

PLANNING COMMISSION AGENDA

Regular Meeting April 6, 2015 at 7:00 p.m. City Council Chambers 701 Laurel Street, Menlo Park, CA 94025

CALL TO ORDER – 7:00 p.m.

ROLL CALL – Bressler, Combs, Eiref (Chair), Ferrick, Kadvany, Onken (Vice Chair), Strehl

INTRODUCTION OF STAFF – Michele Morris, Assistant Planner; Nicole Nagaya, Transportation Manager; Kyle Perata, Associate Planner; Thomas Rogers, Senior Planner

A. REPORTS AND ANNOUNCEMENTS

Under "Reports and Announcements," staff and Commission members may communicate general information of interest regarding matters within the jurisdiction of the Commission. No Commission discussion or action can occur on any of the presented items.

A1. Update on Pending Planning Items

- a. Housing Element Annual Report City Council March 24, 2015
- b. ConnectMenlo (General Plan Update)
 - i. GPAC #6 (March 25, 2015)
 - ii. Joint CC/PC Meeting (March 31, 2015)
- c. Planning Commission Appointments City Council April 14, 2015

B. PUBLIC COMMENTS #1 (Limited to 30 minutes)

Under "Public Comments #1," the public may address the Commission on any subject not listed on the agenda within the jurisdiction of the Commission and items listed under Consent. When you do so, please state your name and city or political jurisdiction in which you live for the record. The Commission cannot respond to non-agendized items other than to receive testimony and/or provide general information.

C. CONSENT

Items on the consent calendar are considered routine in nature, require no further discussion by the Planning Commission, and may be acted on in one motion unless a member of the Planning Commission or staff requests a separate discussion on an item.

- C1. Approval of minutes from the March 9, 2015 Planning Commission meeting (Attachment)
- **C2.** Architectural Control/Denise Forbes/138 Stone Pine Lane: Request for architectural control for exterior modifications including enclosing the existing second floor balcony to enlarge the existing kitchen by approximately 120 square feet, building a new third floor balcony, and a vertical planting trellis located on the front elevation of a townhouse located in the R-3 (Apartment) zoning district. (*Attachment*) Continued from the meeting of March 23, 2015.

D. PUBLIC HEARING

- D1. Use Permit/Jack McCarthy/1295 Middle Avenue: Request for a use permit to demolish an existing one-story residence, pool and shed, then construct a new two-story single-family residence on a substandard lot with regard to lot width located in the R-1-S (Single-Family Suburban Residential) zoning district. (<u>Attachment</u>)
- **D2.** Use Permit Revision/Intersect ENT/1555 Adams Drive: Request for a revision to a use permit, previously approved in June 2012, to modify the types and quantities of hazardous materials used and stored at the site for the research and development (R&D) and production of medical technologies for use in treating ear, nose, and throat patients, within an existing building in the M-2 (General Industrial) zoning district. All hazardous materials would be used and stored within the building. (*Attachment*)
- D3. Use Permit Revision/John Tarlton for O'Brien Drive Portfolio, LLC/1035 O'Brien Drive: Request for a use permit revision to convert a mixed-use office/research and development (R&D) and manufacturing building to a predominately R&D use to allow for an existing tenant, Avalanche Biotechnologies, to expand to the entire building located in the M-2 (General Industrial) zoning district. The previous (2012) use permit approval limited the office/R&D square footage to 14,432 square feet (40 percent of the building). At this time, the applicant is proposing to modify the uses within the building to increase the square footage devoted to wet-lab R&D and supporting office uses. The building's land use would be generally considered R&D, but would contain ancillary manufacturing, warehouse, and office uses. The proposed project includes a request to modify the types and quantities of hazardous materials used and stored at the site. The Planning Commission approved a hazardous materials use permit in April 2014. All hazardous materials would be used and stored within the building. As part of the project, the applicant is requesting a use-based parking reduction based on the specific tenant operations and its Transportation Demand Management (TDM) plan, which is intended to reduce the potential increase in trips from the site. A total of 103 parking spaces would be provided, where 120 parking spaces would be required by the M-2 square-footage-based parking requirements. In addition, the applicant is requesting approval of a Below Market Rate (BMR) In-Lieu Fee Agreement for this project. (Attachment)

E. STUDY SESSION

- E1. EI Camino Corridor Study: Status update and opportunity to provide comments and recommendation to the City Council on potential alternatives for El Camino Real within Menlo Park. (<u>Attachment</u>) Continued from the meeting of March 23, 2015.
- F. REGULAR BUSINESS None
- G. COMMISSION BUSINESS None
- H. INFORMATION ITEMS None

ADJOURNMENT

Future Planning Commission Meeting Schedule

Regular Meeting	April 20, 2015
Regular Meeting	May 4, 2015
Regular Meeting	May 18, 2015
Regular Meeting	June 8, 2015
Regular Meeting	June 22, 2015

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At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission's consideration of the item.

At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designed by the Chair, either before or during consideration of the item.

Any writing that is distributed to a majority of the commission by any person in connection with an agenda item is a disclosable public record (subject to any exemption under the Public Records Act) and is available for inspection at The Community Development Department, Menlo Park City Hall, 701 Laurel Street, Menlo Park, CA 94025 during regular business hours.

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PLANNING COMMISSION Agenda and Meeting Information

The Planning Commission welcomes your attendance at and participation in this meeting. The City supports the rights of the public to be informed about meetings and to participate in the business of the City.

ASSISTANCE FOR PERSONS WITH DISABILITIES: Person with disabilities who require auxiliary aids or services in attending or participating in Planning Commission meetings, may call the Planning Division office at (650) 330-6702 prior to the meeting.

COMMISSION MEETING AGENDA AND REPORTS: Copies of the agenda and the staff reports with their respective plans are available prior to the meeting at the Planning Division counter in the Administration Building, and on the table at the rear of the meeting room during the Commission meeting. Members of the public can view or subscribe to receive future weekly agendas and staff reports in advance by e-mail by accessing the City website at http://www.menlopark.org.

MEETING TIME & LOCATION: Unless otherwise posted, the starting time of regular and study meetings is 7:00 p.m. in the City Council Chambers. Meetings will end no later than 11:30 p.m. unless extended at 10:30 p.m. by a three-fourths vote of the Commission.

PUBLIC TESTIMONY: Members of the public may directly address the Planning Commission on items of interest to the public that are within the subject matter jurisdiction of the Planning Commission. The City prefers that such matters be presented in writing at the earliest possible opportunity or by fax at (650) 327-1653, e-mail at planning.commission@menlopark.org, or hand delivery by 4:00 p.m. on the day of the meeting.

Speaker Request Cards: All members of the public, including project applicants, who wish to speak before the Planning Commission must complete a Speaker Request Card. The cards shall be completed and submitted to the Staff Liaison prior to the completion of the applicant's presentation on the particular agenda item. The cards can be found on the table at the rear of the meeting room.

Time Limit: Members of the public will have **three** minutes and applicants will have **five** minutes to address an item. Please present your comments clearly and concisely. Exceptions to the time limits shall be at the discretion of the Chair.

Use of Microphone: When you are recognized by the Chair, please move to the closest microphone, state your name and address, whom you represent, if not yourself, and the subject of your remarks.

DISORDERLY CONDUCT: Any person using profane, vulgar, loud or boisterous language at any meeting, or otherwise interrupting the proceedings, and who refuses to be seated or keep quiet when ordered to do so by the Chair or the Vice Chair is guilty of a misdemeanor. It shall be the duty of the Chief of Police or his/her designee, upon order of the presiding officer, to eject any person from the meeting room.

RESTROOMS: The entrance to the men's restroom is located outside the northeast corner of the Chamber. The women's restroom is located at the southeast corner of the Chamber.

If you have further questions about the Planning Commission meetings, please contact the Planning Division Office (650-330-6702) located in the Administration Building.



PLANNING COMMISSION DRAFT MINUTES

Regular Meeting March 9, 2015 at 7:00 p.m. City Council Chambers 701 Laurel Street, Menlo Park, CA 94025

CALL TO ORDER – 7:01 p.m.

ROLL CALL – Bressler, Combs, Eiref (Chair), Ferrick, Kadvany, Onken (Vice Chair), Strehl

INTRODUCTION OF STAFF – Jean Lin, Associate Planner; Michele Morris, Assistant Planner; Stephen O'Connell, Contract Planner; Thomas Rogers, Senior Planner; Corinna Sandmeier, Associate Planner

A. REPORTS AND ANNOUNCEMENTS

- A1. Update on Pending Planning Items
 - a. ConnectMenlo (General Plan Update)
 - i. Workshop #3 (March 12, 2015)
 - ii. Open House #3 (March 19, 2015)

Senior Planner Rogers reported on upcoming ConnectMenlo meetings as noted on the agenda. He said the focus of the Workshop #3 would be the draft Preferred Land Use Alternative, which would then go to the City Council for review. He said the Open House #3 would look at the same topic and was primarily aimed at the Belle Haven community.

- b. City Council
 - i. 1400 El Camino Real Study Session (February 24, 2015)
 - ii. 1300 El Camino Real Status Report (February 24, 2015)

Senior Planner Rogers said the City Council at their February 24 meeting held a study session on the 1400 El Camino Real site (former Shell Station at the corner of Glenwood Avenue and El Camino Real). He said the proposal for the site was a hotel and the property owner wanted to present their proposal to the Council and get feedback on any potential revenue sharing options. He said the Council indicated they were interested in continuing the conversation.

Senior Planner Rogers said the Council last September had approved the Environmental Impact Report (EIR) budget for 1300 El Camino Real, and also at their February 24 meeting received an update on the report structure and how different land use alternatives were being analyzed. He said the most intense alternative in regard to traffic would be analyzed and within that there was a different range of outcomes. He said the likely next step for the proposal would be a Planning Commission study session on the public benefit bonus topic.

Chair Eiref asked if there were any updates on 500 El Camino Real or Greenheart. Senior Planner Rogers said Greenheart was the applicant for 1300 El Camino Real, which had just been discussed. He said the 500 El Camino Real proposal had been quiet since the election and he understood the applicant was looking at some different design directions. He said the

next procedural step would likely be an EIR and scoping session as traffic would need a different analysis.

B. PUBLIC COMMENTS #1

There was none.

C. CONSENT

C1. Approval of minutes from the February 9, 2015 Planning Commission meeting (<u>Attachment</u>)

Commission Onken said he needed to be recused for item C2. He moved to approve the minutes from the February 9, 2015 Planning Commission meeting as submitted. Commissioner Strehl seconded the motion.

Commission Action: M/S Onken/Strehl to approve the minutes as submitted.

Motion carried 7-0.

C2. Architectural Control/Helen Peters/131 Forest Lane: Request for architectural control to remove and replace exterior trim and stucco, remove and repair the underside and overhang of the balcony, and replace the front door on the front elevation of a townhouse located in the R-3 (Apartment) zoning district. (<u>Attachment</u>)

Commission Action: M/S Eiref/Strehl to approve the item as recommended in the staff report.

- 1. Make a finding that the project is categorically exempt under Class 1 (Section 15301, "Existing Facilities") of the current CEQA Guidelines.
- 2. Make findings, as per Section 16.68.020 of the Zoning Ordinance, pertaining to architectural control approval:
 - a. The general appearance of the structure is in keeping with the character of the neighborhood.
 - b. The development will not be detrimental to the harmonious and orderly growth of the City.
 - c. The development will not impair the desirability of investment or occupation in the neighborhood.
 - d. The development provides adequate parking as required in all applicable City Ordinances and has made adequate provisions for access to such parking.
 - e. The property is not within any Specific Plan area, and as such no finding regarding consistency is required to be made.
- 3. Approve the use permit subject to the following *standard* conditions:

- a. Development of the project shall be substantially in conformance with the plans prepared by Helen Peters, consisting of four (4) plan sheets, dated received February 25, 2015, and approved by the Planning Commission on March 9, 2015 except as modified by the conditions contained herein, subject to review and approval by the Planning Division.
- b. Prior to building permit issuance, the applicant shall comply with all Sanitary District, Menlo Park Fire Protection District, San Mateo County Health Department, and utility companies' regulations that are directly applicable to the project.
- c. Prior to building permit issuance, the applicant shall comply with all requirements of the Building Division, Engineering Division, and Transportation Division that are directly applicable to the project.
- d. Prior to building permit issuance, the applicant shall submit a plan for any new utility installations or upgrades for review and approval by the Planning, Engineering and Building Divisions. All utility equipment that is installed outside of a building and that cannot be placed underground shall be properly screened by landscaping. The plan shall show exact locations of all meters, back flow prevention devices, transformers, junction boxes, relay boxes, and other equipment boxes.

Motion carried 6-0 with Commissioner Onken recused.

D. PUBLIC HEARING

D1. Use Permit and Variance/Jeanne Moeschler/1029 Ringwood Avenue: Request for a use permit to construct single-story additions and conduct interior modifications to a single-story, single-family residence that would exceed 75 percent of the replacement value of the existing nonconforming structure in a 12-month period. The proposal includes a request for a variance for an addition to encroach approximately three feet into the required 20-foot front setback. The subject parcel is located in the R-1-U (Single-Family Urban) zoning district. (Attachment)

Staff Comment: Planner Sandmeier said there were no additions to the written report.

Public Comment: Ms. Jeanne Moeschler said she and her husband had bought the property seven years prior with the intent to stay three years. She said they love the neighborhood and want to stay in the home but needed more space for their family, which had grown. She said their variance request was actually a reduction of non-conformity. She said in the 1980s the previous owners had added a master bath that encroached about eight feet into the front setback. She said their proposal would reduce that encroachment to three feet. She said they would retain the single-story bungalow style and use modernizing materials.

Commissioner Ferrick asked if the Commission had to detail their findings regarding the variance request. Planner Sandmeier said that if the Commission agreed with staff's recommendation on the variance request that an action to approve per the recommendation would suffice.

Menlo Park Planning Commission Draft Minutes March 9, 2015 3 Chair Eiref closed the public hearing.

Commission Comment: Commissioner Kadvany said the unusual lot shape as described in the staff finding for the variance request was a hardship intrinsic to the property. He said he liked the siding and the profile of the proposal, and that the project would reduce the nonconformance. He moved move to approve the item as recommended in the staff report. Commissioner Onken seconded the motion.

Commission Action: M/S Kadvany/Onken to approve the item as recommended in the staff report.

- Make a finding that the project is categorically exempt under Class 3 (Section 15303, "New Construction or Conversion of Small Structures") of the current CEQA Guidelines.
- 2. Make findings, as per Section 16.82.030 of the Zoning Ordinance pertaining to the granting of use permits, that the proposed use will not be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use, and will not be detrimental to property and improvements in the neighborhood or the general welfare of the City.
- 3. Make the following findings as per Section 16.82.340 of the Zoning Ordinance pertaining to the granting of variance:
 - a. Relative to other properties in the vicinity, the subject parcel is unusually oddlyshaped. The three-sided nature of the parcel, in combination with the Zoning Ordinance's lot line definitions and setback requirements, create a uniquely small area for the permitted building footprint. These hardships are unique to the property, and have not been created by an act of the owner.
 - b. With the proposed additions, the building would occupy almost the entire area outside the setbacks as well as portions within the front setback. However, the proposed building coverage is well below the maximum permitted coverage. The variance would thus be necessary for the preservation and enjoyment of substantial property rights possessed by other conforming property. Given that other properties in the vicinity do not have similar constraints with regard to the length of the front setback, the requested variance would not represent a special privilege.
 - c. The proposed addition would intrude into the front setback along the left side of the house. This element of the project would effectively represent the reduction of an existing nonconformity, but the reconstruction of structural elements within the required setback cannot be permitted without a variance. If the lot was a typical corner lot, the area where the intrusion is proposed would be considered a side yard with a setback of 12 feet. The closest point of the proposed addition to the street would be 17 feet, resulting in very limited impacts on the adjacent residential parcels. The proposed project would be below the maximum allowed building coverage and all other Zoning Ordinance standards would be met. As such, granting of the variance would not be materially detrimental to the public health, safety, or welfare, and will not impair an adequate supply of light and air to adjacent property.

- d. The prevailing neighborhood standard is of R-1-U lots with a rectangular shape and an area of approximately 6,500 square feet. The subject parcel is uniquely oddly-shaped relative to this standard. As such, the conditions on which the variance is based are not generally applicable to other property in the same zoning classification.
- e. The property is not within any Specific Plan area, and as such no finding regarding an unusual factor is required to be made.
- 4. Approve the use permit and variance subject to the following *standard* conditions:
 - a. Development of the project shall be substantially in conformance with the plans prepared by l'oro, consisting of 14 plan sheets, dated received February 18, 2015 and approved by the Planning Commission on March 9, 2015, except as modified by the conditions contained herein, subject to review and approval by the Planning Division.
 - b. Prior to building permit issuance, the applicants shall comply with all Sanitary District, Menlo Park Fire Protection District, and utility companies' regulations that are directly applicable to the project.
 - c. Prior to building permit issuance, the applicants shall comply with all requirements of the Building Division, Engineering Division, and Transportation Division that are directly applicable to the project.
 - d. Prior to building permit issuance, the applicant shall submit a plan for any new utility installations or upgrades for review and approval by the Planning, Engineering and Building Divisions. All utility equipment that is installed outside of a building and that cannot be placed underground shall be properly screened by landscaping. The plan shall show exact locations of all meters, back flow prevention devices, transformers, junction boxes, relay boxes, and other equipment boxes.
 - e. Simultaneous with the submittal of a complete building permit application, the applicant shall submit plans indicating that the applicant shall remove and replace any damaged and significantly worn sections of frontage improvements. The plans shall be submitted for review and approval of the Engineering Division.
 - f. Simultaneous with the submittal of a complete building permit application, the applicant shall submit a Grading and Drainage Plan for review and approval of the Engineering Division. The Grading and Drainage Plan shall be approved prior to the issuance of grading, demolition or building permits.
 - g. Heritage trees in the vicinity of the construction project shall be protected pursuant to the Heritage Tree Ordinance.

Motion carried 7-0.

D2. Use Permit/Natalie Hylund/810 University Drive: Request for a use permit to demolish an existing single-story, single-family residence and detached accessory buildings, and construct a new two-story, single-family residence on a substandard lot with regard to lot width and lot area in the R-3 (Apartment) zoning district. (*Attachment*)

Staff Comment: Planner O'Connell said staff had no additions to the written report.

Questions of Staff: Commissioner Onken confirmed with Planner O'Connell that in the R-3 zone there was no side daylight plane required as in the R-1 zone.

Public Comment: Ms. Natalie Hylund, Hylund Design Group, said she was the lead designer and applicant for the proposed project. She said this site was situated among multi-family units and was close to the downtown. She said the client wanted something contemporary. She provided the Commission with a color rendering. She said a wood roof would wrap around the front and left side elevation to break up the upper and lower floors for a front covered porch. She said the garage with wood stain doors was recessed. She said there were also some nice recessed corner windows. She said they tried to articulate the front as much as possible. She said they moved the house back an additional five feet to be in line with the neighbor's home.

Commissioner Kadvany asked if there was a significant oak tree in the rear. Ms. Hylund said there was a very large pine tree on the neighboring property.

Chair Eiref said the homes in the neighborhood were primarily bungalow. He asked if there was a consideration of designing the home more in character with the surrounding architecture. Ms. Hylund said the house was for resale and the client felt the demographic of buyers were looking for more contemporary design homes.

Commissioner Onken asked if there was a material missing at the very top of the stucco wall where it met the roof. Ms. Hylund said it was supposed to be a parapet stucco wall.

Ms. Lydia Cooper, University Drive, said her home was across the street from the project site. She said she was not opposed to new development. She said the houses between Santa Cruz Avenue to Creek Drive for the most part maintained the same character. She said some were different but none were as stark and straight lined as this proposal. She said newer homes on Roble Avenue had contemporary features yet connected to the neighborhood character. She said the neighborhood character in this area should be preserved. She disagreed that the younger demographic liked more modern architecture. She said she met the woman who bought a home on Live Oak a year ago who loves the 1930s style. She said three modern contemporary homes recently built on Live Oak were in her opinion eyesores. She asked that the character of the area in downtown Menlo Park be maintained.

Mr. Carl Bianchini, Menlo Park, said he owned the home at 890 Roble Avenue around the corner from the subject property. He said the existing home on that property had been built by his grandfather. He said his home had apartments on both sides and he was concerned that the height of the proposed structure would block the sun in his backyard. He said that the proposed home was out of character with the two structures on either side of it.

Chair Eiref closed the public hearing.

Commission Comment: Commissioner Kadvany said he liked the curb cut of the project and the recessing of the garage. He noted that the side elevations were expanses of stucco and except for the wood band so was the front elevation. He suggested more articulation and architectural detail were needed. He said he did not think it was the style that people objected to but the way it was executed.

Menlo Park Planning Commission Draft Minutes March 9, 2015 6 Commissioner Onken said this was a single-family residential development in an R-3 zone, which was unusual. He said the project benefited from the larger setback requirement of the R-3 zone but suffered from the loss of the daylight plane requirement of the R-1 zone. He noted that the proposed project had less square footage than the existing home. He said he thought the designers were mimicking architectural features of several quaint, art-deco, boxy houses with corner windows on Crane and University Drives. He said he would like to see more detailing that would pick up more of the art deco details in other nearby houses. He said the project generally conformed.

Commissioner Ferrick said she heard the neighbors' concerns noting that there were not residential development guidelines. She said she was impressed that the front setback was greater than it needed to be, the rear setback was almost double what it needed to be, and the side setbacks were much better than existing. She said the maximum height allowed was 35-feet but the project was 24.5 feet only. She said she understood the sentiment of maintaining the history and character of the neighborhood but that did not preclude this proposal.

Commissioner Bressler said the reason for residential design guidelines was so there were no surprises. He said that they did not have guidelines shouldn't mean that they just approve any design. He said the mitigating factor for this project for him was that it was located in the apartment district. He said he would like more architectural detail required.

Commissioner Strehl said she appreciated that the second story had been designed to minimize the views into the neighbors on either side. She said the materials seemed to be good. She said that this design type of home was appearing all over the City, including in her neighborhood, which was mainly bungalows.

Commissioner Combs said he understood the neighbors' concerns as this proposal would stand out and look different from other homes. He said similarly as noted by Commissioner Strehl this style of home was appearing in other neighborhoods and was different from existing homes.

Chair Eiref said this proposal did not fit into the neighborhood context as there was a row of bungalows and then this big, square solid structure. He said it was completely out of style with a couple of blocks of the surrounding neighborhood. He noted they had pushed back on other designs that did not fit well with the neighborhood context. He said he was surprised they were removing the basement. He said he was not in favor of the project and would like to see more thought given to the neighborhood feel.

Commissioner Kadvany said there seemed two options: one to redesign in a bungalow style or two to take this basic structure and decorate and detail it so it referenced the other buildings that were this square style with different types of windows.

Commissioner Ferrick said she thought it was the execution of the design that was the issue.

Commissioner Onken said if the item was continued, he would recommend to the architect to expand the ground floor, which might allow for a smaller second story. He said he didn't agree that all designs proposed had to be Craftsman, bungalow-style.

Chair Eiref said he would support the proposal to continue the item. He said he would like to see the massing and space changed so the home would fit better with the other homes in the neighborhood.

Commission Action: M/S Onken/Eiref to continue the item.

Motion carried 6-1 with Commissioner Strehl in opposition.

D3. Use Permit Revision and Architectural Control/Sharon Heights Golf and Country Club/2900 Sand Hill Road: Request for a use permit revision and architectural control to allow an expansion of the clubhouse facilities, including an addition to the existing clubhouse building, demolition of an existing pool building, construction of a new pool building with indoor and outdoor dining areas, and construction of a new movement building for fitness classes and wellness activities at an existing golf and country club in the OSC (Open Space and Conservation) zoning district. As part of the proposed expansion, 10 regular parking stalls would be eliminated and replaced with 13 new tandem parking spaces. No changes are proposed to site's existing membership cap of 680 members. Continued from the meeting of February 23, 2015. (Attachment)

Staff Comment: Planner Lin said there were no additions to the written report. She said color chips were being circulated.

Public Comment: Mr. Steve Zales, Menlo Park, said he was the past President of the Sharon Heights Club Board. He said staff did a good job on the summary of the project. He said compared to 25 or 55 years ago when the Club was started, their members were now busier, golfing had declined in popularity, and their members were more interested in fitness, dining and family activities. He said to retain and attract new members they had to evolve in response to these types of changes. He said they would like to add 5,200 square feet to the existing clubhouse for fitness and casual dining use. He said the expansion was one-story and for the most part secluded from view. He said the Floor Area Ratio (FAR) was well within the maximum allowed. He noted they were in frequent communication with their many neighbors and had a good relationship with them. He said none of the Homeowners Association or the office building owners wanted to meet to discuss the project.

Chair Eiref closed the public hearing.

Commission Comment: Commissioner Onken said the project was readily approvable as it did not increase parking, was not seen by anyone else, and would not increase water usage at the golf course.

Commissioner Ferrick moved to approve as recommended in the staff report. Chair Eiref seconded the motion.

Commissioner Kadvany said he liked the use of tandem parking.

Commission Action: M/S Ferrick/Eiref to approve the item as recommended in the staff report.

1. Make the following findings relative to the environmental review of the proposal:

- a. A Negative Declaration was previously prepared and circulated for public review in accordance with current State CEQA Guidelines;
- b. The Planning Commission considered the Negative Declaration prepared for the 2900 Sand Hill Road – Sharon Heights Golf and Country Club Membership Increase and any comments received during the public review period and subsequently adopted the Negative Declaration;
- c. Based on the Initial Study prepared for the Negative Declaration, there is no substantial evidence that the proposed project will have a significant effect on the environment; and,
- d. The Addendum to the Negative Declaration provides adequate environmental documentation of the changes to the project, which will likewise not have a significant effect on the environment.
- 2. Adopt the following findings, as per Section 16.68.020 of the Zoning Ordinance, pertaining to architectural control approval:
 - a. The general appearance of the structure is in keeping with the character of the neighborhood.
 - b. The development will not be detrimental to the harmonious and orderly growth of the City.
 - c. The development will not impair the desirability of investment or occupation in the neighborhood.
 - d. The development provides adequate parking as required in all applicable City Ordinances and has made adequate provisions for access to such parking.
 - e. The property is not within any Specific Plan area, and as such no finding regarding consistency is required to be made.
- 3. Make findings, as per Section 16.82.030 of the Zoning Ordinance pertaining to the granting of use permits, that the proposed use will not be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use, and will not be detrimental to property and improvements in the neighborhood or the general welfare of the City.
- 4. Approve the use permit revision and architectural control request subject to the following *standard* conditions of approval:
 - a. Development of the project shall be substantially in conformance with the plans prepared by BAR Architects, dated received on March 5, 2015, consisting of 21 plan sheets and approved by the Planning Commission on March 9, 2015 except as modified by the conditions contained herein, subject to review and approval of the Planning Division.

- b. The applicant shall comply with all West Bay Sanitary District, Menlo Park Fire Protection District, and utility companies regulations that are directly applicable to the project.
- c. Prior to building permit issuance, the applicant shall comply with all requirements of the Building Division, Engineering Division, and Transportation Division that are directly applicable to the project.
- d. Prior to building permit issuance, the applicant shall submit a plan for any new utility installations or upgrades for review and approval of the Planning, Engineering and Building Divisions. Landscaping shall properly screen all utility equipment that is installed outside of a building and that cannot be placed underground. The plan shall show exact locations of all meters, back flow prevention devices, transformers, junction boxes, relay boxes, and other equipment boxes.
- e. Simultaneous with the submittal of a complete building permit application, the applicant shall submit a Grading and Drainage Plan for review and approval of the Engineering Division. The Grading and Drainage Plan shall be approved prior to the issuance of grading, demolition, or building permits.
- f. Trees in the vicinity of the construction project shall be protected pursuant to the Heritage Tree Ordinance and the recommendations specified in the arborist report.
- 5. Approve the use permit revision and architectural control subject to the following *project-specific* conditions:
 - Prior to building permit issuance, the applicant shall pay the transportation impact fee per the direction of the Transportation Division in compliance with Chapter 13.26 of the Municipal Code. The current estimated transportation impact fee is \$41,438.32, although the final fee shall be the fee in effect at the time of payment.
 - b. Concurrent with the submittal of a complete building permit application, the applicant shall submit an agreement between the Sharon Heights Golf and Country Club and Pacific Gas and Electric Company (PG&E) regarding the realignment of the existing utility easement, including exhibit(s) showing the location of the proposed easement. Prior to building permit issuance, the applicant shall submit recorded documentation for any new and/or amended easement.
- 6. Approve the use permit revision and architectural control subject to the following **ongoing**, **project-specific** conditions:
 - a. The maximum membership level shall be a total of 680 members, which includes members in all membership categories.

- b. The applicant shall continue to maintain the flashing stop warning sign and flashing stop sign located at the main driveway exit.
- c. Approve the use permit subject to the following restated conditions from the use permit approved by the Planning Commission on March 19, 2012 for recurring special events at the site, including, but not limited to, a fireworks display, children's carnival, and amplified music:
 - Development of the project shall be substantially in conformance with the plans provided by the applicant, consisting of two plan sheets, dated received March 13, 2012, and approved by the Planning Commission on March 19, 2012 except as modified by the conditions contained herein, subject to review and approval of the Planning Division.
 - Prior to the commencement of the event, the applicant shall obtain all necessary permits from the Menlo Park Fire Protection District, Menlo Park Building Division, and other applicable agencies.
- Approve the use permit subject to the following restated conditions from the use permit and architectural control approved by the Planning Commission on August 6, 2012 for the proposed maintenance yard and storage and use of hazardous materials:
 - If there is an increase in the quantity of hazardous materials on the project site, a change in the location of the storage of the hazardous materials, or the use of additional hazardous materials after this use permit is granted, the applicant shall apply for a revision to the use permit.
 - Any citation or notification of violation by the Menlo Park Fire Protection District, San Mateo County Environmental Health Department, West Bay Sanitary District, Menlo Park Building Division or other agency having responsibility to assure public health and safety for the use of hazardous materials will be grounds for considering revocation of the use permit.
 - If the business discontinues operations at the premises, the use permit for hazardous materials shall expire unless a new business submits a new hazardous materials business plan to the Planning Division for review by the applicable agencies to determine whether the new hazardous materials business plan is in substantial compliance with the use permit.
 - The applicant shall diligently work with Caltrans to obtain encroachment permits for installation of 12, 24-inch box redwood trees on the southern side of the project site to decrease visibility of the corporation yard from Interstate 280. If after two years from the approval date the applicant is unable to obtain encroachment permit approval from Caltrans for installation of the trees within the Caltrans public right-of-way, the applicant shall install the 12 trees on the subject project site in a manner the screens the corporation yard from public view to the satisfaction of the Community Development Director.

Motion carried 7-0.

E. REGULAR BUSINESS

E1. Public Resources Code Section 21151.2 Review/Sequoia Union High School District/150 Jefferson Drive: Consideration of a proposed public high school at 150 Jefferson Drive, in the M-2 (General Industrial) zoning district, with regard to Public Resources Code Section 21151.2. This code states that, to promote the safety of pupils and comprehensive community planning, the Planning Commission shall investigate a proposed school site and submit a report prior to the school governing board acquiring title to the property. On January 26, 2015, the Planning Commission conducted a General Plan conformity review regarding the same property. The overall school approval actions will be considered separately by the Sequoia Union High School District. (Attachment)

Staff Comment: Senior Planner Rogers said Public Resources Code Section 21151.2 was brought to staff and the Commission's attention by a member of the public in January during the Commission's review of the proposal for conformity with the General Plan. He said staff and counsel had reviewed and found it was applicable. He noted the school district would conduct a more robust review process including the environmental impact review.

Public Comment: Mr. Matthew Zito, Menlo-Atherton High School, Sequoia Union High School District, said they had closed escrow on the property. He said they would have to obtain California Department of Education and other agency approvals to build.

Confirming that environmental review was required, Commissioner Strehl asked if the CEQA process indicated mitigations were needed whether those would have to be made. Mr. Zito said there had been other school sites for which a Mitigated Negative Declaration had been prepared. He noted in response to another query from Commissioner Strehl that the CEQA process would be accomplished in about four months.

Commissioner Combs asked if Mr. Zito or staff had previously been aware of this Public Resources Code Section. Mr. Zito said they had not been aware of it. Senior Planner Rogers said that the City had not seen the development of new public schools in quite a while and as a result staff was not aware of this Public Resources Code Section.

Commissioner Kadvany asked how students would be kept on campus. Mr. Zito said that they have a closed campus policy. He said they would look at some buffer between their property and the Exponent property. He introduced Mr. Enrique Nava, Assistant Superintendent of Business, who worked with Ms. Lisa Costanza, California Department of Education, on acquisition of the property.

Mr. James Ficenec, attorney at Archer Norris, legal counsel for Exponent, referenced the statute noting it was unfortunate that the school district closed escrow on the property without regard to this statute. He said the project was for a high school of 400 students as well as some community college classes and students. He said the statute and this review was for the Commission to provide feedback as to whether this was a safe location for students and consistent with comprehensive community planning. He said the street was very narrow and was a safety concern. He said typically schools were located in residential areas. He asked if

the location of this school facility would hamper future Planning Commission decisions on industrial uses in this area and asked about pending projects. He said Exponent management did not think this project was suitable for the area under this statute.

Mr. Richard Schlenker, Exponent, said he had spoken to the Commission about this item in January. He thanked Commissioner Kadvany for visiting the site. He said he thought they would gain more attention from City staff and the school district for the issues they raised at the January meeting and in their detailed letter about this safety study. He said that Commissioner Kadvany by visiting had an understanding of their failure analysis business. He noted the various testing they do. He said they did not think the staff or the school had done a comprehensive study of the appropriateness of a school in this industrial park. He invited the other Commissioners to visit their property location. He said the school district should have come to the City to identify the right place for a school project.

Mr. Paul Johnston, President and CEO of Exponent and President of Exponent Engineering, said Exponent had a long history with Menlo Park since 1967. He said they had developed this current site in 1989 with Class A office in the front and interesting testing labs in the rear. He said he didn't want their operations disrupted by students and safety concerns.

Commissioner Ferrick asked staff if a school next to Exponent could cause obstacles for future use permits that the company might pursue. Senior Planner Rogers said there had not been obvious issues with the continued operation of the industrial and light research and development uses around other schools located in the M-2 zone.

Commissioner Kadvany said Exponent conducts analyses on equipment that has failed and these were not hazardous materials but potential hazards. He noted for instance that there Toyotas for forensic examination related to accelerator pedal failures. He said currently there was a chain link fence with barbed wire on top that he thought could fairly readily be accessed. He said it was a serious insurance issue for both the school and the company unless the area could be securely confined. He said he was somewhat appalled at the process that was being followed for this school location as it was clear that there were concerns about Exponent's adjacency to the school property.

Chair Eiref said he visited the site on Sunday and that he had not felt unsafe there, noting that the shrubbery and fence provided a buffer between the two properties.

Commissioner Strehl said she was very concerned that the school district's legal counsel and the city attorney were not aware of the Public Resources Code and that it had not been cited when the item came before the Commission in January. She said at that meeting she voted that this proposed school use in a light industrial area was inconsistent with the City's General Plan. She said when an industrial user comes into this zone that the Commission always asks about the safety of sensitive users or populations. She said putting a school in an area next to a company or companies that have or use potentially hazardous materials would potentially affect a school population. She said given Commissioner Kadvany's comments and her own observations she could not make a finding of safety under the Public Resource Code. She said perhaps the item should be continued so all of them could visit the site. She said there was a burden on the school district to provide data and mitigate the lack of sidewalks and parking and guarantee some type of bus or shuttle service or carpools to eliminate student parking. She

said also if the project moved ahead that they had to insure the students would be on campus the entire time.

Commissioner Bressler said if the school was going to be built in this location that the school district needed to address parents' potential concerns with Exponent being next door. He said the school district in their letter should be responsible for creating a barrier so students and parents were not disturbed by activities on Exponent that were conducted within code and regulation.

Commissioner Onken said he wanted to support the school district in their expansion. He said for the record he would vote against this site being used for a school noting that public and quasi-public use in this zone was a footnote to the zoning ordinance. He said the school use could prejudice future use applications and planning decision for the area. He said he could not make the findings recommended in the staff report.

Commissioner Combs said he initially was supportive of the school use and generally remained supportive of the school district's efforts to put a school on this site noting that the Commission's decision had no weight to change the outcome. He said the school's need to support the expanding student population outweighed any of his concerns. He noted that in other cities such that schools were located in urban areas next to industrial uses.

Chair Eiref said although the site was not ideal he thought it was inspired to have a technology magnet school in an industrial area. He said he was still supportive of the project.

Commissioner Kadvany moved that a positive finding could not be made at this time under Public Resource Code Section 21151.2.

Commissioner Ferrick suggested that the motion should be framed in the positive with opposition votes made. Senior Planner Rogers said the motion to deny could be made procedurally.

Chair Eiref said recommending acquisition of the 150 Jefferson Drive property sounded odd. Senior Planner Rogers said as Menlo Park had had no prior public school development proposals in the recent past that staff had to look to other cities to see what they did with new public school proposals. He said Public Resource Code Section 21151.2 indicated that the Planning Commission should make a recommendation regarding acquisition of the property proposed for a new public school. He said the factors outlined in the staff report were the basis to recommend acquisition. He said the Commission could alternately recommend to not acquire the property.

Commissioner Kadvany said he wanted to add to his motion "and *not* recommend acquisition of the 150 Jefferson Drive property *at this time*." Commissioner Strehl seconded the motion.

Commissioner Bressler noted the school development could proceed whatever they recommended, and thought they would just create red tape by not recommending. Note was made of the fact the property had already been acquired, and discussion ensued about the Commission making a strong statement with its decision and for what purpose.

Commissioner Ferrick said not recommending would probably bolster a legal case and cost the school district much time and money. She said she did not support that, particularly when there were no other sites the school district could have acquired. She said accommodation for expanding school population had to be made. She said this concept had proven to work at Summit and Everest High Schools, and it would work here.

Chair Eiref said he was questioning how they could determine that this was a safe site. Commissioner Strehl said they also were looking at community planning and CEQA. Chair Eiref said that although the Exponent site was not in operation when he visited on Sunday he thought it would be safe for a school noting that the school design was one factor and the other was the school district and Exponent cooperating to reach resolution.

Commissioner Strehl asked if the Commission did not recommend acquisition of the site whether that would pressure the school district to address the safety concerns. Senior Planner Rogers said that under this code that if the report did not favor the acquisition of the property then the school district should not acquire title to the property for 30 days after the reviewing agency's report was received. He said in this case the property and title have been acquired already by the school district. Commissioner Strehl said she thought it was in escrow. Senior Planner Rogers noted for the record that Mr. Zito indicated that the escrow had closed on February 25, 2015.

Commissioner Kadvany said he thought the school district had been disingenuous in this process and it was wrong that the Planning Commission had to consider this item twice rather than once.

Chair Eiref asked if the Commission was ready to vote on the motion on the table.

Senior Planner Rogers addressed item 1 on page six of the staff report. He said the finding that the Public Resources Code review was not a project was correct. He said whenever a decision making body used discretion that invokes CEQA so the body had to either define the project and do environmental analysis or find that it was not a project.

Commissioner Kadvany suggested that item 1 be added to his motion. He said he wanted to strike the reference to the staff report being the report and substitute with a recommendation that the Planning Commission could not support acquisition of the 150 Jefferson Drive property at this time. He said the bases for this were safety concerns and that a school use might prejudice against certain current and future uses. Chair Eiref asked Commissioner Kadvany if he would agree to an addendum to say that more detailed evaluation of the industrial uses next door was needed to ensure safety of the school site. Commissioner Kadvany said the land use classification was not the barrier to a school use.

Commissioner Ferrick said her sentiment was if the Exponent site was so dangerous that a high school could not be next to it then no use should be next to it. She said the Exponent site needed to be made safe and secure.

Commissioner Kadvany said it was not the use but the increased risk of exposure. He said it was safe now because people in the area knew not to go near the barbed wire fence.

Chair Eiref said he would like the motion to say that while not opposed to a school use in this general area that the Commission recommended that the school district had to provide more compelling information as to how they would make the site safe.

Commissioner Bressler said he did not think the use was inherently unsafe and that they might be opening up issues for the school district. He said the school would have to address these concerns to the satisfaction of the parents of the students.

Commissioner Combs said he did not agree that students would find the Exponent site so enticing that students would want to climb the fence to get to it. He suggested that Exponent consider some way to address that concern if they saw it as such a risk.

Chair Eiref said that the Commission regularly tells homeowners that they cannot tell other property owners what they can build. He said whatever the motion was that it had to address making this a safe site.

Commissioner Kadvany said he would suggest amending the motion to state that the Commission does not categorically rule out construction of a high school on this site but was not able to make the recommendation to acquire the property at this time because of the adjacent company's unusual uses. Commissioner Strehl suggested that Chair Eiref second the amended motion. Chair Eiref second the amended motion.

Commissioner Ferrick said they should have called the question and the vote switch would cause a big problem for the school district. She said Chair Eiref talked about property rights and this motion would jeopardize the school's rights. Chair Eiref said this was an awkward recommendation for the Commission to make and that they did not have enough information.

Commissioner Kadvany said both the school district and Exponent were big players and the Commission's action whatever it was would be symbolic. He said the school district has good decision makers and would do fine.

Commissioner Strehl said the school district had not done due diligence in that this review should have occurred before the property was acquired.

Senior Planner Rogers said in response to Chair Eiref's query that the motion was that the Commission did not categorically rule out construction of a high school on this site but was only able to recommend at this time that the acquisition not move forward due to the unique uses on the neighboring property.

Chair Eiref said he did not think that was the motion. Commissioner Kadvany said the motion was that they could not provide a positive finding subject to Public Resources Code Section 21151.2 with respect to people safety and community planning. Discussion ensued as to whether the Commission needed to make a finding regarding acquisition of the property.

Commissioner Kadvany restated that the first part of the motion should be that they could not provide a positive finding subject to Public Resources Code Section 21151.2 with respect to people's safety and community planning; that they could not recommend acquisition of the property at this time but did not categorically rule out construction of a high school at this site in the future because of the unique activities of the adjacent business. Chair Eiref said upon

further thought that he would not second a motion that did not recommend acquisition of the property. Commissioner Strehl seconded Commissioner Kadvany's motion as restated.

Senior Planner Rogers said staff's understanding of Public Resources Code Section 21151.2 review was for the Commission to answer whether the site should be acquired. He said the clause about the safety of pupils and comprehensive community planning were things to consider when arriving at the acquisition recommendation. He said the motion was that the Commission could not make a positive finding in regard to pupil safety and comprehensive community planning and as a result could not recommend acquisition of the parcel at this time due to the unique uses next door but the Commission was not categorically ruling out construction of a high school at this site in the future.

Commission Action: M/S Kadvany/Strehl that the Commission could not make a positive finding in regard to pupil safety and comprehensive community planning and as a result could not recommend acquisition of the parcel at this time due to the unique uses next door but the Commission was not categorically ruling out construction of a high school at this site in the future

Motion failed 3-4 with Commissioners Eiref, Strehl and Kadvany supporting and Commissioners Bressler, Combs, Onken and Ferrick opposing.

Senior Planner Rogers said the staff recommendation could be kept to support acquisition but change the report to include details about the neighboring property concerns and what else the Commission wanted to add. He said the report could be the minutes for the meeting.

Commissioner Bressler said that since the school district had acquired the property already that they should not take a position on the acquisition. He said they should only provide feedback and ideas on how to make this work. Chair Eiref said that he agreed that they should not make a recommendation on acquisition but that the school district should pay careful attention to the unique circumstances they have and make sure what they were doing was safe for students and to work with adjacent property owners.

Commissioner Ferrick said she agreed that the school district should do what was needed. She said also that Exponent were the ones creating the hazardous conditions and they should have to provide a safe site for whoever was next door.

Commissioner Bressler said that the Commission should not take a position on whether or not the school district should make the acquisition as it was already acquired.

Commissioner Onken said the first item for recommendation was to make a finding as to whether the review was or was not a project and he said it should be considered a project. He said for item 2 that the Planning Commission had to make a finding on acquisition whether it was after the fact or not.

Commissioner Combs questioned whether there would be any consequences if they were not to make any finding.

Senior Planner Rogers said the City Attorney said the review should be moved forward whether the school district had acquired the property or not. He said the finding could be that the

Commission reached no consensus on the recommendation to acquire the property, and that could be information that could be used by the school district under this code.

Commissioner Strehl said not making a recommendation as to the acquisition of the property because the Commission could not reach consensus was probably an accurate reflection.

Commissioner Onken said that lack of consensus was not clear until another motion was made and seconded, and voted upon.

Commissioner Strehl moved that the Commission was not able to reach consensus on the acquisition of 150 Jefferson Drive by the school district.

Commissioner Bressler asked about item 1 and whether the Commission wanted to make this its project.

Senior Planner Rogers said from staff's perspective that the language in item 1 should not be changed as it related to the way "project" was defined in CEQA. He said he did not believe the City would have the authority to request that the City become the discretionary lead agency on this site because of the way school districts have authority for school development.

Commissioner Strehl moved to continue the item and request the City Attorney attend in the future and explain some of the ramifications of this review. Motion died for lack of a second.

Chair Eiref moved to recommend that the school district move ahead and acquire the property and make a thorough effort of investigating the safety of the property and working with the neighbors to make sure the site is safe for students. Commissioner Combs seconded the motion.

Commissioner Kadvany agreed that something could be done to provide safety but that might require Exponent to change its business processes.

Commission Action: M/S Eiref/Combs recommend that the Sequoia Union High School District acquire the 150 Jefferson Drive property and conduct a thorough effort to investigate the safety of the property and work with their neighbors to make the school safe for their students.

Motion carried 4-3 with Commissioners Bressler, Combs, Eiref and Ferrick supporting the motion and Commissioners Strehl, Onken and Kadvany opposing.

Commissioner Bressler moved to make the finding as listed in item 1 in the staff report on page 6. Commissioner Ferrick seconded the motion.

There was discussion about the meaning of "project" as defined in CEQA. Senior Planner Rogers read from the staff report: Public Resources Code Section 21151.2 review is not a "project" as defined by the California Environmental Quality Act (CEQA), in that such a determination itself would not have a potential for resulting in a physical change to the environment. Sequoia Union will be required to address applicable CEQA requirements relating to the development of a school at this site. County Counsel has indicated that when Sequoia Union determines their programmatic needs/plans for the site, they will conduct their CEQA process, which will include notice to Menlo Park before taking final action/proceeding with their project.

Commission Action: M/S Ferrick/Bressler to:

• Make a finding that the Public Resources Code Section 21151.2 review is not a "project" as defined by the California Environmental Quality Act (CEQA).

Motion carried 6-0, with Commissioner Kadvany abstaining.

F. COMMISSION BUSINESS

There was none.

G. INFORMATION ITEMS

There was none.

ADJOURNMENT

The meeting adjourned at 9:55 p.m.

Staff Liaison: Thomas Rogers, Senior Planner

Recording Secretary: Brenda Bennett



PLANNING COMMISSION STAFF REPORT

FOR THE PLANNING COMMISSION **MEETING OF MARCH 23, 2015 AGENDA ITEM C2** APPLICANT: LOCATION: 138 Stone Pine Lane **Denise Forbes** EXISTING USE: Townhouse PROPERTY Theo and Elza Keet OWNERS: PROPOSED USE: Townhouse APPLICATION: Architectural Control ZONING: **R-3 (Apartment)**

PROPOSAL

The applicant is requesting architectural control for exterior modifications including enclosing the existing second floor balcony to enlarge the existing kitchen by approximately 120 square feet, building a new third floor balcony, and a vertical planting trellis located on the front elevation of a townhouse located in the R-3 (Apartment) zoning district.

ANALYSIS

Site Location

The subject property is located at 138 Stone Pine Lane, off El Camino Real, near the City's northern border (using El Camino Real in a north to south orientation). The contiguous parcels along Stone Pine Lane are also in the R-3 zoning district and occupied by townhouses and associated common space. The nearby properties along El Camino Real are primarily commercial, with the exception of the Atherton Park Forest Apartments located at 1670 El Camino Real, and are located within the El Camino Real/Downtown Specific Plan area. The parcel and the townhouses surrounding the parcel were originally developed under the jurisdiction of San Mateo County as a Planned Unit Development and are known collectively as the Park Forest development. The area represents a variety of architectural styles, and many residents have modified their units since being annexed into the City of Menlo Park.

Project Description

The existing townhouse contains approximately 2,176 square feet of gross floor area. The existing townhouse also includes an approximately 444 square foot garage which is not included in the calculation of gross floor area. The townhouse consists of three levels with three bedrooms, two and a half bathrooms, and a two-car garage. The new second floor addition will be built out to the end of the existing second floor balcony in order to add approximately 120 square feet to the existing kitchen. The windows on the second floor will be reused and recessed to avoid a flat appearance on the new stucco front façade. The stucco will be painted white and "lemon ice," which will match the existing color palette of the townhouse. The new third floor balcony would extend from the master bedroom. This new balcony would include a new metal plant trellis ascending up the wall opposite the existing wood arbor feature and a railing wall with an 18-inch glass top. The air conditioning unit would be relocated from the second floor balcony where it will be screened by the side wall.

The proposal would result in an increase in the gross floor area of the building and the proposed modifications require Planning Commission approval for architectural control review. The applicant has submitted a detailed project description letter (Attachment C) that describes the project as striving to achieve a consistent and contemporary architectural style for the individual unit. The Park Forest development has three homeowners associations, and the applicant has provided documentation of approval from the applicable homeowners association.

Correspondence

At the time of writing this report, staff has not received any correspondence.

Conclusion

Staff believes that the project would result in a consistent architectural style for the individual unit. In addition, the proposed architectural style is complementary to the development as a whole, which includes a variety of materials and architectural styles. The proposed project has been reviewed and approved by the homeowners association. Staff recommends that the Planning Commission approve the proposed project.

ENVIRONMENTAL REVIEW

The project is categorically exempt under Class 1 (Section 15301, "Existing Facilities") of the current California Environmental Quality Act (CEQA) Guidelines.

RECOMMENDATION

- 1. Make a finding that the project is categorically exempt under Class 1 (Section 15301, "Existing Facilities") of the current CEQA Guidelines.
- 2. Make findings, as per Section 16.68.020 of the Zoning Ordinance, pertaining to

architectural control approval:

- a. The general appearance of the structure is in keeping with the character of the neighborhood.
- b. The development will not be detrimental to the harmonious and orderly growth of the City.
- c. The development will not impair the desirability of investment or occupation in the neighborhood.
- d. The development provides adequate parking as required in all applicable City Ordinances and has made adequate provisions for access to such parking.
- e. The property is not within any Specific Plan area, and as such no finding regarding consistency is required to be made.
- 3. Approve the use permit subject to the following *standard* conditions:
 - a. Development of the project shall be substantially in conformance with the plans prepared by William Maston Architect & Associates, consisting of six (6) plan sheets, dated received March 17, 2015, and approved by the Planning Commission on March 23, 2015 except as modified by the conditions contained herein, subject to review and approval by the Planning Division.
 - b. Prior to building permit issuance, the applicant shall comply with all Sanitary District, Menlo Park Fire Protection District, San Mateo County Health Department, and utility companies' regulations that are directly applicable to the project.
 - c. Prior to building permit issuance, the applicant shall comply with all requirements of the Building Division, Engineering Division, and Transportation Division that are directly applicable to the project.
 - d. Prior to building permit issuance, the applicant shall submit a plan for any new utility installations or upgrades for review and approval by the Planning, Engineering and Building Divisions. All utility equipment that is installed outside of a building and that cannot be placed underground shall be properly screened by landscaping. The plan shall show exact locations of all meters, back flow prevention devices, transformers, junction boxes, relay boxes, and other equipment boxes.

Report prepared by: *Michele T. Morris Assistant Planner*

Report reviewed by: Thomas Rogers Senior Planner

PUBLIC NOTICE & APPEAL PERIOD

Public notification consisted of publishing a legal notice in the local newspaper and notification by mail of owners and occupants within a 300-foot radius of the subject property. Planning Commission action will be effective after 15 days calendar days unless the action is appealed to the City Council, in which case the outcome of the application shall be determined by the City Council.

ATTACHMENTS

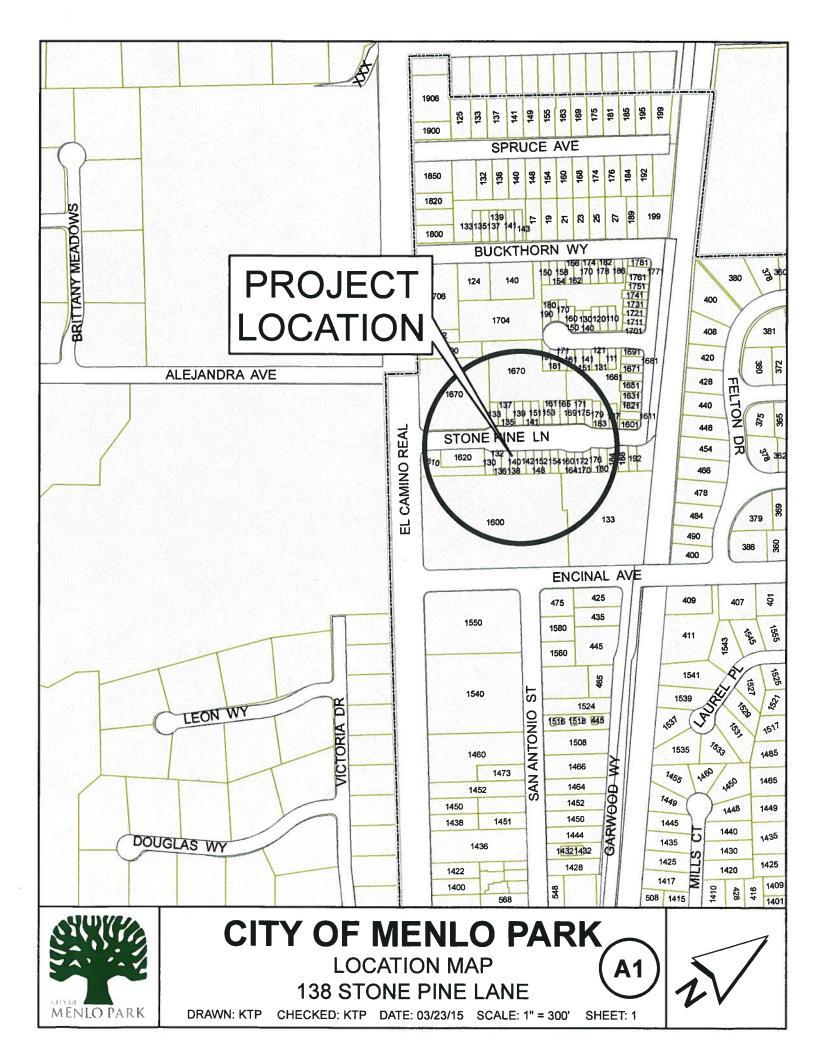
- A. Location Map
- **B.** Project Plans
- C. Project Description Letter

Note: 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.

EXHIBITS TO BE PROVIDED AT MEETING

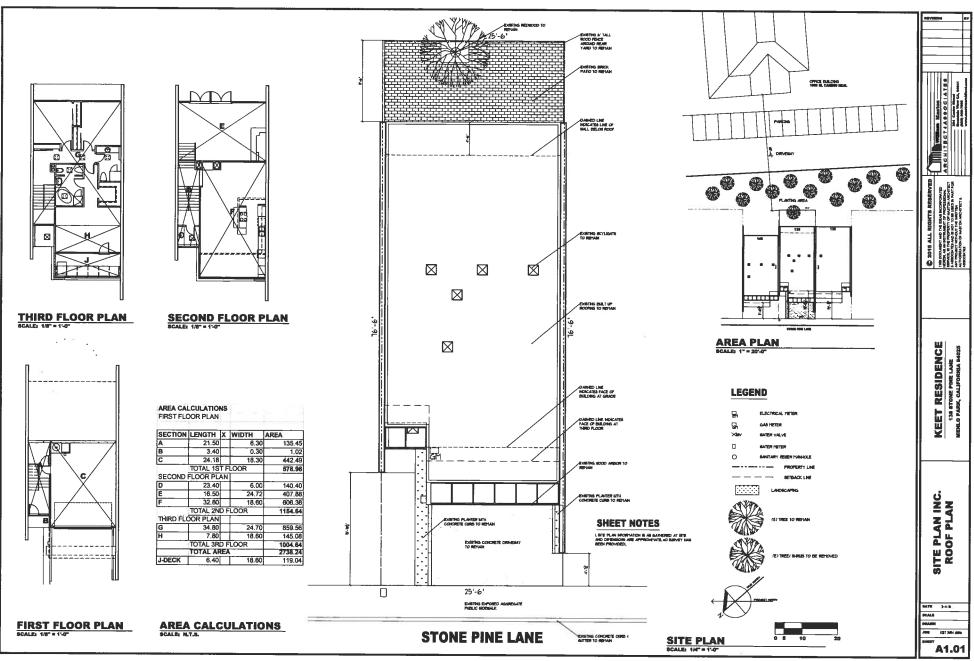
Color and Materials Board Photographs of Front Façade

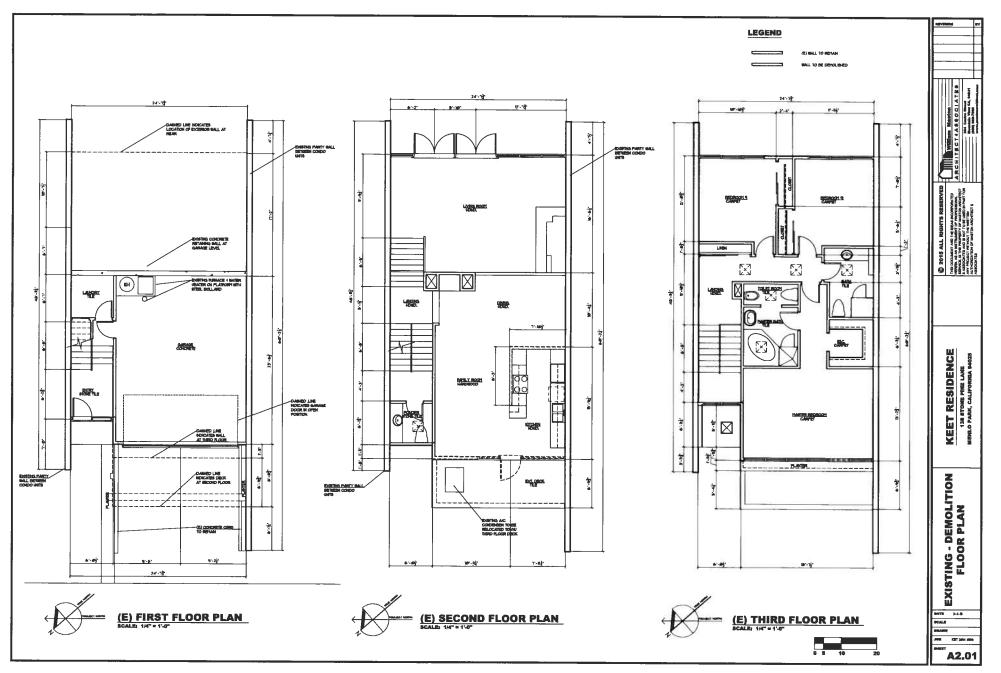
V:\STAFFRPT\PC\2015\032315 - 138 Stone Pine Lane.docx



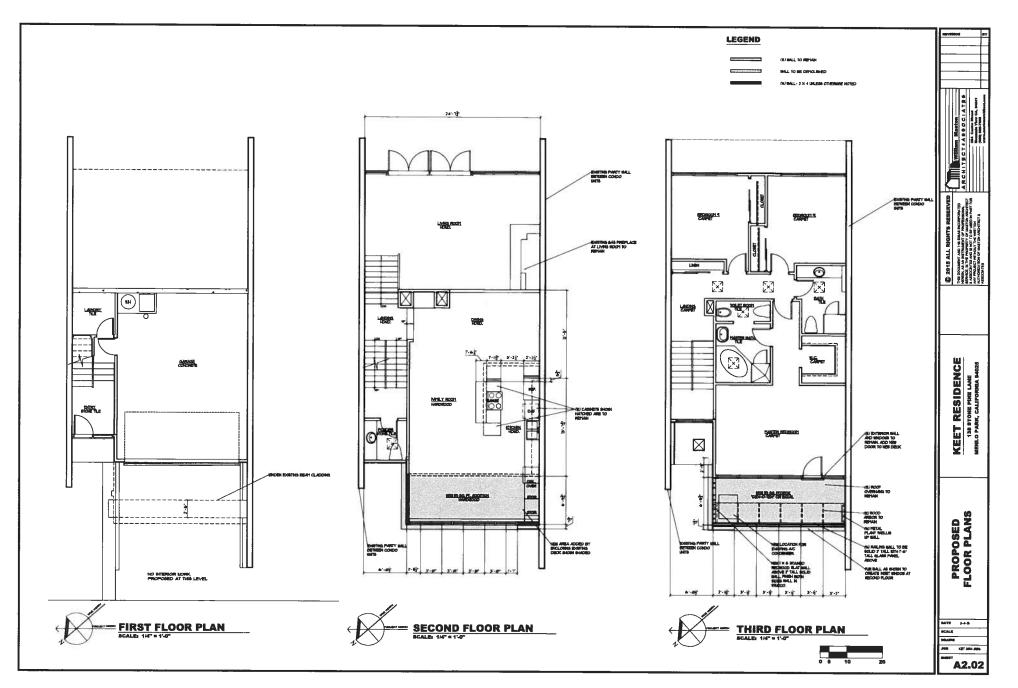
	PROJECT TEAM	VICINITY PLAN			ACVESION	
KEET RESIDE	ARCHITECT ULLIAN HASTON ARCHITECT I ASSOCS. 384 CASING STREET HONTAN VEU CAL FORMA 34041 PH (660) 380-7800 FAX (650) 380-780 COTACT, ULLIANDA COTACT, ULLIANDA COTACT, ULLIANDAN COTACT, ULLIANDAN	PROJECT DATA				
MENLO PARK, CALIFORNIA 94025					DRAWING INDEX	
		ARCHITECTURAL ADDI COVER SHEET & PROJECT DATA ALDI SITE PLAN UITH ROOF PLAN & FLOOR AREA CALCULATIONS AJDI EXISTING FLOOR PLANS AJDI EXISTING ELEVATIONS / PHOTOS	AN 060-314-050 PROPERTY OWNER ELZA 1 THEO KEET PROPERTY OWNER ELZA 1 THEO KEET PROPERTY ADDRESS IDS STORE PARE LANE ZONING DISTRICT R-3 OCCUPANCY GROUP R-3 TYPE OF CONSTRUCTION VS EXISTING USE SNGLE FAMILY RESIDENCE-CONDO PROJECT SUMMARY TABLE			ONTS RESERVED ONTS RESERVED TO OF MODERCIAN TO OF WATCH MODERCIA
		A5.02 EXISTING ELEVATIONS / PHOTOS A5.02 PROPOSED ELEVATIONS / PERSPECTIVES / PARTIAL BLOG. SECTION	NET LOT AREA	EXCENTING 1951 SQ. FT.	TOTAL PROPOSED	C 2018
			FIRST FLOOR UNHEATED (GARAGE) SECOND FLOOR THIRD FLOOR	136 60. FT. 444 60. FT. 1035 60. FT. 1005 60. FT.	136 80. FT. 444 80. FT. 185 80. FT. 1869 80.FT.	C FINAR
			TOTAL FLOOR AREA TOTAL DECKS	2620 8Q. FT. 120 8Q. FT.	2740 BQ. FT. 170 BQ. FT.	
			BUILDING COVERAGE	1211 BQ. FT. 62%	1211 SQ. FT. 62%	
(7)			FLOOR AREA RATIO (FAR)	262Ø 1343	2140 SQ. FT. 1403	5
(+)			SETBACKS FRONT REAR RIGHT SIDE	4'-7' II'-6' D'-0'	4'-1' -6' Ø'-0'	KEET RESIDENCE
			LEFT SIDE	0'-0' 26'-10'	@'-@' 26'-1@'	
			LANDSCAPING	41 9Q. FT. 2.4%	41 5Q. FT. 2,4%	KEET
			PAVING	21/2 BO, FT, IR	21/2 SQ. FT. IBA 2 COVERED	
ABBREVIATIONS	SYMBOLS	PROJECT DESCRIPTION				╟╌
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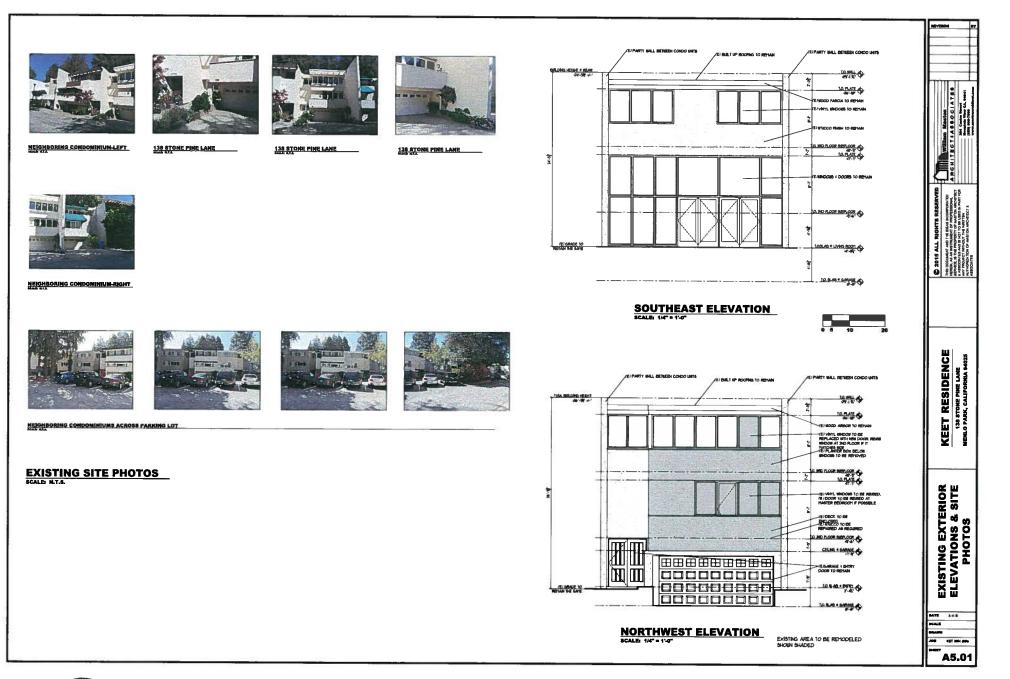




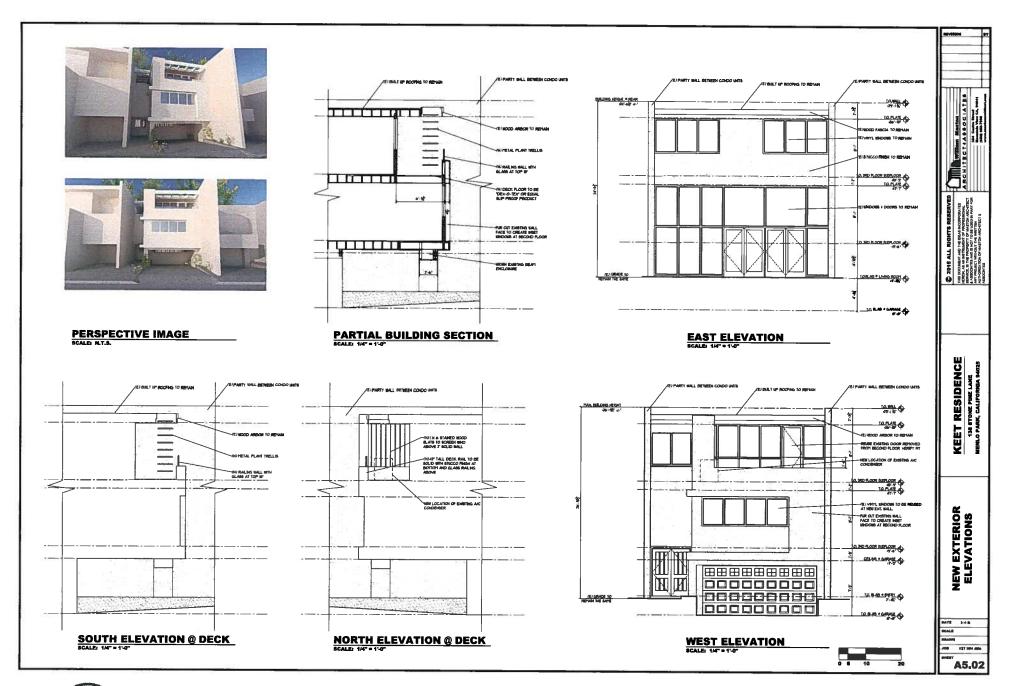


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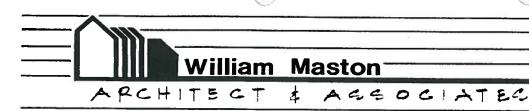




B5



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January 19, 2015

PROJECT DESIGN NARRATIVE FORMAL DESIGN REVIEW

RECEIVED

JAN 27 2015

CITY OF MENLO PARK PLANNING

Project: Residential Addition 138 Stone Pine Lane, Menlo Park, CA

The existing home is in an older condominium development that includes several communal outdoor areas including a swimming pool. Our clients have lived on the property for many years and did a small addition to the third floor in 1993. The new proposal is to enclose the existing deck at the second floor to enlarge their existing kitchen by 120 sq. ft. They will also be creating a deck above the addition at the third floor off the master bedroom.

The new addition modifies only the front façade. There are no changes proposed at the rear and the sides are integral with the neighboring units. The existing color scheme will be matched with all the new elements. All existing windows (newer Milguard white vinyl) are proposed to be reused. The windows at the second floor are recessed by furring the existing wall out to create the desired shadow lines. A metal trellis is proposed for the wall of the upper deck so vine type planting can climb the wall and cascade over the upper arbor, adding a touch of green to the upper level.

The interior changes will be minimal as our clients would like to reuse the bulk of the existing cabinetry and only plan minor updates to the cabinetry and replacement of the appliances. The walls surrounding the existing kitchen will be demolished, leaving a more open concept in the second floor living space. There are no changes proposed for the first or third floor interiors with the exception of changing one of the exterior windows to doors to allow access to the new deck.

We look forward to your additional input regarding our project. Please call or email with any questions or comments.





PLANNING COMMISSION STAFF REPORT

FOR THE PLANNING COMMISSION MEETING OF APRIL 6, 2015 AGENDA ITEM D1

LOCATION:	1295 Middle Avenue	APPLICANT:	Jack McCarthy
EXISTING USE:	Single-Family Residence	OWNER:	Sepand Hokmabadi
PROPOSED USE:	Single-Family Residence	APPLICATION:	Use Permit

ZONING: R-1-S (Single-Family Suburban Residential District)

	PROPOSED PROJECT		EXISTING PROJECT		ZONING ORDINANCE		
Lot area	10,588 sf		10,588	sf	10,000	sf min.	
Lot width	67.01 ft.		67.01	ft.	80	ft. min.	
Lot depth	158 ft.		158	ft.	100	ft. min.	
Setbacks							
Front	22 ft.		30	ft.	20	ft. min.	
Rear	67 ft.		57	ft.	20	ft. min.	
Side (left)	12.66 ft.		11	ft.	10	ft. min.	
Side (right)	10.33 ft.		14	ft.	10	ft. min.	
Building coverage	2,582.5 sf		2,251	sf	3,705	sf max.	
	24.4 %		21.3	%	35	% max.	
FAL (Floor Area Limit)	3,695.7 sf		1,896	sf	3,697	sf max.	
Square footage by floor	1,904.6 sf/1st		1,476	sf/1st			
	1,327.1 sf/2nd		420	sf/garage			
	455.1 sf/garage		10	sf/fireplace			
	8.9 sf/>5 ft. a		345	sf/porches			
	222.8 sf/porche						
	and firep	laces					
Square footage of building	3,918.5 sf		2,251	sf			
Building height	27.75 ft.		17	ft.	28	ft. max.	
Parking	2 covered		2 cov	ered	1 covered/1		
-			•		•		
		I	1		1		
Trees	Heritage trees	1	Non-Heritage tr		New Trees	0	
	Heritage trees proposed	itage trees proposed 0 Non-Heritage trees 1 Total Number of			of 5		
	for removal		proposed for re	moval	Trees		

PROPOSAL

The applicant is requesting a use permit to demolish an existing one-story residence, pool and shed, then construct a new two-story single-family residence on a substandard lot with regard to lot width located in the R-1-S (Single-Family Suburban Residential) zoning district.

ANALYSIS

Site Location

The project site is located at 1295 Middle Avenue, which is located near the intersection of Middle Avenue and Hermosa Way in the West Menlo neighborhood. It is mainly surrounded by R-1-S zoned properties; however, a few properties nearby to the northwest of the project on Hermosa Way are in the R-E (Residential Estate) district.

The subject parcel is substandard with respect to lot width. The lot width is 61.07 feet where 80 feet is required. The lot area is 10,588 square feet where 10,000 square feet is required, and the lot depth is 158 feet where 100 feet is required.

Project Description

The applicant is proposing to demolish the existing single-story residence, pool and shed, and construct a new two story home. At the main level, a covered porch would lead to the entry and living room. At this level, there would also be a mud room, guest suite, a two-car garage with two wood carriage style doors, a dining room, a nook, and a family room leading out to a covered porch. The second floor would have two bedrooms, a laundry room, and a master bedroom leading out to a deck. There would be a total of three and a half bathrooms: one and a half bathrooms on the first floor and two bathrooms on the second floor. The second floor deck would comply with the City's requirement that balconies and decks above the first floor shall be located at least 20 feet from the side lot line and 30 feet from the rear lot line.

The total proposed floor area would be 3,695.7 square feet where 3,697 square feet is the floor area limit. The allowable building coverage is 3,507 square feet (or 35 percent of the lot size) which is well above the proposed building coverage of 2,582.5 square feet for this project.

Design and Materials

The new home would be constructed in a craftsman style with wood shingle siding at the main level, vertical board and batten siding on the second floor façade, and a cedar shingle roof. The windows would be metal clad wood with simulated true divided lights. The doors and windows would have rosettes at the upper corners and be trimmed with wood elements. The sill heights at the second floor would be a minimum of 3.5 feet high in order to promote privacy. The prominent porch, dormers, and decorative columns and other bold treatment of framing details would help minimize the impact of the garage which would project beyond the front of the residence. The subject property is

1295 Middle Avenue/Jack McCarthy

surrounded by a mix of one and two-story single-family residences which feature a variety of architectural styles including mission and craftsman style homes. Staff believes that the scale, materials, and style of the proposed residence would be consistent with the neighborhood.

Trees and Landscaping

The applicant has submitted a copy of the arborist report (Attachment D) dated March 2, 2015 detailing the species, size, and condition of the trees on or adjacent to the project site. One tree is located in the public right-of-way, five trees are on the subject property, and the remaining trees are located on the immediate adjacent properties for a total of fifteen trees. The report determines the present condition of the trees, discusses the impacts of the proposed project, and provides recommendations regarding tree protection. The applicant proposes to remove one non-Heritage tree (number 6, an arborvitae at the front left corner of the residence).

Correspondence

The applicant indicated that a letter was mailed with a copy of the plot plan, floor plans and elevations to twelve neighbors asking to convey any questions or concerns. At the time of writing this report, staff has received one email in support of the project from the neighbor at 1300 Middle Avenue, included as Attachment E.

Conclusion

Staff believes that the scale, materials, and craftsman style of the proposed residence would be compatible with those of the existing structures on Middle Avenue and in the general vicinity. Design elements such as the second floor sill heights would help limit privacy impacts, and the craftsman style front porch would add visual interest to the project and minimize the size and prominence of the garage. The project complies with all Zoning Ordinance requirements. Staff recommends that the Planning Commission approve the proposed project.

ENVIRONMENTAL REVIEW

The project is categorically exempt under Class 1 (Section 15301, "Existing Facilities") of the current California Environmental Quality Act (CEQA) Guidelines.

RECOMMENDATION

- 1. Make a finding that the project is categorically exempt under Class 1 (Section 15301, "Existing Facilities") of the current CEQA guidelines.
- 2. Make findings, as per Section 16.82.030 of the Zoning Ordinance pertaining to the granting of use permits, that the proposed use will not be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use, and will not be detrimental to property and improvements in the neighborhood or the general welfare of the City.

- 3. Approve the use permit subject to the following *standard* conditions:
 - a. Development of the project shall be substantially in conformance with the plans prepared by Jack McCarthy Designer, Inc., consisting of 10 plan sheets, dated received March 30, 2015, and approved by the Planning Commission on April 6, 2015 except as modified by the conditions contained herein, subject to review and approval by the Planning Division.
 - b. Prior to building permit issuance, the applicants shall comply with all Sanitary District, Menlo Park Fire Protection District, and utility companies' regulations that are directly applicable to the project.
 - c. Prior to building permit issuance, the applicants shall comply with all requirements of the Building Division, Engineering Division, and Transportation Division that are directly applicable to the project.
 - d. Prior to building permit issuance, the applicant shall submit a plan for any new utility installations or upgrades for review and approval by the Planning, Engineering and Building Divisions. All utility equipment that is installed outside of a building and that cannot be placed underground shall be properly screened by landscaping. The plan shall show exact locations of all meters, back flow prevention devices, transformers, junction boxes, relay boxes, and other equipment boxes.
 - e. Simultaneous with the submittal of a complete building permit application, the applicant shall submit plans indicating that the applicant shall remove and replace any damaged and significantly worn sections of frontage improvements. The plans shall be submitted for review and approval of the Engineering Division.
 - f. Simultaneous with the submittal of a complete building permit application, the applicant shall submit a Grading and Drainage Plan for review and approval of the Engineering Division. The Grading and Drainage Plan shall be approved prior to the issuance of grading, demolition or building permits.
 - g. Heritage trees in the vicinity of the construction project shall be protected pursuant to the Heritage Tree Ordinance.

Report prepared by: Michele T. Morris Assistant Planner

Report reviewed by: Thomas Rogers Senior Planner

PUBLIC NOTICE & APPEAL PERIOD

Public notification consisted of publishing a legal notice in the local newspaper and notification by mail of owners and occupants within a 300-foot radius of the subject property. Planning Commission action will be effective after 15 days unless the action is appealed to the City Council, in which case the outcome of the application shall be determined by the City Council.

ATTACHMENTS

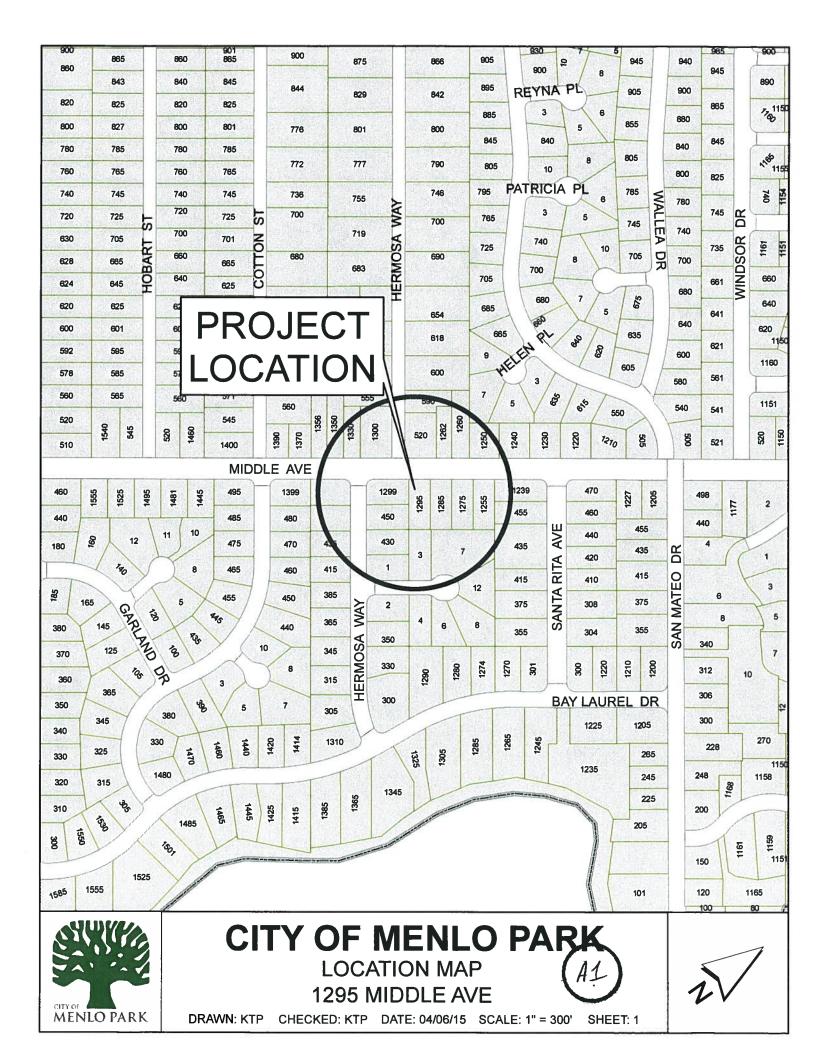
- A. Location Map
- B. Project Plans
- C. Project Description Letter
- D. Arborist Report
- E. Correspondence

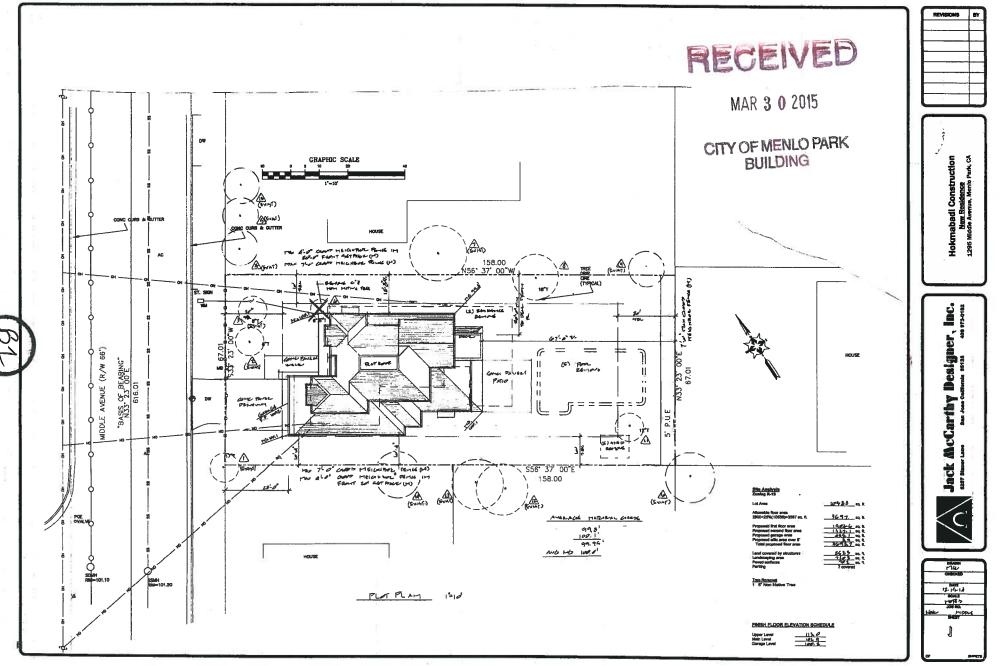
Note: Attached are reduced versions of maps and diagrams submitted by the applicants. The accuracy of the information in these drawings is the responsibility of the applicants, and verification of the accuracy by City Staff is not always possible. The original full-scale maps, drawings and exhibits are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

EXHIBITS TO BE PROVIDED AT MEETING

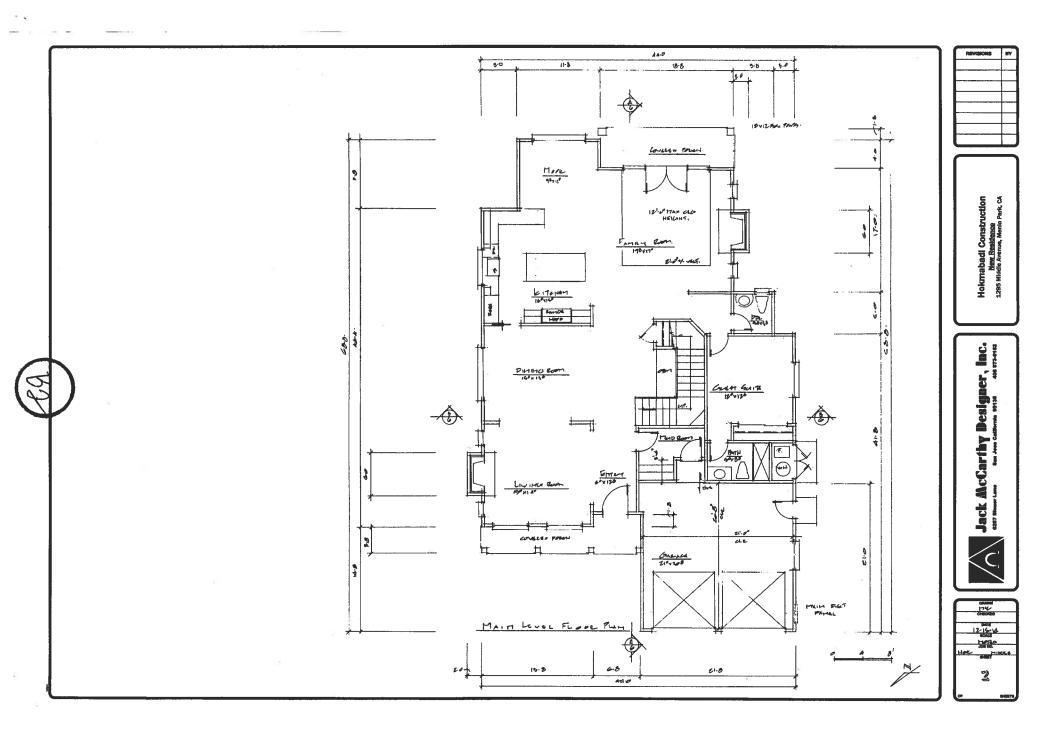
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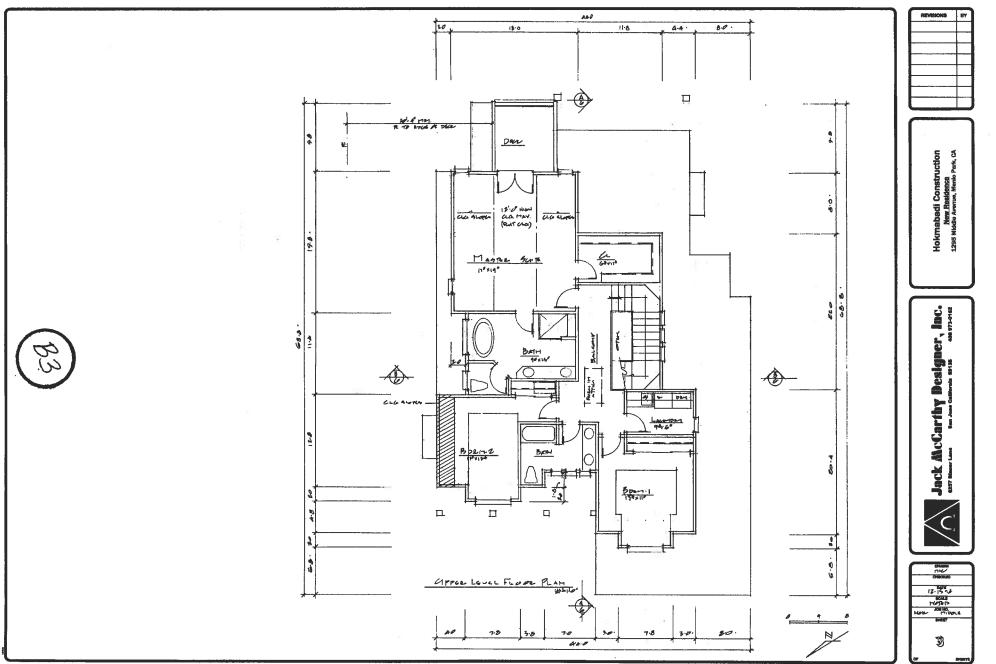
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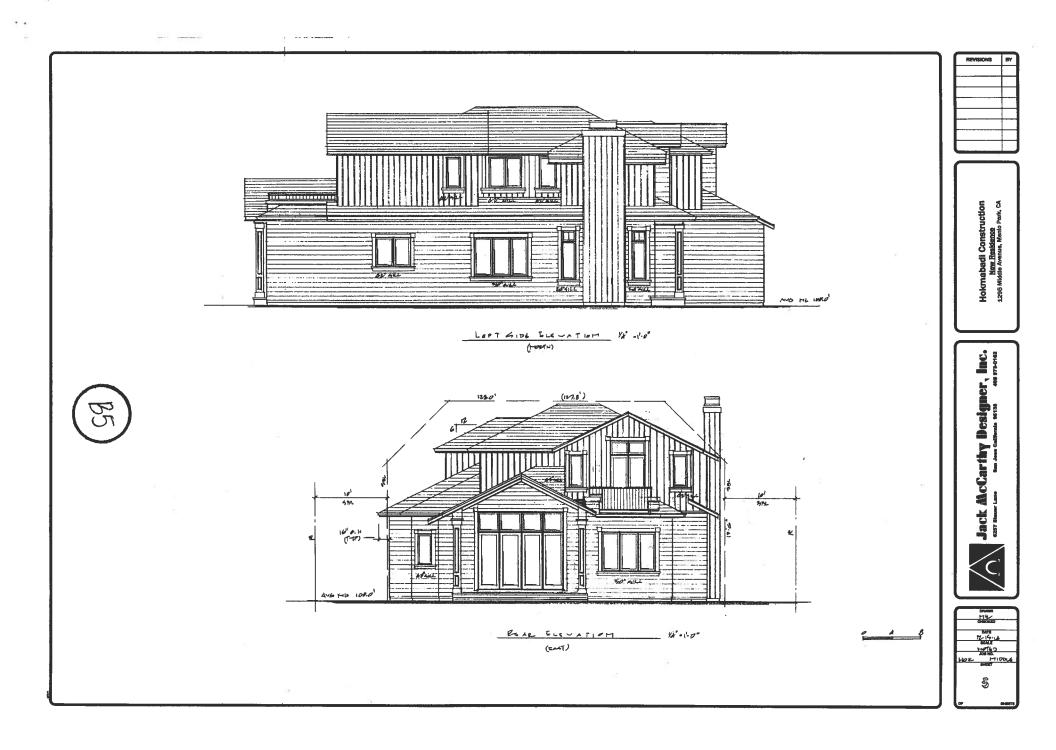
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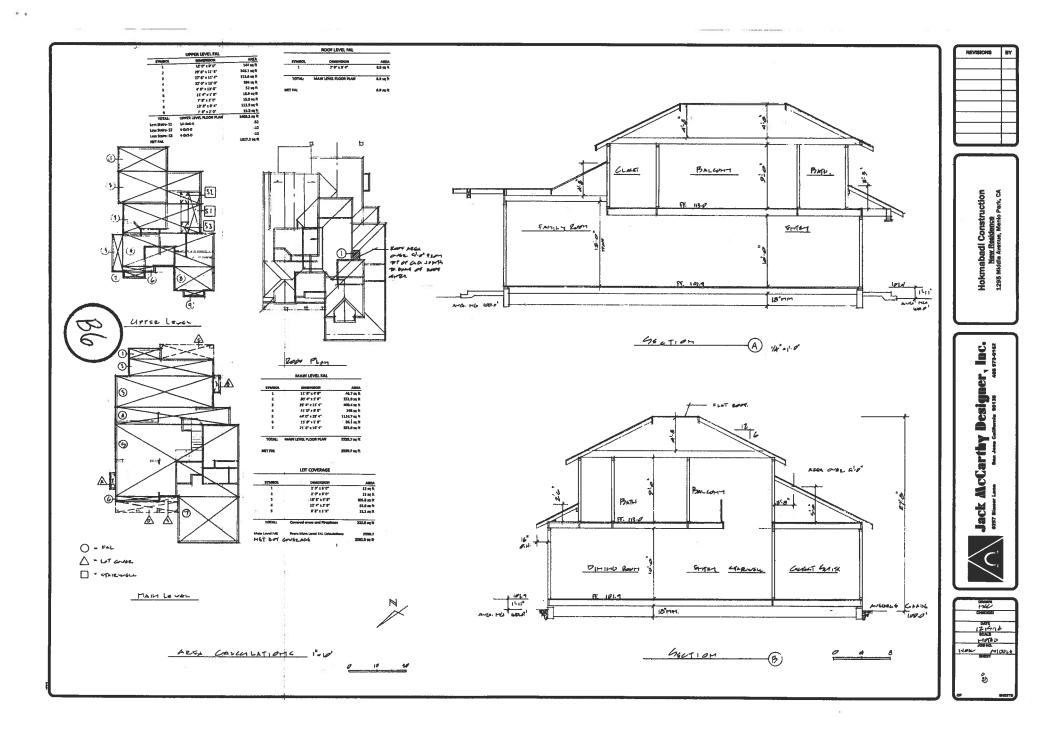


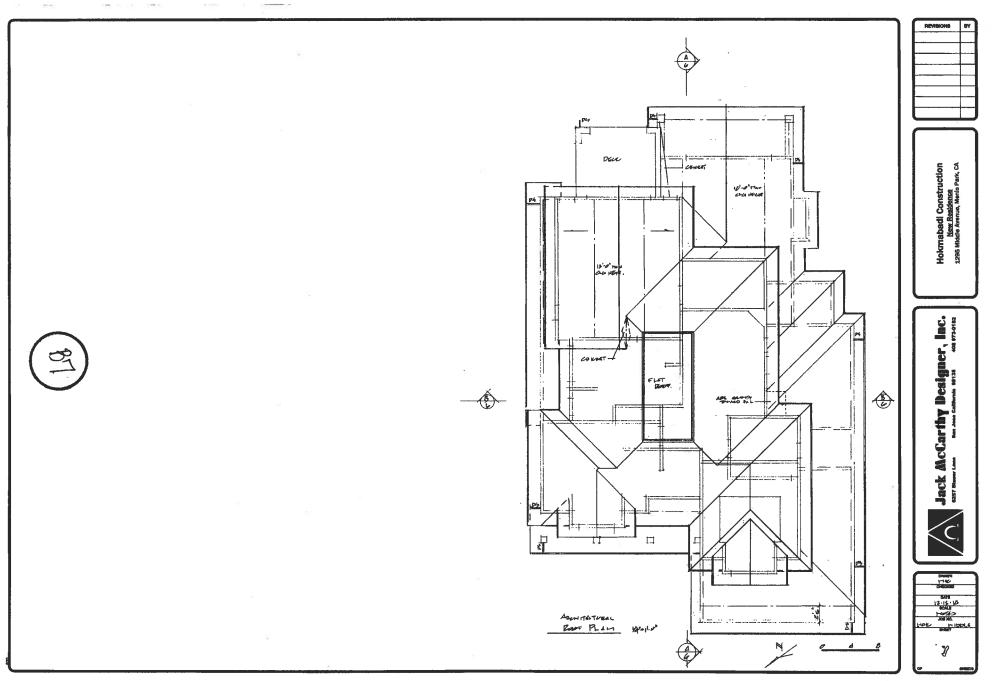


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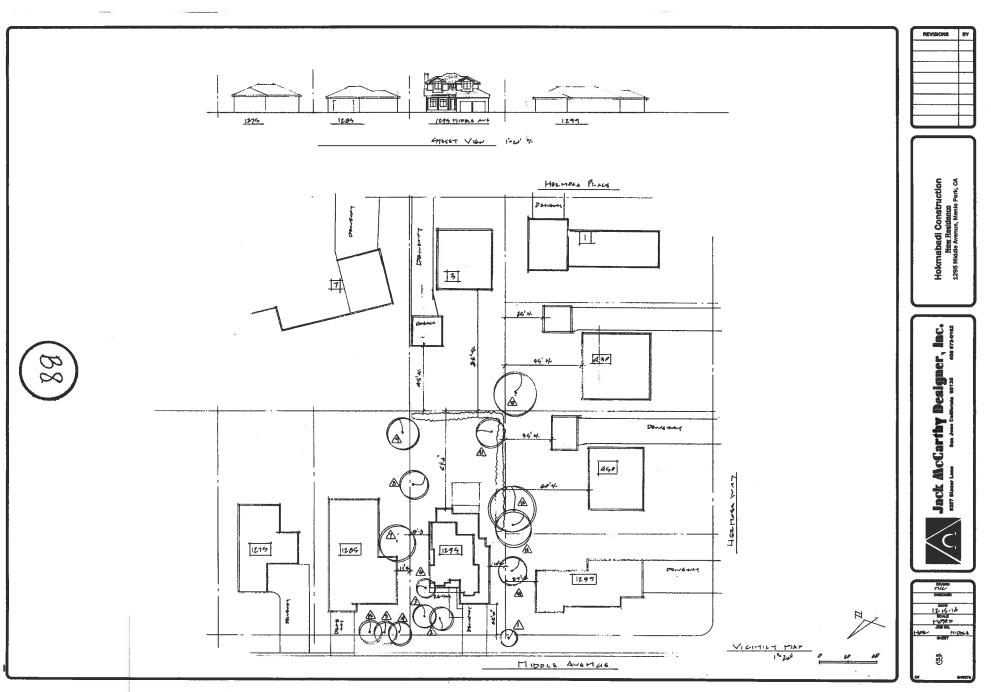




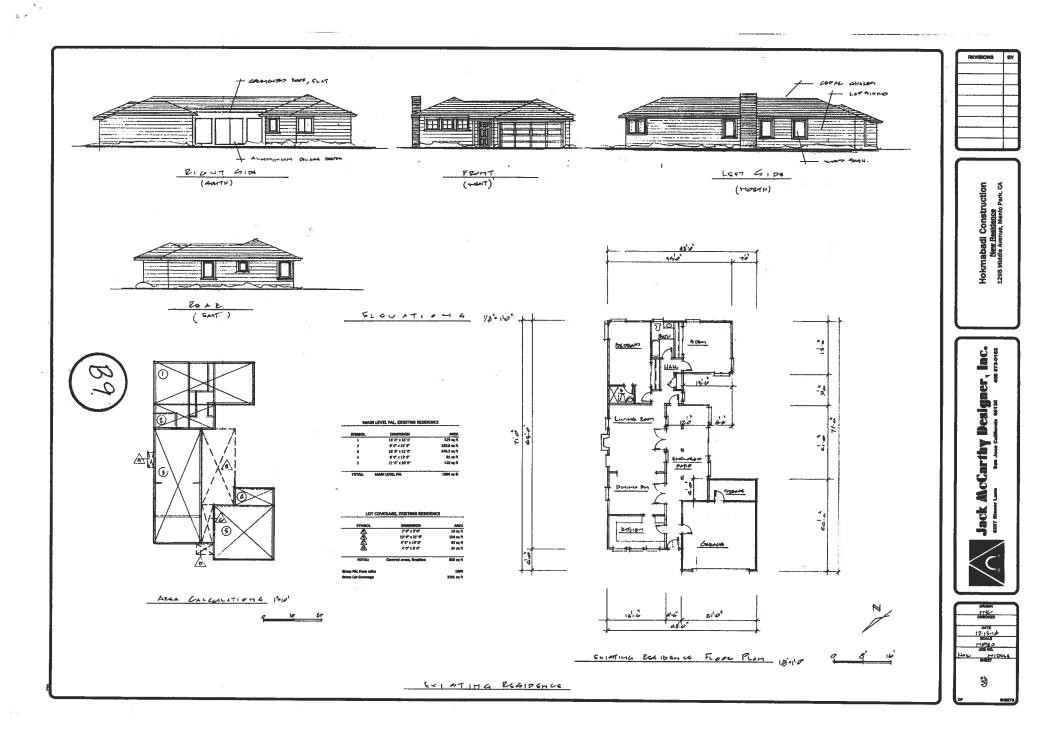


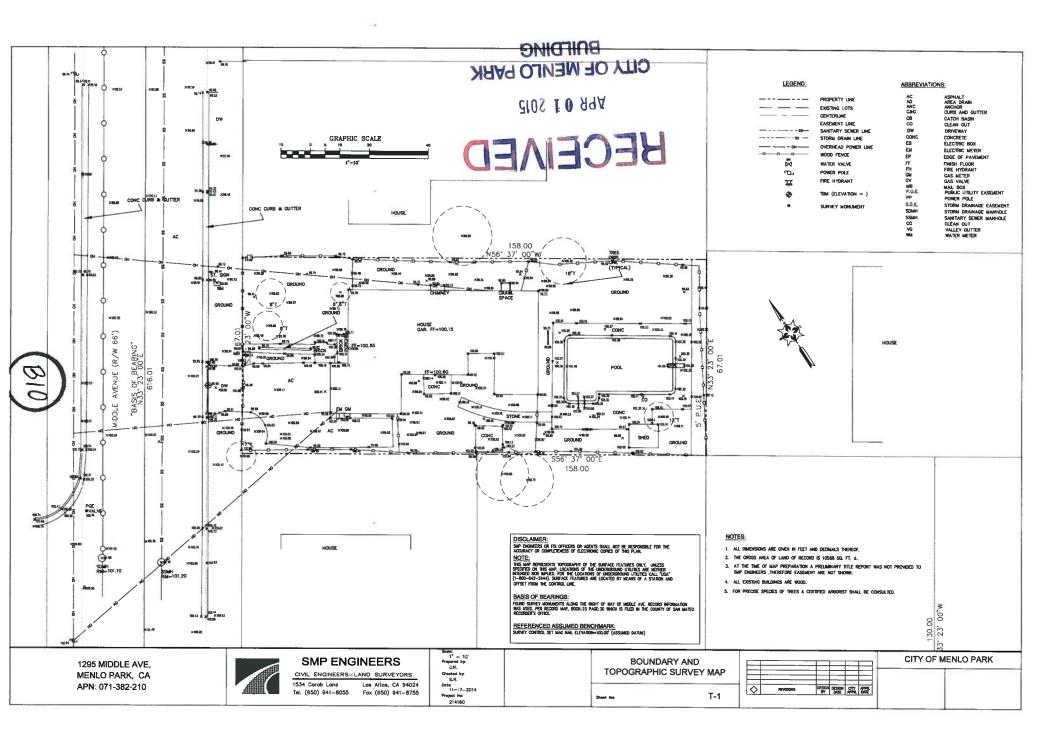


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Jack McCarthy Designer, Inc.

6257 Blauer Lane, San Jose, California 95135, Phone 408 973-0162 Fax 408 465-7368

March 26, 2015

RECEIVED MAR 8 0 2015

Design Concept

1295 Middle Avenue, Menlo Park, CA

CITY OF MENLO PARK

This parcel is a non-conforming lot do to the width of the parcel. The zoning ordinance requires a lot to have a minimum width of 80.0 feet whereas this lot is only 67.01 feet wide. The parcel does comply with all the other requirements of the zoning ordinance. Additionally the site does not have any Heritage Trees on it. There are large trees on adjoining lots and there is a large tree in the rear of this lot but they will not be affected by the removal of the residence and existing pool as well as the construction of the new residence. We will provide tree protection fencing at all tree locations.

The new residence will be a craftsman style structure with a combination of vertical board and batt siding and on the upper level and wood shingle siding on the main level. It will have a master suite and 2 additional bedrooms on the upper level and a living room, dining room, family room, kitchen, nook and guest suite on the main level. The windows will be metal clad wood with simulated true divided lights as shown on the plans. The windows and doors will be trimmed with wood elements and rosettes at the upper corners of each unit. We felt that this style of structure will fit well with the existing structures on Middle Avenue in the general vicinity.

The colors for the house will be:

- Wood siding and shingle siding, warm medium grey
- Wood trim, white
- Sash and French doors, white
- Front door, accent color to be selected later
- Cedar shingle roof, natural

I have included a color board showing the colors. The final colors may vary from the colors selected depending on the paint manufacturer.

On March 26, 2015 we mailed a letter along with the plot plan, floor plans and elevations to 12 surrounding neighbors and asked that they contact us with any questions or concerns and notified them that the hearing will be on April 6th at 7:00pm. We have attached a copy of the letter and the address that we mailed the information to for your records.



Jack AcCarthy Designer, Inc.

6257 Blauer Lane, San Jose, California 95135, Phone 408 973-0162 mccarthydesign@yahoo.com

March 26, 2015

Dear Neighbor,

We are in the process of designing and gaining approval for the construction of a new residence at 1295 Middle Avenue in Menlo Park. As part of the process we would like provide you with plot plan, floor plans and elevations of the proposed residence for you to review prior to the public hearing which has been set for April 6th at 7:00pm in the city council chambers. Please review them and let us know if you have any questions or concerns. We will be happy to discuss any item with you.

Regards,

Jack McCarthy



Neighbor 1300 Middle Avenue Menlo Park, CA 94025

1

Neighbor 1262 Middle Avenue Menlo Park, CA 94025

Neighbor 1560 Middle Avenue Menlo Park, CA 94025

Neighbor 1275 Middle Avenue Menlo Park, CA 94025

Neighbor 1285 Middle Avenue Menlo Park, CA 94025

Neighbor 1299 Middle Avenue Menlo Park, CA 94025

Neighbor 450 Hermosa Avenue Menlo Park, CA 94025

Neighbor 430 Hermosa Avenue Menlo Park, CA 94025

Neighbor 1 Hermosa Place Menlo Park, CA 94025

Neighbor 3 Hermosa Place Menlo Park, CA 94025 Neighbor 7 Hermosa Place Menlo Park, CA 94025

Hokmabadi, 1295 Middle Project

Neighbor 520 Hermosa Way Menio Park, CA 94025



Kielty Arborist Services Certified Arborist WE#0476A P.O. Box 6187 San Mateo, CA 94403 650-515-9783

March 2, 2015

Jack McCarthy Designer, Inc. Attn: Mr. Jack McCarthy 6257 Blauer Lane San Jose, CA 95135



Site: 1295 Middle, Menlo Park, CA

Dear Mr. McCarthy,

As requested on Wednesday, February 18, 2015, I visited the above site to inspect and comment on the trees. New construction is planned for this site and your concern as to the health and safety of the trees has prompted this visit.

Method:

All inspections were made from the ground; the trees were not climbed for this inspection. The trees in question were located on a "Not- to-Scale" map provided by me. The trees were then measured for diameter at 54 inches above ground level (DBH or diameter at breast height). Each tree was given a condition rating for form and vitality. The trees' condition rating is based on 50 percent vitality and 50 percent form, using the following scale.

1	-	29	Very Poor
30	-	49	Poor
50	-	69	Fair
70	-	89	Good
90	-	100	Excellent

The height of the tree was measured using a Nikon Forestry 550 Hypsometer. The spread was paced off. Comments and recommendations for future maintenance are provided.

Surve Tree# 1	y: Species English walnut (Juglans regia)	DBH 16.2	CON 45		Comments Fair vigor, poor form, decay in trunk from vehicle damage.
2	Beech (Fagus sylvatica)	7.8	65	25/15	Good vigor, fair form, multi at 3 feet.
3	Beech (Fagus sylvatica)	8.4	65	25/20	Good vigor, fair form, multi leader.



1295 Middle/3/2/15

Tree# Species DBH CON HT/SPComments 35/25 Fair vigor, fair form, multi leader, ivy on 4* Privet 6est 55 trunk. (Ligustrum japonicum) 30/25 Fair vigor, fair form, multi leader, ivy on 5* Plum 8est 50 trunk. (Prunus spp) 20/15 Fair vigor, poor form, poor location at 6.3 45 6 Arborvitae corner of house. (Thuja occidentalis) 7* 40est 50 70/45 Good vigor, poor-fair form, poor crotch Green ash formations. (Fraxinus uhdei) 8* 40/35 Fair vigor, fair form, trunk girdled. Coast live oak 18est 55 (Quercus agrifolia) 9* 35 30/15 Poor vigor, fair form. Holly 6est (Ilex aquifolium) 20/15 Poor-fair vigor, poor form, decay in trunk. 10 Flowering cherry 11.8 40 (Prunus serrulata) 11* 35/15 Fair vigor, fair form. Birch 8est 60 (Betula pendula) 70/50 Good vigor, fair form, codominant at 35 12* Deodar cedar 40est 65 feet. (Cedrus deodara) Deodar cedar 38est 70 70/50 Good vigor, good form, heavy lateral limbs. 13* (Cedrus deodara) 14* 20/25 Good vigor, poor form, heavily trimmed. Plum 14est 65 (Prunus spp) 15* 20 35/35 Good vigor, fair form, multi leader at 3 feet. English walnut 55 (Juglans regia)

(2)

*indicates neighbor's tree



1295 Middle/3/2/15

(3)

Summary:

The trees on site are a mix of imported trees, the only native oak in on a neighboring property. The only heritage tree on site is walnut tree #1 which has been hit by a vehicle and is in poor condition. Removal of walnut #1 is a viable option.

The trees located on the neighboring properties will not be affected but will be protected where the existing property line fencing is not sufficient. The following tree protection plan will help to protect trees on and off the site.

Tree Protection Plan:

Tree protection fencing

Tree protection zones should be established and maintained throughout the entire length of the project. Fencing for the protection zones should be 6 foot tall metal chain link supported by metal poles the support poles should be spaced no more than 10 feet apart on center. The location for the protection fencing should be as close to the dripline as possible still allowing room for construction to safely continue. Signs should be placed on fencing signifying "Tree Protection Zone - Keep Out". No materials or equipment should be stored or cleaned inside the tree protection zones. Areas outside the fencing but still beneath the dripline of protected trees, where foot traffic is expected to be heavy, should be mulched with 4 to 6 inches of chipper chips.

Demolition

All tree protection measures must be in place and inspected by the site arborist. Existing driveways should be kept in place as long as possible. Demolition equipment shall access the site from the existing drive and should avoid the driplines of the trees on site and neighboring trees. Foundation material near protected trees should be removed with care or removed by hand.

Trenching and excavation

Trenching for irrigation, electrical, drainage or any other reason should be hand dug when beneath the driplines of protected trees. Hand digging and carefully laying pipes below or beside protected roots will dramatically reduce root loss of desired trees thus reducing trauma to the entire tree. Trenches should be backfilled as soon as possible with native material and compacted to near its original level. Trenches that must be left exposed for a period of time should also be covered with layers of burlap or straw wattle and kept moist. Plywood over the top of the trench will also help protect exposed roots below.

Irrigation

Normal irrigation should be maintained throughout the entire length of the project. The imported trees on this site will require irrigation during the warm season months. Some irrigation may be required during the winter months depending on the seasonal rainfall. During the summer months the trees on this site should receive heavy flood type irrigation 2 times a month. During the fall and winter 1 time a month should suffice. Mulching the root zone of protected trees will help the soil retain moisture, thus reducing water consumption.



1295 Middle/3/2/15

Inspections

Tree protection must be inspected by the site arborist prior to the start of demolition or construction. All other inspections will be on an as needed basis.

The information included in this report is believed to be true and based on sound arboricultural principles and practices.

Sincerely, Kevin R. Kielty

Certified Arborist WE#0476A





Morris, Michele T

From:Jack McCarthy <mccarthydesign@yahoo.com>Sent:Monday, March 30, 2015 1:23 PMTo:Morris, Michele T; Allen HokmabadiSubject:Fw: 1295 middle

Just got this email from the neighbor at 1300 Middle.

Sent from Yahoo Mail on Android

From:"Carol Mince" <<u>carolj3474@earthlink.net</u>> Date:Mon, Mar 30, 2015 at 1:11 PM Subject:1295 middle

I live at 1300 middle. Happy to see an attractive new house go up. Good luck. Is this a spec house?

Sent from my iPhone





PLANNING COMMISSION STAFF REPORT

FOR THE PLANNING COMMISSION MEETING OF APRIL 6, 2015 AGENDA ITEM D2

LOCATION:	1555 Adams Drive	APPLICANT:	Intersect ENT
EXISTING USE:	Research and Development, and Manufacturing	PROPERTY OWNER:	Menlo Business Park, LLC
PROPOSED USE:	Research and Development, and Manufacturing	APPLICATION:	Use Permit Revision

ZONING: M-2 (General Industrial District)

PROPOSAL

The applicant is requesting a revision to a use permit, previously approved in June 2012, to modify the types and quantities of hazardous materials used and stored at the site for the research and development (R&D) and production of medical technologies for use in treating ear, nose, and throat patients, within an existing building in the M-2 (General Industrial) zoning district. All hazardous materials would be used and stored within the building.

ANALYSIS

Site Location

The project site is occupied by two R&D and manufacturing buildings located at 1555-1605 Adams Drive, which are Buildings 17 and 18 of the Menlo Business Park. Intersect ENT currently occupies approximately half of the subject building (1555 Adams Drive), and is expanding to the entire building. Hazardous materials are not anticipated to be used and stored on the second floor.

The adjacent parcels to the north, south, and west (using University Avenue in a north to south orientation) are also located in the M-2 zoning district, and primarily contain light industrial, R&D, and office uses. Single-family residences in the City of East Palo Alto are located south of the business park, along Kavanaugh Drive, approximately 700 feet from the subject building. The subject parcel is located approximately 100 feet

from Costano Elementary School, which is east of the project site, and 1,000 feet from Green Oaks Academy (grades K-5) and Cesar Chavez Elementary School (grades 6-8), which are located on a shared campus to the southwest of the project site. Both school sites are located within the City of East Palo Alto. In addition, a preschool (Casa dei Bambini) is located at 1215 O'Brien Drive, which is located approximately 1,700 feet from the subject building.

Project Description

Intersect ENT is a medical device company that is conducting research on site-specific drug delivery methods, focused on advancing clinically proven therapy solutions to improve the quality of life for ear, nose, and throat patients. The company's initial focus is a new dissolvable steroid-releasing implant to treat patients with chronic sinusitis. The applicant provided a project description letter that discusses the project and the company in more detail (Attachment C). The proposed expansion would allow the company to continue to conduct research and development of new products and manufacture its currently commercialized products. The applicant anticipates that development of additional products could take between six months and two years. The company currently holds 25 U.S. patents and more than 85 patents and pending applications worldwide. In 2012, the company employed 49 people and has grown to 228 full time employees with plans to grow to 300 within a year.

Proposed Hazardous Materials

Proposed hazardous materials include carcinogens, cryogens, corrosives, flammable liquids, and combustible liquids. A complete list of the types of chemicals is included in Attachment E. The project plans, included as Attachment B, provide the locations of chemical use and storage, and hazardous waste storage. In addition, the plans identify the location of safety equipment, such as fire extinguishers, first aid kits, eyewash stations/showers, spill kits, and exit pathways. All hazardous materials would be used and stored inside of the building. The applicant provided a chemical comparison matrix (Attachment F) documenting the changes between the approved 2012 chemical inventory and the proposed chemical inventory, summarized by hazard class.

The Hazardous Materials Information Form (HMIF), which was recently developed by the Planning Division is included in Attachment D. The HMIF replaces the need for applicants to complete the Hazardous Materials Business Plan (HMBP) and old County of San Mateo narrative HMBP during this phase of review. The applicant is still required to complete the HMBP, as applicable, and submit to the County prior to using and storing hazardous materials. The HMIF includes a description of how hazardous materials are stored and handled on-site, which includes the storage of hazardous materials within fire-rated storage cabinets, segregated by hazard class. The applicant indicates that storage areas would be monitored by lab staff and documented inspections would be performed. The largest waste container would be a 55-gallon drum, used for solid wastes. Liquid wastes would be collected in 5-gallon containers, which would be secondarily contained. Licensed contractors would be used to haul off and dispose of the hazardous waste. The HMIF includes a discussion of the applicant's intended training plan, which encompasses the handling of hazardous materials and

waste, as well as how to respond in case of an emergency. The applicant indicates that the procedures for notifying emergency response personnel and outside agencies are kept in the site's emergency response plan. The applicant's written response to the HMIF would be used to inform the HMBP update, which must be submitted to the County as part of this use permit update.

Staff has included recommended conditions of approval that would limit changes in the use of hazardous materials, require a new business to submit a chemical inventory to seek compliance if the existing use is discontinued, and address violations of other agencies in order to protect the health and safety of the public.

Agency Review

The Menlo Park Fire Protection District, City of Menlo Park Building Division, West Bay Sanitary District, and San Mateo County Environmental Health Services Division were contacted regarding the proposed use and storage of hazardous materials on the project site. Their correspondence has been included as Attachment G. Each entity found the proposal to be in compliance with all applicable standards. Although the subject parcel is located in proximity to residences and schools, there would be no unique requirements for the proposed use, based on the specific types and amounts of chemicals that are proposed.

Correspondence

Staff has not received any correspondence on this project.

Conclusion

Staff believes that the proposed use and quantities of hazardous materials would be compatible and consistent with other uses in this area. The Hazardous Materials Business Information Form and chemical inventory have been reviewed and approved by the relevant agencies, and include a discussion of the applicant's training plan and protection measures in the event of an emergency. The proposed use permit would allow an existing business to continue to expand its operations within Menlo Park. Staff recommends that the Planning Commission approve the proposed project.

ENVIRONMENTAL REVIEW

The project is categorically exempt under Class 1 (Section 15301, "Existing Facilities") of the current California Environmental Quality Act (CEQA) Guidelines.

RECOMMENDATION

- 1. Make a finding that the project is categorically exempt under Class 1 (Section 15301, "Existing Facilities") of the current CEQA Guidelines.
- 2. Make findings, as per Section 16.82.030 of the Zoning Ordinance pertaining to the granting of use permits, that the proposed use will not be detrimental to the health,

safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use, and will not be detrimental to property and improvements in the neighborhood or the general welfare of the City.

- 3. Approve the use permit subject to the following *standard* conditions:
 - a. Development of the project shall be substantially in conformance with the plans provided by DES Architects/Engineers, consisting of six plan sheets, dated received March 19, 2015, and approved by the Planning Commission on April 6, 2015 except as modified by the conditions contained herein, subject to review and approval of the Planning Division.
 - b. Prior to building permit issuance, the applicant shall comply with all sanitary district, Menlo Park Fire Protection District, San Mateo County Environmental Health Division, and utility companies regulations and submit the appropriate permit applications that are directly applicable to the project.
 - c. Prior to building permit issuance, the applicant shall comply with all requirements of the Building Division, Engineering Division, and Transportation Division that are directly applicable to the project.
 - d. If there is an increase in the quantity of hazardous materials on the project site, a change in the location of the storage of the hazardous materials, or the use of additional hazardous materials after this use permit is granted, the applicant shall apply for a revision to the use permit.
 - e. Any citation or notification of violation by the Menlo Park Fire Protection District, San Mateo County Environmental Health Services Division, West Bay Sanitary District, Menlo Park Building Division or other agency having responsibility to assure public health and safety for the use of hazardous materials will be grounds for considering revocation of the use permit.
 - f. If the business discontinues operations at the premises, the use permit for hazardous materials shall expire unless a new business submits a new hazardous materials business plan to the Planning Division for review by the applicable agencies to determine whether the new hazardous materials business plan is in substantial compliance with the use permit.

Report prepared by: *Kyle Perata Associate Planner*

Report reviewed by: Thomas Rogers Senior Planner

PUBLIC NOTICE & APPEAL PERIOD

Public notification consisted of publishing a legal notice in the local newspaper and notification by mail of owners and occupants within a 1,320-foot radius of the subject property. Planning Commission action will be effective after 15 days unless the action is appealed to the City Council, in which case the outcome of the application shall be determined by the City Council.

ATTACHMENTS

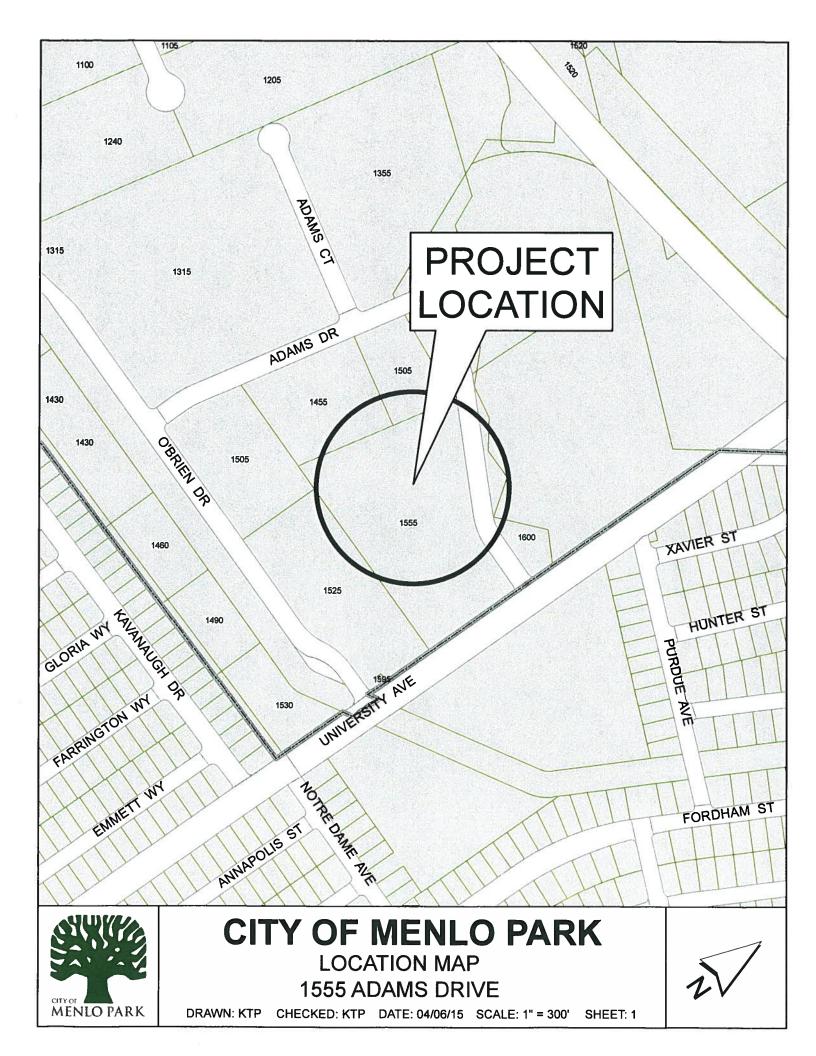
- A. Location Map
- B. Project Plans
- C. Project Description Letter
- D. Hazardous Materials Information Form
- E. Chemical Inventory
- F. Chemical Comparison Matrix
- G. Hazardous Materials Agency Referral Forms:
 - Menlo Park Fire Protection District
 - San Mateo County Environmental Health Department
 - West Bay Sanitary District
 - Menlo Park Building Division

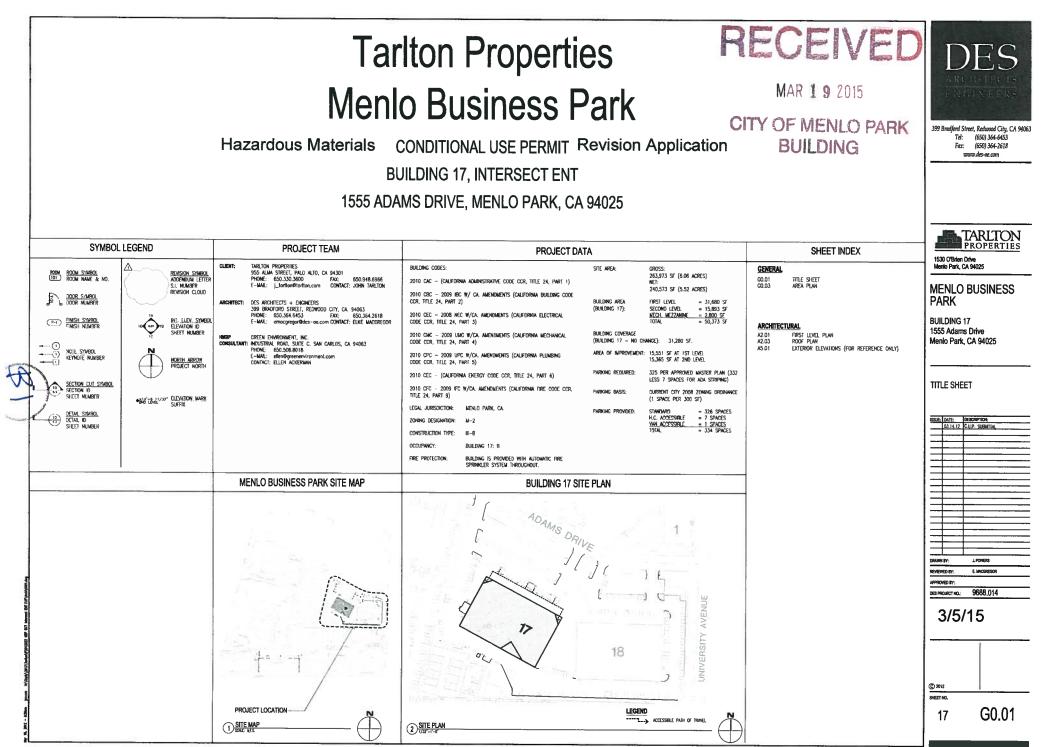
EXHIBITS TO BE PROVIDED AT MEETING

None

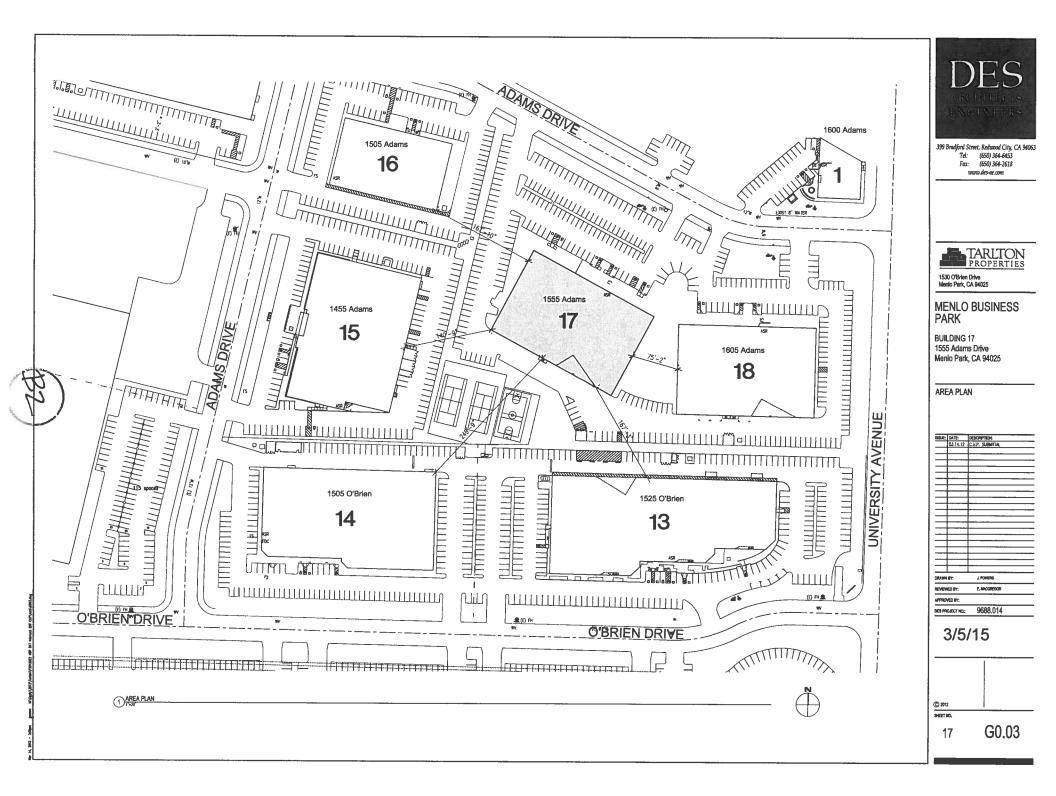
Note: Attached are reduced versions of maps and diagrams submitted by the applicant. The accuracy of the information in these drawings is the responsibility of the applicant, and verification of the accuracy by City Staff is not always possible. The original full-scale maps and drawings are available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

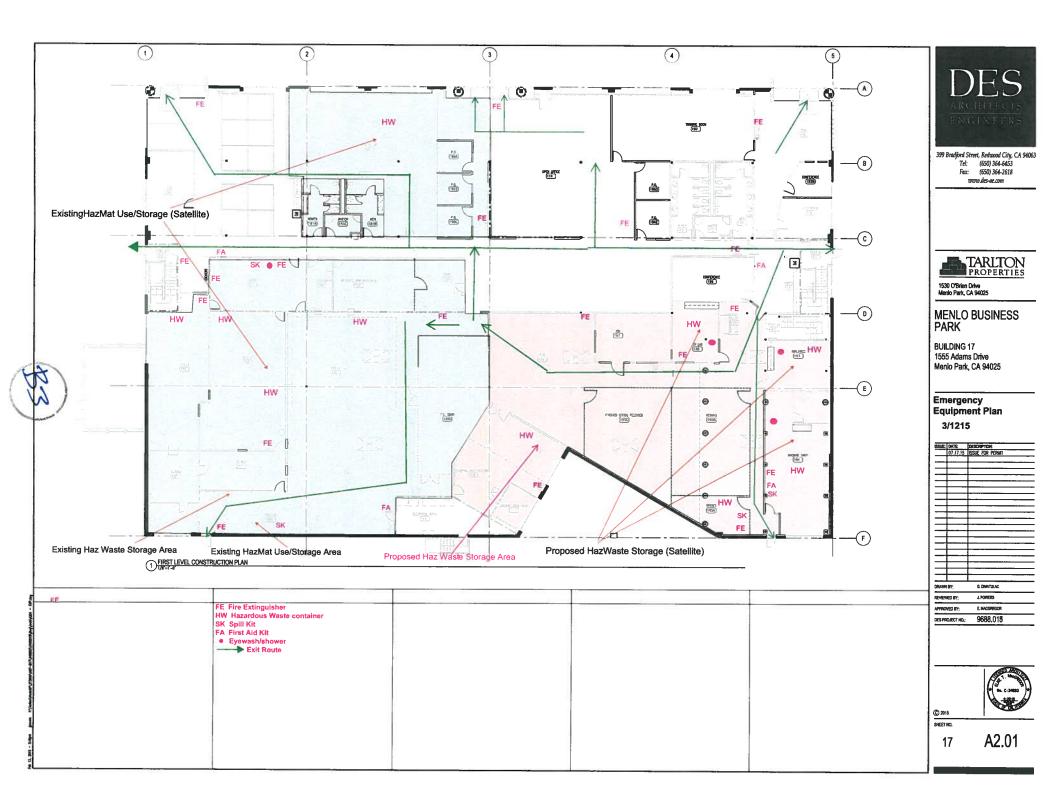
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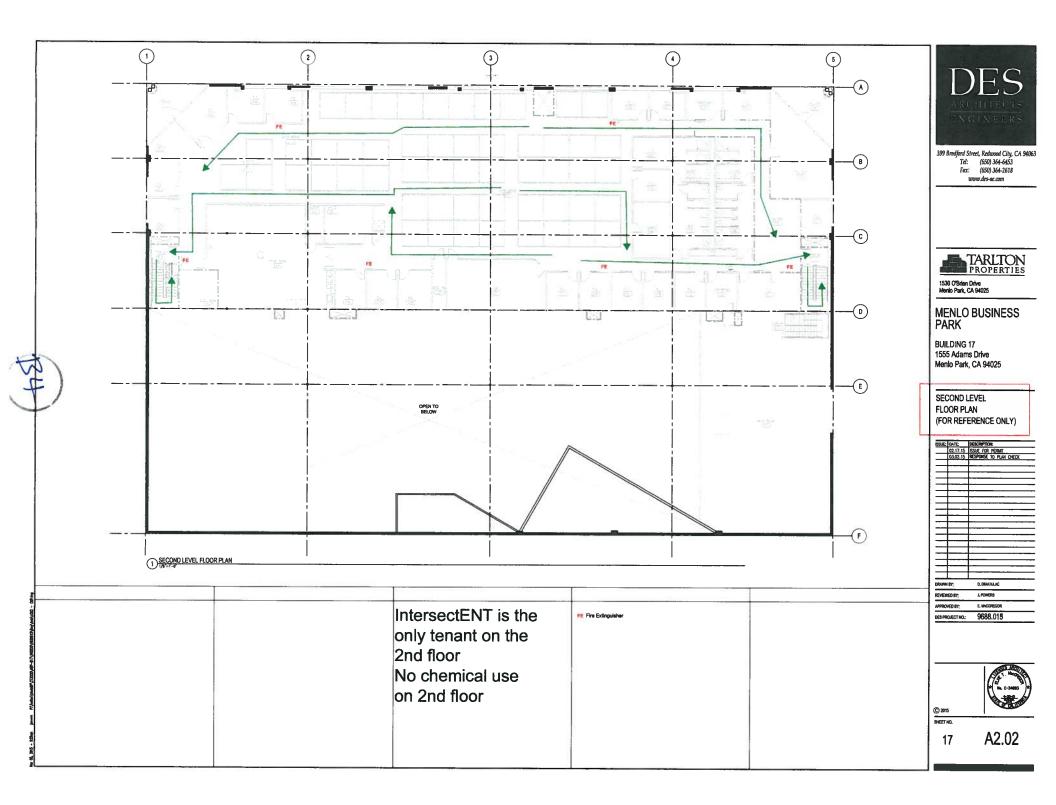




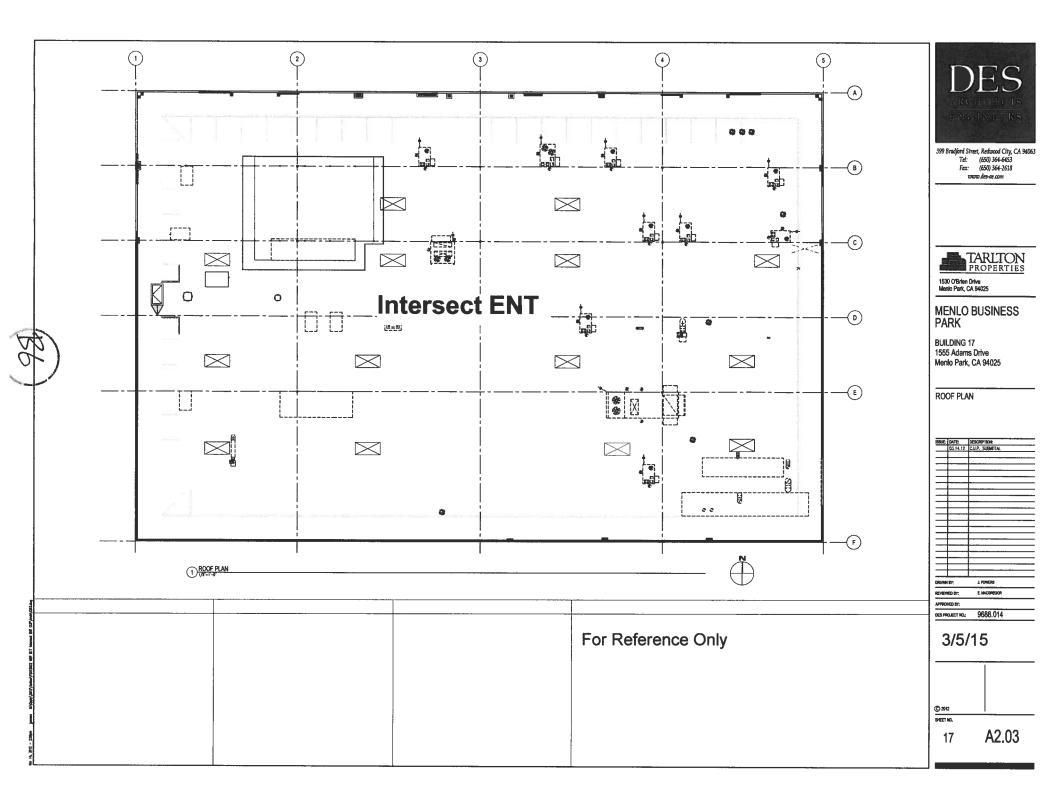
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RECEIVED

MAR 0 9 2015

CITY OF MENLO PARK

PLANNING

Business Summary and Discussion of Hazardous Materials Use March 2015

Intersect ENT, is an innovator in local drug delivery focused on advancing clinically proven therapy solutions that improve quality of life for ear, nose and throat patients.

The company's initial focus is a first-of-its-kind dissolvable steroid-releasing implant to treat patients with chronic sinusitis, a common condition that affects one out of seven adults in the U.S. and greatly impacts quality of life.

The PROPEL[™] Steroid-Releasing Implant received Pre-market Approval (PMA) from the U.S. Food and Drug Administration (FDA) in August 2011. PROPEL is now commercially available product available in the U.S.

The company holds more than twenty five issued U.S. patents, more than 85 patents, and pending applications worldwide.

The Menlo Park facility will serve as a R&D site for new products as well as production of currently commercialized devices. Some of the process steps for manufacture of the Intersect ENT devices use chemicals. These materials are stored in the manufacturing area as well as other areas of the company in appropriate designated storage cabinets. Waste is generated as a result of the manufacturing and R&D activities. Hazardous waste is collected in appropriate containers and disposed of off-site by a licensed contractor. Alternatively, small quantities of hazardous waste may be disposed of through the San Mateo County Very Small Quantity Generator Program.

The development cycle for the Intersect ENT products can range from 6 months to upwards of 2 years from concept to approval for commercialization. The company manufactures devices for evaluation, clinical studies and commercial sale.

The Company currently employs 228 full time employees, and expects to grow to approximately 300 full time employees within a year.

The Company has an air emissions permit for operations at the facility, Intersect ENT's permit number is Plant # 21321.

An industrial wastewater discharge permit was issued for the facility in July 2013. The SBSA issued a Low Volume Discharge Authorization File # 70-60.02 which will remain in effect for 5 years. The authorization will expire in July 2018 and at that time Intersect ENT will apply for a new authorization.



RECOMMENT DEVELOPMENT DEPARTMENT PLANNING DIVISION

MAR 0 9 2015

CITY OF MENLO PARK PLANNING

701 Laurel Street Menlo Park, CA 94025 phone: (650) 330-6702 fax: (650) 327-1653 planning@menlopark.org http://www.menlopark.org

HAZARDOUS MATERIALS INFORMATION FORM

In order to help inform City Staff and the external reviewing agencies, the Planning Division requires the submittal of this form, If the use permit application is approved, applicants are required to submit the necessary forms and obtain the necessary permits from the Menlo Park Fire Protection District, San Mateo County Environmental Health Services Division, West Bay Sanitary District, and other applicable agencies. Please complete this form and attach additional sheets as necessary.

 List the types of hazardous materials by California Fire Code (CFC) classifications. This list must be consistent with the proposed Hazardous Materials Inventory Statement (HMIS), sometimes referred to as a Chemical Inventory. (The HMIS is a separate submittal.)

Please see attached spreadsheet.

2. Describe how hazardous materials are handled, stored and monitored to prevent or minimize a spill or release from occurring (e.g., secondary containment, segregation of incompatibles, daily visual monitoring, and flammable storage cabinets).

Hazardous materials will be stored within flammable storage cabinets and segregated by hazard class. Storage areas for chemicals will be monitored by lab staff during normal business hours (visual). Weekly documented inspections of hazardous waste storage areas are performed.

3. Identify the largest container of chemical waste proposed to be stored at the site. Please identify whether the waste is liquid or solid form, and general safeguards that are used to reduce leaks and spills.

The largest waste container will be a 55-gallon drum, used to store solid wastes such as solvent-contaminated wipes. Each drum holds approximately 100 lb of waste. Liquid wastes will be collected in 5-gallon containers. All liquid wastes are secondarily contained, and a Spill Kit is stored on site.

4. Please explain how hazardous waste will be removed from the site (i.e. licensed haulers, or specially trained personnel).

Licensed waste haulers will be used.

- 5. Describe employee training as it pertains to the following:
 - a. Safe handling and management of hazardous materials or wastes;
 - b. Notification and evacuation of facility personnel and visitors;
 - c. Notification of local emergency responders and other agencies;
 d. Use and maintenance of emergency response equipment;

 - e. Implementation of emergency response procedures; and
 f. Underground Storage Tank (UST) monitoring and release response procedures.

Lab employees receive training on management of chemicals and waste. All employees receive training on what do do in case of emergencies, including chemical spills. The site's emergency response plan includes procedures to notify first responders and make reports to outside agencies. All employees receive emergency response training upon hire and annually thereafter. There are no USTs at the site.

Describe documentation and record keeping procedures for training activities.

All training is documented, and training records are kept by Document Control.

Describe procedures for notifying onsite emergency response personnel and outside agencies (e.g. Fire, Health, Sanitary Agency-Treatment Plant, Police, State Office of Emergency Services "OES") needed during hazardous materials emergencies.

The procedures for notifying emergency response personnel and outside agencies are contained in the site's written emergency response plan. This plan describes various emergency scenarios and specifically who to call and how to respond, internally and in conjunction with responding agencies.

8. Describe procedures for immediate inspection, isolation, and shutdown of equipment or systems that may be involved in a hazardous materials release or threatened release.

EHS/Facilities personnel are authorized to shut down utilities if a spill requires such action. Spills are contained using materials from Spill Kit, and if larger than internal capabilities, the outside emergency response contractor is called. If danger exists, MP FPD is also called.

9. Identify the nearest hospital or urgent care center expected to be used during an emergency.

Stanford Hospital, Palo Alto

v:\handouts\approved\hazardous materials information form.doc

IntersectENT Chemical Inventory

Chemical	Primary Hazard	Secondary Hazard	S,L,G	Initial Storage Qty	3 Year Projected Qty	Largest Container	Qty in Open Use
Methylene Chloride	Carcinogen	Irritant	L	1 L	0.5 gal	.25 gal	1 L
	(Tota	Carcinogens	0.5 gal		
Liquid Nitrogen	cryogen		cryo	720 L	590 gal	792 gai	NA
			Т	otal Cryogens	1,000 gal		
Acetic Acid (Glacial acetic acid)	Corrosive	Flam	L	4 L	4 gal	1 L	1 L
			To	al Corrosives	4 gal		
Acetone	Flam IB	Irritant	L	40 gal	120 gal	4 L	8 gal
Acetonitrile	Flam IB	Irritant	L	40 L	30 gal	4 L	8 L
Ethanol (Ethyl alcohol)	Flam IB	Irritant	L	1 L	1 gal	1 L	500ml
Isopropyl Alcohol	Flam IB	Irritant	L	36 gal	108 gal	20 L	5 gal
Methanol	Flam IB	Toxic	L	1 L	4 gal	1 L	1 L
Misc. Cleaners/solvents	Flam IB	Irritant	L	4 gal	8 gal	1 gal	1 gal
Solvent wastes	Flam IB	Irritant	L	20 gal	60 gal	5 gal	5 gal
			Total	Flammable IB	331 gal		
Methyl Sulfoxide (Dimethyl Sulfoxide)	Comb IIIA	Irritant	L	500 ml	2 L	500 ml	100 ml
Misc. Lubricants	Comb IIIA	Irritant	L	5 gal	15 gal	5 gal	1 gal
			Total Co	mbustible IIIA	15.5 gal		
Solvent-contaminated solid wastes	Misc	Irritant	s	200 lbs	600 lbs	100 lb (55 gailon (55 gailon	100 lb
Irritants and other materials not reg	ulated by Fire (Code not liste	d	RE	CEN	ED	

CITY OF MENLO PARK PLANNING

IntersectENT Comparison of Hazardous Materials Class Totals

			Approved	Proposed	Table 50	03.1.1(1)
Hazard Category	Class	Significant Changes	2012 CUP	2015	Stor w sprink ²	Max Storage
Carcinogens		none	0.5 gal	0.5 gal		
	11				240	48
Combustible Liquid (gal)	IIIA	methyl sulfoxide and lubricants	0	15.5 gal	660	1,32
	IIIB				26,400	52,80
Flammable Liquid (gal)	IA				60	12
	IB & IC	increase all solvents (e.g., acetone, IPA, acetonitrile)	48.5 gal	331 gal	240	48
Flammable Solid (lb)					250	50
Solvent-contaminated sol	id wastes	due to increase in production	100 lb	600 lb	NA	NA
	1				no limit	no limit
Oxidizer ¹	2		4		500	1,00
	3				20	4
	4				1	
Oxidizing gas (cf)					3,000	6,00
Inert gas (cf)					no limit	no limit
Flammable gas (cf)					2,000	4,00
Cryogenic inert (gal)		increased liquid nitrogen	380 gal	1,000 gal	no limit	no limit
Pyrophoric ¹					4	
Pyrophoric gases (cf)			<i>a</i>		50	10
	1				no limit	no limit
Water reactive ¹ (lb)	2				100	20
	3				5	1
Unstable reactive	3		2		10	20
Corrosive solids (lb)					10,000	20,00
Corrosive liquids (gal)		acetic acid	0	4 gal	1,000	2,00
Toxic ¹ (lb)					1,000	2,00
Highly Toxic ¹ (lb)					20	41

Notes: 1 - These classes are listed in pounds for both solids and liquids. Assume 10 lb/gal for liquids

2 - assumes building is sprinklered. For max storage, assumes rated cabinets in use.



MAR 0 9 2015

CITY OF MENLO PARK PLANNING



DEVELOPMENT SERVICES PLANNING DIVISION Contact: Kyle Perata 650-330-6721 or ktperata@menlopark.org 701 Laurel Street Menlo Park, CA 94025 PHONE (650) 330-6702 FAX (650) 327-1653

AGENCY REFERRAL FORM RETURN DUE DATE: Monday, March 23, 2015

DATE: March 9, 2015

TO: MENLO PARK FIRE PROTECTION DISTRICT Ron Keefer 170 Middlefield Road Menio Park, CA 94025

(650) 323-2407

Applicant	Intersect ENT
Applicant's Address	1555 Adams Drive, Menlo Park, CA 94025
Telephone/FAX	Tel: 650-508-8018 (Consultant)
Contact Person	Ellen Ackerman (EHS Consultant)
Business Name	Intersect ENT
Type of Business	Research and development and production of medical technologies for use in treating ear, nose, and throat patients. The company received a use permit for the use and storage of hazardous materials in June 2012 and is requesting a revision to that approval at this time to increase the chemicals and expand into the neighboring tenant suite.
Project Address	1555 Adams Drive, Menlo Park, CA 94025
	FOR OFFICE USE ONLY
□ The hazardous mate	erials listed are not of sufficient quantity to require approval by this agency.
The Fire District has and has found the p	reviewed the applicant's plans and use of listed hazardous materials/chemicals roposal to be in compliance with all applicable Fire Codes.

□ The Fire District has reviewed the applicant's plans and use of listed hazardous materials/chemicals outlined, and suggests conditions and mitigation measures to be made a part of the City's Use Permit approval (please list the suggested conditions and mitigation measures).

The applicant's proposal has been reviewed by the Menlo Park Fire Protection District by:

Signature/Date	Name/Title (printed)
3/19/2015	Jou JOHNSTON - FIRE MANSHAL
Comments:	



DEVELOPMENT SERVICES PLANNING DIVISION Contact: Kyle Perata 650-330- 6721 or ktperata@menlopark.org 701 Laurel Street Menlo Park, CA 94025 PHONE (650) 330-6702 FAX (650) 327-1653

AGENCY REFERRAL FORM RETURN DUE DATE: Monday, March 23, 2015

DATE: March 9,2015

TO: SAN MATEO COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION Dan Romf, Hazardous Materials Specialist San Mateo County Environmental Health

2000 Alameda de las Pulgas, Ste 100 San Mateo, CA 94403 (650) 372-6235

Applicant	Intersect ENT	
Applicant's Address	1555 Adams Drive, Menlo Park, CA 94025	
Telephone/FAX Tel: 650-508-8018 (Consultant)		
Contact Person Ellen Ackerman (EHS Consultant)		
Business Name Intersect ENT		
Type of Business Research and development and production of medical technologies for use in treating ear, nose, and throat patients. The company received a use permit for the use and storage of hazardous materials in June 2012 and is requesting a revision to that approval at this time to increase the chemicals and expand in the neighboring tenant suite.		
Project Address	1555 Adams Drive, Menlo Park, CA 94025	
	FOR OFFICE USE ONLY	
The hazardous materials listed are not of sufficient quantity to require approval by this agency.		
The Health Department has reviewed the applicant's plans and use of listed hazardous materials/chemicals and has found the proposal to be in compliance with all applicable Codes.		
 The Health Department has reviewed the applicant's plans and use of listed hazardous materials/chemicals outlined, and suggests conditions and mitigation measures to be made a part of the City's Use Permit approval (please list the suggested conditions and mitigation measures). The Health Department will inspect the facility once it is in operation to assure compliance with applicable laws and regulations. The applicant's proposal has been reviewed by the San Mateo County Environmental Health Services Division by: 		
Signature/Date		
Cullen	emaii=daculien@smcgov.org, c=US Date: 2015.03.12 09:24:21-07'00'	
Comments: Insur	e to update your HMBP and request a CUPA inspection	



DEVELOPMENT SERVICES PLANNING DIVISION

701 Laurel Street Menio Park, CA 94025 PHONE (650) 858-3400 FAX (650) 327-5497

AGENCY REFERRAL FORM

DATE: April 1st, 2015

TO: WEST BAY SANITARY DISTRICT 500 Laurel Street Menio Park, CA 94025 (650) 321-0384

Applicant	Intersect ENT
Applicant's Address	1555 Adams Drive, Menlo Park, CA 94025
Telephone/FAX	Tel: 650-508-8018 (Consultant, see below)
Contact Person	Ellen Ackerman of Green Environment (650- 508-8018)
Business Name	Intersect ENT
Type of Business	Research and development and production of medical technologies for use in treating ear, nose, and throat patients. The company received a use permit for the use and storage of hazardous materials in June 2012 and is requesting a revision to that approval at this time to increase the chemicals and expand into the neighboring tenant suite.
Project Address	1555 Adams Drive, Menlo Park, CA 94025

FOR OFFICE USE ONLY

- The hazardous materials listed are not of sufficient quantity to require approval by this agency.
- ✓ The Sanitary District has reviewed the applicant's proposed plans and use of listed hazardous materials/chemicals and has found that the proposal meets all applicable Code requirements.
- The Sanitary District has reviewed the applicant's plans and use of listed hazardous materials/chemicals outlined, and suggests conditions and mitigation measures to be made a part of the City's Use Permit approval (please list the suggested conditions and mitigation measures).

The applicant's proposal has been reviewed by the West Bay Sanitary District by: <u>Jed Beyer</u> Inspector

Signature/Date

4.1.15

Name/Title (printed) John Simonett. Regulatory

Comments:



DEVELOPMENT SERVICES PLANNING DIVISION Contact: Kyle Perata 650-330- 6721 or ktperata@menlopark.org 701 Laurel Street Menlo Park, CA 94025 PHONE (650) 330-6702 FAX (650) 327-1653

AGENCY REFERRAL FORM RETURN DUE DATE: Monday, March 23, 2015

DATE: March 9, 2015

TO: CITY OF MENLO PARK BUILDING DIVISION 701 Laurel Street Menlo Park, CA 94025

(650) 330-6704

Applicant's Address1555 Adams Drive, Menlo Park,Telephone/FAXTel: 650-508-8018 (Consultant)Contact PersonEllen Ackerman (EHS Consultant)Business NameIntersect ENT	t) production of medical technologies for use in ients. The company received a use permit for s materials in June 2012 and is requesting a		
Contact Person Ellen Ackerman (EHS Consultan	production of medical technologies for use in ients. The company received a use permit for s materials in June 2012 and is requesting a		
	production of medical technologies for use in ients. The company received a use permit for s materials in June 2012 and is requesting a		
Business Name Intersect ENT	ents. The company received a use permit for s materials in June 2012 and is requesting a		
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Type of BusinessResearch and development and production of medical technologies for use i treating ear, nose, and throat patients. The company received a use permit f the use and storage of hazardous materials in June 2012 and is requesting a revision to that approval at this time to increase the chemicals and expand in the neighboring tenant suite.			
Project Address 1555 Adams Drive, Menlo Park,	CA 94025		
FOR OFFICE USE	ONLY		
The hazardous materials listed are not of sufficient qual	ntity to require approval by this Division.		
The Building Division has reviewed the applicant's plans and listed hazardous materials/chemicals and has found that the proposal meets all applicable California Building Code requirements.			
The Building Division has reviewed the applicant's plans and use of listed hazardous materials/chemicals outlined, and suggests conditions and mitigation measures to be made a part of the City's Use Permit approval (please list the suggested conditions and mitigation measures).			
The applicant's proposal has been reviewed by the City of Menlo Park's Building Division by:			
Signature/Date Name/Title (printed)			
Kon la Munu 3/10/15 Ron LaFrance, Building Official			
Comments:			

64)



PLANNING COMMISSION STAFF REPORT

FOR THE PLANNING COMMISSION MEETING OF APRIL 6, 2015 AGENDA ITEM D3

LOCATION:	1035 O'Brien Drive	APPLICANT:	O'Brien Drive Portfolio, LLC for Avalanche Biotechnologies
EXISTING USE:	Research and Development, and Manufacturing	PROPERTY OWNER:	O'Brien Drive Portfolio, LLC
PROPOSED USE:	Research and Development	APPLICATION:	Use Permit Revision
ZONING:	M-2 (General Industrial I	District)	

PROPOSAL

The property owner, O'Brien Drive, LLC, is requesting a use permit revision to convert a mixed-use office/research and development (R&D) and manufacturing building to a predominately R&D use to allow for an existing tenant, Avalanche Biotechnologies, to expand to the entire building located in the M-2 (General Industrial) zoning district. The previous (2012) use permit approval limited the office/R&D square footage to 14,432 square feet (40 percent of the building). At this time, the applicant is proposing to modify the uses within the building to increase the square footage devoted to wet-lab R&D and supporting office uses. The building's land use would be generally considered R&D, but would contain ancillary manufacturing, warehouse, and office uses. The proposed project includes a request to modify the types and quantities of hazardous materials used and stored at the site. The Planning Commission approved a hazardous materials use permit in April 2014. All hazardous materials would be used and stored within the building. As part of the project, the applicant is requesting a use-based parking reduction based on the specific tenant operations and its Transportation Demand Management (TDM) plan, which is intended to reduce the potential increase in trips from the site. A total of 103 parking spaces would be provided, where 120 parking spaces would be required by the M-2 square-footage-based parking requirements. In addition, the applicant is requesting approval of a revision to the previously approved Below Market Rate (BMR) In Lieu Fee Agreement for this project.

BACKGROUND

The existing building encompasses 36,000 square feet of gross floor area (GFA), which represents a floor area ratio (FAR) of 55 percent. Prior to 2012, the site was occupied by a 36,632 square foot manufacturing and warehousing building, with ancillary office uses. In October 2012, the Planning Commission approved a use permit and architectural control request for the construction of the new office/R&D and manufacturing building. That approval contained square footage limits for office/R&D uses and warehouse/manufacturing uses within the building. The approval limited the total amount of office/R&D uses to 14,432 square feet or 40 percent of the building. The land use breakdown at the time was based on the property owner's best estimate of possible future tenants, using the owner's other buildings in the vicinity as a guide. In April 2014, Avalanche Biotechnologies, which is engaged in the R&D of medical devices, received approval of a use permit for the storage and use of hazardous materials, associated with its wet-lab R&D operations. Currently, Avalanche Biotechnologies occupies 14,256 square feet, or 39.6 percent of the building. Based on the current approval, any future tenants would be limited to warehouse/manufacturing uses. Therefore, the property owner, on behalf of Avalanche Biotechnologies, has applied for a use permit revision to modify the permitted uses within the building, which would allow for Avalanche Biotechnologies to utilize the entire building, thus converting the building to a predominately R&D use.

ANALYSIS

Site Location

The project site is located at the corner of O'Brien Drive and Kelly Court, and is addressed 1035 O'Brien Drive. The building was completed in January 2014 and the applicant, Avalanche Biotechnologies, is currently the only tenant in the building. For the purposes of this staff report, O'Brien Drive will be considered to be in a north to south orientation. The immediately adjacent parcels to the north of the subject site, along O'Brien Drive are also part of the M-2 zoning district, and are occupied by a variety of warehouse and light manufacturing uses. The properties to the east and south of the subject site, along Kelly Court, are also located in M-2 zoning district and also contain warehouse and light manufacturing uses. The parcels to the west of the subject site, along O'Brien Drive are located in the M-2 zoning district and contain warehouse and light manufacturing uses.

Parcels along the west side of O'Brien Drive border properties within the City of East Palo Alto, which contain single family residences. The Girls Club of the Mid-Peninsula, which is located within the City of Menlo Park but accessed from Ralmar Avenue in East Palo Alto, is located approximately 850 feet to the southwest of the subject site. Green Oaks Academy, a K-4th grade public school in the Ravenswood School District, is located at the end of Ralmar Avenue in East Palo Alto, approximately 980 feet from the subject site. In addition, a preschool (Casa Dei Bambini) is located at 1215 O'Brien Drive, approximately 525 feet from the project site, and a private high school (Mid-Peninsula High School) is located approximately 400 feet to the northeast of the subject site, along Willow Road. The project site and surrounding properties are located in a Federal Emergency Management Agency (FEMA) flood zone.

Project Description

Avalanche Biotechnologies is developing technologies and products for sustained delivery of therapeutic proteins to the eye to treat wet age-related macular degeneration (AMD), as well as other retinal disorders, such as diabetic retinopathy, retinal degeneration, and glaucoma. The company relocated from San Francisco to Menlo Park in 2014. The facility at 1035 O'Brien Drive is the company's corporate headquarters and R&D facility.

At this time, Avalanche Biotechnologies desires to expand to the entire building. The existing building was anticipated to have up to four tenants, and the original approval contained a mix of office/R&D and manufacturing uses, which represented the typical land use breakdown of the property owner's other buildings in the Menlo Business Park and O'Brien Drive areas. Since the previous approval specifically limited office/R&D square footage to 14,432 square feet, in order for Avalanche to expand to the entire building, a use permit revision is required. The requested conversion would result in a building composed of predominately non-office uses, such as wet-lab R&D facilities and good manufacturing practice (GMP) lab areas on the ground floor with ancillary offices to support the research and manufacturing operations. The second floor would be primarily office space, for the administrative and executive operations of the business. Based on the specific operations of the tenant, staff believes the land use classification of R&D is appropriate for the project. No exterior modifications to the building are proposed at this time; however, the applicant is proposing to modify the parking lot to increase the number of striped parking spaces. The project description letter is included as Attachment C and describes the project proposal in more detail.

Trip Generation and Parking Demand

The applicant submitted a trip generation analysis as part of the proposed project. According to the information provided by the applicant, the conversion to an all R&D facility would result in an increase in 110 total daily trips from the site, 12 net new AM peak hour trips and eight net new PM peak hour trips. The Transportation Division has reviewed the trip generation analysis and determined that the projected trips would not require a Transportation Impact Analysis (TIA).

Regardless, the applicant has submitted a transportation demand management (TDM) plan to further reduce the net increase in daily and peak hour trips from the site. The TDM plan and trip generation analysis is included in Attachment D. The TDM plan is anticipated to include bike storage and shower facilities on site, a Commute Assistance Center, expanded shuttle service (to Caltrain and BART), subsidized transit passes, preferential carpool parking, and a guaranteed ride home program. The Transportation Division has also reviewed the TDM plan to confirm the assumptions used to calculate the trip credits and effectiveness of the proposed measures. Staff has added condition of approval 4.a. requiring the applicant to provide an annual report to the City on the general effectiveness of the TDM program in reducing trips to and from the site.

The subject site currently has 77 parking spaces, where 120 spaces would be required based on the Zoning Ordinance square footage requirements. The reduction was approved using the City's use-based guidelines as part of the initial use permit and architectural control for the construction of the building. For warehouse uses, the use-based guidelines suggest a parking ratio of one space per 1,000 square feet of gross floor area versus 3.33 spaces per 1,000 square feet, and for office use, one space per 300 square feet of gross floor area, which is consistent with the M-2 district requirement. At this time, the applicant is requesting to increase the existing parking onsite to 103 spaces. For reference, 103 spaces is equal to a ratio of one space for approximately every 350 square feet of gross floor area, as the new parking would be located on a previously paved surface, left open for possible loading and storage activities associated with a warehouse tenant. Since the specific operations of the tenant are now known, this open area at the rear of the building is no longer necessary, allowing it to be converted to additional parking spaces.

The applicant believes that the increase in 26 spaces would adequately serve the anticipated demand based on the projected employee growth for the company and its commitment to the site's TDM plan. The applicant states that Avalanche's operations result in low employee density, since employees would have devoted lab space as well as personal office cubicles. The ratio of one space for every 300 square feet of gross floor area is appropriate for general office uses (and is also the general requirement for the M-2 district), per the City's use based parking guidelines. Avalanche is a R&D company that utilizes portions of the building for wet lab R&D and small scale manufacturing. These tenant specific operations would result in fewer employees per square foot, since employees working in the lab would also have dedicated office space, resulting in a less dense employee distribution within the building. Therefore, the parking ratio of one space per 350 square feet of gross floor area is appropriate. In addition, Avalanche has a slow growth plan for the site, along with a robust TDM plan (Attachment D), which is anticipated to reduce trips, specifically peak hour trips, to and from the subject site, and subsequently reduce the parking demand at the site. Staff believes the application of the tenant specific parking ratio is appropriate for the proposed project given the use of the building as a mixed use office/R&D building, containing wet lab R&D and small scale manufacturing areas.

Below Market Rate (BMR) Housing Requirement

Per the Zoning Ordinance, commercial projects inclusive of 10,000 square feet or more are subject to the BMR requirements, which include different requirements for uses designated as Group A (Office/R&D) and Group B (all other uses). Since the existing building is 36,000 square feet in size, the project is subject to BMR requirements. Although the proposal is not increasing the total square footage at the site, it is increasing the amount of square footage in Group A (Office/R&D). As part of the previous use permit and architectural control to construct the building, the applicant received approval of a BMR In-Lieu Fee Agreement, which was reviewed and recommended by the Housing Commission for approval by the Planning Commission. The previous BMR in-lieu fee was \$53,978.74, which included a credit for the previous

36,632 square foot manufacturing building with ancillary offices. The applicant subsequently paid the BMR in-lieu fee based on the approved land use breakdown of the building, prior to building permit issuance.

At this time, the applicant is requesting a revision to the previously approved BMR In-Lieu Fee Agreement to increase the square footage devoted to Group A uses (Office/R&D) within the building. Consistent with the previous project's BMR Ordinance requirements, the applicant proposes to pay a commercial linkage fee since residential development is not permitted at the site, the applicant does not own any sites in the city that are available and feasible for construction of BMR units to satisfy the requirement, and the Housing Commission and Planning Commission previously approved a BMR In-Lieu Fee Agreement for the project site. Staff informed the Housing Commission via email of the applicant's requested revision to the approved BMR in lieu fee agreement.

The current in-lieu rate for office/R&D (Group A) uses is \$15.19 per square foot and \$8.24 per square foot for all other commercial (Group B) uses. The rate is adjusted annually on July 1 and the applicable fee for the project will be based upon the amount of square footage within Group A and Group B, as well as the rate that is in effect at time of payment. The in-lieu fee is required to be paid prior to building permit issuance. The estimated net new BMR in-lieu fee for the proposed project is \$149,897.60, based upon credit for the existing 21,568 square feet of manufacturing/warehousing uses within the building. If the use permit is approved by the Planning Commission, the applicant would pay the additional BMR in-lieu fee prior to building permit issuance, and the total in-lieu fees paid for the overall project would be \$203,876.34. The overall total in-lieu fee includes the previous in-lieu fee and the additional fee for the conversion of the remaining manufacturing space (21,568 square feet) to office/R&D uses. The draft BMR In-Lieu Fee Agreement is included in Attachment E.

Proposed Hazardous Materials

As part of the proposed expansion, Avalanche anticipates modifying the types and quantities of hazardous materials used and stored on-site. Proposed hazardous materials include carcinogens, combustible liquids, corrosives, inert cryogens, flammable liquids, highly toxics, non-flammable gases, oxidizing gases, toxics, and water reactives. A complete list of the types of chemicals is included in Attachment G. The project plans, included as Attachment B, provide the locations of chemical use and storage, and hazardous waste storage. In addition, the plans identify the location of safety equipment, such as fire extinguishers, first aid kits, eyewash stations/showers, spill kits, and exit pathways. All hazardous materials would be used and stored inside of the building. The applicant provided a chemical comparison matrix (Attachment H) documenting the changes between the approved 2014 chemical inventory and the proposed chemical inventory, summarized by hazard class.

The Hazardous Materials Information Form (HMIF), which was recently developed by the Planning Division is included in Attachment F. The HMIF replaces the need for applicants to complete the Hazardous Materials Business Plan (HMBP) and old County of San Mateo narrative HMBP during this phase of review. The applicant is still required to complete the HMBP, as applicable, and submit to the County prior to using and

storing hazardous materials, or in this case modifying the use and storage types and quantities. The HMIF includes a description of how hazardous materials are stored and handled on-site, which includes the storage of hazardous materials within fire-rated storage cabinets, segregated by hazard class. The applicant indicates that storage areas would be monitored by lab staff and documented inspections would be performed. The largest waste container would be a 30-gallon container, used occasionally. Licensed contractors are intended to be used to haul off and dispose of the hazardous waste. The HMIF includes a discussion of the applicant's intended training plan, which encompasses the handling of hazardous materials and waste, as well as how to respond in case of an emergency. The applicant indicates that the procedures for notifying emergency response personnel and outside agencies are kept in the site's emergency response plan. The applicant's written response to the HMIF would be used to inform the HMBP update, which must be submitted to the County as part of this use permit update.

Staff has included recommended conditions of approval that would limit changes in the use of hazardous materials, require a new business to submit a chemical inventory to seek compliance if the existing use is discontinued, and address violations of other agencies in order to protect the health and safety of the public.

Agency Review

The Menlo Park Fire Protection District, City of Menlo Park Building Division, West Bay Sanitary District, and San Mateo County Environmental Health Services Division were contacted regarding the proposed use and storage of hazardous materials on the project site. Their correspondence has been included as Attachment I. Each entity found the proposal to be in compliance with all applicable standards. Although the subject parcel is located in proximity to residences and schools, there would be no unique requirements for the proposed use, based on the specific types and amounts of chemicals that are proposed.

Correspondence

Staff has not received any correspondence on this project.

Conclusion

The proposed conversion of the building from a mix of office/R&D and warehouse/manufacturing to a predominately R&D use would allow an existing business to expand and continue operating within Menlo Park. Avalanche is a R&D company engaged in wet lab R&D and manufacturing (small scale), with supporting offices including administrative and executive staff. The proposed use of the building as an R&D facility is consistent with the broader M-2 area. The property owner and applicant have proposed a TDM plan to reduce trips to and from the site. Staff believes the proposed 103 parking spaces are sufficient given the specific operations of the tenant and its TDM plan. Staff believes that the proposed use and quantities of hazardous materials would be compatible and consistent with other uses in this area. The Hazardous Materials Business Information Form and chemical inventory have been

reviewed and approved by the relevant agencies, and includes a discussion of the applicant's training plan and protection measures in the event of an emergency. The proposed revision to the previously approved BMR In Lieu Fee Agreement is consistent with the previous agreement. Staff recommends that the Planning Commission approve the proposed project.

ENVIRONMENTAL REVIEW

The applicant submitted a trip generation analysis for the proposed project, prepared by Kimley Horn. Due to the scale of the 2012 use permit and architectural control request, the City's Transportation Division prepared a trip generation analysis, which determined that trips associated with the previous project would be less than significant at nearby intersections. The analysis for the proposed project concluded that the proposed project would result in a net increase of 12 trips in the AM peak hour, and a net increase of eight trips in the PM peak hour. The proposed project is also anticipated to generate 110 additional trips during the day than the existing use. Given that the net amount of trips generated in the AM peak hour would only increase by 12 trips, the proposed project would not be equivalent to a new 10,000 square foot office building and as such, a TIA would not be required. The project site is within the city limits and is less than five acres in size. Additionally, the proposed use is consistent with the M-2 (General Industrial) zoning district and Limited Industry General Plan Land Use Designation. The site was recently redeveloped and the previous use was an industrial building, with limited landscaping, and therefore, no sensitive habitat or endangered species would be affected by the proposed project. The recently redeveloped building was designed to meet the water quality requirements of the Engineering Division and the site operations do not generate significant levels of noise. Given the site's location, it can be adequately served by all existing utilities. As such, the proposed project is categorically exempt under Class 32 (Section 15332, "In-Fill Development Projects") of the current California Environmental Quality Act (CEQA) Guidelines.

RECOMMENDATION

- Make a finding that the project is categorically exempt under Class 32 (Section 15332, "In-Fill Development Projects") of the current California Environmental Quality Act (CEQA) Guidelines.
- 2. Make findings, as per Section 16.82.030 of the Zoning Ordinance pertaining to the granting of use permits, that the proposed use will not be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use, and will not be detrimental to property and improvements in the neighborhood or the general welfare of the City.
- 3. Approve the use permit subject to the following *standard* conditions:
 - a. Development of the project shall be substantially in conformance with the plans provided by DES Architects/Engineers, consisting of 10 plan sheets, dated received March 25, 2015, and approved by the Planning Commission

on April 6, 2015 except as modified by the conditions contained herein, subject to review and approval of the Planning Division.

- b. Prior to building permit issuance, the applicant shall comply with all sanitary district, Menlo Park Fire Protection District, San Mateo County Environmental Health Division, and utility companies regulations and submit the appropriate permit applications that are directly applicable to the project.
- c. Prior to building permit issuance, the applicant shall comply with all requirements of the Building Division, Engineering Division, and Transportation Division that are directly applicable to the project.
- d. If there is an increase in the quantity of hazardous materials on the project site, a change in the location of the storage of the hazardous materials, or the use of additional hazardous materials after this use permit is granted, the applicant shall apply for a revision to the use permit.
- e. Any citation or notification of violation by the Menlo Park Fire Protection District, San Mateo County Environmental Health Services Division, West Bay Sanitary District, Menlo Park Building Division or other agency having responsibility to assure public health and safety for the use of hazardous materials will be grounds for considering revocation of the use permit.
- f. If the business discontinues operations at the premises, the use permit for hazardous materials shall expire unless a new business submits a new hazardous materials business plan to the Planning Division for review by the applicable agencies to determine whether the new hazardous materials business plan is in substantial compliance with the use permit.
- 4. Approve the use permit subject to the following *project-specific* conditions:
 - a. The property owner shall retain a qualified transportation consulting firm to monitor the trips to and from the project site one year from commencement of operations within the subject building and shall submit a memorandum/report to the City reporting on the results of such monitoring for review by the City to determine the effectiveness of the TDM plan (Attachment D). This report shall be submitted annually to the City subject to review by the Planning and Transportation Divisions.
 - a. Prior to or concurrent with the submittal of a complete building permit application, the applicant shall execute the review to the Below Market Rate (BMR) Housing In Lieu Fee Agreement. Prior to building permit issuance, the applicant shall pay the in lieu fee of approximately \$149,897.60 in accordance with the BMR Housing Agreement (as of July 1, 2014). The BMR fee rate is subject to change annually on July 1 and the final fee will be calculated at the time of fee payment.

Report prepared by: *Kyle Perata Associate Planner*

Report reviewed by: Thomas Rogers Senior Planner

PUBLIC NOTICE & APPEAL PERIOD

Public notification consisted of publishing a legal notice in the local newspaper and notification by mail of owners and occupants within a 1,320-foot radius of the subject property. Planning Commission action will be effective after 15 days unless the action is appealed to the City Council, in which case the outcome of the application shall be determined by the City Council.

ATTACHMENTS

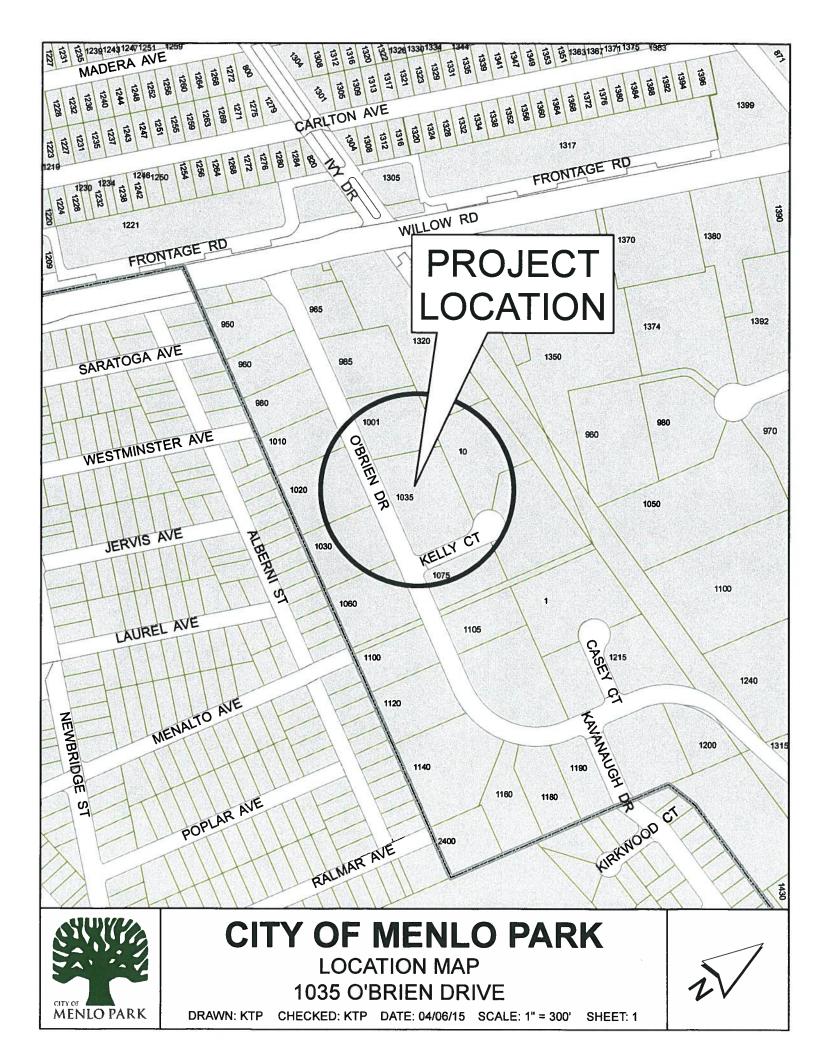
- A. Location Map
- B. Project Plans
- C. Project Description Letter
- D. Trip Generation and Transportation Demand Management (TDM) Program, prepared by Kimley Horn, dated March 24, 2015
- E. Draft BMR In Lieu Fee Agreement
- F. Hazardous Materials Information Form (HMIF)
- G. Hazardous Materials Inventory Statement (HMIS or Chemical Inventory)
- H. Chemical Inventory Comparison Matrix
- I. Hazardous Materials Agency Referral Forms:
 - Menlo Park Fire Protection District
 - San Mateo County Environmental Health Department
 - West Bay Sanitary District
 - Menlo Park Building Division

EXHIBITS TO BE PROVIDED AT MEETING

None

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

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RECEIVE

MAR 2 5 2015



USE PERMIT REVISION

- SHEET 1 COVER SHEET
- SHEET 2 DEMOLISHED ORIGINAL BUILDING USE PLANS
- SHEET 3 CURRENT BUILDING EXISTING / PROPOSED FLOOR PLANS
- SHEET 4 CURRENT BUILDING PROPOSED USE AREAS
- SHEET 5 CURRENT SITE PLAN
- SHEET 6 PROPOSED SITE PLAN

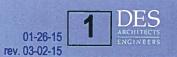
- SHEET 7 CURRENT AND PROPOSED CHEMICAL USE AREAS AND SAFETY EQUIPMENT PLAN
- SHEET 8 CURRENT BUILDING ELEVATIONS (FOR REFERENCE ONLY)
- SHEET 9 CURRENT BUILDING ELEVATIONS (FOR REFERENCE ONLY)
- SHEET 10 CURRENT ROOF PLAN (FOR REFERENCE ONLY)

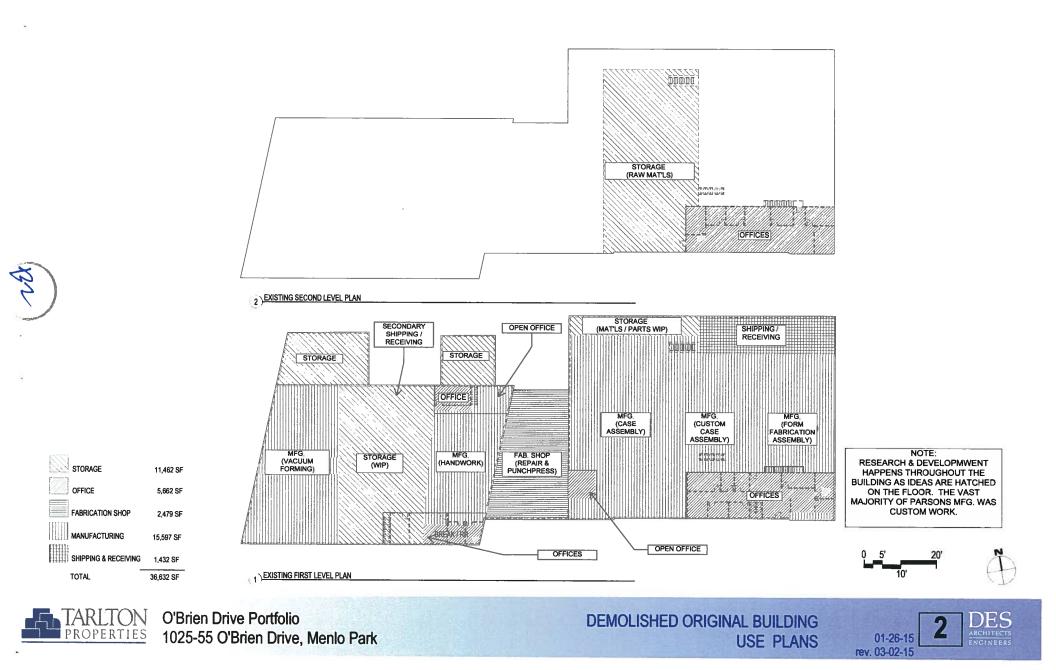


B

O'Brien Drive Portfolio 1035 O'Brien Drive, Menlo Park

COVER SHEET



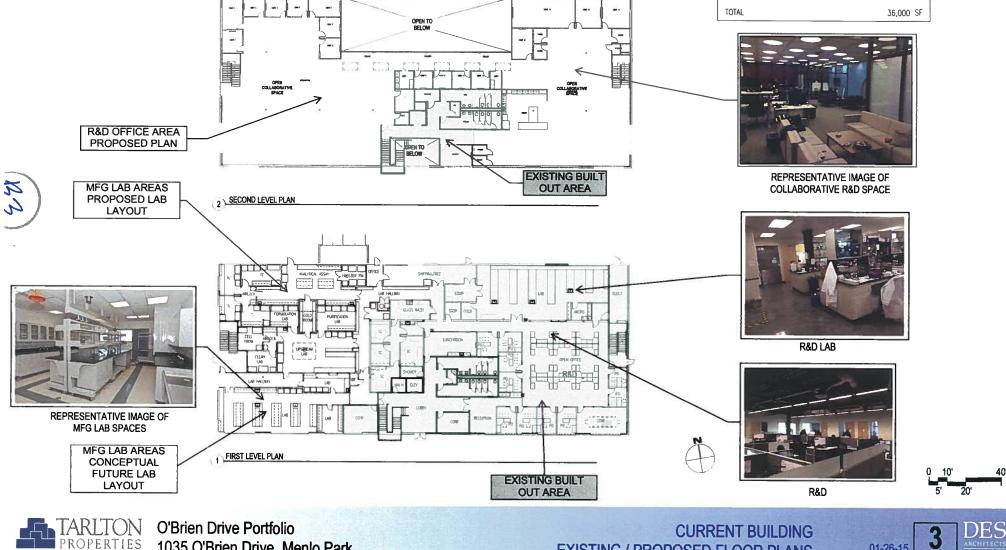


GROSS BUILDING USE AREAS

40'

01-26-15 rev. 03-02-15

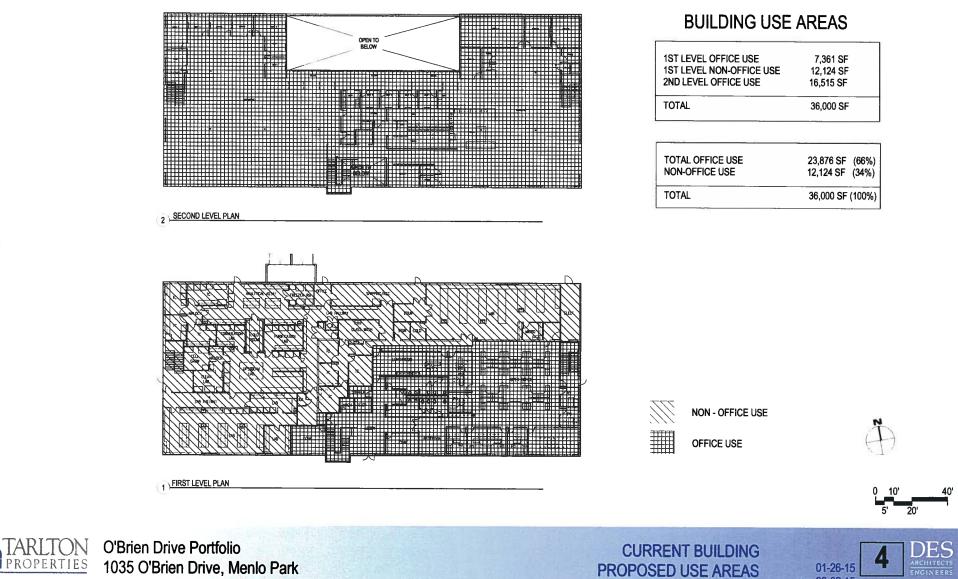
1 ST LEVEL AREA	19,485 SF
2ND LEVEL AREA	:16,515 SF
TOTAL	36,000 SI



PROPERTIES

1035 O'Brien Drive, Menlo Park

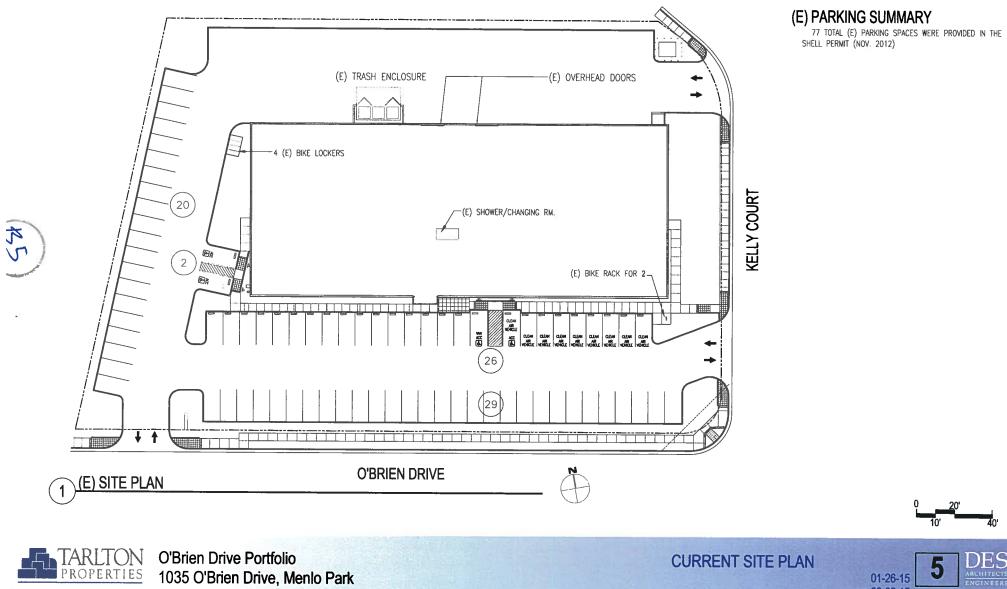
EXISTING / PROPOSED FLOOR PLANS



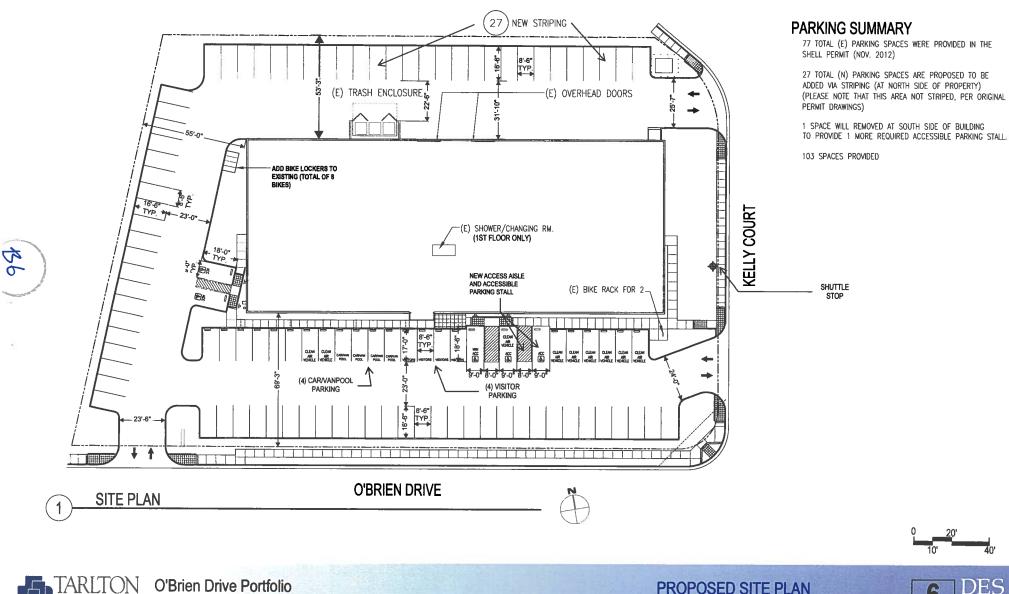
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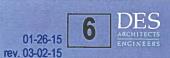


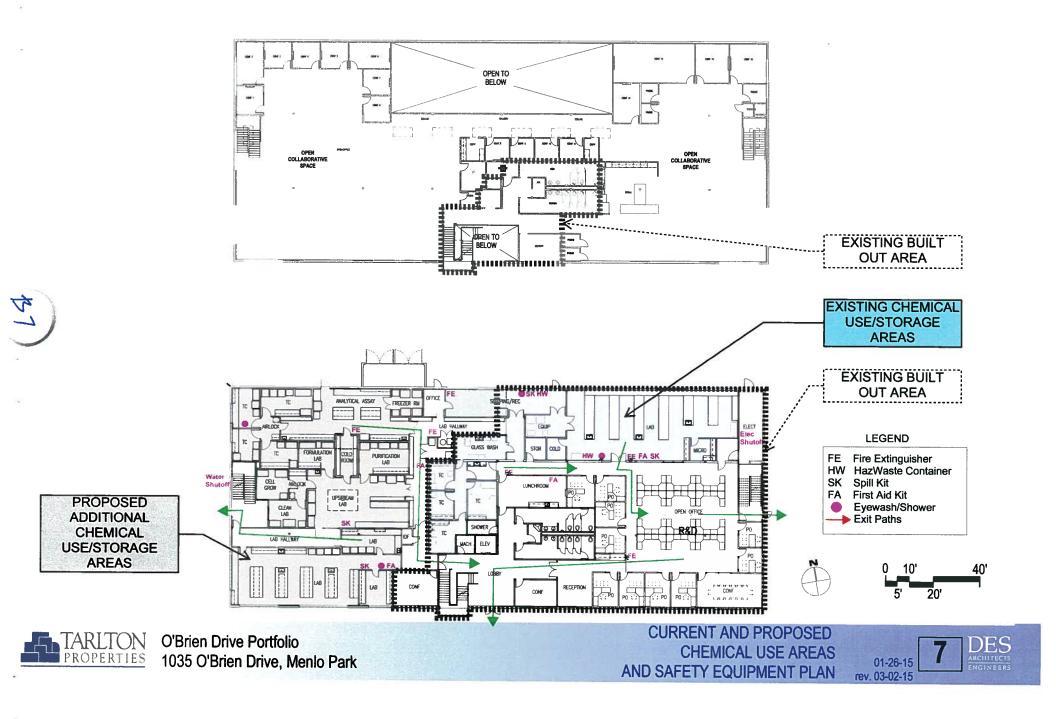
DES ARCHITECTS ENGINEERS 5 01-26-15 rev. 03-02-15

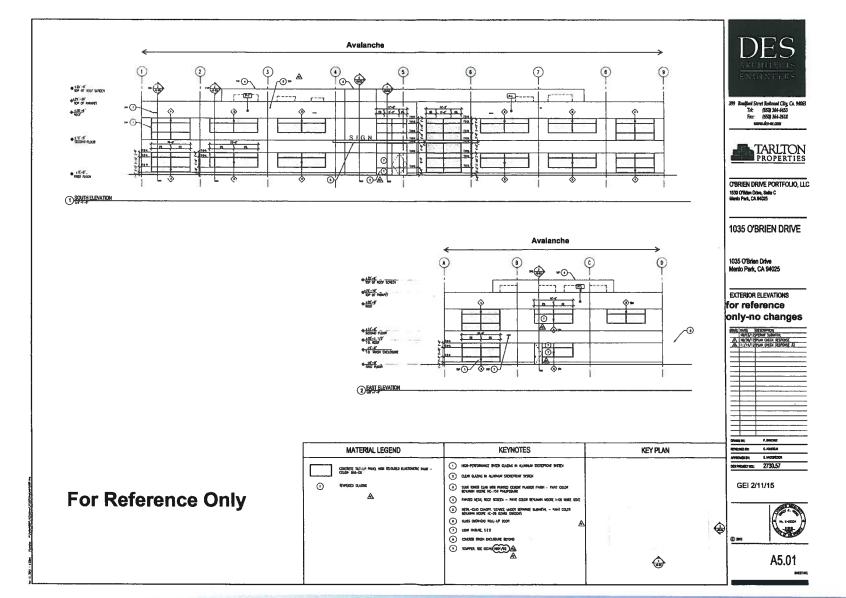


1035 O'Brien Drive, Menlo Park

PROPERTIES



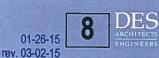




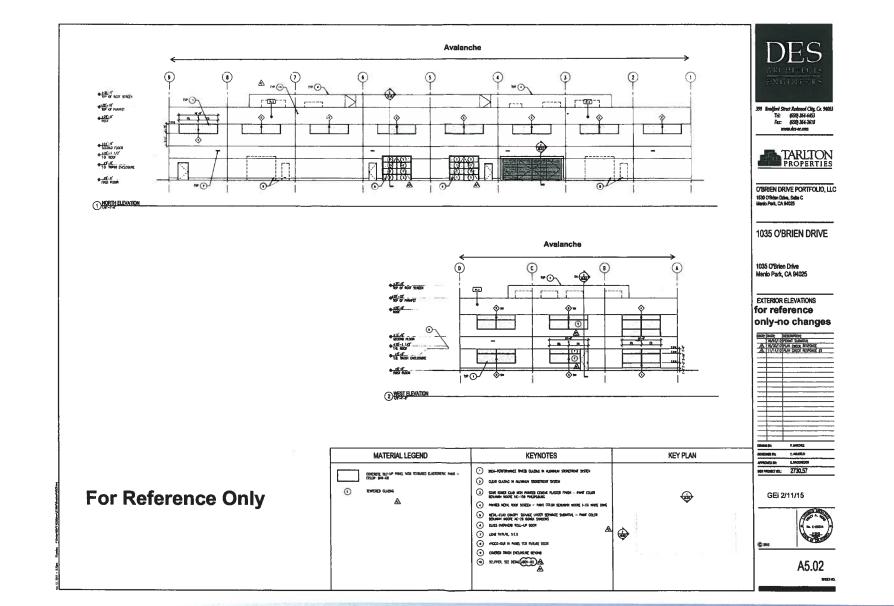


O'Brien Drive Portfolio 1035 O'Brien Drive, Menlo Park

CURRENT BLDG. ELEVATIONS (FOR REFERENCE ONLY)

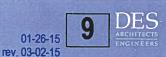


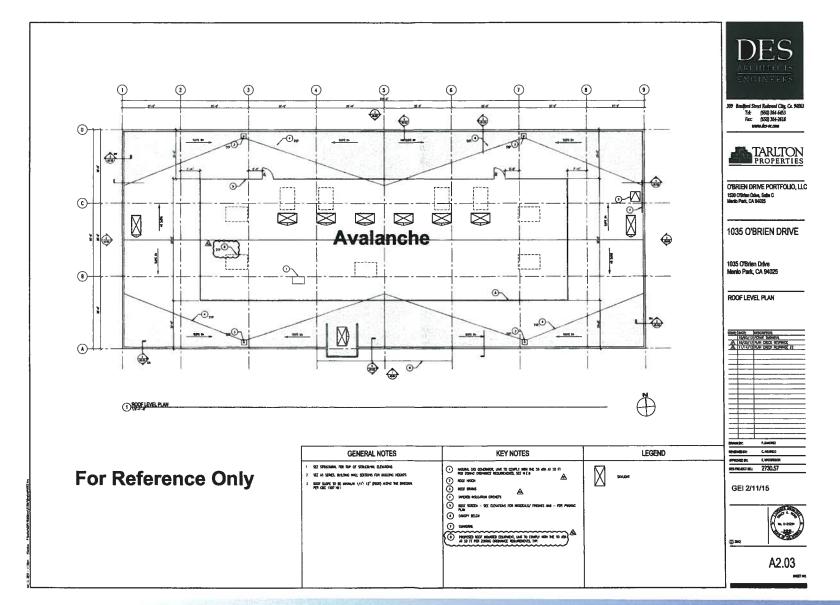
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O'Brien Drive Portfolio 1035 O'Brien Drive, Menlo Park







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O'Brien Drive Portfolio 1035 O'Brien Drive, Menlo Park

DES

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01-26-15 rev. 03-02-15

1035 O'Brien Drive Project Description

January 25, 2015 (rev. 3/2/15)

Background



In 2012, Tarlton Properties gained approval to rebuild 1025-1055 O'Brien Drive, Menlo Park a site with a lot area of 1.5 acres (65,486 sq. ft) in the M2 zone in the City of Menlo Park. At that time, the existing structures on site included two connected, one-story buildings with a mezzanine space in 1055 O'Brien Drive. These buildings were used as offices and warehouse/manufacturing facilities for Parsons Manufacturing. The firm made custom, thermoformed, plastic instrument cases. It had a total building area of 36,632 sq ft at 0.56 FAR. The existing parking provided 25 uncovered stalls on surface parking lots. There was minimal landscaping at the front entry and along the eastern property line, none of which was a sensitive habitat.

As approved in 2012, the1035 O'Brien project consisted of the demolition of the existing connected, one-story buildings at the 1025-1055 O'Brien Drive site and the construction of a new two-story core and shell tilt-up building for office/manufacturing use with the associated site improvements. The site is already adequately served by all required utilities and public services.

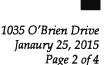
The new two-story core and shell building has a total of 36,000 sq. ft. and an FAR of 0.55. It is sited at a slightly higher elevation to meet FEMA requirements. A new entry lobby/stair tower, placed at the center of the southern elevation, is the key architectural element. Other exterior finishes of the new building include painted cement plaster finishes, high performance, tinted glazing with aluminum mullions, and a metal-clad canopy. Mechanical equipment is located within screened areas on the roof. This project was designed to enhance the commercial neighborhood image and complement the four other Tarlton buildings on this street.

Reallocation of Uses

Although the 1035 O'Brien building was designed to accommodate up to four tenant suites, a very successful biotechnology company, Avalanche Biotechnologies, has leased the entire facility. Avalanche was the initial tenant in one quarter of the space but is growing rapidly following a successful IPO. As a result, as a sole occupant, they will be building out the remaining interior to accommodate their needs for research and development. Since this firm is still seeking FDA approval for its initial product, its business activities are almost exclusively research and development related and are in support of this goal. The space needed for manufacturing, storage, meeting space, wet labs, tissue culture and tissue inventory is very dynamic and very challenging to describe or predict. No new square footage will be added to the building. A use designation as

Redwood City, California 94063

Tel 650-364-6453 Fax 650-364-2618



Research and Development for the building will allow the company to function properly and grow in ways that will enable it to meet its production needs.

One of Avalanche's market advantages is the intrinsic scalability of its manufacturing platform and processes. Avalanche's website describes its manufacturing and R&D processes this way:

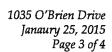
"Avalanche is a clinical-stage biotechnology company focused on discovering and developing novel gene therapies to transform the lives of patients with sight-threatening ophthalmic diseases. Using a next generation gene therapy platform, the Ocular BioFactory, the Company is developing products designed to provide long-term benefit or a functional cure by inducing a sustained expression of a therapeutic protein with a one-time administration in the eye.... Our Ocular BioFactory platform features two key proprietary components: a novel vector screening and optimization system referred to as directed evolution, and an industrialized manufacturing process."

This is a very different approach to both research and development and manufacturing than was prevalent on O'brien Drive or other portions of the M2 zone in the past fifty years. However, this proposed use is not unique in today's medical device/biomedical marketing niches. The floor plan configuration required by the tenant is made up of lab-related clean environment manufacturing, storage, shipping, wet labs and desk work areas used by the same individual (depending on the work performed during the workday), and general office for purely administrative purposes, such as HR and accounting.

The first floor will be more heavily GMP type activities, as the wet lab areas and the shipping/receiving are located there. The second floor will not have the wet lab components, but the work areas will be collaborative in their layout, such that research and development activities can be performed in self-directed work teams away from lab operations. There are no private offices or cubicles on the second floor. The only enclosed areas are for conferencing and private areas for telephoning.

Revised Hazardous Materials

As part of the R&D efforts, hazardous materials will be used in properly equipped chemistry labs, to make a variety of materials for testing and development of their clinical drug products. These materials are used in fume hoods or other appropriately exhausted space. Compressed gases such as oxygen and liquid nitrogen are used to facilitate cell growth and analysis. Solvents, including isopropyl alcohol, are used to



clean and prepare samples. Other chemicals are needed to further develop molecular biology techniques. Container sizes for most hazardous materials are one gallon or less for liquids and K-size for compressed gas cylinders.

Small amounts of non-clinical drug product will be made; high-volume or commercial manufacturing is not anticipated to be conducted at this site.

Use of hazardous materials (except for janitorial supplies) is restricted to lab areas on the first floor.

Chemicals are delivered by common carrier. Delivery frequency varies with the pace of research, but is not expected to exceed bi-weekly. Hazardous waste removal is conducted by a licensed hauler; removal is generally on a quarterly basis.

Air emissions and wastewater discharge permits are not required for the current operations.

Request for Additional Parking to Support Research and Development

It is our belief that 103 parking spaces are sufficient for this site due to this building being of single tenant occupancy which reduces the number of visitors and allows the tenant to manage the entire site. Similar to other biotech companies, Avalanche has a conservative staff growth plan and a low density operation which provides two workstation spaces per person for laboratory and desk work. The tenant's aggressive but realistic TDM plan will also reduce the number of vehicles which will need parking on site.

Given these considerations, we propose to stripe an already paved area at the rear of the property. This will result in the addition of 27 spaces to arrive at a gross total of 104 spaces. However, because of the increase, one additional accessible space will be required near the front door by building code. The addition of this accessible space requires an accessible path of travel unloading area, reducing the total number of spaces to 103.

Of the 103 spaces, five spaces will be striped for accessibility, four will be reserved near the front door as preferential parking spaces for car or van pools, four will be striped for visitors and eight spaces will be striped for Clean Air Vehicles. Four additional bike lockers will be stacked atop the four existing lockers, for a total bike storage capacity of 8 bicycles. In combination with the existing rack, a total of 10 parking spaces/lockers for bikes will be available.

1 .

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1035 O'Brien Drive Janaury 25, 2015 Page 4 of 4

Addition of a Transportation Demand Management Program

To alleviate concerns about potential transportation impacts from an all research and development designation, Tarlton Properties and Avalanche have developed a robust Transportation Demand Management Program (TDM). In addition to the existing bike storage and shower facilities already on site, Avalanche will provide a Commute Assistance Center and Tarlton will expand its existing Shuttle Service to nearby CalTrain and across the Bay to BART. Subsidized transit tickets (Go Pass for Caltrain) will also be provided. As stated above, the site will be updated for 4 additional bike lockers, and preferential carpool parking. Avalanche will be a member in the Alliance's Guaranteed Ride Home Program. Please refer to the Kimley Horn Memorandum dated January 21, 2015 regarding the details of the TDM program.

Summary

6 6

The result of this request for a realignment of use in combination with a realistic TDM program is that there are no net new trips to and from the site. Consistent with the policies of the Menlo Park General Plan, Avalanche Biotechnologies will be able to grow and thrive in Menlo Park, and the Willow Business Area of the City's M2 Zoning District will retain a global, revenue producing, biotechnology manufacturing company.

r.u

Kimley Horn

MEMORANDUM

To:	Ron Krietemeyer
	Tarlton Properties, Inc.
From:	Michael Mowery, P.E.
	Ben Huie, P.E.
Date:	March 24, 2015
Subject:	Transportation Demand Management (TDM) Program for 1035 O'Brien Drive

Kimley-Horn and Associates, Inc. (KHA) was retained by Tarlton Properties, Inc. to prepare a Transportation Demand Management (TDM) Program to aid in reducing the potential transportation impacts from the proposed project at 1035 O'Brien Drive in the City of Menlo Park. The proposed project will realign the previous building uses. The proposed uses for 1035 O'Brien Drive would consist of:

• 36,000 square feet of research and development center

The previous use for the project site in 2012 consisted of:

- 30,970 square feet of manufacturing
- 5,662 square feet of general office building

These changes in land use for 1035 O'Brien Drive will result in a change in peak hour trips generated from the project site.

PROJECT PEAK HOUR TRIPS

The number of project trips for the project site can be estimated using the industry standard Institute of Transportation Engineer's (ITE) *Trip Generation Manual*. This reference estimates project trips based on land use from survey data. Since the proposed project is not a new project, but updating an existing land use, trip rates were calculated for both the proposed use and the previous use. **Table 1** summarizes the trip generation assumed for the proposed use and the previous use. As shown in **Table 1**, the calculated trip rates would result in 110 additional daily trips, 12 additional AM peak hour trips, and 8 additional PM peak hour trips. No adjustments for trip reductions (e.g. pass-by trips or internal capture) were assumed in this calculation.

Although the number of peak hour trips generated by this proposed project is less than the 100 peak hour trips threshold specified by the City/County Association of Government (C/CAG) of San Mateo County for a traffic study, Tarlton Properties, Inc. would like to work with the City of Menlo Park to develop a Transportation Demand Management (TDM) Program to reduce the number of proposed project peak hour trips due to the existing traffic conditions at nearby intersections.

Kimley Worn

Trip Rate Time Trips Land Use Period In Out Total In Out Total Manufacturing (30.970 KSF) 59 1.91 1.91 3.82 59 118 Previous General Office (5.662 KSF) 5.515 5.515 11.03 32 32 64 **Total Previous Use Daily Trips** 91 182 91 Dailv **Research and Development** 4.06 4.06 8.11 146 146 292 Center (36.000 KSF) Proposed **Total Proposed Use Daily Trips** 146 146 292 **Net New Daily Trips** 55 55 110 Manufacturing (30.970 KSF) 5 23 0.57 0.16 0.73 18 Previous General Office (5.662 KSF) 1.37 0.19 1.56 8 1 9 **Total Previous Use AM Trips** 26 6 32 AM Research and Development Peak 1.01 0.21 1.22 7 37 44 Center (36.000 KSF) Proposed **Total Proposed Use AM Trips** 7 37 44 Net New AM Peak Trips 11 1 12 Manufacturing (30.970 KSF) 0.26 0.47 0.73 8 15 23 Previous General Office (5.662 KSF) 0.25 1.24 7 1.49 1 8 **Total Previous Use PM Trips** 9 22 31 PM **Research and Development** Peak 0.16 0.91 1.07 6 33 39 Center (36.000 KSF) Proposed **Total Proposed Use PM Trips** 6 33 39 **Net New PM Peak Trips** (3) 11 8

Table 1 – Trip Generation Summary

TRANSPORTATION DEMAND MANAGEMENT PROGRAM

The following summarizes an initial approach to the proposed TDM program for the proposed project at 1035 O'Brien Drive. It is assumed that the TDM program will be refined over time to adapt to changing transportation trends and to maximize the efficiency of the program. The TDM program is specifically designed to focus on incentives and rewards for employees to participate in the program rather than penalties for not participating.

POTENTIAL PROGRAM ELEMENTS

Tarlton Properties, Inc. should offer a combination of program elements to encourage employees to utilize alternative modes of transportation to driving alone. Potential program elements are listed below:

- Bike lockers/racks
- Showers/changing rooms
- Shuttle service
- Subsidized transit tickets for employees

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Page 2

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- Preferential carpool parking spaces
- Preferential vanpool parking spaces
- Vanpool program
- Commute assistance center
- Allowance program for bicyclists, walkers, and carpoolers
- Parking cash out program
- Compressed work week program
- Alternate hours workweek program
- Join the Alliance's guaranteed ride home program

These program elements are listed in the City of Menlo Park's *Transportation Demand Management Program Guidelines*. Additionally, the City/County Association of Governments of San Mateo County (C/CAG) has its own guidelines for a TDM program mentioned in the *Revised C/CAG Guideline for the Implementation of the Land Use Component of the Congestion Management Program*. Each of these documents summarizes the potential program measures, a description of each measure, and the trip credits associated with each measure.

PROPOSED PROGRAM ELEMENTS

Tarlton Properties, Inc. and the proposed tenant are both interested in working with the City to develop a practical TDM plan that can be both effective and provide the most value for all parties. After discussion with the City of Menlo Park and Tarlton Properties, Inc., a set of TDM measures were proposed for the 1035 O'Brien Drive site and is summarized in **Table 2**. It should be noted that the number of trip credits was determined from the City of Menlo Park's TDM Guidelines.

The following provides a brief description of each proposed TDM element:

- Bike Storage: Bike lockers are proposed to be located on the northwest portion of the
 property as shown in the proposed site plan. A total of eight bike lockers are proposed, with
 four bike lockers stacked on top of four more bike lockers. The bike lockers are furnished by
 the American Bicycle Security Company and provide a safe storage for bikes at work.
 Additionally, one bike rack is proposed for the southeast corner of the building as shown in
 the proposed site plan.
- Showers/Changing Rooms: An existing shower/changing room is located on the first floor of the building. The shower/changing room provides a dedicated facility for the cyclists and persons walking to work. This measure, combined with the bike lockers/racks, should provide employees with a great alternative for commuting to work.
- Guaranteed Ride Home Program: Tarton Properties, Inc. will also enroll its tenants in a Guaranteed Ride Home Program administered by the Peninsula Traffic Congestion Relief Alliance. The program provides employees a free taxi ride home in the case of an emergency. Employers will pay 25 percent of the taxi costs and the Peninsula Traffic Congestion Relief Alliance will pay the remaining 75 percent. There is no additional cost to join the program. This program provides a safety net for those carpooling, vanpooling, taking transit, walking to work, or bicycling to work to with an emergency.

Page 3

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Peak Hour Program Trip **TDM Measure** Number of Trips Credited Trip Credits Elements Credits¹ One credit per 3 bike **Bike Storage** 1/3 9 3 lockers/racks Two credits per 1 Showers/Changing Rooms 2 1 2 shower/changing room One trip credit for each round trip Shuttle service 1 40 40 seat on the shuttle Additional credit for combination with Additional one trip credit for each 1 40 40 Guaranteed Ride Home seat Program Subsidized transit tickets One trip credit for each transit 1 30 30 (Go Pass for Caltrain) pass provided Preferential carpool parking Two credits per 1 space reserved 2 4 8 Commute assistance center One peak hour trip credited for Transit brochure rack 1 1 1 each feature Computer kiosk connected One peak hour trip credited for 1 1 1 to Internet each feature One peak hour trip credited for Telephone 1 1 1 each feature One peak hour trip credited for Desk and chairs 1 1 1 each feature One credit for every two slots Join Alliance's guaranteed ride purchased in the program with home program Alliance²

Table 2 – Proposed TDM Measure Summary

Total Trip Credits: 127

¹The number of peak hour trips credited is outlined in the City of Menlo Park's *Transportation Demand Management (TDM) Guidelines*.

²The Alliance's guaranteed ride home program operates differently than when the TDM guidelines were created. The Alliance no longer offers slots to be purchased. Trip credits for this TDM measure are combined with the shuttle service.

Shuttle Service: A shuttle service will be provided for employees to use for commuting to work. The shuttle service is provided by Bauers and is currently being implemented in the existing business park surrounding the proposed project. A new shuttle service, specifically serving the buildings along O'Brien Drive, will begin starting February 1, 2015. The shuttle service will have a stop at the northwest corner of the intersection of Kelly Court/O'Brien Drive, adjacent to 1035 O'Brien Drive. This shuttle service will include a separate BART shuttle and Caltrain shuttle. The BART shuttle will carry up to 20 passengers between the Union City BART Station and the project site during the AM and PM peak hours. The shuttle departs every 60-65 minutes. The Caltrain shuttle will carry up to 20 passengers between

Page 4

Kimley Worn

the Palo Alto Caltrain Station and the project site during the AM and PM peak hours. The shuttle departs every 40 minutes. There is also a pick-up/drop-off location at Decoto Road/Ozark Park Way in Fremont, CA.

- Subsidized Transit Tickets: Caltrain Go Passes will be provided to employees at no cost to the employees. The Caltrain Go Pass allows for unlimited rides, seven days a week. The cost of the Go Pass is \$180 per person, but a minimum of \$15,120 per employer. This equates to 84 Go Passes at a minimum to distribute to all employees. For TDM calculations, it was assumed that 30 Go Passes will be provided for this specific project.
- Preferential Carpool Parking: Eight preferential carpool parking spaces are provided. The carpool parking spaces will be located close to the building's main entrance to provide an incentive for employees to carpool. Marked carpool parking spaces are shown on the proposed site plan.
- Commute Assistance Center: A Commute Assistance Center will be provided with the following features:
 - Transit brochure rack
 - Computer kiosk connected to Internet
 - Telephone
 - Desk and chairs

The center should encourage employees to use transit to commute to work and provide ease of access to determine the optimal mode of transportation home.

As shown in Table 2, the proposed TDM measures total to 127 trip credits. However, this assumes that the TDM plan is 100 percent effective.

EFFECTIVENESS OF TDM PROGRAM ELEMENTS

The effectiveness of the TDM plan was predicted using the COMMUTER model developed by the United States Environmental Protection Agency (EPA). The COMMUTER model is a spreadsheet based model that predicts the travel and emission effects resulting from an employer implemented transportation management program. The model allows for inputs to local work-trip mode shares, work trip lengths, vehicle occupancy, financial incentives for alternative modes of transportation, employer participation rates, and the level of each program to determine the predicted trip reduction rates. After inputting the specific TDM measures mentioned in Table 2 for the proposed project, the anticipated trip reduction percentage is 17.4 percent. The COMMUTER model output for this project is shown in Attachment A.

Assuming that the total trip credits mentioned in **Table 2** of 127 vehicle credits is 17.4 percent effective, the TDM plan should provide for a reduction in 22 peak hour trips. The 22 peak hour trips is greater than the net additional 12 AM peak hour trips and 8 PM peak hour trips generated by the land use change for the proposed project, resulting in no additional peak hour vehicle trips generated.

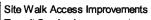
The TDM program should be reviewed annually and adjustments made as needed.

COMMUTER MODEL RESULTS

SCENARIO INFORMATION

Description	C/CAG Base TDM Program
Scenario Filename	Tarlton1.vme
Emission Factor File	
Performing Agency	Kimley-Hom and Associates, Inc
Analyst	Ben Huie
Metropolitan Area	Menlo Park, CA
Area Size	1 - Large (over 2 million)
Analysis Scope	2 - Site or Employer-Based
Analysis Area/Site	1035 O'Brien Drive
Total Employment	100

PROGRAMS EVALUATED



Transit Service Improvements

X Financial Incentives

X Employer Support Programs

Alternative Work Schedules

User-Supplied Final Mode Shares

MODE SHARE IMPACTS

Mode	Baseline	Final	%Change
Drive Alone	70.5%	57.2%	-13.3%
Carpool	6.5%	7.8%	+1.3%
Vanpool	0.0%	0.0%	+0.0%
Transit	4.3%	18.0%	+13.7%
Bicycle	7.3%	7.4%	+0.1%
Pedestrian	2.7%	2.4%	-0.3%
Other	8.7%	7.3%	-1.4%
No Trip		0.0%	+0.0%
Total	100.0%	100.0%	-
			34C
Shifted from Pea	0.0%		

TRAVEL IMPACTS (relative to affected employment)

Χ

Quantity	Peak	Off-Peak	Total
Baseline VMT	1,245	783	2,028
Final VMT	1,045	657	1,702
VMT Reduction	200	126	326
% VMT Reduction	16.1%	16.1%	16.1%
Baseline Trips	90	57	147
Final Trips	74	47	121
Trip Reduction	16	10	26
% Trip Reduction	17.4%	17.4%	17.4%

6

BELOW MARKET RATE HOUSING IN LIEU FEE AGREEMENT

This Below Market Rate Housing In Lieu Fee Agreement ("Agreement") is made as of this ____ day of _____, 2015 by and between the City of Menlo Park, a California municipality ("City") and O'Brien Drive Portfolio, LLC, a Delaware limited liability company ("Applicant"), with respect to the following:

RECITALS

- A. Applicant owns a building, located at that certain real property in the City of Menlo Park, County of San Mateo, State of California, consisting of approximately 1.5 acres or 65,486 square feet, more particularly described as Assessor's Parcel Number: 055-421-190 ("Property"), more commonly known as 1035 O'Brien Drive, Menlo Park.
- B. The Property currently contains one 36,000 square foot building consisting of approximately 14,432 square feet of office/lab space and approximately 21,568 square feet of warehouse/manufacturing space, which was recently redeveloped.
- C. In 2012, the applicant received approval to demolish the previous 36,632 square feet building, consisting of approximately 5,662 square feet of office/lab space and approximately 30,970 square feet of warehouse/manufacturing space and construct a new 36,000 square foot building. The applicant paid the \$53,978.74 BMR in-lieu fee for the partial change of uses with the building at that time.
- D. Applicant proposes to convert approximately 21,568 square feet of the building from manufacturing/warehouse to office/R&D use, which would result in 36,000 square feet of office/R&D use within the building. Applicant has applied to the City for a use permit for this conversion ("Project").
- E. Applicant is required to comply with Chapter 16.96 of City's Municipal Code ("BMR Ordinance") and with the Below Market Rate Housing Program Guidelines ("Guidelines") adopted by the City Council to implement the BMR Ordinance. In order to process its application, the BMR Ordinance requires Applicant to submit a revision to the previously approved Below Market Rate Housing Agreement. This Agreement is intended to satisfy that requirement. Approval of a Below Market Rate Housing Agreement is a condition precedent to the approval of the applications and the issuance of a building permit for the Project.
- F. Residential use of the Property is not allowed by the applicable zoning regulations. Applicant does not own any sites in the City that are available and feasible for construction of sufficient below market rate residential



housing units to satisfy the requirements of the BMR Ordinance. The Housing Commission and Planning Commission previously approved a BMR In-Lieu Fee Agreement for the project in 2012. Based on these facts, the City has found that development of such units off-site in accordance with the requirements of the BMR Ordinance and Guidelines is not feasible.

G. Applicant, therefore, is required to pay an additional in lieu fee as provided for in this Agreement. Applicant is willing to pay the in lieu fee on the terms set forth in this Agreement, which the City has found are consistent with the BMR Ordinance, Guidelines, and previous Agreement. The additional in-lieu fee is estimated at \$149,897.60. The total in-lieu fees to be paid for the overall project by the applicant are estimated to be \$203,876.34, including the previous \$53,978.74 fee paid for the initial redevelopment.

NOW, THEREFORE, the parties agree as follows:

1. If Applicant elects to proceed with the Project, Applicant shall pay the in lieu fee as provided for in the BMR Ordinance and Guidelines. Notwithstanding the proceeding, nothing in this Agreement shall obligate Applicant to proceed with the Project. The applicable in lieu fee is that which is in effect on the date the payment is made. The in lieu fee is adjusted on July 1st of each year. The in lieu fee will be calculated as set forth in the table below; however, the applicable fee for the Project will be based upon the amount of square footage within Group A and Group B at the time of payment. The estimated in lieu fee is provided below.

Use Group	Fee/SF	Square Feet	Component Fees
A-Office/R&D	\$15.19	14,432	(\$219,222.08)
B- Non-Office	\$8.24	21,568	(\$177,720.32)
A-Office/R&D	\$15.19	36,000	\$546,840.00
B- Non-Office	\$8.24	0	\$0
	A-Office/R&D B- Non-Office A-Office/R&D	A-Office/R&D\$15.19B- Non-Office\$8.24A-Office/R&D\$15.19	Use Group Fee/SF Feet A-Office/R&D \$15.19 14,432 B- Non-Office \$8.24 21,568 A-Office/R&D \$15.19 36,000

Total Estimated Net New In Lieu Fee

\$149,897.60

2. If the Applicant elects to proceed with the Project, the Applicant shall pay the in lieu fee before the City issues a building permit for the Project. The in lieu fee may be paid at any time after approval of this Agreement by the Planning Commission. If for any reason, a building permit is not issued within a reasonable time after Applicant's payment of the in lieu fee, upon request by

Applicant, City shall promptly refund the in lieu fee, without interest, in which case the building permit shall not be issued until payment of the in lieu fee is again made at the rate applicable at the time of payment.

- 3. This Agreement shall be binding on and inure to the benefit of the parties hereto and their successors and assigns. Each party may assign this Agreement, subject to the reasonable consent of the other party, and the assignment must be in writing.
- 4. If any legal action is commenced to interpret or enforce this Agreement or to collect damages as a result of any breach of this Agreement, the prevailing party shall be entitled to recover all reasonable attorney's fees and costs incurred in such action from the other party.
- 5. This Agreement shall be governed by and construed in accordance with the laws of the State of California and the venue for any action shall be the County of San Mateo.
- 6. The terms of this Agreement may not be modified or amended except by an instrument in writing executed by all of the parties hereto.
- 7. This Agreement supersedes any prior agreements, negotiations, and communications, oral or written, and contains the entire agreement between the parties as to the subject matter hereof.
- 8. Any and all obligations or responsibilities of Applicant under this Agreement shall terminate upon the payment of the required fee.
- 9. To the extent there is any conflict between the terms and provisions of the Guidelines and the terms and provisions of this Agreement, the terms and provisions of this Agreement shall prevail.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

CITY OF MENLO PARK

O'Brien Drive Portfolio, LLC

By: _____ City Manager

By: _____ John C. Tarlton



COMMUNITY DEVELOPMENT DEPARTMENT PLANNING DIVISION



701 Laurel Street Menlo Park, CA 94025 phone: (650) 330-6702 fax: (650) 327-1653 planning@menlopark.org http://www.menlopark.org

FEB 12 2015

HAZARDOUS MATERIAL SUNFORMATION FORM

BUILDING

In order to help inform City Staff and the external reviewing agencies, the Planning Division requires the submittal of this form, If the use permit application is approved, applicants are required to submit the necessary forms and obtain the necessary permits from the Menlo Park Fire Protection District, San Mateo County Environmental Health Services Division, West Bay Sanitary District, and other applicable agencies. Please complete this form and attach additional sheets as necessary.

 List the types of hazardous materials by California Fire Code (CFC) classifications. This list must be consistent with the proposed Hazardous Materials Inventory Statement (HMIS), sometimes referred to as a Chemical Inventory. (The HMIS is a separate submittal.)

Refer to attached document - Avalanche Chemical Inventory - February 2015.

2. Describe how hazardous materials are handled, stored and monitored to prevent or minimize a spill or release from occurring (e.g., secondary containment, segregation of incompatibles, daily visual monitoring, and flammable storage cabinets).

Hazardous materials will be stored within secondary containment inside flammable storage cabinets and segregated by hazard class. Storage areas for chemicals will be monitored by lab staff during normal business hours (visual). Hazardous waste storage areas will be inspected daily.

3. Identify the largest container of chemical waste proposed to be stored at the site. Please identify whether the waste is liquid or solid form, and general safeguards that are used to reduce leaks and spills.

Typical storage will be 4L; some 5-gal and 30-gal containers may be used occasionally. The largest gas cylinder will be K-size (555 standard cubic feet).



FEB 1 2 2015

4. Please explain how hazardous waste will be removed from the site (i.e. licensed haulers, or specially trained personnel).

A licensed hazardous waste transporter and disposal vendor will be used, in accordance with all applicable regulatory requirements.

- 5. Describe employee training as it pertains to the following:
 - a. Safe handling and management of hazardous materials or wastes;
 - b. Notification and evacuation of facility personnel and visitors;
 - c. Notification of local emergency responders and other agencies;
 - d. Use and maintenance of emergency response equipment;
 - e. Implementation of emergency response procedures; and
 - f. Underground Storage Tank (UST) monitoring and release response procedures.

Lab employees receive training on management of chemicals and waste. All employees receive training on what do do in case of emergencies, including chemical spills. The site's emergency response plan includes procedures to notify first responders and make reports to outside agencies. All employees receive emergency response training upon hire and annually thereafter. There are no USTs at the site.

6. Describe documentation and record keeping procedures for training activities.

Training records are maintained by the Avalanche Quality Assurance group.

 Describe procedures for notifying onsite emergency response personnel and outside agencies (e.g. Fire, Health, Sanitary Agency-Treatment Plant, Police, State Office of Emergency Services "OES") needed during hazardous materials emergencies.

The procedures for notifying emergency response personnel and outside agencies are contained in the site's written emergency response plan. This plan describes various emergency scenarios and specifically who to call and how to respond, internally and in conjunction with responding agencies. (Ref. Avalanche Emergency Response Plan, Section 8.3.4.)

8. Describe procedures for immediate inspection, isolation, and shutdown of equipment or systems that may be involved in a hazardous materials release or threatened release.

The procedures for monitoring equipment and shutting down systems are addressed in the site's emergency response plan, including shut-off of utilities and equipment, if it is safe for employees and vendors to do so. (Ref. Avalanche Emergency Response Plan, Section 8.4.5.)

9. Identify the nearest hospital or urgent care center expected to be used during an emergency.

Stanford Health Care - Urgent Care Center - 300 Pasteur Drive, Stanford Ca (650)723-4000

v:\handouts\approved\hazardous materials information form.doc

Avalanche Chemical Inventory February 2015

Chemical	Primary Hazard	Secondary Hazard	S, L or G?	Current Storage Quantity	Projected Storage Quantity	Largest Container Size	Amount in Use
Chloroform	Carcinogen		L	1L	1 gal	1L	10mL
			te	otal carcinogens	1 gal		
Acetic Acid	CL II	corrosive	L	12 L	36 L	4L	100ml
Formaldehyde 37%	CL II	corrosive	L	3L	9 L	1L	100ml
Future Comb Liquids TBD	CL II		L	0	5 gal		
			total comb	ustible II liquids	17 gal		
Dimethylsulfoxide	CL IIIB	Sensitizor	L	4 L	12 L	1L	10 ML
			otal comb	ustible III liquids	3.2 gal		
Bleach	Corrosive		L	28 L	84 L	4L	100 mL
Guanidinium thiocyanate	Corrosive		L	100mL	1 L	100mL	.001mL
Hydrochloric Acid	Corrosive	Irritant	L	12 L	36 L	4L	100ml
Phenol	Corrosive	Тохіс	L	1 L	4 L	1L	10 ML
Sodium Hydoxide 50%	Corrosive	WR1	L	12 L	36 L	4L	100ml
Spor Kleen	Corrosive		L	16 L	48 L	1	
Sulphuric Acid	Corrosive	WR2	L .	8 L	24 L	4L	100ml
Vesphene	Corrosive		L	16 L	48 L		
Future Acids/Bases TBD	Corrosive		L	0	10 gal		
		total corrosiv		ondary hazards	84 gal		
Liquid Nitrogen	cryogen		L	1920 L	5760 L	160L	160L
					1,521 gal		
Diethyl ether	Flam IA		L	100mL	1 L	100mL	100ml
					< 1 gai		
Acetone	Flam IB		L	8 L	24 L	1L	100ml
Ethyl Alcohol 200 Proof	Flam IB		<u> </u>	12 L	36 L	500mL	100mi
Isopropyl Alcohol 100%	Flam IB	<u>.</u>		20 L	60 L	500mL	100ml
Methanol	Flam IB			4 L	12 L		100111
Xylene	Flam IB				4 L	1L	10 ML
Future Solvents TBD	Flam IB				10 gal		TO IVIL
	Ji lain lo				46 gal		
Iso Butyl Alcohol	Flam IC		L		24 L	500mL	100ml
iso Butyr Adomor				nable liquids 1C	6.3 gal	COOME	TOOTTI
Ethidium bromide	Highly toxic		L	110 ml	1 L	100 ML	.001ml
Sodium azide	Highly toxic	UR3	s s	20 g	1 lb	10g	.001mL
	I lightly toxic	010	· · ·		4.25 lb	log	.00 mil
Carbon Dioxide	NFG	asphyxiant	G	4000 cf		200 cu ft	400 cu ft
Nitrogen	NFG	аэрпулан	G		2000 cf	200 cu π 337 cf	
Compressed Air	NFG		G		3000 cf	400 cf	
Compressed All	INFG			ammable gases		400 CI	· · · · ·
D unua n	10. mm					FFF	
Oxygen	Ox gas		G		2775 cf	555 cf	
	A		T	and the second	2,775 cf	100.14	
Betamercapto-ethanol	toxic	corrosive			1L	100 ML	.001mL
Glutaraldehyde	toxic	Sensitizor	L		3 L	1 L	10 mL
	harma a		_		31 Ib		5.
Dithiothreitol	WR1	Toxic	L		1 L	100 ML	.001ml
			total	water-reactive 1	< 1 gal		

Avalanche Comparison of Hazardous Materials Class Totals

			Approved	Proposed	Table 50	03.1.1(1)
Hazard Category Clas	Class	Significant Changes	2014 CUP	2015	Stor w sprink ²	Max Storage
	11	increase acetic acid, add future materials TBD	2	17		480
Combustible Liquid (gal)	IIIA			에 관계	660	1,320
	IIIB	increase DMSO	1	3	26,400	52,800
Flammable Liquid (gal)	IA		1	1	60	120
rialiilliable ciquiu (gal)	IB & IC	increase solvents	7	52	240	480
Flammable Solid (lb)					250	500
	1				no limit	no limit
Oxidizer ¹	2				500	1,000
Oxidizer 3	3				20	40
	4			1.2.5	1	2
Oxidizing gas (cf)		add oxygen	0	2,775	3,000	6,000
Inert gas (cf)		increase CO2, add nitrogen, air	1,000	13,000	no limit	no limit
Flammable gas (cf)					2,000	4,000
Cryogenic inert (gal)		increase liquid nitrogen	127	1,521	no limit	no limit
Pyrophoric ¹			- 110 - 14		4	8
Pyrophoric gases (cf)					50	100
	1	increase diothiothreitol	1	3	no limit	no limit
Water reactive ¹ (lb)	2				100	200
	3				5	10
Unstable reactive	3	increase sodium azide	0.02	1	10	20
Corrosive solids (lb)					10,000	20,000
Corrosive liquids (gal)		increase bleach, acids and bases	6	84	1,000	2,000
Toxic ¹ (lb)		increase all existing toxics	5	31	1,000	2,000
Highly Toxic ¹ (lb)		increase all existing highly toxics	1	4	20	40

Notes: 1 - These classes are listed in pounds for both solids and liquids. Assume 10 lb/gal for liquids

2 - assumes building is sprinklered. For max storage, assumes rated cabinets in use.



DEVELOPMENT SERVICES PLANNING DIVISION Contact: Kyle Perata 650-330-6721 or ktperata@meniopark.org 701 Laurel Street Menio Park, CA 94025 PHONE (650) 330-6702 FAX (650) 327-1653

AGENCY REFERRAL FORM RETURN DUE DATE: Friday, February 27, 2015

DATE: February 13, 2015

TO: MENLO PARK FIRE PROTECTION DISTRICT Ron Keefer 170 Middlefield Road Menlo Park, CA 94025

(650) 323-2407

Applicant	Avalanche Biotechnologies		
Applicant's Address	1035 O'Brien Drive, Menlo Park, CA 94025		
Telephone/FAX	Tel: 650-508-8018 (Consultant)		
Contact Person	Ellen Ackerman (EHS Consultant)		
Business Name	Avalanche Biotechnologies		
Type of Business	Research and development of products for sustained delivery of therapeutic proteins to the eye to treat wet age-related macular degeneration (AMD), as well as other retinal disorders. The applicant received a use permit in April of 2014 for the use and storage of hazardous materials. At this time, the applicant is expanding to the entire building and is proposing to modify its chemical inventory accordingly.		
Project Address	1035 O'Brien Drive, Menlo Park, CA 94025		
FOR OFFICE USE ONLY			

□ The hazardous materials listed are not of sufficient quantity to require approval by this agency.

□ The Fire District has reviewed the applicant's plans and use of listed hazardous materials/chemicals and has found the proposal to be in compliance with all applicable Fire Codes.

X The Fire District has reviewed the applicant's plans and use of listed hazardous materials/chemicals outlined, and suggests conditions and mitigation measures to be made a part of the City's Use Permit approval (please list the suggested conditions and mitigation measures).

The applicant's proposal has been reviewed by the Menlo Park Fire Protection District by:

Signature/Date /		Name/Title (printed)
A.	2/24/2015	JON JOHNSTON - FIRE MANSAGE
Comments: 3 rd Carly FIRE	ain funda	containent, et required.
- Carry TIRE	I COVER OI USE STOTAGE,	conterment, ere required.



DEVELOPMENT SERVICES PLANNING DIVISION Contact: Kyle Perata 650-330- 6721 or ktperata@menlopark.org 701 Laurel Street Menio Park, CA 94025 PHONE (650) 330-6702 FAX (650) 327-1653

AGENCY REFERRAL FORM RETURN DUE DATE: Friday, February 27, 2015

DATE: February 13, 2015

TO: SAN MATEO COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION Dan Romf, Hazardous Materials Specialist

San Mateo County Environmental Health 2000 Alameda de las Pulgas, Ste 100 San Mateo, CA 94403 (650) 372-6235

(000) 372-0230					
Applicant	Avalanche Biotechnologies				
Applicant's Address	1035 O'Brien Drive, Menlo Park, CA 94025				
Telephone/FAX	Tel: 650-508-8018 (Consultant)				
Contact Person Ellen Ackerman (EHS Consultant)					
Business Name	Avalanche Biotechnologies				
Type of Business Research and development of products for sustained delivery of therapeutic proteins to the eye to treat wet age-related macular degeneration (AMD), as well as other retinal disorders. The applicant received a use permit in April of 2014 for the use and storage of hazardous materials. At this time, the applicant is expanding to the entire building and is proposing to modify its chemical inventory accordingly.					
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	FOR OFFICE USE ONLY				
The hazardous mater					
	ent has reviewed the applicant's plans and use of listed hazardous and has found the proposal to be in compliance with all applicable Codes.				
The Health Department has reviewed the applicant's plans and use of listed hazardous materials/chemicals outlined, and suggests conditions and mitigation measures to be made a part of the City's Use Permit approval (please list the suggested conditions and mitigation measures). The Health Department will inspect the facility once it is in operation to assure compliance with applicable laws and regulations. The applicant's proposal has been reviewed by the San Mateo County Environmental Health Services Division by:					
Signature/Date Darrell Cullen	A. Digitally signed by Darrel A. Cullen Dit on-Darrel A. Cullen, octivionmenial Heith Sweice Division, cullen mail-decillengemogrowag, cullo Date: 2015/02.21 10626: 00f007				
Comments: Insure	to submit updated electronic HMBP to The County				

12



DEVELOPMENT SERVICES PLANNING DIVISION

701 Laurel Street Menlo Park, CA 94025 PHONE (650) 858-3400 FAX (650) 327-5497

AGENCY REFERRAL FORM

DATE: February 23rd, 2015

TO: WEST BAY SANITARY DISTRICT 500 Laurel Street Menio Park, CA 94025 (650) 321-0384

Applicant	Avalanche Biotechnologies
Applicant's Address	1035 O'Brien Drive, Menlo Park, CA 94025
Telephone/FAX	Tel: 650-508-8018 (Consultant, see below)
Contact Person	Ellen Ackerman of Green Environment (650- 508-8018)
Business Name	Avalanche Biotechnologies
Type of Business	Research and development of products for sustained delivery of therapeutic proteins to the eye to treat wet age-related macular degeneration (AMD), as well as other retinal disorders. The applicant received a use permit in April of 2014 for the use and storage of hazardous materials. At this time, the applicant is expanding to the entire building and is proposing to modify its chemical inventory accordingly.
Project Address	1035 O'Brien Drive, Menlo Park, CA 94025

FOR OFFICE USE ONLY

- The hazardous materials listed are not of sufficient quantity to require approval by this agency.
- ✓ The Sanitary District has reviewed the applicant's proposed plans and use of listed hazardous materials/chemicals and has found that the proposal meets all applicable Code requirements.
- ✓ The Sanitary District has reviewed the applicant's plans and use of listed hazardous materials/chemicals outlined, and suggests conditions and mitigation measures to be made a part of the City's Use Permit approval (please list the suggested conditions and mitigation measures).

Signature/Date

Name/Title (printed)

2-23-15 Phil Scott / District Manager

Comments: Please add both West Bay Sanitary District and Silicon Valley Clean Water to emergency contact list – in case of accidental spill to sanitary sewer.



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10

DEVELOPMENT SERVICES PLANNING DIVISION Contact: Kyle Perata 650-330- 6721 or ktperata@menlopark.org 701 Laurel Street Menio Park, CA 94025 PHONE (650) 330-6702 FAX (650) 327-1653

AGENCY REFERRAL FORM RETURN DUE DATE: Friday, February 27, 2015

DATE: February 13, 2015

TO: CITY OF MENLO PARK BUILDING DIVISION

701 Laurel Street Menio Park, CA 94025 (650) 330-6704

(650) 330-670	4				
Applicant	Avalanche Biotechnologie	25			
Applicant's Address	1035 O'Brien Drive, Menle	o Park, CA 94025			
Telephone/FAX	Tel: 650-508-8018 (Consultant)				
Contact Person	tact Person Ellen Ackerman (EHS Consultant)				
Business Name Avalanche Biotechnologies					
Type of Business	proteins to the eye to trea well as other retinal disord 2014 for the use and stord	ent of products for sustained delivery of therapeutic t wet age-related macular degeneration (AMD), as ders. The applicant received a use permit in April of age of hazardous materials. At this time, the applicant building and is proposing to modify its chemical			
Project Address	1035 O'Brien Drive, Menle	o Park, CA 94025			
	FOR OFFIC	E USE ONLY			
 The Building Division and has found that to and has found that to The Building Division materials/chemicals the City's Use Perm The applicant's proposal 	n has reviewed the applicant he proposal meets all applicant n has reviewed the applicant outlined, and suggests cond it approval (please list the su	ent quantity to require approval by this Division. 's plans and listed hazardous materials/chemicals able California Building Code requirements. 's plans and use of listed hazardous litions and mitigation measures to be made a part of ggested conditions and mitigation measures). City of Menlo Park's Building Division by:			
Signature/Date		Name/Title (printed)			
	Kan La France, Building Official				
Comments:	(14)			

MEMORANDUM



DATE: March 5, 2015

- TO: Bicycle Commission Transportation Commission Planning Commission
- **FROM:** Nikki Nagaya, Transportation Manager

RE: El Camino Real Corridor Study

RECOMMENDATION

Staff recommends the Bicycle, Transportation and Planning Commissions recommend to the City Council a preferred alternative for the El Camino Real Corridor Study.

BACKGROUND

The City is conducting the El Camino Real Corridor Study to review potential transportation and safety improvements to El Camino Real. El Camino Real is the main north-south arterial in Menlo Park and connects the Downtown to other parts of the peninsula. The corridor within the City limits is typically a four- to six-lane divided arterial with traffic signals, sidewalks, pedestrian crosswalk and curb ramps, as well as assorted transit service including SamTrans buses, shuttles, and Caltrain. The average weekday traffic volume on El Camino Real ranges from 34,300 to 46,700 vehicles per day.

In June 2012, the City Council adopted the El Camino Real/Downtown Specific Plan which emphasizes the character and extent of enhanced public spaces, the character and intensity of private infill development, and circulation and connectivity improvements to preserve and enhance community life. The plan focuses on improvements along the El Camino Read corridor in the City of Menlo Park, as well as downtown Menlo Park and the Menlo Park Caltrain Station area. For transportation circulation, the Specific Plan envisions the following:

• A vehicular circulation system that accommodates both local traffic and north/south through traffic on El Camino Real.

- An integrated pedestrian network of expansive sidewalks, promenades and paseos along El Camino Real and within downtown. The network provides opportunities for safe crossing of El Camino Real and the railroad tracks and connects the east and west sides of town, including the City's civic center with downtown.
- A bicycle network that builds upon existing plans and integrates more fully with downtown and proposed public space improvements in the area.
- An integrated circulation plan that supports transit use.
- A public parking strategy and management plan that efficiently accommodates downtown visitors and supports downtown businesses.
- Modified parking rates for private development based on current industry standards.

Following adoption of the Downtown Specific Plan, in 2013, the City Council directed staff to move forward with the El Camino Real Corridor Study as part of the 2013-2018 Five-Year Capital Improvement Program. The City Council approved a Request for Proposals on October 15, 2013 and awarded a contract to a consultant team led by W-Trans on January 28, 2014.

ANALYSIS

Since contract award in January 2014, the City and the project team have been working to facilitate community engagement, identify key issues and opportunities, evaluate existing conditions, identify potential alternatives, develop future travel demand projections, and evaluate alternatives. Three community workshops were held as detailed below:

- Workshop 1: April 30, 2014 Identify Issues & Suggest Ideas for Improving El Camino
- Workshop 2: October 1, 2014 Summarize Feedback, Identify Best Practices, Hands-on Street Design Workshop
- Workshop 3: February 19, 2015 Present Alternatives, Preliminary Analysis, & Participants Rank Options

Between 30 and 65 community members attended each workshop. Additionally, two online surveys were conducted as part of this Study. The first was open from June 16 to October 2, 2014 to learn how and why different members of the community use the El Camino Real Corridor and to elicit feedback on potential improvements to the Corridor. Many of the questions were based directly on the ideas gathered at the first community workshop, and were intended to assess which of these ideas had the greatest appeal to the broader community. 316 responses were received. Based on the survey data collected, the top desirable changes were identified:

- 1. Enhanced pedestrian safety and crossings
- 2. Inclusion of bike lanes on El Camino Real
- 3. More bike parking close to downtown

- 4. More landscaping along El Camino Real (providing buffers between pedestrians or bicyclists and vehicles)
- 5. Timing traffic signals to favor continuous north-south flow on El Camino Real

The least desirable changes were identified:

- 1. More convenient on-street parking on El Camino Real
- 2. Higher travel speeds on El Camino Real
- 3. Lower travel speeds on El Camino Real

A full report on the survey results is included as part of Attachment A.

Alternatives Development and Analyses

Following the survey and feedback collected during Workshop 2, physical changes to EI Camino Real were developed into 3 alternatives plus a "no change" option. Preliminary alternative concepts were shared with the Bicycle and Transportation Commissions in November 2014 for feedback prior to analysis results being prepared.

A summary of the consultant team's analysis is included as Attachment A. The purpose of this report is to summarize the Corridor Study progress and analysis to inform the community and Bicycle, Transportation and Planning Commissions of the Study work to-date. The consultant team will provide a presentation at each Commission meeting to review the information provided in the report and answer questions.

Each of the proposed alternatives can be accommodated within the existing curb-tocurb width – within the existing paved area – with the exception of the northbound approach to the Ravenswood Avenue intersection. At Ravenswood, widening would be needed to accommodate any of the proposed changes and, depending on the alternative, may impact trees near the intersection, as detailed in Attachment A.

A second online survey was developed to allow participants to review the alternatives, rank their preferred choices, and provide comments and feedback on the options. The survey was available online starting February 19, 2015, and will remain open through Friday, March 13, 2015. As of March 3, 2015, 242 responses had been received.

Next Steps

Staff requests the Commissions provide input on alternatives and identify a recommendation to the City Council for a preferred alternative for the El Camino Real corridor.

Following the Commission meetings, the summary report will be expanded to incorporate community feedback heard at each of the meetings, summarize the results of the ongoing online survey on the potential alternative options, and a draft will be released for public review in April 2015, prior to the City Council's consideration of the El Camino Real Corridor Study later this spring.

PUBLIC NOTICE

Public notification was achieved by posting the agenda, at least 72 hours prior to the meeting, with this agenda item being listed.

ATTACHMENT

A. El Camino Real Corridor Study – Summary Report



El Camino Real Corridor Study

March 2015 Executive Summary



Prepared for the

City of Menlo Park



Submitted by

Whitlock & Weinberger Transportation, Inc.

490 Mendocino Avenue Suite 201 Santa Rosa, CA 95401 voice 707.542.9500

475 14th Street Suite 290 Oakland, CA 94612 voice 510.444.2600

web www.w-trans.com

March 5, 2015

Balancing Functionality and Livability Traffic Engineering • Transportation Planning

Introduction

The focus of the El Camino Real Corridor Study is to review and recommend potential transportation and safety improvements to El Camino Real, making it safer and more efficient to move along and across El Camino for all modes of travel: pedestrians, bicycles, automobiles, and transit. The purpose of this study is to identify potential reconfiguration alternatives, and evaluate the feasibility and potential impacts (adverse and beneficial) to improve multi-modal transportation along the corridor. This study considers possible modifications to allow for the addition of a bicycle lane or an additional through lane, for a total of three lanes in each direction between Sand Hill Road and Encinal Avenue. Impacts to traffic, active transportation, safety, parking and aesthetics are addressed as part of the evaluation. Within the limited right-of-way available, this study assesses safety, efficiency and convenience trade-offs between motorists and bicyclists on El Camino Real between Sand Hill Road and Encinal Avenue. This Executive Summary report presents the work completed to date.

The study objectives of the El Camino Real Corridor Study are to:

- Review potential transportation and safety improvements.
- Consider possible alternatives to allow for the addition of a bicycle lane or an additional through lane.
- Identify potential reconfiguration alternatives.
- Evaluate the feasibility and potential impacts of up to three (3) alternatives to improve multi-modal transportation.
- Address impacts to traffic, active transportation, safety, parking and aesthetics.
- Assess safety, efficiency and convenience trade-offs between motorists and bicyclists within the limited right-of-way available.

Per direction from the City Council, the following guidelines were developed to set the parameters of the Corridor Study process:

- El Camino Real between Encinal Avenue and Sand Hill Road will be evaluated.
- Modifications to side-streets will be considered between the western side of the Caltrain tracks and the eastern side of Curtis Street-Hoover Street-Alto Lane.
- All proposed modifications should be consistent with the El Camino Real/Downtown Specific Plan.
- Only surface improvements will be considered (i.e., no grade separation or tunneling).
- No impacts to existing medians and sidewalks.
- Impacts (both beneficial and adverse) to all modes of travel will be considered in this study.
- Ultimate design and implementation of modifications to El Camino Real will need to meet Caltrans requirements and standards.



Existing Conditions

This Existing Conditions Report includes a summary of data collected along the corridor, an analysis of existing corridor operations, and documentation of existing facilities that serve all modes of travel. A full copy of the Report is included as Appendix A. (The full version of the report including appendices is on the City's project website.)

• Study Area – El Camino Real is the main north-south arterial in Menlo Park and connects the Downtown to other parts of the peninsula. The corridor within the City limits is typically a four- to six-lane divided arterial with traffic signals, sidewalks, pedestrian crosswalk and curb ramps, as well as assorted transit service including SamTrans buses, shuttles, and Caltrain. Table I shows typical daily traffic on El Camino Real.

Location along El Camino Real	Southbound	Northbound	Total
Between Encinal Ave and Glenwood Ave	16,700	17,900	34,600
Between Ravenswood Ave-Menlo Ave and Santa Cruz Ave	17,900	I 6,400	34,300
North of Middle Ave	21,500	22,600	44,100
North of Sand Hill Rd	22,600	24,100	46,700

 Table I

 El Camino Real Daily Traffic Volumes

Vehicular Traffic Operations – The 1.35-mile corridor includes nine signalized intersections, each of which was analyzed in greater detail. Southbound traffic is highest during the a.m. peak period, while northbound traffic is highest during the p.m. peak period. Travel times through the corridor range between three and five minutes during peak periods. Results of the Level of Service (LOS) calculations indicate that all study intersections are operating at LOS D or better, with the exception of El Camino Real/Sand Hill Road during the p.m. peak period which operates at LOS E. Table 2 shows existing travel time and average speed during peak periods on El Camino Real.

Direction of Travel	AM Peak ¹		Midday F	Peak ²	PM Peak ³			
	Average Travel Time	Average Speed	•		Average Travel Time	Average Speed		
NB El Camino Real ⁴	3:48	21.5	4:35	17.5	5:24	14.9		
SB El Camino Real ⁵	5:06	15.7	3:48	21.3	5:00	16.1		

 Table 2

 Existing Peak Period Travel Time

Notes: Travel Time is measured in minutes: seconds, Speed is measured in miles per hour (mph) ¹ a.m. peak period = 7:00 – 9:00 a.m.; ² midday peak period = 11:30 a.m. – 1:30 p.m.; ³ p.m. peak period = 4:00 – 6:00 p.m.; ⁴ from Sand Hill Rd to Encinal Ave; ⁵ from Encinal Ave to Sand Hill Rd

• Queuing – Vehicular queuing along El Camino Real is generally concentrated near approaches to Menlo Avenue-Ravenswood Avenue. Vehicle queuing in turn lanes are adequately accommodated within existing queue storage, with the exception of the northbound left-turn lane at Sand Hill Road. While vehicular queuing on El Camino Real through lanes approaching Menlo Avenue-Ravenswood Avenue may sometimes exceed storage capacity and spill over onto adjacent intersections, all average queue



lengths during the morning and afternoon peak hours can be accommodated with existing queue storage and spillover queues are temporary.

- Pedestrian Facilities Within Menlo Park, continuous sidewalks are currently provided along both sides of El Camino Real; however, the width and condition of the sidewalk varies along the corridor. Marked pedestrian crosswalks, along with pedestrian crossing signal equipment, are provided at all study intersections; however, at some intersections, crossings are prohibited on one leg of the intersection. There are no uncontrolled marked crossings of El Camino Real within the study area corridor.
- Bicycle Facilities Existing bicycle facilities within the study area include bike lanes and bike routes on streets intersecting El Camino Real, nearby parallel routes (e.g., Laurel Street, Alma Street, and portions of University Drive), and bike parking near the Downtown and Caltrain Station areas. Table 3 shows pedestrian and bicycle volumes on El Camino Real at key intersection during the morning and evening peak periods.

Intersection	Pedestrian	Bicycle	
ECR/Oak Grove Road	53-88	20-7	
ECR/Santa Cruz Ave	96-144	19-13	
ECR/Ravenswood-Menlo Ave	35-46	26-25	
ECR/Middle Ave	13-28	9-17	
ECR/Sand Hill Rd	113-41	201-55	

Table 3Pedestrian and Bicycle Volumes

Note: (##-##) represents (morning-afternoon) volumes

- Public Transit Transit service in the study area is provided by several agencies, including SamTrans for local bus service; the City of Menlo Park and Stanford University for local shuttle service; and Caltrain for regional rail service. Bus service runs at frequencies of 15-minutes and rail service runs at frequencies of approximately 60-minutes during typical weekdays.
- Collisions and Safety A review of the City's records for collisions along El Camino Real showed that the calculated intersection collision rates were higher than the statewide average for similar facilities at intersections near the Downtown and Caltrain areas. Two-thirds of reported intersection-related collisions between Valparaiso Avenue-Glenwood Avenue and Roble Avenue were rear-end collisions. Table 4 shows collision rates at the study intersections.



Study Intersection		Number of Collisions (2009-2013)*	Collision Rate (c/mve)	Injury Rate	Fatality Rate	
١.	El Camino Real/Sand Hill Rd	8	0.09 (0.27)	37.5% (41.9%)	0% (0.4%)	
2.	El Camino Real/Cambridge Ave	18	0.24 (0.27)	44.4% (41.9%)	0% (0.3%)	
3.	El Camino Real/Middle Ave	16	0.21 (0.21)	43.8 % (42.4%)	0% (0.4%)	
4.	El Camino Real/Roble Ave	22	0.32 (0.27)	40.9% (41.9%)	0% (0.4%)	
5.	El Camino Real/Menlo Ave- Ravenswood Ave	34	0.40 (0.27)	44.1 % (41.9%)	0% (0.4%)	
6.	El Camino Real/Santa Cruz Ave	23	0.38 (0.27)	47.8 % (41.9%)	0% (0.4%)	
7.	El Camino Real/Oak Grove Ave	36	0.52 (0.27)	44.4% (41.9%)	0% (0.4%)	
8.	El Camino Real/Valparaiso Ave- Glenwood Ave	24	0.36 (0.27)	37.5% (41.9%)	0% (0.4%)	
9.	El Camino Real/Encinal Ave	6	0.09 (0.27)	83.3%(41.9%)	0% (0.4%)	

 Table 4

 Collision Rates at the Study Intersections Compared to Statewide Average

Note: c/mve = collisions per million vehicles entering; * = collision records for El Camino Real/Sand Hill Rd are dated October 2007 through September 2012; Statewide average rates are indicated in parentheses; **Bold** = actual rate greater than the Statewide average rate

Parking – Parking along the El Camino Real corridor consists of on-street parking, off-street public parking lots, private parking lots, and Caltrain commuter lots. The available on-street parking supply along El Camino Real is 156 spaces. More spaces are available nearby in public off-street plazas, on-street parking on intersecting streets, commuter parking lots at Caltrain, and private off-street parking lots. Parking occupancy surveys completed in September 2014 along El Camino Real show that street parking spaces are typically underutilized along El Camino Real with the exception of the portion of El Camino Real between Oak Grove Avenue and Ravenswood Avenue-Menlo Avenue. It is worth noting that this portion of El Camino Real is adjacent to Downtown Menlo Park, where several off-street parking lots are available. Additionally, increased parking utilization was observed between College Avenue and Partridge Avenue on the west side of El Camino Real.



Community Feedback & Survey

In April 2014, the first workshop was held on the project to gain the input of the community related to critical transportation issues on the corridor. At that first workshop, attendees provided a list of both issues and opportunities for transportation improvements for the corridor. Following the workshop, a web-based online survey was provided to gain further input on the use of the corridor and additional input on the ideas from the first workshop.

Survey questions were focused on learning how and why different members of the community use the El Camino Real Corridor and on eliciting feedback on potential improvements to the Corridor. Many of the questions were based directly on the ideas gathered at the first community workshop, and were intended to assess which of these ideas had the greatest appeal to the broader community. The survey was active between June 16 and September 12, 2014, during which time 309 community members participated. Initial results were presented at an open house on October 2, 2014, where seven additional responses were collected, for a total of 316 responses.

The survey report is provided in Appendix B. (The full version of the report including appendices is on the City's project website.)

TOP 5 DESIRABLE CHANGES
 Enhanced pedestrian safety and crossings
2. Inclusion of bike lanes on El Camino Real
3. More bike parking close to downtown
4. More landscaping along El Camino Real (providing
buffers between pedestrians or bicyclists and vehicles)
5. Timing traffic signals to favor continuous north-south
flow on El Camino Real
MOST UNDESIRABLE CHANGES
I. More convenient on-street parking on El Camino Real
2. Higher travel speeds on El Camino Real
3. Lower travel speeds on El Camino Real

Transportation Needs

Most respondents use multiple forms of transportation along El Camino Real—mainly a combination of driving, bicycling, and walking. They mostly travel the Corridor to access shopping and local businesses, and half of respondents use it to commute to work. Most respondents use El Camino Real to access the Menlo Park Caltrain station. These Caltrain users tend to favor bicycling or walking to the station.

Respondents desire multi-modal improvements along the Corridor regardless of which modes they currently use most. The majority agreed that if pedestrian and bicycling improvements were made, they would prefer to take advantage of those transportation options rather than drive.

There may need to be a closer examination of public transit needs along the corridor. The sample of transit riders responding to the survey was too small to draw supportable generalizations. However, survey responses suggest that frequent transit riders—unlike frequent users of other transportation modes—are less willing or less able to drive as an alternative to transit, meaning that this group may have



a greater need for non-automotive transportation options. Additionally, there were some open-ended responses from non-transit users that showed interest in improving public transportation along the corridor.

<u>Traffic</u>

Traffic was a prevalent concern throughout responses to the open-ended questions. Respondents connected traffic conditions with a number of the Corridor's safety issues as frustrated drivers participate in risky behavior, such as running red lights, cutting through adjacent neighborhoods, and speeding. In discussing potential improvements to vehicle traffic, most respondents did not feel that vehicle capacity was a problem in the Corridor, and additional vehicle lanes on El Camino Real were not considered a desirable improvement. Respondents' explanations for traffic causes focused on bottlenecks at specific intersections or along specific segments of the Corridor due to signal timing and lane design. Problematic intersections tended to be those adjacent to major destinations (such as Menlo/Ravenswood) or which serve as connections for regional traffic (such as Sand Hill). Signalization changes were a desired improvement. According to the responses to the open-ended questions, important considerations for signal timing include crossing signals for pedestrians and cyclists and ensuring that signals facilitate east-west movement as well as north-south flow.

<u>Safety</u>

Safety in the Corridor was a major concern, particularly for those traveling by bicycle or on foot. Pedestrian safety and crossing improvements, bike lanes, bike parking, and landscaped buffers for pedestrians and cyclists were among the most desired improvements. Additionally, though travel by vehicle was considered the safest way to travel El Camino Real, vehicle safety improvements were still considered desirable. Open-ended responses indicated that vehicle safety may need to address driving behavior such as speeding, opportunistic use of turn lanes for passing purposes, running red lights, U-turns, and stopping in the intersection during red lights.

Student safety and the safety of children using El Camino Real was a priority for respondents, regardless of whether or not respondents have children who need to cross El Camino Real for school. Nineteen percent of respondents have children who need to make this crossing, though responses to open-ended questions suggested that there were additional respondents who are uncomfortable with letting their children travel El Camino Real alone and use alternate means of getting them to school. Student safety concerns include traveling by foot and by bicycle, particularly at crossings.



Alternatives

The Menlo Park El Camino Real Downtown Specific Plan, adopted in June 2012, emphasizes the character and extent of enhanced public spaces, the character and intensity of private infill development, and circulation and connectivity improvements to preserve and enhance community life. The plan focuses on improvements along the El Camino Read corridor in the City of Menlo Park, as well as downtown Menlo Park and the Menlo Park Caltrain Station area. For transportation circulation, the Specific Plan envisions the following:

- A vehicular circulation system that accommodates both local traffic and north/south through traffic on El Camino Real.
- An integrated pedestrian network of expansive sidewalks, promenades and paseos along El Camino Real and within downtown. The network provides opportunities for safe crossing of El Camino Real and the railroad tracks and connects the east and west sides of town, including the City's civic center with downtown.
- A bicycle network that builds upon existing plans and integrates more fully with downtown and proposed public space improvements in the area.
- An integrated circulation plan that supports transit use.
- A public parking strategy and management plan that efficiently accommodates downtown visitors and supports downtown businesses.
- Modified parking rates for private development based on current industry standards.

Through the completion of these visions, the Specific Plan accommodates all travel modes, with an emphasis on pedestrians, bicyclists, transit users and parking for downtown. The Specific Plan focuses development in areas well served by transit with a mix of uses in close proximity in order to reduce the reliance on private motor vehicles. The Specific Plan outlines specific pedestrian, bicycle, and transit policies which support each mode's individual goals while fulfilling the overall goals of the Specific Plan.

Based on these goals from the Downtown Specific Plan, a "toolbox" of best practices and potential improvement measures for the El Camino Real corridor was developed, and is included in Appendix C. The improvements in the toolbox were presented during Community Workshop #2 in October 2014 for feedback on the applicability of these treatments to El Camino Real in Menlo Park. Following that workshop and feedback, alternative concept designs were developed for the corridor, as described below:

- No Project
- Alternative I Continuous Three Lanes
- Alternative 2 Buffered Bike Lanes
- Alternative 3 Separated Bike Facility



<u>No Project</u>

Under this alternative, the existing lanes, crossings, and traffic controls on El Camino Real within Menlo Park would remain with no changes.





Alternative I – Continuous Three Lanes

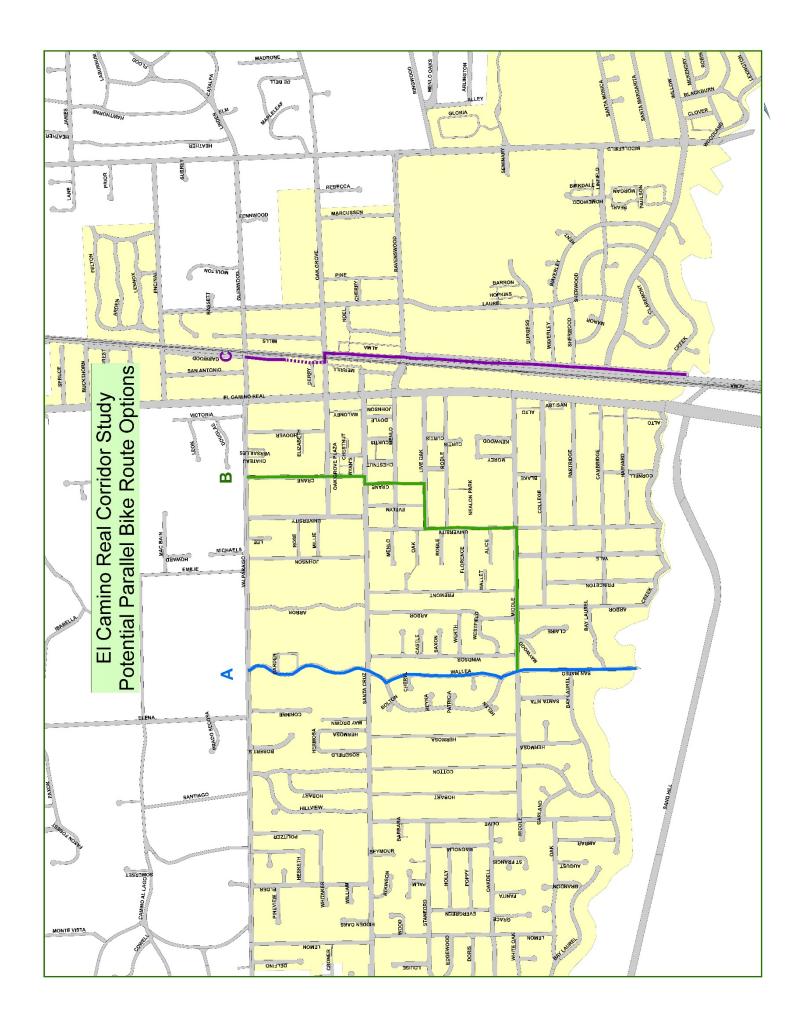
This alternative includes the addition of a third travel lane in each direction between Encinal Avenue and Roble Avenue, where there are currently two lanes in each direction. The additional through lane would be created by removing on-street parking and right-turn lanes, which would become shared through/right-turn lanes.

- On-Street parking would be prohibited north of Roble Avenue.
- Existing right-turn pockets at Santa Cruz, Oak Grove, etc. would become shared through/right-turn lanes.
- The existing northbound right-turn lane approaching Ravenswood Avenue would become the 3rd travel lane and the road would be widened by approximately 12 feet to create a new NB right turn lane.
- No pedestrian bulbouts could be added under this alternative north of Roble Avenue due to geometric constraints. There still may be opportunities to provide some bulbouts south of Roble Avenue.
- No bicycle facilities would be added to El Camino Real under this alternative. A parallel bicycle route would be included. Three options for this route are the following corridors (see map below):
 - A, West of El Camino Real: San Mateo Drive Wallea Drive
 - B, West of El Camino Real, Downtown Alternative: San Mateo Drive Middle Avenue University Drive – Live Oak Avenue – Crane Street
 - C, East of El Camino Real: Alma Street Oak Grove Avenue Garwood Way (including possible future extension)
- This alternative may result in removal of approximately 11 heritage trees and seven street trees on the southeast corner of El Camino Real and Ravenswood Avenue to accommodate the third travel lane.



ALTERNATIVE 1





Alternative 2 – Buffered Bike Lanes

Bike lanes would be added on El Camino Real in both directions under this alternative by narrowing the existing vehicle lanes by one to three feet, and eliminating on-street parking along the majority of the corridor. The bike lanes would be further buffered from traffic by an approximately 3-foot wide painted section.

- On-Street parking would be prohibited north of Roble Avenue.
- Existing right-turn lanes north of Roble Avenue would be modified to accommodate bike lanes.
- Bikes would need to cross right-turning traffic.
- Narrow pedestrian bulbouts could be accommodated at some intersections where there are no right-turn lanes.
- In the northbound direction approaching Ravenswood, the roadway would be widened by approximately 21 feet to accommodate the third travel lane, northbound right-turn lane and the bike lane. (Third travel lane would take the place of the existing right-turn lane.)
- New third northbound through travel lane would become a trap right-turn lane at Santa Cruz Avenue.
- This alternative may result in removal of approximately 11 heritage trees and seven street trees on the southeast corner of El Camino Real and Ravenswood Avenue to accommodate widening at Ravenswood Avenue.



ALTERNATIVE 2



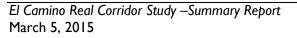
Alternative 3 – Separated Bicycle Facility

The alternative would provide a physically separated bicycle facility on El Camino Real. Each of the oneway bike lanes would be protected from vehicle traffic with raised curbs or planters, which could also include landscaping. The facility would be created by eliminating on-street parking and right-turn lanes through the majority of the corridor.

- On-Street parking would be prohibited north of Roble Avenue.
- Existing right-turn lanes north of Roble Avenue would be eliminated.
- Some intersections would be designed with a "Protected Intersection" bicycle design approach. Cycle tracks would enter mixing zones with pedestrians at the intersections, and cross-bikes would be provided adjacent to crosswalks.
- The existing northbound right turn lane approaching Ravenswood Avenue would be maintained, but widening of approximately 8-feet on this section will be required to achieve the one-way cycle track. There would be no widening on this section to achieve a 3rd travel lane.
- Intersections would be designed with bicycle crossings provided adjacent to crosswalks.
- No traditional pedestrian bulbouts could be accommodated under this alternative, but pedestrian crossing distances would be shortened with provision of the separated bicycle facility.
- This alternative would result in removal of approximately one heritage tree and seven street trees on the southeast corner of El Camino Real and Ravenswood Avenue to accommodate the separated bicycle facility.



ALTERNATIVE 3





Alternatives Analysis

Analysis was completed on the different alternatives to demonstrate how the corridor would operate under Existing (2014) and Future (2035) travel demand projections.

Model Forecasting

Travel Demand Model Forecasting was completed with:

- C/CAG-VTA Bi-County Travel Demand Model
- 2010 Base and 2035 Future Traffic Projections
- Primarily ABAG Land Use Outside the Study Area
- Menlo Park Downtown Specific Plan Land Use
- Adjustments to lane capacity for Alternative I (6-Lanes)
- Bike volume projections for Alternatives 2 and 3 based on the bike facility improvements

The C/CAG-VTA Bi-County Travel Demand Model with 2010 and 2035 ABAG Draft SCS (Sustainable Communities Strategy) socio-demographic assumptions was used. This version of the model represented the most current model as of June 2014. The most recent modeling files from CCAG were obtained and the input assumptions were reviewed, including networks and land uses for all Traffic Analysis Zones (TAZ) within Menlo Park.

Network

The Countywide Model has a coarse network representation within the study area, so not all the cross streets in the study area were represented. The network was modified to add missing cross streets to better represent all legs of the identified study intersections.

Land Use

The Countywide model land uses primarily reflect ABAG assumptions at the census tract level, and are not necessarily accurate at the individual TAZ level, especially with representing future projects for 2035 conditions (CCAG and VTA are in the process of updating the model to Plan Bay Area Projections and requesting input from San Mateo County jurisdictions on future general plans to better allocate the land uses to individual TAZs. This version of the model will be released in mid-2015). City staff reviewed assumptions for 2010 and 2035 socio-demographic input data and made appropriate adjustments to the growth and location of key future projects in the corridor, primarily to reflect potential future build out of land uses under the El Camino Real/Downtown Specific Plan.

Lane Geometrics

Under Alternative I with the continuous 6 lanes on El Camino Real, the lane capacity was adjusted to reflect the continuous 3 lanes in each direction in the study area.

With Alternatives 2 and 3, the corridor capacity was based on the existing through lanes on El Camino Real. Adjustments were made based on the provision of the right-turn lane mixing zones in Alternative 2 and the absence of right-turn lanes in Alternative 3.



Bike Volume Estimates

With Alternatives 2 and 3, the determination of bike volumes on El Camino Real was based on the extent of bike facility improvements to the non-motorized mode forecasting.

Analysis of Corridor Metrics

Analysis of the alternatives included assessment of:

- Traffic Volume Projections
- Induced Demand & Change in Travel Patterns
- Corridor Travel Time and Speed
- Intersection Delay
- Intersection Queuing
- Bicyclist Comfort and Safety
- Pedestrian Comfort and Safety

Traffic Volume Projections

Traffic volume projections were extracted from the traffic model for each of the alternatives including the No Project condition. Table 5 includes the projected traffic volumes during the p.m. peak hour on El Camino Real and Middlefield Road under the different alternatives. Traffic demand on Middlefield Road is presented to understand how travel patterns on parallel routes may change as a result of changes to El Camino Real.

As shown, Alternative I results in approximately 45 percent more traffic demand in the El Camino corridor north of Ravenswood Avenue with the expansion of capacity. However, only 9 percent more traffic is served south of Ravenswood Avenue, as minimal capacity improvements can be included without widening the street. Minimal change in vehicle demand is observed in Alternatives 2 or 3.

Segment	2014	Future 2035							
	Existing	No Project	Alt I		Alt 2		Alt 3		
	Conditions	Volume	Volume	% Inc	Volume	% Inc	Volume	% Inc	
El Camino Real									
North of Ravenswood	2,800	3,140	4,550	45%	3,130	-0.5%	3,070	-2%	
South of Ravenswood	3,620	4,230	4,620	9 %	4,230	0%	4,170	-1.5%	
Middlefield Road									
North of Ravenswood	I,290	1,650	1,540	-7%	1,680	2%	1,730	5%	
South of Ravenswood	2,100	2,390	2,860	20%	2,460	3%	2,430	2%	

Table 5 Vehicles Per Hour (PM Peak)

Induced Demand & Change in Travel Patterns

As demonstrated by the date in Table 5, Alternative I shows the greatest increase in traffic volumes compared with the other three alternatives. The increase in capacity with the continuous 6 lanes in



Alternative I attracted through traffic from other parallel routes such as Middlefield Road and Highway 101. Traffic volume projections for Alternative 2 and Alternative 3 did not attract additional traffic volumes compared with the No Project since the through traffic lanes were the same under these options. Middlefield Road does not experience much change in traffic volumes under any alternative, north of Ravenswood Avenue. However, south of Ravenswood Avenue, Alternative I would create an increase of approximately 20 percent due to the added capacity on El Camino Real to the north.

The increased capacity under Alternative I also resulted in diverted trips and additional turning movements to/from El Camino Real which reflected the change in trips from other routes.

Corridor Travel Time and Speed

Table 6 shows the travel time for the entire corridor with the associated average speed in Table 7 under Future 2035 traffic volumes. With the added capacity in Alternative I along with the increase in traffic volumes discussed above, traffic time generally increases over the No Project condition during both the a.m. and p.m. peak except for the southbound direction in the morning which decreases. Alternatives 2 and 3 also would experience an increase in travel time compared to the No Project scenario as well as a similar decrease in travel time in the southbound direction during the a.m. peak hour.

Study Segments	Future 2035								
	No Al Project		t I	Alt 2		Alt 3			
	Travel Time	Travel Time	% Inc	Travel Time	% Inc	Travel Time	% Inc		
AM									
NB Sand Hill to Encinal*	4.I	4.8	17%	4.6	12%	4.3	5%		
SB Encinal to Sand Hill*	5.9	5.2	-12%	5.I	-14%	5.8	-2%		
PM									
NB Sand Hill to Encinal*	5.3	5.8	9 %	5.9	11%	6.0	13%		
SB Encinal to Sand Hill*	4.8	5.0	4%	4.9	2%	5.3	10%		

Table 6						
Travel Time with Future Volumes ((minutes)					

Note: Travel Time in minutes

* Segment length is 6,950 feet



Study Segments	Future 2035								
	No Alt I Project		tl	Al	t 2	Alt 3			
	Avg Speed	Avg Speed	% Inc	Avg Speed	% Inc	Avg Speed	% Inc		
AM									
NB Sand Hill to Encinal*	19.2	16.6	-14%	17.3	-10%	18.3	-5%		
SB Encinal to Sand Hill*	13.8	15.3	11%	15.6	13%	13.6	-1%		
PM									
NB Sand Hill to Encinal*	14.8	13.6	-8%	13.3	-10%	13.2	-11%		
SB Encinal to Sand Hill*	16.3	15.7	-4%	16.2	-1%	14.8	-9 %		

Table 7Average Speed (mph)

Note: Speed is measured in miles per hour

* Segment length is 6,950 feet

Intersection Delay

A summary of the intersection delay and Level of Service conditions for the nine signalized intersections on the corridor are included in Appendix D. These conditions are shown for Existing and Future 2035. Future conditions include the No Project and the three Alternatives for the corridor. During the more critical p.m. peak hour, three intersections under the No Project condition are projected to operate at a LOS E including Sand Hill Road, Ravenswood Avenue-Menlo Avenue and Valparaiso Avenue-Glenwood Avenue. With the addition of the continuous 3 lanes in Alternative I and the associated increase in traffic volumes, two of these intersections (Sand Hill Road and Valparaiso Avenue-Glenwood Avenue) would deteriorate to LOS F. The intersection of Ravenswood Avenue-Menlo Avenue would improve to LOS D. Alternatives 2 and 3 would have very similar conditions to the No Project scenario, except the intersection with Ravenswood Avenue-Menlo Avenue under Alternative 2 would improve to LOS D as a result of the added through lane and relocation of the right turn lane in the northbound direction.

Intersection Queuing

Appendix E shows the through lane queue lengths for the nine signalized intersections on the corridor. These conditions are shown for Existing and Future 2035. Future conditions include the No Project and the three Alternatives for the corridor. During the p.m. peak hour, the No Project condition shows that traffic from five intersections will spill back to upstream intersections at the following locations:

- Northbound approaching Sand Hill
- Northbound approaching Ravenswood
- Northbound approaching Glenwood-Valparaiso
- Southbound approaching Encinal
- Southbound approaching Ravenswood

With Alternative I, five locations would experience spillback:

- Northbound approaching Sand Hill
- Northbound approaching Ravenswood



- Northbound approaching Oak Grove
- Northbound approaching Glenwood-Valparaiso

Alternative 2 would have four locations with spillback:

- Northbound approaching Sand Hill
- Northbound Glenwood-Valparaiso
- Southbound approaching Glenwood-Valparaiso
- Southbound approaching Ravenswood

Alternative 3 would produce critical spillback at 6 locations:

- Northbound approaching Sand Hill
- Northbound approaching Ravenswood
- Northbound approaching Oak Grove
- Northbound approaching Glenwood-Valparaiso
- Southbound approaching Encinal
- Southbound approaching Glenwood-Valparaiso

Bicyclist Comfort and Safety

El Camino Real through Menlo Park is not currently a desirable route for bicyclists because of the high traffic volumes, speed, and the lack of bicycle facilities. Conditions would be expected to worsen for the cyclists on El Camino Real with Alternative I since an additional through travel lane would now be closer to the cyclists riding adjacent to the curb. However, enhanced facilities on parallel routes would improve cycling conditions overall for north-south through traffic within the City. People biking to or from destinations on El Camino Real would not have continuous facilities under this option. Alternative 2 significantly improves conditions for the cyclists with the addition of the buffered bicycle lanes. Alternative 3 would be the optimum conditions for bicycling with the separated facility. Under both Alternatives 2 and 3, bicyclists would need to navigate interactions with vehicles at driveways and right-turning traffic at intersections unless separate bicycle signal phases would be provided.

Pedestrian Comfort and Safety

Pedestrian comfort and crossings were also evaluated for each alternative. Under Alternative I, pedestrian comfort would decrease compared to No Project since elimination of parking would remove the buffer between vehicle traffic and the sidewalk. Under Alternatives 2 and 3, the bike lanes provide a level of buffering between vehicle traffic and the sidewalk. Alternative 3 would provide the most potential improvement to pedestrian conditions on the sidewalk, since the physical separation between the bike lane and vehicle traffic lane could provide a landscaped buffer area.

Alternatives I, 2 and 3 all provide an opportunity to add crosswalks at intersections where they are missing today (e.g., Ravenswood Avenue, Roble Avenue, etc.). Alternatives 2 and 3 provide the most potential improvement to pedestrian crossing conditions, since the number of lanes pedestrians would need to cross at intersections is minimized. Alternative 2 also provides the opportunity to construct narrow pedestrian bulbouts to further shorten pedestrian crossing distances.



While no sidewalk widening is proposed with any of the potential alternatives, sidewalk widening would be accommodated by increasing building setbacks with future redevelopment opportunities along the corridor, according to requirements in the El Camino Real/Downtown Specific Plan.

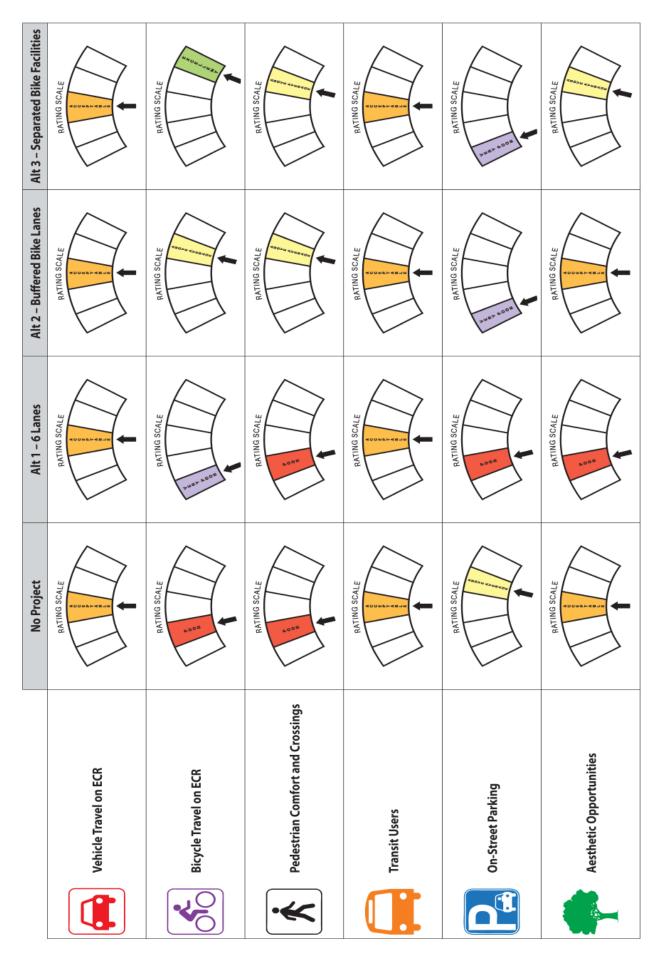
Summary of Results

Based on the analysis of the traffic metrics discussed above, an overall rating was developed for each mode under each alternative. Following is a summary of the ratings for each of these assessments, as presented during Community Workshop #3.



El Camino Real Corridor Study

Transportation Rating



Appendix A

Existing Conditions Report





El Camino Real Corridor Study

Existing Conditions Report



Prepared for the

City of Menlo Park



Submitted by

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December 19, 2014

Table of Contents

Introduction and Summary	I
Corridor Characteristics	3
Vehicular Traffic Characteristics	11
Non-Auto Modes of Transportation	26
Regulatory Setting	37
Collision History and Safety Conditions	41
Parking Facilities	47
Study Participants and References	52

Figures

Ι	Study Area	.4
2A	Cross Section	
2B	Cross Section	. 6
2C	Cross Section	.7
2D	Cross Section	. 8
3	Existing Peak Hour Traffic Volumes	19
4A	Queuing	22
4B	Queuing	23
4C	Queuing	24
4D	Queuing	25
5	Crosswalk Locations	27
6	Existing Peak Hour Pedestrian Crossing Volumes	28
7	Bicycle Facilities	
8	Existing Peak Hour Bicycle Intersection Volumes	31
9	Transit Facilities	32
10	All Collisions at Intersections	42
11	All Collisions between Intersections	43
12	Pedestrian Collisions	
13	Bicycle Collisions	46

Tables

I	El Camino Real Daily Traffic Volumes	.11
2	Existing Peak Period Travel Time	
3	Signalized Intersection Level of Service Definitions	
	Existing Peak Hour Intersection Levels of Service	
	Collision Rates at the Study Intersections Compared to Statewide Average	



Appendices

- A El Camino Real Segment Volume Data
- B El Camino Real Vehicle Classification Data
- C El Camino Real Travel Time Data
- D Intersection Turning Volumes
- E Intersection Level of Service Calculations
- F El Camino Real Queuing Calculations
- G El Camino Real Curb Ramp Data
- H El Camino Real Collision Records
- I El Camino Real On-Street Parking Inventory



Document Context

The goal of the El Camino Real Corridor Study is to evaluate potential transportation and safety improvements to El Camino Real in the City of Menlo Park. This study will consider alternatives to modify the existing cross-section to allow for the addition of a bicycle lane and/or an additional through lane for a total of three lanes in each direction. Ultimately the project will be consistent with the goals for balanced capacity, bicyclist and pedestrian connectivity, transit access, parking, and safety outlined in the *El Camino Real/Downtown Specific Plan* as well as the City's Complete Streets Policy.

This Existing Conditions Report is the first in a series of documents that will be produced as part of this effort. Major upcoming tasks and documentation will include the following elements (Estimated completion dates are shown in parentheses):

- Summary of Best Practices This document will highlight road modification strategies gathered from the El Camino Real/Downtown Specific Plan and the experience of other Bay Area communities that have incorporated such practices along similar roadways. (Early August 2014)
- Performance Metrics Performance metrics will be developed for all users vehicles, bicycle, pedestrians, transit, parking, etc. that will be used to evaluate alternatives. The metrics will consider industry operational standards as well as conditions specific to the El Camino Real corridor. (September 2014)
- Travel Demand Forecasts Travel demand forecasts will be developed for 2014 and future year 2040, conditions with and without potential modifications, using the San Mateo County/C/CAG Travel Demand Model. (October 2014)
- Alternatives Analysis Preliminary modifications, improvements, and other concepts to meet the goals
 of the community and the El Camino Real Specific Plan will be presented in this report. Following
 review of the concepts, the improvements will be mixed, matched, and combined, as appropriate
 into three alternatives. These alternatives will be evaluated and refined based on input from the
 public. (November 2014)

Existing Conditions Summary

This Existing Conditions Report includes a summary of data collected along the corridor, an analysis of existing corridor operations, and documentation of existing facilities that serve all modes of travel. Following is a summary of the issues that are detailed in this report.

- Study Area El Camino Real is the main north-south arterial in Menlo Park and connects the Downtown to other parts of the peninsula. The corridor within the City limits is typically a four- to six-lane divided arterial with traffic signals, sidewalks, pedestrian crosswalk and curb ramps, as well as assorted transit service including SamTrans buses, shuttles, and Caltrain.
- Vehicular Traffic Operations The 1.35-mile corridor includes nine signalized intersections, each of which was analyzed in greater detail. Southbound traffic is highest during the a.m. peak period, while northbound traffic is highest during the p.m. peak period. Travel times through the corridor range between three and five minutes during peak periods. Results of the Level of Service (LOS) calculations indicate that all study intersections are operating at LOS D or better, with the exception of El Camino Real/Sand Hill Road during the p.m. peak period.



- Queuing Vehicular queuing along El Camino Real is generally concentrated near approaches to Menlo Avenue-Ravenswood Avenue. Vehicle queuing in turn lanes are adequately accommodated within existing queue storage, with the exception of the northbound left-turn lane at Sand Hill Road. While vehicular queuing on El Camino Real through lanes approaching Menlo Avenue-Ravenswood Avenue may sometimes exceed storage capacity and spill over onto adjacent intersections, all average queue lengths during the morning and afternoon peak hours can be accommodated with existing queue storage and spillover queues are temporary.
- Pedestrian Facilities Within Menlo Park, continuous sidewalks are currently provided along both sides of El Camino Real; however, the width and condition of the sidewalk varies along the corridor. Marked pedestrian crosswalks, along with pedestrian crossing signal equipment, are provided at all study intersections; however, at some intersections, crossings are prohibited on one leg of the intersection. There are no uncontrolled marked crossings of El Camino Real within the study area corridor.
- Bicycle Mode of Travel Existing bicycle facilities within the study area include bike lanes and bike routes on streets intersecting El Camino Real, nearby parallel routes (e.g., Laurel Street, Alma Street, and portions of University Drive), and bike parking near the Downtown and Caltrain Station areas.
- *Public Transit* Transit service in the study area is provided by several agencies, including SamTrans for local bus service; the City of Menlo Park and Stanford University for local shuttle service; and Caltrain for regional rail service. Bus service runs at frequencies of 15-minutes and rail service runs at frequencies of approximately 60-minutes during typical weekdays.
- Collisions and Safety A review of the City's records for collisions along El Camino Real showed that the calculated intersection collision rates were higher than the statewide average for similar facilities at intersections near the Downtown and Caltrain areas. Two-thirds of reported intersectionrelated collisions between Valparaiso Avenue-Glenwood Avenue and Roble Avenue were rear-end collisions.
- Parking Parking along the El Camino Real corridor consists of on-street parking, off-street public parking lots, private parking lots, and Caltrain commuter lots. The available on-street parking supply along El Camino Real is 156 spaces. More spaces are available nearby in public off-street plazas, onstreet parking on intersecting streets, commuter parking lots at Caltrain, and private off-street parking lots. Parking occupancy surveys along El Camino Real are scheduled to be completed in September 2014.



The study area consists of El Camino Real within the City of Menlo Park City limits between Sand Hill Road to the south and Encinal Avenue to the north (shown in Figure 1). El Camino Real, also designated as State Route (SR) 82, is a primary arterial roadway and commercial corridor on the San Francisco Peninsula. As a regional route, El Camino Real begins in Santa Clara County in the south, and continues through Daly City to the north, where it continues as Mission Street into San Francisco. In much of Santa Clara County and all of San Mateo County, El Camino Real is under the jurisdiction of the California Department of Transportation (Caltrans).

Corridor Segments

Within the city limits of Menlo Park, El Camino Real has a posted speed limit of 35 mph and segments with either two or three through lanes in each direction as shown in Figure 2.

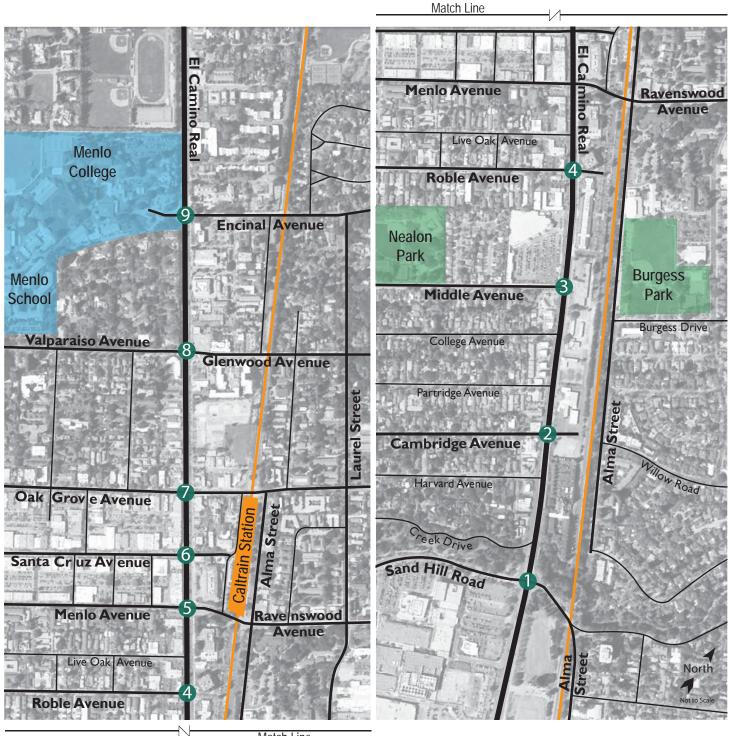
- From <u>Sand Hill Road north to Roble Avenue</u>, there are three through travel lanes in each direction with wide curb lanes. The curb-to-curb width of El Camino Real varies between 88 feet and 120 feet throughout the segment. On-street parking is allowed on the east side of El Camino Real, north of Cambridge Avenue. Parking on the west side of the street is allowed on a short section south of Middle Avenue.
- Between <u>Roble Avenue and Ravenswood Avenue</u> El Camino Real transitions from a six-lane roadway to four through lanes with turn lanes. The curb-to-curb width of El Camino Real varies between 84 feet and 90 feet throughout the segment. In the northbound direction, the curb lane becomes a right-turn lane for the entire block serving right-turn movements onto Ravenswood Avenue. On-street parking is allowed on the west side of the street.
- Between <u>Menlo Avenue-Ravenswood Avenue and Valparaiso Avenue-Glenwood Avenue</u> there are two through lanes in each direction with turn lanes. The curb-to-curb width of El Camino Real is typically 84 feet throughout the segment. There are right-turn lanes of varying length at each of the intersections. On-street parking is generally allowed between signalized intersections; near the intersections, parking is restricted to provide right-turn pockets.
- <u>North of Valparaiso Avenue-Glenwood Avenue</u>, El Camino Real has two northbound through lanes and three southbound travel lanes. The curb-to-curb width of El Camino Real is typically 88 feet throughout the segment. On the east side of El Camino Real, on-street parking is provided, except where restricted to provide a right-turn pocket at Encinal Avenue. In the southbound direction, the third curb lane serves as a long right-turn lane at the Valparaiso-Glenwood intersection.

Study Intersections

All of the intersections within the corridor that are controlled by traffic signals were evaluated in more detail. These intersections, which are shown on Figure 1, include:

- I. El Camino Real/Sand Hill Road
- 2. El Camino Real/Cambridge Avenue
- 3. El Camino Real/Middle Avenue
- 4. El Camino Real/Roble Avenue
- 5. El Camino Real/Menlo Avenue-Ravenswood Avenue
- 6. El Camino Real/Santa Cruz Avenue
- 7. El Camino Real/Oak Grove Avenue
- 8. El Camino Real/Valparaiso Avenue-Glenwood Avenue
- 9. El Camino Real/Encinal Avenue



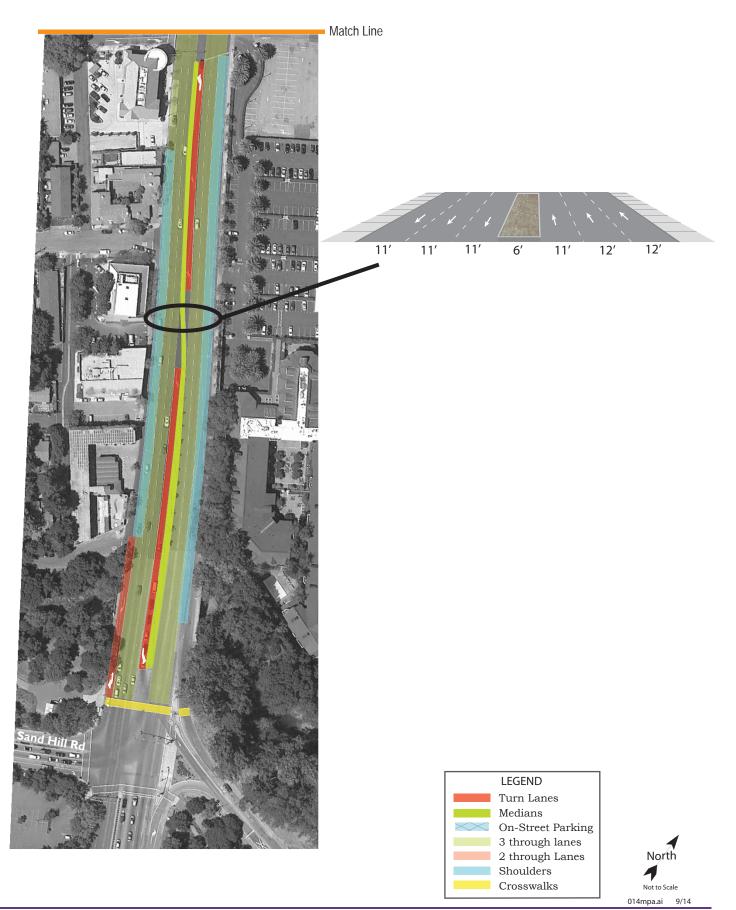


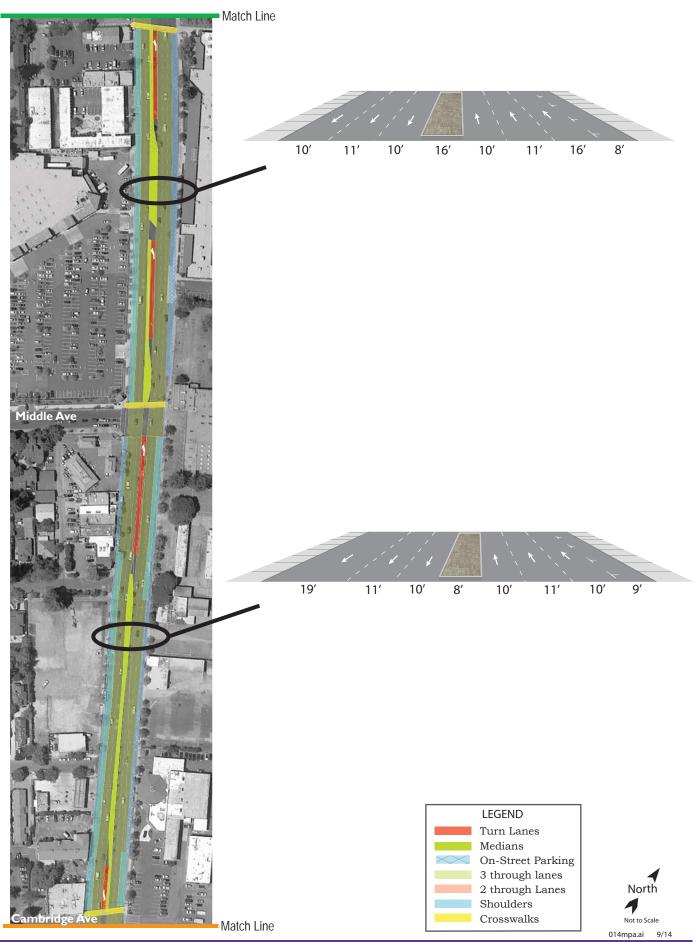
Match Line



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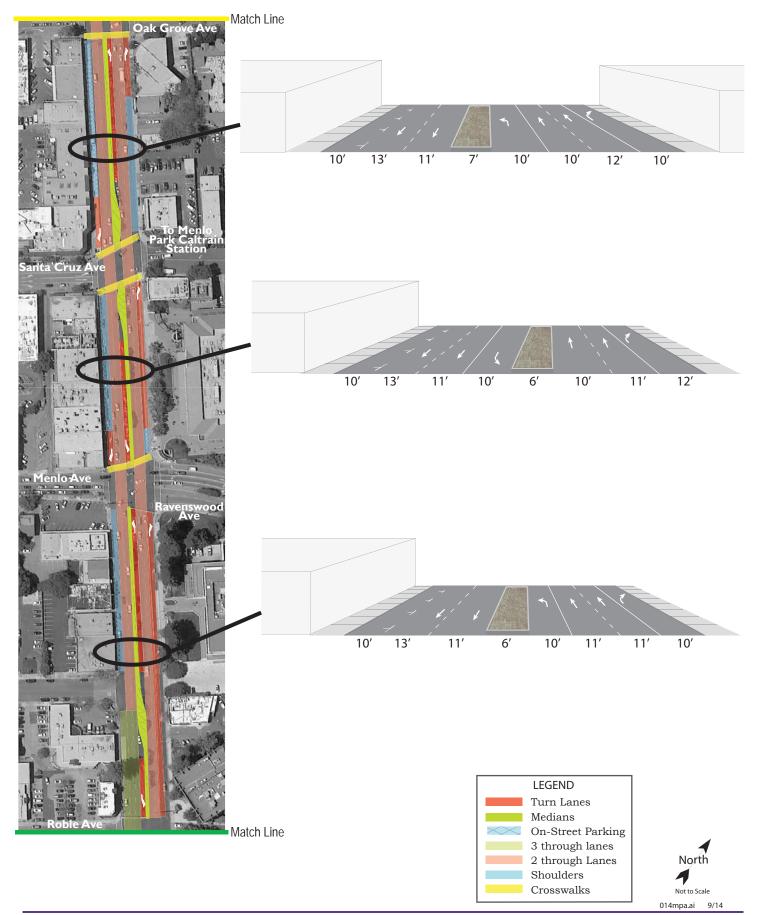




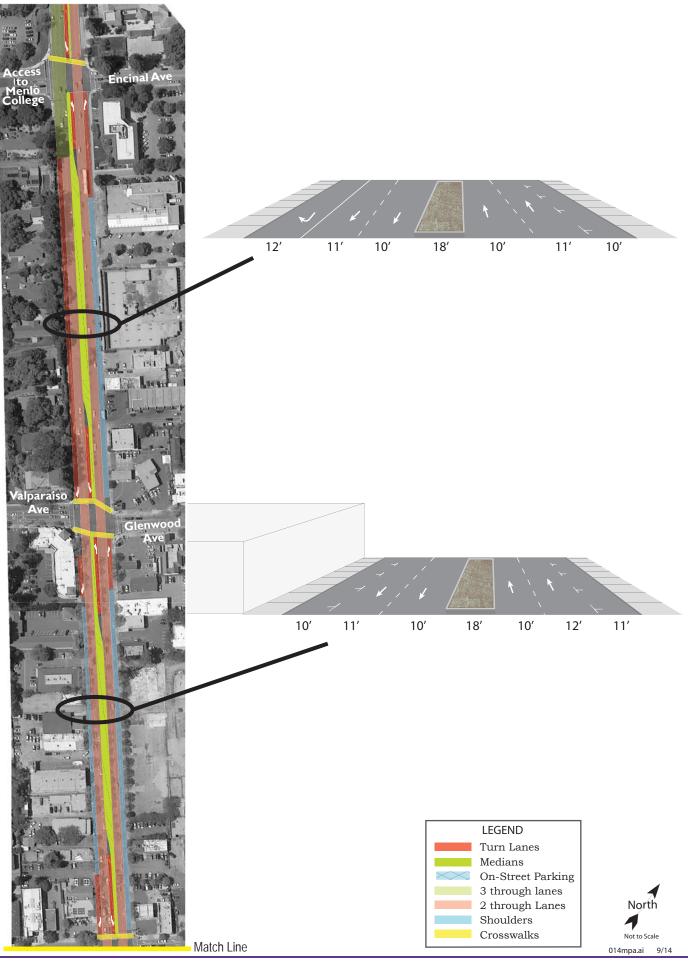


El Camino Real Corridor Study – Existing Conditions Report Figure 2B – Cross Sections





El Camino Real Corridor Study – Existing Conditions Report Figure 2C – Cross Sections



El Camino Real Corridor Study – Existing Conditions Report Figure 2D – Cross Sections

These locations represent all the signalized intersections on El Camino Real within the City of Menlo Park. The following intersections are stop-controlled on their approach to El Camino Real:

- Live Oak Avenue
- College Avenue
- Partridge Avenue
- Harvard Avenue
- Creek Drive

These streets all lie to the west of El Camino Real and are limited to right-turn in/right-turn out movements by a raised median on El Camino Real.

It is acknowledged that streets in Menlo Park generally do not follow a true north-south or east-west alignment. For the purpose of this analysis, El Camino Real was considered to have a north-south alignment. Therefore, the alignment designation of all other streets was established based on the street's relative position to El Camino Real.

Cross Streets

Following are descriptions of the cross streets at the study intersections:

Sand Hill Road – is a primary arterial street that parallels the border between the cities of Menlo Park and Palo Alto. This arterial connects the two cities with I-280 to the west. East of El Camino Real the route continues as Alma Street; however, the intersection alignment prohibits east-west through traffic movements across El Camino Real between Sand Hill Road and Palo Alto Avenue, except for bicyclists. The intersection is within the City of Palo Alto.

Cambridge Avenue – is a local, two-lane street that connects El Camino Real to the Allied Arts neighborhood to the west of El Camino Real. The west leg of the intersection is a driveway serving the Stanford Park Hotel and is a potential access location for the proposed development at 500 El Camino Real on the east side of El Camino Real.

Middle Avenue – is a collector street that provides access to residential neighborhoods, a shopping center, schools and parks to the west of El Camino Real. The intersection is a potential access location for the proposed development at 500 El Camino Real on the east side of El Camino Real, and would connect to a pedestrian and bicycle undercrossing of Caltrain which was proposed in the Menlo Park El Camino Real and Downtown Specific Plan

Roble Avenue – is a two-lane local street that provides access to residential neighborhoods, shopping, schools and parks to the west of El Camino Real. The signalized intersection also provides access to a shopping center and office building on the east side of El Camino Real.

Ravenswood Avenue – is a minor arterial street to the east of El Camino Real (aligning with Menlo Avenue to the west) that provides connectivity to Middlefield Road, Menlo-Atherton High School, Menlo Park Caltrain Station, residential neighborhoods east of Caltrain, Menlo Park City Hall and employment centers, including the SRI International campus. Ravenswood Avenue is the southernmost crossing of the Caltrain line that connects to eastern Menlo Park.

Menlo Avenue – is a collector street to the west of El Camino Real (aligning with Ravenswood Avenue to the east). The corridor borders Downtown Menlo Park on its southern side and provides access to local businesses and Downtown parking plazas.



Santa Cruz Avenue – is a minor arterial street that provides access to Alameda de las Pulgas and ultimately Sand Hill Road to the west. To the east of El Camino Real, Santa Cruz Avenue is a local street that terminates into the Menlo Park Caltrain Station. Santa Cruz Avenue is the primary commercial street in Downtown Menlo Park. However, since northbound and southbound left-turn movements are not permitted from El Camino Real onto Santa Cruz Avenue, access to Downtown is dispersed among Santa Cruz Avenue as well as Menlo Avenue and Oak Grove Avenue, to the south and north, respectively.

Oak Grove Avenue – is a collector street that forms the northern boundary of Downtown Menlo Park and provides access to local businesses and Downtown parking plazas.

Valparaiso Avenue – is a minor arterial street to the west of El Camino Real (aligning with Glenwood Avenue to the east) that provides access to several schools and residential neighborhoods, ultimately connecting to Alameda de las Pulgas (a regional, north-south route) to the west.

Glenwood Avenue – is a collector street to the east of El Camino Real (aligning with Valparaiso Avenue to the west) that provides access to residential neighborhoods and ultimately connects to Middlefield Road.

Encinal Avenue – is a collector street that connects to Middlefield Road to the east. West of El Camino Real, Encinal Avenue terminates into Menlo College.

Pedestrian Facilities

Within Menlo Park, continuous sidewalks are currently provided along both sides of El Camino Real with varying width and physical condition. As shown in Figure 2, there are marked crossings of El Camino Real provided at all of the study intersections; however, at some intersections, crossings are prohibited on one leg of the intersection. There are no uncontrolled marked crossings of El Camino Real within the study area.

Bicycle Facilities

Along the El Camino Real, no bicycle facilities are currently provided. Within the study area, bike facilities on intersecting streets include Class II bike lanes on Valparaiso Avenue-Glenwood Avenue, shared-lane (sharrow) markings along Menlo Avenue west of El Camino Real. Bike parking at the Caltrain station, public parking lots, and bike racks located in bike corrals and sidewalks on streets intersecting El Camino Real are provided.

Transit Facilities

Local and regional transit service is provided by SamTrans and Caltrain respectively. Additionally, local shuttles provided by the City of Menlo Park and nearby Stanford University to supplement transit service along El Camino Real. In each direction, one Caltrain station and six bus stops are located along El Camino Real within the City of Menlo Park.



Data Collection

Transportation data along the El Camino Real corridor was collected in early April 2014, on typical weekdays while local schools were in session and without the presence of special events or adverse weather. This included collection of the following data:

- Peak period vehicle turning movement counts at all study intersections
- Peak period pedestrian and bicycle turning movement counts at all study intersections
- 48-hour roadway segment vehicle counts, including vehicle classification, at the following locations:
 - El Camino Real between Encinal Avenue and Glenwood Avenue
 - El Camino Real between Ravenswood Avenue and Santa Cruz Avenue
 - El Camino Real north of Middle Avenue
 - El Camino Real north of Sand Hill Road
- Morning, midday and evening peak period travel time studies

Segment Traffic Volumes

Vehicle traffic volume counts on El Camino Real, which are included in Appendix A, were found to be lowest at the north end of the City, generally increasing towards the south where there is as much as 35 percent more traffic. These counts are summarized in Table I.

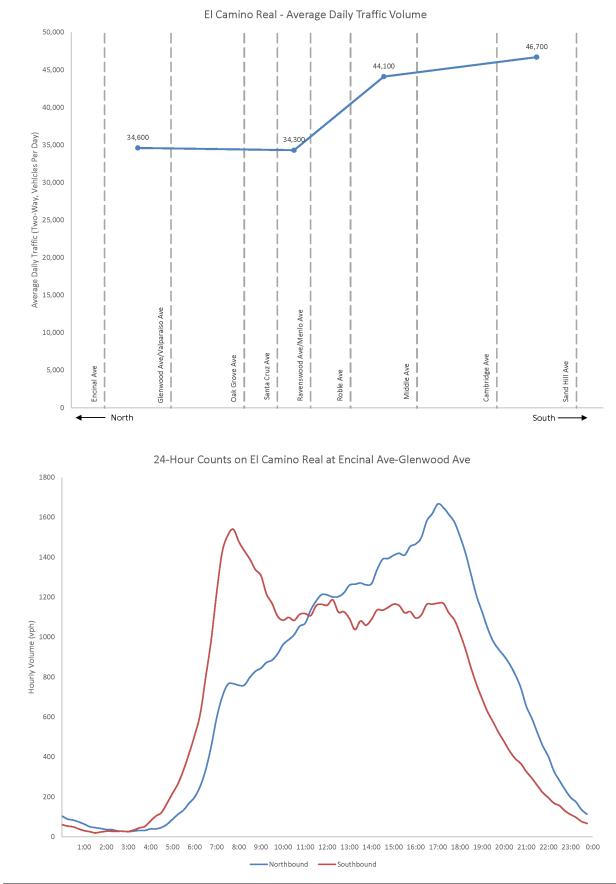
El Camino Real Dally Traffic Volumes					
Location along El Camino Real	Southbound	Northbound	Total		
Between Encinal Ave and Glenwood Ave	16,700	17,900	34,600		
Between Ravenswood Ave-Menlo Ave and Santa Cruz Ave	17,900	I 6,400	34,300		
North of Middle Ave	21,500	22,600	44,100		
North of Sand Hill Rd	22,600	24,100	46,700		

 Table I

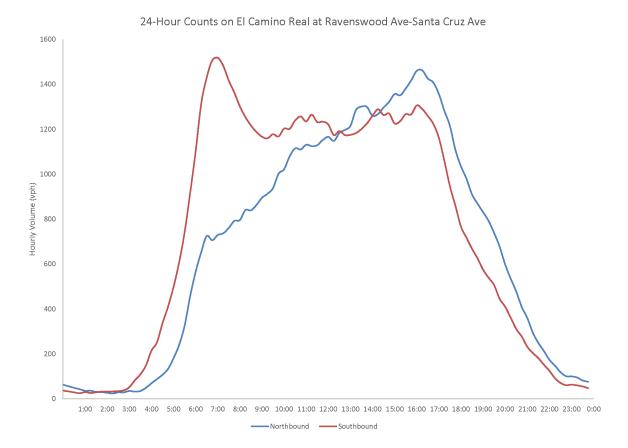
 El Camino Real Daily Traffic Volumes

The charts below display the hourly distribution of traffic on El Camino Real at the four points of data collection. Throughout the day, southbound traffic generally peaks during the morning and decreases slightly during the afternoon. Conversely, northbound traveling traffic steadily increases throughout the day, peaking during the evening commute period.

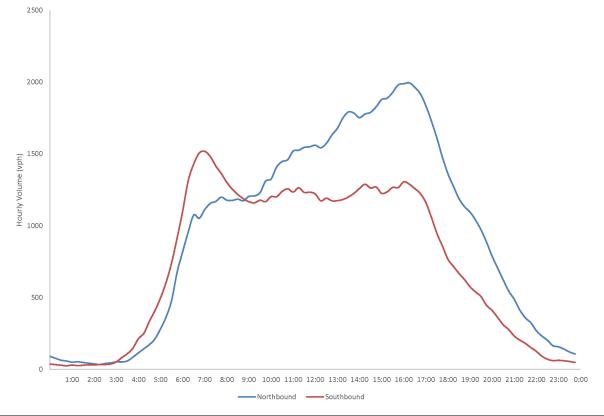




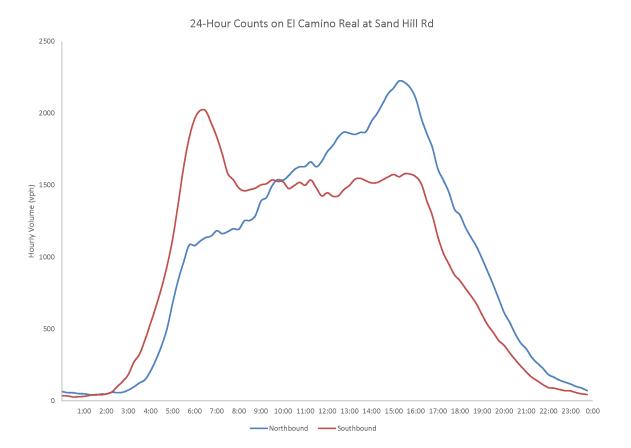












Vehicle Classification

Vehicle classification studies were performed at two locations along El Camino Real, at Cambridge Avenue and Middle Avenue, to determine the level of heavy vehicle traffic, including buses, on the route. Heavy vehicle volumes were found to be highest during the midday peak period, at approximately two percent of total vehicle traffic. During the evening, heavy vehicles represents less than one percent of total traffic on El Camino Real. The vehicle classification counts are included in Appendix B.

Travel Times

Travel time surveys were conducted along the study corridor for three time periods: a.m. peak period of 7:00 - 9:00 a.m., midday peak period of 11:30 a.m. - 1:30 p.m., and the p.m. peak period of 4:00 - 6:00 p.m. Details of the surveys are included in Appendix C. Table 2 provides a summary of existing average travel time and average speeds along the corridor between Encinal Avenue and Sand Hill Road during typical morning, midday and evening peak periods.



Existing reak renod Travel Time						
Direction of Travel	AM Peak ¹		Midday Peak ²		PM Peak ³	
	Average Travel Time	Average Speed	Average Travel Time	Average Speed	Average Travel Time	Average Speed
NB El Camino Real ⁴	3:48	21.5	4:35	17.5	5:24	14.9
SB El Camino Real ⁵	5:06	15.7	3:48	21.3	5:00	16.1

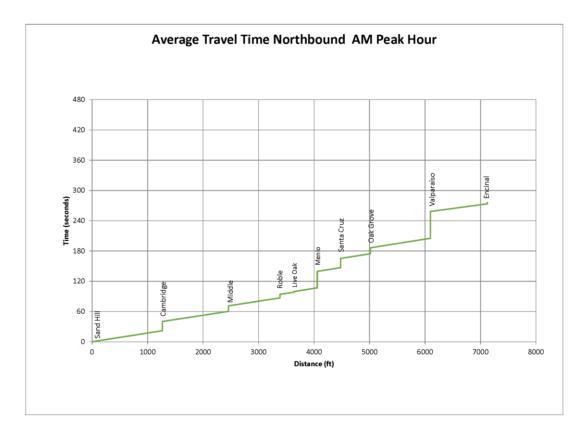
Table 2 Existing Peak Period Travel Time

Notes: Travel Time is measured in minutes: seconds, Speed is measured in miles per hour (mph)

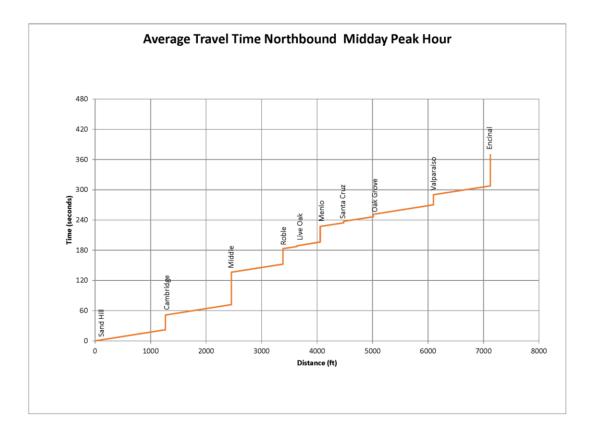
¹ a.m. peak period = 7:00 – 9:00 a.m.; ² midday peak period = 11:30 a.m. – 1:30 p.m.; ³ p.m. peak period = 4:00 – 6:00 p.m.; ⁴ from Sand Hill Rd to Encinal Ave; ⁵ from Encinal Ave to Sand Hill Rd

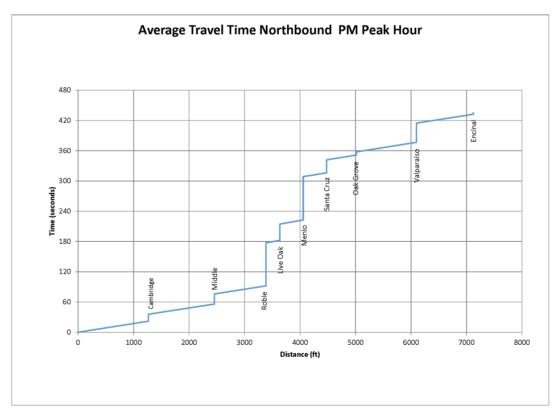
In the northbound direction, average speeds varied between 14.9 mph (p.m. peak) and 21.5 mph (a.m. peak) while in the southbound direction, average speeds varied between 15.7 mph (a.m. peak) and 21.3 mph (midday peak). The City, in Policy II-A-2 of its *General Plan*, has established a goal of maintaining an average travel speed of 14 mph or better along El Camino Real. Under existing conditions, surveyed travel speeds exceed 14 mph during all study periods.

The charts below provide more details of the travel time in both directions during the three peak hours.

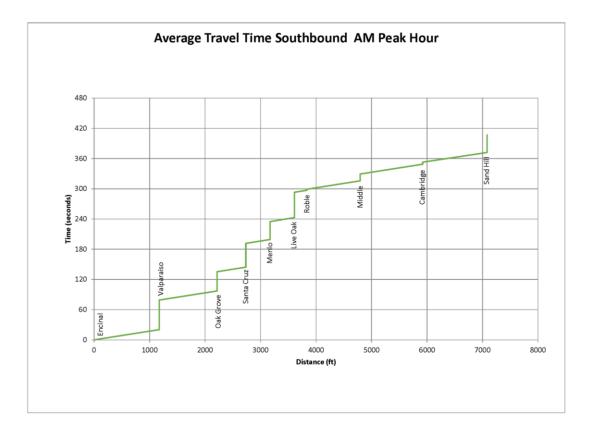


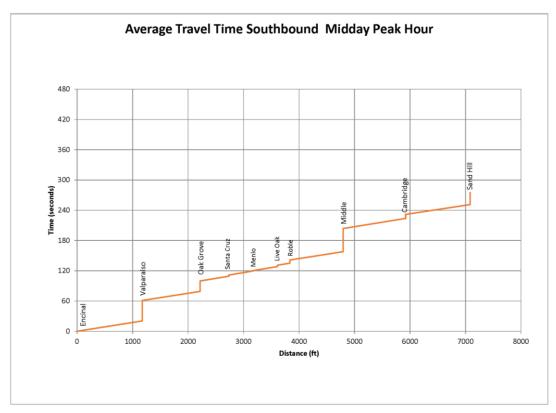




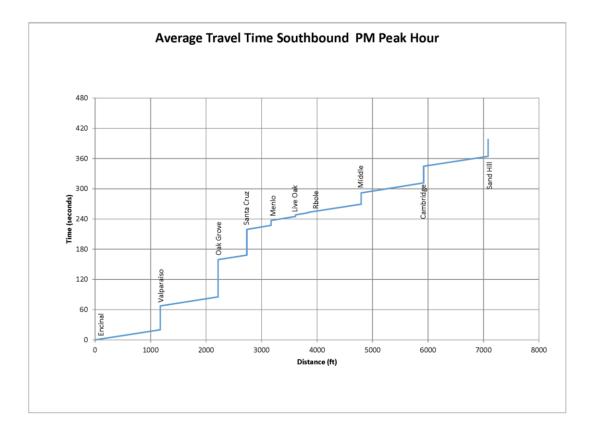












Intersection Traffic Volumes

Peak hour intersection turning movement volumes at the study intersections are shown on Figure 3 with full details of the counts in Appendix D.

Intersection Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

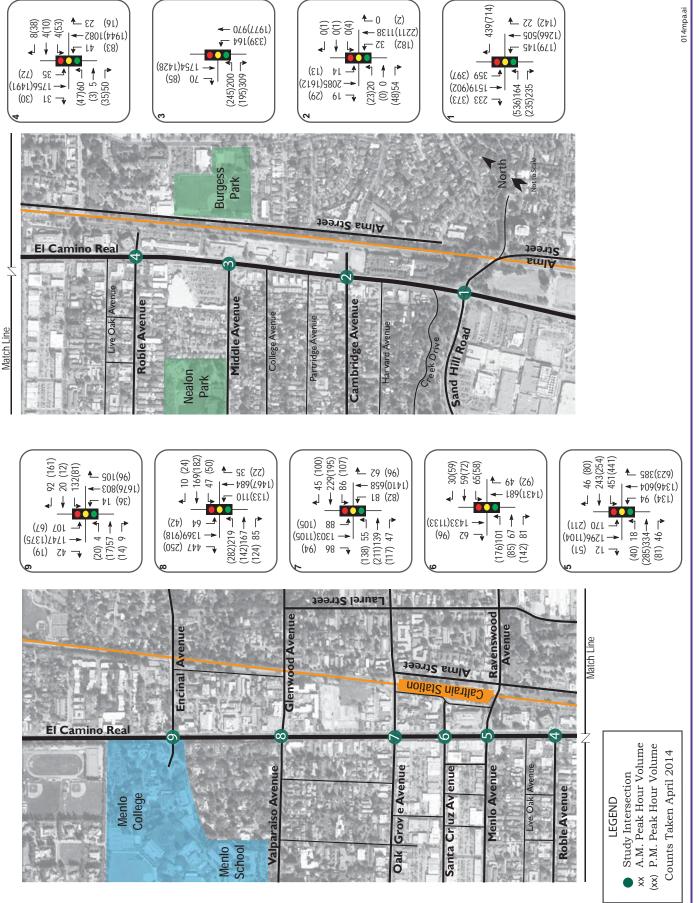
The study intersections were analyzed using the signalized methodology published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2000. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle. The study intersections were evaluated using the Synchro 8 application. The signalized methodology is based on factors including traffic volumes, green time for each movement, phasing, whether or not the signals are coordinated, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology.

The ranges of delay associated with the various levels of service are indicated in Table 3.





El Camino Real Corridor Study – Existing Conditions Report **Figure 3 – Existing Peak Hour Traffic Volumes**



	Signalized intersection Level of Service Delinitions
LOS A	Delay of 0 to 10 seconds.
LOS B	Delay of 10 to 20 seconds.
LOS C	Delay of 20 to 35 seconds.
LOS D	Delay of 35 to 55 seconds.
LOS E	Delay of 55 to 80 seconds.
LOS F	Delay of more than 80 seconds.

Table 3
Signalized Intersection Level of Service Definitions

Reference: Highway Capacity Manual, Transportation Research Board, 2000

Standards of Significance

The City of Menlo Park's standards of significance are established in the City's *General Plan*. For signalized intersections within Menlo Park, including those controlled by Caltrans, the City has established an acceptable threshold of LOS D or better.

Calibration Process

Since the City employs an adaptive traffic signal system that automatically adjusts signal timing based on traffic demands, delays were calculated using signal timing calibrated to produce results similar to field-collected travel-time runs. The model's corridor travel time were determined using the SimTraffic application of Synchro and averaging the corridor travel times for each of five runs. Corridor travel times predicted by the Synchro model were within five percent of field-observed travel time runs after calibration.

Existing Intersection Operations

Operating conditions during the a.m. and p.m. peak periods were evaluated to capture the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, while the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute. A summary of the intersection level of service calculations is contained in Table 4, and copies of the Level of Service calculations are provided in Appendix E.



St	Study Intersection Existing Conditions					
		AM Peak PM		PM I	1 Peak	
		Delay	LOS	Delay	LOS	
١.	El Camino Real/Sand Hill Rd	33.9	С	65.8	E	
2.	El Camino Real/Cambridge Ave	4.9	А	11.6	В	
3.	El Camino Real/Middle Ave	14.7	В	15.9	В	
4.	El Camino Real/Roble Ave	10.2	В	13.5	В	
5.	El Camino Real/Menlo Ave-Ravenswood Ave	38.3	D	53.8	D	
6.	El Camino Real/Santa Cruz Ave	22.5	С	18.7	В	
7.	El Camino Real/Oak Grove Ave	20.7	С	30.6	С	
8.	El Camino Real/Valparaiso Ave-Glenwood Ave	38.6	D	31.4	С	
9.	El Camino Real/Encinal Ave	13.8	В	10.2	В	

Table 4Existing Peak Hour Intersection Levels of Service

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

Currently, all study intersections along the corridor were found to be operating at LOS D or better, with the exception of El Camino Real/Sand Hill Road which operates at LOS E during the p.m. peak hour (which is in Palo Alto, and as a CMP intersection is considered acceptable at LSO E). Generally, the highest level of delay was found to occur during the p.m. peak hour at all but three of the study intersections.

Queuing

Vehicular queuing along the El Camino Real corridor at the study intersections was determined using the SimTraffic application of Synchro. Queue statistics were averaged over five runs of SimTraffic. In addition, vehicular queuing along El Camino Real was field-observed. After calibration of the Synchro models used for the SimTraffic application, results from the expected queuing from the SimTraffic application, including typical queues and maximum projected queues, were compared with field observations and were found to be consistent.

For each scenario the projected average and maximum queues on the El Camino Real approaches to the study intersections are shown in Figure 4. The queuing calculation results are contained in Appendix F. In general, these conditions reveal the following:

- The longest average queues were determined to be in the southbound direction during the a.m. peak hour, and in the northbound direction during the p.m. peak hour, approaching Menlo Avenue-Ravenswood Avenue, with maximum projected through-lane queues intermittently spilling back to adjacent intersections. However, all average queues were within the available storage capacity between signalized intersections on El Camino Real.
- While maximum left-turn queues intermittently exceeded the available storage capacity, all of the average queues within left-turn lanes were within the available storage capacity of those lanes, with the exception of the northbound left-turn lane at Sand Hill Road.
- All of the queues within right-turn lanes were, on average, within the available storage capacity of those lanes.



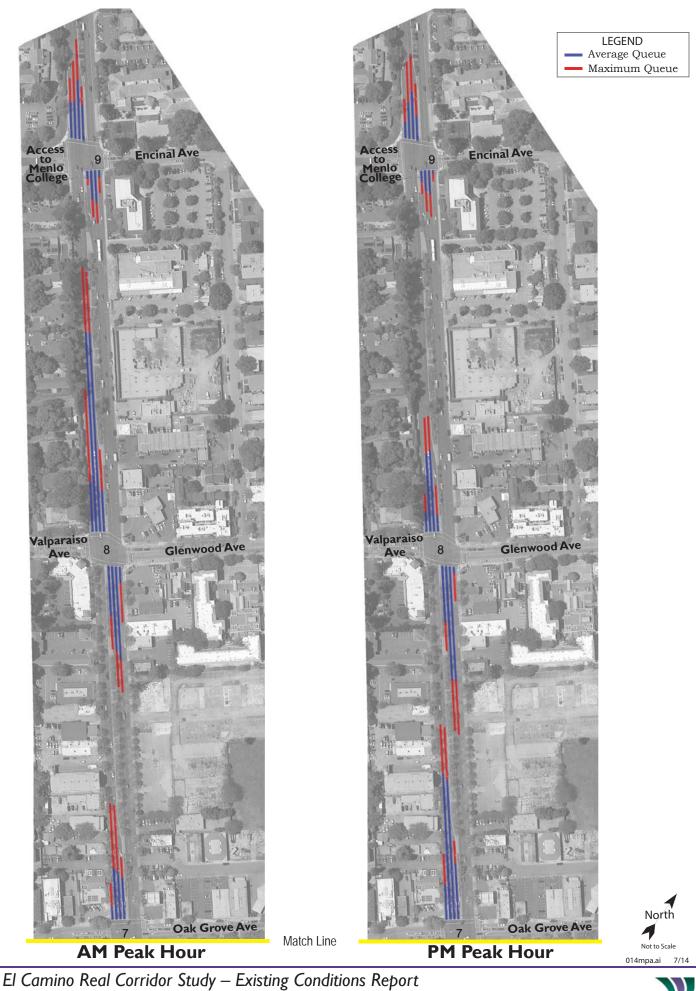
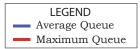
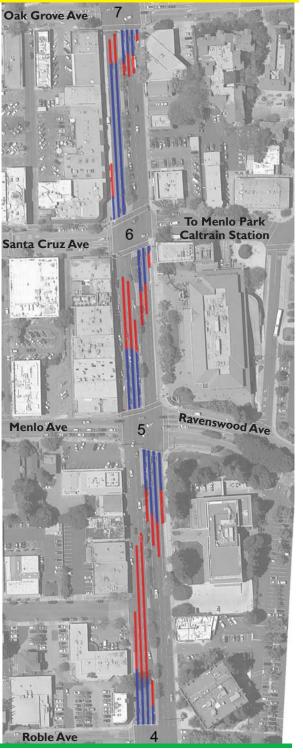


Figure 4A – Queuing





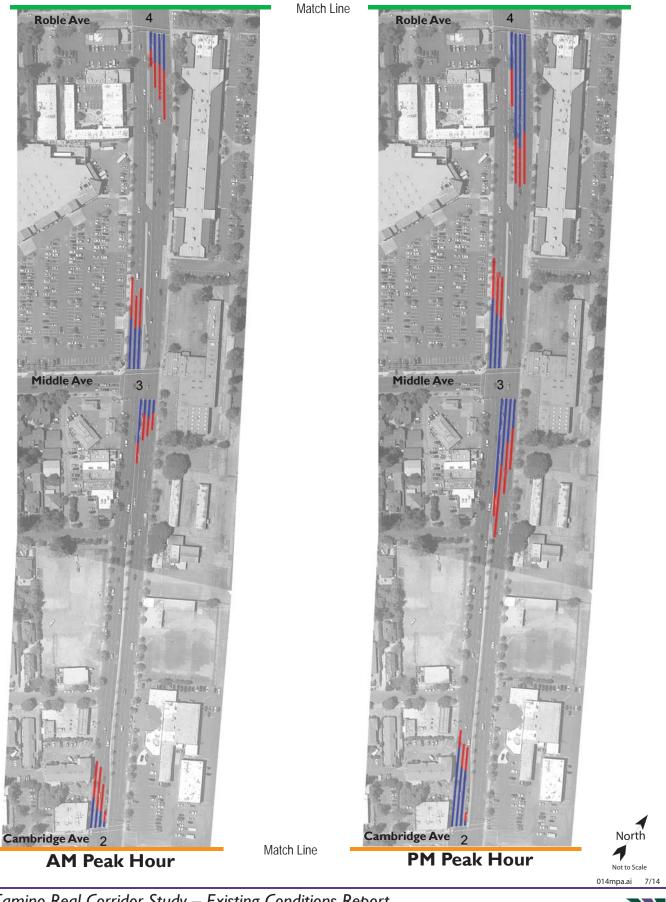
AM Peak Hour



PM Peak Hour



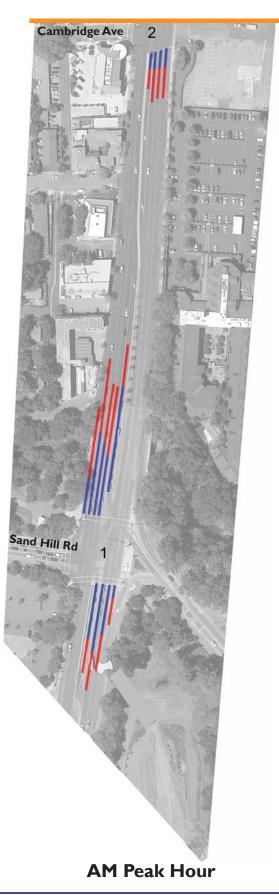




w-trans

LEGEND Average Queue Maximum Queue





Match Line



El Camino Real Corridor Study – Existing Conditions Report Figure 4D – Queuing

Pedestrian Facilities

Within Menlo Park, continuous sidewalks are currently provided along both sides of El Camino Real; however, it is noted that the width and condition of the sidewalk varies along the corridor. As part of the corridor study, a detailed analysis of pedestrian facilities will be conducted and, where appropriate, improvement measures will be recommended.

Crosswalk Locations

Marked pedestrian crosswalks, along with pedestrian crossing signal equipment, are provided at all study intersections; however, at some intersections, crossings are not provided on one leg of the intersection as shown on Figure 5. At these locations, there is no traffic signal crossing equipment but also no signing prohibiting crossing, except for the south leg of El Camino Real at Menlo Avenue. All crosswalks within the study area have standard crosswalk markings, two transverse white lines perpendicular to the flow of traffic.

There are no uncontrolled marked crossings of El Camino Real within the study area corridor. At the five other uncontrolled intersections within the corridor (Live Oak Avenue, College Avenue, Partridge Avenue, Harvard Avenue and Creek Drive), there are raised medians which include intermittent landscaping. Although these medians discourage pedestrian crossings of El Camino Real, there are no signs or markings that prohibit pedestrians from crossing at these locations.

Curb Ramps

At all marked crosswalk locations, curb ramps are provided on both sides of the street. Curb ramps are also provided at all intersecting street crossings along El Camino Real. A complete inventory is shown in Appendix G.

<u>Medians</u>

There are existing raised medians on all sections of El Camino Real in the study corridor which are shown in Figure 2. Wider medians also provide tree coverage and landscaping while narrower sections have no landscaping and provide channelization.

Pedestrian Crossing Volumes

As part of the data collection effort, pedestrian crossings were counted during the a.m. and p.m. peak hours. The peak crossing volume for each of the study intersections is shown on Figure 6. The heaviest pedestrian crossings of El Camino Real were recorded at the intersection with Santa Cruz Avenue with over 120 crossings during the p.m. peak hour.

Bicycle Facilities

The Highway Design Manual, California Department of Transportation (Caltrans), 2012, classifies bikeways into three categories:

- Class I Multi-Use Path: a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- Class II Bike Lane: a striped and signed lane for one-way bike travel on a street or highway.
- Class III Bike Route: signing only for shared use with motor vehicles within the same travel lane on a street or highway.





Match Line



El Camino Real Corridor Study – Existing Conditions Report Figure 5 – Existing Crosswalk Location 014mpa.ai 9/14





El Camino Real Corridor Study – Existing Conditions Report Figure 6 – Existing Peak Hour Pedestrian Crossing Volumes



In addition, the Downtown Specific Plan contains a "Future Class II/Minimum Class III" designation for locations where bicycle lanes are desired but may be infeasible in the near-term because they would require parking removal or right-of-way acquisition.

Currently, there are no designated bicycle facilities on El Camino Real within Menlo Park. Class II bicycle lanes currently exist on Valparaiso Avenue and Glenwood Avenue. Sharrows are marked on Menlo Avenue west of El Camino Real, a Class III Bike Route. Additionally, parallel Class II bicycle lanes are provided along Alma Street and Laurel Street; however, neither parallel route continues for the entire length of El Camino Real.

Planned bicycle facilities along El Camino Real and on nearby side streets are detailed in the Menlo Park Comprehensive Bicycle Development Plan and in the Menlo Park El Camino Real and Downtown Specific Plan. These planned bicycle facilities include Class II bike lanes on Oak Grove Avenue, Future Class II/ Minimum Class III bike facilities along El Camino Real and on Menlo Avenue, Ravenswood Avenue west of the Caltrain Tracks, and Middle Avenue, and a Class III bike route on Encinal Avenue.

A summary of Existing and Planned bicycle facilities is shown in Figure 7.

Bicycle Volumes

The peak hour bicycle volumes for each of the study intersections are shown on Figure 8. The data shows that, today, there is limited bicycle use along the El Camino Real corridor. This is likely due to the limited bicycle infrastructure on El Camino Real, coupled with heavy vehicle traffic volumes. Additionally, many bicycle trips are made off-peak when vehicle traffic is lighter, but speeds are faster with less congested conditions.

Crossing El Camino Real, most of the intersections between Valparaiso Avenue-Glenwood Avenue and Menlo Avenue-Ravenswood Avenue experience bicycle volumes of between 5 and 15 riders per hour. Sand Hill Road, with the bicycle-only through lane crossing El Camino Real, has over 30 riders per hour in the peak direction.

Transit Facilities

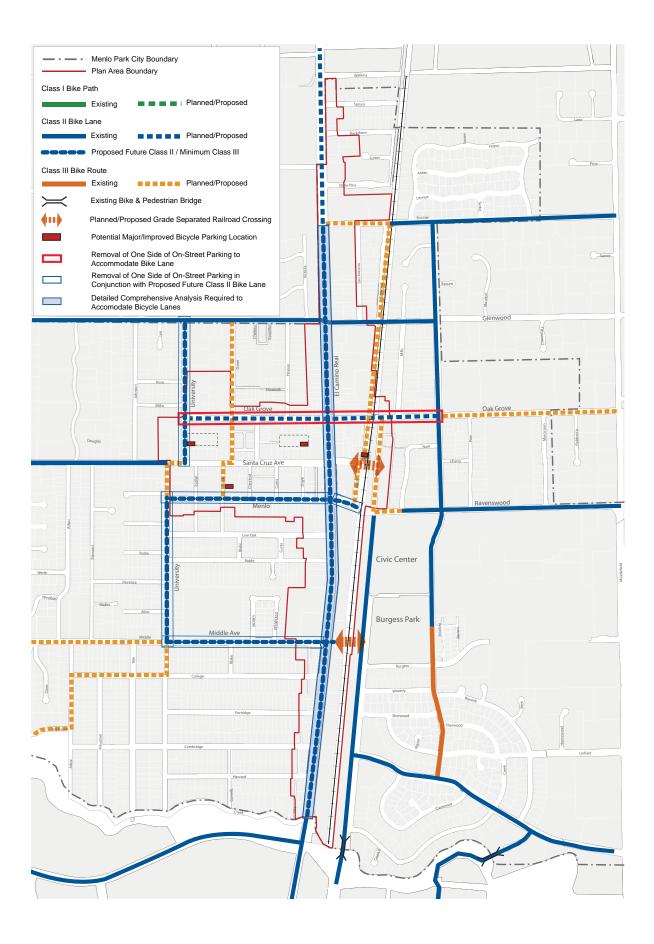
Local transit services in Menlo Park are provided by the San Mateo County Transit District (SamTrans). Additional regional services are provided by Caltrain and the Santa Clara Valley Transportation Authority (VTA). In addition, shuttles along El Camino Real are provided by the City of Menlo Park's Shuttle Service, as well as Stanford's Marguerite Shuttle. The transit lines and bus stop locations within the study area are shown in Figure 9.

In addition to local service provided by SamTrans, regional transit services are provided by Caltrain and the VTA within the vicinity of the project site and along the Peninsula. These services are not intended to serve riders traveling only within Menlo Park, but instead, they provide connections between Menlo Park and neighboring cities and counties.

<u>SamTrans</u>

The San Mateo County Transit District operates SamTrans, a fixed-route bus transit service within San Mateo County. SamTrans primarily serves as a local transit provider within San Mateo County, but also provides connecting regional services to neighboring Santa Clara and San Francisco Counties. All SamTrans buses are equipped with bike racks. Two additional bikes are allowed inside the bus, depending on passenger loads.



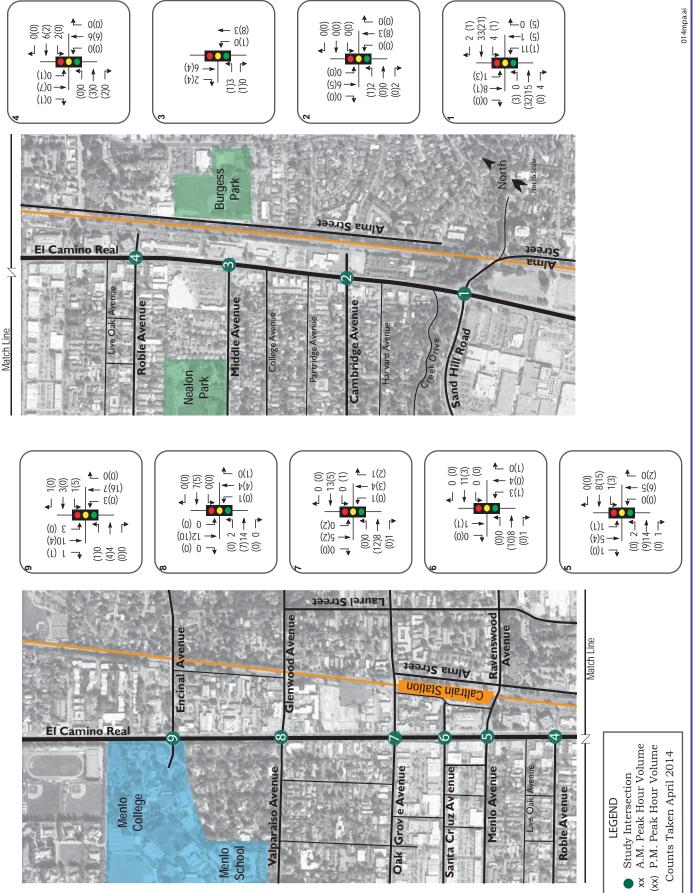


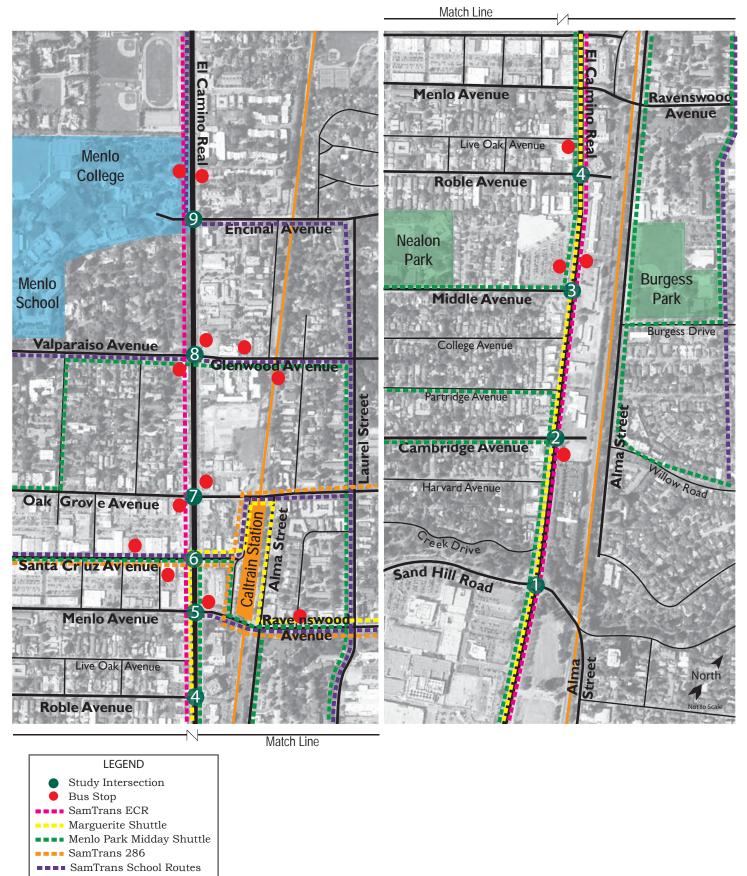
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El Camino Real Corridor Study – Existing Conditions Report Figure 8 – Existing Peak Hour Bicycle Intersection Volumes





El Camino Real Corridor Study – Existing Conditions Report Figure 9 – Transit Facilities 014mpa.ai 9/14

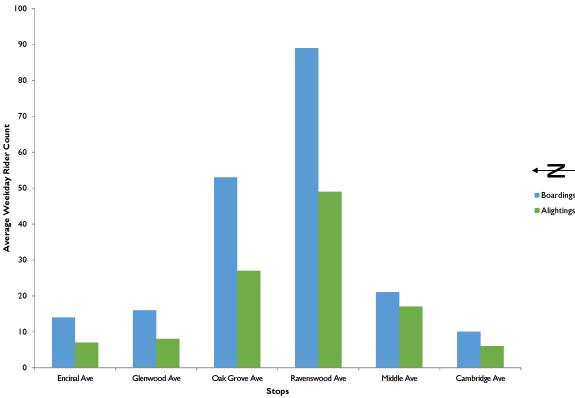


The following SamTrans routes serve El Camino Real in Menlo Park:

- *Route ECR* serves El Camino Real between Palo Alto and the Daly City BART Station. The route runs every day from approximately 5:00 a.m. to 2:00 a.m., with headways of approximately 15 to 20 minutes.
- *Route 286* serves Menlo Park and Atherton, crossing El Camino Real at Santa Cruz Avenue. The route operates four times daily in each of the westbound and eastbound directions, twice during the morning commute period and twice during the even commute period.
- *Routes 82, 83, 84,* and 86 provide school-oriented services. These routes operate only on school days and are timed to coincide with school arrival and dismissal times. The routes do not travel along El Camino Real within the project area, but cross El Camino Real at Valparaiso Avenue and Santa Cruz Avenue.

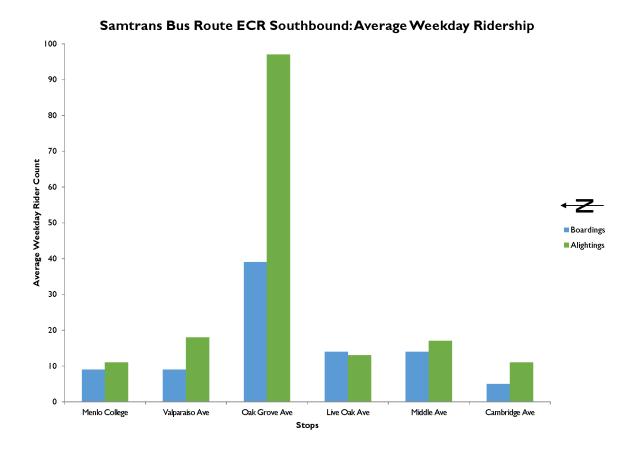
SamTrans provides paratransit services through the affiliated Redi-Wheels and RediCoast providers. Paratransit, also known as dial-a-ride or door-to-door service, is available for those who are unable to independently use the transit system due to a disability.

There are six ECR stops in both directions within the study area. The average weekday ridership, by direction, is summarized in the following charts:



Samtrans Bus Route ECR Northbound: Average Weekday Ridership





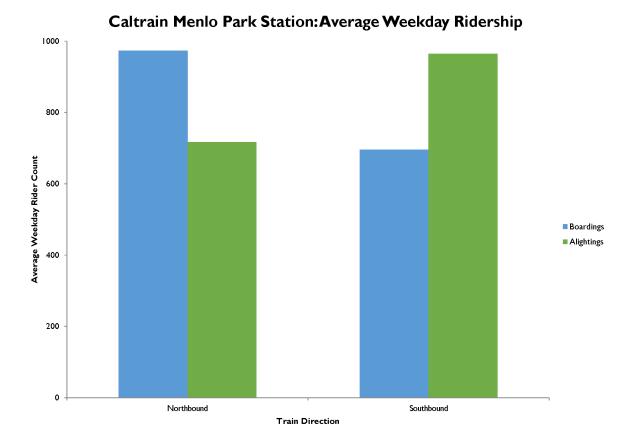
The majority of boardings and alightings occur at the Ravenswood Avenue and Oak Grove Avenue stops. The Ravenswood Avenue stop serves northbound riders, while the Oak Grove Avenue stops serve both northbound and southbound riders. These stops are located near the Menlo Park Caltrain Station and provide easy transfer between modes of transit. Based on the average weekday boardings and alightings, many riders appear to be travelling from the north to the Menlo Park Caltrain Station via the ECR.

<u>Caltrain</u>

Caltrain is the commuter rail line serving the San Francisco Peninsula. It connects Menlo Park with San Francisco to the north and San Jose and Gilroy to the south, and provides a means to connect to VTA Light Rail and BART services. On weekdays, there are 30 trains servicing the Menlo Park Station in the northbound and southbound directions. There are four to six trains during the 7:00-9:00 a.m. and 4:00-6:00 p.m. peak periods in each of the northbound and southbound directions. On weekends, there are fourteen to sixteen trains that stop at the station daily. The Menlo Park Caltrain Station is on the north side of Ravenswood Avenue, east of El Camino Real.

The average weekday ridership is summarized in the following chart:





The majority of riders leaving Menlo Park are travelling in the northbound direction, towards downtown San Francisco, and returning via southbound trains. However, there are a significant number of riders also travelling in the southbound direction, towards downtown San Jose, and returning via northbound trains. The lack of a larger directional split in average weekday Caltrain ridership demonstrates that many riders from Menlo Park are travelling to employment centers in both San Francisco and the greater San Jose area. Also, there are riders that travel to Menlo Park each day from the South Bay or San Francisco and the Peninsula for employment.

Santa Clara VTA

The Santa Clara Valley Transportation Authority (VTA) provides light rail services within Mountain View, Santa Clara, Sunnyvale, Milpitas, San Jose and Campbell as well as bus service throughout Santa Clara County. The nearest VTA Light Rail station is the Evelyn Station in Downtown Mountain View, with Caltrain providing a connection between Menlo Park and the light rail service. The nearest VTA bus stops are located on El Camino Real, south of Sand Hill Road.

Shuttle Services

Menlo Park Midday Shuttle

The City of Menlo Park provides hourly community shuttle service to the general public from 9:30 a.m. to 3:30 p.m. on weekdays, serving nearby senior centers, Downtown Menlo Park and Palo Alto, Menlo Park Caltrain Station, nearby shopping centers, libraries, and medical buildings such as the Menlo Medical Clinic and the VA Medical Center. The Menlo Park Midday shuttle travels along portions of El Camino



Real, but does not have an established shuttle stop. However, shuttles will stop anywhere along the route where it is safe and legal to stop.

Stanford Marguerite Shuttle

Nearby Stanford University, located south of Menlo Park, provides free public shuttle service that connects the university campus to other nearby destinations. The Marguerite Bohannon line (Line BOH) runs from Stanford University to Menlo Park Caltrain and eastern Menlo Park via El Camino Real. Line BOH stops along El Camino Real at Cambridge Avenue and also Roble Avenue.



Menio Park General Plan

The Menlo Park General Plan adopted in 1994 provides the framework for transportation planning within the city. The General Plan established goals that are concerned with the safe and efficient movement of people and goods in and around the city, while promoting alternative modes of transportation. Transportation-related goals and policies included in the Circulation and Transportation Element of the Menlo Park General Plan that are relevant to this study include the following:

Goal II-A: To maintain a circulation system using the Roadway Classification System that will provide for the safe and efficient movement of people and goods throughout Menlo Park for residential and commercial purposes.

- Policy II-A-1: Level of Service D (40 seconds average stopped delay per vehicle) or better shall be maintained at all City-controlled signalized intersections during peak hours, except at the intersection of Ravenswood Avenue and Middlefield Road and at intersections along Willow Road from Middlefield Road to US 101.
- Policy II-A-2: The City should attempt to achieve and maintain average travel speeds of 14 miles per hour or better on El Camino Real and other arterial roadways controlled by the State and at 46 miles per hour or better on U.S. Route 101 (Level of Service D).

Goal II-B: To promote the use of public transit.

- Policy II-B-1: The City shall consider transit modes in the design of transportation improvements and the review and approval of development projects.
- Policy II-B-2: As many activities as possible should be located within easy walking distance of transit stops, and transit stops should be convenient and close to as many activities as possible.
- Policy II-B-3: The City shall promote improved public transit service and increased transit ridership, especially to office and industrial areas and schools.

Goal II-C: To promote the use of alternatives to the single occupant automobile.

- Policy II-C-I: The City shall work with all Menlo Park employers to encourage the use of alternatives to the single occupant automobile in their commute to work.
- Policy II-C-7: Commuter shuttle service between the industrial work centers and the Downtown Transportation Center should be maintained and improved, within fiscal constraints. The City shall encourage SamTrans and other agencies to provide funding to support shuttle services.

Goal II-D: To promote the safe use of bicycles as a commute alternative and for recreation.

- Policy II-D-2: The City shall, within available funding, work to complete a system of bikeways within Menlo Park.
- Policy II-D-4: The City shall require new commercial and industrial development to provide secure bicycle storage facilities on-site.



Goal II-E: To promote walking as a commute alternative and for short trips.

- Policy II-E-1: The City shall require all new development to incorporate safe and attractive pedestrian facilities on-site.
- Policy II-E-2: The City shall endeavor to maintain safe sidewalks and walkways where existing within the public right of way.
- Policy II-E-3: Appropriate traffic control shall be provided for pedestrians at intersections.
- Policy II-E-4: The City shall incorporate appropriate pedestrian facilities, traffic control, and street lighting within street improvement projects to maintain or improve pedestrian safety.

Goal II-F: To provide adequate parking in the Downtown area, especially for retail customers and Caltrain patrons.

• Policy II-F-1: Adequate off-street parking should be required for all new development in the Downtown Area

Menlo Park El Camino Real and Downtown Specific Plan

Adopted by the City Council in June 2012, the *Menlo Park El Camino Real and Downtown Specific Plan* establishes the framework for private development and public improvements along the El Camino Real corridor in the City of Menlo Park, as well as downtown Menlo Park and the Menlo Park Caltrain Station area. For circulation, the Specific Plan envisions the following:

- A vehicular circulation system that accommodates both local traffic and north/south through traffic on El Camino Real.
- An integrated pedestrian network of expansive sidewalks, promenades and paseos along El Camino Real and within downtown. The network provides opportunities for safe crossing of El Camino Real and the railroad tracks and connects the east and west sides of town, including the City's civic center with downtown.
- A bicycle network that builds upon existing plans and integrates more fully with downtown and proposed public space improvements in the area.
- An integrated circulation plan that supports transit use.
- A public parking strategy and management plan that efficiently accommodates downtown visitors and supports downtown businesses.
- Modified parking rates for private development based on current industry standards.

The Specific Plan includes a series of recommended enhancements to the pedestrian and bicycle networks as well as transit access along El Camino Real and within Downtown Menlo Park.

City of Menlo Park Complete Streets Policy

In January 2013, the Menlo Park City Council passed a resolution establishing the *Complete Streets Policy* of *City of Menlo Park*. The policy establishes complete streets as being those that serve all users and are developed based on the context of the situation that requires a collaborative effort between many City departments to implement. The policy further requires incorporation of a complete streets approach into all phases of all projects, unless a project is found to meet limited exemption criteria.

City of Menlo Park Comprehensive Bicycle Development Plan

The 2005 Comprehensive Bicycle Development Plan (CBDP) provides a blueprint of strategies and actions to further the integration of bike usage as a commute alternative and for recreation. The goals of this



Plan provide the framework for specific policies and actions addressed in the Bike Plan. The goals of the CBDP provide a long-range vision, while the policies provide specific action descriptions to implement the Plan. Following are the relevant bicycle-related goals and policies:

Goal 1: Expand and Enhance Menlo Park's Bikeway Network

• Policy 1.1: Complete a network of bike lanes, bike routes, and shared use paths that serve all bicycle user groups, including commuting, recreation, and utilitarian trips.

Goal 2: Plan for the Needs of Bicyclists

- Policy 2.1: Accommodate bicyclists and other non-motorized users when planning, designing, and developing transportation improvements.
- Policy 2.2: Review capital improvement projects to ensure that needs of bicyclists and other non-motorized users are considered in programming, planning, maintenance, construction, operations, and project development activities.
- Policy 2.3: Encourage traffic calming, intersection improvements, or other similar actions that improve safety for bicyclists and other non-motorized users.
- Policy 2.4: Require developers to adhere to the design standards identified in this Comprehensive Bicycle Development Plan.

Goal 3: Provide for Regular Maintenance of the Bikeway Network

- Policy 3.3: Develop a program to ensure that bicycle loop detectors are installed at all signalized intersections on the bike network and are tested regularly to ensure they remain functional.
- Policy 3.4 Require that construction or repair activities, both on street and of adjacent building, minimize disruption to bicycle facilities, ensure bicyclist safety at all times, and provide alternated routes if necessary.

Goal 4: Encourage and Educate Residents, Businesses and Employers in Menlo Park on Bicycling

- Policy 4.6: Encourage major Menlo Park employers and retailers to provide incentives and support facilities for existing and potential employees and customers that commute by bicycle.
- Policy 4.9: Promote bicycling as a healthy transportation alternative.

San Mateo County Comprehensive Bicycle and Pedestrian Plan

The City/County Association of Governments of San Mateo County (C/CAG), with support from the San Mateo County Transportation Authority (SMCTA), developed the 2011 San Mateo County Comprehensive Bicycle and Pedestrian Plan (CBPP) to address the planning, design, funding, and implementation of bicycle and pedestrian projects of countywide significance.

The following are the relevant goals and policies:

Goal 2: More People Riding and Walking for Transportation and Recreation

• Policy 2.6: Serve as a resource to county employers on promotional information and resources related to bicycling and walking.



Goal 4: Complete Streets and Routine Accommodation of Bicyclists and Pedestrians

- Policy 4.1: Comply with the complete streets policy requirements of Caltrans and the Metropolitan Transportation Commission concerning safe and convenient access for bicyclists and pedestrians, and assist local implementing agencies in meeting their responsibilities under the policy.
- Policy 4.5: Encourage local agencies to adopt policies, guidelines, standards and regulations that result in truly bicycle-friendly and pedestrian-friendly land use developments, and provide them technical assistance and support in this area.
- Policy 4.6: Discourage local agencies from removing, degrading or blocking access to bicycle and pedestrian facilities without providing a safe and convenient alternative.

Caltrans Implementation of Deputy Directive 64-R1: Complete Streets – Integrating the Transportation System

El Camino Real is designated as State Route 82, so is operated by the California Department of Transportation (Caltrans) in coordination with the City of Menlo Park. Caltrans has adopted a Deputy Directive relevant to complete streets, noting that they provide safe mobility for all users, including motorists, bicyclists, pedestrians and transit riders, and contribute to the Department's mission/vision. The goals of implementing the complete street policy are to provide more options for people to go from one place to another, reduce traffic congestion and greenhouse gas emissions, promote walkable communities, and reduce barriers for persons with disabilities.

While there are no specific goals and policies of this Directive, local agencies are working in cooperation with Caltrans to further the intent of the Deputy Directive. Deputy Directive 64-Revision #1: Complete Streets: Integrating the Transportation System (DD-64-R1) was signed on October 2, 2008. Under this Directive Caltrans is directed to provide for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State Highway System (SHS). Caltrans views all transportation improvements (new and retrofit) as opportunities to improve safety, access, and mobility for all travelers and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. Bicycle, pedestrian, and transit travel is facilitated by creating "complete streets" beginning early in system planning and continuing through project delivery, maintenance, and operations.

Providing complete streets increases travel options which, in turn, reduces congestion, increases system efficiency, and enables environmentally sustainable alternatives to single driver automotive trips. Implementing complete streets and other multi-modal concepts supports the California Complete Streets Act of 2008 (AB 1358), as well as the California Global Warming Solutions Act of 2006 (AB 32) and Senate Bill 375, which outline the State's goals of reducing greenhouse gas emissions. With AB 1358 and DD-64-R1, both Caltrans and local agencies are working to complete and address common goals.

Grand Boulevard Initiative

The Grand Boulevard Initiative is a regional collaboration of public, private, and nonprofit organizations in San Mateo and Santa Clara counties with the goal of revitalizing the El Camino Real corridor. Both the *El Camino Real and Downtown Specific Plan* as well as this El Camino Real study are part of Menlo Park's efforts towards implementing the overall goals of the Grand Boulevard Initiative.



Collision History and Safety Conditions

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the City's Police Department. The most current five-year period available is January 2009 through December 2013. Collision records for the intersection of El Camino Real/Sand Hill Road, located in the neighboring City of Palo Alto, were obtained from the Caltrans Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current five-year period available for the El Camino Real/Sand Hill Road Hill Road intersection is October 2007 through September 2012.

As presented in Table 5, the calculated collision rates for the study intersections were compared to average collision rates for similar facilities statewide, as indicated in 2010 Collision Data on California State Highways, California Department of Transportation.

64	udu Intovoction	Number of	Collision	Inium	Estalitur
3 t	udy Intersection	Number of Collisions (2009-2013)*	Rate (c/mve)	Injury Rate	Fatality Rate
١.	El Camino Real/Sand Hill Rd	8	0.09 (0.27)	37.5% (41.9%)	0% (0.4%)
2.	El Camino Real/Cambridge Ave	18	0.24 (0.27)	44.4% (41.9%)	0% (0.3%)
3.	El Camino Real/Middle Ave	16	0.21 (0.21)	43.8% (42.4%)	0% (0.4%)
4.	El Camino Real/Roble Ave	22	0.32 (0.27)	40.9% (41.9%)	0% (0.4%)
5.	El Camino Real/Menlo Ave- Ravenswood Ave	34	0.40 (0.27)	44.1 % (41.9%)	0% (0.4%)
6.	El Camino Real/Santa Cruz Ave	23	0.38 (0.27)	47.8 % (41.9%)	0% (0.4%)
7.	El Camino Real/Oak Grove Ave	36	0.52 (0.27)	44.4% (41.9%)	0% (0.4%)
8.	El Camino Real/Valparaiso Ave- Glenwood Ave	24	0.36 (0.27)	37.5% (41.9%)	0% (0.4%)
9.	El Camino Real/Encinal Ave	6	0.09 (0.27)	83.3%(41.9%)	0% (0.4%)

 Table 5

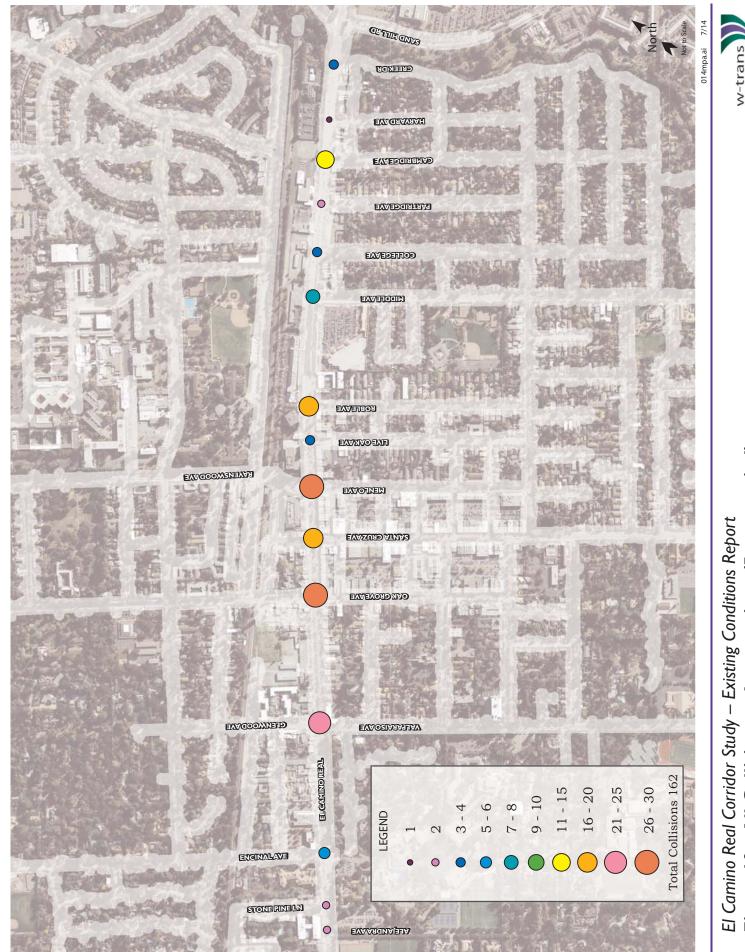
 Collision Rates at the Study Intersections Compared to Statewide Average

Note: c/mve = collisions per million vehicles entering; * = collision records for El Camino Real/Sand Hill Rd are dated October 2007 through September 2012; Statewide average rates are indicated in parentheses; **Bold** = actual rate greater than the Statewide average rate

The calculated collision rates are higher than the statewide average collision rate for similar facilities for the study intersections between Roble Avenue and Valparaiso Avenue-Glenwood Avenue. The calculated injury rates were generally similar or slightly higher than statewide averages, with the exception of El Camino Real/Encinal Avenue.

Approximately 85 percent of all intersection-related collisions at the study intersections between Roble Avenue and Valparaiso Avenue-Glenwood Avenue were rear-end and sideswipe collisions, with almost two-thirds of intersection-related collisions classified as rear-end collisions. These types of collisions are often attributable to congestion on the roadway, in addition to other factors. However, out of all intersection-related collisions resulting in injury, all but four collisions resulted in minor injury only, and the remaining four collisions involved pedestrians and bicyclists. Collision maps of the intersectionrelated collisions between intersections are shown in Figure 10 and Figure 11. All collision data is included in Appendix H.





El Camino Real Corridor Study – Existing Conditions Report Figure 10 – All Collisions at Intersections (5-year period)

w-trans



El Camino Real Corridor Study – Existing Conditions Report Figure 11 – All Collisions between Intersections (5-year period)

Collision involving just pedestrian and bicycles were also reviewed. Because these types of collisions are less common than vehicle collisions, the analysis period was extended to 10 years. Over a 10-year period, the intersection of El Camino Real/Santa Cruz Avenue has experienced the highest number of pedestrian collisions, with four collisions, while the intersection of El Camino Real/Oak Grove Avenue experienced the most bicycle collisions, with four collisions. Collision maps of the reported pedestrian and bicycle collisions along the corridor in the last 10 years of available collision records are shown in Figure 12 and Figure 13.





w-trans

El Camino Real Corridor Study – Existing Conditions Report Figure 12 – Pedestrian Collisions (10-year period)



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El Camino Real Corridor Study – Existing Conditions Report Figure 13 – Bicycle Collisions (10-year period)

Vehicle Parking

Vehicular parking along the El Camino Real corridor is provided in four forms: on-street parking, offstreet public parking plazas, off-street private parking lots and off-street commuter parking. In addition, bicycle parking is provided both in racks along the corridor, at various downtown locations and at the Caltrain station.

On-Street Parking

On-street parallel parking is provided along segments of El Camino Real where the roadway width permits. In Downtown Menlo Park, both along El Camino Real and on adjacent streets, on-street parking is generally limited to two hours. There are a total of 85 parking spaces on the east side of El Camino Real and 71 spaces on the west side within the study area. Additional on-street parking is available on side streets throughout the corridor. The inventory of on-street parking spaces in the corridor is included in Appendix I.

Off-Street Public Parking

Several off-street public parking plazas are located within Downtown Menlo Park, all to the west of El Camino Real. The first two hours of parking in these plazas is free, with an option to pay to extend time limits beyond two hours in some of the plazas.

Off-Street Private Parking

Shopping centers and businesses outside of the Downtown area generally provide off-street private parking. Parking in these lots is intended for the use of the site's employees and visitors and is controlled by the respective business or shopping center.

Off-Street Commuter Parking

Paid parking is available at the Menlo Park Caltrain station for the use of Caltrain riders. Caltrain sells both daily and monthly parking permits for the lot. The requirement for paid parking at the Caltrain station is enforceable at all times.

Vehicle Parking Occupancy

On-street parking occupancy surveys were conducted in September 2014, while public schools and Stanford University were in session. Parking occupancy surveys were conducted along El Camino Real between Encinal Avenue and Sand Hill Road, as well as on side-streets immediately adjacent to El Camino Real. The time periods for the parking occupancy surveys included weekday midday peak period, weekday p.m. peak period, weekend midday peak period, and weekend p.m. peak period.

The street parking occupancy on El Camino Real during weekdays and weekends are shown in Table 6 and Table 7 respectively. Street parking spaces are typically underutilized along El Camino Real with the exception of the portion of El Camino Real between Oak Grove Avenue and Ravenswood Avenue-Menlo Avenue. It is worth noting that this portion of El Camino Real is adjacent to Downtown Menlo Park, where several off-street parking lots are available. Additionally, increased parking utilization was observed between College Avenue and Partridge Avenue on the west side of El Camino Real.



Segment of El Camino Real	Weekday Parking Occupancy							
	Midday Peak				PM Peak			
	West Side East Side		Side	West	t Sid e	East Side		
	Parked Veh.	Осс. %	Parked Veh.	Осс. %	Parked Veh.	Осс. %	Parked Veh.	Осс. %
Encinal Ave to Valparaiso Ave-Glenwood Ave	-	-	6	43%	-	-	2	14%
Valparaiso Ave-Glenwood Ave to Oak Grove Ave	8	53%	9	56%	5	33%	4	25%
Oak Grove Ave to Santa Cruz Ave	5	100%	-	-	0	0%	-	-
Santa Cruz Ave to Ravenswood Ave-Menlo Ave	7	88%	-	-	6	75%	-	-
Ravenswood Ave-Menlo Ave to Live Oak Ave	2	20%	-	-	4	40%	-	-
Roble Ave to Middle Ave	-	-	0	0%		-	0	0%
Middle Ave to College Ave	3	38%	-	-	0	0%	-	-
College Ave to Partridge Ave	5	83%	4	33%	4	67%	I	8%
Partridge Ave to Cambridge Ave	-	-	4	36%	-	-	2	18%
Cambridge Ave to Harvard Ave	-	-	0	0%	-	-	0	0%
Harvard Ave to Creek Dr	0	0%	0	0%	0	0%	0	0%

 Table 6

 Existing Weekday On-Street Vehicle Parking Occupancy – El Camino Real

Notes: MD = Midday; Occ. = Occupancy; loading zones were not included in the parking occupancy calculation.



Segment of El Camino Real	Weekend Parking Occupancy							
	Midday Peak				PM Peak			
	West Side East Side		Side	West Side		East Side		
	Parked Veh.	Осс. %	Parked Veh.	O cc. %	Parked Veh.	Осс. %	Parked Veh.	O cc. %
Encinal Ave to Valparaiso Ave-Glenwood Ave	-	-	0	0%	-	-	9	64%
Valparaiso Ave-Glenwood Ave to Oak Grove Ave	4	27%	9	56%	4	27%	11	69 %
Oak Grove Ave to Santa Cruz Ave	4	100%	-	-	I	25%	-	-
Santa Cruz Ave to Ravenswood Ave-Menlo Ave	7	88%	-	-	8	100%	-	-
Ravenswood Ave-Menlo Ave to Live Oak Ave	4	40%	-	-	6	60%	-	-
Roble Ave to Middle Ave	-	-	0	0%	-	-	I	5%
Middle Ave to College Ave	4	50%	-	-	2	25%	-	-
College Ave to Partridge Ave	4	67%	0	0%	3	50%	0	0%
Partridge Ave to Cambridge Ave	-	-	I	9 %	-	-		9 %
Cambridge Ave to Harvard Ave	-	-	0	0%	-	-	0	0%
Harvard Ave to Creek Dr	0	0%	0	0%	0	0%	0	0%

 Table 7

 Existing Weekend On-Street Vehicle Parking Occupancy – El Camino Real

Notes: MD = Midday; Occ. = Occupancy; loading zones were not included in the parking occupancy calculation.



On-street parking on the side-streets approaching El Camino Real were also surveyed. The street parking occupancy on side-streets of El Camino Real during weekdays and weekends are shown in Table 8 and Table 9 respectively. Similar trends were found along side-streets of El Camino Real, with the highest parking utilization observed near downtown during both weekdays and weekends, and near Partridge Avenue during weekdays only.

Side-Street	Weekday Parking Occupancy								
		Midda	y Peak		PM Peak				
	West	West of ECR		of ECR	West	of ECR East		of ECR	
	Parked Veh.	Occ. %	Parked Veh.	Occ. %	Parked Veh.	Occ. %	Parked Veh.	Occ. %	
Encinal Ave (east to San Antonio Ave)	-	-	6	46%	-	-	I	8%	
Valparaiso Ave-Glenwood Ave (Hoover St to San Antonio Ave)	-	-	0	0%	-	-	0	0%	
Oak Grove Ave (Hoover St to Merrill St)	11	79%	5	31%	7	50%	9	56%	
Santa Cruz Ave (Doyle St to Merrill St)	7	88%	7	58%	7	88%	7	58%	
Live Oak Ave (up to 100 feet west of ECR)	0	0%	-	-	I	25%	-	-	
College Ave (up to 100 feet west of ECR)	3	60%	-	-	I	20%	-	-	
Partridge Ave (up to 100 feet west of ECR)	6	100%	-	-	I	17%	-	-	
Harvard Ave (up to 100 feet west of ECR)	3	43%	-	-	2	2 9 %	-	-	
Creek Dr (up to 100 feet west of ECR)	I	25%	-	-	I	25%	-	-	

Table 8Existing Weekday On-Street Vehicle Parking Occupancy – Side Streets

Notes: MD = Midday; ECR = El Camino Real; Occ. = Occupancy; loading zones were not included in the parking occupancy calculation.



Side-Street	Weekend Parking Occupancy								
	We	Weekend Midday Peak Weekend PM Peak							
	West	West of ECR		East of ECR		West of ECR		of ECR	
	Parked Veh.	Occ. %	Parked Veh.	Occ. %	Parked Veh.	Occ. %	Parked Veh.	Occ. %	
Encinal Ave (east to San Antonio Ave)	-	-	8	62%	-	-	0	0%	
Valparaiso Ave-Glenwood Ave (Hoover St to San Antonio Ave)	-	-	I	33%	-	-	0	0%	
Oak Grove Ave (Hoover St to Merrill St)	5	36%	12	75%	2	14%	I	6%	
Santa Cruz Ave (Doyle St to Merrill St)	7	88%	8	67%	8	100%	7	58%	
Live Oak Ave (up to 100 feet west of ECR)	2	50%	-	-	3	75%	-	-	
College Ave (up to 100 feet west of ECR)	0	0%	-	-	I	20%	-	-	
Partridge Ave (up to 100 feet west of ECR)	0	0%	-	-	0	0%	-	-	
Harvard Ave (up to 100 feet west of ECR)	0	0%	-	-	I	14%	-	-	
Creek Dr (up to 100 feet west of ECR)	0	0%	-	-	0	0%	-	-	

Table 9Existing Weekend On-Street Vehicle Parking Occupancy – Side Streets

Notes: MD = Midday; ECR = El Camino Real; Occ. = Occupancy; loading zones were not included in the parking occupancy calculation.

Bike Parking

Bike parking is provided at one location along El Camino Real: the southbound SamTrans bus stop at Cambridge Avenue. Outside of the El Camino Real Corridor, bike racks are provided in public parking lots between Santa Cruz Avenue and Menlo Avenue, bike parking corrals in the parking lane on Santa Cruz Avenue, and also at the Caltrain station. In addition, a bike locker with 50 bike spaces is provided at the Caltrain station. In other areas, bicyclists park their bikes at bike racks on private property or locked to various street signs.



Study Participants and References

Study Participants

W-Trans

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Appendix B

Community Survey Report



El Camino Real Corridor Study

Community Survey Report Internal Draft - January 2015

Prepared for W-Trans by

DYETT & BHATIA Urban and Regional Planners

Table of Contents

Ι.	IntroductionI
2.	MethodologyI
3.	Survey Results
	Location2
	Reasons to Travel on El Camino Real4
	Transportation Modes6
	Opinions and Concerns
	Potential Changes on El Camino Real
	Open-Ended Questions
4.	Summary of Key Issues
	Transportation Needs
	Traffic
	Safety
Ар	pendix A: El Camino Real SurveyMonkey Transportation Survey A-I
Ар	pendix B: El Camino Real Transportation Survey ResponsesB-I
Ар	pendix C: El Camino Real Transportation Survey Open-Ended Responses C-I

List of Figures and Charts

Chart I: Where Respondents Live	2
Figure 1: Study Area	3
Chart 2: Where Respondents Work	
Chart 3: Why Respondents Travel on El Camino Real	5
Chart 4: How Respondents Travel El Camino Real	
Chart 5: Frequency that Respondents Drive on El Camino Real	
Chart 6: Frequency that Respondents Walk along El Camino Real	9
Chart 7: Frequency that Respondents Bike El Camino Real	10
Chart 8: Frequency that Respondents Use Local Bus Transit Services on El Camino Real	
Chart 9: How Respondents Commonly Access the Menlo Park Caltrain Station	13
Chart 10: Opinions on General Safety and Environmental Concerns	14
Chart II: Opinions on Walking Environment	15
Chart 12: Opinions on Transit	17
Chart 13: Opinions on Vehicle Traffic Environment	18
Chart 14: Opinions on Bicycle Environment	
Chart 15: Opinions on Parking Environment	
Chart 16: Preferences for Potential Changes on El Camino Real	

List of Tables

Table 1: Where Respondents Live	2
Table 2: Where Respondents Work	
Table 3: Why Respondents Travel on El Camino Real	6
Table 4: How Respondents Travel El Camino Real	7
Table 5: Frequency that Respondents Drive on El Camino Real	8
Table 6: Frequency that Respondents Walk along El Camino Real	9
Table 7: Frequency that Respondents Bike El Camino Real	. 11
Table 8: Frequency that Respondents Use Local Bus Transit Services on El Camino Real	. 12
Table 9: How Respondents Commonly Access the Menlo Park Caltrain Station	. 13
Table 10: Opinions on General Safety and Environmental Concerns	. 14
Table 11: Opinions on Walking Environment	
Table 12: Opinions on Transit	. 17
Table 13: Opinions on Vehicle Traffic Environment	. 19
Table 14: Opinions on Bicycle Environment	
Table 15: Opinions on Parking Environment	
Table 16: Preferences for Potential Changes on El Camino Real	. 26
Table 17: Intersections of Concern	
Table 18: Intersections in Segments of Concern	. 32

I. Introduction

The City of Menlo Park is conducting the El Camino Real Corridor Study to evaluate potential transportation and safety improvements to El Camino Real in the City of Menlo Park. The study will consider alternatives for modifying the Corridor to allow for a possible addition of a bicycle lane and/or additional through lanes. Ultimately, the project will be consistent with the goals outlined in the El Camino Real/Downtown Specific Plan for balanced capacity, bicyclist and pedestrian connectivity, transit access, parking, and safety, as well as the City's Complete Streets Policy. Figure 1 shows the Study Area.

The City conducted an online survey during the initial phase of the Study, following the project's first community workshop. Survey questions were focused on learning how and why different members of the community use the El Camino Real Corridor and on eliciting feedback on potential improvements to the Corridor. Many of the questions were based directly on the ideas gathered at the first community workshop, and were intended to assess which of these ideas had the greatest appeal to the broader community. The survey was active between June 16 and September 12, 2014, during which time 309 community members participated. Initial results were presented at an open house on October 2, 2014, where seven additional responses were collected, for a total of 316 responses.

This report presents and analyzes the results of the survey. Appendix A contains the original survey questions as they appeared online. Appendix B contains the summary tables and cross-tabulations used in this analysis. A list of the open-ended responses provided for questions 9, 17, 18, and 19 can be found in Appendix C.

2. Methodology

The survey was conducted using SurveyMonkey, an online service, and was announced via the City's El Camino Real project website. Results were exported from the site as summary files and cross-tabulations.

Questions included three general types of questions: multiple choice questions about respondents' location and habits; questions that asked respondents to rate their agreement with a given statement or to rate the desirability of a proposed improvement; and open-ended questions. Questions 1 through 9 were used in cross-tabulations to assess whether respondents' location or habits had a significant relationship to the ratings they assigned to different statements or improvements. Notable correlations are discussed in the analysis.

3. Survey Results

LOCATION

Questions 1 and 2 asked participants where they live or work in relation to the El Camino Real Corridor—in Menlo Park within a half-mile of the Corridor, in Menlo Park farther than a half-mile from the Corridor, outside of Menlo Park within a half-mile of the Corridor, or none of the above (outside of Menlo Park, farther than a half-mile from the Corridor). Responses are described in Chart 1 and Table 1 for where participants live, and Chart 2 and Table 2 for where participants work.

The majority of survey respondents live in Menlo Park, with the largest portion of respondents (47 percent) living in Menlo Park within a half-mile of the Corridor. The next-largest portion of respondents (32 percent) lives in Menlo Park, but farther than a half-mile from the Corridor. For participants living outside of Menlo Park, more live within a half-mile of the Corridor (13 percent) than beyond (8 percent).

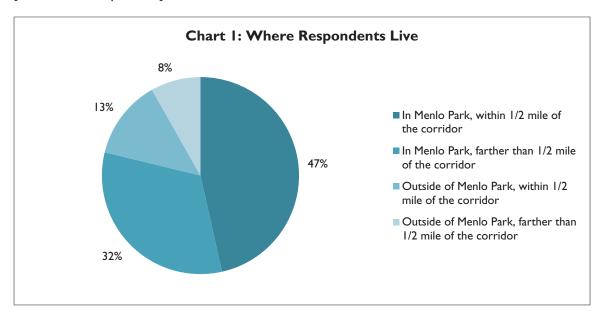
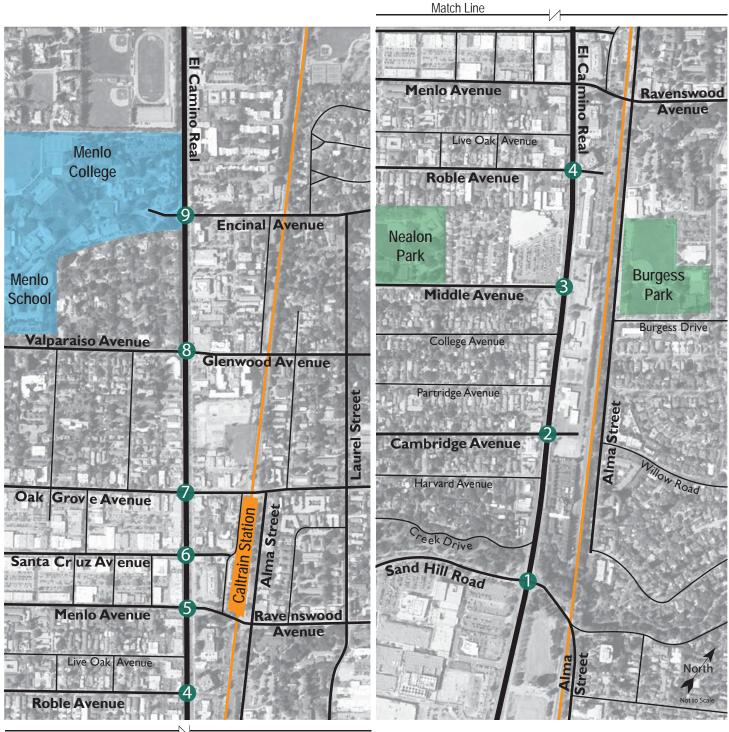


Table	I :	Where	Respondents	Live
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Location	Number of Respondents	Percent of Total
In Menlo Park, within 1/2 mile of the Corridor	147	47%
In Menlo Park, farther than 1/2 mile of the Corridor	102	32%
Outside of Menlo Park, within 1/2 mile of the Corridor	41	13%
Outside of Menlo Park, farther than 1/2 mile of the Corridor	26	8%
Total	316	100%

Figure 1: Study Area



Match Line

LEGEND

Study Intersection

El Camino Real Corridor Study

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Conversely, the majority of survey respondents work outside of Menlo Park, with the largest portion (43 percent) working outside of the city and farther than a half-mile from the Corridor. Those working outside of Menlo Park but within a half-mile of the Corridor constitute the second-largest portion, at 32 percent.

For those working in Menlo Park, the majority live in the same location category as their workplaces.

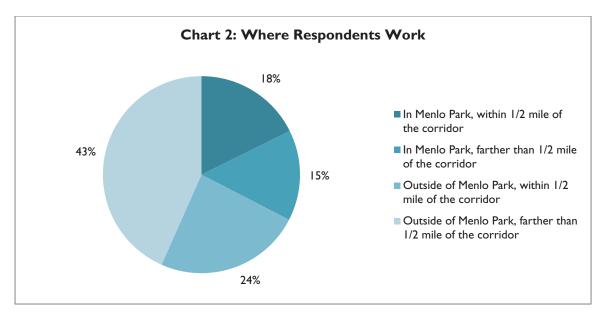


Table 2: Where Respondents Work

Location	Number of Respondents	Percent of Total
In Menlo Park, within 1/2 mile of the Corridor	56	18%
In Menlo Park, farther than 1/2 mile of the Corridor	47	15%
Outside of Menlo Park, within 1/2 mile of the Corridor	76	24%
Outside of Menlo Park, farther than 1/2 mile of the		
Corridor	137	43%
Total	316	100%

REASONS TO TRAVEL ON EL CAMINO REAL

Question 9 asked participants why they typically travel on El Camino Real. The question offered five general categories of activities—travel for shopping, patronizing local businesses, travel to and/or from work, travel to and/or from school, and for physical activity—as well as an "other" response that allowed for an open-ended answer. Respondents were asked to check all that applied, and many selected more than one response.

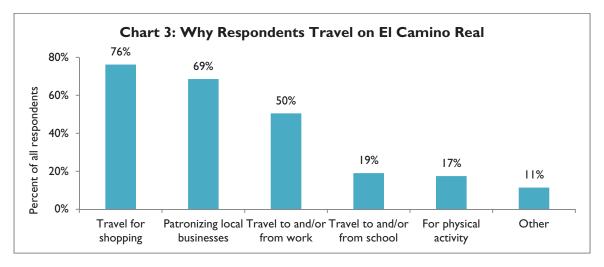
As shown in Chart 3 and Table 3 below, the most common reason that respondents visit El Camino Real is to travel for shopping, at 75 percent of respondents. Sixty-nine percent of respondents travel to patronize local business, and 50 percent travel for work. Smaller percentages use it to travel for school (19 percent) and for physical activity (17 percent).

Within each category, the largest share of respondents tended to live in Menlo Park, primarily within half a mile of the El Camino Real Corridor. For those who travel for shopping, local businesses, work, or school, 45 to 50 percent of respondents live in Menlo Park within a half-mile of the Corridor, while another 25 to 40 percent live in Menlo Park farther than a half-mile from the Corridor. The smallest percentages of respondents for each response category live outside of Menlo Park farther than half a mile from the Corridor. Among those who use El Camino Real for physical activity, over 90 percent live in Menlo Park.

The "other" responses tended to fall into one of six general categories of responses:

- 1. To connect to other cities in the region
- 2. To access the library and recreation center
- 3. For events and children's activities
- 4. To cross from east to west
- 5. To visit friends and family
- 6. To access services

A full list of the open-ended responses can be viewed in Appendix C.



Reason	Number of Respondents	Percent of Total
Travel for shopping	240	76%
Patronizing local businesses	216	69%
Travel to and/or from work	159	50%
Travel to and/or from school	60	19%
For physical activity	55	17%
Other	36	11%
Total	315	

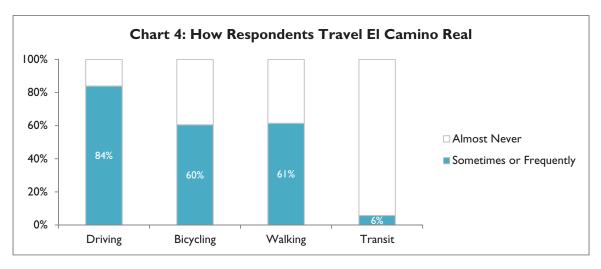
Table 3: Why Respondents Travel on El Camino Real

TRANSPORTATION MODES

Questions 3 through 8 asked respondents about their use of various modes of travel on El Camino Real. Questions 3 through 6 focused on the frequencies with which participants drive a vehicle, ride a bike, use local bus transit, or walk along El Camino Real.

The majority of respondents use multiple forms of transportation to access El Camino Real. In fact, only 22 percent of respondents exclusively drive along El Camino Real, only 5 percent exclusively bicycle there, and less than 1 percent exclusively walks (only one respondent). No respondents use bus transit as their only form of transportation along El Camino Real.

Chart 4 and Table 4 describe the percentage of respondents who use each of the four modes at least sometimes compared to those who stated that they "almost never" use each mode. As each respondent may use multiple modes, each column shows a percentage of the total number of respondents. The transportation mode used by the largest share of survey respondents was driving, with 84 percent of respondents driving El Camino Real at least a few times a week. Walking and bicycling each have similar shares of respondents, with 61 percent of respondents walking and 60 percent bicycling at least sometimes on weekends. Comparatively few respondents, only 6 percent, use bus transit service along El Camino Real.



Transportation Method	Number of Respondents	Percent of Total
Driving	265	84%
Bicycling	191	60%
Walking	194	61%
Transit	18	6%
Total Respondents	316	

Table 4: How Respondents Travel El Camino Real

Driving

Driving was the most common form of transportation among survey respondents, with 84 percent driving El Camino Real at least a few times a week. Most respondents who drive on El Camino Real drive on a daily basis, with nearly 50 percent of respondents driving on the Corridor at least once a day. Chart 5 and Table 5 describe the frequency with which respondents drive El Camino Real.

Those driving most frequently tend to live in Menlo Park and work outside of Menlo Park. Following the overall trend for reasons respondents visit El Camino Real, those driving at the highest frequencies tend to be visiting for shopping, to patronize local businesses, and to commute to work. Those driving a few times a week are more likely traveling to shop (75 percent) and patronize local businesses (68 percent) and commute (39 percent), than to travel for school or physical activity, though the percentage of commuters is still much lower than among those driving multiple times a day. If a respondent drives and travels El Camino Real for work, he or she is more likely to be driving multiple times a day.

A majority of the respondents who drive along El Camino Real travel the Corridor using other forms of transportation in addition to driving, mainly bicycling and walking. For instance, 55 percent of drivers also bike, 62 percent also walk, and 4 percent also use bus transit. Over a quarter of drivers at all frequencies walk along or across El Camino Real at least a few times a week.

Of those 16 percent of respondents who almost never drive El Camino Real, most use an alternative form of transportation to access the Corridor, with bicycle being the most common form. Ninety percent of those not driving ride a bicycle on El Camino Real at least sometimes, with 82 percent of those not driving bicycling several times a week or daily. Sixty-one percent of those not driving walk along El Camino Real; 29 percent of those not driving walk several times a week or daily. Fourteen percent of those not driving use bus transit along the Corridor; only six out of seven respondents use transit several times a week, and one uses transit mostly on weekends.

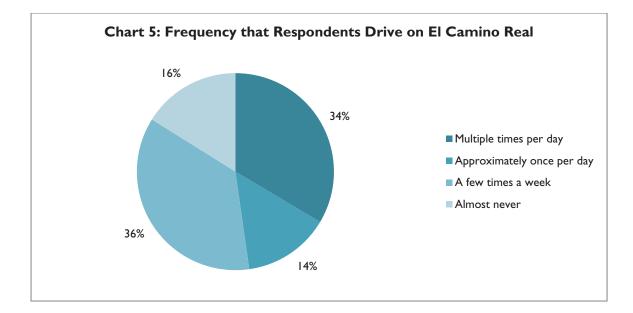


Table 5: Frequency that Respondents Drive on El Camino Real

Fraguena	Number of	Dougout of Total
Frequency	Respondents	Percent of Total
Multiple times per day	106	34%
Approximately once per day	45	14%
A few times a week	114	36%
Almost never	51	16%
Total	316	100%

Walking

Walking was the second-most common form of transportation among respondents, with 61 percent walking along or across the Corridor at least sometimes. Among those who walk, more tend to do so on weekends (26 percent of respondents) or several times per week (25 percent of respondents), while a smaller portion walks on a daily basis (10 percent). Chart 6 and Table 6 describe the frequency that respondents walk along or across El Camino Real.

Respondents who walk along El Camino Real are more likely to live in Menlo Park within a half mile of the Corridor (84 percent of those walking live in this area), and are far less likely to live outside of Menlo Park farther than half a mile from the Corridor. There is no significant pattern that describes where they tend to work.

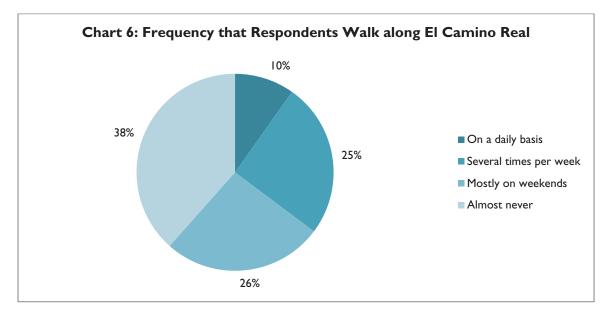
Reasons that those who walk along El Camino Real have for traveling the Corridor follow the overall trend, with most traveling for shopping and patronizing local businesses, followed, to a lesser degree, by travel to and from work. There is a difference, however, among those who walk El Camino Real on a daily basis, for which 55 percent of respondents who walk the Corridor

selected physical activity as a reason that they travel there (a higher percentage than among respondents in general).

Most of the 38 percent of respondents who almost never walk El Camino Real access the Corridor using a vehicle or a bicycle, while few use bus transit. Eighty-three percent of those who do not walk the Corridor tend to drive. Forty percent tend to use bicycle, with most cycling several times per week or daily. Only 2 percent said that they use bus transit on El Camino Real.

Most of the respondents who do walk along El Camino Real also travel the Corridor using other transportation modes, generally driving or bicycling. Eighty-four percent also drive, while 73 percent also bike.

Survey participants were also asked if they had children who have to cross El Camino Real to get to school, to which 19 percent of respondents said yes.



Frequency	Number of Respondents	Percent of Total
On a daily basis	31	10%
Several times per week	80	25%
Mostly on weekends	83	26%
Almost never	121	38%
Total	315	100%

Bicycling

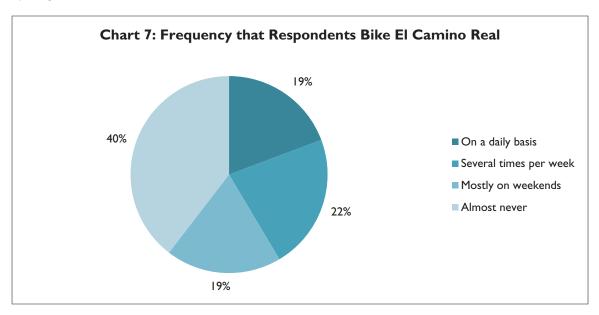
Bicycling was the third-most common form of transportation among respondents, with just three respondents fewer than walking. Sixty percent of respondents bike along El Camino Real at least sometimes. Most respondents who bike do so on a weekly basis, with 22 percent of respondents biking several times a week and another 19 percent biking on a daily basis. Chart 7 and Table 7 describe the frequency with which respondents bicycle along El Camino Real.

Those cycling most frequently are more likely to live in Menlo Park and work outside of Menlo Park, though those cycling on a daily basis are also generally more likely to live and work within half a mile of the Corridor.

Reasons that bicyclists on El Camino Real may visit the Corridor are similar to the overall trend, with the exception of those cycling daily – for those cycling at this frequency, the most common reason to travel El Camino Real is travel to and from work (74 percent), just barely more common than travel for shopping (72 percent). At least half of those cycling several times a week or mostly on weekends travel for work. If a respondent bikes and travels El Camino Real for work, he or she is more likely to be cycling on a daily basis.

Of those 40 percent of respondents who almost never cycle along El Camino Real, most drive to access the Corridor.

A majority of the respondents who bike along El Camino Real travel the Corridor using other forms of transportation in addition to biking, mainly driving and walking. There is nearly the same number of those driving (76 percent of bicyclists) as those walking (74 percent of bicyclists). Generally, cycling and driving frequencies appear inversely related, with those driving more often cycling less often and vice versa.



Frequency	Number of Respondents	Percent of Total
On a daily basis	61	19%
Several times per week	70	22%
Mostly on weekends	60	19%
Almost never	125	40%
Total	316	100%

Table 7: Frequency that Respondents Bike El Camino Real

Transit

Local bus transit was the least common form of transportation used among respondents, with only 6 percent of respondents. Most transit users responding to the survey ride at a frequency of several times a week (4 percent of respondents) with smaller numbers riding mostly on weekends (1 percent of respondents or 22 percent of respondents using transit) and on a daily basis (1 percent of respondents or 11 percent of respondents using transit). Chart 8 and Table 8 describe the frequency with which respondents use transit along El Camino Real. The sample size for this transportation mode was very small and may not be indicative of the habits of all users of transit along El Camino Real in Menlo Park.

Those respondents using transit along El Camino Real live and work in all four location categories. Reasons for traveling El Camino Real differ by frequency of transit usage. Both daily riders travel the Corridor for work, school, and local businesses. Those riding several times per week followed nearly the same distribution as survey respondents overall, with the highest share (92 percent of transit users) traveling for shopping, followed by patronizing local businesses (75 percent of transit users) and traveling to and from work (58 percent of transit users. For the four respondents using transit mostly on weekends, all travel the Corridor for work, three for shopping and local businesses, and one for school.

Of the 94 percent of respondents who almost never use local bus transit along El Camino Real, most drive along the Corridor, though a majority also bicycles and walks. For those who do use transit on El Camino Real, most also bike, walk, and drive. Respondents in this transportation category differ from the others in that driving is not the most common form of transportation used in addition to transit. The most common is biking, as 89 percent of transit users also bike the Corridor, while 83 percent of transit users also walk there. Sixty-one percent of transit users also drive, the lowest percentage of drivers among the bicycling, walking, and transit using categories.

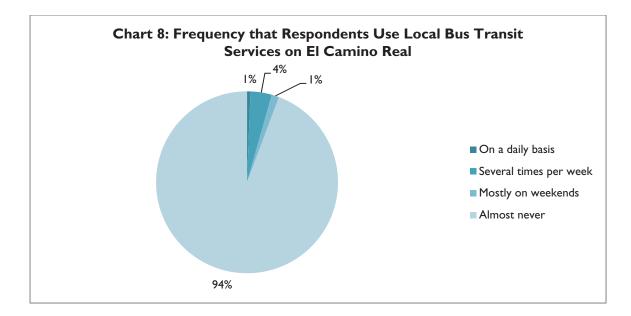
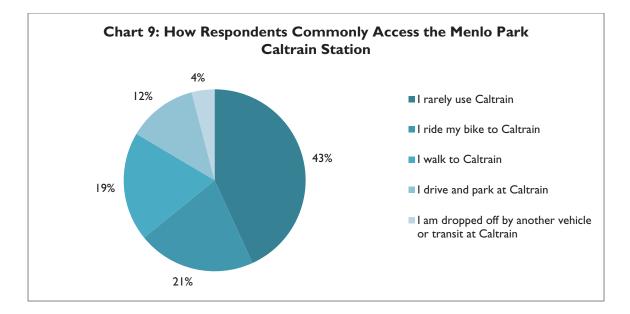


Table 8: Frequency that Respondents Use Local Bus Transit Services on El Camino Real

	Number of	
Frequency	Respondents	Percent of Total
On a daily basis	2	1%
Several times per week	12	4%
Mostly on weekends	4	1%
Almost never	298	94%
Total	316	100%

Caltrain

Question 8 asked participants how they commonly travel to the Menlo Park Caltrain station, which can be accessed from El Camino Real via Oak Grove Avenue and Santa Cruz Avenue. Most respondents use the station in some capacity, with 43 percent indicating that they rarely use Caltrain. The most common transportation method used to access Caltrain is bicycle, which accounts for 37 percent of those who use the Caltrain station. The second-most common mode of transportation to the station is walking, at 34 percent of station users. Twenty-two percent of station users (12 percent of respondents) drive to Caltrain and park there. Only 7 percent of station users (4 percent of respondents) said that they commonly are dropped off at the station by another vehicle or transit. Chart 9 and Table 9 describe how respondents commonly access the Menlo Park Caltrain station.



Transportation Method	Number of Respondents	Percent of Total
I rarely use Caltrain	136	43%
l ride my bike to Caltrain	66	21%
I walk to Caltrain	61	19%
I drive and park at Caltrain	39	12%
l am dropped off by another vehicle or transit at Caltrain	13	4%
Total	315	100%

Table 9: How Respondents Commonly Access the Menlo Park Caltrain Station

OPINIONS AND CONCERNS

Questions 11 through 14 asked participants to indicate their opinions on a series of statements on safety, the environment, and the walking, transit, vehicle traffic, bicycle, and parking environments on El Camino Real. The statements included in the survey were originally made by community members at the community workshop on April 30, 2014.

Safety and Environmental

These statements gauged respondents' opinions on general safety, children's safety, air quality, and signage. Chart 10 and Table 10 describe respondents' agreement with these statements. Responses showed agreement that safety on El Camino Real could be improved. A large majority of respondents agreed that children's safety when crossing the Corridor for school should be a high priority for the community, and only a very small portion of respondents disagreed. Though a very high percentage of respondents with children who cross El Camino Real strongly agreed (70 percent) or agreed (17 percent) with this statement, the majority of respondents without children who cross the Corridor also strongly agreed (47 percent) or agreed (29 percent).

A majority of respondents also agreed that the Corridor is only safe for vehicles regardless of which transportation modes they tend to use. Air quality was also a concern, with a majority of respondents agreeing that it should be a high priority to mitigate poor air quality resulting from traffic congestion. Regarding the clarity of signage for cross streets and turns, respondents tended to be neutral or split evenly between agreement and disagreement.

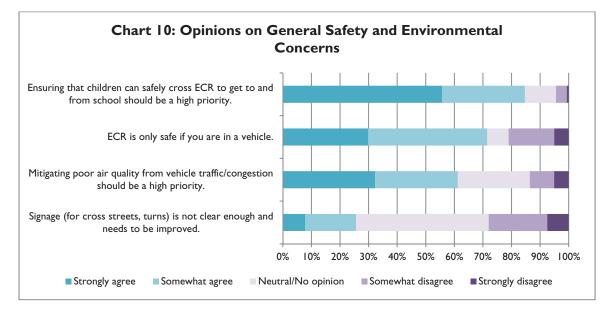
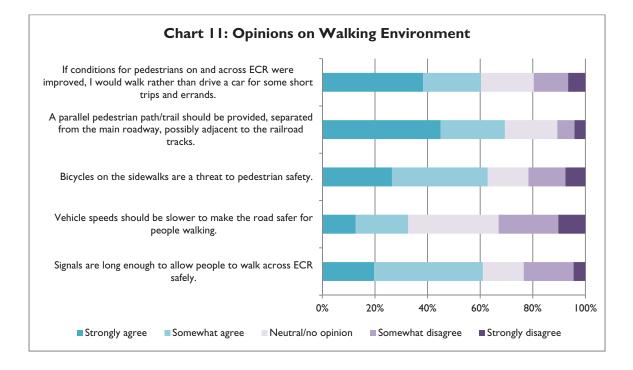


Table 10: Opinions on General Safety and Environmental Concerns

	Strongly disagree	Somewhat disagree	Neutral/ No opinion	Somewhat agree	Strongly agree	Response Count
Ensuring that children can safely cross ECR to get to and from school should be a high priority.	١%	4%	11%	29%	56%	294
ECR is only safe if you are in a vehicle.	5%	16%	7%	42%	30%	295
Mitigating poor air quality from vehicle traffic/congestion should be a high priority.	5%	8%	25%	29%	32%	294
Signage (for cross streets, turns) is not clear enough and needs to be improved.	7%	20%	46%	18%	8%	293

Walking Environment

The statements in Question 12 focused on pedestrian facilities and safety, and addressed concerns about paths, bicycles on the sidewalk, vehicle speeds, and crossing signals. Chart 11 and Table 11 describe respondents' levels of agreement with these statements. Despite the responses to Question 11, in which the majority of respondents believed that the Corridor was only safe if you were in a vehicle and that ensuring safe crossing for school children should be a high priority, most respondents agreed that signal lengths are currently appropriate for pedestrian safety, and disagreed that vehicle speeds should be slowed to improve pedestrian safety. There was not a strong difference in responses between participants who walk and respondents who drive. There was, however, also a sense that bicycles on the sidewalk pose a danger to pedestrians, as more than 60 percent agreed and just over 20 percent disagreed. A majority (nearly 70 percent) of respondents also agreed that there should be a parallel separated pedestrian path; less than 10 percent disagreed. Both cyclists and pedestrians tended to agree with this statement. Most respondents claimed that they would walk rather than drive for short trips if pedestrian conditions improved on El Camino Real. Agreement was strongest among those living in Menlo Park near the Corridor, those working within half a mile of the Corridor, those frequently bicycling, and those already walking.



	Strongly disagree	Somewhat disagree	Neutral/ No opinion	Somewhat agree	Strongly agree	Response Count
Signals are long enough to allow people to walk across ECR safely.	4%	19%	16%	41%	20%	290
Vehicle speeds should be slower to make the road safer for people walking.	10%	23%	34%	20%	13%	291
Bicycles on the sidewalks are a threat to pedestrian safety.	8%	14%	16%	37%	27%	291
A parallel pedestrian path/trail should be provided, separated from the main roadway, possibly adjacent to the railroad tracks.	4%	7%	20%	24%	45%	291
If conditions for pedestrians on and across ECR were improved, I would walk rather than drive a car for some short trips and errands.	7%	13%	20%	22%	38%	290

Table 11: Opinions on Walking Environment

Transit

This statement evaluated participants' interest in a dedicated bus or bus rapid transit (BRT) lane. Chart 12 and Table 12 describe respondents' levels of agreement with this statement. Most respondents disagreed that there should be BRT along El Camino Real through Menlo Park (40 percent) and nearly the same amount were neutral or had no opinion. Those more likely to agree with the statement tended to live outside of Menlo Park, almost never drive, or frequently walk or bike.

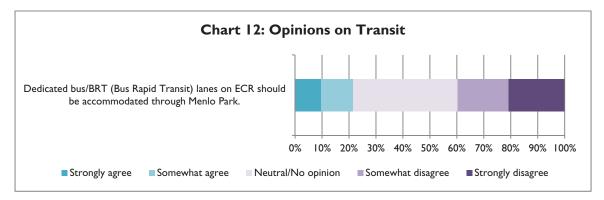


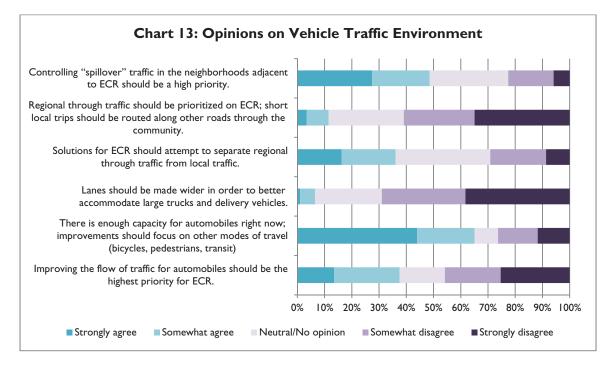
Table 12: Opinions on Transit

	Strongly disagree	Somewhat disagree	Neutral/ No opinion	Somewhat agree	Strongly agree	Response Count
Dedicated bus/BRT (Bus Rapid Transit) lanes on ECR should be accommodated through Menlo Park.	21%	19%	39%	12%	10%	289

Vehicle Traffic Environment

These statements represented opinions on priorities and actions to be taken regarding vehicle traffic conditions on El Camino Real. Chart 13 and Table 13 describe respondents' levels of agreement with these statements. Most (more than 60 percent) of respondents agreed that there is already adequate capacity for automobiles, and that improvements should prioritize alternative transportation modes. Respondents who said that they drive on El Camino Real tended to be neutral on this statement, with similar numbers somewhat agreeing and disagreeing, though among the most frequent drivers, respondents were more likely to agree than disagree. Respondents who frequently bicycle were particularly likely to support this statement, with 80 percent of daily riders in strong support. Pedestrians also tended to be in strong support. Along the same lines, respondents were more likely to disagree than agree with the statement that improving automobile traffic flow should be the highest priority for the Corridor. Those who drive on El Camino Real were more likely than the other demographics to agree with this statement, with over 50 percent of those driving multiple times a day, and 60 percent of those driving once per day agreeing.

Responses generally revealed preferences for statements that prioritized convenience for locals. Respondents were far more likely to agree than disagree that controlling spillover traffic in neighborhoods adjacent to the Corridor should be a priority, very strongly disagreed with the prioritization of regional through-traffic, and even more strongly disagreed that lanes should be widened to accommodate large trucks and delivery vehicles. There was a relatively balanced response to the statement that regional through-traffic and local traffic should be separated—though respondents were most likely to agree, nearly the same number of respondents were neutral, and only slightly fewer disagreed.



	Strongly disagree	Somewhat disagree	Neutral/ No opinion	Somewhat agree	Strongly agree	Response Count
Improving the flow of traffic for automobiles should be the highest priority for ECR.	25%	20%	17%	24%	14%	288
There is enough capacity for automobiles right now; improvements should focus on other modes of travel (bicycles, pedestrians, transit)	12%	15%	9%	21%	44%	289
Lanes should be made wider in order to better accommodate large trucks and delivery vehicles.	39%	31%	25%	6%	١%	290
Solutions for ECR should attempt to separate regional through traffic from local traffic.	9%	20%	35%	20%	16%	288
Regional through traffic should be prioritized on ECR; short local trips should be routed along other roads through the community.	35%	26%	28%	8%	3%	289
Controlling "spillover" traffic in the neighborhoods adjacent to ECR should be a high priority.	6%	17%	29%	21%	27%	288

Table 13: Opinions on Vehicle Traffic Environment

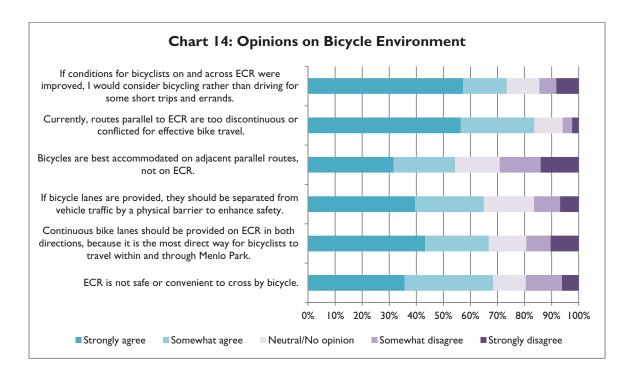
Bicycle Environment

Question 15 included statements about bicycle safety and potential bicycle improvements, and parallel routes. Two statements gauged opinions on the best place to accommodate bicycle traffic—one stated that there should be continuous bike lanes along El Camino Real, another stated that bicycles are best accommodated on parallel routes. Chart 14 and Table 14 describe respondents' levels of agreement with these statements.

A majority of respondents agreed with both statements, though 11 percent more agreed that there should be bike lanes, and more respondents tended to disagree that bicycles were best accommodated on parallel routes. Preferences tended to differ based on whether the respondent was a daily or frequent cyclist, versus primarily a driver: frequent cyclists were generally more

likely to favor bike lanes, with daily cyclists 40 percent more likely to strongly agree with bike lanes than with parallel routes. On the other hand, frequent drivers were more likely to prefer parallel routes than bike lanes. Respondents indicated that existing parallel routes are not currently effective for bicycle travel, with over 80 percent agreeing that they are too discontinuous or conflicted. Regarding potential bike lanes, most respondents agreed that they should be physically separated from vehicle traffic. A large majority of cyclists agreed with this statement, as did a majority of drivers.

Respondents also largely agreed that the Corridor is not currently safe or convenient for crossing by bicycle. Over 70 percent of respondents agreed that they would consider bicycling rather than driving for short trips if bicycle conditions on El Camino Real were improved. This includes the majority of frequent drivers, frequent and weekend cyclists, and all but two transit-riding respondents.

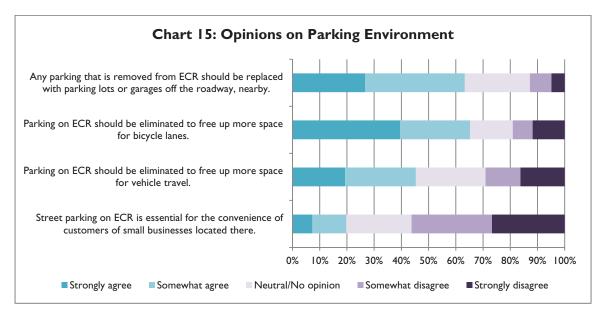


	Strongly disagree	Somewhat disagree	Neutral/ No opinion	Somewhat agree	Strongly agree	Response Count
ECR is not safe or convenient to cross by bicycle.	6%	13%	12%	33%	36%	291
Continuous bike lanes should be provided on ECR in both directions, because it is the most direct way for bicyclists to travel within and through Menlo Park.	10%	9%	14%	23%	43%	289
If bicycle lanes are provided, they should be separated from vehicle traffic by a physical barrier to enhance safety.	7%	10%	19%	25%	40%	291
Bicycles are best accommodated on adjacent parallel routes, not on ECR.	14%	15%	16%	23%	32%	291
Currently, routes parallel to ECR are too discontinuous or conflicted for effective bike travel.	2%	3%	10%	27%	56%	287
If conditions for bicyclists on and across ECR were improved, I would consider bicycling rather than driving for some short trips and errands.	8%	6%	12%	16%	57%	290

Table 14: Opinions on Bicycle Environment

Parking Environment

These statements gauged participants' opinions on parking along El Camino Real. Chart 15 and Table 15 describe respondents' agreement with these statements. Respondents were more likely to agree with statements that the space currently occupied by on-street parking could be used more effectively for purposes other than parking. Respondents were more likely to strongly disagree than agree with the statement that on-street parking on El Camino Real is essential for customers of small businesses there. If parking were to be replaced by another use, bicycle lanes were the alternative use with the highest and strongest levels of agreement, with nearly 70 percent in agreement. There was less agreement with converting parking to space for vehicle travel (at 45 percent, less than a majority); however, respondents were still more likely to agree with converting parking to space for vehicles than they were to agree that street parking is essential on El Camino Real. Regardless of the reason for parking removal, a majority of respondents agreed that any parking removed from El Camino Real should be replaced as off-street parking located nearby.



	Strongly disagree	Somewhat disagree	Neutral/ No opinion	Somewhat agree	Strongly agree	Response Count
Street parking on ECR is essential for the convenience of customers of small businesses located there.	27%	30%	24%	13%	7%	288
Parking on ECR should be eliminated to free up more space for vehicle travel.	16%	13%	26%	26%	19%	289
Parking on ECR should be eliminated to free up more space for bicycle lanes.	12%	7%	16%	26%	40%	288
Any parking that is removed from ECR should be replaced with parking lots or garages off the roadway, nearby.	5%	8%	24%	37%	27%	289

Table 15: Opinions on Parking Environment

POTENTIAL CHANGES ON EL CAMINO REAL

Question 10 offered 17 ideas for potential improvements along El Camino Real, and asked participants to rate each on a scale from least desirable (with a score of 1) to most desirable (with a score of 5). Chart 16 and Table 16 describe the responses for each item; the table also includes an average rating score for each item.

The idea rated as most desirable based on its average score is "Enhanced pedestrian safety and crossings on El Camino Real." Over 80 percent of respondents considered this option desirable, with 57 percent considering it most desirable (more than a majority, and more than was received by any other item). It also received the least amount of undesirable or least desirable responses.

Other items that received a majority of desirable responses were:

- Inclusion of bike lanes on El Camino Real, which also received more than a majority of most desirable responses and also the fewest neutral responses
- More bike parking close to downtown
- More landscaping along El Camino Real (providing buffers between pedestrians or bicyclists and vehicles)
- Timing traffic signals to favor continuous north-south flow on El Camino Real
- Reduction in delay at signalized intersections on El Camino Real
- Wider sidewalks on El Camino Real

• Increased vehicle safety on El Camino Real

These included all of these bicycle- and pedestrian-related improvements, two improvements to signalization, and an improvement related to vehicle safety.

The least-desirable improvement, based on average score, was "More convenient on-street parking on El Camino Real." Over 60 percent of respondents considered this an undesirable improvement, with over 40 percent considering it least desirable. Only eight percent responded that it would be a desirable improvement.

Other items where there were more undesirable responses than desirable responses were:

- Additional through lanes on El Camino Real
- Lower travel speeds on El Camino Real
- Higher travel speeds on El Camino Real
- More convenient on-street parking on El Camino Real

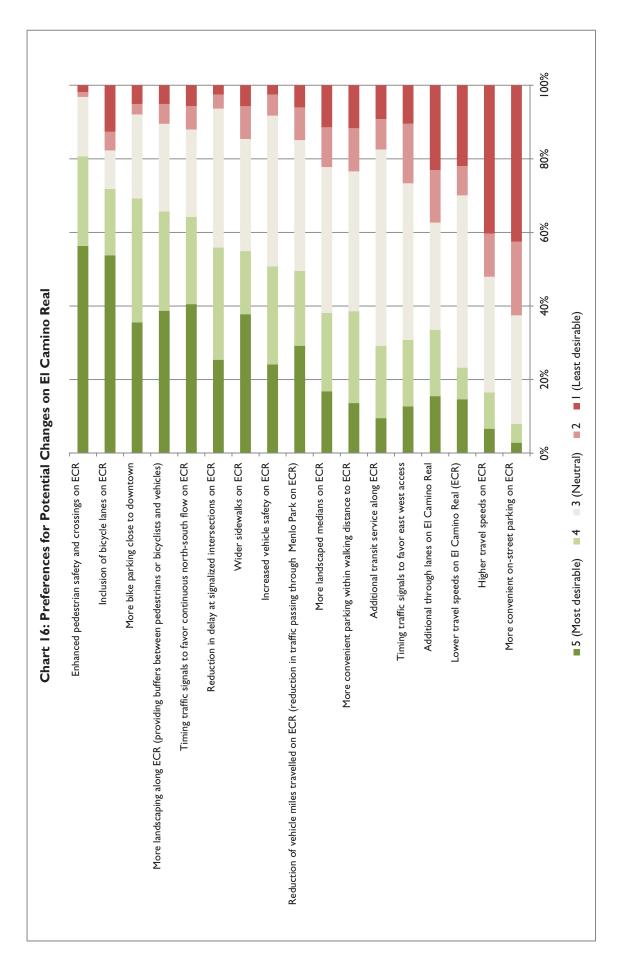
These were mainly vehicle-related improvements that altered travel speeds or that would increase the number of through-lanes or on-street parking spaces on El Camino Real.

There were also three improvements that received more neutral responses than either desirable or undesirable responses, though each of these items was still considered more desirable than undesirable:

- More landscaped medians on ECR
- Additional transit service along ECR
- Timing traffic signals to favor east west access

Responses to this question generally corresponded to the opinions expressed in responses to questions 11 through 16. For example, the desirability of pedestrian and bicycle improvements reflects respondents' tendency to agree with statements promoting pedestrian and cyclist safety. Likewise, the relative unpopularity of additional through-lanes and on-street parking reflects respondents' opinions that there is adequate vehicle capacity on El Camino Real, and that on-street parking along the Corridor is nonessential and should be eliminated.

Community Survey Report Internal Draft



25

El Camino Real Corridor Study

			Per	Percent of Total	-		
		_	2	m	4	5	
Potential Improvement	Rating Average	Least Desirable		Neutral		Most Desirable	Number of Respondents
Enhanced pedestrian safety and crossings on ECR	4.32	2%	%	891	24%	57%	316
Inclusion of bicycle lanes on ECR	3.95	13%	5%	%01	18%	54%	316
More bike parking close to downtown	3.92	5%	3%	23%	34%	36%	315
More landscaping along ECR (providing buffers between pedestrians or bicyclists and vehicles)	3.89	5%	5%	24%	27%	39%	315
Timing traffic signals to favor continuous north-south flow on ECR	3.87	6%	%9	24%	24%	41%	316
Reduction in delay at signalized intersections on ECR	3.72	3%	4%	38%	30%	25%	315
Wider sidewalks on ECR	3.72	6%	6%	30%	17%	38%	315
Increased vehicle safety on ECR	3.64	3%	%9	41%	27%	24%	315
Reduction of vehicle miles travelled on ECR (reduction in traffic passing through Menlo Park on ECR)	3.58	%9	%6	36%	20%	29%	315
More landscaped medians on ECR	3.21	811	11%	40%	21%	17%	315
More convenient parking within walking distance to ECR	3.17	12%	12%	38%	25%	14%	316
Additional transit service along ECR	3.12	6%	8%	53%	20%	10%	315
Timing traffic signals to favor east west access	3.06	10%	16%	43%	18%	13%	315
Additional through lanes on El Camino Real	2.89	23%	14%	29%	18%	16%	316
Lower travel speeds on El Camino Real (ECR)	2.86	22%	8%	47%	6%	15%	314
Higher travel speeds on ECR	2.31	40%	12%	31%	%0I	7%	315
More convenient on-street parking on ECR	2.06	43%	20%	30%	5%	3%	315

Table 16: Preferences for Potential Changes on El Camino Real

OPEN-ENDED QUESTIONS

Questions 17 through 19 asked open-ended questions and allowed respondents to identify specific concerns and problematic locations along El Camino Real. Full text of the open-ended responses can be found in Appendix C.

Q17. In your opinion, how well does El Camino Real currently serve your transportation needs?

There were a total of 235 responses to this question. Responses generally corresponded to the following categories:

- Well: El Camino Real adequately serves the respondent's current needs
- Not well: El Camino Real does not adequately serve the respondent's needs or desires
- Mixed: The respondent that some needs may be met, but others are not
- **Other:** The respondent's opinion could not be determined from the response

In many cases, respondents also offered details about their transportation needs, and how they related to the El Camino Real Corridor. Common themes among the responses included concerns about the visual environment, future development, alternative transportation, safety, signalization, east/west crossings, and congestion, and a tendency for respondents to seek alternative routes in order to avoid the Corridor.

Most responses, 59 percent, could be categorized as "not well." These stated outright that the Corridor failed to serve their needs or were composed entirely of complaints. Congestion and safety were the main issues cited overall by respondents who felt that their needs were not being met. Specifically, respondents were concerned that traffic and congestion made vehicular travel along El Camino Real too time-consuming or dangerous, particularly during commute times. Thus, the Corridor is not serving the needs of these respondents who would use it in order to commute.

Meanwhile, nearly half of the "not well" responses cited their needs as bicyclists, pedestrians, and transit riders as being neglected along the Corridor. Those who must travel by these modes (as well as those who would prefer to but are afraid or are unable to do so), highlighted a lack of facilities and unsafe conditions as a barrier to their use of the Corridor. Many respondents described difficulty crossing El Camino Real. This was mentioned in relation to driving, bicycling, and walking, and was attributed to the congested and dangerous intersections along the Corridor. One safety concern related specifically to children—many respondents pointed out that the Corridor was too dangerous to serve the needs of children, particularly students, who live in the area and find it challenging to travel the Corridor to reach the destinations such as the school, library, and recreation center. Many of the responses in this category (over 25 percent) indicated that as a result of the concerns discussed above, the respondent regularly seeks alternative routes to avoid El Camino Real.

Additionally, 25 percent of responses were "mixed," where respondents identified both needs that were and were not met, or where respondents indicated that the Corridor was "OK" but then identified an area where their needs were not being met. Concerns described in these responses

were similar to those in the "not well" category. Most responses followed a similar pattern, first stating something positive about the Corridor—it is "OK" or "adequate," is a direct route for the respondent's travel needs, is effective during non-commute hours, is effective for car travel, is adequate for pedestrians at crosswalks—and then stating that the respondent finds it difficult during commute hours or during active times of the day, dangerous for walking or bicycling, too congested or dangerous, or that the respondent actually tends to avoid the route when possible.

About 12 percent of responses could be categorized as "well." These stated that El Camino Real adequately served their needs and did not note any complaints about needs that were not being met. However, the responses revealed that in many cases, needs were only just being met. Characteristic responses included statements like "OK," "just tolerable," "barely adequately," and similar phrases suggesting that respondents still find aspects of traveling the Corridor to be unpleasant.

Four percent of the responses were categorized as "other." These included suggested improvements, descriptions of conditions on El Camino Real that did not indicate whether or not the respondent felt their needs were being met, and other comments. These responses can be found in Appendix C.

Q18. Specifically, what is the most important traffic/transportation/circulation issue to you on the El Camino Real Corridor in the City of Menlo Park?

There were a total of 239 responses to this question. In many cases, respondents noted more than one issue; these are also included in the following discussion. The issues identified by respondents can be divided into the following categories, and many of these sentiments mirror the priorities expressed in the earlier questions:

- Alternatives to driving: Sixty-two percent of responses identified a need for more alternatives to automobile travel along the Corridor, including improved public transportation options, bicycling, and walking, to accommodate both the needs and desires of different travelers, and the reduction of the number of cars traveling the Corridor.
- **Bicycle facilities and safety:** Fifty-six percent of responses included bicycle facilities and safety as important issues. Responses called for safety improvements both at crossings and along El Camino Real, with the primary improvement being the addition of bike lanes. Some responses indicated a need for separated bike lanes to ensure the safety of riders. Many responses focused specifically on the safety of students who may bicycle along or across the Corridor.
- **Safety:** Forty-one percent of respondents were concerned about safety along the Corridor, including bicycle, pedestrian, and student safety.
- **Traffic:** Thirty-two percent of responses mentioned traffic as a concern. The issue of traffic was often related to other issues, such as potential causes (such as on-street parking, poorly-timed lights, no alternatives to driving), and impacts (such as frustrated drivers behaving dangerously, safety concerns for cyclists and pedestrians, cars cutting through neighborhoods to avoid El Camino Real). Some respondents were also concerned about traffic impacts of future development in the city and along the Corridor.

- **Pedestrian facilities and safety:** Twenty-six percent of responses mentioned pedestrian facilities and safety. Respondents were particularly concerned with safety at pedestrian crossings, and requested improvements in pedestrian-friendliness at intersections. Requests for pedestrian improvements tended to be grouped with requests for bicycle improvements.
- **Crossing El Camino Real:** Nineteen percent of responses were concerned with the safety and convenience of crossing El Camino Real. Pedestrian crossings were a main concern, as were bicycle crossings. Drivers also reported frustration with long lights, blockages, and risky behavior at crossings.
- **Traffic lights:** Fifteen percent of respondents brought up traffic lights in their responses. Most often, the context involved the timing of the lights—many respondents felt that the lights are currently poorly timed, and that changing the timing could improve traffic flow along the Corridor. Many considered their experiences with waiting at individual traffic lights through multiple signal cycles as an indicator of poor traffic performance on the street. Some discussed unsafe driving behaviors at lights, as well as the need to improve signals and safety for cyclists and pedestrians at intersections.
- Vehicle lanes: Eleven percent of responses to this question mentioned vehicle travel lanes as an important issue. Regarding the number of lanes desired on El Camino Real, there were both responses suggesting that traffic is too great for existing lanes or that additional lanes are needed, and that there should not be any additional lanes or that existing lanes could be eliminated (Question 10 specifically asked participants whether or not they considered additional lanes desirable, and responses tended to be neutral or to indicated undesirability). Respondents also identified the points where three lanes merge into two as problem areas responsible for bottlenecks. There were also some mentions of unsafe or problematic behavior at specific turn lanes along the Corridor that contribute to traffic and safety concerns.
- **Parking:** Five percent of respondents mentioned parking as an issue. These respondents indicated that parking along El Camino Real may contribute to traffic and safety problems, either by causing bottlenecks or by endangering cyclists or pedestrians. Some had suggestions for improving or removing parking along the Corridor.
- **East-west connections:** Five percent of responses specifically mentioned El Camino Real as a barrier when traveling between the eastern and western portions of the city.
- Less common themes:
 - *Transit:* Three percent of responses specifically mentioned a need for more public transit options.
 - Student Safety: Three percent of responses focused on improving safety and accessibility for students and children to walk and bike along and across El Camino Real.
 - *Overpass/Underpass:* Three percent of responses requested the construction of an overpass or underpass to facilitate crossings on El Camino Real.
 - Streetscaping: Two percent of responses emphasized the need to improve the appearance of El Camino Real, requesting plantings, landscaping, and multi-modal design.

- *Desirable uses*: One percent responses suggested that the Corridor could be improved by adding more retail businesses or restaurants, markets, and housing.
- Other: There were six other issues highlighted in responses, which include minimizing delays caused by the train and the need for more roads connecting to Middlefield.

Q19. Specifically, what intersection or portion of El Camino Real do you have concerns with traffic/transportation/circulation, if any?

There were a total of 210 responses to this question. Respondents indicated specific intersections and/or segments of El Camino Real that they felt were problematic, and many discussed their concerns with those intersections or segments.

Table 17 describes the frequency with which specific intersections were mentioned. The most frequently mentioned intersection by far was the intersection between El Camino Real and Menlo Avenue/Ravenswood Avenue, followed by Middle Avenue and Sand Hill Road.

Intersection	Number of Mentions
Menlo/Ravenswood	73
Middle	34
Sand Hill	26
Oak Grove ^a	21
Santa Cruz	17
Cambridge	14
Valparaiso/Glenwood	10
Encinal	7
Roble	5
Creek	5
Live Oak	3
Partridge	3
Notes:	
a. One of these mentions is ambiguous; it was written as "[O…],"	

Table 17: Intersections of C	Concern
------------------------------	---------

and assumed to refer to Oak Grove.

Many respondents also described concerns that they had with specific intersections.

- Encinal: Respondents were mainly concerned with crossing El Camino Real.
- Valparaiso/Glenwood: Some respondents were concerned with the crossing, some were concerned with turns off El Camino Real.
- **Oak Grove:** Concerns included vehicles running red lights, and safety of pedestrians and cyclists trying to cross El Camino Real.

- **Santa Cruz:** Concerns included unsafe pedestrian crossing, signal timing, and vehicles running red lights.
- **Menlo/Ravenswood:** Respondents cited a range of concerns including poor bicycle and pedestrian safety; large amounts of traffic, congestion, and conflict between different modes due to the popularity of destinations in the vicinity; turning; and signal timing.
- **Roble:** The only specific concern for Roble was cars blocking cross-traffic at the intersection.
- **Middle:** Concerns included congestion, particularly congestion related to the Safeway and gas station, and the unsafe and inconvenient crossing for pedestrians and cyclists.
- **Cambridge:** Concerns included U-turns and pedestrian crossings.
- **Creek:** The only specific concern noted for Creek Drive is that the bridge is too narrow for pedestrians.
- Sand Hill: Concerns included signal timing and vehicles running red lights.

Live Oak Avenue and Partridge Avenue are counted here based on responses that indicated "all intersections" in the Study Area, and have no specific concerns associated with them. The general concerns discussed in these responses are related to safety or, specifically, bicycle safety.

Table 18 describes the frequency that intersections were mentioned as part of problematic segments of the Corridor. Segments of concern included intersections throughout the Study Area. The frequency of inclusion peaks at Menlo Avenue/Ravenswood Avenue, and generally decreases towards the northern and southern boundaries of the Study Area. Many respondents described segments using landmarks such as the Caltrain station, the Stanford Shopping Center, and Palo Alto; these were associated with the nearest intersection and included in the analysis.

Intersection ^a	Number of Mentions
Encinal	10
Valparaiso/Glenwood	29
Oak Grove	34
Santa Cruz	44
Menlo/Ravenswood ^b	50
Live Oak ^b	43
Roble ^b	41
Middle⁵	44
Partridge ^b	34
Cambridge ^b	33
Creek⁵	32
Sand Hill ^b	30
Notes:	
a. Intersections are listed from north	to south.

Table 18: Intersections in Segments of Concern

b. One response described a segment from the Stanford Shopping Center to "Ringwood," which was assumed for this analysis to include intersections from Ravenwood to Sand Hill Road.

Descriptions of respondents' concerns about these segments were focused mainly on congestion or bicycle safety. The areas mentioned most frequently, such as Menlo/Ravenswood, may be considered the most congested and most challenging for cyclists.

Summary of Key Issues 4.

TRANSPORTATION NEEDS

Most respondents use multiple forms of transportation along El Camino Real-mainly a combination of driving, bicycling, and walking. They mostly travel the Corridor to access shopping and local businesses, and half of respondents use it to commute to work. Most respondents use El Camino Real to access the Menlo Park Caltrain station. These Caltrain users tend to favor bicycling or walking to the station.

Respondents desire multi-modal improvements along the Corridor regardless of which modes they currently use most. The majority agreed that if pedestrian and bicycling improvements were made, they would prefer to take advantage of those transportation options rather than drive.

There may need to be a closer examination of public transit needs along the corridor. The sample of transit riders responding to the survey was too small to draw supportable generalizations. However, survey responses suggest that frequent transit riders-unlike frequent users of other transportation modes-are less willing or less able to drive as an alternative to transit, meaning that this group may have a greater need for non-automotive transportation options. Additionally, there were some open-ended responses from non-transit users that showed interest in improving public transportation along the corridor.

TRAFFIC

Traffic was a prevalent concern throughout responses to the open-ended questions. Respondents connected traffic conditions with a number of the Corridor's safety issues as frustrated drivers participate in risky behavior, such as running red lights, cutting through adjacent neighborhoods, and speeding. In discussing potential improvements to vehicle traffic, most respondents did not feel that vehicle capacity was a problem in the Corridor, and additional vehicle lanes on El Camino Real were not considered a desirable improvement. Respondents' explanations for traffic causes focused on bottlenecks at specific intersections or along specific segments of the Corridor due to signal timing and lane design. Problematic intersections tended to be those adjacent to major destinations (such as Menlo/Ravenswood) or which serve as connections for regional traffic (such as Sand Hill). Signalization changes were a desired improvement. According to the responses to the open-ended questions, important considerations for signal timing include crossing signals for pedestrians and cyclists and ensuring that signals facilitate east-west movement as well as north-south flow.

SAFETY

Safety in the Corridor was a major concern, particularly for those traveling by bicycle or on foot. Pedestrian safety and crossing improvements, bike lanes, bike parking, and landscaped buffers for pedestrians and cyclists were among the most desired improvements. Additionally, though travel by vehicle was considered the safest way to travel El Camino Real, vehicle safety improvements were still considered desirable. Open-ended responses indicated that vehicle safety may need to address driving behavior such as speeding, opportunistic use of turn lanes for passing purposes, running red lights, U-turns, and stopping in the intersection during red lights.

Student safety and the safety of children using El Camino Real was a priority for respondents, regardless of whether or not respondents have children who need to cross El Camino Real for school. Nineteen percent of respondents have children who need to make this crossing, though responses to open-ended questions suggested that there were additional respondents who are uncomfortable with letting their children travel El Camino Real alone and use alternate means of getting them to school. Student safety concerns include traveling by foot and by bicycle, particularly at crossings.

Appendix C

Best Practices Report



Summary of Best Practices

Introduction

The Menlo Park El Camino Real Downtown Specific Plan, adopted in June 2012, emphasizes the character and extent of enhanced public spaces, the character and intensity of private infill development, and circulation and connectivity improvements to preserve and enhance community life. The plan focuses on improvements along the El Camino Read corridor in the City of Menlo Park, as well as downtown Menlo Park and the Menlo Park Caltrain Station area. For transportation circulation, the Specific Plan envisions the following:

- A vehicular circulation system that accommodates both local traffic and north/south through traffic on El Camino Real.
- An integrated pedestrian network of expansive sidewalks, promenades and paseos along El Camino Real and within downtown. The network provides opportunities for safe crossing of El Camino Real and the railroad tracks and connects the east and west sides of town, including the City's civic center with downtown.
- A bicycle network that builds upon existing plans and integrates more fully with downtown and proposed public space improvements in the area.
- An integrated circulation plan that supports transit use.
- A public parking strategy and management plan that efficiently accommodates downtown visitors and supports downtown businesses.
- Modified parking rates for private development based on current industry standards.

Through the completion of these visions, the Specific Plan accommodates all travel modes, with an emphasis on pedestrians, bicyclists, transit users and parking for downtown. The Specific Plan focuses development in areas well served by transit with a mix of uses in close proximity in order to reduce the reliance on private motor vehicles. The Specific Plan outlines specific pedestrian, bicycle, and transit policies which support each mode's individual goals while fulfilling the overall goals of the Specific Plan.

Based on these goals from the Downtown Specific Plan, following is a "toolbox" of potential improvement measures for the El Camino Real corridor which would support the goals of each mode. This toolbox focuses on curb to curb improvements within the public right-of-way to create Complete Streets. The details of additional circulation improvements outside of the roadway are summarized in the Specific Plan. Images and specific examples of these measures which have been implemented in the Bay Area are shown.

Pedestrian Improvements

Through new development and redevelopment, the Specific Plan anticipates an increase in the number of pedestrians along El Camino Real and in the station area and downtown, the Specific Plan focuses on pedestrian east-west connectivity across El Camino Real, north-south connectivity along El Camino Real, and circulation through the downtown area supported by the following modifications:

- Improved pedestrian comfort and accommodation
- Addition of track-separated pedestrian/bicycle access across the railroad tracks
- Reduced pedestrian crossing distances across El Camino Real

The following improvement measures, and accompanying examples, would aid in the improvement of the pedestrian environment along the El Camino Real Corridor as outlined by the Specific Plan:

1. High Visibility Crosswalks – Clearly delineated pedestrian crossing areas to enhance visibility and the pedestrian environment.



Figure I Ladder Crosswalk (Main Street/Harrison Street, San Francisco)



Figure 2 Brick Crosswalk (El Camino Real/Stanford Avenue, Palo Alto)

2. Curb Extensions – Increase the visibility of pedestrians while reducing intersection crossing distance by aligning pedestrians with the edge of the parking lane.



Figure 3 Curb Extensions and High Visibility Elements (Mission Street at Alp Avenue, Daly City)

3. Pedestrian Refuge Median – Reduce the exposure time experienced by pedestrians in the intersection and provide the ability to cross in two separate legs. In Menlo Park, there would be a desire to ensure that the existing median trees are not impacted by these refuge areas.

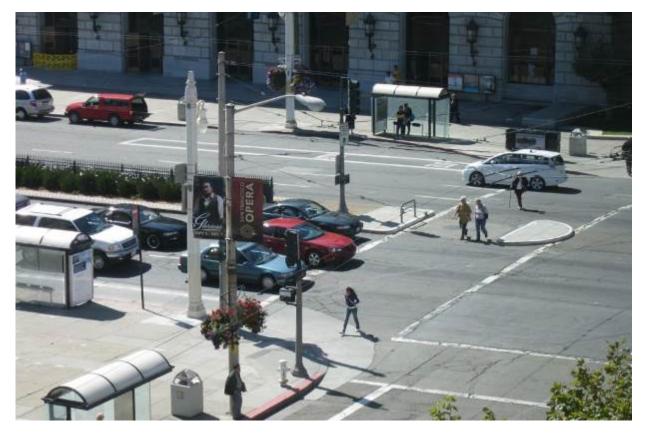


Figure 4 Pedestrian Refuge Island (Van Ness Avenue/McAllister Street, San Francisco)

4. Enhanced Pedestrian Signal Functions – Leading Pedestrian Intervals provide pedestrians a head start when entering the intersection in order to increase the visibility of pedestrians in the intersection. Countdown signal heads will inform pedestrians of the available time to cross.



Figure 5 Leading Pedestrian Interval (Mission Street/6th Street, San Francisco)



Figure 6 Pedestrian Countdown Signal

5. Enhanced Crossing Signage – Intended to increase pedestrian visibility, but should not replace geometric design strategies. Provides motorists more warning of approaching pedestrian crossing



Figure 7 Enhanced Active when Present Signage (San Pablo Avenue/Madison Avenue, El Cerrito)



6. Turn Limitations – Prohibiting and/or limiting motorists turning movements to reduce conflicts with pedestrians.

Figure 8 No Right Turn on Red (Winchester Boulevard/Daves Street, Los Gatos)

7. Enhanced Pedestrian Railroad Crossings – Provide pedestrians a direct crossing of the tracks in order to increase safety and reduce exposure time.



Figure 9 Pedestrian Gates at Railroad Crossings

Note: All of the pedestrian crossings of El Camino Real are at signalized intersections, so additional enhancements which apply to uncontrolled intersection crossings are not included in this discussion.

Bicycle Improvements

The Specific Plan highlights bicycling as an important mode of transportation for the City. Many Menlo Park residents commute to work by bicycle taking advantage of a mild climate and relatively flat terrain to access many destinations within close proximity to their home or place of employment. In accordance with the Menlo Park Comprehensive Bicycle Development Plan (CBDP), the Specific Plan establishes a comprehensive bicycle network for the El Camino Real corridor, downtown area, and Caltrain station area. This network recommends a combination of bicycle paths, bicycle lanes, and bicycle routes. The Specific Plan includes recommended facilities included in the DBDP, upgraded recommendations from the DBDP, and new recommendations to improve east-west connectivity and north-south facilities. The concept of El Camino Real in the Specific Plan embraces providing a continuous bike route along the length of the corridor, with the potential for a dedicated bike lane in the future.

The following improvement measures, and accompanying examples, would aid in the implementation of bicycle network improvements along El Camino Real as outlined in the Specific Plan:

1. Conventional Bike Lanes – Designate an exclusive space for bicyclists through pavement markings and signage. Located adjacent to travel lanes and flows in the same direction as traffic.



Figure 10 Conventional Bike Lane (Folsom Street, San Francisco)

2. Buffered Bike Lanes – Conventional bike lanes paired with a designated buffer space to separate the bicycle lane from the adjacent travel lane or parking lane.



Figure 11 Buffered Bike Lane (Fourth Street, San Jose)

3. Physically Separated Bike Lanes – Exclusive bicycle facilities physically separated and sometimes elevated from vehicle traffic and distinct from the sidewalk. These can be configured as either one-way or two-way depending on the available width.



Figure 12 Two Way Cycle Track (Fernside Boulevard, Alameda)

4. Shared Lane Markings – Also known as Sharrows, these are road markings used to indicate a shared lane environment for bicycles and vehicles which recommend proper bicycle positioning and offer directional guidance. These markings are generally used on both local and arterial streets where there is not adequate width for full bike lanes.



Figure 13 Shared Lane Markings (Scott Street, San Francisco)

5. Parallel Bicycle Boulevard – Parallel streets with low motorized traffic volumes and speeds, designated and designed to give bicycle travel priority.



Figure 14 Bicycle Boulevard (Milvia Street which is parallel to Shattuck Avenue, Berkeley)

6. Colored Bike Facilities – Increases the visibility of the bicycle facility, identifies potential conflict areas, and reinforces bicycle priority in conflict areas.



Figure 15 Green Conflict Zone Markings at driveways (Fell Street, San Francisco)

7. Bicycle Through Lanes at Intersections – Enable bicyclists to correctly position themselves to travel through the intersection, minimizing conflict and creating predictability



Figure 16 Through Bike Lane (Oak Street/Lake Merritt Boulevard, Oakland)

8. Intersection/Bicycle Crossing Markings – Increase bicycle visibility and reduce exposure in the intersection.



Figure 17 Intersection Bicycle Crossing Markings (Market Street/Octavia Blvd, San Francisco)

9. Bike Boxes – A designated area ahead of the travel lane that provides bicyclists with a safe and visible way to get ahead of queuing traffic.



Figure 18 Green Bike Box (Scott Street/Oak Street, San Francisco)

10. Two-Stage Turn Queue Boxes – Orient bicyclists properly for turning movements, provide a better way to make left turns at multi-lane signalized intersections.



Figure 19 Two-State Turn Queue Boxes (Eighth Street/Folsom Street (top) and 11th Street/ Howard Street (bottom), San Francisco)

II. Bicycle Turn Signal Heads – Provide for specific bicycle turn movement at signalized intersections.

Example Pending

12. Full Bicycle Signal – Standard three lens signal specifically for bicycles provide priority to bicycle movements at intersections and accommodates bicycle-only movements.



Figure 20 Bicycle Signal (Panhandle Park along Fell Street, San Francisco)

13. Increased Bicycle Parking and Storage – Safe and convenient bicycle parking racks and storage would encourage bicycle trips to the Downtown and Caltrain.



Figure 21 Bicycle Parking (Embarcadero BART Station, San Francisco)

Transit Improvements

The land use intensification as part of the Specific Plan will result in increased travel along El Camino Real and around downtown Menlo Park. Transit must play an important role in accommodating the increases travel to reduce the reliance on private vehicles and relieve pressure from the roadway network. The Specific Plan supports transit improvements by recommending the following:

- Increase shuttle service to serve added travel demand;
- Improve east-west connectivity and reduce demand for parking in the plan area; and
- Continue employer-sponsored programs that support and increase transit use.

The following improvement measures, and accompanying examples, would aid in the improvement of transit services in the El Camino Real corridor and connectivity to the Caltrain Station as outlined by the Specific Plan:

1. Bus Bulbs – Curb extensions that align the bus stop with the parking lane, allowing busses to stop and board passengers without ever leaving the travel lane.



Figure 22 Bus Bulb (San Francisco)

2. Far-Side Bus Stops – Located at the far side of an intersection, these allow for passengers to cross behind the bus improving visibility of crossing pedestrians for drivers waiting at the intersection.



Figure 23 Far-Side Bus Stop (San Pablo Avenue/Stanford Avenue, Oakland)

3. Midblock Bus Stops – Recommended for important destinations or locations where multiple buses may queue.



Figure 24 Midbock Bus Stop (Broadway at the 12th Street BART Station, Oakland)

- 4. Transit Signal Priority Modifications to normal signal operation process to better accommodate transit vehicles through preferential treatment.
- 5. Bus Stop Facilities All bus stops should have improved shelters, bike racks, and expanded sidewalks to separate the waiting area from the walking area of the sidewalk.



Figure 25 Real Time Arrival Display (VTA Bus Stop)



Figure 26 Bus Shelter (Muni Bus Stop, San Francisco)

Streetscape Improvements

The Specific Plan proposes streetscape improvements on El Camino Real that unify the street experience by using a common language of trees, paving materials, and lighting elements. The intent of these improvements is to encourage walking and pedestrian activity along El Camino Real with improved walkability and comfort. These streetscape improvements should incorporate the green street standards of the *San Mateo County Sustainable Green Streets and Parking Lots Design Guidebook*. This guidebook recommends sustainable stormwater facilities to minimize pollution, stream degradation, and localized flooding. The following improvement measures, and accompanying examples, would aid in streetscape improvements as outlined by the Specific Plan:

1. Street Trees – Provide tree cover to create substantial shaded pathways to encourage walking and completing tree canopy or shade where possible. Mitigate heat island effects.



Figure 27 Street Trees (Shattuck Avenue, Berkeley)

2. Median Enhancements – Additional trees and landscaping to complete tree canopy or shade where possible.



Figure 28 Medians (Octavia Boulevard, San Francisco)

3. Parklet – Public seating platforms that convert curbside parking spaces into community spaces along narrow or congested sidewalk to increase public space and seating.



Figure 29 Parklet (Clement Street, San Francisco)



Figure 29 Streetview of Parklet (Clement Street, San Francisco)

4. Temporary Street Closures – Allow cities to take better advantage of roadways and call attention to neighborhood businesses and increase foot traffic on designated corridors.



Figure 30 Art & Soul Festival (Downtown Oakland)



Figure 31 Farmers Market (Center Street, Berkeley)

5. Interim Public Plazas – Transforms underutilized areas of roadway into public spaces for surrounding residents and businesses.



Figure 323 Temporary Plaza (Telegraph Avenue at Broadway, Oakland)



Figure 33 Jane Warner Plaza (17th Street/Castro Street, San Francisco)

6. Vegetated Swales – Shallow landscaped areas designed to capture, convey, and potentially infiltrate stormwater runoff as it moves downstream.



Figure 34 Vegetated Swale (Freedom Park Road, Sacramento County)

7. Infiltration/Flow-Through Planters – Contained landscaping areas designed to capture and retain stormwater runoff.



Figure 35 Flow-Through Planters (San Pablo Avenue, El Cerrito)

8. Pervious Pavement – Allows rainwater to either pass through the paving system itself or through joint openings between the pavers.



Figure 36 Porous Asphalt (Bay Street Demonstration Parking Lot, Fremont)

9. Rain Gardens – Shallow landscaped areas that can collect, slow, filter, and absorb large volumes of water delaying discharge into the watershed system.



Figure 37 Rain Garden (Cesar Chavez Street, San Francisco)

10. Stormwater Curb Extensions – Landscaped areas within the parking zone of a street that capture stormwater and allow it to interact with plants and soil.



Figure 29 Green Curb Extension (Donnelly Avenue, Burlingame)

11. Pavement Reallocation - The available pavement should be delineated to serve all needs, including travel lanes, safety islands, bike lanes, and landscaping. Therefore, it is necessary under certain circumstances to reallocate the pavement space to better serve all users. The reallocation of pavement could reduce travel speeds, improve safety and operations, enhance neighborhood character, improve access, and reduce imperious pavement area to decrease water run-off. Pavement reallocation could include the narrowing of travel lanes, the removal of supplemental turn lanes, or the removal of on-street parking. The additional space could be used to add buffers to bike lanes, construct green infrastructure elements, or extend the width of sidewalks.

Parking

The proposed improvements of the Specific Plan to create additional public space, such as widened sidewalks, will affect the amount and availability of on-street parking supplies. In order to mitigate these affects, the Specific Plan recommends the construction of up to two new parking garages and the creation of a Parking Management Plan to improve the utilization of parking in downtown Menlo Park. Focusing on the Parking Management Plan, as it affects part of the curb-to-curb focus of this summary of best practices, it is recommended that it could encompass varied time limits for parking, parking pricing, and the accommodation of car-share program. Additionally, changing the design of on-street parking could have a positive effect on the available parking supply. The following management strategies and design standards, and accompanying examples, would aid in parking improvements as outlined by the Specific Plan:

1. Short On-Street Parking Time Limits – Used to encourage turnover in areas where high turnover is expected or warranted.



Figure 38 Short-Term Parking Restrictions (Berkeley)

2. Long Off-Street Parking Time Limits – Encourage employees and multi-purpose trips to park offstreet to free up available spaces to improve convenience.



Figure 39 Early Bird Off-Street Parking Rates (Oakland)

3. Parking Pricing Strategies – Price convenient/desirable spaces at a higher rate. Set parking prices so that 85 percent of curbside spaces are occupied during peak periods.



Figure 40 Variable Parking Rates (Berkeley)



Figure 41 Single Point of Payment Parking Meter (Oakland)

4. Vegetated Parking Lanes – Utilize street trees or planters to separate parking spaces.



Figure 42 Trees used as buffers in parking lane (Grant Avenue, Novato)

5. Parking Lanes as Buffers – Place the parking lane between the bicycle lane and the travel lane to increase bicycle protection.



Figure 43 Parking used as buffers for bike lane (JF Kenndy Drive, San Francisco)

Appendix D

Intersection Levels of Service



Vehicular Delay - Intersection Average	Existing		No Project		Al	t I	Alt 2		Alt 3	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
AM										
I. ECR/Sand Hill	33.9	С	41.7	D	37.3	D	41.7	D	42.8	D
2. ECR/Cambridge	4.9	А	8.5	А	7.8	А	8.5	А	7.4	А
3. ECR/Middle	14.7	В	23.7	С	26.2	С	23.7	С	25.3	С
4. ECR/Roble	10.2	В	7.1	А	6.9	А	7.1	А	8.3	Α
5. ECR/Ravenswood-Menlo	38.3	D	40.6	D	75.1	E	40.4	D	41.6	D
6. ECR/Santa Cruz	22.5	С	15.6	В	23.3	С	16.0	В	16.1	В
7. ECR/Oak Grove	20.7	С	24.2	С	22.7	С	24.3	С	25.3	С
8. ECR/Glenwood-Valparaiso	38.6	D	69.6	E	121.1	F	70.5	E	129.0	F
9. ECR/Encinal	13.8	В	18.1	В	14.9	В	19.5	В	19.4	В
PM										
I. ECR/Sand Hill	65.8	E	75.5	E	85.9	F	75.5	E	72.7	E
2. ECR/Cambridge	11.6	В	11.5	В	11.9	В	11.5	В	11.3	В
3. ECR/Middle	15.9	В	27.6	С	33.7	С	28.0	С	29.2	С
4. ECR/Roble	13.5	В	13.1	В	10.9	В	12.9	В	15.8	В
5. ECR/Ravenswood-Menlo	53.8	D	62.5	E	51.3	D	53.3	D	62.6	E
6. ECR/Santa Cruz	18.7	В	17.7	В	23.0	С	21.0	С	25.6	С
7. ECR/Oak Grove	30.6	С	40.5	D	31.8	С	40.6	D	41.2	D
8. ECR/Glenwood-Valparaiso	31.4	С	61.4	E	112.0	F	62.4	E	78.4	E
9. ECR/Encinal	10.2	В	18.1	В	14.2	В	19.1	В	23.1	С
Ave	27.94	С	36.43	D	41.63	D	36.03	D	39.99	D

Appendix E

Intersection Queuing



Approx. 95th %-ile Queue (Avg on Thru	x. 95th %-ile Queue (Avg on Thru Lanes Only)		Existing		No Project		Alt I		Alt 2		Alt 3	
	Available	Queue	% of									
	Storage (ft)	Length	Storage									
AM												
NB ECR												
I. approaching Sand Hill	1350	225	17%	530	39%	over	exceeds storage	over	exceeds storage	over	exceeds storage	
2. approaching Cambridge	1030	120	12%	345	33%	335	33%	410	40%	275	27%	
3. approaching Middle	1080	90	8%	365	34%	450	42%	470	44%	290	27%	
4. approaching Roble	840	175	21%	100	12%	613	73%	115	14%	185	22%	
5. approaching Ravenswood-Menlo	610	235	39%	215	35%	over	exceeds storage	160	26%	255	42%	
6. approaching Santa Cruz	340	155	46%	145	43%	105	31%	150	44%	155	46%	
7. approaching Oak Grove	390	105	27%	175	45%	220	56%	180	46%	185	47%	
8. approaching Glenwood-Valparai	sc 990	365	37%	690	70%	400	40%	505	51%	410	41%	
9. approaching Encinal	1020	160	16%	245	24%	150	15%	250	25%	160	16%	
SB ECR												
9. approaching Encinal	550	225	41%	over	exceeds storage							
8. approaching Glenwood-Valparai	sc 1010	980	97%	over	exceeds storage							
7. approaching Oak Grove	1000	355	36%	95	10%	185	19%	90	9%	90	9%	
6. approaching Santa Cruz	410	over	exceeds storage	205	50%	320	78%	145	35%	165	40%	
5. approaching Ravenswood-Menlo	340	285	84%	180	53%	300	88%	230	68%	200	59%	
4. approaching Roble	610	155	25%	160	26%	120	20%	180	30%	85	14%	
3. approaching Middle	840	220	26%	240	29%	285	34%	240	29%	290	35%	
2. approaching Cambridge	1080	140	13%	165	15%	130	12%	130	12%	120	11%	
I. approaching Sand Hill	1020	350	34%	610	60%	390	38%	725	71%	500	49%	
PM												
NB ECR												
I. approaching Sand Hill	1350	490	36%	over	exceeds storage							
2. approaching Cambridge	1030	305	30%	650	63%	500	49%	395	38%	655	64%	
3. approaching Middle	1080	205	19%	290	27%	355	33%	360	33%	355	33%	
4. approaching Roble	840	485	58%	265	32%	345	41%	235	28%	355	42%	
5. approaching Ravenswood-Menlo	610	480	79%	over	exceeds storage	over	exceeds storage	555	91%	over	exceeds storage	
6. approaching Santa Cruz	340	205	60%	185	54%	335	99%	260	76%	275	81%	
7. approaching Oak Grove	390	175	45%	365	94%	over	exceeds storage	350	90%	over	exceeds storage	
8. approaching Glenwood-Valparai	sc 990	585	59%	over	exceeds storage							
9. approaching Encinal	1020	120	12%	300	29%	95	9%	300	29%	420	41%	
SBECR												
9. approaching Encinal	550	195	35%	over	exceeds storage	545	99%	over	exceeds storage	over	exceeds storage	
8. approaching Glenwood-Valparai	sc 1010	325	32%	450	45%	over	exceeds storage	430	43%	over	exceeds storage	
7. approaching Oak Grove	1000	535	54%	600	60%	225	23%	265	27%	540	54%	
6. approaching Santa Cruz	410	255	62%	185	45%	210	51%	170	41%	195	48%	
5. approaching Ravenswood-Menic	340	285	84%	over	exceeds storage	330	97%	over	exceeds storage	305	90%	
4. approaching Roble	610	200	33%	265	43%	175	29%	265	43%	420	69%	
3. approaching Middle	840	255	30%	405	48%	370	44%	350	42%	325	39%	
2. approaching Cambridge	1080	235	22%	210	19%	170	16%	205	19%	170	16%	
I. approaching Sand Hill	1020	175	17%	340	33%	280	27%	330	32%	295	29%	



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