILINGS

13. GARAGE SECURITY SCREEN

14. CORRUGATED METAL ROOF SCREEN

15. CONCRETE

1. MATERIALS

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE

Architectural Control Package - Parcel 3

Menlo Park, CA

SCALE:

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DRAWING TITLE: MATERIAL BOARD

DRAWING NO: A7.01

Y7

Parcel 3 - Adjustment #1
Base Height

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow the Base Height (including 10-foot increase withing the flood zone) to be acceptable at top of Level 5, or about 58'-4" above finished grade.

Code Requirements

16.45.120(2): Building Mass and Scale

Base Height: The maximum height of a building at the minimum setback at street or before the building steps back the minimum horizontal distance required. Properties within the flood zone or subject to flooding and sea level rise are allowed a 10' increase. Maximum Base height: 45' + 10' Bonus

Subject Site Description

Parcel 3 spans two City blocks in length and one City block in width. The building design is characterized by stepbacks and setbacks all along its four sides, with massing that variously includes portions that are 2 stories, 4 stories, 5 stories, 6 stories, and 7 stories. Stepbacks for from the Building Base occur for private and shared terraces. Two large stepbacks occur along Center street at the podium level, where two courtyards open out to the street-side. The massing attempts to provide variety, articulation, and relief, while expressing a dense program of mixed uses. The building design has variation in the perceived roof line, and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical layers along the street edge.

Along the west, north, and east sides, where the building massing fronts onto the Town Square and Main Street, the 7-story building's design includes a Base of 5 stories and an upper level Stepback of 2 stories. The proposed base:top stepback relationship is 5:2, or 5 floors of Base and 2 floors of Stepback. A stepback at the prescribed 55' Base level, which would more strictly follow the requirements, would create a 4:3 ratio, and cause the building to look stocky and top-heavy with static massing along the frontages. The design attempts to find a base height that achieves a suitable proportion – stepping back the top 2 floors rather than the top 3 floors. The proposed stepback occurs at the datum at 63-foot-6-inches above natural grade, or about 58-foot-4-inches above proposed finished grade, and excludes the height of a 42" open railing at the stepback's terraces.

Modifications

Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment Exhibit

Parcel 3 - Adjustment #2
Stepback

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow for stepbacks of 8' minimum depth instead of 10 feet in depth
Allow for projections into stepback area
Allow for projections (awnings) of 8' instead of 6 feet in depth

Code Requirements

16.45.120(2): Building Mass and Scale

Base Height: The maximum height of a building at the minimum setback at street or before the building steps back the minimum horizontal distance required. Properties within the flood zone or subject to flooding and sea level rise are allowed a 10' increase. Maximum Base height: 45' + 10' Bonus

Minimum Stepback: 10' for a minimum of 75% of the building face along public streets.

Building Projection: The maximum depth (8') of allowable building projections, such as balconies or bay windows from the required stepback for portions of the building above the ground floor.

Subject Site Description

Parcel 3 spans two City blocks in length and one City block in width. The building design is characterized by stepbacks and setbacks all along its four sides, with massing that variously includes portions that are 2 stories, 4 stories, 5 stories, 6 stories, and 7 stories. Stepbacks for from the Building Base occur for private and shared terraces. Two large stepbacks occur along Center street at the podium level, where two courtyards open out to the street-side. The massing attempts to provide variety, articulation, and relief, while expressing a dense program of mixed uses. The building design has variation in the perceived roof line, and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical layers along the street edge.

Above the 5-story Building Base, the proposed stepback is typically 8 feet, rather than 10', adding to the 3 foot to 7 foot setback from the property line. The design attempts to use a stepback depth which meets the intent of the code while also allowing the building massing to be within range of the prescribed fire access dimensions. Section D105.3 of the Fire Codes requires fire-fighting access not less than 15 feet and not greater than 30 feet from the building. The streetscape design, with broad sidewalks and on-street parking, discourages the building massing from meeting the Zoning Code's Stepback and Setback requirements. The Parcel 3 building design attempts to find a reasonable solution to the requirements, with a fire-fighting access depth of 30' to 33' at the upper floor stepbacks. Further, as most of the building voluntarily exceeds required Setbacks, the overall effect of the upper-story Stepback typically meets or exceeds the 10 feet required by Code.

The design concept includes a two-story trellis at the top levels, a scaling feature to unify the massing and articulation strategy along its three most public and visible sides. The trellis sits where the stepback creates a terrace. The trellis provides shade for the windows and terraces, and has perpendicular louvered fin walls that act as privacy screens between unit terraces. The trellis's top awning projects 8' from the stepped-back building face.

Modifications

Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

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DRAWING TITLE:
APPENDIX:
PARCEL ADJUSTMENTS

DRAWING NO:
APP1.01

Y8

Parcel 3 - Adjustment #3
Building Height

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.050 to:

Allow Building Height to be exceeded for inclusion of Community Benefits, by 4'-2", and by 8'-8" at key "pop-up" areas along the north "prow" of the building

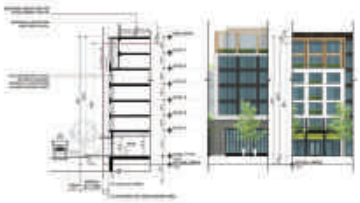
Code Requirements
16.45.050: Maximum Height
Maximum Height - (70-FT. + 10-FT. = 80-FT.) Bonus level development shall not exceed 70 feet in height, except that properties within the flood zone or subject to sea level rise are allowed a 10 foot increase in height and maximum heights.

Subject Site Description
Parcel 3 spans two City blocks in length and one City block in width. The building design is characterized by stepbacks and setbacks all along its four sides, with massing that variously includes portions that are 2 stories, 4 stories, 5 stories, 6 stories, and 7 stories. Stepbacks for from the Building Base occur for private and shared terraces. Two large stepbacks occur along Center street at the podium level, where two courtyards open out to the street-side. The massing attempts to provide variety, articulation, and relief, while expressing a dense program of mixed uses. The building design has variation in the perceived roof line, and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical layers along the street edge.

In order to achieve a flexible and reasonable ceiling height for community-benefitting ground floor retail uses, while still including 6 levels of residential units above to meet the housing targets – a slight increase in building height is proposed where the building massing is the full 7 stories. The allowable building height is 80 feet. The prosed building height is 78 feet-8 inches, measured from finished grade, or 84 feet-2 inches measured from existing grade. The proposed building height increase is by 4'-2". The proposed height is increased an additional 4'-6" at selected "pop-up" areas along the north "prow" of the building, a prominent feature seen along key vistas in Willow Village.

Modifications
Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments
Illustrative Adjustment Exhibit



Parcel 3-Adjustment #4
Ground Floor Exterior, Garage Entrances

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(3) to:

Allow grouped vehicle access locations along Center Street and West Street, without the minimum 100' separation distance

Code Requirements
16.45.120(1)-Ground Floor Exterior, Garage Entrances
Definition: Width of garage entry/door along street frontage.
Garage Entry Required: Maximum 12-foot opening for one-way entrance; maximum 24-foot opening for two-way entrance. Additional Requirements: Garage entrances must be separated by a minimum of 100 feet to ensure all entrances/exits are not grouped together or resulting in an entire stretch of sidewalk unsafe and undesirable for pedestrians.

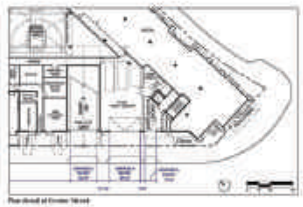
Subject Site Description
Parcel 3 spans two City blocks in length and one City block in width. A north-south pedestrian passage bisects the massing. The project proposes an active ground floor to befit its central location in the surrounding urban village environment. The ground floor program envisions a mix of residential and other active uses, including retail and food & beverage. Other more active amenity-like programs could be included. These uses will require an adequate amount of service access points, for: possible event parking, non-residential parking, residential parking, move-in/move-out access, and delivery/trash servicing. The project requires 2 parking garage access points (for 600-700 cars), up to 3 trash service bays, 1-2 move-in/move-out bays or lay-by parking zones, and multiple delivery areas, some of which can be shared with trash.

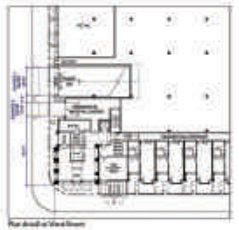
Main Street is a priority area for pedestrian activity, with plaza and active retail. Center Street is a residential street lined with stoops as much as possible. These priority pedestrian areas are supported by service areas concentrated in 2 locations: On the southern end of West Street, and the Eastern End of Center Street. The locations have servicing, move-in/out, and a parking access locations. The grouping of these vehicle access points, while in the least-bad places for site-planning and pedestrian movement, does not meet the 100' separation requirements, on either West Street or Center Street.

- On West Street, the 2 vehicles access points are consolidated, adjacent to each other just south of mid-block. The 2 vehicle access points are separated by 6'-8".
- On Center Street, the 3 vehicle access points are consolidated, are separated by 10' and 4', respectively.

Modifications
Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments
Illustrative Adjustment Exhibit





PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SO-41. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY. OBTAIN CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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DRAWING TITLE:
APPENDIX:
PARCEL ADJUSTMENTS

DRAWING NO:
APP1.02

Parcel 3 - Adjustment #5
Major Building Modulation

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.120(2) to:

- Allow for major modulations that are less than the required 10'
- Allow for major modulations to be achieved with stepped massing on Center St
- Allow for major modulations to be achieved with the "prow and diamond" jogged massing along Main Street

Code Requirements
16.45.120(2): Building Mass and Scale
Major Building Modulations: A major modulation is a break in the building plane from the ground level to the top of the building's base height that provides visual variety, reduces large building volumes, and provides spaces for entry ways and publicly accessible spaces. Modulation is required on building façade(s) facing publicly accessible spaces (streets, open space, and paseos). Parking is not allowed in the modulation recess. Minimum one recess of 15 feet wide by 10 feet deep per 200 feet of façade length.

Subject Site Description
Parcel 3 spans two City blocks in length and one City block in width. The building design is characterized by stepbacks and setbacks all along its four sides, with massing that variously includes portions that are 2 stories, 4 stories, 5 stories, 6 stories, and 7 stories. Stepbacks for from the Building Base occur for private and shared terraces. Two large stepbacks occur along Center street at the podium level, where two courtyards open out to the street-side. The massing attempts to provide variety, articulation, and relief, while expressing a dense program of mixed uses. The building design has variation in the perceived roof line, and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical layers along the street edge.

The design incorporates many of the major building modulation requirements to create visual interest on the various facades.

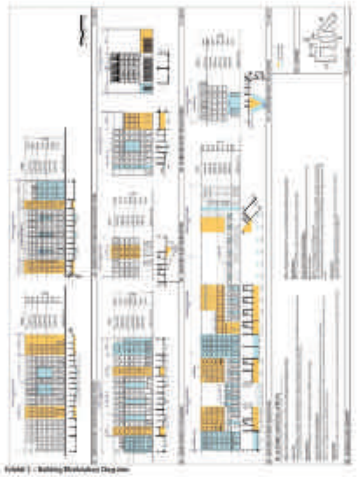
Along Center Street: The design slightly deviates from the requirements on the Center Street Elevation (See Exhibit 1), where there is a façade length of 230' before a major modulation on the ground floor is introduced. But within this 230' length, the massing steps back 8'-10' on Level 3-7. By creating this step back on the upper levels, it creates an emphasis on Level 1-2 to lend itself to a more residential scale composition.

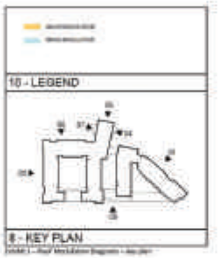
Along Main Street, the building includes stepbacks and minor modulations like along West Street. The major modulation occurs where the building massing pulls back from the street, across from the Town Square; then the "prow and diamond", projecting north from the massing, form a public-scaled, site-scaled major modulation.

Throughout the building facades, there are many major modulations that are open from ground to sky with generous widths in the spirit of the major building modulation requirement.

Modifications
Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments Illustrative Adjustment Exhibit 1-7





Parcel 3 - Adjustment #6
Roof Modulation

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.120(2) to:

- Allow for roof modulations less than 4'-0"

Code Requirements
16.45.120(6)G: Building Design
Roof Modulations
Rooflines and eaves adjacent to street-facing facades shall vary across a building, including a four foot minimum height modulation to break visual monotony and create a visually interesting skyline as seen from public streets. The variation of the roofline's horizontal distance should match the required modulations and stepbacks.

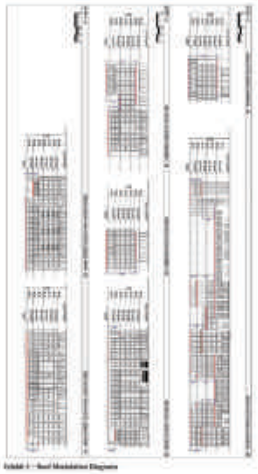
Subject Site Description
Parcel 3 spans two City blocks in length and one City block in width. The building design is characterized by stepbacks and setbacks all along its four sides, with massing that variously includes portions that are 2 stories, 4 stories, 5 stories, 6 stories, and 7 stories. Stepbacks from the Building Base occur for private and shared terraces. Two large stepbacks occur along Center street at the Level 3 podium, where two courtyards open out to the street-side. The massing attempts to provide variety, articulation, and relief, while expressing a dense program of mixed uses. The building design has variation in the perceived roof line, and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical layers along the street edge.

Roof modulation approach:
Along Center Street (Exhibit 1.06), the roofline varies 51' along massing changes from Level 3 to Level 7.
Along West Street (Exhibit 1.03), the roofline varies almost 24' form Level 5 to Level 7.
Along Main Street (Exhibit 1.01 and 1.02), the roofline varies almost 24' form Level 5 to Level 7.

The roofline's horizontal positioning follows major massing changes and design features of the building. The roofline's horizontal distance does not match the required frequent modulations and stepbacks. Rather, the roofline provides a more consistent backdrop and datum for the frequent modulations and massing changes to be seen and perceived against.

Modifications
Modifications to any adjustment may be considered according to Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments
Illustrative Adjustment Exhibits



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 3
Menlo Park, CA

SCALE:

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APPENDIX:
PARCEL ADJUSTMENTS

DRAWING NO:
APP1.03

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ATTACHMENT AA

VIEW FROM PUBLIC PARK

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS ISO A1. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY, OR SEEK CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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PERSPECTIVE

DRAWING NO:
A6.01

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TOWNHOUSES ON PARK STREET

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE:

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NORTH ELEVATION PERSPECTIVE

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

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A6.03

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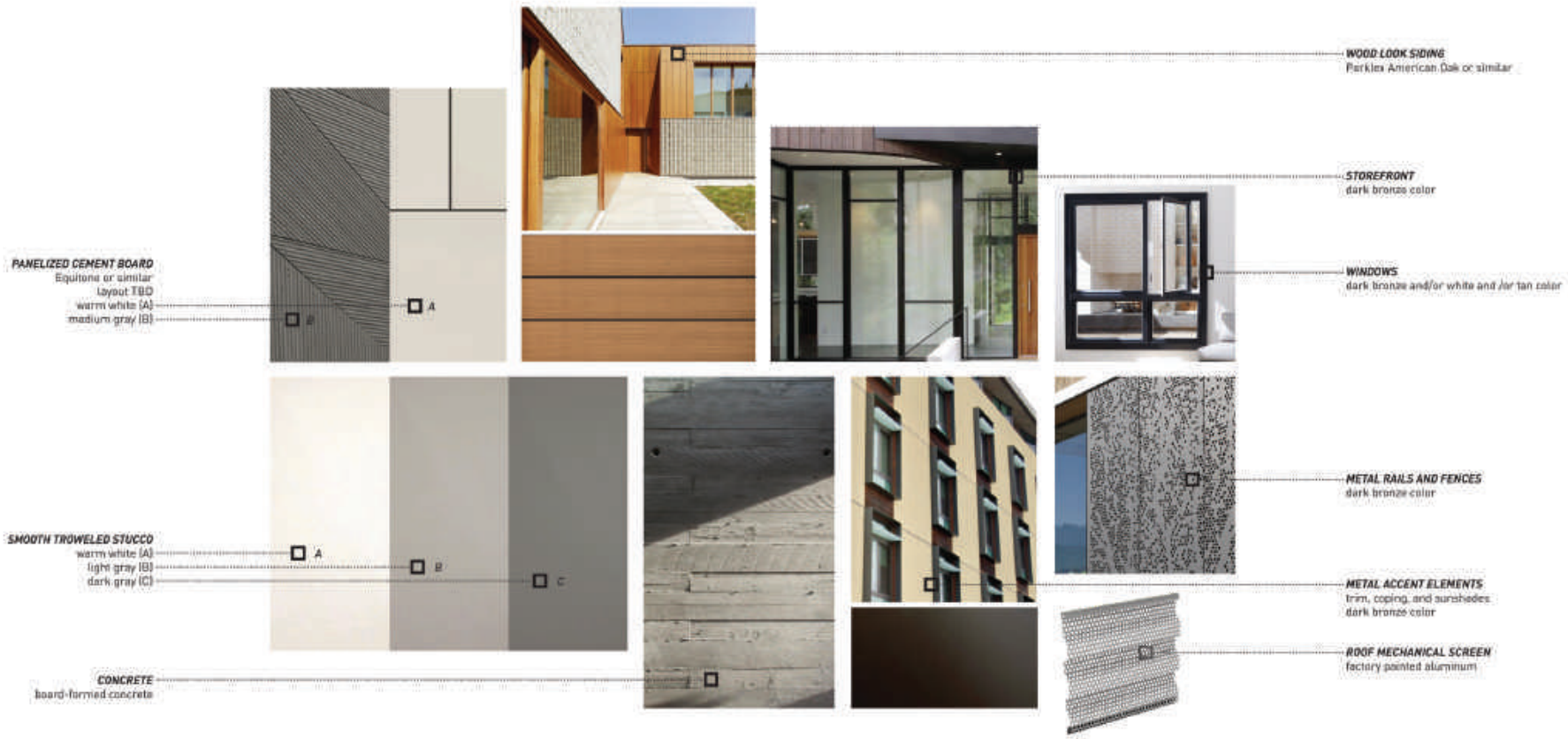

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE:

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DRAWING TITLE:
MATERIALS AND COLOR BOARD

DRAWING NO:
A7.01

Parcel 6 – Adjustment #1
Stepback

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow for Minimum Stepbacks of 5 feet instead of 10 feet in depth

Code Requirements

16.45.120(2): Building Mass and Scale

Minimum Stepback: The horizontal distance a building's upper story(ies) must be set back above the base height. Bonus Level Fronting a Local Street or a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street: 10' for a minimum of 75% of the building face along public street(s).

Subject Site and Proposed Building Description

Parcel 6 spans along Park Street with a frontage length of +/- 270 feet. The proposed building design is characterized by stepbacks and setbacks all along its four sides, with massing that variously includes portions that are 3 stories, 6 stories and 7 stories. Stepbacks from the building base occur for private and shared terraces. The massing attempts to provide variety, articulation, and relief, while opening up to and embracing the public park to the west. The building design has variation in the perceived roof line and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical layers along the Park Street edge.

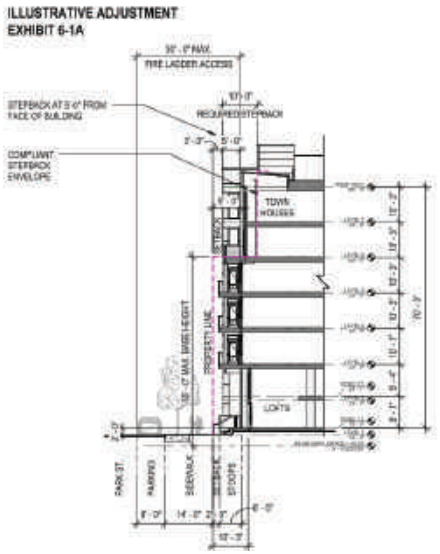
Above the 55 foot building base height, along Park Street, the proposed stepback is typically 8 feet from property line and 5 feet from building face, rather than 10 feet from building face. The building façade below the 55 foot building base height is typically 3 foot setback from the property line to provide for a more gracious public right of way experience and to mitigate what will otherwise be a cavernous feeling at ground level where the building massing has a greater than 8 foot setback along Park Street coupled with stoops to increase privacy for ground level units. The design attempts to use a stepback depth that meets the intent of the code while also allowing the building massing to be within range of the prescribed fire access dimensions. Section D105.3 of the Fire Codes requires fire-fighting access not less than 15 feet and not greater than 30 feet from the building. The streetscape design, with broad sidewalks and on-street parking, discourages the building massing from meeting the Zoning Code's Minimum Stepback and setback requirements. The proposed Parcel 6 building design attempts to find a reasonable solution to the requirements, with a fire-fighting access depth of 30 feet at the upper floor stepbacks.

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibits 6-1A** and **6-1B**



Parcel 6 – Adjustment #2
Minor Building Modulations

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow for greater than 50 foot length of flexible façade modulation rhythm and composition for levels 3-6 of the frontage with minor modulations provided at first and second levels.

Code Requirements

16.45.120(2): Building Scale and Massing

Minor Building Modulations

Minimum recess of 5 foot wide by 5 foot deep per 50 feet of façade length.

Modulation is required on the building façade(s) facing publicly accessible spaces (street, open spaces, and paseos). Parking is not allowed in the modulation recess. When more than 50% of an existing building façade that faces a publicly accessible space is altered, it must comply with these requirements. Building projections spaced no more than 50 feet apart with a minimum 3-foot depth and 5-foot width may satisfy this requirement in lieu of a recess.

Subject Site and Proposed Building Description

Parcel 6 spans along Park Street with a frontage length of +/- 270 feet. The proposed building design is characterized by stepbacks and setbacks all along its four sides, with massing that includes portions that are 3 stories, 6 stories and 7 stories. Stepbacks from the building base occur for private and shared terraces. The massing attempts to provide variety, articulation, and relief, while opening up to and embracing the public park to the west. The building design has variation in the perceived roof line and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical layers and rhythm along the Park Street edge.

The design deviates from Minor Modulations requirement in approximately 167'-2" of facade length for three stories only (shown in attached Exhibit 6-2A) in order to add massing contrast and create a different/simpler horizontal rhythm and language in this portion of the building. Minor modulations are provided at the first two levels of the subject building mass/element. The design rationale is that providing a portion of the facade with minimal modulation and a simpler form language will prevent an overly busy street frontage and allow for a portion of the façade to read as predominantly horizontal while still having significant openings and carve outs in the form of private balconies.

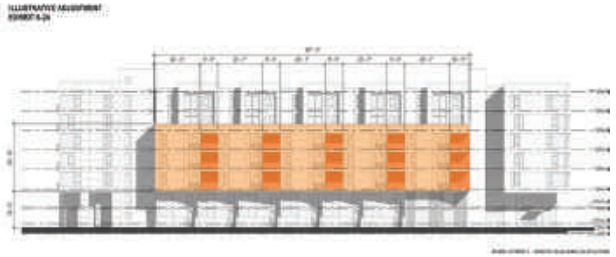
The west facing public park façade is minor modulation compliant as can be seen in Exhibit 6-2B.

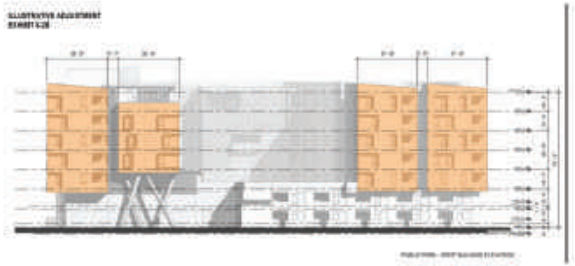
Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibits 6-2A** and **6-2B**





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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE:

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APPENDIX - PARCEL ADJUSTMENTS

DRAWING NO:
APP1.01

Parcel 6 – Adjustment #3
Base Height

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow for 3'-6" increase in base height to top of solid parapet/guardrail.

Code Requirements
16.45.120(2): Building Scale and Massing
Base Height
The maximum height of a building at the minimum setback at street or before the building steps back the minimum horizontal distance required.

Subject Site and Proposed Building Description

Parcel 6 spans along Park Street with a frontage length of +/- 270 feet. The proposed building design is characterized by stepbacks and setbacks all along its four sides, with massing that includes portions that are 3 stories, 6 stories and 7 stories. Stepbacks along the Park Street facade occur at base height and include private terraces formed by the building upper floor stepback.

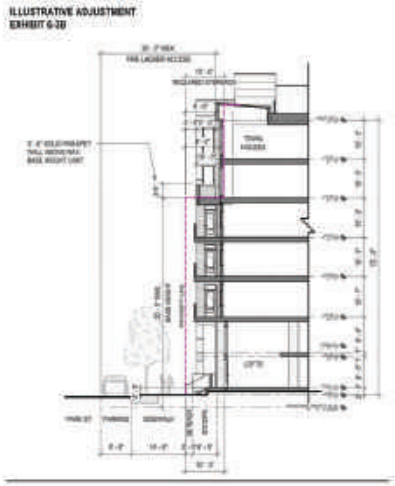
The design deviates from the Base Height requirement in approximately 167'-2" of Park Street facade length (shown in attached Exhibit 6-3A). The building mass in question does achieve a compliant step back 6th floor level at 55'-0" above natural grade, however the building design is reliant on a solid parapet wall above the 6th floor stepback floor level to complete the horizontal language of the mid-building massing while simultaneously servin as a guardrail for the private terraces created by the required stepback. The solid parapet runs continuous at 58'-6" above natural grade. The applicant is requesting adjustment for a parapet that is 3'-6" taller than the complian 55'-0" base height step back (see Exhibit 6-3B).

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consisten Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibits 6-3A** and **6-3B**



Parcel 6 – Adjustment #4
Roof Modulation

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.120(6)G to:

Allow for roof modulations less than 4'-0"

Code Requirements
16.45.120(6)G: Building Design
Roof Modulation
Rooflines and eaves adjacent to street-facing facades shall vary across a building, including a four (4) foot minimum height modulation to break visual monotony and create a visually interesting skyline as seen from public streets (see Figure 6). The variation of the roofline's horizontal distance should match the required modulations and stepbacks.

Subject Site and Proposed Building Description

Parcel 6 spans along Park Street with a frontage length of +/- 270 feet. The proposed building design is characterized by stepbacks and setbacks all along its four sides, with massing that includes portions that are 3 stories, 6 stories and 7 stories.

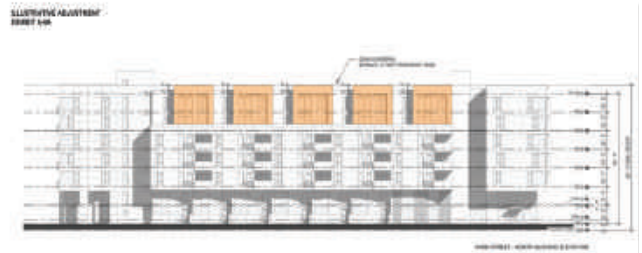
The building is generally designed with roof modulations that include a combination of sloped shed roof forms and parapets which strive for visual interest and an eye towards creation of a '5th façade'. However, in order to meet unit mix and site density requirements while staying under the maximum height constraint of 80'-0", roof modulations are less than the required 4'-0" in locations along Park Street and facing the public park to the west. As described by Exhibit 6-4A, roof modulations along Park Street are 2'-5". As described by Exhibit 6-4B, the roof modulations along the west façade facing the public park are 2'-8 ½".

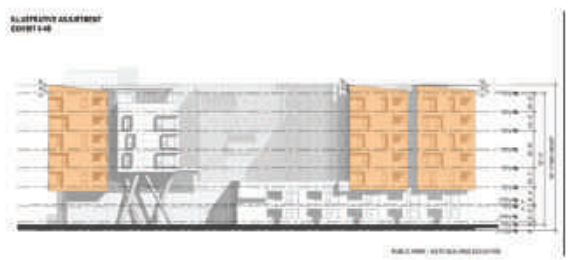
Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibits 6-4A** and **6-4B**





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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 6
Menlo Park, CA

SCALE:

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APPENDIX - PARCEL ADJUSTMENTS

DRAWING NO:
APP1.02

VIEW FROM CENTRAL STREET TO PARCEL 7 AND BUILDING ENTRANCE

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE:

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ARCADE

PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE:

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

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MATERIALS AND COLOR BOARD

DRAWING NO:
A7.01

Parcel 7 – Adjustment #1
Stepback

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow for Minimum Stepbacks of 8 feet instead of 10 feet in depth

Code Requirements
16.45.120(2): Building Mass and Scale
Minimum Stepback: The horizontal distance a building's upper story(ies) must be set back above the base height. Bonus Level Fronting a Local Street or a Boulevard, Thoroughfare, Mixed Use Collector, or Neighborhood Street: 10' for a minimum of 75% of the building face along public street(s).

Subject Site and Proposed Building Description

Parcel 7, a 120 unit permanently affordable senior residential building, spans along Park Street with a frontage length of +/- 274 feet and a triangular shaped parcel. The proposed building design is characterized by stepbacks and setbacks all along its four sides, with massing that includes portions that are 1 story, 5 stories and 6 stories. Stepbacks from the building base occur for a pedestrian arcade along Park Street at ground level and at the 5th floor for private and shared terraces. The building design has variation in the perceived roof line and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical and horizontal layers along the Park Street edge.

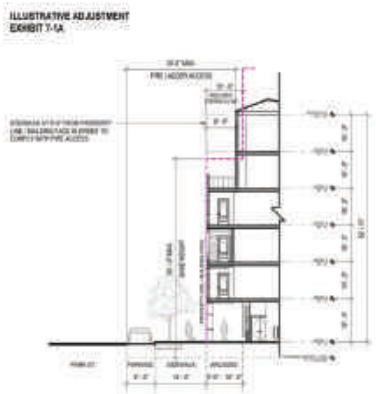
Above the 55 foot building base height, along Park Street, the proposed stepback is typically 8 feet from property line and building face, rather than 10 feet from property line and building face. The building façade below the 55 foot building base height is typically at the property line with the ground level arcade being used for a more gracious public right of way experience. The design attempts to use a stepback depth which meets the intent of the code while also allowing the building massing to be within range of the prescribed fire access dimensions. Section D105.3 of the Fire Codes requires fire-fighting access not less than 15 feet and not greater than 30 feet from the building. The streetscape design, with broad sidewalks and on-street parking, discourages the building massing from meeting the Zoning Code's Minimum Stepback and setback requirements. The proposed Parcel 7 building design attempts to find a reasonable solution to the requirements, with a fire-fighting access depth of 30 feet at the upper floor stepbacks.

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibit 7-1A and Exhibit 7-1B**



Parcel 7 – Adjustment #2
Minor Building Modulations

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.120(2) to:

Allow for greater than 50 foot length of flexible façade modulation rhythm and composition

Code Requirements
16.45.120(2): Building Scale and Massing
Minor Building Modulations
Minimum recess of 5 foot wide by 5 foot deep per 50 feet of façade length.
Modulation is required on the building façade(s) facing publicly accessible spaces (street, open spaces, and paseos). Parking is not allowed in the modulation recess. When more than 50% of an existing building façade that faces a publicly accessible space is altered, it must comply with these requirements. Building projections spaced no more than 50 feet apart with a minimum 3-foot depth and 5-foot width may satisfy this requirement in lieu of a recess.

Subject Site and Proposed Building Description

Parcel 7, a 120 unit permanently affordable senior residential building, spans along Park Street with a frontage length of +/- 274 feet and a triangular shaped parcel. The proposed building design is characterized by stepbacks and setbacks all along its four sides, with massing that includes portions that are 1 story, 5 stories and 6 stories. Stepbacks from the building base occur for a pedestrian arcade along Park Street at ground level and at the 5th floor for private and shared terraces. The building design has variation in the perceived roof line and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical and horizontal layers along the Park Street edge.

The building design deviates from the Minor Modulations requirements in two distinct areas along the Park Street frontage.

To the West of the major building modulation break in the façade, which is aligned with the elevator core and main lobby entrance, approximately 68'-0" > 50'-0" of façade is left without a ground to sky minor modulation massing break in order to add massing contrast and create a strong anchor volume at the building corner. Minor modulations in the form of a ground level pedestrian arcade and second floor recessed balconies are provided at the first two levels of the subject building mass. Providing a portion of the facade with minimal modulation and a simpler form language helps to mitigate an overly busy frontage and accentuate the break between Parcel 6 and Parcel 7 along the street edge.

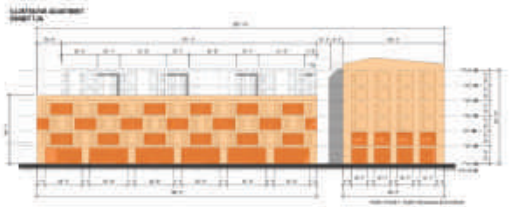
To the East of the major building modulation break in the façade, 188'-0" > 50'-0" levels 2 thru 4 of façade is left without a ground to sky minor modulation massing break. The entire Park Street façade is designed with a continuous pedestrian scale arcade from West to East ends of the building. This arcade is important in providing the senior population of Parcel 7 with a protected venue from which to engage with the street life. Seniors will inhabit and activate the public realm along this arcade frontage which will also widen the public sidewalk and enhance the pedestrian experience. The arcade design is contingent on a continuous carved building massing at the ground level. The remainder of the building facade is designed with generous rhythmic modulations and fenestration playing off the simpler corner building form and massing. From floors 2 thru 4 over 30% of the façade is carved out with private balconies for the senior residential units. The balconies are designed to promote unit to adjacent unit socialization.

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibit 7-2A**



PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE:

NOTE: THIS DRAWING IS SIZED A1. DO NOT SCALE. REFER TO FIGURED DIMENSIONS ONLY. OBTAIN CLARIFICATION FROM ARCHITECT FOR MEASUREMENTS THAT ARE NOT INDICATED.

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Parcel 7 – Adjustment #4
Roof Modulation

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.120(6)G to:

Allow for roof modulations less than 4'-0"

Code Requirements
16.45.120(6)G: Building Design
Roof Modulation
Rooflines and eaves adjacent to street-facing facades shall vary across a building, including a four (4) foot minimum height modulation to break visual monotony and create a visually interesting skyline as seen from public streets (see Figure 6). The variation of the roofline's horizontal distance should match the required modulations and stepbacks.

Subject Site and Proposed Building Description

Parcel 7, a 120 unit permanently affordable senior residential building, spans along Park Street with a frontage length of +/- 274 feet and a triangular shaped parcel. The proposed building design is characterized by stepbacks and setbacks all along its four sides, with massing that includes portions that are 1 story, 5 stories and 6 stories. Stepbacks from the building base occur for a pedestrian arcade along Park Street at ground level and at the 5th floor for private and shared terraces. The building design has variation in the perceived roof line and also includes setbacks and stepbacks of varying depths for opportunities to provide significant relief in the massing and to establish additional vertical and horizontal layers along the Park Street edge. The Roof planes and modulations generally align with the building façades respectively below them.

To the West of the major modulation massing break the building volume has an asymmetric gable roof form with a 4'-5" low to high modulation which is compliant for modulation height. However, this roof form extends across 68'-0" of horizontal distance, which like the volume below the roof, is greater than the 50'-0" required minor modulation massing break. See parcel 7 adjustment request #2 dealing with the façade in this location.

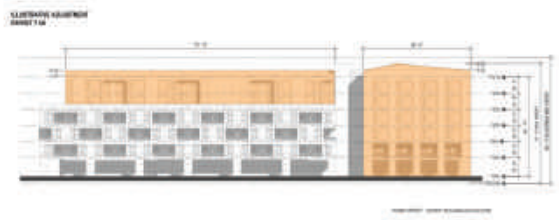
To the East of the major modulation massing break the building volume has an asymmetric gable roof form which is turned perpendicular from the West roof form with a 3'-3" low to high modulation. This is intentional and provides opportunity for the building to be viewed from multiple angles as having an asymmetric gable roof form. This roof area extends 171'-3" along Park Street without minor modulation which is greater than the 50'-0" required minor modulation massing break. Again, this is intentional and compliments the level 5 and 6 façade immediately below while enhancing the level 2 thru 4 façade design. See parcel 7 adjustment request #2 dealing with the façade in this location.

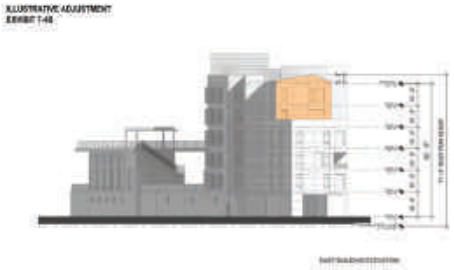
Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibit 7-4A** and **7-4B**





Parcel 7 – Adjustment #5
Parking reduction

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.080/WVMP 2.1(A) to:

Reduce required parking ratio for Senior units from 1 per unit to 0.5 per unit.

Code Requirements
16.45.080 Parking standards.
Development in the R-MU district shall meet the following parking requirements:
Residential units: Minimum Spaces (Per Unit or 1,000 Sq. Ft.): 1 per unit

Subject Site and Proposed Building Description

Parcel 7, a 120 unit permanently affordable senior residential building, spans along Park Street with a frontage length of +/- 274 feet and a triangular shaped parcel. There is a ground level, in-building parking garage proposed under a Type-1 concrete podium servicing the residential senior units of the building above. The project applicant proposes to provide 0.5:1 residential unit to parking space ratio resulting in 60 residential use car parking (see related parcel 7 adjustment request #6 for shared parking). As there are multiple transit lines within ¼ mile walking distance from the building it is anticipated that car ownership demand from the resident population will be significantly less than a comparable project not serviced by transit.

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

None

Parcel 7 – Adjustment #6
Shared Parking

Adjustment Request
Allow adjustments to Zoning Code Section 16.45.080(2) to:

Provide 36 of the total required 60 parking spots in a shared arrangement with Parcel 6

Code Requirements
16.45.080 Parking standards.
Shared Parking
(2) Parking facilities may be shared at the discretion of the city's transportation manager if multiple uses cooperatively establish and operate the facilities, if these uses generate parking demands primarily during different hours than the remaining uses, and if a sufficient number of spaces are provided to meet the maximum cumulative parking demand of the participating uses at any time. An individual development proposal may incorporate a shared parking study to account for the mixture of uses, either on site or within a reasonable distance. The shared parking supply would be subject to review and approval based on the proposed uses, specific design and site conditions. Project applicants may also be allowed to meet the minimum parking requirements through the use of nearby off-site facilities at the discretion of the transportation manager. (Ord. 1026 § 3 (part), 2016).

Subject Site and Proposed Building Description

Parcel 7, a 120 unit permanently affordable senior residential building, spans along Park Street with a frontage length of +/- 274 feet and a triangular shaped parcel. There is a ground level, in-building parking garage proposed under a Type-1 concrete podium servicing the residential senior units of the building above. Parcel 7 is proposed to be parked at 0.5:1 parking space to unit ratio yielding 60 total residential parking spots. (see parcel 7 zoning adjustment request #5). Due to the irregular shaped parcel 7 footprint and programmatic constraints at the ground level, it is not possible to provide more than 22 total parking spots in the parcel 7 parking garage. The project applicant proposes to enter into a binding shared parking agreement with adjacent parcel 6 to provide the remaining 38 residential spots. In the parcel 6 parking garage the shared parking spots will be parked in quad stack parking lifts, immediately adjacent the entrance to the parcel 6 parking garage, proximate to the parcel 7 lobby and will be for use of parcel 7 residents only. See attached adjustment exhibit 7-6 for a floor plan illustration of the proposed shared parking arrangement.

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibit 7-6**

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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

SCALE:

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Parcel 7 – Adjustment #7

Bicycle parking reduction

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.080 to:

Provide 0.5:1 covered bicycle parking in lieu of 1.5:1. Provide 10% additional short-term bicycle parking of the provided long-term spaces in lieu of 10% of the required long-term spaces.

Code Requirements

16.45.080; 16.45.120(7) and best practice standards in Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines: Residential Units Bike Parking

Minimum 1.5 long term bike parking space per unit; 10% additional short-term for guests

Subject Site and Proposed Building Description

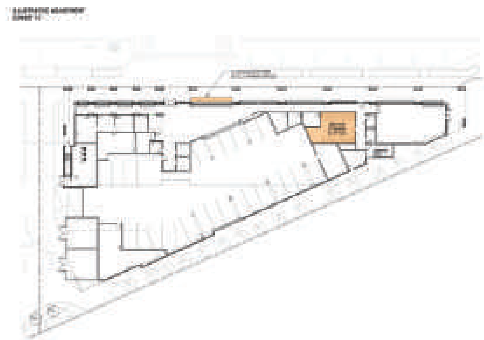
Parcel 7, a 120 unit permanently affordable senior residential building, spans along Park Street with a frontage length of +/- 274 feet and a triangular shaped parcel. There is a ground level, in-building, bicycle parking room with space to park 60 bicycles in 2-level, lift assisted bike parking stack racks (see illustrative adjustment exhibit 7-7). This represents 0.5:1 long term covered bike parking provision vs the code required 1.5:1. Marketplace industry standard does not support 1.5:1 covered bike parking for the proposed senior resident population. In addition, the units in the building are predominantly studios and thus occupancy will be inherently limited by unit design. The proposed project will provide 6 additional short-term bicycle parking, 10% of the provided long term spaces, for guests in exterior bike racks adjacent to the main building lobby entrance.

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibit 7-7**



Parcel 7 – Adjustment #8

Frontage Landscaping

Adjustment Request

Allow adjustments to Zoning Code Section 16.45.120(1) to:

Provide biotreatment planting adjacent the building frontage

Code Requirements

16.45.120(1) Relationship to the Street: Frontage Landscaping – Bonus level fronting a mixed-use collector.

Minimum of 25% (50% of which should provide on-site infiltration of stormwater runoff)

Subject Site and Proposed Building Description

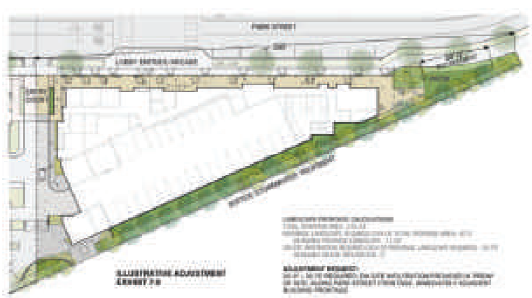
Parcel 7, a 120 unit permanently affordable senior residential building, spans along Park Street with a building frontage length of +/- 274 feet and a triangular shaped parcel with total Park Street frontage length of +/- 390 feet. The landscape design at the building frontage incorporates in-ground planters flanking building support columns along a continuous pedestrian arcade formed as a carved setback in the ground level building frontage. (see illustrative adjustment exhibit 7-8). Due to the North facing nature of the frontage, the design of the continuous ground level pedestrian arcade and bike parking requirements there is no available space to place biotreatment planting along the building frontage. The project applicant proposes to place biotreatment planting area in the prow of the triangular parcel in an area immediately adjacent the building frontage while still being part of the Park Street parcel frontage. The landscape design does achieve compliance for minimum non biotreatment landscaping along building frontage.

Modifications

Modifications to any adjustment may be considered according to CDP Section x governing Substantially Consistent Modifications and Minor Modifications.

Attachments

Illustrative Adjustment **Exhibit 7-8**



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PENINSULA INNOVATION PARTNERS

WILLOW VILLAGE
Architectural Control Package - Parcel 7
Menlo Park, CA

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DRAWING NO: APP1.03

H. T. HARVEY & ASSOCIATES
Ecological Consultants
50 years of field notes, exploration, and excellence

Willow Village Master Plan
Bird-Safe Design Assessment

Project #3375-21

Prepared for:

Brian Zubradt
Peninsula Innovation Partners
1 Hacker Way, Building 28
Menlo Park, CA 94025

Prepared by:

H. T. Harvey & Associates

February 24, 2022

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Table of Contents

Appendices

List of Preparers

Steve Rottenborn, Ph.D., Principal/Senior Wildlife Ecologist
Robin Carle, M.S., Project Manager/Senior Wildlife Ecologist

Section 1. Introduction and Purpose

Per the request of Peninsula Innovation Partners, H. T. Harvey & Associates has performed an assessment of avian collision risk for the proposed Willow Village Master Plan project (Master Plan) located in Menlo Park, California.

It is our understanding that the project proposes to replace more than one million square feet of existing industrial, office, and warehouse space in the 59-acre Menlo Science and Technology Park with a new residential/mixed-used village that includes up to 1,730 residential units, up to 200,000 square feet of retail uses, a hotel with up to 193 rooms and accessory uses, approximately 1,600,000 square feet of space for office and accessory uses (with a maximum of 1,250,000 square feet of office uses and the balance 350,000 square feet [if office use is maximized] of accessory uses) on the project site. The site is bounded by Willow Road to the west, the Joint Powers Board (JPB) rail corridor to the north, the Hetch Hetchy right-of-way corridor and Mid-Peninsula High School to the south, and an existing life science complex to the east. To allow for the transformation of the site into a vibrant residential/mixed-use community, the plan will require demolition of all existing site improvements consisting of buildings, streets, and utilities.

This report provides an analysis of bird collision hazards associated with the conceptual design for the Master Plan and documents the bird-safe design measures that will be incorporated into the project to ensure that (1) project impacts due to bird collisions with buildings are reduced to less-than-significant levels under the California Environmental Quality Act (CEQA), and (2) the project complies with City of Menlo Park bird-safe design requirements.

This assessment is based on the project's Conditional Development Permit (CDP) application, as well as additional design details for the various Master Plan components identified in Appendix A to support our assessment. We will also review the final Architectural Control Plans (ACPs) and produce a subsequent final report for each Master Plan component to document (1) compliance with the CEQA mitigation measures the project will implement to mitigate significant CEQA impacts; and (2) compliance with City of Menlo Park bird-safe design requirements (with requests for waivers of certain requirements as permitted by the City bird-safe design requirements and including compliance with alternative City measures, where appropriate); and (3) compliance with the lighting design principles identified herein. If we find that modifications are needed to the ACPs to ensure that impacts are reduced to less-than-significant levels under CEQA and/or compliance with City requirements, we will provide recommended modifications in our reports for individual ACPs.

Section 2. City Bird-Safe Design Requirements

In 2014, the City of Menlo Park initiated the process of updating its General Plan Land Use and Circulation Elements as well as its zoning for the M-2 area (also known as the Bayfront Area) in the northern portion of Menlo Park. Collectively, this update to the General Plan and zoning is known as *ConnectMenlo*. On November 29, 2016, the City Council certified the *ConnectMenlo: General Plan Land Use & Circulation Elements and M-2 Area Zoning Update Environmental Impact Report* (ConnectMenlo EIR) and approved the General Plan Land Use and Circulation Elements. The Willow Village project is located within the ConnectMenlo area.

Mitigation Measure BIO-1 of the ConnectMenlo EIR requires measures to ensure that the project reduces bird collisions with new buildings. For the purpose of this report, we assume that the project will comply with City of Menlo Park bird-safe design requirements (including obtaining waivers, as permitted by the City bird-safe design requirements, where applicable) provided in Municipal Code Sections 16.43.140(6) and 16.45.130(6), which include measures to reduce bird collisions. Hereafter, the bird-safe design measures in the ConnectMenlo EIR and the City's Municipal Code are referred to together as *City bird-safe design requirements*. These requirements are as follows:

A. No more than 10% of facade surface area shall have non-bird-friendly glazing.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

C. Occupancy sensors or other switch control devices with an astronomic time clock shall be installed on nonemergency lights and shall be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

G. Use of rodenticides shall not be allowed.

A project may receive a waiver from requirements A through F, subject to the submittal of a site-specific evaluation from a qualified biologist (defined as an ornithologist familiar with local bird communities and populations and with expertise assessing avian collision risk) and review and approval by the planning commission. A waiver from requirement G is not authorized. The project will comply with requirement G, and this requirement is not discussed further in the body of this report.

However, to address collision risk with the project buildings, tailored alternative bird-safe design measures, derived from the City of Menlo Park's requirements with appropriate waivers, are provided in Section 5 of this report based on the conceptual designs in the project's CDP application to reduce collision impacts to less-than-significant levels under CEQA (hereafter, these alternative measures are referred to as *alternative City measures*). Sections 5 and 6 of this report provides a discussion of how the Master Plan components will comply with the City's bird-safe design requirements, as well as examples of locations where waivers to the City requirements are, in our professional opinion, appropriate in areas of low collision risk. Waivers are requested in order for the project to achieve design excellence (e.g., related to aesthetics, energy efficiency, or project objectives). Waivers are requested only where strict adherence to the City's bird-safe design requirements (a) is not necessary to reduce project impacts to less-than-significant levels under CEQA and (b) would not substantively reduce bird collision risk beyond the alternative City measures proposed in Sections 5 and 6 (discussed in detail in Sections 5 and 6 below).

This report documents the CEQA mitigation measures and alternative City measures the project will implement to reduce impacts to less-than-significant levels and comply with the City's bird-safe design requirements. Documentation of compliance with this report will be provided in subsequent reports for each ACP for the project.

Section 3. Project Site Conditions

3.1 Existing Conditions

Habitat conditions and bird occurrence in the immediate vicinity of the project site (i.e., on the site and on immediately adjacent lands) are typical of much of the urbanized San Francisco Bay area. The approximately 64.0-acre project site currently supports office buildings, roadways, restaurants, a gas station, parking lots, walking paths, mulched and irrigated areas, and landscape areas (Photos 1–4). The site is located across the inactive JPB rail corridor from a storage facility and large brackish marsh to the north, and is otherwise surrounded by high-density commercial and residential development to the east, west, and south (Figure 1).

Photo 1. Office buildings, parking lots, and landscape areas on the project site.

Photo 2. Landscape areas and trees on the project site.

Photo 3. An overgrown wooded area with landscape trees on the project site.

Photo 4. Office buildings and landscape trees on the project site.

Figure 1. The project site (delineated in yellow) is surrounded by commercial and residential development to the east, west, and south. The inactive JPB rail corridor, a storage facility, and a large brackish marsh are located to the north.

Habitat conditions on the site are of low quality for most native birds found in the region due to the scarcity of vegetation, the lack of well-layered vegetation (e.g., with ground cover, shrub, and canopy tree layers in the same areas), and the small size of the vegetated habitat patches. Landscaped areas on the site support nonnative Canary Island pine (*Pinus canariensis*), Chinese pistache (*Pistacia chinensis*), London plane (*Platanus* x *hispanica*), eucalyptus (*Eucalyptus* sp.), and crepe myrtle (*Lagerstroemia* sp.) trees. Common understory plants include nonnative buckbrush (*Ceanothus* sp.) and rosemary (*Rosmarinus officinalis*). Nonnative vegetation supports fewer of the resources required by native birds compared to native vegetation, and the structural simplicity of the vegetation further limits resources available to birds (Anderson 1977, Mills et al. 1989). Nevertheless, there is a suite of common, urban-adapted bird species that occur in such urban areas that are expected to occur on the site regularly. These include the native Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), Bewick's wren (*Thryomanes bewickii*), bushtit (*Psaltriparus minimus*), dark-eyed junco (*Junco hyemalis*), and house finch (*Haemorhous mexicanus*), as well as the non-native European starling (*Sturnus vulgaris*) and house sparrow (*Passer domesticus*). All of these birds are year-round residents that can potentially nest on or immediately adjacent to the project site. A number of other species, primarily migrants or winter visitors (i.e., nonbreeders), are expected to occur occasionally on the site as well, including the white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), and yellow-rumped warbler (*Setophaga coronata*). All of the species expected to occur regularly are regionally abundant species, and no special-status birds (i.e., species of conservation concern) are expected to nest or occur regularly on the site.

The habitat conditions located to the east, west, and south of the project site are very similar to those on the project site itself. These areas are dominated by commercial and residential uses and have landscaping similar to that on the project site (Figure 1). As a result, bird use of these surrounding areas is as described above for the project site.

A large brackish marsh is present approximately 150 feet north of the project site, north of the inactive JPB rail corridor and a storage facility (Figure 1). This brackish marsh, which extends north to State Route 84 and east to University Avenue, is dominated by salt marsh and brackish marsh plants and contains several channels. As a result, marsh-associated special-status birds such as the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), Alameda song sparrow (*Melospiza melodia pusillula*), and northern harrier (*Circus hudsonius*) – all of which are California species of special concern – may occur in this area. However, state and federally listed birds associated with tidal salt marshes, salt pannes, and aquatic habitats, such as the California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), western snowy plover (*Charadrius nivosus nivosus*), and California least tern (*Sternula antillarum browni*), are absent from these habitats.

Further to the northeast and northwest are former salt ponds, now managed as waterbird habitat, and the waters and marshes of the San Francisco Bay. Ravenswood Pond R3 is located approximately 750 feet north of the site, and is separated from the site by the inactive JPB rail corridor, commercial development, and Highway 84 (Figure 1). Ravenswood Pond SF2 is located approximately 1,760 feet northeast of the site, and is separated from the site by the inactive JPB rail corridor, a large brackish marsh (discussed above), and University Avenue (Figure 1). These ponds provide foraging habitat for a wide variety of waterbirds such as the American avocet (*Recurvirostra americana*), western sandpiper (*Calidris mauri*), marbled godwit (*Limosa fedoa*), ruddy duck (*Oxyura jamaicensis*), semipalmated plover (*Charadrius semipalmatus*), dunlin (*Calidris alpina*), least sandpiper (*Calidris minutilla*), red knot (*Calidris canutus*), long-billed dowitcher (*Limnodromus scolopaceus*), northern shoveler (*Spatula clypeata*), green-winged teal (*Anas crecca*), canvasback (*Aythya valisineria*), American white pelican (*Pelecanus erythrorhynchos*), black-bellied plover (*Pluvialis squatarola*) and others (Cornell Lab of Ornithology 2021). The federally threatened western snowy plover also nests and forages in Pond SF2.

Due to their location along the edge of the San Francisco Bay and the extensive areas of habitat present, the managed ponds located northeast and northwest of the project site support relatively high numbers of species of birds compared to areas located farther inland in San Mateo (Figure 2). Based on observations by birders over the years, approximately 138 species of birds have been recorded at pond SF2 and 136 species along the Bay Trail adjacent to Pond R3, including year-round resident, migrant, and wintering landbirds (associated with upland areas), shorebirds (associated with the shoreline), and waterbirds (associated with open water habitat) (Cornell Lab of Ornithology 2021). Ebird records suggest that some species of shorebirds and waterbirds can occur in these areas in large numbers (i.e., 1,000 individuals), but the majority of these species occur in smaller flocks. A number of migrant bird species will remain in this area for days to weeks to rest and forage. Resident birds that are present in the vicinity year-round are similarly attracted to the open habitats within these salt ponds in relatively large numbers for foraging opportunities (Cornell Lab of Ornithology 2021).

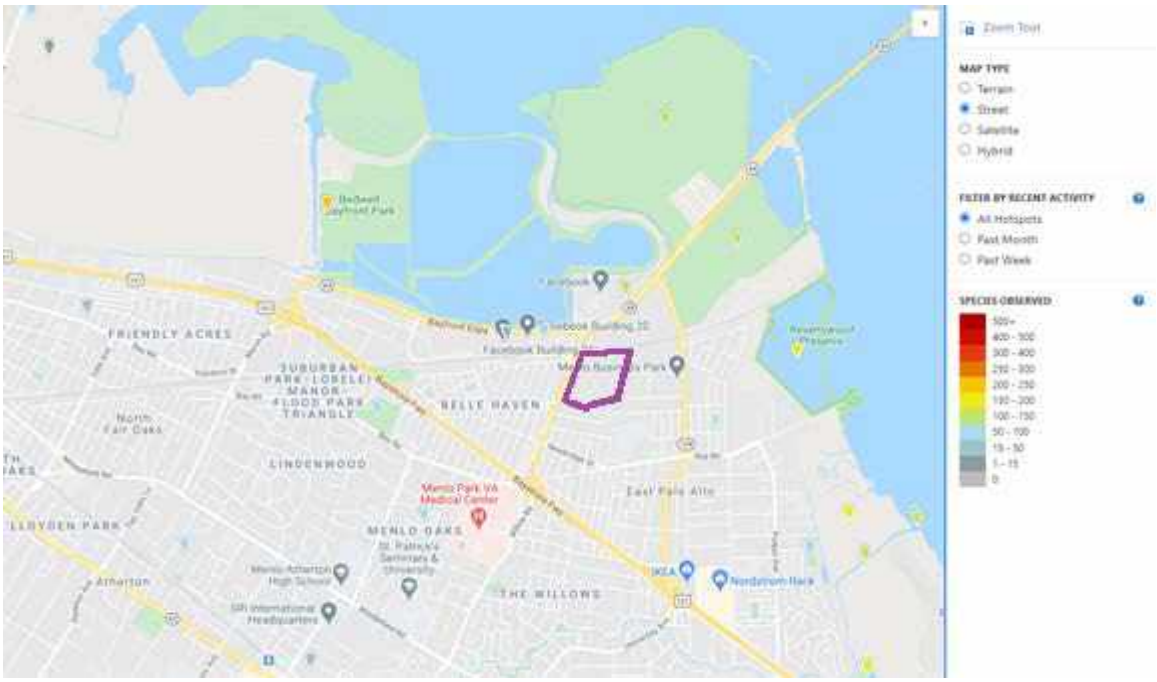

Figure 2. Map of eBird hotspots in the site vicinity. The project site is outlined in purple.

3.2 Proposed Conditions

The project would construct office and accessory space, parking garages, a hotel, retail, residential, and residential/mixed-use buildings on the majority of the site. A portion of the office and accessory space would be located inside a glass atrium. We do not expect these artificial structures to provide high-quality habitat for birds. However, the project will also create approximately 20 acres of open space areas consisting of paved pedestrian areas and landscape vegetation. The conceptual planting plans for these areas predominantly include nonnative trees, shrubs, and herbaceous plants (Appendix B). Nonnative trees to be planted on the site may include red maple (*Acer rubrum*), deodar cedar (*Cedrus deodara*), Canary Island pine, European olive (*Olea europea*), Mexican fan palm (*Washingtonia robusta*), agave (*Agave* sp.), ginkgo (*Ginkgo biloba*), Chinese elm (*Ulmus parvifolia*), crape myrtle, London plane, Brisbane box (*Lophostemon confertus*), coast redwood (*Sequoia sempervirens*) (which is not locally native to the project site), and red alder (*Alnus rubra*). In addition, native California sycamores (*Platanus racemosa*) and coast live oaks (*Quercus agrifolia*) may be planted on the site. Shrubs, forbs, and grasses that may be planted on the site include nonnative European grey sedge (*Carex divulsa*), small cape rush (*Chondropetalum tectorum*), horsetails (*Equisetum hyemale*), slender weavers (*Bambusa textilis*), bougainvillea (*Bougainvillea* sp.), and New Zealand flax (*Phormium* sp.); natives include common yarrow (*Achillea millefolium*), California wild rose (*Rosa californica*), California lilac (*Ceanothus* spp.), toyon (*Heteromeles arbutifolia*), and common rush (*Juncus patens*). While we understand that the exact species to be planted may change, we assume for purposes of this report that the characterization of proposed conditions as a mix of native and nonnative tree and plant species, with predominantly nonnative species, will remain the same.

In general, native plant species provide higher-quality food, nesting, roosting, and cover resources for native birds compared to nonnative plant species. Thus, under proposed conditions, the predominantly nonnative tree and plant species to be planted on the site will provide resources such as food (e.g., seeds, fruits, nectar, or foliage that supports insect prey), nesting sites, roosting sites, and cover from predators that is similar to existing conditions. However, due to the anticipated greater extent of this vegetation compared to existing conditions, this vegetation is expected to attract greater numbers of landbirds, including both resident birds and migrating birds, to the site compared to existing conditions. Nocturnal migrant landbirds that travel along the edge of San Francisco Bay are expected to be attracted to vegetated open space areas on the site following construction, as these areas will be visible from the San Francisco Bay as potential nesting, roosting, and foraging opportunities along a densely developed urban shoreline. Such migrants are expected to descend from their migration flights to the project site to rest and forage. Thus, a slight increase in the abundance of resident birds and a somewhat larger increase in the abundance of migrating birds is expected as a result of the proposed landscaping. Still, due to the extent of hardscape proposed in these open space areas, bird use will be much lower than in natural areas in the region.

Section 4. Method of Analysis

This assessment was prepared by H. T. Harvey & Associates wildlife ecologists/ornithologists Steve Rottenborn, Ph.D., and Robin Carle, M.S. Their qualifications are provided in Appendix C. Reconnaissance-level field surveys of the portion of the site located east of Willow Road, as well as areas within the JPB rail corridor east and west of Willow Road, were initially conducted by S. Rottenborn on October 26, 2017. After the project was redesigned in 2019, S. Rottenborn visited the project site again on April 22, 2019.

Although the subject of bird-friendly design is relatively new to the West Coast, S. Rottenborn and R. Carle have performed avian collision risk assessments and identified measures to reduce collision risk for several projects in the Bay Area, including projects in the cities of San Francisco, Oakland, Berkeley, South San Francisco, Redwood City, Menlo Park, Palo Alto, Mountain View, Santa Clara, Sunnyvale, and San José. The methods of analysis used for this report are consistent with the methods of analysis used for these other projects in the San Francisco Bay Area.

Section 5. Project Analysis

5.1 Analysis of Overall Project Site Conditions

Because birds do not necessarily perceive glass as an obstacle (Sheppard and Phillips 2015), windows or other structures that reflect the sky, trees, or other habitat may not be perceived as obstacles, and birds may collide with these structures. Similarly, transparent windows can result in bird collisions when they allow birds to perceive an unobstructed flight route through the glass (such as at corners), and when the combination of transparent glass and interior vegetation results in attempts by birds to fly through glass to reach vegetation. A number of factors play a role in determining the risk of bird collisions with buildings, including the amount and type of glass used, lighting, properties of the building (e.g., size, design, and orientation), type and location of vegetation around the building, and building location.

As noted above, moderate numbers of native, resident birds occur in the project vicinity. Because resident birds are present within an area year-round, they are more familiar with their surroundings and can be less likely to collide with buildings compared with migrant birds (discussed below). However, the numbers of resident birds that collide with buildings can still be relatively high over time. Young birds that are more naïve regarding their surroundings are more likely to collide with glass compared to adult birds. In addition, although adult birds are often more familiar with their surroundings, they still collide with glass with some frequency, especially when they are startled (e.g., by a predator) and have limited time to assess their intended flight path to avoid glazed facades. As a result, a moderate number of resident (i.e., breeding or overwintering) landbirds may collide with the project buildings over time.

Nocturnal migrant landbirds are also expected to be attracted to the project vicinity, especially the marsh and scrub habitat to the north of the site, during migration periods in the spring and fall. When these birds arrive in the site vicinity they are tired from flying all night, they are hungry, and they are less likely to be aware of risks such as glass compared to well-fed, local resident, summering, or wintering birds familiar with their surroundings. As these migrants descend from higher elevations, they will seek suitable resting and foraging resources in the new landscape vegetation adjacent to the buildings. During this reorientation process, migrants will be susceptible to collisions with the buildings if they cannot detect the glass as a solid structure to be avoided. Migrant birds that use structures for roosting and foraging (such as swifts and swallows) will also be vulnerable to collisions if they perceive building interiors as potential habitat and attempt to enter the buildings through glass walls.

Once migrants have descended and decided to settle into vegetation on or adjacent to the project site, they may collide with the glass because they do not detect it as a solid surface and think they can fly through the building (e.g., if they are on the west side of the building and try to fly through a glazed corner to reach trees on the north side). Foggy conditions may exacerbate collision risk, as birds may be even less able to perceive that glass is present in the fog. The highest collision risk would likely occur when inclement weather enters the region on

a night of heavy bird migration, when clouds and fog make it difficult for birds to find high-quality stopover sites once they reach ground level.

The project site is located in a highly urbanized area, and is surrounded on three sides by high-intensity development (Figure 1). As a result, relatively low numbers of birds are expected to occur in the general vicinity of the site to the east, west, and south (i.e., away from less developed, higher-quality habitats along the edge of the baylands to the north).

In addition, several features of the proposed buildings' architecture would further reduce the frequency of avian collisions (referred to in this report as *beneficial project features*) (Appendix A). For instance, the presence of beneficial project features such as overhangs and awnings on many of the project buildings may reduce the potential for bird collisions with buildings by helping buildings to appear as more solid structures from a distance (San Francisco Planning Department 2011, Sheppard and Phillips 2015), and we expect that birds using habitats on the project site or in adjacent areas would be more likely to interpret the building as a solid structure (rather than as reflected sky or vegetation) due to the presence of these beneficial project features. At a more localized scale, these beneficial project features reduce collisions by blocking views of glazing to birds using areas of trees or roof vegetation located above the overhangs and awnings. However, overhangs and awnings do not eliminate issues related to reflections or transparency, or block the view of birds unless birds are located above the overhang or awning (San Francisco Planning Department 2011, Sheppard and Phillips 2015). Thus, these beneficial project features are typically used in combination with bird-safe glazing treatments, such as incorporation of visible patterns on the glass, as scientific trial studies have documented that these treatments effectively reduce bird collisions. Incorporation of the beneficial project features identified in this Assessment as depicted on the figures included in Appendix A will be required as a condition of the CDP so that they are part of the project description for CEQA review of the Master Plan.

Many of the project buildings are also articulated, with numerous features that break up the building's exterior surfaces so they do not appear smooth and unbroken. Well-articulated buildings are better perceived by birds as solid structures, particularly as birds approach buildings from a distance (San Francisco Planning Department 2011); as discussed above for awnings and overhangs, this is expected to reduce bird collisions. At a more localized/closer scale, building articulations can influence the potential for collisions in different ways. A recent study (Riding et al. 2020) found that buildings with alcoves (i.e., indentations/concavities in the building outline when viewed from above) experienced higher collision rates compared to other façade types (including flat facades), possibly because these features "trap" birds within an area where they are surrounded on three sides by glazing. These findings suggest that alcoves represent high-risk collision hazards to birds that are attracted to vegetation within the alcoves. In contrast, porticos (i.e., areas where an overhang creates a covered paved walkway), which are present in several locations on the Master Plan buildings, have been found to have relatively low collision rates compared to other façade types (Riding et al 2020). However, if porticos are vegetated (rather than entirely paved) or located immediately adjacent to native vegetation and trees that will attract birds, collision rates are expected to be higher because birds would be drawn towards the glass by the vegetation. In addition, porticos on the project buildings include transparent glass corners, which represent high-risk collision

hazards. Thus, it is necessary to consider the presence of collision hazards at porticos that may be created by vegetation and/or transparent glass corners when determining if porticos should be used independently, or in combination with bird-safe glazing treatments, to ensure that collision hazards are effectively addressed.

The project includes landscape vegetation that will be planted immediately adjacent to glazed facades in a number of locations, especially at the elevated park adjacent to the south façade of the atrium and in landscape areas adjacent to the north façade of the atrium. Where landscape vegetation must be planted adjacent to buildings, some agencies recommend planting the vegetation very close to (i.e., within 3 feet of) glazed facades to reduce bird collisions, as this obscures reflections of the vegetation in glazing and reduces fatal collisions by reducing birds' flight speed if they should fly into the glass (Klem 1990, New York City Audubon Society, Inc. 2007). However, not all studies have documented a reduction in bird collisions when resources are placed within 3 feet of windows (Kummer and Bayne 2015), and birds are fragile enough that they may still be killed due to window collisions when flying at relatively slow speeds (Klem 2008). In our professional opinion, vegetation that is (1) dense enough that birds cannot fly swiftly through it to reach glazed windows, and (2) located close enough to windows that birds will not be flying fast when they leave the vegetation and hit the glass, reduces the potential for collisions with glazing that is immediately adjacent to the vegetation. However, while dense shrubs and herbaceous plants will reduce collision hazards with immediately adjacent glazing, they will not protect glazing located above or to the side of the vegetation. Similarly, while a dense crown of a tree located immediately adjacent to a façade will reduce collision hazards on the adjacent glass, birds may still have a relatively high collision risk with glass located below the crown, where there is no dense vegetation. All trees and vegetation also grow and are trimmed over time, and areas of adjacent facades with higher or lower collision risk are expected to change accordingly over time. As a result, although planting vegetation adjacent to facades is expected to reduce collision hazards with immediately adjacent glazing, the effectiveness of this strategy is limited because (1) birds may still be killed or injured even when they fly into windows at relatively low speeds; (2) the vegetation only reduces the collision hazard where it is dense very close to the façade, and not in adjacent areas; and (3) vegetation is not uniformly shaped, and grows or is trimmed back over time, and so does not provide uniform or consistent protection for entire facades over time.

There are also some features evident in the project's plans where bird collisions may be more frequent than at other features because they may not be easily perceived by birds as physical obstructions; these features are related to the presence of a location-related hazard on the site as well as feature-related hazards on the proposed new buildings. A *location-related hazard* occurs where new construction is located within 300 feet of an *urban bird refuge*, which is defined as an open space 2 acres or larger dominated by vegetation (San Francisco Planning Department 2011). The project is located immediately adjacent to open areas to the north that provide habitat for birds. In addition, the project will construct new landscape areas on the site within approximately 20 acres of open space (composed of extensive paved areas with some landscape vegetation) that is accessible to birds. The connectivity of the new open space on the site with open habitats to the north is expected to draw birds onto the site, especially where trees are present to attract migrant birds. The northern portion of the site is expected to attract the highest numbers of birds due to its proximity to open habitats along the edge of San Francisco Bay. Although some birds will also occur farther south within the project site, the number of

individuals is likely to decline farther south due to the urbanized conditions that will be present on the project site and urbanization present to the west, south, and east.

Within areas of relatively high collision risk, the greatest potential for bird collisions is where a feature-related hazard is located adjacent to a location-related hazard. A *feature-related hazard* is a design feature that represents a high-risk collision hazard regardless of its location. Feature-related hazards on the site include free-standing glass railings, transparent glass corners with clear sight lines through a building, and alcoves and atria surrounded by glazing. In addition, feature-related hazards include areas of extensive glazing, as the extent of glazing on a building and the presence of vegetation opposite the glazing are known to be two of the strongest predictors of avian collision rates (Gelb and Delacretaz 2009, Borden et al. 2010, San Francisco Planning Department 2011, Cusa et al. 2015, Sheppard and Phillips 2015, Riding et al. 2020). The risk of collision is highest when a feature-related hazard is located adjacent to a location-related hazard, especially when vegetation is present on either side of the hazard, creating a perceived "flight path" through the glazing. Where these features are located along potential flight paths that birds may use when traveling to and from landscape vegetation on the site or in nearby areas, the risk of bird collisions is higher because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass.

5.2 Hotel and Residential/Mixed-Use Buildings

The hotel and residential/mixed-use buildings are discussed together because the conceptual designs indicate that their facades are predominantly opaque (with the exception of retail areas on the lower levels of the buildings) and they are located in portions of the site with less extensive vegetation. Thus, bird collisions with these buildings are generally expected to be lower compared to other buildings on the project site, although certain facades of these buildings face areas of landscape vegetation (e.g., parks and courtyards) where bird collisions are generally expected to be relatively higher.

5.2.1 Building Descriptions

5.2.1.1 Hotel

A hotel is located at the eastern end of the Town Square District, adjacent to Willow Road; the hotel will be a maximum of 120 feet tall (Figure 3). The conceptual design of the hotel includes a central courtyard on Level 1, a pool deck on Level 3, and balconies on Level 6 (Figure 4). A bridge will connect the hotel's Level 3 pool deck to the elevated park to the north. The facades of the hotel are intended to be predominantly opaque, with extensive glazing on Level 1 on the west, east, and south facades as well as all Level 1 facades surrounding the courtyard (Figure 5). Free-standing glass railings may be included in the hotel design, and landscape vegetation may be present on roof terraces.

Figure 3. Illustration of buildings in the northern portion of the site showing the proposed atrium, elevated park, hotel, Town Square, Office Building 04, and event building.

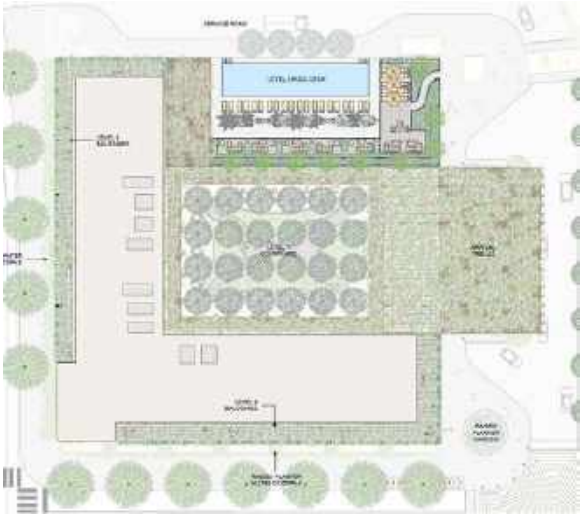

Figure 4. The conceptual hotel plan includes a central courtyard on Level 1, a pool deck on Level 3, and vegetated balconies on Level 6.

Figure 5. The conceptual east (top left), north (top right), west (bottom left), and south (bottom right) facades of the hotel.

Birds using open marsh and scrub habitats, or migrating, north of the site may be attracted to landscape vegetation along the façades of the hotel. The conceptual project plans show vegetation and trees at the elevated park to the northeast within the Town Square to the east, and within the hotel's central courtyard (Figures 3 and 5). Street trees and limited vegetation are proposed along Willow Road to the northwest and future Main Street to the southwest (Figure 5).

Although the hotel is located in the northern portion of the site and adjacent to the elevated park (i.e., in areas where higher numbers of birds are expected to be present, compared to areas farther south within the Master Plan area), the extensive opaque panels on the exterior facades as shown in the conceptual design are beneficial project features that substantially reduce the expected frequency of bird collisions with this building by helping the building appear as a solid structure from a distance (Figure 5). Features of the architecture of the hotel where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at roofs with landscape vegetation (which are expected to attract birds towards glazing on the building), in the central courtyard (where birds are surrounded on three or three sides by glazed facades), and at areas of contiguous glazing that face landscape vegetation within approximately 60 feet of the ground.

5.2.1.2 Residential/Mixed-Use Buildings

The residential/mixed-use buildings on Parcels 2–7 are assessed together because they are similar in structure, and collision hazards with these buildings are expected to be similar. These buildings are located in the southeast portion of the Master Plan area (Figure 6) and will be a maximum of 85 feet tall. Figures 7 and 8, which show the Parcel 2 building, are representative of the conceptual appearance of the residential/mixed-use buildings: their facades are intended to be predominantly opaque with residential windows, with more extensive glazing typically present at ground-floor public spaces. All buildings incorporate courtyards and open space areas, and landscape vegetation may be present on roof terraces. Free-standing glass railings may be included in the building designs.

Figure 6. Illustrative site plan showing the proposed residential/mixed-use buildings and associated open space areas. Facades with relatively highest collision risk are delineated in red.

Figure 7. The conceptual Parcel 2 residential/mixed-use building plan includes open space courtyards on Level 3.

Figure 8. The conceptual east (top), west (middle), south (bottom left), and north (bottom right) facades of the Parcel 2 residential/mixed-use building.

Birds are expected to use landscape vegetation planted adjacent to the façades of the residential/mixed-use buildings within public areas (e.g., street trees), planted landscape areas, and parks. However, according to the conceptual designs, the majority of the residential/mixed-use buildings are not located adjacent to large open space areas; as a result, fewer birds are expected to occur along these buildings compared to other buildings on the project site. In general, higher numbers of birds are expected to be present at the approximately 3.5-acre publicly accessible park on Parcel A and at the Town Square to the north/northeast of Parcels 2 and 3, and fewer birds are expected to be present in smaller/narrower vegetated areas (e.g., in between buildings).

Beneficial project features of the architecture of residential/mixed-use buildings that would reduce the frequency of avian collisions include opaque panels, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to vegetation (Figure 8). Nevertheless, some bird collisions with these façades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the facades of the residential/mixed-use buildings where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at alcoves (which surround trees and vegetation that are expected to attract birds), at green roofs (which are expected to attract birds towards glazing on the building), in courtyards (where birds are surrounded on three or four sides by glazed facades), and at areas of contiguous glazing that face landscape vegetation within approximately 60 feet of the ground (Figure 8). At transparent glass corners, the collision hazard extends as far from the corner as it is possible to see through the corner (and can potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).

5.2.2 Compliance with City Bird-Safe Design Requirements

Collision risk for the hotel and residential/mixed-use buildings is expected to be lower compared with other buildings in the Master Plan area because the conceptual designs indicate that their facades are predominantly opaque (with the exception of retail areas on the lower levels of the buildings) and they are located in portions of the site with less extensive vegetation. To address collision risk, the project will comply with City bird-safe design requirements, with requests for appropriate waivers, as permitted by the City bird-safe design requirements, by focusing bird-safe treatment of glazing within areas of relatively highest collision risk.

5.2.2.1 Requirements for which No Waiver is Requested

As currently proposed, the hotel and residential/mixed-use buildings anticipate complying with City bird-safe design requirements B, D, and G without requesting waivers; requirements B and D are listed below. Where the project's bird-safe design strategy is more specific than the City's requirements, sub-bullets specify how the project will comply with those requirements.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

- Specifically, glazing used on the hotel and residential/mixed-use buildings shall have the following specifications:

    a. Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of four inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of two inches;

    OR

    b. Bird-safe glazing shall have a Threat Factor[1] less than or equal to 30.

- To reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on the hotel and residential/mixed-use buildings will have a visible reflectance of 15% or lower.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

Discussion of project compliance with City requirement C, related to occupancy sensors, is provided in Section 6.2.2 below.

[1] A material's Threat Factor is assigned by the American Bird Conservancy, and refers to the level of danger posed to birds based on birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at https://abcbirds.org/wp-content/uploads/2021/01/Master-spreadsheet-1-25-2021.xlsx.

5.2.2.2 Requirements for which Waivers will be Requested

Waivers Requested. As currently proposed, the project anticipates complying with City bird-safe requirements A, E, and F by requesting waivers for the hotel and residential/mixed-use buildings, as permitted by the City bird-safe design requirements. These waivers are requested in order for the project to achieve design excellence. City requirements A, E, and F are as follows:

A. No more than 10% of facade surface area shall have non-bird-friendly glazing.

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

Alternative City Measures Proposed. As an alternative to these requirements, to ensure that the project meets the City's intent of designing bird-safe buildings and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures:

- The hotel and residential/mixed-use buildings shall focus bird-friendly glazing treatments within areas of extensive glazing on lower floors and roof terraces that face the approximately 3.5-acre publicly accessible park (Parcel A), Town Square, and elevated park (i.e., the north, east, and south facades of the hotel; the north and south façades of the Parcel 2 building; the north/northeast facades of the Parcel 3 buildings; a portion of the south façade of the Parcel 4 building; and the west façades of the Parcel 6 building as indicated on Figure 6), as these represent areas of heightened collision risk. The focal façade areas to be treated shall be identified by a qualified biologist on building-specific façade views; no more than 10% of these areas shall have non-bird-friendly glazing.
- If free-standing glass railings are included on the hotel and/or residential/mixed-use buildings, all glazing on free-standing glass railings shall be 100% treated with a bird-safe glazing treatment.
    - Specifically, all glazing on free-standing glass railings on the buildings shall have a Threat Factor (see footnote 1 above) less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-safe treatment correspondingly high) due to the relatively high risk of bird collisions with free-standing glass railings.
- All glazed features of the hotel and residential/mixed-use with clear sight lines between vegetation on either side of the feature (e.g., at glazed corners) shall be 100% treated with a bird-safe glazing treatment where they are located within or adjacent to (i.e., on both sides of a corner where one side of the corner falls within a focal treatment area) the focal treatment areas identified by the qualified biologist. These transparent building corners shall treated as far from the corner as it is possible to see through to the other side of the corner.

With respect to the bird-safe glazing treatments recommended in connection with these alternatives, Figure 9 provides an example of identified areas that would be required to be treated on the conceptual Parcel 2 residential/mixed-use building based on the January 2021 façade elevations.

Figure 9. An example mark-up of areas (shown in blue) that would be required to be treated on north (top left), south (top right), east (middle) and west (bottom) facades of the conceptual Parcel 2 residential/mixed-use building to ensure that avian collisions are less-than-significant. Transparent glass corner delineations are estimated; these corners should be treated as far from the corner as it is possible to see through the corner. Free-standing glass railings are not indicated on this figure but are required to be treated in all locations.

In lieu of complying with City requirements A, E, and F per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirements A, E, and F, the project will comply with these City requirements. In our professional opinion, this strategy (i.e., compliance with City requirements or compliance via approved waivers, as permitted by the City bird-safe design requirements, and alternative City measures) will avoid significant CEQA impacts for these buildings.

5.2.3 Additional Mitigation Measures Proposed Under CEQA

Based on our assessment of the conceptual design of the hotel and residential/mixed-use buildings, we have determined that there is an overall low likelihood of collisions with the buildings. With the project's compliance with City requirements (either via compliance with the listed requirements or by requesting waivers, as permitted by the City bird-safe design requirements, and proposing alternative City measures, where

appropriate), it is our professional opinion that project impacts due to bird collisions with the hotel and residential/mixed-use buildings would be less than significant under CEQA. As such, no additional mitigation measures under CEQA for impacts related to avian collisions are proposed.

5.2.4 CEQA Impacts Summary

The hotel and residential/mixed-use buildings will comply with the City's bird-safe design requirements by implementing requirements B, D, and G; requesting waivers for requirements A, E, and F, as permitted by the City bird-safe design requirements; and implementing alternative City measures for requirements A, E, and F. Compliance with requirement C is discussed in Section 6.2.2 below. No additional mitigation measures under CEQA for impacts related to avian collisions are proposed. As stated above, with compliance with City requirements (including the implementation of the proposed alternative City measures), it is our professional opinion that project impacts due to bird collisions with the hotel and residential/mixed-use buildings would be less than significant under CEQA.

A subsequent report prepared by a qualified biologist will accompany the final ACPs for each of the residential/mixed-use buildings and the hotel. It is our understanding based on coordination with the design teams that (1) the final ACP designs for the residential/mixed-use buildings and hotel will substantially conform with the conceptual designs reviewed for this report, such that our analysis and conclusions are expected to be valid for the final designs; (2) the proposed bird-safe treatments within the areas where such treatments are expected to be necessary (per the example shown in Figure 9) are feasible; and (3) the project will implement alternative City measures as described herein. Nevertheless, because the designs and renderings for the hotel and residential/mixed-use buildings that were reviewed for this assessment are conceptual, a qualified biologist shall review the final ACPs for the hotel and residential/mixed-use buildings to confirm that the alternative City measures described herein, or other alternative measures reasonably acceptable to the qualified biologist[2], are incorporated into the final design, such that project impacts due to bird collisions would be less than significant under CEQA as indicated herein.

5.3 Office Campus

Office Buildings 01, 02, 03, 05, and 06 are assessed together because the conceptual designs indicate that they are similar in structure, and collision hazards with these buildings are expected to be similar.

5.3.1 Building Descriptions

5.3.1.1 Office Buildings 01, 02, 03, 05, and 06

Office Buildings 01, 02, 03, 05, and 06 will be a maximum of 120 feet tall. As shown on Figure 13 in Section 5.4.1.2 below, Office Building 04 is representative of the appearance of all proposed office buildings; their facades are predominantly glazed, although portions of the lower levels incorporate opaque wall panels. All

[2] If alternative measures are used that are not discussed in this report for the project's CDP, those measures will be submitted to the City for review in accordance with the City's Zoning Code and CEQA with the project's ACPs.

buildings have open space areas on rooftops that may support landscape vegetation. Free-standing glass railings may be included in the design of Office Buildings 01, 02, 03, 05, and 06.Birds are expected to use landscape vegetation along the façades of the office buildings. In general, higher numbers of birds are expected to be present in larger vegetated open space areas (e.g., in the plaza north of Office Building 05), and fewer birds are expected to be present in smaller/narrower vegetated areas (e.g., in between Office Building 06 and the South Garage) (Figure 10).

Figure 10. Conceptual site plan showing the locations of proposed office buildings and garages, as well as the proposed extent of landscape vegetation and trees.

Beneficial project features of the architecture of office building facades that would reduce the frequency of avian collisions include opaque panels, exterior vertical and horizontal solar shades, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to native vegetation. Nevertheless, because (1) the façades of the office buildings are extensively glazed and (2) this glazing faces landscape vegetation, bird

collisions with these façades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the facades of the office buildings where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at alcoves (which surround trees and vegetation that are expected to attract birds), at roofs with landscape vegetation (which are expected to attract birds towards glazing on the building), at free-standing glass railings, and at areas of contiguous glazing that face landscape vegetation within approximately 60 feet of the ground. At transparent glass corners, the collision hazard extends as far from the corner as it is possible to see through the corner (and can potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).

5.3.1.2 Parking Garages

The North Garage is located in the northeast corner of the project site and the South Garage is located in the southeast corner of the project site (Figure 10). These garages are similar in structure, and will be a maximum of 120 feet tall. The conceptual plans indicate that the facades of the garages are predominantly opaque, with limited glazing only on two approximately 15-foot wide elevator towers on the west and north facades on all levels (Figure 11). Free-standing glass railings may be included in the project design, and landscape vegetation may be present above the ground level.

Figure 11. Conceptual North Garage elevations: east (top), west (middle), north (bottom left), and south (bottom right). The building facades are predominantly opaque; glazed areas are located on all levels the elevator towers on the west and north facades.

Birds using open marsh and scrub habitats, or migrating, north of the site may use landscape vegetation along the façades of the North Garage and South Garage. In general, higher numbers of birds are expected to be present opposite the north façade of the North Garage (which faces open habitats associated with the San Francisco Bay) and in larger vegetated open space areas (e.g., in the plaza southwest of the North Garage), and

fewer birds are expected to be present in smaller/narrower vegetated areas opposite the garage facades (e.g., in between the North Garage and Office Building 05).

The extensive opaque facades on the North Garage and South Garage shown on the conceptual plans are beneficial project features that will substantially reduce bird collisions with these buildings. Nevertheless, bird collisions are expected to occur where glazing is present opposite open space areas and landscape vegetation, at free-standing glass railings, and at roofs where landscape vegetation is located adjacent to glazing. No high-risk collision hazards (e.g., transparent glass corners) are present on these buildings.

5.3.2 Compliance with City Bird-Safe Design Requirements

Although a number of beneficial project features in the project design mentioned above will reduce bird collisions (e.g., opaque facades, exterior solar shades, mullions, and porticos), the number of collisions with Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage is expected to be relatively higher compared with certain other buildings in the Master Plan area (e.g., the hotel and mixed-use buildings described above) because (1) the building facades incorporate extensive glazing, and (2) this glazing faces landscape vegetation that will be used by birds. To address collision risk, the project will comply with City bird-safe design requirements, with appropriate waivers, as permitted by the City bird-safe design requirements.

5.3.2.1 Requirements for which No Waiver is Requested

As currently proposed, Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage anticipate complying with City bird-safe design requirements A, B, C, D, and G without requesting waivers; requirements A, B, C, and D are listed below. Where the project's bird-safe design strategy is more specific than the City's requirements, sub-bullets specify how the project will comply with those requirements.

A. No more than 10% of facade surface area shall have non-bird-friendly glazing.

   - Specifically, all portions of Office Buildings 01, 02, 03, 05, and 06 shall be treated with a bird-safe glazing treatment with the exception of certain portions of the facades on Level 1. The area of untreated glazing shall be less than 10% of the total surface area of the atrium. Specific treatment areas on the North Garage and South Garage are unknown, but will comply with this requirement.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

   - Specifically, glazing used on Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage shall have the following specifications:

      c. Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of four inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of two inches;

      OR

d. Bird-safe glazing shall have a Threat Factor (see footnote 1 above) less than or equal to 30.

- To reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage will have a visible reflectance of 15% or lower.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

Discussion of project compliance with City requirement C, related to occupancy sensors is provided in Section 6.2.2 below.

5.3.2.2 Requirements for which Waivers will be Requested

Waivers Requested. As currently proposed, the project anticipates complying with City bird-safe design requirements E and F by requesting waivers for Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage, as permitted by the City bird-safe design requirements. City requirements E and F are as follows:

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

Alternative City Measures Proposed. As an alternative to these requirements, to ensure that the project meets the City's intent of designing bird-safe buildings and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures:

- All glazed features with clear sight lines between vegetation on either side of the feature (e.g., at glazed corners and free-standing glass railings) shall be 100% treated with a bird-safe glazing treatment. Transparent building corners shall be treated as far from the corner as it is possible to see through to the other side of the corner (and will potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).
- All glazing above Level 1 of Office Buildings 01, 02, 03, 05, and 06 (i.e., all glazing adjacent to roof terraces with landscape vegetation) will be 100% treated with a bird-safe glazing treatment. Specific treatment areas on the North Garage and South Garage are unknown, but no more than 10% of the façade surface area shall have non-bird-friendly glazing.
- All transparent glass at the rooflines adjacent to vegetated roof decks will be 100% treated with a bird-safe glazing treatment. The only untreated glazing on for Office Buildings 01, 02, 03, 05, and 06 will be located on the ground level, which does not create a collision hazard due to landscape vegetation on roofs. No vegetated roof decks are proposed for the North Garage and South Garage, and all transparent glass at the rooflines of these buildings will be 100% treated with a bird-safe glazing treatment.

- If free-standing glass railings are included on Office Buildings 01, 02, 03, 05 and/or 06, all glazing on free-standing glass railings shall be 100% treated with a bird-safe glazing treatment.
    - Specifically, all glazing on free-standing glass railings on the building shall have a Threat Factor (see footnote 1 above) less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-safe treatment correspondingly high) due to the relatively high risk of bird collisions with free-standing glass railings.

In lieu of complying with City requirements E and F per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirements E and F, the project will comply with these City requirements. In our professional opinion, this strategy (i.e., compliance with City requirements or compliance via approved waivers, as permitted by the City bird-safe design requirements, and alternative City measures) will avoid significant CEQA impacts for these buildings.

5.3.3 Additional Mitigation Measures Proposed Under CEQA

With the project's compliance with City requirements (either via compliance with the listed requirements or by requesting waivers, as permitted by the City bird-safe design requirements, and proposing alternative City measures, where appropriate), it is our professional opinion that project impacts due to bird collisions with Office Buildings 01, 02, 03, 05, and 06 would be less than significant under CEQA. As such, no additional mitigation measures under CEQA for impacts related to avian collisions are proposed.

5.3.4 CEQA Impacts Summary

Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage will comply with the City's bird-safe design requirements by implementing requirements A, B, C, D, and G; requesting waivers for requirements E and F, as permitted by the City bird-safe design requirements; and implementing alternative City measures for requirements E and F. Compliance with requirement C is discussed in Section 6.2.2 below. No additional mitigation measures under CEQA for impacts related to avian collisions are proposed. As stated above, with compliance with City requirements (including the implementation of the proposed alternative City measures), it is our professional opinion that project impacts due to bird collisions with Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage would be less than significant under CEQA.

A subsequent report prepared by a qualified biologist will accompany the final ACPs for Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage. It is our understanding based on coordination with the design teams that (1) the final ACP designs for these buildings will substantially conform with the conceptual designs reviewed for this report, such that our analysis and conclusions are expected to be valid for the final designs; (2) the proposed bird-safe treatments within the areas where such treatments are expected to be necessary are feasible; and (3) the project will implement alternative City measures as described herein.

Nevertheless, because the designs and renderings for Office Buildings 01, 02, 03, 05, and 06 as well as the North Garage and South Garage that were reviewed for this assessment are conceptual, a qualified biologist shall review the final ACPs for these buildings to confirm that the alternative City measures described herein, or other alternative measures reasonably acceptable to the qualified biologist (see footnote 2 above), are incorporated into the final design such that project impacts due to bird collisions would be less than significant under CEQA as indicated herein.

5.4 Event Building and Nearby Buildings

The event building, Office Building 04, Town Square retail pavilion, pavilions SP1 and SP2, and stair/elevator towers are discussed together because the conceptual designs indicate that they are located in the northern portion of the project site reasonably close to open space areas with extensive trees and landscape vegetation (Figure 3). Because these open space areas are relatively large compared to other areas of the project site, and because the structures addressed in this section all incorporate extensive glazing, avian collision risk with these buildings is expected to be relatively higher than on the other office campus buildings, hotel, and residential/mixed-use buildings discussed in Sections 5.2 and 5.3 above.

5.4.1 Building Descriptions

5.4.1.1 Event Building

An event building is located southeast of the atrium (Figure 3), and it will have a maximum height of 120 feet. The northwest façade of this facility abuts the elevated park, and the facility connects directly with the atrium via a partially glazed passageway that extends beneath the elevated park (Figure 12). The southwest and northeast facades of the event building will be entirely opaque, and the lower portions of the northwest and southeast facades will also be opaque (Figure 12). Glazing will be present on the upper portions of the northwest and southeast facades; this glazing will face the vegetation at the adjacent elevated park (Figure 12). Landscape vegetation may be present on the sides of the building above the ground level, and free-standing glass railings may be included in the project design.

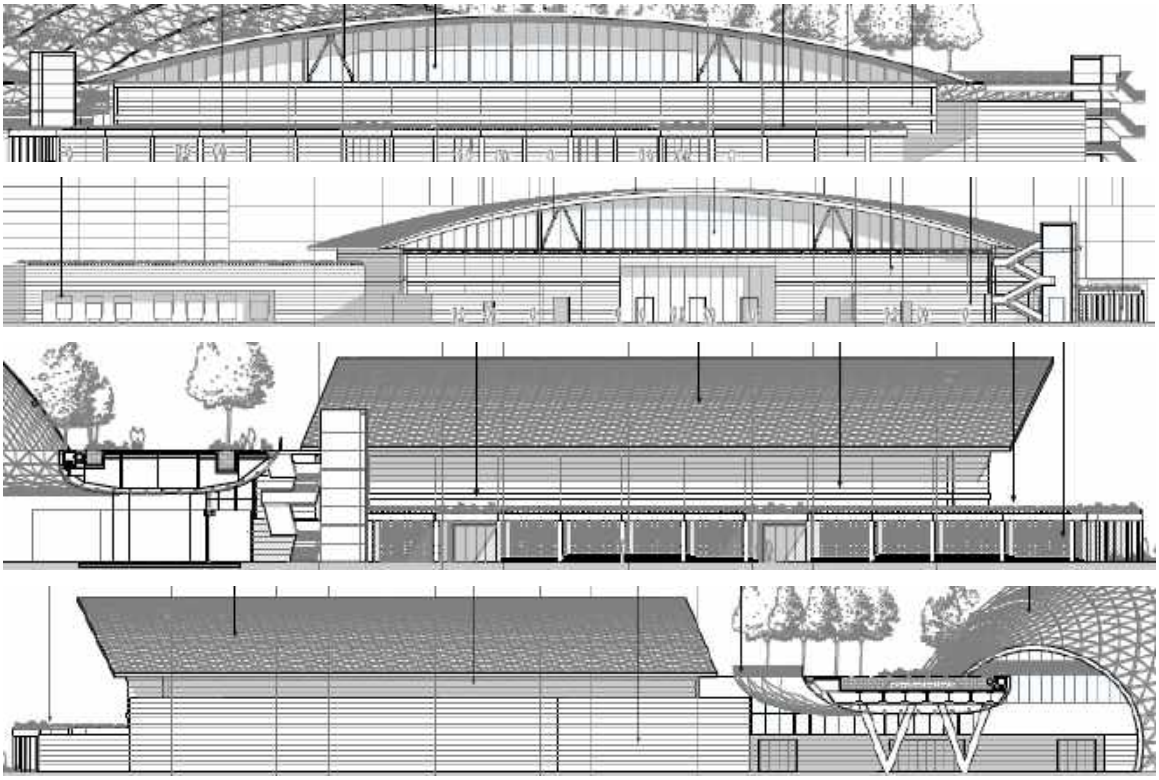

Figure 4. Illustration of the event building façades. Top to bottom: the southeast, northwest, northeast, and southwest facades.

Birds using open marsh and scrub habitats, or migrating, north of the site may be attracted to landscape vegetation along the façades of the event building. Because the conceptual plans show that the event building is surrounded by vegetated open space areas, including the elevated park to the northwest and a plaza with landscape vegetation to the southwest and southeast, relatively high numbers of birds are expected to be present around the building (Figure 3).

The extensive opaque facades on the event building are beneficial project features that will substantially reduce bird collisions with the building. However, bird collisions are expected to occur in several locations where glazing is present. For instance, birds using vegetation at the elevated park northwest of the event building will be able to see vegetation within the open space area southeast of the building, and vice-versa, through the glazing on the building's northwest and southeast facades. In addition, birds using vegetation adjacent to the glazed passageway will also be able to see vegetation on the other side of this feature. The risk of bird collisions at these locations is expected to be relatively high because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass. Bird collisions are also expected to be relatively high where vegetation above the ground level is located adjacent to glazing, and at free-standing glass railings.

5.4.1.2 Office Building 04

Office Building 04 will have a maximum height of 120 feet. Open space areas will be located on rooftop terraces that may support landscape vegetation, and free-standing glass railings may be included in the project design.

Figure 13 shows the facades of Office Building 04, which are predominantly glazed, although portions of the lower levels incorporate opaque wall panels.

Figure 13. Conceptual Office Building 04 elevations: west (top left), east (top right), north (middle), and south (bottom).

Birds using open marsh and scrub habitats, or migrating, north of the site may be attracted to landscape vegetation along the façades of Office Building 04. Higher numbers of birds are expected to be present around this building compared to buildings located farther south on the project site (e.g., Office Buildings 01–03 and 05–06, which are discussed in Section 5.3 above) due to the presence of large open space areas with landscape vegetation in the northern portion of the site. The conceptual plans show vegetation and trees at the elevated park north of Office Building 04 and within open space areas at grade level to the east, west, and south of this building (Figure 10).

Features of the architecture of the facades of Office Building 04 (and connected building TS3) that represent beneficial project features that would reduce the frequency of avian collisions include opaque panels, exterior vertical and horizontal solar shades, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to native vegetation (Figure 13). Nevertheless, because (1) the façades of the office building are extensively glazed and (2) this glazing faces landscape vegetation, bird collisions with these façades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the building where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at roofs with landscape vegetation (which are expected to attract birds towards glazing on the building), at free-standing glass railings, and at areas of contiguous glazing that face landscape vegetation within approximately 60 feet of the ground. At transparent glass corners, the collision hazard extends as far from the

corner as it is possible to see through the corner (and can potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).

5.4.1.3 Town Square

The Town Square is located east of the hotel, south of the elevated park, and west of Office Building 04 (Figure 3). This area includes a new access road (West Street), a below-grade parking garage, a paved plaza with landscape vegetation and trees, several seating areas, bicycle parking, and a retail pavilion (Figure 14). Glazing will be present on the facades of the retail pavilion, which will have a maximum height of 120 feet (Figure 15). Free-standing glass railings may be included in the Town Square design, and landscape vegetation may be present on the roof of the retail pavilion.

Figure 14. The conceptual Town Square includes a paved plaza with landscape vegetation and trees, seating areas, a glazed elevator to the elevated park, bicycle parking, and a retail pavilion.

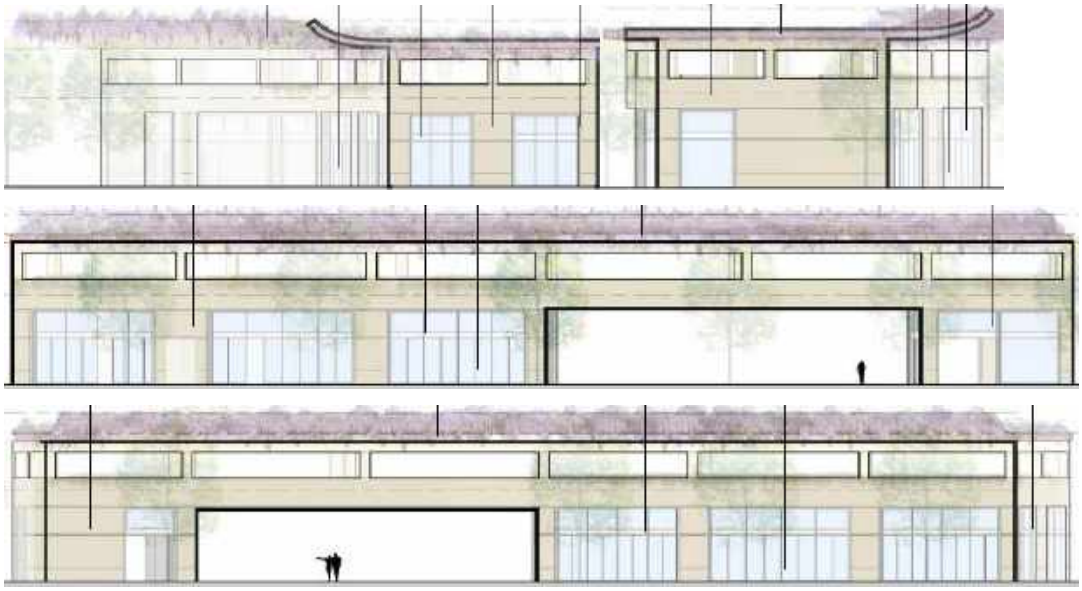

Figure 15. The conceptual west (top left), east (top right), south (middle), and north (bottom) facades of the Town Square retail pavilion.

Birds using open marsh and scrub habitats, or migrating north of the site may be attracted to landscape vegetation in the Town Square. The Town Square is an open space area with paved pedestrian areas as well as landscape vegetation and trees, and vegetation is also present to the north of the Town Square at the elevated park (Figures 3 and 14).

Beneficial project features of the Town Square retail pavilion that would reduce the frequency of avian collisions include opaque panels and mullions (Figure 15). Nevertheless, because (1) the façades of the retail pavilion are extensively glazed and (2) this glazing faces landscape vegetation, bird collisions with these façades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the pavilion where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at the roof (which is expected to attract birds towards glazing on the pavilion due to the potential presence of landscape vegetation), at free-standing glass railings, and at areas of contiguous glazing that face landscape vegetation. In addition, birds using vegetation north of the pavilion will be able to see vegetation south of the pavilion, and vice-versa, though the glazing on the pavilion's north and south facades. The risk of bird collisions at these locations is expected to be relatively high because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass.

5.4.1.4 Security Pavilions

Accessory buildings Security Pavilions 1 and 2 (SP1 and SP2) are located in the northern portion of the site: SP1 in between Office Buildings 03 and 04, and SP2 at the southwest corner of the North Garage (Figure 10). These pavilions are discussed together because they are similar in structure, and collision risk with the pavilions' facades is expected to be similar. SP1 and SP2 will have a maximum height of 120 feet. Figure 16 is

representative of the appearance of these buildings, and indicates that glazing will be present on all sides of the buildings and pergolas will be present above the roofs. Free-standing glass railings may be included in the design of the pavilions, and landscape vegetation may be present on the building's roofs.

Figure 16. The conceptual south (top left), west (top right), north (bottom left), and east (bottom right) facades of buildings SP1 and SP2.

Birds using open marsh and scrub habitats, or migrating, north of the site may be attracted to landscape vegetation along the pavilions. Higher numbers of birds are expected to be present around these buildings compared to buildings located farther south on the project site (e.g., Office Buildings 01–03 and 05–06, which are discussed in Section 5.3 above) due to the presence of large open space areas with landscape vegetation in the northern portion of the site. The conceptual project plans show vegetation and trees in large open space areas/plazas surrounding buildings SP1 and SP2 (Figure 10).

Features of the architecture of the pavilions that represent beneficial project features that would reduce the frequency of avian collisions include opaque panels and mullions (Figure 16). Nevertheless, because the facades of these pavilions incorporate extensive glazing that faces landscape vegetation, bird collisions with these facades are expected to occur despite the presence of certain features that reduce collision risk. Features of the architecture of the pavilions where collision risk is expected to be relatively highest include transparent glass corners (through which sight lines between vegetation on either side of the corners create collision hazards for birds), at free-standing glass railings, where rooftop vegetation is located adjacent to glazing, and at areas of contiguous glazing that face landscape vegetation. In addition, birds using vegetation east of the pavilions will be able to see vegetation west of the pavilions, and vice-versa, though the glazing on the pavilion's east and west facades (Figure 16). The risk of bird collisions at these locations is expected to be relatively high because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass.

5.4.1.5 Stair/Elevator Towers

Five stair/elevator towers are present that connect the ground level with the elevated park in the following locations (Figure 3):

- At the eastern end of the elevated park
- At the northwest corner of the event building (also see Figure 12)
- At the Town Square (also see Figure 14)
- At the hotel (also see Figure 5)
- At the western end of the elevated park

The conceptual plans indicate that the stair/elevator towers incorporate extensive glazing; as a result, bird collisions with facades of these towers are expected to occur. Because these towers create clear sight lines between vegetation on either side of the towers, the risk of bird collisions at these locations is expected to be relatively high because birds may not perceive the intervening glass and may therefore attempt to fly to vegetation on the far side of the glass.

5.4.2 Compliance with City Bird-Safe Design Requirements

To address collision risk, the project will comply with City bird-safe design requirements, with appropriate waivers, as permitted by the City bird-safe design requirements.

5.4.2.1 Requirements for which No Waiver is Requested

As currently proposed, the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers shall anticipate complying with City bird-safe design requirements A–D and G without requesting waivers; requirements A–D are listed below. Where the project's bird-safe design strategy is more specific than the City's requirements, sub-bullets specify how the project will comply with those requirements.

A. No more than 10% of facade surface areas shall have non-bird-friendly glazing.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.

   - Specifically, glazing used on the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers shall have the following specifications:

     e. Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of four inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of two inches;

     OR

     f. Bird-safe glazing shall have a Threat Factor (see footnote 1 above) less than or equal to 30.

   - To reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on the event building, Office

Building 04, Town Square retail pavilion, security pavilions, and elevator towers will have a visible reflectance of 15% or lower.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

Discussion of project compliance with City requirement C, related to occupancy sensors, is provided in Section 6.2.2 below.

5.4.2.2 Requirements for which Waivers will be Requested

Waivers Requested. As currently proposed, the project anticipates complying with City bird-safe design requirements E and F by requesting waivers for the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers, as permitted by the City bird-safe design requirements. City requirements E and F are as follows:

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

Alternative City Measures Proposed. As an alternative to these requirements, to ensure that the project meets the City's intent of designing bird-safe buildings and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures:

- All glazed features of the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers with clear sight lines between vegetation on either side of the feature (e.g., at glazed corners) shall be 100% treated with a bird-safe glazing treatment. Transparent building corners of these buildings shall be treated as far from the corner as it is possible to see through to the other side of the corner (and will potentially extend through an entire floor or section of a building, if it is possible to see through from one side of the building to the other).
- Any glazing of the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers that creates see-through conditions where vegetation will be visible from one side of the building to the other shall be 100% treated. Examples include the north and south facades of the event building, the north and south facades of the Town Square retail pavilion, and facades of pavilions SP1 and SP2.
- If free-standing glass railings are included on the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers, all glazing on free-standing glass railings shall be 100% treated with a bird-safe glazing treatment.
    - Specifically, all glazing on free-standing glass railings on the event building, Office Building 04, Town Square retail pavilion, security pavilions, and elevator towers shall have a Threat Factor (see footnote 1 above) less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-

safe treatment correspondingly high) due to the relatively high risk of bird collisions with free-standing glass railings.

- All glazing above Level 1 of Office Building 04 (i.e., all glazing adjacent to roof terraces with landscape vegetation) will be 100% treated with a bird-safe glazing treatment.

In lieu of complying with City requirements E and F per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirements E and F, the project will comply with these City requirements. In our professional opinion, this strategy (i.e., compliance with City requirements or compliance via approved waivers, as permitted by the City bird-safe design requirements, and alternative City measures) will avoid significant CEQA impacts for these buildings.

5.4.3 Additional Mitigation Measures Proposed Under CEQA

With the project's compliance with City requirements (either via compliance or by requesting waivers, as permitted by the City bird-safe design requirements, and proposing alternative City measures, where appropriate), it is our professional opinion that project impacts due to bird collisions with the event building and nearby buildings would be less than significant under CEQA. As such, no additional mitigation measures under CEQA for impacts related to avian collisions are proposed.

5.4.4 CEQA Impacts Summary

The Town Square retail pavilion, security pavilions, and stair/elevator towers will comply with the City's bird-safe design requirements by implementing requirements A–D and G, requesting waivers for requirements E and F, as permitted by the City bird-safe design requirements, and implementing alternative City measures for requirements E and F. Compliance with requirement C is discussed in Section 6.2.2 below. No additional mitigation measures under CEQA for impacts related to avian collisions are proposed. As stated above, with compliance with City requirements (including the implementation of the proposed alternative City measures), it is our professional opinion that project impacts due to bird collisions with the Town Square retail pavilion, security pavilion, and stair/elevator towers would be less than significant under CEQA.

A subsequent report prepared by a qualified biologist will accompany the final ACPs for the event building, Office Building 04, the Town Square retail pavilion, the security pavilions, and the stair/elevator towers. It is our understanding based on coordination with the design teams that (1) the final ACP designs for these buildings will substantially conform with the conceptual designs reviewed for this report, such that our analysis and conclusions are expected to be valid for the final designs; (2) the proposed bird-safe treatments within the areas where such treatments are expected to be necessary are feasible; and (3) the project will implement alternative City measures as described herein. Nevertheless, because the designs and renderings for the event building, Office Building 04, the Town Square retail pavilion, the security pavilions, and the stair/elevator

towers that were reviewed for this assessment are conceptual, a qualified biologist shall review the final ACPs for these buildings to confirm that the alternative City measures described herein, or other alternative measures reasonably acceptable to the qualified biologist (see footnote 2 above), are incorporated into the final design such that project impacts due to bird collisions are less than significant under CEQA as described herein.

5.5 Atrium

Due to the unique structure of the atrium and the potential for bird collisions with the atrium to occur, additional supporting information from the project's ACP for the atrium was referenced for this analysis (Appendix A). Although the ACP for the atrium is not yet final, it is our understanding based on considerable coordination with the design teams that the designs in the final ACP for the atrium will substantially conform with the designs referenced in this report, such that our analysis and conclusions are expected to be valid for the final design. Incorporation of the beneficial project features identified in this Assessment as depicted on the figures included in Appendix A will be required as a condition of the CDP so that they are part of the project description for CEQA review of the Master Plan.

5.5.1 Building Description

5.5.1.1 Overall Description of the Atrium Structure

The structure located north of the elevated park is proposed to be covered by an approximately 117-foot tall, 129,000 square-foot glass atrium (hereafter referred to as the *atrium*) with four interior levels of office and accessory space and approximately 3.7 acres of interior open space that will include paved pedestrian areas, landscape vegetation, and trees. For the purpose of these sections, landscape vegetation, structures, and features outside the atrium are referred to as *exterior*, and landscape vegetation, structures, and features within the atrium are referred to as *interior*. The interior of the atrium will not be accessible to birds. The northern side of the atrium faces open marsh and scrub habitats and the San Francisco Bay, and the southern side of the atrium faces the remainder of the project site. A roadway, an open space area, and a bicycle park will be constructed along the northern side of the atrium (Figure 3). An approximately 36-foot tall elevated park will be constructed along the southern side of the atrium, and an event building, office building, town square, and hotel will be located immediately south of the elevated park (Figure 3). Vegetation and trees at the elevated park and in the area immediately north of the atrium will be planted as close to the atrium's north and south façades as feasible (this is discussed as a general 'good practice' in Section 5 above).

The lower approximately 12.5 feet[3] of the atrium's south façade will consist of vertical glazing with several building entrances, and the remaining areas of the atrium's north and south facades will be composed of a network of glass panels that create a curved 'dome' shape (Figure 17). At its eastern end along the south façade, the atrium is connected to the event building via a partially glazed passageway; this connection is discussed in Section 5.4 above. A visitor center is located on the ground floor below the elevated park at the western end of

[3] The vertical façade beneath the elevated park consists of 12.5-foot tall contiguous untreated glazing below a solid roof, and a 4.5-foot tall zone of framed glass louvers in between the roof and the elevated park. The total height of the glazed façade beneath the elevated park is 18.5 feet.

the atrium, and connects with the atrium's westernmost interior building. Glass facades surround the visitor center (Figure 18) and are contiguous with the atrium's vertical south façade (Figure 17). The eastern and western ends of the atrium are closed off via large vertical predominantly glazed facades that are approximately 45–50 feet tall (Figure 18).

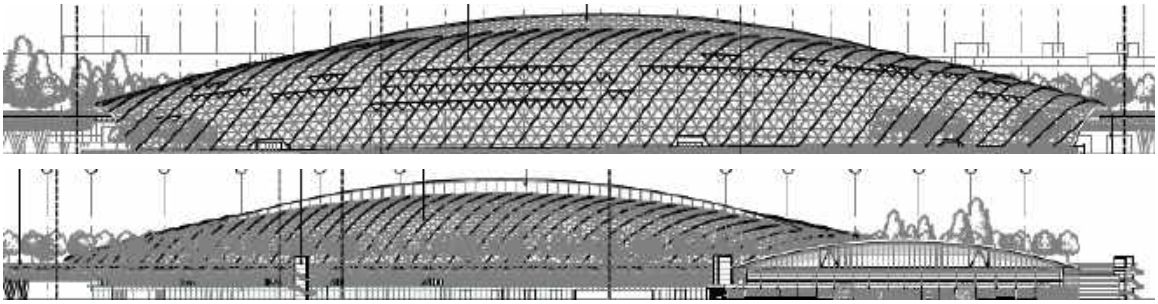

Figure 17. Conceptual drawings of the north façade (top) and south façade (bottom) of the atrium. Trees to be planted along the north façade are not shown.

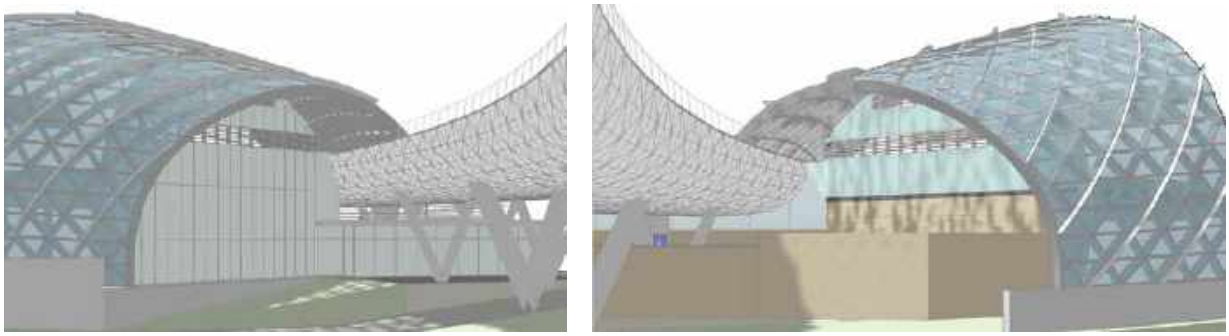

Figure 18. An illustration of the appearance of the vertical glass facades at the western (left) and eastern (right) ends of the atrium.

Figure 19 provides illustrative overhead views of proposed vegetation on each level inside the atrium. The vegetation in the atrium's interior will be similar in character to the exterior vegetation described in Section 3.2 (i.e., predominantly nonnative plant species).

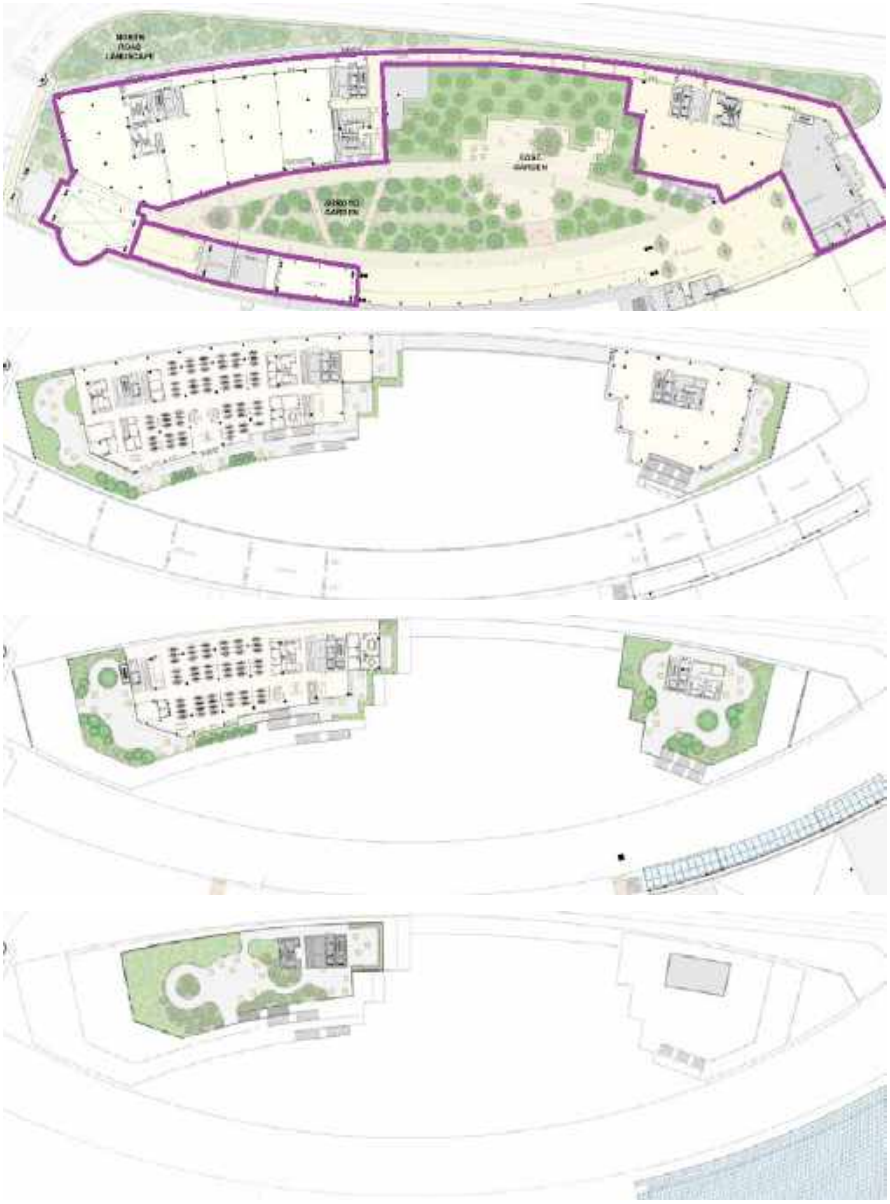

Figure 19. From top to bottom, illustrative views of landscape vegetation on Levels 1, 2, 3, and 4 of the atrium's interior. The interior building footprints and the connection between them are outlined in purple on the top image.

One four-story building and one three-story building will be located within the atrium, and the atrium's north façade composes the north façades of these buildings (Figure 19). These buildings incorporate vegetated terraces approximately 37 feet high on Level 2, 56 feet high on Level 3, and (on the westernmost building only) 75 feet high on Level 4 (Figure 19). A raised walkway connects the two buildings at Level 2 along the atrium's north facade; the area beneath the raised walkway is open with the exception of structural support beams. A security office and café with glass facades will be located beneath the elevated park; however, no interior structures will be located along the atrium's south façade; rather, this area will consist of open space gardens

with landscape vegetation and pedestrian pathways (Figure 19). An approximately 12.5-foot tall vertical glass façade is present along the base of the atrium's south facade beneath the elevated park, with several doorways/entrances that connect with the Town Square and courtyards to the south. As mentioned above and discussed in Section 5.4, a passageway directly connects the atrium with the event building to the south. In addition, a visitor center with glazed facades and a glazed entrance in the shape of a half-circle projects outwards from beneath the elevated park near the atrium's western end, connecting the interior building with the Town Square to the south, and a security office and café with glazed facades are located immediately east of this entrance beneath the elevated park (Figure 19). The only vegetation proposed beneath the elevated park consists of small low interior planters adjacent to the event building near the eastern end of the atrium and small low exterior planters adjacent to a bicycle parking area near the western end of the atrium.

The potential for avian collisions differs between the north, south, east, and west facades of the atrium due to differences in the designs of these facades; the habitats located opposite the façades; and the presence, location, and orientation of interior vegetation, structures, and features within the atrium. Due to these differences, Sections 5.5.1.2, 5.5.1.3, and 5.5.1.4 provide separate assessments of the frequency of bird collisions with the north, south, and east/west facades of the atrium, respectively. The atrium will be sealed such that birds are not expected to be able to enter the atrium's interior; as a result, bird collisions with the interior surfaces of the atrium and/or building facades within the atrium would not occur, and no bird-safe treatment of glazing inside the atrium would be necessary.

5.5.1.2 North Façade

Birds using habitats or descending from migration flights to the north of the site may be attracted to the exterior landscape vegetation along the northern façade of the atrium. There is also some potential for higher-flying birds (e.g., birds descending from migration) to be attracted to the interior vegetation within the atrium; however, the visibility of this interior vegetation to birds located north of the structure will be very limited for the following reasons: (1) interior structures located along the northern facade of the atrium will block the view of the majority of interior vegetation from the north, and (2) the articulated shape of the atrium's facades will substantially reduce the visibility of interior vegetation to birds.

The majority of interior vegetation planted on Level 1 of the atrium's interior will be entirely screened from view to birds located at grade level to the north by the presence of interior buildings along the northern periphery of the atrium (Figure 19). Although some interior trees will be partially visible to birds to the north beneath the walkway that connects the two interior buildings, most will be blocked from view by terraces of the East Garden. No exterior trees will be planted immediately adjacent to the atrium's north façade along the East Garden such that birds would be attracted to this section of the façade where they would be able to see interior vegetation within the East Garden.

Some interior trees planted on roof terraces on Levels 2, 3, and 4 of interior buildings will be visible to birds from the north; however, all trees on these terraces will be set back from the atrium's north façade by approximately 20 feet on Levels 2 and 3, and 25 feet on Level 4 (Figure 19). As a result, birds using exterior

vegetation and trees north of the atrium will have limited line-of-sight views to interior trees at grade level and no line-of-sight views to trees on rooftops. This reduces the potential for bird collisions with the atrium's north façade by blocking direct "flight paths" for birds between interior and exterior vegetation.

The articulated structure of the atrium is a beneficial project feature that will substantially reduce the visibility of all interior vegetation to birds, especially from a distance (Figure 20), reducing the likelihood that birds will collide with glazing on the north façade (in any location) because they are attempting to reach interior vegetation. The architect for the Willow Village atrium has indicated that a good comparison, with respect to birds' ability to view vegetation inside the atrium, is the Jewel Changi Airport in Singapore (Figure 20), which was also designed by the same architecture firm. Although the Jewel Changi Airport building also contains extensive vegetation in its interior, like the Jewel Changi Airport building, the articulated glass surface and fins at the Willow Village atrium (see Figure 21) would combine to mask the visibility of that vegetation, so that birds flying outside the Willow Village atrium will not be able to clearly see, and therefore will not be attracted to, interior vegetation.

Figure 20. The Jewel Changi Airport building, which has a comparable design and exterior appearance to the proposed atrium. Although extensive vegetation is present inside this building, it is largely invisible from outside the atrium.

Fin-like mullions on the exterior surface of the atrium's façade are a beneficial project feature that will help break up the smooth surface and increase the visibility of the façade to birds (Figure 21). As a result, birds located north of the atrium that are attracted to the project site are more likely to view the atrium as a solid structure and are less likely to collide with the atrium.

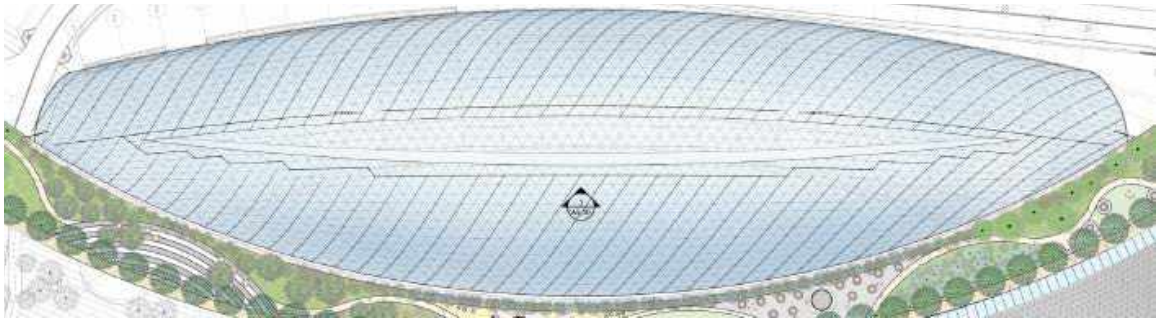

Figure 21. Fin-like mullions on the exterior surface of the conceptual north and south facades of the atrium will break up the smooth surface and increase the visibility of the facades to birds, especially from a distance.

5.5.1.3 South Façade

Birds are expected to be attracted to exterior landscape vegetation along the south side of the atrium, especially at the elevated park located immediately adjacent to the atrium's south façade. Vegetation will also be present in open space courtyards and at the Town Square to the south, and some birds are expected to be attracted to these areas as well. Interior vegetation consisting of small low planters adjacent to the event building will be present below the elevated park; these planters will be screened from the outside by the event building and an adjacent enclosed room, and hence will not be directly visible to birds on the atrium's exterior. Additional exterior vegetation proposed beneath the elevated park consists of small low planters adjacent to a bicycle parking area near the western end of the south façade.

The visibility of vegetation within the glass atrium to birds using vegetation at the elevated park will be limited for the following reasons: (1) interior solar shades will block the view of interior vegetation from the south in certain locations, and (2) the articulated shape of the atrium's façades will substantially reduce the visibility of interior vegetation to birds, as indicated in Figure 20. In addition, vegetation located at the elevated park will be planted immediately adjacent to glass, as feasible, so that birds' flight speeds may be reduced as they approach the glazing, further reducing the potential for collisions.

Interior operable, suspended solar shades along a large portion of the south façade are a beneficial project feature that will block views of interior vegetation to birds located south of the atrium (Figure 22). As a result, birds using exterior vegetation and trees or flying in certain areas south of the atrium (i.e., areas from which the solar shades block views of vegetation in the atrium's interior) will not have line-of-sight views to interior vegetation where these shades are present. This reduces the potential for bird collisions with portions of the atrium's south façade by preventing that interior vegetation from being a strong attractant to birds. However, birds located elsewhere along the south façade (i.e., areas where the solar shades do not block views of vegetation in the atrium's interior) would have line-of-sight views to interior vegetation. As discussed above for the north façade, the articulated structure of the atrium will substantially reduce the visibility of interior vegetation to birds on the atrium's south facade, especially from a distance (Figure 20), reducing the likelihood

that birds will collide with glazing on the south façade because they are attempting to reach interior vegetation. In addition, fin-like mullions on the exterior surface of the façade will help break up the smooth surface and increase the visibility of the façade to birds (Figure 21).

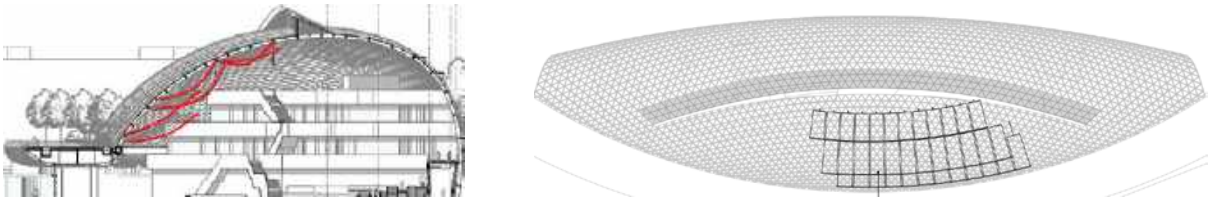

Figure 22. Interior sail shades, shown in red on the left cross-section image, are located along portions of the south façade of the atrium and will block views of interior vegetation to birds located at the elevated park or flying overhead. The approximate extent of the sail shades is shown in dark gray on the right (overhead) image.

To the extent feasible, exterior vegetation at the elevated park will be planted such that high-branching clear-stemmed trees are set back from the glass façade, and dense trees, shrubs, and other plants would be located immediately adjacent to glass facades (Figure 23). As discussed above, we expect this planting strategy to reduce the frequency of collisions with glazing that is immediately adjacent to the vegetation by obscuring reflections of the vegetation in glazing, and to reduce fatal collisions by reducing birds' flight speed if they should fly into the glass. However, even with this orientation of plantings, (1) birds may still be killed or injured even when they fly into windows at relatively low speeds; (2) the vegetation only reduces the collision hazard where it is dense very close to the façade, and not in adjacent areas; and (3) vegetation is not uniformly shaped, and grows or is trimmed back over time, and so does not provide uniform or consistent protection for entire facades over time. As a result, while this strategy represents a good practice for bird-safe design, collisions with the facades adjacent to the elevated park are still expected to occur.

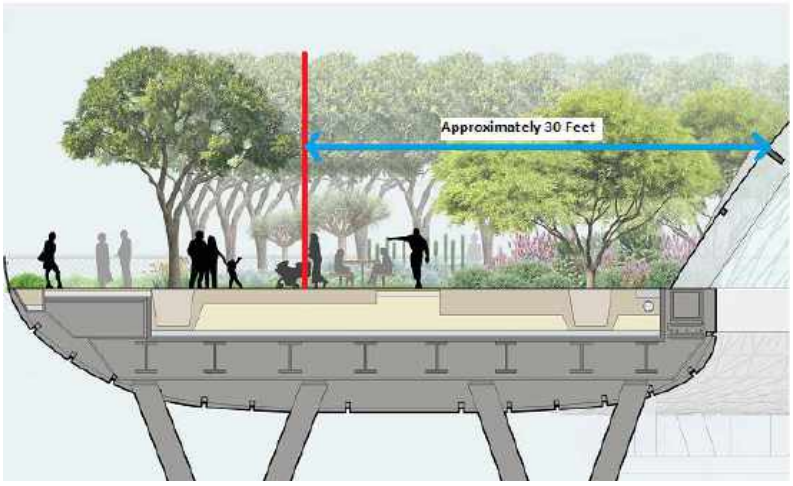

Figure 23. To the extent feasible, vegetation at the elevated park south of the site will be planted such that trees are set back from the glass façade, and dense shrubs and plants are located immediately adjacent to glass facades.

We expect potential bird collisions with the approximately 12.5-foot tall vertical glass façade beneath the elevated park to be reduced due to the following:

- The elevated park is approximately 50–65 feet wide, and trees on Level 1 within the atrium will be set back approximately 50 feet from the vertical glass façade. The resulting more than 50-foot distance of separation is expected to reduce the visibility of trees in the atrium to birds in the Town Square and courtyard.
- Birds would need to traverse more than 50 feet of minimally vegetated areas to attempt to travel in between trees in the Town Square/courtyard and the atrium's interior. Although some birds are expected to attempt to travel along this flight path, in our professional opinion the majority of birds will choose to travel to the immediately adjacent trees at the elevated park due to the closer proximity of these resources.
- A recent study (Riding et al. 2020) found that glass facades located at porticos (i.e., areas where an overhang creates a covered paved walkway, such as beneath the elevated park) have relatively low collision rates compared to other façade types. Thus, the overhang created by the elevated park, in combination with the lack of vegetation beneath the park, is expected to reduce the potential for collision risk.

Nevertheless, due to the presence of vegetation on either side of the atrium's south facade, birds are expected to collide with glazing on this façade when attempting to reach vegetation inside the atrium. Based on the project plans, this is especially true where vegetation on the Level 2 and 3 terraces are located adjacent to the atrium's south façade, because both of these areas are elevated at similar heights (Figure 19).

5.5.1.4 East and West Facades

Birds are expected to be attracted to exterior landscape vegetation along the east and west sides of the atrium. Within the atrium, Level 1 immediately adjacent to the west façade consists of the interior of a building, Level 2 consists of a vegetated roof terrace set back 30 feet from the facade, and Levels 3 and 4 consist of open air with vegetated roof terraces set back farther from the façade (Figure 19). Within the atrium immediately adjacent to the east façade, Level 1 consists of the interior of a building, Level 2 consists of a vegetated roof terrace set back 30 feet from the facade, Level 3 consists of open air with a vegetated roof terrace set back farther from the façade, and Level 4 consists of open air with an unvegetated roof terrace (Figure 19). Vegetation on the Level 2 terraces will be directly visible to birds using landscape vegetation in exterior areas east and west of the atrium. Vegetation on the Level 3 terraces will have limited visibility to birds east and west of the building due to the height of these terraces and because they are set back from the facades (Figure 19). Vegetation on the Level 4 terrace on the westernmost building is not expected to be visible to birds through the atrium's west façade (Figure 19).

Due to the presence of vegetation on either side of the atrium's east and west facades, birds are expected to collide with glazing on these facades when attempting to reach vegetation inside the atrium, especially at the Level 2 and 3 terraces.

5.5.2 Compliance with City Bird-Safe Design Requirements

To address collision risk with the atrium in part, the project will comply with City bird-safe design requirements, with appropriate waivers, as permitted by the City bird-safe design requirements.

5.5.2.1 Requirements for which No Waiver is Requested

As currently proposed, the atrium anticipates complying with City bird-safe design requirements A–D and G without requesting waivers; requirements A–D are listed below. Where the project's bird-safe design strategy is more specific than the City's requirements, sub-bullets specify how the project will comply with those requirements.

A. No more than 10% of facade surface area shall have non-bird-friendly glazing.
    - Specifically, all portions of the atrium shall be treated with a bird-safe glazing treatment with the exception of the vertical façade on the south side of the atrium below the elevated park. The area of untreated glazing shall be no more than 10% of the total surface area of the atrium.

B. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted.
    - Specifically, to reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on the atrium will have a visible reflectance of 15% or lower.

D. Placement of buildings shall avoid the potential funneling of flight paths towards a building facade.

Discussion of project compliance with City requirement C, related to occupancy sensors, is provided in Section 6.2.2 below.

5.5.2.2 Requirements for which Waivers will be Requested

Waivers Requested. As currently proposed, the project anticipates complying with the City's bird-safe design requirements E and F by requesting waivers for the atrium, as permitted by the City bird-safe design requirements. These waivers are requested in order for the project to achieve design excellence. City requirements E and F are as follows:

E. Glass skyways or walkways, free-standing (see-through) glass walls and handrails, and transparent building corners shall not be allowed.

F. Transparent glass shall not be allowed at the rooflines of buildings, including in conjunction with roof decks, patios and roofs with landscape vegetation.

Alternative City Measures Proposed. As an alternative to these requirements, to ensure that the project meets the City's intent of designing bird-safe buildings and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures for the atrium:

- All glazed features of the atrium with clear sight lines between vegetation on either side of the feature (e.g., at glazed corners) shall be 100% treated with a bird-safe glazing treatment. Transparent building corners shall be treated in all locations where it is possible to see through to the other side of the visitor center.
- If free-standing glass railings are included in the project design in exterior areas adjacent to the atrium (e.g., at the elevated park), all glazing on free-standing glass railings shall be 100% treated with a bird-safe glazing treatment.
    - Specifically, all glazing on free-standing glass railings in exterior areas adjacent to the atrium shall have a Threat Factor (see footnote 1 above) less than or equal to 15. This Threat Factor is relatively low (and the effectiveness of the bird-safe treatment correspondingly high) due to the relatively high risk of bird collisions with free-standing glass railings.
- All transparent glass at the rooflines of the atrium adjacent to roof decks (i.e., the elevated park) will be 100% treated with a bird-safe glazing treatment. The only untreated glazing on the atrium will be located on the vertical façade beneath the elevated park, which does not create a collision hazard due to landscape vegetation on roofs.

In lieu of complying with City requirements E and F per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirements E and F, the project will comply with these City requirements.

5.5.3 Additional Mitigation Measures Proposed Under CEQA

Due to the unique design of the atrium, compliance with City bird-safe design requirements (either via compliance with the listed requirements or by requesting waivers, as permitted by the City bird-safe design requirements, and proposing alternative City measures, where appropriate) may not reduce collision impacts with this structure sufficiently to avoid significant impacts under CEQA, and therefore these impacts may be potentially significant even with incorporation of the alternative City measures provided in Section 5.5.2 above. Therefore, additional CEQA mitigation measures are necessary to reduce impacts. With the implementation of the following mitigation measures, which go above and beyond the City's bird-safe design requirements as well as the alternative City measures, impacts due to bird collisions with the atrium will be reduced to less-than-significant levels under CEQA, in our professional opinion.

- **Mitigation Measure 1.** The project shall treat 100% of glazing on the 'dome-shaped' portions of the atrium's façades (i.e., all areas of the north façade, and all areas of the south façade above the elevated park)

with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor (see footnote 1 above) of 15 or lower.

Because a Threat Factor is a nonlinear index, its value is not equivalent to the percent reduction in collisions that a glazing product provides. However, products with lower threat factors result in fewer bird collisions. Because the City's bird-safe design requirements (and requirements of other municipalities in the Bay Area) do not specify the effectiveness of required bird-safe glazing, Mitigation Measure 1 goes above and beyond what would ordinarily be acceptable to the City, as well as what is considered the industry standard for the Bay Area.

- **Mitigation Measure 2.** The project shall treat 100% of glazing on the atrium's east and west facades with a bird-safe glazing treatment to reduce the frequency of collisions. This glazing shall have a Threat Factor[1] of 15 or lower.

- **Mitigation Measure 3.** Interior trees and woody shrubs will be set back from the atrium's east, west, and non-sloped (i.e., vertical/perpendicular to the ground) portions of the south facades by at least 50 feet to reduce the potential for collisions with these facades due to the visibility of interior trees. This 50-foot distance is greater than the distance used in the project design for the north and sloped portions of the south facades (e.g., 20-25 feet for the north façade) due to the vertical nature of the east, west, and non-sloped portions of the south facades, as opposed to the articulated nature of the north and sloped portions of the south facades (which is expected to reduce the visibility of internal vegetation to some extent), as well as the direct line-of-sight views between interior and exterior vegetation through the east, west, and non-sloped portions of the south facades compared to the north façade (where internal vegetation is elevated above exterior vegetation). Interior trees and shrubs that are not visible through the east, west, and south facades may be planted closer than 50 feet to glass facades.

- **Mitigation Measure 4.** Because the glass production process can result in substantial variations in the effectiveness of bird-safe glazing, a qualified biologist will review physical samples of all glazing to be used on the atrium to confirm that the bird-safe frit will be visible to birds in various lighting conditions, and is expected to be effective.

- **Mitigation Measure 5.** The project shall monitor bird collisions around the atrium for a minimum of two years following completion of construction of the atrium to identify if there are any collision "hotspots" (i.e., areas where collisions occur repeatedly).

  A monitoring plan for the atrium shall be developed by a qualified biologist that includes focused surveys for bird collisions in late April–May (spring migration), September–October (fall migration), and mid-November–mid-January (winter) to maximize the possibility that the surveys will detect any bird collisions that might occur. Surveys of the atrium will be conducted daily for three weeks during each of these periods (i.e., 21 consecutive days during each season, for a total of 63 surveys per year). In addition, for the two-year monitoring period, surveys of the atrium will be conducted the day following all nighttime events held in the atrium during which temporary lighting exceeds typical levels (i.e., levels specified in the International Dark-Sky Association's defined lighting zone LZ-2 from dusk until 10:00 p.m., or 30% below these levels

from 10:00 p.m. to midnight, as described in Section 6.5 below). The applicant can assign responsibility for tracking events and notifying the biologist when a survey is needed to a designated individual who is involved in the planning and scheduling of atrium events. The timing of the 63 seasonal surveys (e.g., morning or afternoon) will vary on different days to the extent feasible; surveys conducted specifically to follow nighttime events will be conducted in the early morning.

At a frequency of no less than every six months, a qualified biologist will review the bird collision data for the atrium in consultation with the City to determine whether any potential hotspots are present (i.e., if collisions have occurred repeatedly in the same locations). A "potential hotspot" is defined as a cluster of three or more collisions that occur within one of the three-week monitoring periods described above at a given "location" on the atrium. The "location" shall be identified by the qualified biologist as makes sense for the observed collision pattern and may consist of a single pane of glass, an area of glass adjacent to a landscape tree or light fixture, the 8,990 square-foot vertical façade beneath the elevated park, the façade adjacent to vegetation on the elevated park, the atrium's east façade, the atrium's west façade, or another defined area where the collision pattern is observed. "Location" shall be defined based on observations of (1) collision patterns and (2) architectural, lighting, and/or landscape features contributing to the collisions, and not arbitrarily (e.g., by assigning random grids).

If any potential hotspots are found, the qualified biologist will provide an opinion regarding whether the potential hotspot will impact bird populations over the long-term to the point that additional measures (e.g., adjustments to lighting or the placement of vegetation) are needed to reduce the frequency of bird strikes at the hotspot location in order to reduce impacts to a less-than-significant level under CEQA (i.e., whether it constitutes an actual "hotspot"). This will be determined based on the number and species of birds that collide with the atrium over the monitoring period. In addition, a "hotspot" is automatically defined if a cluster of five or more collisions are identified at a given "location" on the atrium within one of the three-week monitoring periods described above. If a hotpot is identified, additional measures will be implemented at the potential hotspot location at the atrium; these may include one or more of the following options in the area of the hotspot depending on the cause of the collisions:

- The addition of a visible bird-safe frit pattern, netting, exterior screens, art, printed sheets, interior shades, grilles, shutters, exterior shades, or other features to untreated glazing (i.e., on the façade below the elevated park) to help birds recognize the façade as a solid structure.
- Installing interior or exterior blinds in the buildings within the atrium to prevent light from spilling outward though glazed facades at night.
- Reducing lighting by dimming fixtures, redirecting fixtures, turning lights off, and/or adjusting programmed timing of dimming/shutoff.
- Replacing certain light fixtures with new fixtures to provide increased shielding or redirect lighting.
- Adjusting or reducing lighting during events.
- Adjusting the timing of events to reduce the frequency of events during certain times of year (e.g., spring and/or fall migration) when relatively high numbers of collisions occur.

- Adjusting landscape vegetation by removing, trimming, or relocating trees or other plants (e.g., moving them farther from glass), or blocking birds' views of vegetation through glazing (e.g., using a screen or other opaque feature).

If modifications to the atrium are implemented to reduce collisions at a hotspot, one year of subsequent focused monitoring of the hotspot location will be performed to confirm that the modifications effectively reduce bird collisions to a less-than-significant level under CEQA. This monitoring may or may not extend beyond the two-year monitoring period described above, depending on the timing of the hotspot detection.

It is our understanding that the project proposes to use a frit consisting of ¼-inch white dots spaced in a 2x2-inch grid (i.e., similar in specifications to the Solyx SX-BSFD Frost Dot Bird Safety Film product rated with a Threat Factor of 15 by the American Bird Conservancy) for all treated façade areas on the atrium. We further understand that the atrium's glazing will have a dark gray thermal frit treatment (e.g., dark dots incorporated into the glass) in addition to the lighter-toned frit pattern that composes the bird-safe treatment. The extent of thermal frit will vary from the lower portions of the atrium to the upper portions of the atrium, with the upper portions incorporating more extensive (i.e., greater percent cover) thermal frit. Based on our review of preliminary physical glass samples supporting potential combinations of thermal frit and bird-safe frit, provided by the project team, it is our opinion that the combination of the bird-safe frit treatment with the thermal frit would produce very low Threat Factors (Figure 24). We are unaware of any glazing products that incorporate thermal frit patterns and have been assigned a Threat Factor by the American Bird Conservancy; however, the U.S. Green Building Council allows Threat Factors to be determined via any of the following options: (1) using a glass product that has been tested and rated by the American Bird Conservancy; (2) using a glass product with the same characteristics as a product that has been tested and rated by the American Bird Conservancy; or (3) using a glass product that has not been tested and rated, and asking the American Bird Conservancy to provide their opinion regarding an appropriate Threat Factor. We reached out to Dr. Christine Sheppard at the American Bird Conservancy to request her concurrence that the presence of the solar frit would not reduce the effectiveness of the bird-safe frit (and may even increase the effectiveness of the bird-safe frit). Dr. Sheppard responded in an email dated April 9, 2021 agreeing that the solar frit should make the lighter bird-safe frit dots more visible, and the proposed bird-safe treatment would have a Threat Factor of 15 as long as the bird-safe frit dots are ¼-inch in diameter (Sheppard 2021). Thus, the proposed bird-safe glazing treatment is appropriate for the atrium facades and goes above and beyond the City's minimum requirements, as well as the local standard for the San Francisco Bay Area.

Figure 24. Two preliminary glass samples that combine the dark gray thermal frit and lighter-toned bird-safe frit were reviewed by H. T. Harvey & Associates. The frit on these samples had very good visibility in different lighting conditions due to the contrast between the light and dark frit, and in our professional opinion are likely to reduce bird collisions with the atrium.

It is our understanding that only the proposed 12.5-foot tall vertical glazed facades on the south side of the atrium will remain untreated. This untreated area is relatively large (approximately 8,990 square feet, per the August 2021 ACPs); however, it will be less than 10% of the entire façade area in compliance with City bird-safe design requirements. Some collisions with this glazing are expected to occur when birds attempt to fly from trees and vegetation within the Town Square and courtyard located south of the elevated park to trees and vegetation within the atrium. As discussed above, because trees on either side of the untreated vertical glass façade will be separated by a distance of approximately 50 feet, and because the vertical glazed façade is located beneath the elevated park (creating a 'portico'), it is our opinion that the potential for collisions with this glazing would be low.

5.5.4 CEQA Impacts Summary

The atrium will comply with the City's bird-safe design requirements by implementing requirements A–D and G, requesting waivers for requirements E and F, as permitted by the City bird-safe design requirements, and implementing alternative City measures for requirements E and F. Compliance with requirement C is discussed in Section 6.2.2 below. In addition, the project will implement Mitigation Measures 1–5 above to reduce impacts to less-than-significant levels under CEQA. As stated above, with compliance with City requirements (including the implementation of proposed alternative City measures) and Mitigation measures 1–5 above, it is our professional opinion that project impacts due to bird collisions with the atrium would be less than significant under CEQA.

A subsequent report prepared by a qualified biologist will accompany the final ACP for the atrium. It is our understanding based on coordination with the design team that (1) the final ACP design for the atrium will

substantially conform with the designs reviewed for this report, such that our analysis and conclusions are expected to be valid for the final design; (2) the proposed bird-safe treatments within the areas where such treatments are expected to be necessary are feasible; and (3) the project will implement alternative City measures and CEQA mitigation measure as described herein. Nevertheless, because the designs and renderings for the atrium were based on conceptual CDP plans and preliminary ACP designs, a qualified biologist shall review the final ACP for the atrium to confirm that the alternative City measures and CEQA mitigation measures described herein , or other alternative measures reasonably acceptable to the qualified biologist (see footnote 2 above) are incorporated into the final design such that project impacts due to bird collisions are reduced to less-than-significant levels under CEQA as described herein.

Section 6. Assessment of Lighting Impacts on Birds

6.1 Overview of Potential Impacts on Birds from Artificial Lighting

Numerous studies indicate that artificial lighting associated with development can have an impact on both local birds and migrating birds. Below is an overview of typical impacts on birds from artificial lighting, including lighting impacts related to general site lighting conditions and up-lighting.

6.1.1 Impacts Related to General Site Lighting Conditions

Evidence that migrating birds are attracted to artificial light sources is abundant in the literature as early as the late 1800s (Gauthreaux and Belser 2006). Although the mechanism causing migrating birds to be attracted to bright lights is unknown, the attraction is well documented (Longcore and Rich 2004, Gauthreaux and Belser 2006). Migrating birds are frequently drawn from their migratory flight paths into the vicinity of an artificial light source, where they will reduce their flight speeds, increase vocalizations, and/or end up circling the lit area, effectively "captured" by the light (Herbert 1970, Gauthreaux and Belser 2006, Sheppard and Phillips 2015, Van Doren et al. 2017). When birds are drawn to artificial lights during their migration, they may become disoriented and possibly blinded by the intensity of the light (Gauthreaux and Belser 2006). The disorienting and blinding effects of artificial lights directly impact migratory birds by causing collisions with light structures, buildings, communication and power structures, or even the ground (Gauthreaux and Belser 2006). Indirect impacts on migrating birds might include orientation mistakes and increased length of migration due to light-driven detours.

6.1.2 Impacts Related to Up-Lighting

Up-lighting refers to light that projects upwards above the fixture. There are two primary ways in which the luminance of up-lights might impact the movements of birds. First, local birds using habitats on a site may become disoriented during flights among foraging areas and fly toward the lights, colliding with the lights or with nearby structures. Second, nocturnally migrating birds may alter their flight direction or behavior upon seeing lights; the birds may be drawn toward the lights or may become disoriented, potentially striking objects such as buildings, adjacent power lines, or even the lights themselves. These two effects are discussed separately below.

Local Birds. Seabirds may be especially vulnerable to artificial lights because many species are nocturnal foragers that have evolved to search out bioluminescent prey (Imber 1975, Reed et al. 1985, Montevecchi 2006), and thus are strongly attracted to bright light sources. When seabirds approach an artificial light, they seem unwilling to leave it and may become "trapped" within the sphere of the light source for hours or even days, often flying themselves to exhaustion or death (Montevecchi 2006). Seabirds using habitats associated with the San Francisco Bay to the north include primarily gulls and terns. Although none of these species are primarily nocturnal foragers, there is some possibility that gulls, which often fly at night, may fly in areas where they

would be disoriented by project up-lights under conditions dark enough that the lights would affect the birds. Shorebirds forage along the San Francisco Bay nocturnally as well as diurnally, and move frequently between foraging locations in response to tide levels and prey availability. Biologists and hunters have long used sudden bright light as a means of blinding and trapping shorebirds (Gerstenberg and Harris 1976, Potts and Sordahl 1979), so evidence that shorebirds are affected by bright light is well established. Though impacts of a consistent bright light are undocumented, it is possible that shorebirds, like other bird species, may be disoriented by a very bright light in their flight path.

Passerine species have been documented responding to increased illumination in their habitats with nocturnal foraging and territorial defense behaviors (Longcore and Rich 2004, Miller 2006, de Molenaar et al. 2006), but absent significant illumination, they typically do not forage at night, leaving them less susceptible to the attraction and disorientation caused by luminance when they are not migrating.

Migrating Birds. Hundreds of bird species migrate nocturnally in order to avoid diurnal predators and minimize energy expenditures. Bird migration over land typically occurs at altitudes of up to 5,000 feet, but is highly variable by species, region, and weather conditions (Kerlinger 1995, Newton 2008). In general, night-migrating birds optimize their altitude based on local conditions, and most songbird and soaring bird migration over land occurs at altitudes below 2,000 feet while waterfowl and shorebirds typically migrate at higher altitudes (Kerlinger 1995, Newton 2008).

It is unknown what light levels adversely affect migrating birds, and at what distances birds respond to lights (Sheppard and Phillips 2015). In general, vertical beams are known to capture higher numbers of birds flying at lower altitudes. High-powered 7,000-watt (equivalent to 105,000-lumen) spotlights that reach altitudes of up to 4 miles (21,120 feet) in the sky have been shown to capture birds migrating at varying altitudes, with most effects occurring below 2,600 feet (where most migration occurs); however, effects were also documented at the upper limits of bird migration at approximately 13,200 feet (Van Doren et al. 2017). A study of bird responses to up-lighting from 250-watt (equivalent to 3,750-lumen) spotlights placed on the roof of a 533-foot tall building and directed upwards at a company logo documented behavioral changes in more than 90% of the birds that were visually observed flying over the building at night (Haupt and Schillemeit 2011). One study of vertical lights projecting up to 3,280 feet found that higher numbers of birds were captured at altitudes below 650 feet, but this effect was influenced by wind direction and the birds' flight speed (Bolshakov et al. 2013). These studies have not analyzed the capacity for vertical lights to attract migrating birds flying beyond their altitudinal range, and the potential for the project up-lights to affect birds flying at various altitudes is unknown. Thus, birds that encounter beams from up-lights are likely to respond to the lights, and may become disoriented or attracted to the lights to the point that they collide with buildings or other nearby structures, but the range of the effect of the lights is unknown.

Observations of bird behavioral responses to up-lights indicate that their behaviors return to normal quickly once up-lights are completely switched off (Van Doren et al. 2017), but no studies are available that demonstrate bird behavioral responses to reduced or dimmed up-lights. In general, up-lights within very dark areas are more

likely to "capture" and disorient migrating birds, whereas up-lights in brightly lit areas (e.g., highly urban areas, such as Menlo Park) are less likely to capture birds (Sheppard 2017). Birds are also known to be more susceptible to capture by artificial light when they are descending from night migration flights in the early mornings compared to when they ascend in the evenings; as a result, switching off up-lights after midnight can minimize adverse effects on migrating birds (Sheppard 2017). However, more powerful up-lights (e.g., 3,000 lumen spotlights) may create issues for migrating birds regardless of the time of night they are used (Sheppard 2017).

6.2 Lighting Design Principles

To address potential impacts from artificial project lighting, the CDP requires the project to implement (i) certain lighting design principles as well as (ii) the occupancy sensor requirement in the City's bird-safe design requirements, as described below. For all Master Plan components, because the project's lighting plan has not yet been developed, a qualified biologist shall review the final lighting design as part of each ACP to ensure that the lighting design principles provided in Sections 6.2.1 and 6.2.2 below are incorporated into the final design.

The International Dark-Sky Association (2021a) recommends using lighting with a color temperature of no more than 3,000 Kelvins to minimize harmful effects on humans and wildlife. However, the effects of different light wavelengths on various species of birds are not consistent (Owens et al. 2020). Some studies have shown that using blue and green lights may be less disorienting to birds compared to red lights (Poot et al. 2008), but it is known that birds can be disoriented by red lights (Sheppard et al. 2015) and blue lights (Zhao et al. 2020). The American Bird Conservancy's Bird-Friendly Building Design guidance states that manipulating light color shows promise in its potential to reduce bird collisions with buildings, but additional study is needed to determine what colors should be used (Sheppard and Phillips 2015). Instead, the American Bird Conservancy recommends reducing exterior building and site lighting, which has been proven to reduce bird mortality (Sheppard and Phillips 2015). The City of San Francisco's Standards for Bird-Safe Buildings recommends that project proponents "consider" reducing red wavelengths where lighting is necessary, but this measure is not required; rather, they require avoidance of uplighting in lighting designs (San Francisco Planning Department 2011). As a result, the principles provided in Sections 6.5.2.1 to 6.4.2.4 below focus on minimizing lighting, rather than restricting lighting temperatures. Reducing, shielding, and directing lights on the project site and avoiding uplighting effectively limits the effects of lights by minimizing skyglow and the spillage of light outwards into adjacent natural areas, and is consistent with local (City of San Francisco) and national (American Bird Conservancy) standards for minimizing bird collisions.

6.2.1 Design Principles

The advancement of luminaires has substantially improved lighting design in recent years, and the project will employ a scientific approach to reduce overall lighting levels as well as Backlight, Up-light, and Glare ("BUG") ratings for individual fixtures to avoid and minimize the lighting impacts on birds discussed above. Accordingly, the CDP requires the following design principles to avoid and minimize potential lighting impacts on birds:

- Fixtures shall comply with lighting zone LZ-2, *Moderate Ambient*, as recommended by the International Dark-Sky Association (2011) for light commercial business districts and high-density or mixed-use residential districts. The allowed total initial luminaire lumens for the Master Plan area is 2.5 lumens per square foot of hardscape, and the BUG rating for individual fixtures shall not exceed B3-U2-G2, as follows:
    - B3: 2,500 lumens high (60–80 degrees), 5,000 lumens mid (30–60 degrees), 2,500 lumens low (0–30 degrees)
    - U2: 50 lumens (90–180 degrees)
    - G2: 225 lumens (forward/back light 80–90 degrees), 5,000 (forward 60–80 degrees), 1,000 (back light 60–80 degrees asymmetrical fixtures), 5,000 (back light 60–80 degrees quadrilateral symmetrical fixtures)
- Unshielded fixtures, flood lights, drop and sag lens fixtures, unshielded bollards, widely and poorly aimed lights, and searchlights shall be avoided. All lights shall be well-shielded and aimed appropriately to minimize up-light and glare. The materials of illuminated objects shall be considered to minimize up-lighting effects, and low-glare lighting shall be prioritized (e.g., fixtures shall be aimed no more than 25 degrees from vertical).
- Full cutoff fixtures, shielded fixtures, shielded walkway bollards, shielded and properly aimed lights, and flush-mounted fixtures will be encouraged. Full glare control and concealed sources shall be provided to minimize light trespass.
- Lighting controls such as automatic timers, photo sensors, and motion sensors shall be used. Luminaires not on emergency controls shall have occupancy sensors and an astronomic time clock.
- Low-level and human-scale lighting shall be prioritized while emphasizing areas of activity.
- All exterior luminaires shall be dimmable, and overall brightness at night shall be minimized.
- Exterior lighting along the perimeter of the Master Plan area shall be minimized.
- Soft transitions and low contrast shall be created between lighter and darker exterior spaces.
- Interior office lighting shall be directed and shielded to light task areas and minimize spillage outside of buildings.
- All energy efficiency standards shall be met.

With the adoption of these principles, the potential for lighting impacts on birds will be greatly reduced. In our professional opinion, compliance these design principles will reduce impacts due to overall lighting levels on birds to less-than-significant levels under CEQA. However, because the project lighting design has not yet been developed, and due to the sensitivity of the Master Plan area (which faces habitats along the San Francisco Bay) as well as the potential for collisions with certain project components (e.g., the atrium and stair/elevator towers), additional mitigation measures are needed in the absence of a finalized design to ensure that impacts of project lighting on birds are reduced to less-than-significant levels (see Section 6.3.1.2 below).

6.2.2 City Occupancy Sensor Requirements

As currently proposed, the project anticipates complying with City bird-safe design requirement C by implementing the requirement as stated or by requesting waivers where compliance is not feasible, as permitted by the City bird-safe design requirements. City requirement C is as follows:

C. Occupancy sensors or other switch control devices with an astronomic time clock shall be installed on nonemergency lights and programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.

For the purpose of this report, we assume that the City intends this requirement to apply to interior lights only. No additional lighting measures are required as part of the City's bird-safe design requirements.

The two buildings inside the atrium, visitor center, Town Square retail pavilion, event building, Office Buildings 01–06, stair/elevator towers, security pavilions, North Garage, South Garage, hotel, and mixed-use buildings shall comply with City occupancy sensor requirements where feasible. However, occupancy sensors may not be feasible in some areas (e.g., because the space is occupied 24 hours per day). In addition, events at the atrium may extend later than 10:00 p.m. The applicant shall request waivers for areas where occupancy sensors are not feasible, as well as for events that extend later than 10:00 p.m., as permitted by the City bird-safe design requirements.

Alternative City Measures Proposed. As an alternative to this requirement, to ensure that the project meets the City's intent of minimizing the spill of lighting outwards from buildings at night and addresses high-risk collision hazards, the project proposes to implement the following alternative City measures to minimize lighting:

- When occupancy sensors are not feasible, the visitor center, Town Square retail pavilion, Office Building 04, event building, and North Garage shall program interior or exterior blinds to close on exterior windows during non-work hours and between 11:00 p.m. and sunrise in order to block lighting from spilling outward from the buildings.
- During events at the atrium, occupancy sensors shall be programmed so that interior lights shut off no later than midnight.
- For the remaining buildings on the project site (i.e., the two buildings within the atrium, hotel, residential/mixed-use buildings; Office Buildings 01, 02, 03, 05, and 06; stair/elevator towers; security pavilions, and the South Garage), if occupancy sensors or other switch control devices are not feasible, and/or interior lights cannot be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise (e.g., because the space is occupied 24 hours per day or is residential), no alternative City measures are proposed.

In lieu of complying with City requirement C per se, this proposed approach would reduce bird collisions at the locations where bird collisions are most likely to occur and, in our professional opinion, adequately meet

the objective of the City's requirements (i.e., to minimize bird collisions with the buildings). Therefore, the requested waivers to the City's bird-safe design requirements are appropriate. Alternatively, if the City does not grant a waiver for requirement C, the project will comply with this requirement.

6.3 Analysis of Potential Impacts on Birds due to Lighting

No detailed information regarding the proposed lighting design for the project was available for review as part of this assessment. Nevertheless, construction of the project will create new sources of lighting on the project site. Lighting would emanate from light fixtures illuminating buildings, building architectural lighting, pedestrian lighting, and artistic lighting. Depending on the location, direction, and intensity of exterior lighting, this lighting can potentially spill into adjacent natural areas, thereby resulting in an increase in lighting compared to existing conditions. Areas to the south, east, and west of the project site are entirely developed as urban (i.e., within a city or town) habitats that do not support diverse or sensitive bird communities that might be substantially affected by illuminance from the project. Birds inhabiting more natural habitat areas along the San Francisco Bay to the north and/or the future vegetated open space areas on the project site may be affected by an increase in lighting. However, the number of shorebirds foraging near or flying over the project site is expected to be relatively low, as shorebirds do not congregate in large numbers at or near the project site.

Thus, lighting from the project has some potential to attract and/or disorient birds, especially during inclement weather when nocturnally migrating birds descend to lower altitudes. As a result, some birds moving along the San Francisco Bay at night may be (1) attracted to the site, where they are more likely to collide with buildings; and/or (2) disoriented by night lighting, potentially causing them to collide with the buildings. Certain migrant birds that use structures for roosting and foraging (such as swifts and swallows) would be vulnerable to collisions if they perceive illuminated building interiors as potential roosting habitat and attempt to enter the buildings through glass walls. Similarly, migrant and resident birds would be vulnerable to collisions if they perceive illuminated vegetation within buildings as potential habitat and attempt to enter a building through glass walls.

Potential impacts on birds due to lighting within the various Master Plan components, as well as applicable CEQA mitigation measures, are discussed Sections 6.3.1 to 6.3.4 below. For purposes of this analysis, Master Plan components are grouped together in these sections based on lighting impacts within these areas as well as the lighting design principles necessary to reduce impacts under CEQA, as follows:

- Master Plan components within the northern portion of the project site (i.e., areas north of Main Street and Office Buildings 03 and 05 surrounding the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage, but not including buildings within the atrium) are discussed together because lighting within these areas has a greater potential to (1) spill northwards into sensitive habitats along the San Francisco Bay, and (2) attract and/or disorient migrating birds during the spring and fall compared to areas farther south on the project site.

- The stair/elevator towers are discussed separately due to the potential for lighting of these towers to attract birds (especially migrants) towards these structures where they would able to see roosting opportunities behind glazed façades, and potentially collide with the glass.
- Due its unique structure and location along the northern boundary of the project site, the atrium and buildings within the atrium are discussed separately.
- Master Plan components within the southern portion of the project site (i.e., Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings) are discussed together because they have a lower potential to affect migrating birds due to the greater distance between these areas and the San Francisco Bay, the extensive opaque facades on these buildings, and the less extensive vegetation present compared to the northern portion of the site.

6.3.1 Potential Impacts due to Lighting within the Northern Portion of the Project Site

6.3.1.1 Description of Potential Impacts

As discussed above, birds inhabiting more natural habitat areas along the San Francisco Bay to the north and/or the future vegetated open space areas on the project site itself may be affected by an increase in lighting on the site. Because buildings within the northern portion of the site are located in closer proximity to natural habitats along the San Francisco Bay as well as proposed extensive vegetation on the project site itself (e.g., at the elevated park), lighting associated with the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage has a greater potential to (1) spill northwards into sensitive habitats along the San Francisco Bay, and (2) attract and/or disorient migrating birds during the spring and fall, compared to buildings located farther south on the project site. Due to the potential for birds to collide with glazing on these buildings, CEQA mitigation measures to minimize lighting at these locations are provided in Section 6.3.1.2 below to ensure that these impacts are minimized.

6.3.1.2 Additional Mitigation Measures Proposed Under CEQA

Due to the potential for lighting within the northern portion of the project site to affect birds, the City's requirement to include occupancy sensors in the project design (or the alternative City measures provided in Section 6.2.2 above) in combination with the lighting design principles provided in Section 6.2 may not reduce lighting-related impacts within this area sufficiently to avoid significant impacts under CEQA. While the project's lighting design principles provide a general strategy for lighting design and specify a BUG rating for exterior fixtures, these principles are not specific enough to ensure that the spill of lighting upwards and outwards into adjacent natural areas will be minimized to an appropriate level. With the implementation of Mitigation Measures 6–9 below, which provide greater specificity to ensure that lighting impacts are minimized, impacts on birds due to lighting in the northern portion of the site will be reduced to less-than-significant levels under CEQA, in our professional opinion.

For all exterior lighting in the northern portion of the project site (i.e., areas north of Main Street and Office Buildings 03 and 05 surrounding the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage):

- **Mitigation Measure 6.** To the maximum extent feasible, up-lighting (i.e., lighting that projects upward above the fixture) shall be avoided in the project design. All lighting shall be fully shielded to block illumination from shining upward above the fixture.

  If up-lighting cannot be avoided in the project design, up-lights shall be shielded and/or directed such that no luminance projects above/beyond objects at which they are directed (e.g., trees and buildings) and such that the light would not shine directly into the eyes of a bird flying above the object. If the objects themselves can be used to shield the lights from the sky beyond, no substantial adverse effects on migrating birds are anticipated.

- **Mitigation Measure 7.** All lighting shall be fully shielded to block illumination from shining outward towards San Francisco Bay habitats to the north. No light trespass shall be permitted more than 80 feet beyond the site's northern property line (i.e., beyond the JPB rail corridor).

- **Mitigation Measure 8.** Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30% or extinguished, consistent with recommendations from the International Dark-Sky Association [2011]) from 10:00 p.m. until sunrise, except as needed for safety and City code compliance.

- **Mitigation Measure 9.** Temporary lighting that exceeds minimal site lighting requirements may be used for nighttime social events. This lighting shall be switched off no later than midnight. No exterior up-lighting (i.e., lighting that projects upward above the fixture, including spotlights) shall be used during events.

6.3.1.3 CEQA Impacts Summary

The project will implement the lighting design principles in Section 6.2 as well as Mitigation Measures 6–9 above and comply with City requirements (either via compliance with requirement C or the implementation of the proposed alternative City measures) to reduce impacts due to lighting in the northern portion of the project site to less-than-significant levels under CEQA. By incorporating these principles and measures, it is our professional opinion that project impacts due to bird collisions with the buildings in the northern portion of the project site would be less than significant under CEQA.

Subsequent reports prepared by a qualified biologist will accompany each of the final ACPs for the hotel, Town Square retail pavilion, Office Building 04, event building, and North Garage. It is our understanding based on considerable coordination with the design team that (1) the proposed lighting design principles, City measures, and mitigation measures are feasible, and (2) the project will implement the lighting design principles, City requirements or alternative City measures, and mitigation measures as described herein. Nevertheless, because detailed information about project lighting design was not available as part of this assessment, a qualified biologist shall review the final ACPs to confirm that the lighting design principles, City requirements or

alternative City measures, and mitigation measures described herein are incorporated into the final design such that project impacts due to bird collisions are reduced to less-than-significant levels under CEQA as described herein.

6.3.2 Potential Impacts Related to the Stair/Elevator Towers

6.3.2.1 Description of Potential Impacts

Five stair/elevator towers connect the plaza south of the atrium with the elevated park. These towers will be lit at night. As discussed above, certain migrant birds that use structures for roosting and foraging (such as swifts and swallows) would be vulnerable to collisions if they perceive illuminated building interiors as potential roosting habitat and attempt to enter the buildings through glass walls. Lighting of these towers is expected to illuminate their interiors, potentially attracting birds (especially migrants) towards these areas when they are able to see roosting opportunities behind glazed façades. Due to the potential for birds to collide with this glazing, CEQA mitigation measures to minimize lighting at these locations are provided in Section 6.3.2.2 below to ensure that impacts due to lighting at stair/elevator towers are minimized.

6.3.2.2 Additional Mitigation Measures Proposed Under CEQA

Due to the potential for lighting within the stair/elevator towers to result in bird collisions, the City's requirement to include occupancy sensors in the project design (or the alternative City measures provided in Section 6.2.2 above) in combination with the lighting design principles provided in Section 6.2 may not reduce collision impacts with these towers sufficiently to avoid significant impacts under CEQA. While the project's lighting design principles provide a general strategy for lighting design and specify a BUG rating for exterior fixtures, these principles are not specific enough to ensure that the spill of lighting outwards from the glass stair/elevator towers will be minimized to an appropriate level. With the implementation of Mitigation Measure 10 below, impacts due to lighting of the stair/elevator towers will be reduced to less-than-significant levels under CEQA, in our professional opinion.

- **Mitigation Measure 10.** Lights shall be shielded and directed so that lighting does not spill outwards from the elevator/stair towers into adjacent areas.

6.3.2.3 CEQA Impacts Summary

The project will implement the lighting design principles in Section 6.2 as well as Mitigation Measure 10 above and comply with City requirements (either via compliance with requirement C or the implementation of the proposed alternative City measures) to reduce impacts due to lighting within the stair/elevator towers to less-than-significant levels under CEQA. By incorporating these principles, requirements, and measures, it is our professional opinion that project impacts due to bird collisions with the stair/elevator towers would be less than significant under CEQA.

Subsequent reports prepared by a qualified biologist will accompany the final ACPs for the project components that include elevator towers (i.e., the hotel, Town Square, Office Building 04, event building, and atrium). It is

our understanding based on considerable coordination with the design team that (1) the proposed lighting design principles, City requirements or alternative City measures, and mitigation measures are feasible; and (2) the project will implement the lighting design principles, City requirements or alternative City measures, and mitigation measures as described herein. Nevertheless, because detailed information about project lighting design was not available as part of this assessment, a qualified biologist shall review the final ACPs to confirm that the lighting design principles, City requirements or alternative City measures, and mitigation measures described herein are incorporated into the final design such that project impacts due to bird collisions are reduced to less-than-significant levels under CEQA as described herein.

6.3.3 Potential Impacts Related to the Atrium

6.3.3.1 Description of Potential Impacts

In addition to the general site lighting impacts and up-lighting impacts discussed above, lighting within the atrium will illuminate interior vegetation and structures. The architectural features described above that are expected to make it difficult for birds to see interior vegetation during daytime would still mask the appearance of interior vegetation at night to some extent. However, if illumination makes interior vegetation more visible to birds (e.g., in early morning or late evening hours when exterior light levels are low), birds that are active between dusk and dawn may fly into the glazing on the atrium where they can see vegetation and/or structures (e.g., for roosting) on the other side of the glass. As discussed above, collisions by resident birds are expected to occur year-round; however, these birds are generally familiar with their surroundings and can be less likely to collide with buildings compared with migrant birds. In addition, resident birds are primarily active during the day. In contrast, nocturnal migrant landbirds may be attracted to lighting, and are less likely to be aware of risks such as glass compared to resident birds. As a result, relatively higher numbers of collisions by birds, especially migrant birds, could occur if vegetation and/or structures within the atrium are made more conspicuous between dusk and dawn due to interior illumination.

Conceptual views of night lighting levels within the atrium are provided in Figure 25. As discussed in Section 5 above, the visibility of interior vegetation to birds is limited within the atrium due to the presence of interior buildings and solar shades that partially block the view of this vegetation from the north and south, respectively. Nevertheless, lighting is expected to illuminate interior vegetation and structures such that they may be visible to birds outside of the atrium as follows:

- Birds located north of the atrium at any elevation will be able to see illuminated interiors of structures within the atrium. Birds flying at elevations 37 feet or higher will be able to see illuminated interior vegetation and structures on rooftops (Figure 19). The presence of exterior trees and other vegetation immediately adjacent to the north façade is expected to screen illuminated interior vegetation less than or equal to the height of these trees to birds from a distance, with the exception of the area along the East Garden (where no trees will be planted along the atrium's north façade).
- Birds located south of the atrium will be able to see illuminated interior structures and vegetation except where interior solar shades are present in between the birds and interior features (Figure 22). In addition,

the presence of exterior trees and other vegetation immediately adjacent to the south façade along the elevated park is expected to screen illuminated interior vegetation less than or equal to the height of these trees to birds from a distance.

Figure 5. Anticipated conceptual lighting conditions within the atrium and immediately surrounding areas during evening hours (top left), events (top right), and after hours (bottom).

Due to the potential for birds to collide with glazing on the atrium if interior structures and vegetation are illuminated, CEQA mitigation measures to minimize the attraction of birds towards the atrium by minimizing light radiating outward from the atrium being perceived as a bright attractant to nocturnal migrants, as well as the illumination of vegetation and structures within the atrium, are provided in Section 6.3.3.2 below to ensure that impacts due to lighting within the atrium are minimized.

6.3.3.2 Additional Mitigation Measures Proposed Under CEQA

Buildings within the Atrium. Due to the potential for interior lighting within the buildings within the atrium to spill outwards to the north and affect birds, the City's requirement to include occupancy sensors in the project design (or the alternative City measures provided in Section 6.2.2 above), in combination with the lighting design principles provided in Section 6.2 above, may not reduce collisions with the atrium's north façade sufficiently to avoid significant impacts under CEQA. While the project's lighting design principles provide a general strategy for lighting design and specify a BUG rating for exterior fixtures, these principles do not ensure that any security lighting and lighting within occupied spaces will not spill outwards from these buildings towards sensitive habitats to the north. The project shall implement the following mitigation measure for interior lights within the buildings within the atrium to minimize impacts due to lighting:

- **Mitigation Measure 11.** Interior or exterior blinds shall be programmed to close on north-facing windows of interior buildings within the atrium from 10:00 p.m. to sunrise in order to block lighting from spilling outward from these windows.

Atrium. If birds are able to distinguish illuminated interior vegetation, trees, and structures within the atrium at night, collisions with the building are expected to be appreciably higher as birds attempt to fly through glazing to reach these features (e.g., during descent from migration at dawn). The project shall implement Mitigation Measures 6 and 8 above as well as the Mitigation Measure 12 below to ensure that structures, trees, and vegetation in the atrium are not illuminated by up-lighting or accent lighting such that they are more conspicuous to birds from outside compared to ambient conditions (i.e., lighting levels from fixtures within the atrium that do not specifically illuminate these features). Structures, trees, and vegetation are considered 'more conspicuous' to birds when they would be more conspicuous when viewed by the human eye from outside the atrium at any elevation.

- **Mitigation Measure 12.** Accent lighting within the atrium shall not be used to illuminate trees or vegetation. OR

  The applicant shall provide documentation to the satisfaction of a qualified biologist that the illumination of vegetation and/or structures within the atrium by accent lighting and/or up-lighting will not make these features more conspicuous to the human eye from any elevation outside the atrium compared to ambient conditions within the atrium. The biologist shall submit a report to the City following the completion of the lighting design documenting compliance with this requirement.

6.3.3.3 CEQA Impacts Summary

The project will implement the lighting design principles in Section 6.21 as well as Mitigation Measures 6, 8, 11, and 12 above and comply with City requirements (either via compliance with requirement C or the implementation of the proposed alternative City measures) to reduce impacts due to lighting within the atrium and the buildings within the atrium to less-than-significant levels under CEQA. By incorporating these principles and measures, it is our professional opinion that project impacts due to lighting within these areas would be less than significant under CEQA.

Subsequent reports prepared by a qualified biologist will accompany the final ACP for the atrium. It is our understanding based on considerable coordination with the design team that (1) the proposed lighting design principles, City requirements or alternative City measures, and mitigation measures are feasible; and (2) the project will implement the lighting design principles, City requirements or alternative City measures, and mitigation measures as described herein. Nevertheless, because detailed information about project lighting design was not available as part of this assessment, a qualified biologist shall review the final ACP to confirm that the lighting design principles, City requirements or alternative City measures, and mitigation measures described herein are incorporated into the final design such that project impacts are reduced to less-than-significant levels under CEQA as described herein.

6.3.4 Potential Impacts Related to the Southern Portion of the Project Site

6.3.4.1 Description of Potential Impacts

As discussed above, birds inhabiting more natural habitat areas along the San Francisco Bay to the north and/or the future vegetated open space areas on the project site itself may be affected by an increase in lighting on the site. Because buildings within the southern portion of the site are located farther from natural habitats along the San Francisco Bay as well as proposed extensive vegetation on the project site itself (e.g., at the elevated park), the potential for lighting associated with Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings is not expected to spill into sensitive habitats north of the site (due to the presence of buildings in between these areas and habitats to the north), and has a lower potential to attract and/or disorient migrating birds during the spring and fall compared to buildings located farther north on the project site. Nevertheless, due to the potential for birds to collide with glazing on these buildings due to lighting within these areas, CEQA mitigation measures to minimize lighting within this area are provided in Section 6.3.4.2 below to ensure that these impacts are less than significant.

6.3.4.2 Additional Mitigation Measures Proposed Under CEQA

Due to the potential for lighting within the southern portion of the project site to affect birds, the City's requirement to include occupancy sensors in the project design (or the alternative City measures provided in Section 6.2.2 above) in combination with the lighting design principles provided in Section 6.2.1 may not reduce collision impacts with Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings to less-than-significant levels under CEQA. While the project's lighting design principles provide a general strategy for lighting design and specify a BUG rating for exterior fixtures, these principles are not specific enough to ensure that lighting will be minimized sufficiently to avoid significant impacts under CEQA. With the implementation of Mitigation Measures 6 and 13, which provide greater specificity to ensure that lighting impacts are minimized, impacts due to lighting in the southern portion of the site will be reduced to less-than-significant levels under CEQA, in our professional opinion.

For Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings, the project shall implement Mitigation Measure 6 above as well as the following mitigation measure to minimize impacts due to increased lighting:

- **Mitigation Measure 13.** Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30% or extinguished, consistent with recommendations from the International Dark-Sky Association [2011]) from midnight until sunrise, except as needed for safety and City code compliance.

6.3.4.3 CEQA Impacts Summary

The project will implement the lighting design principles in Section 6.2.1 as well as Mitigation Measures 6 and 13 and comply with City requirements (either via compliance with requirement C or the implementation of the proposed alternative City measures) to reduce impacts due to lighting in the southern portion of the project site to less-than-significant levels under CEQA. By incorporating these principles, requirements, and measures,

it is our professional opinion that project impacts due to lighting within this area would be less than significant under CEQA.

Subsequent reports prepared by a qualified biologist will accompany each of the final ACPs for Office Buildings 01, 02, 03, 05, and 06 and the residential/mixed-use buildings. It is our understanding based on considerable coordination with the design team that (1) the proposed lighting design principles, City requirements or alternative City measures, and mitigation measures are feasible; and (2) the project will implement the lighting design principles, City requirements or alternative City measures, and mitigation measures as described herein. Nevertheless, because detailed information about project lighting design was not available as part of this assessment, a qualified biologist shall review the final ACPs to confirm that the lighting design principles, City requirements or alternative City measures, and mitigation measures described herein are incorporated into the final design such that project impacts due to bird collisions are reduced to less-than-significant levels under CEQA as described herein.

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Appendix A. Additional Supporting Design Detail

The project will generally conform with the designs reviewed for this report, as depicted on the figures in this Appendix A to support H. T. Harvey & Associates analysis of bird collision hazards associated with the project. In addition, the CDP will require that the project comply with the specific beneficial project features identified in this Assessment as depicted on the figures in this Appendix A, in addition to the City bird-safe design requirements, City alternative measures, mitigation measures, and lighting design principles discussed in the Assessment, to avoid or reduce to less-than-significant levels under the California Environmental Quality Act project impacts due to bird collisions.

The images provided herein were used as the basis for the Willow Village Master Plan bird-safe design analysis; however, these images are conceptual and represent design intent rather than the final project design. Because the final design may differ from the images provided in Appendix A, a qualified biologist shall review the final ACPs for each project component to confirm that the final design is consistent with this bird-safe design assessment.

Hotel

Figure 6. Illustration of buildings in the northern portion of the site showing the proposed atrium, elevated park, hotel, Town Square, Office Building 04, and event building.

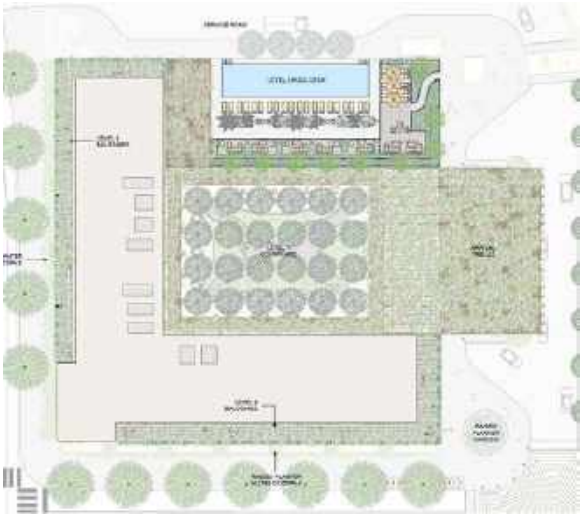


Figure 4. The conceptual hotel plan includes a central courtyard on Level 1, a pool deck on Level 3, and vegetated balconies on Level 6.

Figure 5. The conceptual east (top left), north (top right), west (bottom left), and south (bottom right) facades of the hotel.

Residential/Mixed-Use Buildings

Figure 6. Illustrative site plan showing the proposed residential/mixed-use buildings and associated open space areas. Facades with highest collision risk are delineated in red.

Figure 7. The conceptual Parcel 2 residential/mixed-use building plan includes open space courtyards on Level 3.

Figure 8. The conceptual east (top), west (middle), south (bottom left), and north (bottom right) facades of the Parcel 2 residential/mixed-use building.

Figure 9. An example mark-up of areas (shown in blue) that would be required to be treated on north (top left), south (top right), east (middle) and west (bottom) facades of the conceptual Parcel 2 residential/mixed-use building to ensure that avian collisions are less-than-significant. Transparent glass corner delineations are estimated; these corners should be treated as far from the corner as it is possible to see through the corner. Free-standing glass railings are not indicated on this figure but are required to be treated in all locations.

Office Buildings

Figure 10. Conceptual site plan showing the locations of proposed office buildings and garages, as well as the proposed extent of landscape vegetation and trees.

Parking Garages

Figure 11. Conceptual North Garage elevations: east (top), west (middle), north (bottom left), and south (bottom right). The building facades are predominantly opaque; glazed areas are located on all levels the elevator towers on the west and north facades.

Event Building

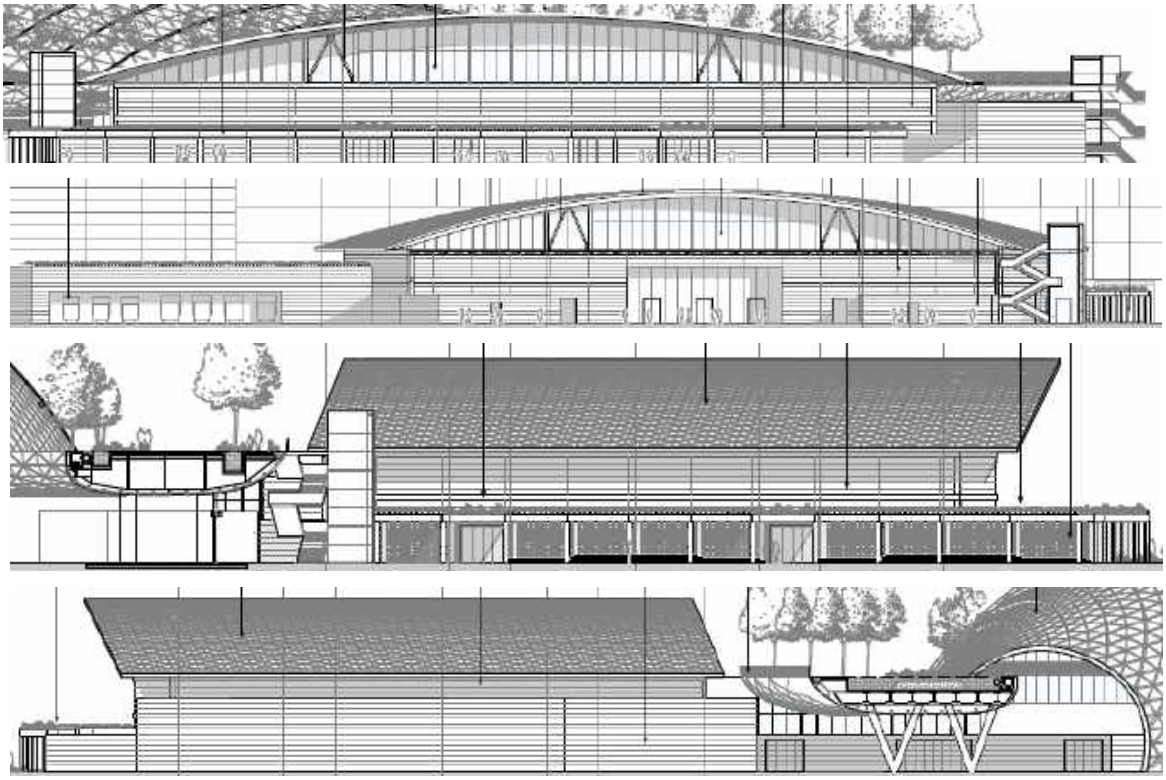


Figure 13. Illustration of the event building façades. Top to bottom: the southeast, northwest, northeast, and southwest facades.

Office Building 04

Figure 14. Conceptual Office Building 04 elevations: west (top left), east (top right), north (middle), and south (bottom).

Town Square

Figure 14. The conceptual Town Square includes a paved plaza with landscape vegetation and trees, seating areas, a glazed elevator to the elevated park, bicycle parking, and a retail pavilion.

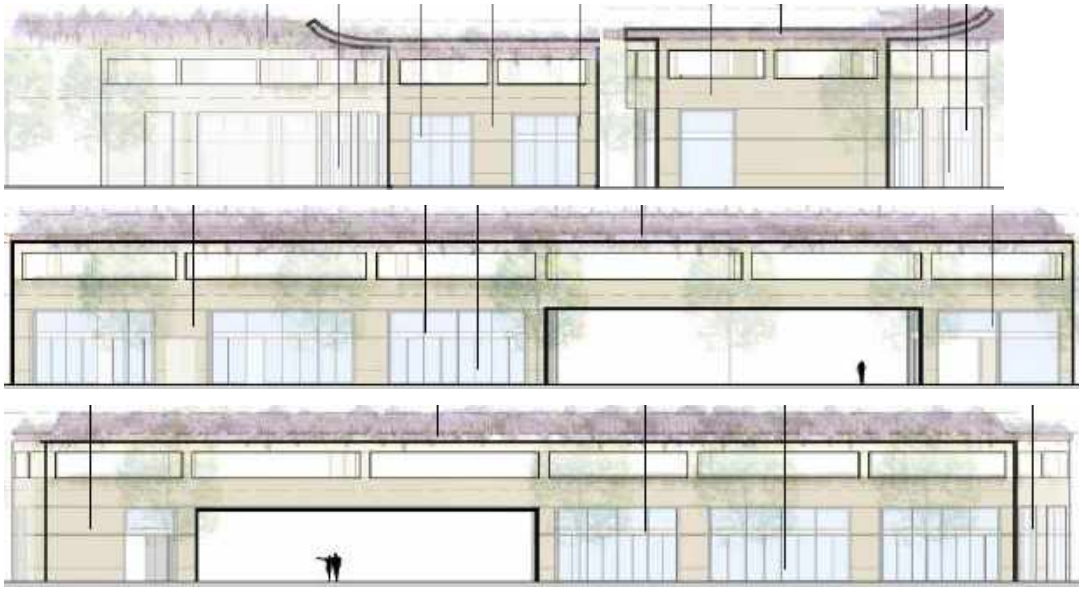


Figure 15. The conceptual west (top left), east (top right), south (middle), and north (bottom) facades of the Town Square retail pavilion.

Security Pavilions

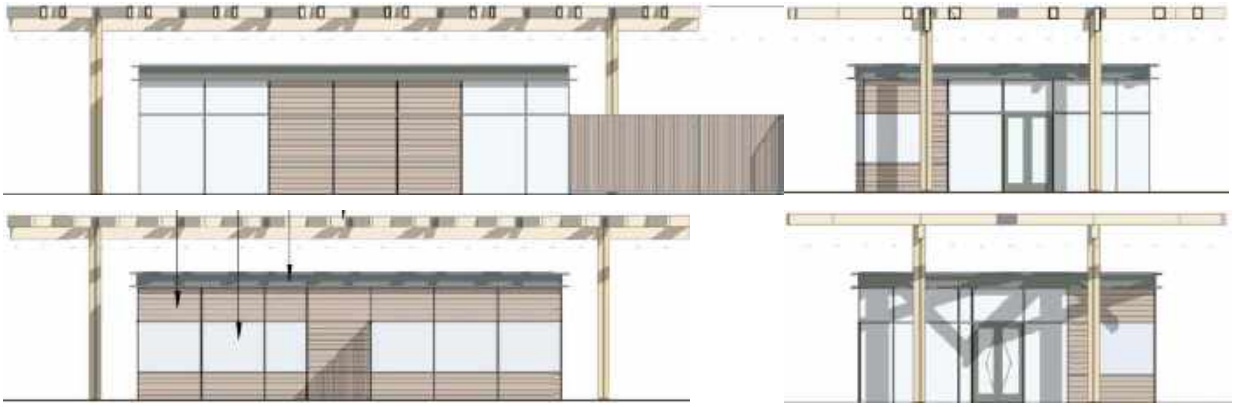


Figure 16. The conceptual south (top left), west (top right), north (bottom left), and east (bottom right) facades of buildings SP1 and SP2.

Atrium

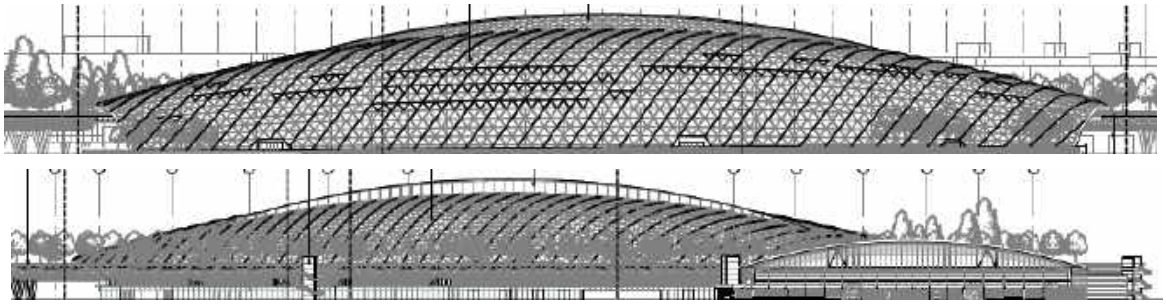


Figure 17. Conceptual drawings of the north façade (top) and south façade (bottom) of the atrium. Trees to be planted along the north façade are not shown.

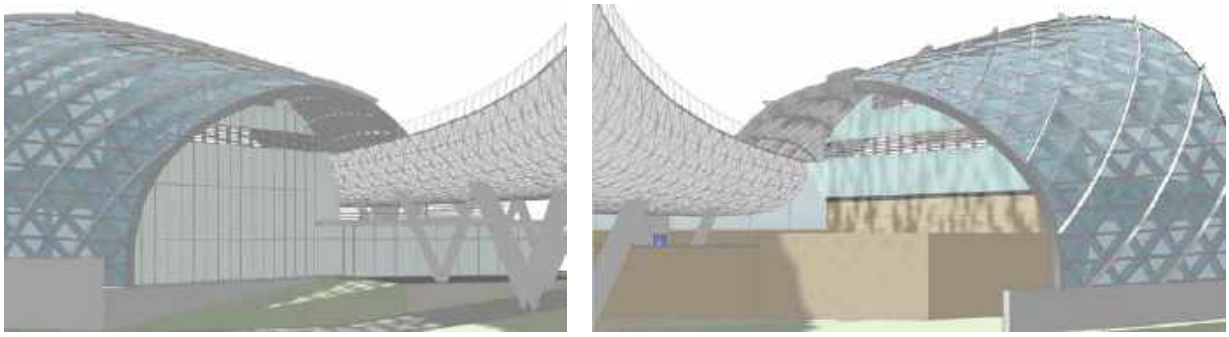


Figure 18. An illustration of the appearance of the vertical glass facades at the western (left) and eastern (right) ends of the atrium.

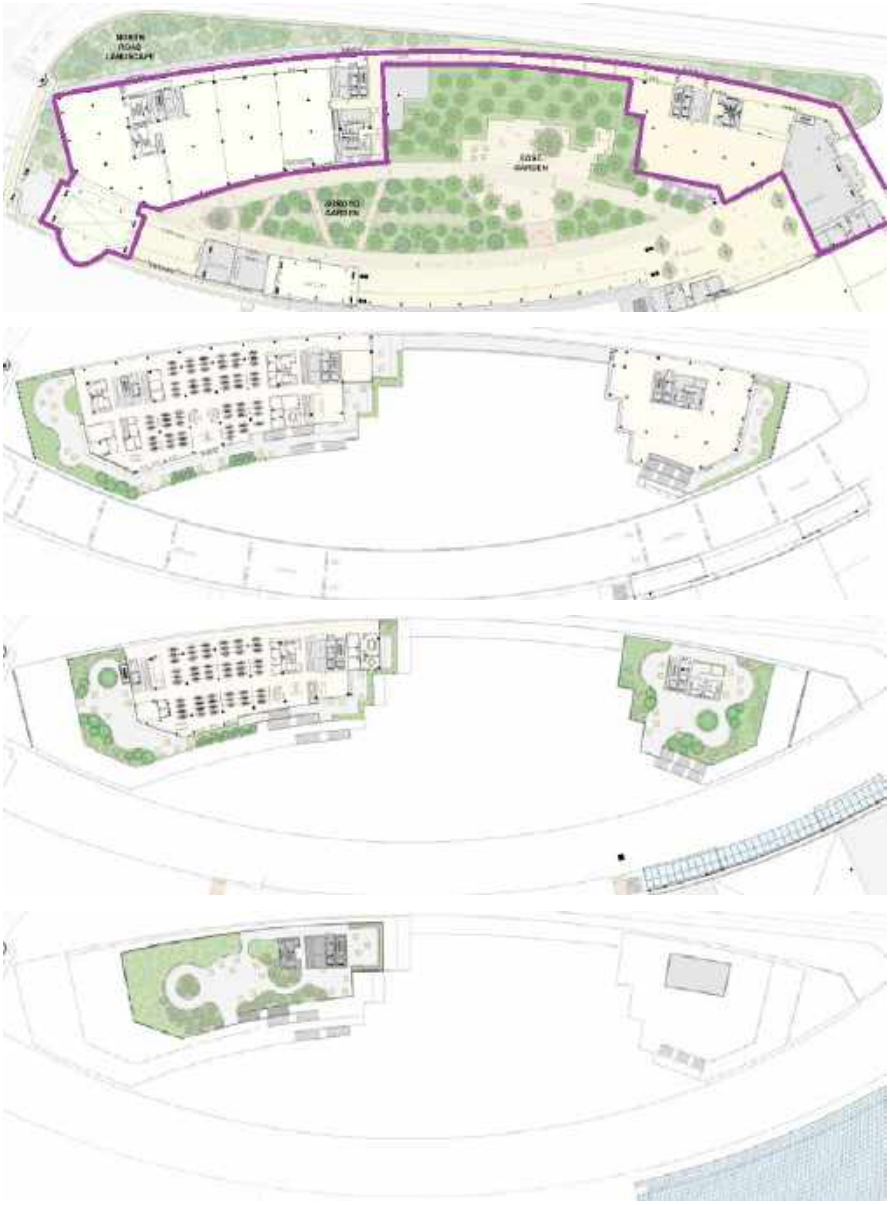


Figure 19. From top to bottom, illustrative views of landscape vegetation on Levels 1, 2, 3, and 4 of the atrium's interior. The interior building footprints and the connection between them are outlined in purple on the top image.

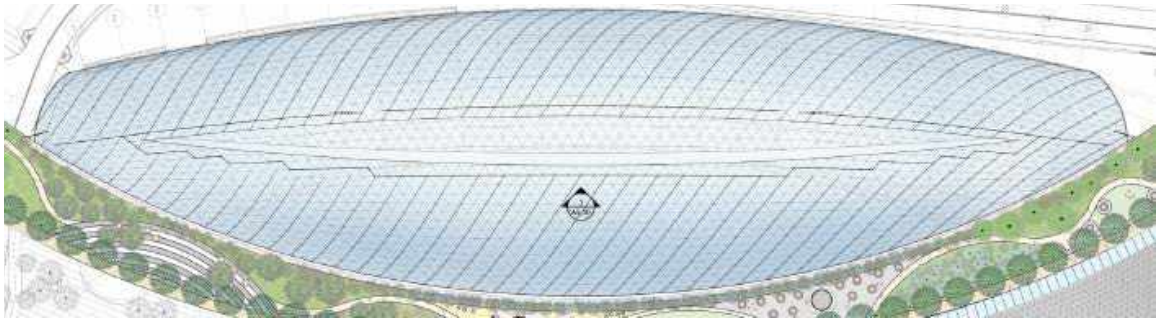


Figure 21. Fin-like mullions on the exterior surface of the conceptual north and south facades of the atrium will break up the smooth surface and increase the visibility of the facades to birds, especially from a distance.

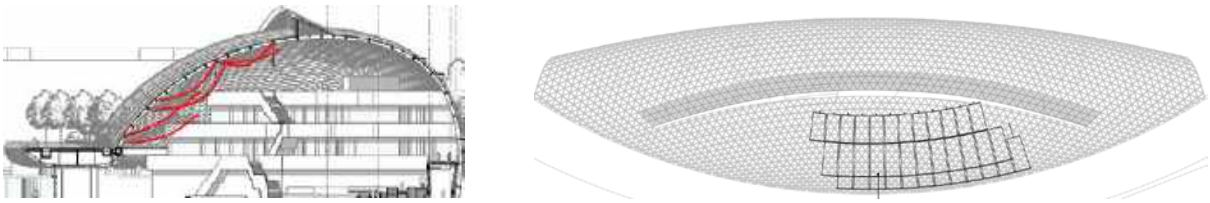


Figure 22. Interior sail shades, shown in red on the left cross-section image, are located along portions of the south façade of the atrium and will block views of interior vegetation to birds located at the elevated park or flying overhead. The approximate extent of the sail shades is shown in dark gray on the right (overhead) image.

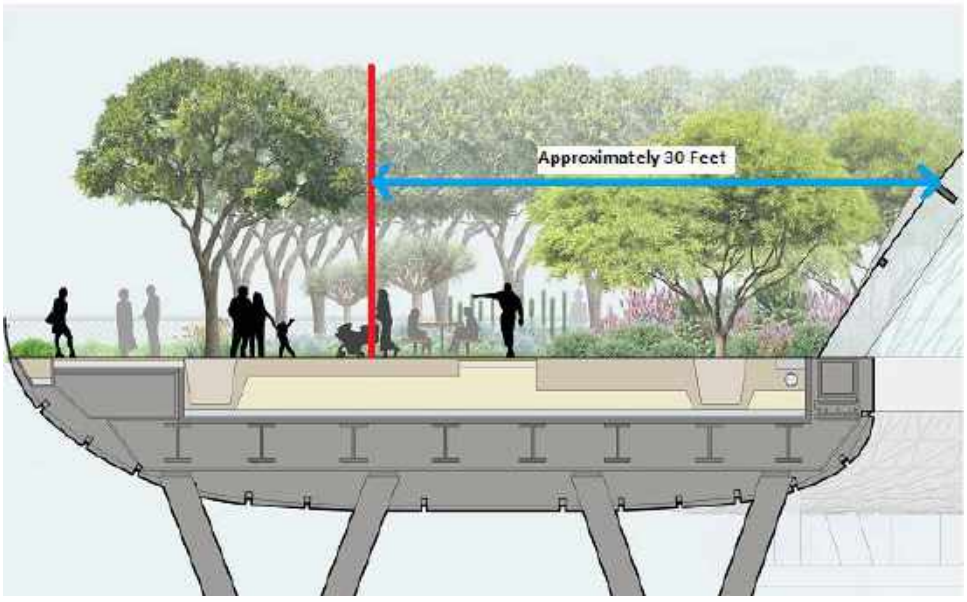


Figure 23. To the extent feasible, vegetation at the elevated park south of the site will be planted such that trees are set back from the glass façade, and dense shrubs and plants are located immediately adjacent to glass facades.

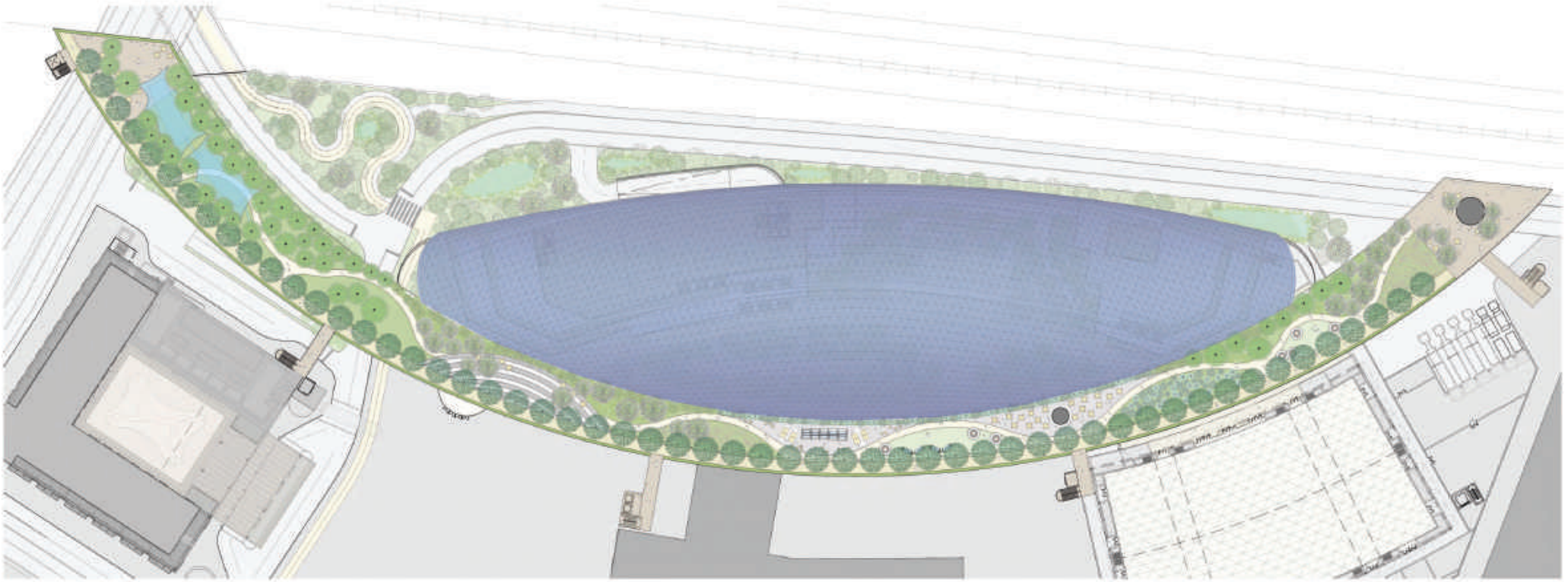
Lighting

Figure 7. Anticipated conceptual lighting conditions within the atrium and immediately surrounding areas during evening hours (top left), events (top right), and after hours (bottom).

Beneficial Project Features

- The extensive opaque panels on the exterior facades of the hotel (Figure 5)
- Opaque panels, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to vegetation on the residential/mixed-use buildings (Figure 8)
- The extensive opaque facades on the North Garage and South Garage (Figure 11)
- The extensive opaque facades on the event building (Figure 13)
- Opaque panels, exterior vertical and horizontal solar shades, overhangs, mullions, and porticos that are not vegetated or located immediately adjacent to native vegetation on Office Buildings 01–06 (Figure 14)
- Opaque panels and mullions on the Town Square retail pavilion (Figure 15)
- Opaque panels and mullions on the security pavilions (Figure 16).
- The articulated structure of the atrium (Figure 20)
- Fin-like mullions on the exterior surface of the atrium's façade (Figure 21)
- Interior operable, suspended solar shades along a large portion of the south façade of the atrium Figure 22)

Appendix B. Conceptual Planting Plans and Plant Palettes



1 min. Walk

0 40 80 120 160 200 240 320'

1" = 40' at 22" x 34"

PARCEL 1 - MCS
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2021

DD87

TREES


Sydney Red Gum
Angophora costata


Manzanita
Arctostaphylos manzanita


Brisbane Box
Lophostemon confertus


Chilean Myrtle
Luma apiculata


Catalina Ironwood
Lyonothamnus floribundus


Palo Verde
Parkinsonia 'Desert Museum'


African Sumac
Rhus lancea


Norfolk Island Palm
Auracaria heterophylla


Yew Plum Pine
Podocarpus spp.


London Plane Tree
Platanus x acerifolia


Chinese Elm
Ulmus parvifolia


Oak Tree
Quercus spp.


Quiver Tree
Aloe dichotoma


Ponytail Palm
Beaucarnea recurvata


Illawarra Flame Tree
Brachychiton acerifolius


Sago Palm
Cycas revoluta


Dragon Tree
Dracaena draco

UNDERSTORY PLANTING


Tree Houseleek
Aeonium spp.


Fox Tail Agave
Agave attenuata 'Boutin Blue'


Coral Aloe
Aloe striata


Blue Grama
Bouteloua gracilis


Leafy Reed Grass
Calamagrostis foliosa


California Lilac
Ceanothus horizontalis


Silk Floss Tree
Chorisia speciosa


Finger Aloe
Cotyledon orbiculata var. oblonga


Sunshine Bush Cone
Leucadendron spp.


Giant Dioon
Dioon spp.


Chalk Dudleya
Dudleya spp.


Mexican Snowball
Echeveria spp.


Golden Barrel Cactus
Echinocactus grusonii


California Fuscia
Epilobium canum


Red Buckwheat Eriganum
Eriganum grande 'Rubescens'


California Fescue
Festuca californica


Lavander
Lavandula angustifolia

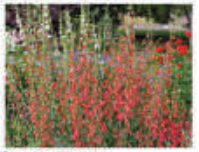

Blue Chalk Sticks
Senecio mandraliscae


Blue Lyme Grass
Leymus spp.


Silver Bush Lupine
Lupinus albifrons


Burrawang
Macrozamia spp.


Bush Monkey Flower
Mimulus aurantiacus


Scarlet Bugler
Penstemon centranthifolius


Coffeeberry
Rhamnus californica


Firecracker Plant
Russelia equisetiformis


Protea
Protea spp.


Beaked Yucca
Yucca rostrata


Honeysuckle
Banksia spp.


White Sage
Salvia apiana


Western Sword Fern
Polystichum munitum


Woolybush
Adenanthos sericeus


Puya
Puya venusta


Giant Chain Fern
Woodwardia fimbriata

PARCEL 1 - MCS
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.01
CONCEPTUAL REPRESENTATIVE PLANT PALETTE
January 8, 2021

DD88

LEVEL 1

TREES

Kauri Pine
Agathis robusta

Red Alder
Alnus rubra

Norfolk Island Pine
Auracaria heterophylla

Black Olive
Bucida buceras

Karaka
Corynocarpus laevigatus

Brisbane Box
Lophostemon confertus

Champak
Michelia champaca

Yew Plum Pine
Podocarpus spp.

Umbrella Tree
Schefflera actinophylla

UNDERSTORY PLANTING

Indian Mallow
Abutilon spp.

Japanese Rush
Acorus gramineus

Azalea
Azalea spp.

Rushes
Baumea spp.

Sedges
Carex spp.

Tree Ferns
Cyathea spp.

Rabbits Foot Fern
Davallia dentriculata

Green Island Ficus
Ficus microcarpa 'Green Island'

Walking Iris
Neomarica gracilis

Western Sword Fern
Polystichum munitum

Rhododendron
Vireya rhododendron

Giant Chain Fern
Woodwardia fimbriata

Boston Fern
Nephrolepis exaltata

LEVEL 2-4

TREES

Alii Fig
Ficus alii

Weeping Fig
Ficus benjamina

Chinese Banyan
Ficus microcarpa

Rusty Leaf Fig
Ficus rubiginosa

Brisbane Box
Lophostemon confertus

Champak
Michelia alba

European Olive
Olea europaea

Umbrella Tree
Schefflera actinophylla

UNDERSTORY PLANTING

Calathea
Calathea zebrina

Spider Lily
Hymenocallis speciosa

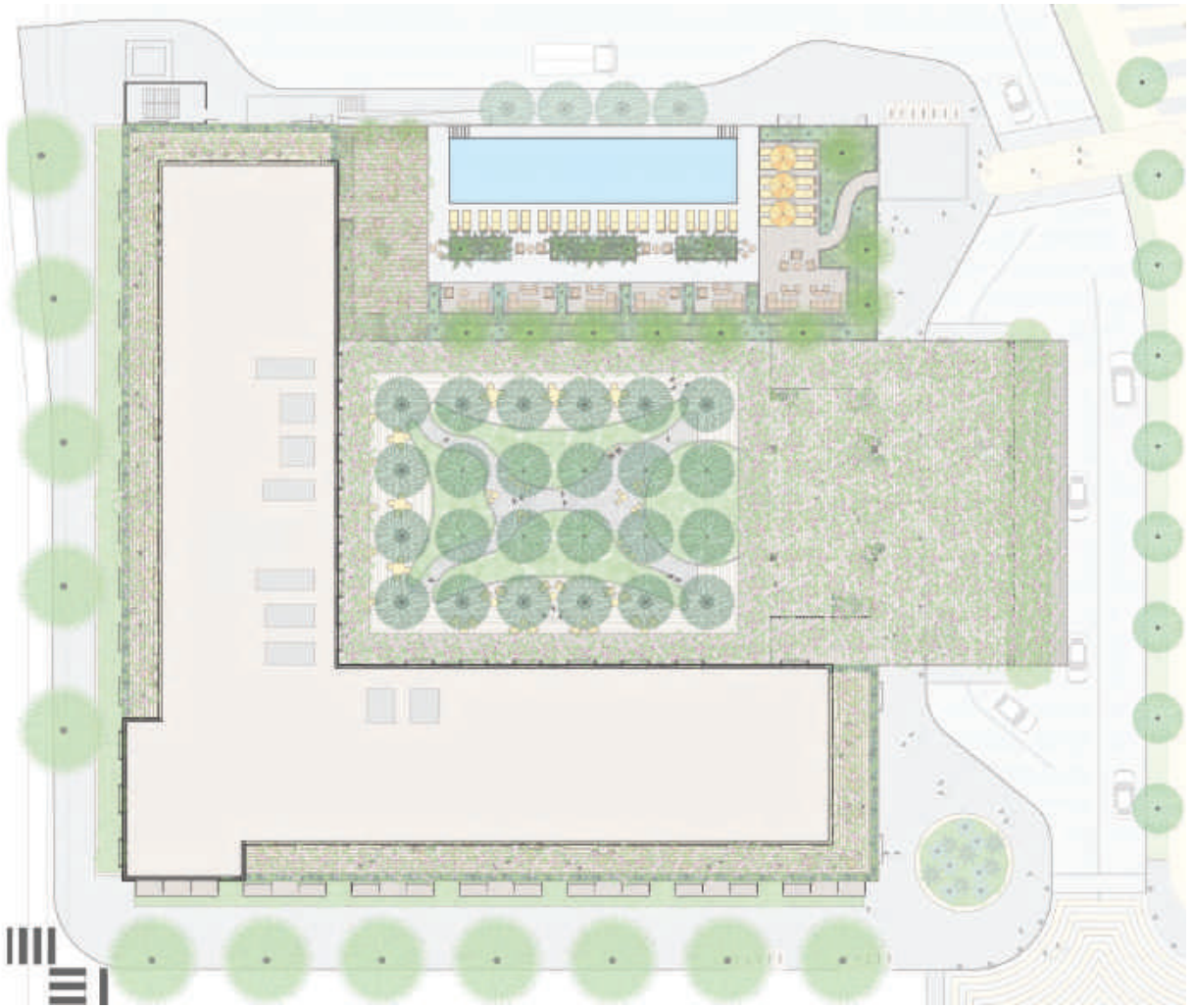
Shell Ginger
Alpinia zerumbet

Mint Geranium
Pelargonium tomentosum

Asparagus Fern
Asparagus densiflorus 'Sprengeri'

Rattlesnake Plant
Calathea lancifolia

Dwarf Umbrella Tree
Schefflera arboricola



0 8 16 32'

1/16" = 1'-0" at 22" x 34"

PARCEL 1-HOTEL
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
CONCEPTUAL LANDSCAPE PLAN
January 8, 2021

DD90

LEVEL 1

TREES

Eastern Redbud
Cercis canadensis

European Olive
Olea europaea

Brisbane Box
Lophostemon confertus

UNDERSTORY PLANTING

Foxtail Agave
Agave attenuata 'Nova'

Yarrow
Achillea spp.

Tree Houseleek
Aeonium spp.

Kangaroo Paw
Anigozanthos spp.

Wormwood
Artemisia

Rabbit's Foot Fern
Davallia spp.

Mexican Snowball
Echeveria spp.

Mediterranean Spurge
Euphorbia characias

Spider Flower
Grevillea

Sage
Salvia spp.

Lace Fern
Microlepia strigosa

Boston Fern
Nephrolepis exaltata

Western Sword Fern
Polystichum munitum

Giant Chain Fern
Woodwardia fimbriata

Carpet Geranium
Geranium incanum

Japanese Wisteria
Wisteria floribunda

California Lilac
Ceanothus horizontalis

Coffeeberry
Rhamnus californica

LEVEL 3

TREES AND PALMS

King Palm
Archontophoenix spp.

Mediterranean Fan Palm
Chamaerops humilis 'Cerifera'

Kentia Palm
Howea forsteriana

Fruitless Olive
Olea europaea 'Swan Hill'

Pygmy Date Palm
Phoenix roebelenii

UNDERSTORY PLANTING

Foxtail Agave
Agave attenuata

Yarrow
Achillea spp.

Tree Houseleek
Aeonium spp.

Wormwood
Artemisia

Mexican Snowball
Echeveria spp.

Mediterranean Spurge
Euphorbia characias

Lavender
Lavandula spp.

LEVEL 6

Tree Houseleek
Aeonium spp.

Agave
Agave 'Blue Flame'

Mexican Snowball
Echeveria spp.

Blue Finger
Senecio talinoides spp. mandraliscae

Japanese Wisteria
Wisteria floribunda

Bougainvillea
Bougainvillea spp.

0 20 40 60 80 100 120 160'

1" = 20' at 24" x 36"

PARCEL 1-TOWN SQUARE
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

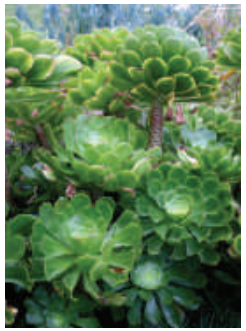
Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2020

DD93

Peppermint Tree
Agonis flexuosa

London Plane Tree*
Platnus x acerifolia



Aeonium
Aeonium spp.

Kangaroo Paw
Anigozanthos cv.

Black Anther Flax Lily
Dianella revoluta

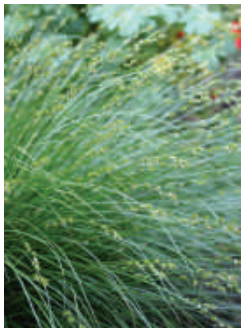
Lavender
Lavandula spp.

New Zealand Flax
Phormium cv.

Jacaranda
Jacaranda mimosifolia

Chinese Evergreen Elm
Ulmus parvifolia cv.

Agave
Agave spp.



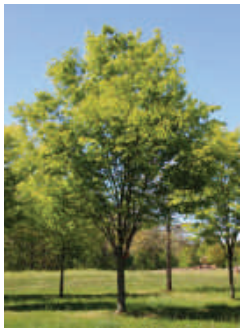
Berkeley Sedge
Carex divulsa

Dietes
Dietes spp.

Lily Turf
Liriope muscari cv.

California Sword Fern
Polystichum californicum

Brisbane Box*
Lophostemon confertus



Zelkova*
Zelkova serrata cv.

Aloe
Aloe spp.

Small Cape Rush
Chondropetalum tectorum

Spurge
Euphorbia spp.

Deer Grass
Muhlenburgia rigens

Sage
Salvia spp.

1 min. Walk

0 80 160 240 320 400 480 640'

1" = 80' at 22" x 34"

1/4 ac

1/8 ac

PARCEL 1(PORTION) & 8
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00

January 8, 2021

DD95

CHINESE PISTACHE
Pistacia chinensis

CHINESE PISTACHE
Pistacia chinensis multi-trunk

CALIFORNIA SYCAMORE
Platanus racemosa

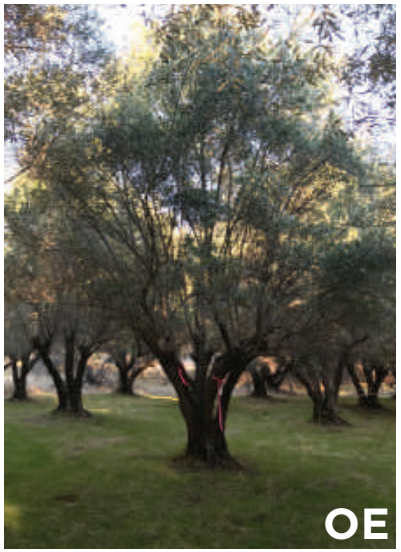
CALIFORNIA SYCAMORE
Platanus racemosa multi-stem

SHUMARD OAK
Quercus shumardii

COASTAL REDWOOD
Sequoia sempervirens 'Aptos Blue'

ELM
Ulmus 'Accolade'

CHINESE ELM
Ulmus parviflora 'True Green'



OLIVE TREE
Olea europaea 'Mission'

MYRICA CALIFORNICA
Pacific Wax Myrtle

PARCEL 1(PORTION) & 8
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.01
Conceptual Representative Planting Palette
January 8, 2021

DD96

BLONDE AMBITION BLUE GRAMA

Bouteloua gracilis 'Blonde Ambition'

BERKELEY SEDGE

Carex divulsa (C. tumulicola)

SMALL CAPE RUSH

Chondropetalum tectorum

BLUE OAT GRASS

Helictotrichon sempervirens

SEA PINK

Armeria maritima

COREOPSIS

Coreopis grandiflora

COYOTE MINT

Monardella villosa

FOOTHILL PENSTEMON

Penstemon heterophyllus 'Blue Springs'

STONE CROP

Sedum sp. (many)

EMERALD CARPET MANZANITA

Arctostaphylos 'Emerald Carpet'

WAYNE RODERICK DAISY

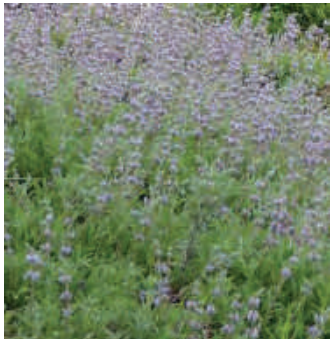
Erigeron glaucus 'Wayne Roderick'

CALIFORNIA POPPY

Eschscholzia californica

COASTAL GUM PLANT

Grindelia stricta platyphylla



CREEPING SAGE

Salvia sonomensis

MOLATE FESCUE

Festuca rubra 'molate'

HOOKER'S MANZANITA

Arctostaphylos hookeri

ROCKROSE

Cistus spp.

LITTLE SUR COFFEEBERRY

Rhamnus californica 'Little Sur'

PARCEL 1(PORTION) & 8
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

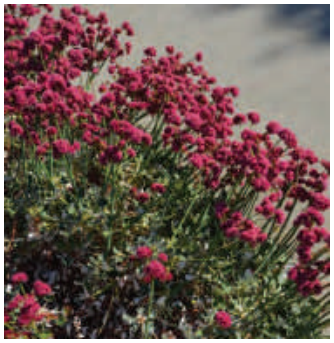
Menlo Park, CA

L1.01
Conceptual Representative Planting Palette
January 8, 2021

DD97

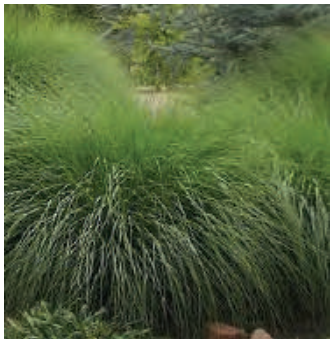
STICKY MONKEY

Mimulus aurantiacus



RED-FLOWERED BUCKWHEAT

Eriogonum grande var. rubescens



DEER GRASS

Muhlenbergia rigens

COMMON COYOTE MINT

Monardella villosa

CENTENNIAL CEANOTHUS

Ceanothus Centennial

BEE'S BLISS SAGE

Salvia 'Bee's Bliss'

DWARF SILVERGRASS

Miscanthus sp. 'Adagio'

CANYON PRINCE WILD RYE

Leymus condensatus 'Canyon Prince'

SIX HILLS GIANT CATMINT

Nepeta faassenii 'Six Hills Giant'

SPANISH LAVENDER

Lavandula otto quast

COMPACT MEXICAN SAGE

Salvia leucantha 'Santa Barbara'

UPRIGHT ROSEMARY

Rosmarinus officinalis 'Tuscan'

LITTLE OLLIE DWARF OLIVE

Olea europaea 'Little Ollie'

MOUNTAIN FLAX

Phormium cookianum

WYNYABBIE COAST ROSEMARY

Westringia fruticosa 'Wynyabbie Gem'

COMMON YARROW

Achillea millefolium

FORTNIGHT LILY

Dietes iridioides

DWARF COYOTE BRUSH

Baccharis pilularis 'Twin Peaks'

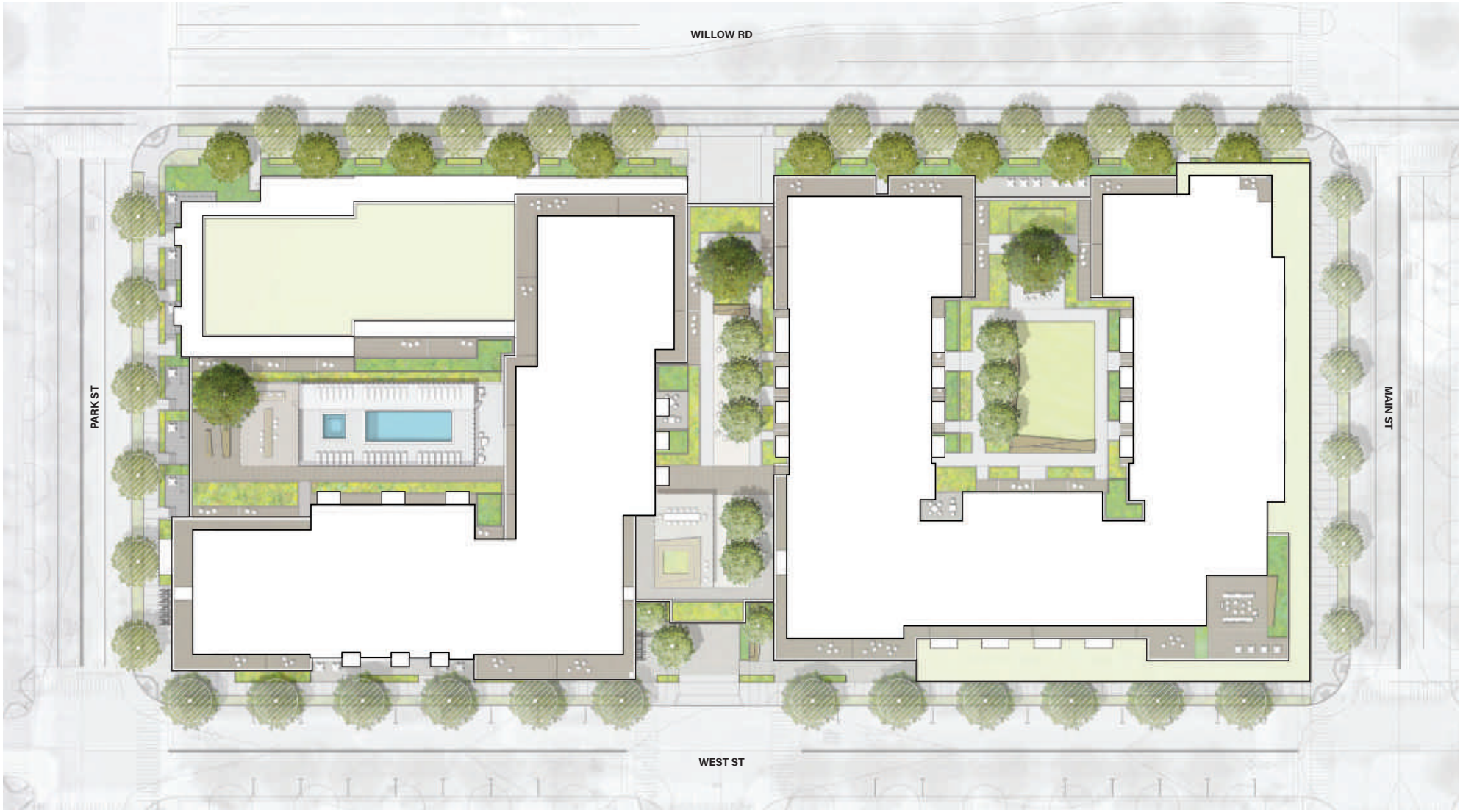
PARCEL 1(PORTION) & 8
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.01
Conceptual Representative Planting Palette
January 8, 2021

DD98



30 seconds Walk

0 20 40 60 80 100 120 160'

1" = 20' at 22" x 34"

PARCEL 2
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2021

DD99

TREE PALETTE

Platanus × acerifolia
London Plane

Magnolia grandiflora
Magnolia Tree

Zelkova serrata
Japanese Zelkova

Platanus × acerifolia
London Plane

Quercus suber
Cork Oak

Arbutus Marina
Strawberry Tree

Quercus virginiana
Southern Live Oak

Olea europaea 'Swan Hill'
Swan Hill Olive

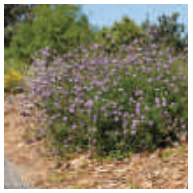
Lyonothamnus floribundus
Catalina Ironwood

Myrica californica
Pacific Wax myrtle

Prunus ilicifolia
Hollyleaf cherry

Ceanothus
California lilacs

UNDERSTORY PALETTE



Verbena lilacina
Purple Cedros Island Verbena

Arctostaphylos 'John Dourley'
John Dourley Manzanita

Bouteloua gracilis 'Blonde Ambition'
mosquito grass

Arctostaphylos manzanita
whiteleaf manzanita

Aristida purpurea
Purple three-awn

Carpenteria californica
Tree Anemone

Ceanothus thyrsiflorus
Blue blossom ceanothus

Daphne x transatlantica
Eternal Fragrance

Agave attenuata
Foxtail Agave

Lessingia filaginifolia
California Dune Aster

Rosmarinus officinalis 'Tuscan Blue
Italian Rosemary

Festuca mairei
Mt. Atlas Fescue

Kniphofia uvaria hybrids
Red-hot Poker

Olea europaea 'Little Ollie'
Dwarf Olive

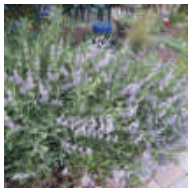
Sporobolus airoides
Sporobolus airoides

Achillea millefolium 'coronation gold'
Common Yarrow

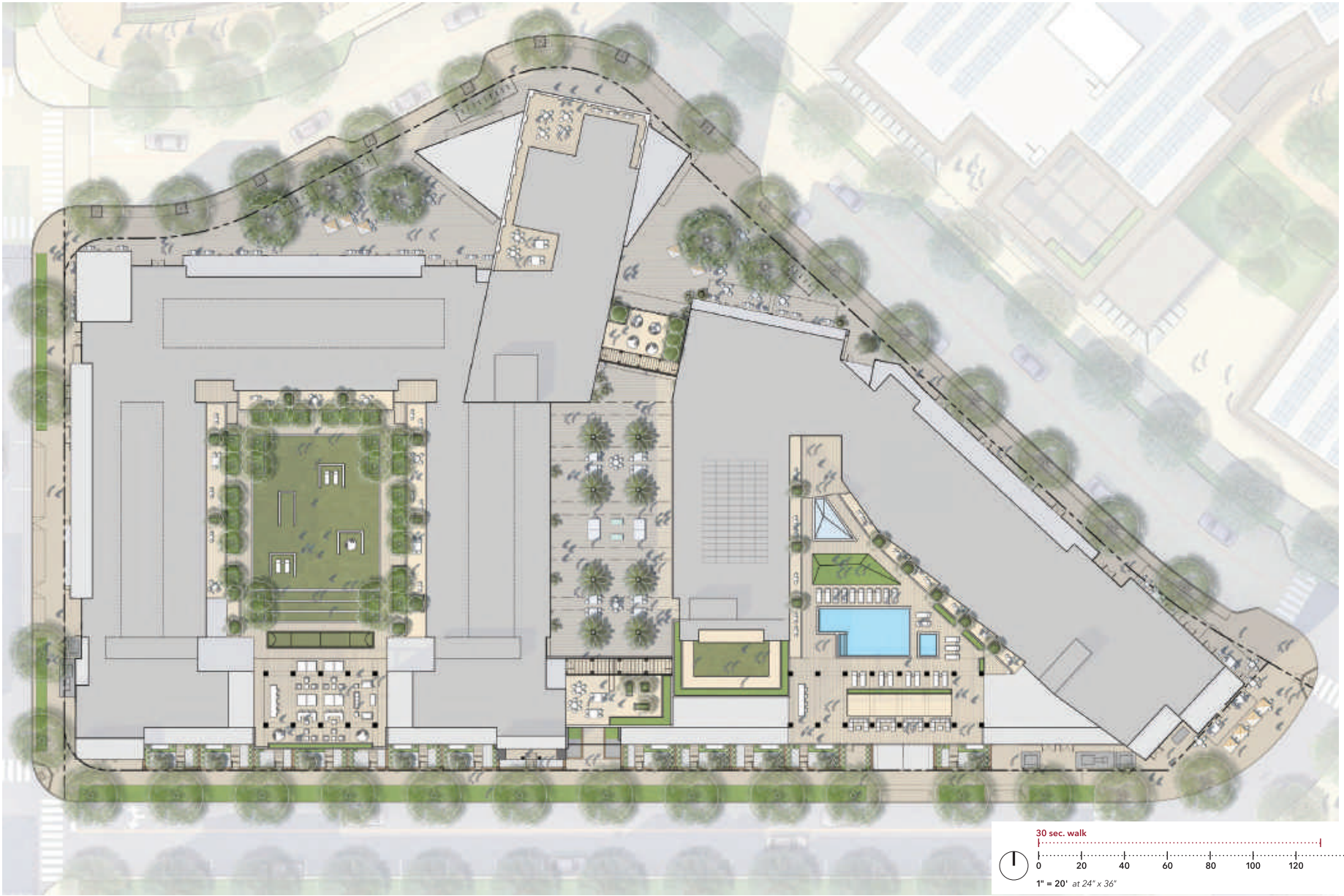
Myrica californica
Pacific Wax myrtle

Calycanthus occidentalis
Spice Bush

Salvia rosmarinus
Rosemary



Salvia sonomensis Bee's Bliss
Bee's Bliss Sage



PARCEL 3
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

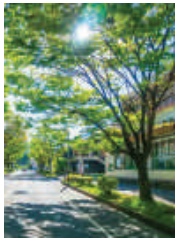
Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2021

DD101

TREES

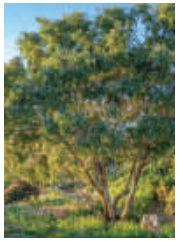
Chinese Elm
Ulmus parvifolia



Zelkova
Zelkova serrata cv.

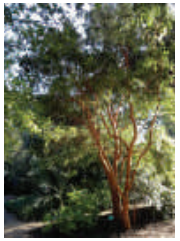
Ginkgo 'Autumn Gold'
Ginkgo biloba 'Autumn

Guadalupe Fan Palm
Brahea edulis

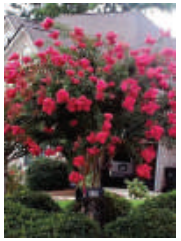


Peppermint Tree
Agonis flexuosa

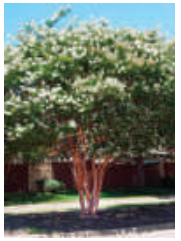
Swan Hill Olive
Olea europaea 'Swan Hill'



Chilean Myrtle
Luma apiculate

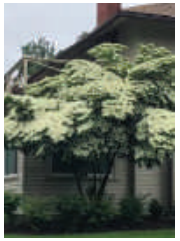


Arapaho Crape Myrtle
Lagerstroemia indica x faueri 'Arapaho'



Natchez Crape Myrtle
Lagerstroemia indica x fauriei 'Natchez'

Jade Butterfly Ginkgo
Ginkgo biloba 'Jade Butterfly'



Venus Dogwood
Cornus 'Venus'

SHRUBS, PERENNIALS, GRASSES AND GROUND COVERS

Dietes
Dietes spp.

Baby Bliss Flax Lily
Dianella revoluta 'Baby Bliss'

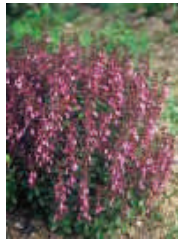
Dwarf Red Kangaroo Paw
Anigozanthos 'Dwarf Red'

Weeping Lantana
Lantana montevidensis 'White Lightning'

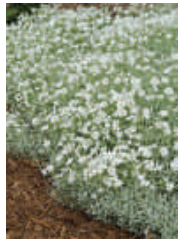
Finescape Lomandra
Lomandra confertifolia

Platinum Beauty Lomandra
Lomandra longifolia 'Platinum Beauty'

Breeze Dwarf Mat Rush
Lomandra longifolia



Dwarf Germander
Teucrium chamaedrys 'nanum'

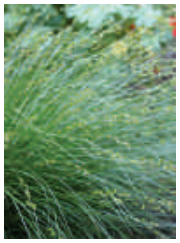


Snow in Summer
Cerastium tomentosum

Elijah Blue Fescue
Festuca glauca 'Elijah Blue'

Small Cape Rush
Chondropetalum tectorum

Sheep's Fescue
Festuca amethystina



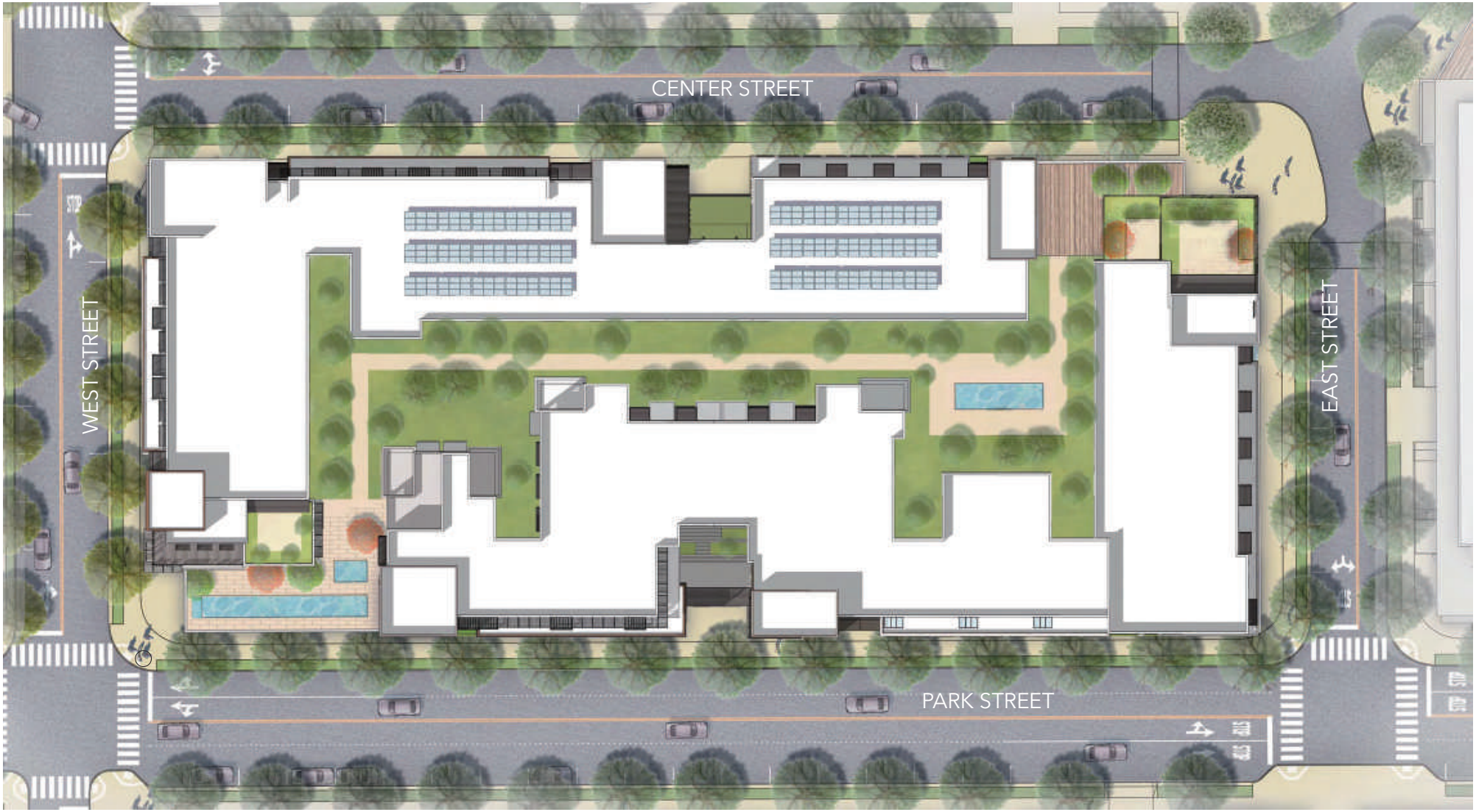
Berkeley Sedge
Carex divulsa

Amazing Red New Zealand Flax
Phormium 'Amazing Red'

Red Bunny Tails Fountain Grass
Pennisetum massaicum

Blue Oat Grass
Helictotrichon sempervirens

Mexican Feather Grass
Stipa tennuissima



30 seconds Walk

0 20 40 60 80 100 120 160'

1" = 20' at 22" x 34"

PARCEL 4
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2021

DD103

TREE PALETTE

Platanus x acerifolia
London Plane

Magnolia grandiflora
Magnolia Tree

Zelkova serrata
Japanese Zelkova

Platanus x acerifolia
London Plane

Quercus suber
Cork Oak

Arbutus Marina
Strawberry Tree

Quercus virginiana
Southern Live Oak

Olea europaea 'Swan Hill'
Swan Hill Olive

Lyonothamnus floribundus
Catalina Ironwood

Myrica californica
Pacific Wax myrtle

Prunus ilicifolia
Hollyleaf cherry

Ceanothus
California lilacs

UNDERSTORY PALETTE

Verbena lilacina
Purple Cedros Island Verbena

Arctostaphylos 'John Dourley'
John Dourley Manzanita

Bouteloua gracilis 'Blonde Ambition'
mosquito grass

Arctostaphylos manzanita
whiteleaf manzanita

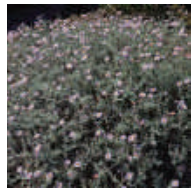
Aristida purpurea
Purple three-awn

Carpenteria californica
Tree Anemone

Ceanothus thyrsiflorus
Blue blossom ceanothus

Daphne x transatlantica
Eternal Fragrance

Agave attenuata
Foxtail Agave



Lessingia filaginifolia
California Dune Aster

Rosmarinus officinalis 'Tuscan Blue
Italian Rosemary

Festuca mairei
Mt. Atlas Fescue

Kniphofia uvaria hybrids
Red-hot Poker

Olea europaea 'Little Ollie'
Dwarf Olive

Sporobolus airoides
Sporobolus airoides

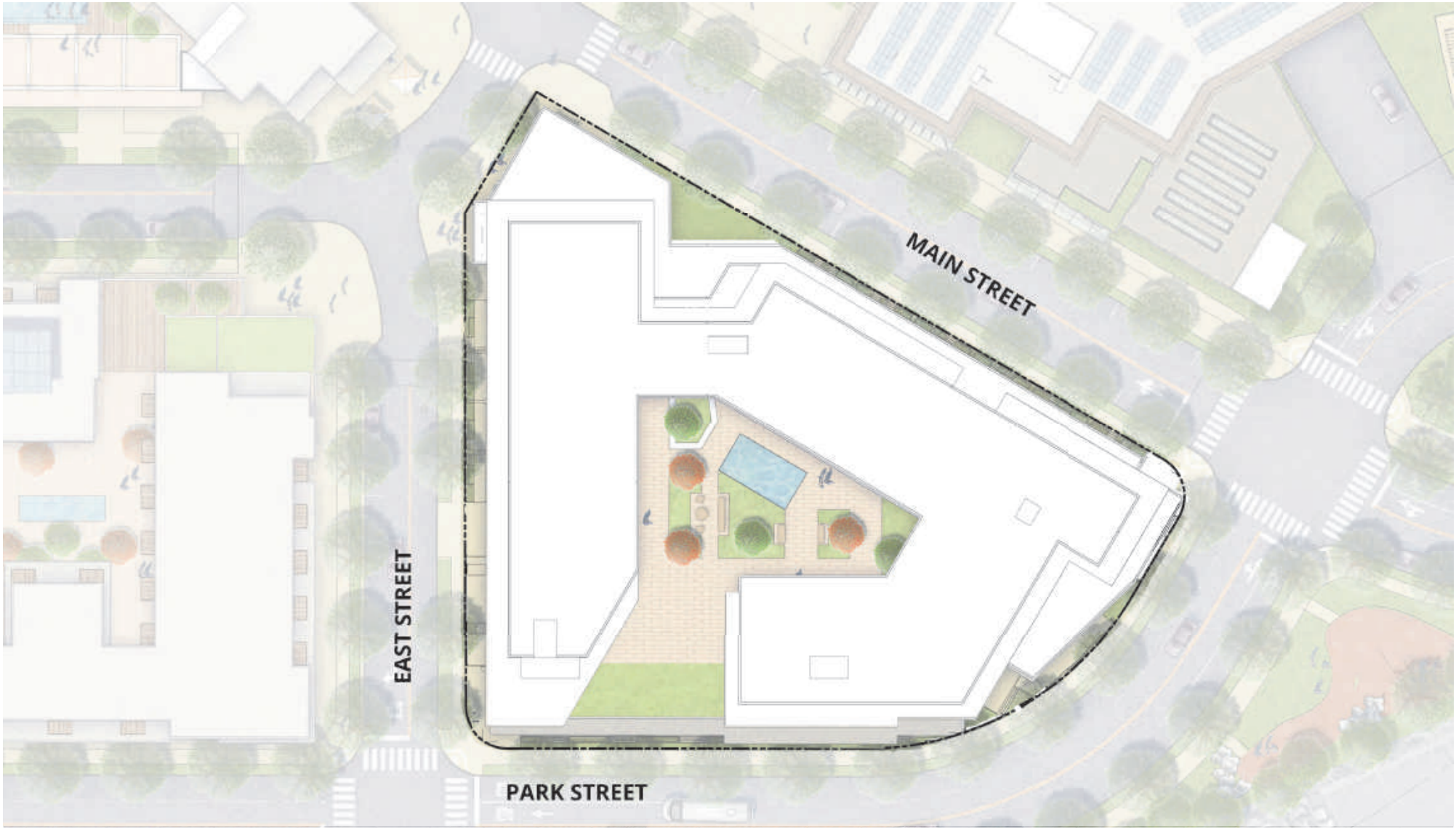
Achillea millefolium 'coronation gold'
Common Yarrow

Myrica californica
Pacific Wax myrtle

Calycanthus occidentalis
Spice Bush

Salvia rosmarinus
Rosemary

Salvia sonomensis Bee's Bliss
Bee's Bliss Sage



PARCEL 5
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2021

DD105

TREE PALETTE

Platanus × acerifolia
London Plane

Magnolia grandiflora
Magnolia Tree

Zelkova serrata
Japanese Zelkova

Platanus × acerifolia
London Plane

Quercus suber
Cork Oak

Arbutus Marina
Strawberry Tree

Quercus virginiana
Southern Live Oak

Olea europaea 'Swan Hill'
Swan Hill Olive

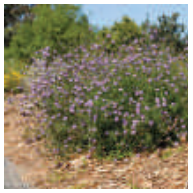
Lyonothamnus floribundus
Catalina Ironwood

Myrica californica
Pacific Wax myrtle

Prunus ilicifolia
Hollyleaf cherry

Ceanothus
California lilacs

UNDERSTORY PALETTE



Verbena lilacina
Purple Cedros Island Verbena

Arctostaphylos 'John Dourley'
John Dourley Manzanita

Bouteloua gracilis 'Blonde Ambition'
mosquito grass

Arctostaphylos manzanita
whiteleaf manzanita

Aristida purpurea
Purple three-awn

Carpenteria californica
Tree Anemone

Ceanothus thyrsiflorus
Blue blossom ceanothus

Daphne x transatlantica
Eternal Fragrance

Agave attenuata
Foxtail Agave

Lessingia filaginifolia
California Dune Aster

Rosmarinus officinalis 'Tuscan Blue
Italian Rosemary

Festuca mairei
Mt. Atlas Fescue

Kniphofia uvaria hybrids
Red-hot Poker

Olea europaea 'Little Ollie'
Dwarf Olive

Sporobolus airoides
Sporobolus airoides

Achillea millefolium 'coronation gold'
Common Yarrow

Myrica californica
Pacific Wax myrtle

Calycanthus occidentalis
Spice Bush

Salvia rosmarinus
Rosemary

Salvia sonomensis Bee's Bliss
Bee's Bliss Sage

30 seconds Walk

0 20 40 60 80 100 120 160'

1" = 20' at 24" x 36"

PARCEL 6
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2021

DD107

Carex divulsa
European Grey Sedge

Chondropetalum tectorum
Small Cape Rush

Juncus patens
Common Rush

Symphoricarpos albus
Common Snowberry

Acer rubrum 'Armstrong'
Armstrong Red Maple

Cedrus deodara
Deodar Cedar

Gingko biloba 'Princeton Sentry'
Princeton Sentry Maidenhair Tree

Pinus canariensis
Canary Island Pine

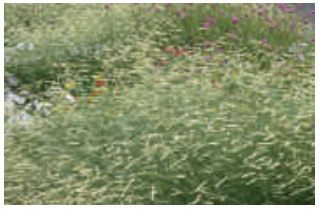
Salvia elegans
Pineapple Sage

Lomandra longifolia
Spiny Headed Mat Rush

Anigozanthos var.
Kangaroo Paw

Calamagrostis x acutiflora 'Karl Foerster'
Feather Reed Grass

Hesperaloe parviflora
Red Yucca



Bouteloua gracilis 'Blonde Ambition'
Blonde Ambition Blue Grama Grass

Muhlenbergia capillaris 'Pink Muhly'
Pink Muhly Grass

Salvia 'Anthony Parker'
Anthony Parker Bush Sage

Aspidistra elatior
Cast Iron Plant

Dicksonia Antarctica
Soft Tree Fern

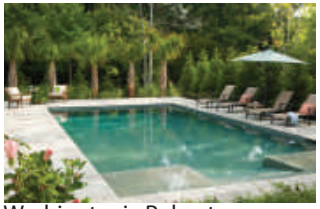
Salvia spathacea
Humming Bird Sage

Woodwardia fimbriata
Giant Chain Fern

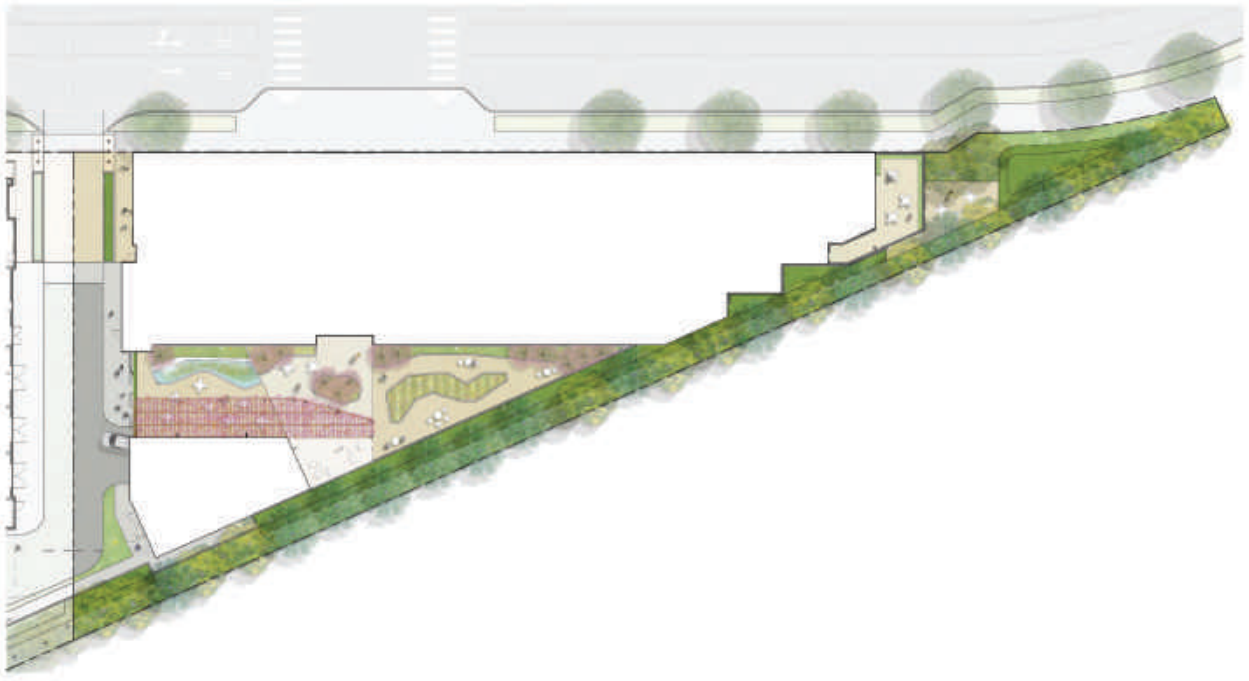
Agave attenuata
Century Plant

Calamagrostis foliosa
Leafy Reedgrass

Euphorbia rigida
Gopher Spurge



Washingtonia Robusta
Mexican Fan Palm



30 seconds Walk

0 20 40 60 80 100 120 160'

1" = 20' at 24" x 36"

PARCEL 7
Peninsula Innovation Partners
Conditional Development Permit

WILLOW VILLAGE

Menlo Park, CA

L1.00
Conceptual Landscape Plan
January 8, 2021

DD109

Carex divulsa
European Grey Sedge

Chondropetalum tectorum
Small Cape Rush

Juncus patens
Common Rush

Symphoricarpos Albus
Common Snowberry

Acer rubrum 'Armstrong'
Armstrong Red Maple

Cedrus deodara
Deodar Cedar

Gingko biloba 'Princeton Sentry'
Princeton Sentry Maidenhair Tree

Pinus canariensis
Canary Island Pine

Heuchera maxima
Island Alum Root

Polystichum munitum
Western Sword Fern

Aeonium 'Sunburst'
Copper Pinwheel

Gardenia jasminoides 'Leetwo'
Gardenia

Lavandula x intermedia
Lavender

Olea europaea 'Montra'
Little Ollie Dwarf Olive

Perovskia atriplicifolia
Russian Sage

Rosemary officinalis 'Chef's Choice'
Chef's Choice Rosemary

Salvia microphylla 'Killer Cranberry'
Autumn Sage

Salvia microphylla 'Little Kiss'
Cherry Sage

Westringia fruticosa
Coastal Rosemary

Bambusa multiplex 'Golden Goddess'
Golden Goddess Bamboo

Bambusa textilis 'Gracilis'
Slender Weavers

Anigozanthos Hybrid
Kangaroo Paw

Bouteloua 'Blonde Ambition'
Blue Grama Grass

Calandrinia Grandiflora
Rock Purslane

LEGEND

	BOTANIC NAME (COMMON NAME)	QUANTITY	SIZE	WUCOLS
⊙	Existing Tree to Remain *Pinus canariensis* (Canary Island Pine)	23	-	-
	Alnus rhombifolia (White Alder)	10	48" box	High
	Arbutus 'Marina' (Marina Arbutus)	13	48" box	Low
	Magnolia grandiflora (Southern Magnolia)	21	48" box	Medium
	Pinus canariensis (Canary Island Pine)	33	48" box	Low
	Pistacia chinensis (Chinese Pistache)	2	48" box	Low
	Platanus x *acerifolia* 'Morton Circle' (Exclamation London Plane Tree)	118	48" box	Medium
	Platanus racemosa (California Sycamore)	53	48" box	Medium
	Ulmus parvifolia cv. (Chinese Elm)	38	48" box	Low
	Zelkova serrata cv. (Zelkova)	68	60" box	Medium
	Total Proposed Tree	356		

Note: Structural soil to be used under sidewalk and plaza adjoining street trees.

TREE VALUATION

QUANTITY	UNIT SIZE	UNIT VALUE	VALUE
0	#5	$ 100	$ -
55	#5	$ 200	$ 11,000
369	24" box	$ 400	$ 147,000
103	36" box	$ 1,200	$ 123,000
670	48" box	$ 5,000	$ 3,350,000
110	60" box	$ 7,000	$ 770,000
294	72" box	$ 10,000	$ 2,940,000
12	84" box	$ 12,000	$ 144,000
34	96" box	$ 15,000	$ 510,000
2	108" box	$ 17,000	$ 34,000
2	120" box	$ 20,000	$ 40,000
1,651			$ 8,070,000

Note: Current valuation includes all proposed trees within Willow Village, and excludes the publicly accessible park. Pending park design.

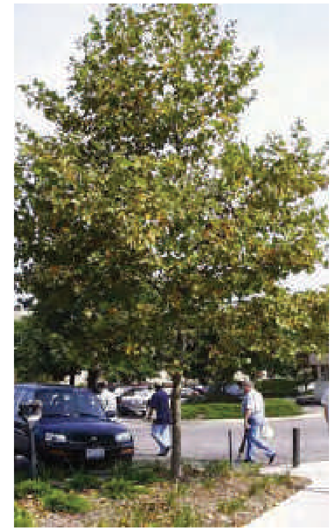
White Alder
Alnus rhombifolia

Marina Arbutus
Arbutus 'Marina'

Southern Magnolia
Magnolia grandiflora

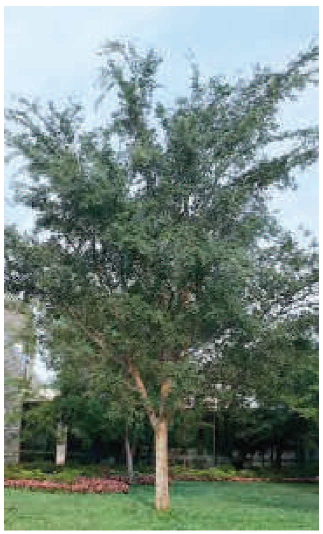
Canary Island Pine
Pinus canariensis

Chinese Pistache
Pistacia chinensis

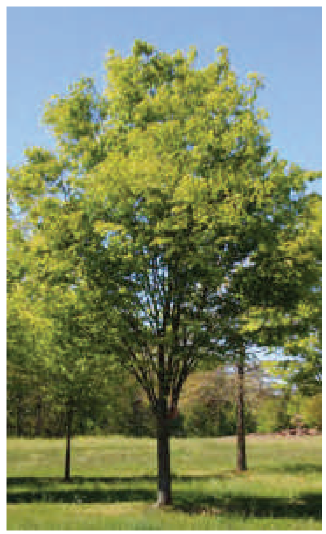


Exclamation London Plane Tree
Platanus x acerifolia 'Morton Circle'

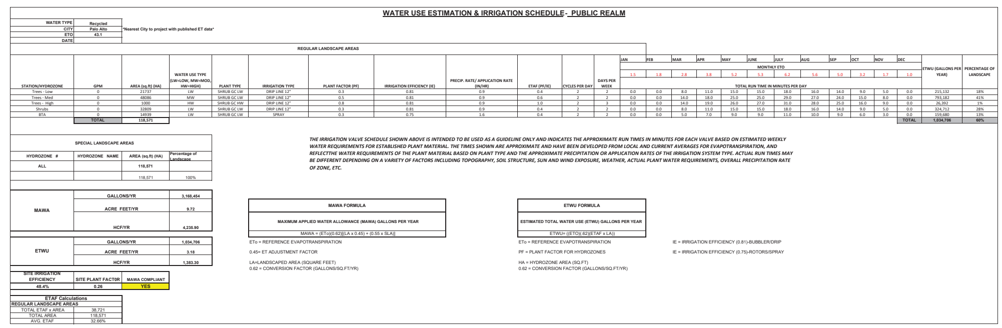
California Sycamore
Platanus racemosa



Chinese Evergreen Elm
Ulmus parvifolia cv.



Zelkova
Zelkova serrata cv.



WATER USE ESTIMATION & IRRIGATION SCHEDULE - PUBLIC REALM

WATER TYPE	Recycled
CITY	Palo Alto
ETO	43.1
DATE	

Nearest City to project with published ET data

REGULAR LANDSCAPE AREAS

STATION/HYDROZONE	GPM	AREA (sq.ft) (HA)	WATER USE TYPE (LW=LOW, MW=MOD, HW=HIGH)	PLANT TYPE	IRRIGATION TYPE	PLANT FACTOR (PF)	IRRIGATION EFFICIENCY (IE)	PRECIP. RATE/ APPLICATION RATE (IN/HR)	ETAF (PF/IE)	CYCLES PER DAY	DAYS PER WEEK
Trees - Low	0	21737	LW	SHRUB GC LW	DRIP LINE 12"	0.3	0.81	0.9	0.4	2	2
Trees - Med	0	48086	MW	SHRUB GC LW	DRIP LINE 12"	0.5	0.81	0.9	0.6	2	2
Trees - High	0	1000	HW	SHRUB GC HW	DRIP LINE 12"	0.8	0.81	0.9	1.0	2	3
Shrubs	0	32809	LW	SHRUB GC LW	DRIP LINE 12"	0.3	0.81	0.9	0.4	2	2
BTA	0	14939	LW	SHRUB GC LW	SPRAY	0.3	0.75	1.6	0.4	2	2
	TOTAL	118,571									

STATION/HYDROZONE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	ETWU (GALLONS PER YEAR)	PERCENTAGE OF LANDSCAPE
MONTHLY ETO	1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0		
TOTAL RUN TIME IN MINUTES PER DAY														
Trees - Low	0.0	0.0	8.0	11.0	15.0	15.0	18.0	16.0	14.0	9.0	5.0	0.0	215,132	18%
Trees - Med	0.0	0.0	14.0	18.0	25.0	25.0	29.0	27.0	24.0	15.0	8.0	0.0	793,182	41%
Trees - High	0.0	0.0	14.0	19.0	26.0	27.0	31.0	28.0	25.0	16.0	9.0	0.0	26,392	1%
Shrubs	0.0	0.0	8.0	11.0	15.0	15.0	18.0	16.0	14.0	9.0	5.0	0.0	324,712	28%
BTA	0.0	0.0	5.0	7.0	9.0	9.0	11.0	10.0	9.0	6.0	3.0	0.0	159,680	13%
												TOTAL	1,034,706	60%

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	AREA (sq.ft) (HA)	Percentage of Landscape
ALL		118,571	
		118,571	100%

MAWA	GALLONS/YR	3,168,454
	ACRE FEET/YR	9.72
	HCF/YR	4,235.90
ETWU	GALLONS/YR	1,034,706
	ACRE FEET/YR	3.18
	HCF/YR	1,383.30

SITE IRRIGATION EFFICIENCY	SITE PLANT FACTOR	MAWA COMPLIANT
48.4%	0.26	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	38,721
TOTAL AREA	118,571
AVG. ETAF	32.66%

THE IRRIGATION VALVE SCHEDULE SHOWN ABOVE IS INTENDED TO BE USED AS A GUIDELINE ONLY AND INDICATES THE APPROXIMATE RUN TIMES IN MINUTES FOR EACH VALVE BASED ON ESTIMATED WEEKLY WATER REQUIREMENTS FOR ESTABLISHED PLANT MATERIAL. THE TIMES SHOWN ARE APPROXIMATE AND HAVE BEEN DEVELOPED FROM LOCAL AND CURRENT AVERAGES FOR EVAPOTRANSPIRATION, AND REFLECTTHE WATER REQUIREMENTS OF THE PLANT MATERIAL BASED ON PLANT TYPE AND THE APPROXIMATE PRECIPITATION OR APPLICATION RATES OF THE IRRIGATION SYSTEM TYPE. ACTUAL RUN TIMES MAY BE DIFFERENT DEPENDING ON A VARIETY OF FACTORS INCLUDING TOPOGRAPHY, SOIL STRUCTURE, SUN AND WIND EXPOSURE, WEATHER, ACTUAL PLANT WATER REQUIREMENTS, OVERALL PRECIPITATION RATE OF ZONE, ETC.

MAWA FORMULA

MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR

MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION
0.45= ET ADJUSTMENT FACTOR
LA=LANDSCAPED AREA (SQUARE FEET)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA

ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR

ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION
PF = PLANT FACTOR FOR HYDROZONES
HA = HYDROZONE AREA (SQ.FT)
0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP
IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

Agave
Agave spp.

Berkeley Sedge
Carex divulsa

Dietes
Dietes spp.

New Zealand Flax
Phormium cv.

Aloe
Aloe spp.

California Wild Lilac
Ceanothus spp.

Grevillea
Grevillea 'Noelii'

Rosemary
Rosmarinus officinalis cv.

Kangaroo Paw
Anigozanthos cv.

Small Cape Rush
Chondropetalum tectorum

Pine Muhly
Muhlenburgia dubia

Sage
Salvia spp.

Appendix C. Résumés

Robin J. Carle, MS
Wildlife Ecology

rcarle@harveyecology.com
408.458.3241

H. T. HARVEY & ASSOCIATES
Ecological Consultants
50 years of field notes, exploration, and excellence

Highlights

- 14 years of experience
- Avian ecology
- Environmental impact assessment
- Endangered Species Act consultation and compliance
- Nesting bird and burrowing owl surveys and monitoring
- Other special-status wildlife surveys and habitat assessments
- Bird-safe design

Education

MS, Fish and Wildlife Management, Montana State University

BS, Ecology, Behavior, and Evolution, University of California, San Diego

Permits and Licenses

Listed under CDFW letter permits to assist with research on bats, California tiger salamanders, California Ridgway's rails, and California black rails

USFWS 10(a)(1)(A) for California tiger salamander

Professional Experience

Associate ecologist, H. T. Harvey & Associates, 2007–present

Volunteer bird bander, San Francisco Bay Bird Observatory, 2010–20

Avian field technician, West Virginia University, 2006

Graduate teaching assistant, Montana State University, 2003–06

Avian field technician, Point Blue Conservation Science (formerly PRBO Conservation Science),

Professional Profile

Robin Carle is an associate wildlife ecologist and ornithologist at H. T. Harvey & Associates, with more than 14 years of experience working in the greater San Francisco Bay Area. Her expertise is in the nesting ecology of passerine birds, and her graduate research focused on how local habitat features and larger landscape-level human effects combine to influence the nesting productivity of passerine birds in the Greater Yellowstone region. She also banded, sexed, and aged resident and migrant passerine birds with the San Francisco Bay Bird Observatory for 10 years.

With an in-depth knowledge of regulatory requirements for special-status species, Robin has contributed to all aspects of client projects including NEPA/CEQA documentation, bird-safe design assessments, biological constraints analyses, special-status species surveys, nesting bird and raptor surveys and monitoring, construction implementation/permit compliance, Santa Clara Valley Habitat Plan/Natural Community Conservation Plan applications and compliance support, and natural resource management plans. Her strong understanding of CEQA, FESA, and CESA allows her to prepare environmental documents that fully satisfy the regulatory requirements of the agencies that issue discretionary permits. She manages field surveys, site assessments, report preparation, agency and client coordination, and large projects.

Bird-Safe Design Experience

Provides bird-safe design support for **development projects for major technology companies in Sunnyvale and Mountain View** including the preparation of avian collision risk assessments, sections of CEQA documents, assessments of project compliance with City requirements, design recommendations, avian collision monitoring plans, and calculations of qualification for LEED Pilot Credit 55.

Provided bird-safe design support for a **development project in Berkeley** including the preparation of an avian collision risk assessment and development of bird-safe design features.

Served as project manager for the preparation of an **avian collision risk assessment for the CityView Plaza project** in San José, and prepared recommendations to minimize the potential for bird nesting and perching on the building following construction.

Served as project manager for the preparation of **avian collision risk assessments for the Menlo Uptown and Menlo Portal** projects in Menlo Park, which included assessments of the potential for avian collisions to occur with the proposed buildings and the potential significance (e.g., under CEQA) of such an impact.

Provided bird-safe design support for **development at Oyster Point in South San Francisco** including the preparation of an avian collision risk assessment and providing project-specific bird-safe design measures to ensure project compliance with CEQA requirements.

Stephen C. Rottenborn, PhD
Principal, Wildlife Ecology

srottenborn@harveyecology.com
408.458.3205

H. T. HARVEY & ASSOCIATES
Ecological Consultants
50 years of field notes, exploration, and excellence

Highlights

- 28 years of experience
- Avian ecology
- Wetlands and riparian systems ecology
- Endangered Species Act consultation
- Environmental impact assessment
- Management of complex projects

Education

PhD, Biological Sciences, Stanford University

BS, Biology, College of William and Mary

Professional Experience

Principal, H. T. Harvey & Associates, 1997–2000, 2004–present

Ecology section chief/environmental scientist, Wetland Studies and Solutions, Inc., 2000–04

Independent consultant, 1989–97

Memberships and Affiliations

Chair, California Bird Records Committee, 2016–19

Member, Board of Directors, Western Field Ornithologists, 2014–20

Scientific associate/advisory board, San Francisco Bay Bird Observatory, 1999–2004, 2009–18

Member, Board of Directors, Virginia Society of Ornithology, 2000–04

Publications

Erickson, R. A., Garrett, K. L., Palacios, E., Rottenborn, S. C., and Unitt, P. 2018. Joseph Grinnell meets eBird: Climate change and 100 years of latitudinal movement in the avifauna of the Californias, in Trends and traditions: Avifaunal change in western North America (W. D. Shuford, R. E. Gill Jr., and C. M. Handel, eds.), pp. 12–49. Studies of Western Birds 3. Western Field Ornithologists, Camarillo, CA.

Rottenborn, S. C. 2000. Nest-site selection and reproductive success of red-shouldered hawks in central California. Journal of Raptor Research 34:18-25.

Rottenborn, S. C. 1999. Predicting the impacts of urbanization on riparian bird communities. Biological Conservation 88:289-299.

Rottenborn, S. C. and E. S. Brinkley. 2007. Virginia's Birdlife. Virginia Society of Ornithology, Virginia Avifauna No. 7.

Professional Profile

Dr. Steve Rottenborn is a principal in the wildlife ecology group in H. T. Harvey & Associates' Los Gatos office. He specializes in resolving issues related to special-status wildlife species and in meeting the wildlife-related requirements of federal and state environmental laws and regulations. Combining his research and training as a wildlife biologist and avian ecologist, Steve has built an impressive professional career that is highlighted by a particular interest in wetland and riparian communities, as well as the effects of human activities on bird populations and communities. Steve's experience extends to numerous additional special-status animal species. The breadth of his ecological training and project experience enables him to expertly manage multidisciplinary projects involving a broad array of biological issues.

He has contributed to more than 800 projects involving wildlife impact assessment, NEPA/CEQA documentation, biological constraints analysis, endangered species issues (including California and Federal Endangered Species Act consultations), permitting, and restoration. Steve has conducted surveys for a variety of wildlife taxa, including a number of threatened and endangered species, and contributes to the design of habitat restoration and monitoring plans. In his role as project manager and principal-in-charge for numerous projects, he has supervised data collection and analysis, report preparation, and agency and client coordination.

Project Examples

Principal-in-charge for **bird-safe design support for more than 40 development projects** in more than 10 cities throughout the San Francisco Bay area. This work has entailed preparation of avian collision risk assessments, sections of CEQA documents, assessments of project compliance with requirements of the lead agency, design recommendations (e.g., related to the selection of bird-safe glazing), and avian collision monitoring plans.

Senior wildlife ecology expert on the South Bay Salt Pond restoration project — the largest (~15,000-acre) restoration project of its kind in the western United States.

Served on the **Technical Advisory Committees/Expert Panels for the Santa Clara Valley Water District's Upper Penitencia Creek, One Water, Science Advisory Hub, San Tomas/Calabazas/Pond A8 Restoration, and Coyote Creek Native Ecosystem Enhancement Tool** efforts; selected to serve on these panels for his expertise in South Bay wildlife, restoration, and riparian ecology.

Led H. T. Harvey's work on the biological CEQA assessment and permitting for extensive/regional **facilities and habitat management programs for the Santa Clara Valley Water District, San Jose Water Company, County of San Mateo, and Midpeninsula Regional Open Space District**.

Contract manager/principal-in-charge for **Santa Clara Valley Water District's Biological Resources On-Call contract** (four successive contracts, with over 120 task orders, since 2009).

From: Kristen L
To: Perata, Kyle T
Subject: Willow Village will be a sea level rise victim
Date: Sunday, April 10, 2022 3:17:22 PM

I hope they will build whatever they want as long as they NEVER ask the city to pay for any climate change impact mitigation projects. The area is very low lying and very close to the water. Sea level rise will impact it. If there is any chance that Willow Village will ask for tax dollars to protect their project, nothing should ever be built. If they assume all the risk, I am all in favor.

Kyle Perata
Community Development Dept., City of Menlo Park
701 Laurel Street, Menlo Park, CA 94025

4/17/22

cc: Planning Commission
Housing Commission
City Council members
Chamber of Commerce
Signature Development

SUB: Willow Village Master Plan Project - EIR

This submittal is in support of the Willow Village project and the EIR process, which will improve the final project as planned.

I have reviewed the EIR executive summary and significant-impacts summary.

Comments:

The modernization of this underutilized commercial area is an important move forward for the City of Menlo Park, especially for the neighbors who are immediately adjacent.

I am pleased with the response by the developer to the extensive community feedback:

Project goals include to minimize traffic, improve Willow Road transportation infrastructure, place all parking underground, and include connections to the Belle Haven neighborhood. A very important benefit to our region is the addition of 1730 units of housing, with over 300 affordable units. Other benefits include delivering needed neighborhood services in the first phase of the development, the creation of a 4-acre community park, and the use of 'mass timber' construction which greatly reduces climate impacts.

I note that the project will include an Impacts mitigating, monitoring, and reporting program.

The development team significantly improved the project design based on community feedback, following almost 170 meetings over the past half dozen years. This development also fits in with the Connect Menlo General Plan Amendment, which also was a very public process.

I am especially pleased to note the sustainability aspects of the project: 100% electrical, extensive use of solar and recycled water, and sustainable building materials.

This project is establishing a model for future construction projects for the development industry worldwide: human-scaled, modern, sustainable, cost-effective construction techniques.

We are lucky that the Meta Platforms company has decided to make this outstanding investment in community amenities and services in the Belle Haven neighborhood.

Thank you, Menlo Park, for working through all the details of the EIR and responses.

Clem Molony

Clem Molony
1966 Menalto Ave.
Menlo Park, CA 94025

GG2

Perata, Kyle T

From: Kimberly Baller <kimberlyballer@gmail.com>
Sent: Wednesday, April 20, 2022 12:47 PM
To: _Planning Commission
Cc: connect@willowvillage.com
Subject: I support Willow Village

Dear Planning Commissioners,

I am writing to express my support for the Willow Village project. I urge you to advance the project through the EIR process and remaining steps toward approval.

I lived in East Palo Alto from 2015 - 2020 on Kavanaugh Dr. We loved being so close to Facebook, where I work, and our neighbors were wonderful. What was hard was not having a grocery store nearby, not having a nice park within walking distance, the sidewalks were awful (cracked, hard to walk with a stroller) and a closer movie theater would have been great. We had a dog and a toddler at the time and not having a park we felt safe enough to walk to was a real bummer.

I was so excited to hear about this project and cannot wait for it to get started. We ended up moving out of the neighborhood because it wasn't working for our family but we kept our property and rented it out. We would love to see this development continue as quickly as possible to improve the livability for future tenants.

Thank you for your consideration,
Kimberly Baller

Perata, Kyle T

From: Mark Baller <markballer@gmail.com>
Sent: Wednesday, April 20, 2022 12:56 PM
To: _Planning Commission
Cc: connect@willowvillage.com
Subject: Please move forward with Willow Village

Dear Planning Commissioners -

I am writing to express my support for the Willow Village project. My wife Kimberly and I moved to East Palo Alto in 2014. Our son Jax was born in our home in 2016. We love the neighborhood in many ways, but community facilities, safe and aesthetic parks and commercial options are poor. Willow Village will provide both Menlo Park and East Palo Alto residents with what is missing from the area.

I urge you to advance the project through the EIR process and remaining steps toward approval.

Thanks for your time and consideration,

Mark Baller
1519 Kavanaugh Dr.
East Palo Alto, CA
94303

Additional Comments Received after Staff Report Publication

YIMBY Law

57 Post St, Suite 908
San Francisco, CA 94104
hello@yimbylaw.org

YIMBY LAW

4/22/2022

Menlo Park Planning Commission
701 Laurel St.
Menlo Park, CA 94025

planning.commission@menlopark.org
Via Email

Re: 1380 Willow Road

Dear Menlo Park Planning Commission,

YIMBY Law is a 501(c)3 non-profit corporation, whose mission is to increase the accessibility and affordability of housing in California. YIMBY Law sues municipalities when they fail to comply with state housing laws, including the Housing Accountability Act (HAA). As you know, the Planning Commission has an obligation to abide by all relevant state housing laws when evaluating the above captioned proposal, including the HAA. Should the City fail to follow the law, YIMBY Law will not hesitate to file suit to ensure that the law is enforced.

Willow Village turns an inward-facing, 59-acre, 1970s low-density R&D site with endless surface parking into a community-serving, mixed-use project with parks, open-space, housing and affordable housing, and badly needed community-serving retail. The neighborhood of Belle Haven lacks basic amenities like a grocery store, pharmacy services and adequate open space. Willow Village delivers all of these amenities in one project. Moreover, once built, Willow Village will increase Menlo Park's existing rental affordable housing stock by more than 60%. Willow Village was designed around more than five years of neighbor and community input and shows what responsible, community-focused mixed-use development can look like.

California Government Code § 65589.5, the Housing Accountability Act, prohibits localities from denying housing development projects that are compliant with the locality's zoning ordinance or general plan at the time the application was deemed complete, unless the locality can make findings that the proposed housing development would be a threat to public health and safety.

The above captioned proposal is zoning compliant and general plan compliant, therefore, your local agency must approve the application, or else make findings to the effect that the proposed project would have an adverse impact on public health and safety, as described above. Should the City fail to comply with the law, YIMBY Law will not hesitate to take legal action to ensure that the law is enforced.

I am signing this letter both in my capacity as the Executive Director of YIMBY Law, and as a resident of California who is affected by the shortage of housing in our state.

Sincerely,

Sonja Trauss
Executive Director
YIMBY Law

April 21, 2022

Menlo Park Planning Commission
701 Laurel St.
Menlo Park, CA 94025

RE: Support for Willow Village Project

Dear Chair Doran and Members of the Planning Commission,

The Bay Area Council is a public policy advocacy organization working to support civic and business leaders in solving our regions most challenging issues. On behalf of the more than 300 members of the Council, I write in support of the proposed Willow Village development in Menlo Park.

California is experiencing an unprecedented housing crisis that will worsen without significant intervention. The California Department of Housing and Community Development estimates that the state must build 180,000 new units of housing annually by 2025 to address the state's housing affordability crisis - over 100,000 more units than we are currently creating. This shortage will disproportionately impact low-income communities and communities of color that are being priced out of Bay Area communities from the lack of affordable housing options. To combat this, every county and city must do its part to produce more housing.

The Willow Village project will create 1,729 units in total, of which 320 units will be BMR at low-income and very low-income rent levels. Facebook is expected to invest $75 million in amenities into Menlo Park and its surrounding communities, which goes far beyond what developers are typically able to contribute to a project. In addition to residential, retail, and office space, this project contains substantial open space – including a two-acre elevated park and dedicated pedestrian paths and bike lanes that link to surrounding and regional trails. This is a massive opportunity for housing, economic, and community development in Menlo Park that should not be missed.

Since more than 50% of Facebook employees walk, bike, rideshare, or take public or company transit, access to public transportation will be an important asset for new community members which in turn will promote low carbon emissions. In addition to reduced transportation emissions, the project will be one of the most sustainable communities of its kind thanks to its integration of LEED Gold standards: all-electric buildings, recycled water, highly sustainable office building materials, increased photovoltaics and other environmental measures.

This project is an excellent opportunity for dense, mixed-use development directly adjacent to transit and within a downtown context to grow the supply of housing and reduce dependence on cars. This is a clear example of sustainable and inclusive growth for future generations and we encourage you to support it.

Sincerely,

Matt Regan
Senior Vice President, Bay Area Council

Perata, Kyle T

From: Bonnie Lam <bllam@ucla.edu>
Sent: Monday, April 25, 2022 12:05 PM
To: _Planning Commission
Subject: Planning Commision - Willow Village

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Planning Commissioners,

As a Belle Haven resident, I am writing to express my support for the Willow Village project. I've been actively following and attending meetings regarding Willow Village and have been very impressed with the openness to feedback. The plans presented have been changed multiple times in order to accomodate our community's request and concerns.

I urge you to advance the project through the EIR process and remaining steps toward approval. Willow Village delivers to our neighborhood much needed amenities such as a full-service grocery store, pharmacy services, cafes and restaurants, publicly accessible park space, and community gathering spaces such as a town square. I look forward to having spaces that my neighbors and I can walk to.

Willow Village also delivers more than 300 units of affordable housing, which will help prevent displacement from our community. Affordable housing is needed more than ever, especially with the rising housing and rent prices. I urge you to support Willow Village as I do. This is a huge investment into the Belle Haven and neighboring communities and will add to the vibrancy of our beautiful community.

Thank you,
Bonnie Lam

Perata, Kyle T

From: Brian Henry <bhenry456@yahoo.com>
Sent: Sunday, April 24, 2022 10:44 AM
To: _Planning Commission
Cc: connect@willowvillage.com
Subject: I support Willow Village

Dear Planning Commissioners, I am writing to express my support for the Willow Village project. I urge you to advance the project through the EIR process and remaining steps toward approval.

Perata, Kyle T

From: Mack, Ed <emack@te.com>
Sent: Monday, April 25, 2022 10:21 AM
To: _Planning Commission
Cc: connect@willowvillage.com
Subject: I support Willow Village

Dear Planning Commissioners, I am writing to express my support for the Willow Village project. I urge you to advance the project through the EIR process and remaining steps toward approval. I feel that this project will be beneficial to East Menlo Park, as well as to East Palo Alto.

Thank You, Ed Mack

1483 Kavanaugh Drive

E. Palo Alto

650-704-3207

Perata, Kyle T

From: Federico Andrade-Garcia <federico@liquilan.com>
Sent: Thursday, April 21, 2022 12:50 PM
To: _Planning Commission
Cc: connect@willowvillage.com
Subject: I support Willow Village

Follow Up Flag: Follow up
Flag Status: Completed

Estimated Planning Commissioners,

I am a resident of East Palo Alto, living relatively close to the Willow Village project. As a nearby resident, I would like to express my support for the Willow Village project. The area it intends to be at, is currently only used for buildings, and this project would include not only that, but shared areas for community entertainment and housing, which should take some of the FB workers (And some other residents) out of the road, which would help traffic overall. Also, having retail and groceries nearby, will help the whole area East of 101, and bring some more tax revenue to MP, so everybody wins.

I urge you to advance the project through the EIR process and remaining steps toward approval.

Regards,

-Federico Andrade-Garcia

Perata, Kyle T

From: Luis Perez <luis.perez.live@gmail.com>
Sent: Monday, April 25, 2022 10:06 AM
To: _Planning Commission
Cc: Willow Village
Subject: I support Willow Village

Follow Up Flag: Follow up
Flag Status: Completed

Dear Planning Commissioners, I am writing to express my support for the Willow Village project. I urge you to advance the project through the EIR process and remaining steps toward approval.

MENLO TOGETHER

April 25, 2022

Re: Willow Village, items F1 and G1

Dear Planning Commission and City Staff,

Menlo Together is a group of Menlo Park and Peninsula residents who envision an integrated and diverse, multi-generational, and environmentally sustainable city. We advocate for an accessible and inviting Menlo Park with housing at all affordability levels, and with pedestrian and bike-friendly spaces, developed to be carbon-free. We value equity, sustainability, inclusion, health, and racial and economic justice.

We write with comments on the Willow Village project to inform your study session this evening.

We appreciate that the Willow Village commercial office project has designed homes and community service amenities into the overall proposal, and that the community amenities are included in the first phase of development. We ask that the Planning Commission study ways to improve the project's jobs/housing balance and fit, increase confidence in the long term viability of the community serving grocery and pharmacy, and improve circulation, pedestrian, and bike safety.

<u>BMR Housing:</u>

Menlo Together appreciates the plan for housing at all levels of affordability and ages in this proposal, and we would like to see a significantly higher number of affordable units at steeper affordability with preference for those most impacted by the project, who have greatest need.

1) **We value inclusion and feel strongly that the market rate apartment buildings should include at least 15% BMR homes at a range of affordability levels.** The city's BMR guidelines require market rate housing projects to provide 15% of the units at Below Market Rate (BMR) affordability. Specifically, the guidelines require all units to be affordable at low income, or a mix of affordability levels that is equivalent in terms of overall subsidy. We believe that the inclusionary BMR housing should include a relatively even

distribution of Very Low, Low, and Moderate income affordable units and propose that Meta increase their investment in our community to achieve this outcome.

2) We are glad to see that city staff is open to explore, but is not yet supporting the proposal to eliminate the 75% cap on moderate income rents. We believe the cap is an important tool to ensure that our "Below Market Rate" units do in fact maintain below market rate rents.
3) **In addition to the integrated 15% BMR units above, we support the proposal to produce 100% affordable housing on-site, and encourage doing so by donating land and finances and partnering with a non-profit housing developer.** Stand-alone 100% affordable housing is able to draw upon county, state and federal financing, and as such can be more deeply affordable. When produced and managed by a mission-aligned non-profit, the units are managed to support tenant success and perpetual affordability. We are glad to see that the developer is working with Mercy Housing to establish such a partnership.
    a) **A portion of the stand-alone affordable units should follow Menlo Park BMR preferences.** County, State, and Federal financing comes with rules about who can apply as tenants. To ensure that Menlo Park has priority to fill a portion of these units, Menlo Park must contribute financing to the project. We propose that the developer make a land *and* financial contribution to ensure that a good portion (30%?) of units can receive Menlo Park preference.
    b) We support age-restricted senior housing, and would also support multi-generational homes for extremely low income families, and/or people with disabilities.
4) Consider converting some rental units (including some BMR units) into ownership units to diversify the type of housing, offer residential stability, and wealth-building opportunities.
5) **Although not proposed by the developer, we would encourage the use of the density bonus to produce an additional 200 units (according to the option studied in the EIR) for additional units that are affordable to ELI/VL/LI households.** Menlo Park has a multi-year debt to the region in terms of housing to support the new jobs we have created. This debt has been and continues to be most strongly felt in Belle Haven through eviction, homelessness, displacement, overcrowding, and extreme housing cost burden. The impacted demographic is 50% Black and Hispanic and has a median income of $50-60,000/year. In addition, Belle Haven has carried a disproportionate impact of our city's growth. That is why we propose that we use the density bonus to produce an additional 200 units but do so in a way that meets the affordability needs of those most impacted by the job/housing imbalance who need housing affordable to households with extremely low, very low, and low incomes.

Circulation, Pedestrian and Bike Safety

We appreciate the focus of the project on improving circulation and safety, and have some concerns and suggestions.

Relating to circulation, the EIR identifies that the project will put pressure on the intersections of Willow and Bayfront and Willow and University. Would it be feasible to add a third entrance/exit to Bayfront from what is currently being proposed as a loop road? This could create a stronger "grid" with multiple options to enter and exit the area, relieving the pressure on the two other intersections.

The current proposal includes expanding the right of way to add a turn lane, which diminishes safety for people walking and bicycling.

With regard to Willow, we would like to see major improvements to pedestrian crossings at all of the intersections along the corridor, especially Hamilton as a major crossing for Belle Haven residents to access the services, and in addition, Park, Ivy, and O'Brien.

With regard to the details of pedestrian and bicycle circulation and safety, we would encourage the project to be reviewed by the Complete Streets Commission.

With regard to trip caps and vehicle parking, we would like to see analysis that is based on goals for mode share - what is the number of people who are expected for the various uses, and what percentage of them are expected to be driving vs. using transit, walking and bicycling. Mountain View has used these methods in its transportation for mixed use developments in the North Bayshore developments around Google's headquarters.

We are concerned that a trip cap focused primarily on peak commute hours may be less relevant in a post-covid era that may have persistently less peak travel. And we are concerned that the all-day trip cap may be equivalent to supporting driving by a very large share of users of the development, which would be unsupportive of the city's goals for sustainable transportation.

Sincerely,
The Menlo Together Team
info@menlotogether.org

Perata, Kyle T

From: Robert Ott <getrobertott@gmail.com>
Sent: Monday, April 25, 2022 2:26 PM
To: _Planning Commission
Cc: connect@willowvillage.com
Subject: In support of Willow Village

Dear Planning Commissioners,

As a Belle Haven resident, I am writing to express my support for the Willow Village project. I urge you to advance the project through the EIR process and remaining steps toward approval. Willow Village delivers to our neighborhood much needed amenities such as a full-service grocery store, pharmacy services, cafes and restaurants, publicly accessible park space, and community gathering spaces such as a town square. This is important so we do not have to cross the highway to shop for groceries or pick up a subscription. Willow Village also delivers more than 300 units of affordable housing, which will help prevent displacement from our community. I urge you to support Willow Village as I do.

Thank you,
Robert

Perata, Kyle T

From: Romain Tanière <rtaniere@yahoo.com>
Sent: Sunday, April 24, 2022 3:32 PM
To: PlanningDept; Perata, Kyle T; Chen, Kevin; _Planning Commission; Wolosin, Jen; Taylor, Cecilia
Subject: [Sent to Planning]F1 & G1 Draft Environmental Impact Report Willow Village - 25 Apr 2022 Menlo Park Planning Commission

Follow Up Flag: Follow up
Flag Status: Completed

Dear Menlo Park planning commissioners,

Nearby Kavanaugh East Palo Alto residents will benefit but also be affected by the new Willow Village/Meta Campus and we thank you for the opportunity to provide some feedback on the EIR and latest development proposal.

With Menlo Park's current city ordinance prohibiting nearby overnight parking and with the Willow Campus parking on the eastern side and the O'Brien/Willow connection next to the East Palo Alto Kavanaugh/Gloria neighborhood, residents have expressed concerns about increasing parking issues, speed/safety and nonresidential cut-through traffic between University, Willow and Bay corridors which need to be addressed now before construction begins. Therefore,

A. Nearby East Palo Alto city streets (Kavanaugh, Gloria, University, etc…) must be included in all current/future studies and some of the impact fees should go towards the city of East Palo Alto for safety and traffic mitigation measures such as:

1. To implement 2 new stop signs on Kavanaugh Drive at Gloria Way and Clarence Court.

2. To install digital driver's speed limit radar displays on Kavanaugh Drive and Gloria Way on both side of the street.

3. To perform an asphalt street resurfacing/reconstruction on Kavanaugh Drive with larger concrete sidewalks and rebuilt ADA compliant crosswalks/curbs/ramps, bury all overhead utility lines and install more lamp posts on all the electrical poles on Kavanaugh Drive, Gloria Way and all adjacent streets and courts to increase safety (Kirkwood, Clarence, Gertrude, Hazelwood, Farrington, Emmett, Ursula, Grace).

4. To conduct an engineering evaluation and implement the most appropriate and effective street traffic/speed calming devices (e.g. speed bumps, traffic circles at intersections, etc…) on Kavanaugh Drive (between O'Brien Dr and University Ave) and on Gloria Way (between Bay Rd and Kavanaugh Dr).

5. To include Notre Dame Ave / Kavanaugh Dr as a bike lane in the Bicycle Transportation Master Plan which would be a bicycle improvement/alternative to the busy Bay Rd / Newbridge St bike route to Willow Road.

6. To install lighting on University Avenue between Kavanaugh Drive and Bay Road either on the street side that has the existing sidewalk or on the median, lighting both side of the road like on the rest of University Avenue to increase safety (currently the side of the road that has lighting on this street portion is the one where there is no sidewalk).

7. To implement an all-red traffic light interval at the University/Kavanaugh/Notre Dame traffic light intersections.

8. To strengthen control and enforcement of speed/traffic/parking regulations.

B. To limit vehicle traffic, the Willow/O'Brien/University area should be redeveloped with pedestrian/bicycle traffic in mind. As such, sidewalks with ADA compliant crosswalks/curbs/ramps, which at present are mostly nonexistent, should be constructed on both sides all along O'Brien Drive (as a continuation and similarly to what has been done at 1035

O'Brien Drive for example when it was rebuilt) and Kavanaugh Way in Menlo Park to connect with existing sidewalks on Kavanaugh Drive and University Avenue in East Palo Alto. Better lighting should be installed and bicycle lanes should be also developed on O'Brien Drive.

C. Paseos and streets in the Willow Campus should better connect to O'Brien Drive. As such, we would like the developer to work with other nearby landowners and specifically CSBio (1075 O'Brien/Kelly Court), 1105-1165 O'Brien Drive, 1005 O'Brien Drive and 1320 Willow Road, and 1350 Adams Court which are currently redeveloping their properties and finalizing their designs. This would allow the possibility of new connections with O'Brien and the new Willow campus street/paseo grid proposal (for example utilizing the current drainage channel between 1075 and 1105 O'Brien Drive and the previous fenced off connections between 20 Kelly Court and 960/1350 Hamilton) and between Adams Court and Hamilton Court.

D. Other more direct bus/street connections from Willow/University to Willow Village should be considered to limit residential traffic and avoid O'Brien Drive/Kavanaugh Drive.

E. Meta should also consider the integration/planning of a Multi-Modal Transit Hub by the SamTrans corridor and keep pushing for the Dumbarton Rail Corridor to be reactivated. The plan should allow options to include and connect a future Dumbarton transit/commuting center to the Willow Village Campus.

F. The redevelopment of Hetch Hetchy right of way should be included in the project to increase greenery and connect the proposed south park crescent between Ivy/Willow and O'Brien Parks. The developer of this project should work with relevant parties such as the city, nearby other landowners, and the SFPUC, to increase park/playground options on Hetch Hetchy such as secured children/toddlers areas and tennis/basketball/football/soccer/bocce courts, etc... This would create an additional south paseo and increase community park amenities serving both future employees and local residents.

G. Re-including the initial proposal for a Community Center on ground level near the Ivy/Willow public park would be greatly beneficial. The Ivy/Willow park/open space should not be limited as a sport's/multi use field which will be only used by 1 or 2 leagues but should be planned as a full amenity community park such as the "awesome spot playground" (Modesto) or the "magical bridge playground" (Palo Alto). Hopefully the elevated park by the SamTrans corridor can also incorporate many great designs/features from the High Line New York city public park.

H. To mitigate traffic issues on the Willow Road/O'Brien Drive corridor, please also find down below some additional feedback/improvements (#1 to #11) that should be implemented as soon as possible in coordination with the appropriate agencies (Caltrans, AC Transit, etc…) in advance of the Willow Village/Meta campus:

1. No parking request in front of 965-985 O'Brien Drive, Menlo Park to ease the flow of vehicles to Willow Road. This would allow vehicles on O'Brien to be in 2 lines, up to the traffic light (right now the 2 lines, no parking zone is not even barely from 965 O'Brien to the light but just a few feet from the corner Willow/O'Brien intersection). Vehicles that are parked on the street around 965-985 O'Brien make the congestion even worse and the 2hr parking zone is not even enforced in this area. This should be very easy and fast to implement (just relocating the existing "no parking here to curb" further down the street and extending the painting strip to divide the lane further).

2. Installation of a new sign on the far right of the large overhang Newbridge traffic light mast arm coming from US101 towards O'Brien Drive with "lane ends - through traffic merge left" would ease the traffic for locals who make a right on Willow Road to Alberni Street and O'Brien Drive. At present, through traffic on Willow Road stay on the very right lane from US101 overpass to O'Brien Drive, blocking the lane for local traffic turning right. Having a "warning" early posted sign ahead of time will help vehicles merge ahead of time instead of seeing the signs too late and blocking the lanes where local residents need to exit/enter.

3. The Willow Road and side street traffic light synchronization needs to account and take place also East of US101 right away, not just West of US101. Vehicle counts and traffic patterns on O'Brien/Ivy/Hamilton should be done/included on the on-going synchronization (also on side streets such as Kavanaugh Way (Menlo Park) and Kavanaugh Drive (East Palo Alto) in anticipation of the FaceBook Willow Campus).

4. As a complement to #2, going East on CA 114 towards the Dumbarton bridge, the sign next to the sidewalk indicating that Willow through traffic must merge left near the intersection of Willow Road and O'Brien Drive is too close to the intersection/traffic light. It does not give cars enough distance to move to the left if going straight. This gives the impression that there are 3 lanes instead of 2 and at peak commute hour creates a bottle neck for people who want to turn right on O'Brien Drive. The "Through traffic must merge left" sign should be moved before Alberni Street EPA to give enough time for drivers to get off the right lane and not block it. Again, having a "warning" early posted sign ahead of time

will help vehicles merge ahead of time instead of seeing the signs too late and blocking the lanes where local residents need to exit/enter. Some additional “Right arrows” should also be painted just after Alberni Street EPA on the right lane to reinforce the message.

5. Similarly to #2, a new sign can be installed on the far right of the horizontal large overhang Newbridge traffic light mast arm coming from O'Brien Drive towards US101 "Right lane must turn right - US101 North SF only".

6. As a complement to #5, going West on CA 114 towards US 101, the new Willow configuration at/after Newbridge is a very nice improvement (except for the Dumbarton express bus stop footprint/location, see #7). However, the signs on the right side indicating that through traffic must merge left and that the right lane is for San Francisco US 101 are not really well placed and from a driver perspective cannot be seen very well (maybe OK if you see them from a pedestrian’s perspective or inspect the intersection on foot, but they are partially hidden by traffic light/trees if you see them from a driver’s perspective on the right or middle lane before the traffic light). May be the placement of the various sidewalk signs between Newbridge and US 101 can be revisited and also some “Right arrows” can be painted just before or after the “SF North” white road marking on the right lane.

7. Going West on CA 114 towards US 101, the Dumbarton Express bus stop on Willow Road, right at the corner of Newbridge MP is badly posted and very dangerous. Unlike the bus stop on the other Willow/Newbridge EPA side going East, and despite the new large sidewalk just been redone, no footprint/easement was accommodated for the bus to pull out of the "turn right 101 North Only" lane. Therefore, drivers following the bus on Willow and who are unaware of the bus stop corner location, get stuck in the middle of the Willow/Newbridge intersection until the bus moves out. Some drivers will then try to get out by partially moving in the middle lane by sharing lanes with cars currently on the middle lane and get into near accidents. At the same time there are also vehicles trying to make a right turn (on red) on Willow from Newbridge MP which makes the situation worse. The bus stop sign should be relocated in a more visible location and a pull out space should be accommodated on the large sidewalk to make a real bus stop aside from trough traffic. Relocating it before the Willow/Newbridge traffic light on the side of Mi Tierra Linda would be best. There is more space and it would be almost at the same location of the other bus stop on the opposite direction/side of the street. This is not simply a problem of responsible drivers but really a poor location of the current bus stop location.

8. In addition to the already difficult situation described on #7, and to avoid people coming from Newbridge MP from blocking Pierce Road and also creating accident situations with drivers coming from Newbridge EPA or Willow Road, there should be a “do not turn right on red” for the light at Newbridge MP. Cars should be forced to stop before Pierce Road and wait for the green light to turn right on Willow Road West.

9. Maintenance wise, several light bulbs are burned off at the O'Brien/Ivy traffic lights and many round shape light covers are missing at several location which makes some lights hard to see depending on the sun exposure. The "Do not block the intersection" sign facing O'Brien Drive at Willow Road fell of the middle traffic light and is now missing. Also the island traffic light to make a left on O'Brien from Willow has been missing and not replaced for several months.

10. Implementation of an all-red interval for vehicle clearance and traffic safety at all the Willow intersections traffic lights between US101 and Bayfront expressway (Newbridge, O'Brien, Ivy, Hamilton) to increase safety and prevent such dangerous/accident prone situations that happened previously on Kavanaugh/University and Willow/O'Brien (see examples here:

https://vimeo.com/231583589

https://vimeo.com/231583590

https://vimeo.com/231583682)

11. Repainting of all missing/faded directional doted lines at all the Willow intersections between US101 and Bayfront expressway (Newbridge, O'Brien, Ivy, Hamilton) to guide the vehicles turning.

Overall, we are very excited about this mixed used project with public access and amenities east of US101. We are looking forward for the city of Menlo Park, the planning commission and the developer to working together with the relevant stakeholders (e.g. the city of East Palo Alto, SFPUC, Meta, CSBio, etc...) to incorporate and implement these improvements so that this live/work/play development transforms the O’Brien business park area in a more lively community district integrated in the surrounding city neighborhoods and ultimately benefits everyone.

Thank you very much for your consideration.

Romain Taniere

East Palo Alto, Kavanaugh neighborhood resident.

Perata, Kyle T

From: Vince Rocha <vrocha@svlg.org>
Sent: Thursday, April 21, 2022 1:28 PM
To: _Planning Commission
Cc: connect@willowvillage.com
Subject: Silicon Valley Leadership Group supports Willow Village

Follow Up Flag: Follow up
Flag Status: Completed

Dear Planning Commissioners,

I am writing on behalf of the Silicon Valley Leadership Group to express our support for the Willow Village project. I urge you to advance the project through the EIR process and the remaining steps toward approval.

Regards,

Vince Rocha (he/him)
Vice President, Housing & Community Development
408.910.4616 | svlg.org
Connect with us: Twitter | LinkedIn | Facebook

Perata, Kyle T

From: Perata, Kyle T
Sent: Monday, April 25, 2022 3:14 PM
To: Perata, Kyle T
Subject: FW: [Sent to Planning]Willow Village

Kyle T. Perata
Acting Planning Manager
City Hall - 1st Floor
701 Laurel St.
tel 650-330-6721
menlopark.org

From: victoria robledo [mailto:vbetyavr@gmail.com]
Sent: Monday, April 25, 2022 2:45 PM
To: PlanningDept <PlanningDept@menlopark.org>
Subject: [Sent to Planning]Willow Village

Good evening Planning Commission,

I am writing as a concerned resident of Belle Haven and the impact of traffic and pollution that will affect the air quality and safety of our residents. In addition, the following items I'm in opposition of due to its great impact on this tiny community.

Opposition to: Additional Hotel when there are already two large Hotels both off 101 (The Nia and Four Seasons).

Opposition to: Tearing down established trees

Opposition to : 1,900 units of housing to be reduced to 1,000 or less
Opposition to : Tearing down so many functioning buildings, trees and many other existing structures.

PROOF in writing that there will NOT be an impact on quality of air due to increase in cars, dust, dirt, noise.

I would also like to request that the Commission consider limiting all entries to these sites " NOT" be directly off of Willow as to prevent traffic jams and buckle up traffic.

Thank you,

Victoria Robledo

Perata, Kyle T

From: Vivian Wehner <veggieviv@gmail.com>
Sent: Thursday, April 21, 2022 5:21 PM
To: _Planning Commission
Cc: connect@willowvillage.com
Subject: I support Willow Village

Dear Planning Commissioners, I am writing to express my strong support for the Willow Village project. I support the advancement of the project through the EIR process and the remaining steps toward approval. I live in east palo alto and this project would be transformational for my quality of life (in a positive way). I support doing due diligence, but am very excited for this project to move forward.

Vivian

April 22, 2022

RE: Endorsement of Willow Village

Dear Menlo Park Planning Commission,

For over 60 years, Greenbelt Alliance has helped create cities and neighborhoods that make the Bay Area a better place to live - healthy places where people can walk and bike; communities with parks, shops, transportation options; homes that are affordable - and defend the Bay Area's natural and agricultural landscapes from sprawl development. Greenbelt Alliance's "Grow Smart Bay Area" goals call for fully protecting the Bay Area's greenbelt and directing growth into our existing communities, and accomplishing both in a way that equitably benefits all Bay Area residents. Our endorsement program helps further these goals by providing independent validation of smart infill housing (development of vacant land within urban areas) and mixed-use projects (allowing for various uses like office, commercial and residential).

Greenbelt Alliance is pleased to conceptually endorse Willow Village

As a mixed-use development, Willow Village would bring housing, jobs, neighborhood-serving retail, and other community amenities including a 4.1 acre public park, 2.1 acre elevated park, dog park, plazas and 1.6 acre town square to a neighborhood without neighborhood-serving retail and service uses. This 1,735 unit, mixed-use development, proposed by Sunset Development will have a commitment for affordability. 18% of units across the project will be offered at Below-Market-Rate Rents (with 100 units reserved for very low income seniors) for households ranging from 30-120% of the Area Median Income (AMI).

This Project would reduce VMT by introducing neighborhood-serving retail, including a full-service grocery store and pharmacy, and other community amenities, to an existing neighborhood without such amenities. The addition of such amenities to the area would reduce the number and length of automobile retail trips of existing residents and employees. Willow Village is also located within 1/2 mile of Facebook's major employment center with bike, pedestrian and shuttle routes available so that employees do not have to drive. Similarly, the inclusion of retail in the Project causes the VMT from Project residents and employees to be lower than it would be if the Project did not include retail uses.

Approximately 1.25M square feet of traditional office space featuring next generation, LEED-Gold design and 500,000 square feet of accessory space that includes a public visitor center and flexible meeting, collaboration and conference space for employees and office guests. This is the kind of climate-smart development that we need in the Bay Area to meet our housing goals, reduce

greenhouse gas emissions, and make sure that local residents are able to grow and thrive in their own communities as housing costs rise.

This project will help the city of Menlo Park make significant progress towards its Regional Housing Needs Assessment (RHNA) goals. Every city in the Bay Area must play their part to increase their housing stock to make sure the local workforce can afford to live close to jobs, schools, and services — spending more time with family and friends and less time in traffic congestion — improving the social fabric of our communities and reducing the climate-damaging greenhouse gas emissions produced by driving.

We recommend the City of Menlo Park approve both of these projects. We hope its approval will resonate with other Bay Area cities, and encourage them to redouble their efforts to grow smartly.

Sincerely,
Zoe Siegel

Director of Climate Resilience, Greenbelt Alliance