



PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

STAFF REPORT

DATE: May 15, 2024

TO: Hearing Officer

SUBJECT: Conditional Use Permit #7139

LOCATION: 1200 E. California Boulevard

APPLICANT: Juan Jimenez, Caltech

ZONING DESIGNATION: PS (Public and Semi-Public)

GENERAL PLAN DESIGNATION: Institutional

CASE PLANNER: Martin Potter

STAFF RECOMMENDATION: Adopt the Environmental Determination and Specific Findings in Attachment A to **approve** Conditional Use Permit #7139 with the conditions in Attachment B

PROJECT PROPOSAL:

- 1) Conditional Use Permit: To allow the construction of a 69,622 square-foot laboratory and office building (Ginsburg Center for Quantum Precision Measurement) with four above-grade stories and two subterranean stories on the existing California Institute of Technology (Caltech) campus. The project includes a subterranean tunnel underneath an existing courtyard with separate external access. A Conditional Use Permit is required for applications for development not envisioned under the existing Master Plan; and
- 2) Private Tree Removal: To allow the relocation of three protected *Olea europaea* (Olive) trees associated with construction of the proposed project.

ENVIRONMENTAL DETERMINATION: This project has been determined to be Categorically Exempt from environmental review pursuant to the guidelines of the California Environmental Quality Act (Public Resources Code §21080(b)(9); Administrative Code, Title 14, §15314, Class 14, Minor Additions to Schools and §15332, Class 32, In-fill Development Projects), and there are no features that distinguish this project from others in the exempt class and, therefore, there are no unusual circumstances. Section

15314 specifically exempts additions to school grounds where the addition does not increase original student capacity by more than 25 percent, or 10 classrooms, whichever is less. Section 15332 exempts in-fill projects consistent with the General Plan and zoning designations on project sites of less than five acres, which are not habitats for endangered species with no significant impacts to traffic, noise, or air quality, and which are adequately served by utilities and services. The proposed addition consists primarily of laboratory space on an institutional site and would not result in more than 10 classrooms or increased student enrollment; therefore, the proposal is exempt from environmental review.

BACKGROUND:

Site characteristics: The Caltech campus encompasses approximately 124 acres. The project site is located on the north side of California Boulevard between Wilson Avenue on the west and Hill Avenue on the east. At approximately 28 acres in size, the subject parcel is the largest of thirty-four parcels in the portion of the Caltech campus bounded by California Boulevard, Wilson Avenue, Hill Avenue, and Del Mar Boulevard (APN #5327-004-005). The proposed building site is adjacent to the Linde Hall and Kellogg Laboratory buildings and is the former site of the Sloan Annex building. The site is currently vacant, aside from two temporary storage buildings.

Adjacent Uses: North: Linde Hall, Kellogg Laboratory
South: Tennis Courts, Single-family residential structure
East: Downs-Lauritsen Laboratory
West: Courtyard (South Gate Entrance)

Adjacent Zoning: North: PS (Public and Semi-Public)
South: PS (Public and Semi-Public), RS-2 (Single-family residential)
East: PS (Public and Semi-Public)
West: PS (Public and Semi-Public)

Previous Cases: Master Development Plan: Establishment of the Caltech Master Development Plan (effective July 2, 1989) and various amendments to the Master Development Plan (1995, 1999, 2006) and entitlements such as Certificates of Appropriateness, Design Review, Conditional Use Permits, and Private Tree Removals for various developments on the Caltech campus.

PROJECT DESCRIPTION:

The applicant, Juan Jimenez, has submitted a Conditional Use Permit application to allow the construction of the Ginsburg Center for Quantum Precision Measurement (GCQPM), a 69,622 square-foot laboratory and office building with four above-grade stories and two subterranean stories on a vacant site within the Caltech campus. The applicant has additionally submitted an application for relocation of three protected Olive trees on the campus, associated with the proposed project. The project includes space for offices, conference rooms, a seminar room, and

subterranean laboratories including a tunnel underneath an existing courtyard with external access. The proposed project would not result in operational changes to campus activities or any increase in the school's student and faculty population.

ANALYSIS:

Zoning

The subject property is located in the PS (Public and Semi-Public) zoning district. This district is intended to provide a specific base zoning district for large public or semi-public land uses. This district can be characterized by private institutional schools and churches. The Caltech campus has undergone numerous improvements since the Master Plan was most recently amended on December 11, 2006, including the construction of the Chen Neuroscience building, Bechtel Residence student housing, the Hameetman student center, and the Resnick Sustainability laboratory. The purpose of the Master Plan is to provide for future growth of Caltech's academic divisions, provide an appropriate interface between the campus and surrounding residential neighborhoods, to minimize uncertainty about Caltech's future development on the part of its neighbors and the City of Pasadena and streamline development procedures, and to provide a unified, balanced, and attractive plan for future growth.

A Master Plan is intended to reduce processing time and uncertainty for some types of public, semi-public, and open space uses by consolidating multiple entitlements, typically several Conditional Use Permits over an extended period, into one process. After a Master Plan is approved, projects that are consistent with the plan do not require an additional entitlement as long as they comply with the Master Plan and other applicable requirements of the Zoning Code.

Caltech, founded in 1891, is a private university that specializes in science and technology. The first Master Plan for the institution was approved in 1989, in order to minimize uncertainty about Caltech's future development and at the same time to streamline development procedures. The first and second amendments to the Master Plan were approved in 1995 and 1999, respectively. The current Master Plan is the third amendment and was approved by City Council in December 2006 without a specific term or sunset date and is in force indefinitely.

Since the construction of the new structure is not specified within the Master Plan at the proposed location, the Director of Planning & Community Development may allow the applicant to apply for a Conditional Use Permit, if the permit would be required in the absence of the Master Plan, pursuant to Zoning Code Section 17.61.050.I (Conditional Use Permits and Master Plans).

In this case, the applicant has submitted this Conditional Use Permit to allow the construction of the new building. The proposed building height is 72'-6", with a setback along California Boulevard ranging from 1'7-1/4" to 5'1-1/4" from the property line.

Conditional Use Permit

The Hearing Officer may approve a Conditional Use Permit to allow the construction of the laboratory and office building only after making six findings identified in the Zoning Code. The general purpose is to evaluate compliance with the Zoning Code and General Plan, whether the use would be detrimental or injurious to the neighborhood, and compatibility of the operation with existing and future uses. The Conditional Use Permit process allows the City to specify development standards and may result in recommended conditions or requirements associated with operation of the use.

In this case, the proposed structure is allowed subject to approval of a Conditional Use Permit and compliance with applicable provisions in the Zoning Code. The purpose of the Pasadena Zoning Code is to protect and promote the public health, safety and general welfare, and to implement the policies of the General Plan by classifying and regulating the uses of land and structures within the City of Pasadena in a manner consistent with the General Plan. To achieve this purpose, it is the intent of this Zoning Code to in part, maintain and protect the value of property, ensure the provision of adequate open space for light, air, and fire safety, and ensure compatibility between land uses. The applicable PS district is intended to provide a specific base zoning district for large public or semi-public land uses that may not be appropriate in other base zoning districts. The PS district is consistent with and implements the Institutional land use designation of the General Plan. Per PMC Section 17.26.040.B.1, development standards for PS-zoned properties are site-specific and determined through the CUP process. The proposed laboratory and office building would be located on the existing Caltech campus. The use of the site for laboratory and office purposes would uphold the institutional character of the property and maintain the purpose of both the PS zoning district and Institutional land use designation of the General Plan.

FAR

The Caltech Master Plan establishes a floor area ratio (FAR) limit of 1.44 for development of new academic facilities, however the area used for calculation of this limit is outside of the area contemplated for development under this application. The Master Plan additionally identifies a limit of 1.6 million gross square feet for new academic and administrative buildings within the area bounded by California Boulevard, Holliston Avenue, Wilson Avenue, and Del Mar Boulevard, an area in which the project site is located. The starting point for calculating new development is established as January 1988 per the Master Plan. Approximately 902,731 square feet of new construction has occurred since that time, resulting in approximately 697,269 square feet of remaining development capacity. The proposed GCQPM building is 69,622 square feet in size; therefore the proposed structure is within the available capacity for the Caltech campus.

Building Height

Building heights are specified within the Caltech Master Plan at specific locations contemplated for future development. The proposed GCQPM site is not within an area envisioned for such development, however the approximately 72'-6" tall structure, with four stories above grade and two subterranean levels, would maintain compatibility with existing multi-story structures located on-site and in the vicinity. The adjacent Linde Hall, Kellogg Laboratory and Downs-Lauritsen Laboratory buildings are approximately three to four-stories in height.

Setbacks

Similar to building heights, setbacks are prescribed by the Caltech Master Plan at specific locations contemplated for future development. The proposed GCQPM building is not within an area envisioned for development, however the project would be located on private property fronting California Boulevard, at a vacant site formerly occupied by the Sloan Annex building, which was constructed in 1931 and demolished in 2016. The proposed structure would have a setback ranging from 1'7-1/4" to 5'1-1/4" from the property line, with four above-grade stories and two subterranean stories and would be approximately 230 feet away from the nearest residentially zoned property.

Tree Relocation

The tree inventory prepared for the project identifies 19 trees on private property within the vicinity of the proposed project. Of these trees, three *Olea europaea* (Olive trees) proposed for relocation (#1339, #1341, and #2679) meet the size protection thresholds identified on the City's protected species list.

A report prepared by Carlberg Associates, Horticulturalists and Registered Consulting Arborists, noted that all three trees proposed for removal exhibit good structural condition and are in good health, with minor interior twig dieback. All three trees were noted as candidates for relocation, provide that sufficient root mass is retained. Pursuant to Municipal Code Section 8.52.085 (Prohibited acts) of the City's Tree Protection Ordinance, applicants are prohibited from removing native, specimen, or mature trees (as defined in the Ordinance) without a permit. The Hearing Officer may approve a private tree removal permit if one of six findings can be made, pursuant to Municipal Code Section 8.52.075 (Private property tree removal and landmark tree pruning permits, Issuance). The applicant has responded to findings 1, 4, and 5 as part of the application.

- 1) *There is a public benefit, or a health, safety or welfare benefit, to the injury or removal that outweighs the protection of the specific private tree. A public benefit means a public purpose, service, or use which affects residents as a community and not merely as particular individuals (Section 8.52.020(V)).*
- 4) *There is a substantial hardship to the property owner in the enjoyment and use of the real property if the injury or removal of the private tree is not permitted.*
- 5) *The protection of the private tree would constitute a taking of the underlying real property.*

Finding 1 requires the applicant to demonstrate that there is a public benefit to removal of the subject trees that affect residents as a community and not merely as private individuals. The proposed project would relocate three trees elsewhere on the campus to allow construction of a laboratory/office building at an institution of higher education, as well as improvements to the adjacent South Gate courtyard which includes improved access for disabled individuals. The proposed expansion of the existing Caltech campus for educational and research purposes serves as a benefit to the community at large. Therefore, it is staff's position that Finding 1 would be satisfied.

Finding 4 requires the applicant to demonstrate that a substantial hardship would exist that prevents the use of the property if the subject trees are not permitted to be removed. The protected trees are located outside of the proposed building footprint. Two of the protected trees are located in the South Gate courtyard; retaining these trees would not preclude the use of the site as a courtyard. The remaining protected tree is located to the east of the proposed structure in front of the Downs-Lauritsen building. Retention of this tree would not preclude the use of the site for educational purposes. Therefore, this finding cannot be made.

Finding 5 requires the applicant to demonstrate that requiring the protected tree to remain would constitute a taking of the underlying real property. As the three subject trees are not located within the proposed building footprint, and retention of said trees does not preclude the use or future development of the property for educational purposes, this finding cannot be made.

Staff's position is that one of the required findings (Finding 1) has been satisfied and therefore recommends approval of the tree removal application.

Historic Resource Analysis

In 1994, Historic Resources Group (HRG) evaluated the Caltech campus as part of a Section 106 process following the Northridge Earthquake and subsequent availability of federal re-building funding from the Federal Emergency Management Agency (FEMA). A rectangular portion of the campus, bounded by Wilson Avenue on the east, Hill Avenue on the west, California Boulevard on the south, and a pedestrian path to the north was identified as eligible for listing on the National Register of Historic Places. Since that time, three contributing buildings to the eligible Caltech Historic District have been demolished (the Chemical Engineering Laboratory, the Housing Office and Annex, and the Sloan Annex) as well as one noncontributing building (the Winnett Student Center). The Sloan Annex building formerly occupied the site associated with this application.

In 2012, Sapphos Environmental, Inc. prepared a National Register Multiple Property Documentation Form for "Historic Designed Gardens in Pasadena, 1873-1975". This document outlined the historic context for designed gardens in Pasadena to facilitate evaluation of such resources for National Register eligibility. Using this document, Planning Department staff identified an eligible Caltech Cultural Landscape Historic District, which is eligible for listing on the National Register. The district is bounded by Wilson Avenue to the west, California Boulevard to the south, Lura Street to the north, and Hill Avenue and a parcel line east of Beckman Auditorium to the east. The South Gate Entrance plaza and a perimeter wall surrounding the project site were identified as historically significant elements within the Caltech Cultural Landscape Historic District.

The proposed GCQPM building is situated within both the eligible Caltech Historic District and Caltech Cultural Landscape Historic District. Development of the proposed structure includes removal and replacement of the existing South Gate Plaza, which will be reinstalled within the same footprint with a modified three-tier design for ADA-compliant access and low-water plantings, as well as partial demolition and reconstruction of a historically significant perimeter wall fronting California Boulevard, with returns wrapping north around the project site. An existing fire lane along the east side of the project site will also be realigned slightly eastward as part of the project. The wall's west-most bay will be reinstalled so that the corner condition from the adjacent plaza to the street will be returned. The east-most bay will also be reinstalled with the same approach, though shifted slightly east along with the adjacent fire lane. The return along the driveway at the east end will be demolished, although a similar wall may be reinstalled, again shifted slightly east. The five bays between the two reinstalled corner bays will be removed and replaced with a new low wall, cable rail guardrail, planters, and a sloped walkway for accessibility to the new building's entrance off California Boulevard. The new low wall and planters are expected to be constructed of concrete with stucco cladding, similar to the materials used for the reinstalled perimeter wall bays.

An analysis of the proposed GCQPM building and historically significant perimeter wall was prepared on behalf of Caltech by Page & Turnbull, whose report indicated that the construction of the GCQPM building in this location is expected to have a minimal change on the distinctive spaces and spatial relationships in this part of the Caltech Historic District. No demolition or rehabilitation of contributing buildings to the district are proposed, and the construction of the proposed GCQPM building at this location follows a pattern of constructing new facilities along the district's outer edge at California Boulevard, where it will have limited effect on the majority of contributors to the Caltech Historic District. The proposed demolition and partial reconstruction of the perimeter wall will retain the distinctive visual and spatial relationships between the perimeter wall, South Gate Plaza entrance, and contributing buildings to the Caltech Historic District. City staff additionally contracted GPA Consulting to peer review the report prepared by Page & Turnbull, whose staff agreed with the conclusions reached by Page & Turnbull.

In summary, the proposed project will have a less than significant impact on both the Caltech Historic District and the Caltech Cultural Landscape District. The new GCQPM building will be located at the districts' southern edge, will not be highly visible within the districts, and is set back from the adjacent South Gate Plaza entrance to avoid overwhelming views and spatial relationships. The scale and massing of the proposed GCQPM is larger than directly adjacent contributing buildings, but not so much larger as to overwhelm or overshadow the historic buildings. The proposed project will involve some modifications to the South Gate Plaza entrance and perimeter wall along California Boulevard, however the modifications will not result in loss of either element as character-defining features of the Cultural Landscape District. Both the Caltech Historic District and Caltech Cultural Landscape District will remain eligible for listing in the National Register.

GENERAL PLAN CONSISTENCY:

The project site is designated Institutional in the Land Use Element of the General Plan. This designation is characterized by facilities owned and operated by the City or by other public and/or private institutions such as corporate yards, schools, libraries, and hospitals. The proposed laboratory building is consistent with a facility operated by a school campus and is in conformance with applicable goals, policies and objectives of the General Plan, specifically Policies 2.9 (Institutional Uses) and 3.3 (Assembly Facilities). Allowing the addition of the proposed laboratory building furthers these policies by accommodating the development of a longstanding educational institution that exists to enrich the lives of Pasadena's residents.

ENVIRONMENTAL REVIEW:

This project has been determined to be Categorically Exempt from environmental review pursuant to the guidelines of the California Environmental Quality Act (Public Resources Code §21080(b)(9); Administrative Code, Title 14, §15314, Class 14, Minor Additions to Schools and §15332, Class 32, In-fill Development Projects), and there are no features that distinguish this project from others in the exempt class and, therefore, there are no unusual circumstances. Section 15314 specifically exempts additions to school grounds where the addition does not increase original student capacity by more than 25 percent, or 10 classrooms, whichever is less. The addition of portable classrooms is included in this exemption. Section 15332 exempts in-fill projects consistent with the General Plan and zoning designations on project sites of less than 5 acres, which are not habitats for endangered species with no significant impacts to traffic, noise, or air quality, and which are adequately served by utilities and services.

As previously noted, a Historic Resource Analysis was prepared by Page & Turnbull and peer reviewed by GPA, pertaining to the perimeter wall on the subject site and adjacent South Gate Plaza. Construction of the GCQPM building and associated demolition and reconstruction of both the adjacent plaza and perimeter wall was found to have a less than significant impact to the eligible Caltech Historic District and Caltech Cultural Landscape District.

Air Quality and Noise analyses were prepared by ESA to estimate air pollutant emissions for the project and determine potential air quality or noise/vibrational impacts associated with construction and operational activities. The Air Quality study concluded that the proposed project would result in incremental increases in on-site emissions but would not exceed regional daily emission thresholds set by the South Coast Air Quality Management District, nor exceed localized thresholds for on-site construction-related emissions and operation of the Project. The Noise study concluded that construction of the project would not exceed the City's construction noise

standards, would not result in a substantial permanent increase in ambient noise levels in the vicinity of the project, and would not generate excessive ground-borne vibration or noise levels as a result of construction activity. Thus, impacts to air quality and noise would be less than significant.

The proposed project would not cause a substantial adverse change to the significance of the eligible Caltech Historic District or Caltech Cultural Landscape District. The project consists primarily of laboratory and office space on an existing college campus and would not result in more than 10 classrooms or any increase in student enrollment; therefore, the project meets the minimum requirements to qualify as a minor addition to a school and as infill development under the California Environmental Quality Act (CEQA) and is exempt from environmental review.

REVIEW BY OTHER CITY DEPARTMENTS:

The Building and Safety Division and Design and Historic Preservation Section along with the Departments of Transportation, Fire, Public Works, and Water and Power were asked to comment on the project. Recommended conditions of approval are provided in Attachment B.

CONCLUSION:

Staff has determined that the findings for approval of the Conditional Use Permit and Private Tree Removal applications can be made. The laboratory use (along with ancillary offices and seminar room) would uphold the institutional character of the property and maintain the purpose of the applicable PS district and Zoning Code. The establishment, maintenance, or operation of the laboratory would not be detrimental to the health, safety, or general welfare of persons residing or working in the neighborhood or detrimental or injurious to property and improvements. Therefore, staff recommends that the Hearing Officer approve the application with the findings in Attachment A and the Conditions of Approval in Attachment B.

Attachments:

Attachment A: Specific Findings for Conditional Use Permit

Attachment B: Conditions of Approval for Conditional Use Permit

ATTACHMENT A
SPECIFIC FINDINGS FOR CONDITIONAL USE PERMIT #7139

Conditional Use Permit

1. *The proposed use is allowed with a Conditional Use Permit (Major and Minor) or Hillside Development Permit within the applicable zoning district and complies with all applicable provisions of this Zoning Code.* Projects that are inconsistent with an approved Master Development Plan may apply for a Conditional Use Permit if the permit would be required in the absence of the Master Plan for certain projects. The applicant has proposed a 69,622 square-foot laboratory and office building on the existing Caltech campus. In the absence of the Master Plan, the proposed laboratory/office building would be subject to approval of a Conditional Use Permit based on land use requirements applicable to the PS district. The proposed use complies with applicable provisions of the Zoning Code.
2. *The location of the proposed use complies with the special purposes of this Zoning Code and the purposes of the applicable zoning district.* The purpose of the Pasadena Zoning Code is to protect and promote the public health, safety and general welfare, and to implement the policies of the General Plan by classifying and regulating the uses of land and structures within the City of Pasadena in a manner consistent with the General Plan. To achieve this purpose, it is the intent of this Zoning Code to in part, maintain and protect the value of property, ensure the provision of adequate open space for light, air, and fire safety, and ensure compatibility between land uses. The applicable PS district is intended to provide a specific base zoning district for large public or semi-public land uses that may not be appropriate in other base zoning districts. The PS district is consistent with and implements the Institutional land use designation of the General Plan. The proposed laboratory/office building, would be located on the existing Caltech campus, would uphold the institutional character of the property, and maintain the purpose of the applicable PS district and Zoning Code.
3. *The proposed use is in conformance with the goals, policies, and objectives of the General Plan and the purpose and intent of any applicable specific plan.* The project site is designated Institutional in the Land Use Element of the General Plan. This designation is characterized by facilities owned and operated by the City or by other public and/or private institutions such as corporate yards, schools, libraries, and hospitals. The proposed laboratory/office building is in conformance with applicable goals, policies and objectives of the General Plan. In particular, Policy 2.9 (Institutional Uses). Allowing the proposed laboratory/office building furthers this policy by accommodating the development of an existing institution that exists to enrich the lives of Pasadena's residents. The proposed structure would provide additional office space, seminar room, and laboratory facilities while maintaining the principal institutional use.
4. *The establishment, maintenance, or operation of the use would not, under the circumstances of the particular case, be detrimental to the health, safety, or general welfare of persons residing or working in the neighborhood of the proposed use.* The proposed laboratory/office building would be located on private property in an unused area fronting California Boulevard. The four-story above-grade, two-story below-grade structure would maintain a substantial distance from persons residing in the neighborhood. While an existing fire lane to the east would be shifted slightly further eastward, circulation through and to the site would otherwise not be affected. Pedestrian entry to the proposed building would be provided from the interior of the site as well as from California Boulevard. Residential uses located approximately 230

feet southeast of the site are buffered by California Boulevard. There would be no detriment to the health, safety, or general welfare of persons residing or working in the neighborhood.

5. *The use, as described and conditionally approved, would not be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the City.* The proposed laboratory/office building would be located on private property in an unused area fronting California Boulevard. The four-story above grade, two-story subterranean structure is an academic laboratory with offices and seminar space on an existing college campus. The proposed project includes demolition and reconstruction of an adjacent courtyard plaza to include ADA accessible paths. Construction of the project would occur in compliance with the California Building Code, Fire Code, and all applicable safety requirements of the City. There would be no detriment or injury to property and improvements in the neighborhood or to the general welfare of the City.
6. *The design, location, operating characteristics, and size of the proposed use will be compatible with the existing and future land uses in the vicinity in terms of aesthetic values, character, and scale.* The approximately four-story structure would maintain compatibility with existing multi-story structures located on-site and in the vicinity. Existing building heights on the campus vary, but surrounding structures are between three- and four-stories tall, consistent with the proposed four-story structure. The design incorporates materials presents on-site and in the vicinity, provides a setback from the street property line, and is consistent with other structures in terms of scale. It is anticipated that the proposed laboratory/office building would be compatible with the existing and future land uses in the vicinity in terms of aesthetic values, character, and scale.

Private Tree Removal Permit – To relocate three Olive trees (*Olea europaea*)

7. *There is a public benefit, or a health, safety or welfare benefit, to the injury or removal that outweighs the protection of the specific private tree. A public benefit means a public purpose, service, or use which affects residents as a community and not merely as particular individuals (Section 8.52.020(V)).* The proposed project would relocate three Olive trees elsewhere on the campus to allow construction of a laboratory/office building at an institution of higher education, as well as improvements to the adjacent South Gate courtyard which includes improved access for disabled individuals. The proposed expansion of the existing Caltech campus for educational and research purposes serves as a benefit to the community at large.

ATTACHMENT B
CONDITIONS OF APPROVAL FOR CONDITIONAL USE PERMIT #7139

The applicant or successor in interest shall meet the following conditions:

1. The proposed project shall substantially conform to the site plan submitted with this application and dated "Approved May 15, 2024", except as modified herein.
2. The right granted under this application must be enacted within 36 months from the effective date of approval. It shall expire and become void, unless an extension of time is approved in compliance with Zoning Code Section 17.64.040.C.
3. The approval of this application authorizes the establishment of a 69,622 square-foot laboratory and office building and the relocation of three protected trees on the Caltech campus.
4. The Caltech Master Plan and all Conditions of Approval of the Caltech Master Plan Amendment approved on December 11, 2006 (Resolution 8691) shall remain in full effect, with the exception of modifications made by Conditions of Approval related to this approval.
5. The Zoning Administrator, at any time, can call for a review of the approved conditions at a duly noticed public hearing. These conditions may be modified or new conditions added to reduce any impacts of the use. The Hearing Officer may revoke the Conditional Use Permit if sufficient cause is given.
6. Any change to these conditions of approval or expansion of the use shall require the modification of this Conditional Use Permit or a new Conditional Use Permit.
7. The applicant or successor in interest shall meet the applicable code requirements of all other City Departments.
8. The proposed project shall comply with the Climate Action Plan Consistency Checklist as part of the building plan check process. The complete checklist and supporting documentation shall be incorporated in the submitted building plans to the satisfaction of staff.
9. The final decision letter and conditions of approval shall be incorporated in the building plans as part of the building plan check process.
10. The proposed project, Activity Number **ZENT2023-00078**, is subject to a Final Zoning Inspection. A Final Zoning Inspection is required for the project prior to the issuance of a Certificate of Occupancy. Contact the Planning Case Manager, Martin Potter at (626) 744-6710 to schedule an inspection appointment time.

Planning Division

11. The applicant or successor in interest shall obtain approval from the Design and Historic Preservation Section for all exterior treatments of the building and site through the Concept Design Review and Final Design Review phases prior to issuance of building permits.
12. The operations at the subject site shall comply with the Noise Restriction Ordinance as outlined in Section 9.36.010 of the Pasadena Municipal Code.

13. Prior to relocation of the protected Olive trees (*Olea europaea*, Tree IDs #1339, #1341, and #2679), the applicant shall post a performance bond (or alternate security provided in a form acceptable to the Director of Finance) in an amount equal to 100% of the appraised value of the tree proposed to be relocated, calculated using the most recent edition of the Guide for Plant Appraisal published by the International Society of Arboriculture to ensure that the relocated tree is properly established and maintained for three years, as required in Section 8.52.077 of Pasadena Municipal Code. Evidence of compliance with this condition shall be submitted to staff for review and approval prior to issuance of an associated building permit. The relocation process, including the removal of the tree from the existing location, shall not commence until this condition is satisfied.
14. Landscaping shall be provided and maintained in the project area, in compliance with the provisions of Chapter 17.44 (Landscaping).
15. A final tree inventory prepared by a certified arborist shall be submitted with a building permit application for any construction that requires removal of trees. If additional protected private trees are proposed to be removed, pursuant to Pasadena Municipal Code Chapter 8.52, the applicant shall submit an application for Private Tree Removal Permit indicating which of the Tree Protection Ordinance findings apply to the removal(s), including the possibility of requiring a new or revised conceptual landscaping plan indicating the location of required replacement trees.
16. Prior to removal of any protected private trees, the applicant or successor in interest shall submit final landscape plans, demonstrating adherence to the replacement matrix adopted by resolution the City Council and included in the associated administrative guidelines and/or alternative requirements, to the Zoning Administrator for review and approval. Compliance with the Tree Protection Ordinance will be monitored through the approved landscape plan depicting replacement trees during the building plan check phase of the project.
17. Prior to the issuance of a building permit, the applicant shall submit a Tree Protection Plan with a final landscape plan to the Zoning Administrator for review and approval. The Tree Protection Plan shall be prepared by a licensed landscape architect and/or certified arborist in compliance with the City's Tree Protection Guidelines.
18. The applicant or successor in interest shall submit landscape and irrigation plans as part of any building, grading or zoning permits. Where proposing more than 2,500 square feet of new landscaping, the project shall meet the threshold for state-mandated water-efficient landscaping. Accordingly, the final landscape plans (inclusive of planting and hardscape plans, the planting pallet, drainage plan, and irrigation system plan(s) and specifications), shall be reviewed by Planning and Community Development Department staff for conformance with the standards and requirements specified within the 2015 California Model Water Efficient Landscape Ordinance (MWELo) prior to the issuance of a building permit. No certificate of occupancy shall be issued until such plans have been deemed compliant with the MWELo and the landscaping has been installed per such approved MWELo-compliant plans to the satisfaction of the Director of Planning and Community Development or his/her designee.

Building and Safety

19. Governing Codes: Current Edition of 2022 California Residential Code, 2022 California Building Code, 2022 California Electrical Code, 2022 California Plumbing Code, 2022

California Mechanical Code, 2022 California Energy Code, California Green Building Standard Code. & the City of Pasadena Municipal Code. The governing edition is based on the date in which the project is submitted to the City of Pasadena for review.

20. Building Code Analysis:
 - a. Provide a Building Code Analysis on the title sheet.
 - b. Include the code(s) information the proposed building: Description of use, Occupancy, whether separated or un-separated, number of stories, type of construction, sprinklers, floor area, height, and allowable floor area.
 - c. Building Code Analysis should include building code required accessible compliance per California Building Code (CBC) Chapter 11, plumbing and mechanical building codes.
21. Means of Egress (Exiting):
 - a. Show an exit plan that labels and clearly shows compliance with all required egress features such as, but not limited to, common path of travel, required number of exits, occupant load, required width, continuity, travel distance, etc. [CBC 1001.1]
 - b. Clearly label and identify on plans fire-resistive corridors, exit enclosures, exit passageways, horizontal exits, occupancy separation walls and floors, fire resistive shafts, and fire walls, along with their fire-resistive ratings
 - c. Primary accessible path of travel shall include a primary entrance to the building or facility; toilet and bathing facilities serving the area; drinking fountains serving the area; public telephones serving the area, and signs. Chapter 11 / Current Code
22. Geotechnical Investigation: This investigation should include soil report(s) for building design criteria.
23. Parking Spaces: Where parking spaces are provided, accessible parking spaces shall be provided in number and kind required per CBC 2022/Current Code.
24. Low Impact Development (LID) Plan and Storm-water Pollution Prevention Plan (SWPPP): See City link for LID: <https://www.cityofpasadena.net/planning/building-and-safety/low-impact-development/>
25. Permits: Separate permits are required for the following:
 - a. Mechanical
 - b. Electrical
 - c. Plumbing
 - d. Fire Sprinkler
 - e. Demolition
 - f. Shoring

Department of Transportation

26. Install two raised mid-block crossings with Rectangular Rapid Flashing Beacon (RRFB) on Wilson Avenue between San Pasqual and Del Mar Blvd.
27. Install green paint on the Bicycle Lanes to highlight conflict points at the intersection approaches of Wilson Avenue and San Pasqual.
28. Repaint southbound direction Class III Bike Route sharrows and add black backing to symbols to improve visibility between California Boulevard and San Pasqual on Wilson Avenue.

29. Install northbound direction Class II Bicycle Lanes between California Boulevard and San Pasqual on Wilson Avenue.
30. Any project loading/unloading spaces shall be on-site, DOT will not install a loading zone for project use along the project's street frontages.
31. The project shall pay the Traffic Reduction and Transportation Improvement Fee (TR-TIF) for the project at the time of building permit issuance. The TR-TIF is subject to change based on the General Fee Schedule at the time of permit issuance. The total payment will be based on the final project scope.
32. The development shall fund the installation of a concrete pad to accommodate a bench at the bus stop along the south side of Del Mar Boulevard and Wilson Ave. Install a concrete pad. **Fee: \$2,100.**
33. Per the Pasadena Street Design Guidelines, the development shall fund the purchase and installation of a bus stop seating amenity that will facilitate comfort and accessibility while waiting at a bus stop along the south side of Del Mar Boulevard and Wilson Avenue within the existing bus zone at the Del Mar Boulevard and Wilson Avenue intersection. **Fee: \$5,000.**
34. The development shall fund purchasing and installing two real-time bus arrival devices. One to be installed at the bus stop along the south side of Del Mar Boulevard and Wilson and the other to be installed at the north side of Del Mar Boulevard and Wilson.
35. Install two real-time bus arrival devices. **Fee: \$18,000**
36. Any existing adjacent or nearby bus zone(s) shall be maintained and operational during construction. Any existing transit amenities in the bus zone(s) shall remain in place, as well as protected during construction. Tree wells, street lights, fire hydrants and other items may not be placed in the public right of way within bus zone(s) without prior approval from the Department of Transportation. Adjacent property environment shall not interfere with bus operations (this includes, but is not limited to, building overhangs, awnings, landscaping, etc.).
37. **Construction Staging & Traffic Management:** Prior to the start of construction or the issuance of any permits, the applicant shall submit a Construction Staging & Traffic Management Plan to the Department of Public Works for review and approval. This plan shall show the impact of the various construction stages on the public right-of-way including street occupations, parking space relocation agreements, closures, detours, staging areas, and routes of construction vehicles entering and exiting the construction site. Permitted hours for construction may be limited due to construction activities bordering the project site.

Public Works

38. No private improvements may be placed within the public right-of-way, including, but not limited to, soldier beams, tie-backs, utility conduits, backflow preventers, transformers, fire sprinkler valve, decorative sidewalk and applicable parade post holes on Colorado Boulevard per Standard Drawing S-419. Private improvements may only be placed in the public right-of-way by submitting a license agreement, which must be approved by the City. The license agreement application for any private improvement within the public right-of-way shall be

submitted to the Department of Public Works for review and shall be approved by the City before any permits are granted. The applicant shall submit the application, plan and processing fee/deposit, associated with processing the license agreement, at least three to four (3-4) months prior to the issuance of any building or demolition permits. An approved license agreement will allow the applicant to install and maintain the private improvements within the public right-of-way with conditions.

39. A license agreement for shoring requires an indemnity bond in order to guarantee that shoring and tie-backs are free from defect due to faulty material, workmanship and failure. Upon review of the license agreement exhibits, an indemnity bond estimate will be prepared and forwarded to the applicant. The estimated amount is equivalent to the cost of reconstructing the public right of way, including all affected utilities, public facilities, and infrastructures, based on the plane of failure at a 45-degree angle from the lowest point of excavation. The indemnity bond shall be submitted to the City prior to the execution of the agreement and the issuance of any building or demolition permits.
40. All steel rods in every tie-back unit shall be relieved of all tension and stresses, and any portion of soldier beams and any portion of the tie-backs located be removed entirely from the public right-of-way. A monthly monitoring report stamped and certified by a licensed surveyor shall be submitted to indicate that the deflection from any piles or soldier beams does not exceed one inch. Upon completion of construction, the developer or his contractor shall remove all tie-back rods within the public right-of-way. The removal shall be documented by a report certified by a licensed deputy inspector. The report shall be submitted to the City for review and approval. The applicant will be charged a penalty of \$7,000 for each tie-back rod not removed from the public right-of-way. For temporary tie-backs or shoring, the maximum width of the license area fronting the development frontage(s) shall only extend to the centerline of the public right-of-way.
41. The applicant shall demolish existing and construct all new public improvements along the subject development frontage of California Boulevard, including concrete drive approach per Standard Plan S-403; concrete sidewalk per Standard Plan S-421; concrete curb and gutter per Standard Plan S-406. All public improvements shall be completed prior to the issuance of Certificate of Occupancy.
42. The proposed development shall connect to the public sewer with one or more new six-inch diameter house sewer laid at a minimum slope of two percent. In accordance with PMC Chapter 13.24.010, house sewer “means that part of the horizontal piping beginning 24 inches from the exterior wall of the building or structure and extending to its connection with the public sewer.” The section of house sewer within the public right-of-way - from the property line to the public sewer, or within easement, shall be vitrified clay or cast iron pipe. The house sewer shall meet City Standards as determined by the Department of Public Works, and a permit issued by the Department of Public Works is required for work within the public right-of-way. The construction of all new house sewers shall be completed prior to the issuance of Certificate of Occupancy.
43. The project submittal proposes five new street trees on California Boulevard in addition to the one existing palm tree. This is more than required. The applicant shall plant two Brisbane box (*Lophostemon confertus*) trees on California Boulevard. The Department of Public Works will confirm eligible planting sites, and will provide the applicant the location, quantity and tree species to be planted as a result of the applicant’s project.

Trees planted by the applicant must meet the City's tree stock standards, be inspected by the City, and be planted according to the details provided by the Parks and Natural Resources (PNR) Division. Planting shall include the installation of the following per tree: no less than two tree stakes; one arbor guard; and the use of slow-release fertilizer tablets. The applicant shall contact PNR (626-744-3880) for tree planting approval, a minimum of two (2) months, prior to the issuance of a Certificate of Occupancy.

Trees planted by the applicant must be irrigated by either an existing or a new irrigation system constructed by the applicant. Plans for the irrigation system shall be prepared by a landscape architect registered in the State of California and submitted to PNR for review and approval. Irrigation facilities (main line, valve, pull box, timer, etc.) must be constructed within private property with the exception of the laterals and bubblers. The lateral shall be a minimum of 18" deep, and no above-ground structures are allowed.

Prior to issuance of the Certificate of Occupancy, the applicant shall submit a Tree Guarantee Deposit equal to the cost of all new trees planted to guarantee that newly planted trees are maintained by the applicant for a minimum of three calendar years. Tree maintenance during this period shall include the following: watering no less than once a week; weed removal; reconstruction of tree wells as needed; re-staking as needed; adjustment to grade of any trees that settle; and any other operations needed to assure normal tree growth. The applicant shall replace any newly planted trees which, for any reason, die or whose health is compromised, within the applicant's three-year establishment period. The three-year tree establishment period shall commence on the day that the Certificate of Occupancy is issued. PNR shall inspect all trees planted by the applicant at the end of the three-year establishment period, and if the trees are found to be in good health, the applicant's deposit will be released. If the trees are found to be in poor health, the establishment period may be extended by PNR and the applicant's deposit shall be held accordingly. Said deposit may be included as part of the construction guarantee if applicable, and is subject to partial refund or additional billing.

44. To protect existing City trees during construction, the applicant shall fully conform to the Tree Protection Guidelines signed by the City Manager. The full guidelines is available at the following link: <https://www.cityofpasadena.net/public-works/engineering-and-construction/engineering/>
45. A Tree Protection Zone (TPZ) shall be established for all existing City trees within the scope of a construction project. The TPZ extends from the base of the tree to four (4) radial feet beyond the dripline of a tree and applies to the entirety of the tree – from the roots to the canopy of the tree.
46. The applicant is prohibited from the following within a designated TPZ: construction vehicle access, construction vehicle operation, staging of materials, and trenching without the consent of the Department of Public Works.
47. The applicant shall at minimum provide the following within a designated TPZ: mulching, irrigation, and protective fencing.
48. Prior to the issuance of any permit, the applicant shall submit a Preliminary Tree Protection Plan (PMC Ch. 8.52 – City Trees and Tree Protection Ordinance), prepared by a Landscape Architect or certified Arborist, showing the TPZ and all structures, footings, and grading that may impact City trees shall be submitted to the Department of Public Works, for review and approval. Given that each construction project poses unique conditions, it is the responsibility of the applicant to develop a Tree Protection Plan based off the TPZ standards to the extent

feasible. The Plan shall conform to the Tree Protection Standards which specifically require showing the locations of all existing trees, their diameters, canopies, whether the tree is a public tree or private tree, as well as any trees to be planted with their canopy at mature size. The final conditions of the Tree Protection Plan shall be approved by the Forestry Superintendent. A non-refundable flat fee, per the current General Fee Schedule, will be required for staff time to review the Tree Protection Ordinance compliance.

49. Prior to any construction, tree protections including the installation of fencing to protect public trees must be in place. The fencing material shall be chain-link attached to posts inserted into the ground at the edge of the dripline and shall be a minimum of 6' in height. See Standard Plan S-642 – Tree Protection Chain Link Fencing. Fencing shall maintain visual lines of sight in order to avoid vehicle and pedestrian hazards. Fencing shall include a minimum 8.5" x 11" warning sign with the following information: 'Tree Protection Zone'; name and contact information of project owner or authorized representative; 'Please contact the City of Pasadena Citizen Service Center to report any concerns (626) 744-7311'. All protective fencing must be permitted, inspected and approved by Public Works prior to the commencement of any construction.
50. All new drive approaches shall be at least seven (7) feet clear of the existing street trees measured from the edge of the trunk closest to the drive approach. All public trees shall be protected and fenced with a posting on the fences advising of the tree protection.
51. Prior to issuance of any permit, the applicant shall submit a valuation assessment report of the existing public tree(s) along the boundary of their project. The report shall be prepared by a registered Arborist and submitted to PNR for review and approval. If it is determined that the applicant has failed to care for any City tree within their Tree Protection Plan, and the health of the tree(s) was critically compromised requiring its removal, the applicant shall be liable for the following costs: assessed value of tree determined by a PNR Arborist using a current ISA assessment methodology; the removal cost determined by PNR; and any applicable infraction or administrative fines determined by Code Compliance.
52. Prior to issuance of any permit, a deposit in the amount of the applicant's total liabilities based on the aforementioned approved tree assessment report shall be submitted to the City. The deposit is fully refundable, less administrative fees, upon the satisfaction of Public Works prior to the issuance of a Certificate of Occupancy.
53. Prior to the start of construction or the issuance of any permits, the applicant shall submit a Construction Staging and Traffic Management Plan to the Department of Public Works for review and approval. The template for the Construction Staging and Traffic Management Plan can be obtained from the Department of Public Works webpage at: <https://www.cityofpasadena.net/public-works/engineering-and-construction/engineering/> . A non-refundable flat fee, based on the current General Fee Schedule, is required for plan review and on-going monitoring during construction. This plan shall show the impact of the various construction stages on the public right-of-way (and the private street) including all street occupations, lane closures, detours, staging areas, and routes of construction vehicles entering and exiting the construction site. An occupancy permit shall be obtained from the department for the occupation of any traffic lane, parking lane, parkway, or any other public right-of-way. All lane closures shall be done in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and California Supplement. If the public right-of-way occupation requires a diagram that is not a part of the MUTCD or California Supplement, a separate traffic control plan must be submitted as part of the Construction Staging and Traffic Management

Plan to the department for review and approval. No construction truck idling or staging, material storage, or construction trailer are allowed in the public right-of-way.

54. In order to ensure that the developer maintains a clean and safe site during the construction phase of development, the applicant shall place a \$20,000 refundable deposit with the Department of Public Works prior to the issuance of any permit. This deposit is a guarantee that the applicant will keep the site clean and safe, and will make permanent repairs to the abutting street improvements that are damaged, including striping, slurry seal/ resurfacing, street trees, curb, gutter, and sidewalk, either directly or indirectly, by the construction on this site. This deposit may also be used for charges due to damage to existing street trees and for City personnel to review traffic control plans and maintain traffic control.

All costs associated with these conditions shall be the applicant's responsibility. Unless otherwise noted in this memo, all costs are based on the General Fee Schedule that is in effect at the time these conditions are met.

In addition to the above conditions, the requirements of all applicable Pasadena Municipal Code (PMC) will apply and be implemented during the corresponding plan review and permitting. They may include but not limited to:

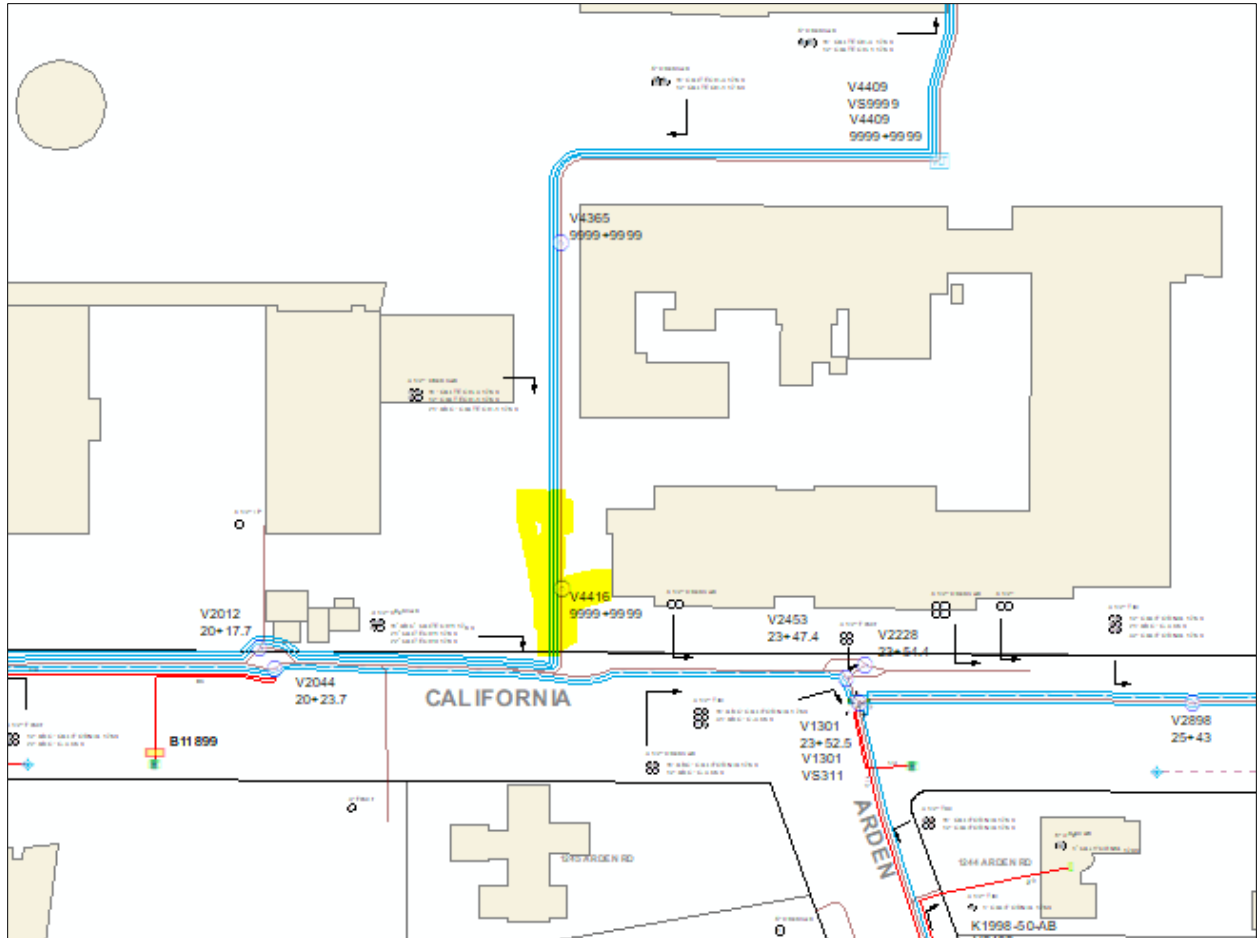
- Sidewalk Ordinance - Chapter 12.04
- Sewer Facility Charge – Chapter 4.53
- Residential Impact Fee – Chapter 4.17
- City Trees and Tree Protection Ordinance - Chapter 8.52
- Construction and Demolition Waste Ordinance - Chapter 8.62
- Holiday Moratorium of activities within public right-of-way – Chapter 12.24.100

If you have questions regarding the above conditions and requirements of the ordinances, please contact me at (626) 744-3762 or email YWu-Bowman@cityofpasadena.net.

Water and Power – Power

55. Power Infrastructure:

- a. There are existing 17KV underground distribution facilities in close proximity of the proposed project location. Developer to maintain proper clearances at all times from existing underground distribution facilities within the property.
- b. Proposed structure location interferes with existing power feed to transformer vault. Conduits will need to be relocated.



56. Existing Electrical Services:

- a. Developer shall notify PWP of any underground electrical conduits, transformer vaults, or overhead lines in conflict with construction.

57. Distributed Generation:

- a. Owner/developer installed distributed generation resources that will be interconnected to the Pasadena Electric Distribution System shall be installed in accordance with the Department Distributed Generation Interconnection Requirements Regulation 23. In addition, all customer installed solar photovoltaic (PV) resources shall meet all of the requirements of local building codes, Fire Department and the Pasadena Solar Initiative Program.

All comments are based on the limited description provided. Please arrange a meeting with Electric Service Planning personnel for further information and detailed requirements at (626) 744-4495.

Water and Power – Water

- 58. Pasadena Water and Power (PWP), Water Division can serve water to this project. The following water mains can serve the project location:

- a. 12-inch cast iron water main in East California Boulevard, installed under Work Order 6057 in 1974. This water main is located approximately 24 feet north of the south property line of East California Boulevard.
 - b. 6-inch cast iron water main East California Boulevard, installed under Work Order 852 in 1921. This water main is located approximately 24 feet north of the south property line of East California Boulevard.
59. Moratoriums: Verify with Public Works Department regarding any street construction moratorium affecting this project.
60. Water Pressure: The water pressure at this site is approximately 80 psi.
61. Water Service: PWP records reflect there is no active water service providing water to the project site. Any change in water service will be reviewed when the building plans are submitted. Any change in service will be installed at actual cost and paid for by the owner/developer. All service pipes shall be of suitable capacity as determined by applicable plumbing and fire codes. The minimum sized service installed by PWP is 1-inch and any services 50 years and older require abandonment.
62. Water Main Charge: If it is determined that a water main must be upgraded due to size, age, pressure deficiencies, and/or the integrity of the existing water main; the upgrade will be paid for by the owner/developer. A deposit will be requested for the water main design and a cost estimate will be provided to the owner/developer for the new water service installations, main design, and main construction. The owner/developer must be aware that the design of a new water main will take 3 to 4 months after the initial deposit is made by the owner/developer. Also, an additional 4 to 6 months will be needed for the construction of the water main after the balance of the estimate is paid in full by the owner/developer. The design and construction estimated time depends on the size and length of the water main and other mains in the queue. For this reason, it is imperative that the initial deposit be submitted promptly. Also, the owner/developer will pay in full any street restoration that is required by PWD. PWD determines the limits of the street restoration.
63. Water Division Requirements:
- a. Water lines are not permitted to cross lot lines to serve adjoining lots without a utility easement; the Pasadena Water Division shall approve all proposed easements.
 - b. The Water Division will install the service tap, lateral, water meter and designate the distribution main and service tap.
 - c. All services not in use must be abandoned at the distribution main at the applicable rate.
 - d. For subdivided lots with one unit behind the existing, show easement documentation and assessor parcel map showing the subdivision.
 - e. Pursuant to the PWP Water Regulation Section XI 'A water service and meter may be evaluated for its continuing integrity. Should PWP find a service, meter, vault or other appurtenance to be substandard and no longer suitable for continued use, replacement and/or construction of new facilities may be required. PWP may require that a portion or all of the costs of such replacement and/or construction be paid or contracted for by the Applicant or Customer prior to construction.' The property owner is responsible for the replacement cost.
64. Cross Connection Control Requirements for Domestic Services:

- a. All city cross-connection prevention policies must be adhered to. The developer is required to provide back-flow protection at all connections whereby the plan arrangement or configuration could potentially contaminate the domestic water system.
 - b. There shall be no taps between the meter and the backflow assembly.
 - c. The owner/developer shall provide and install an approved double check valve backflow prevention assembly at each water service if more than one water service serves property. The location of the back-flow prevention assembly shall be above ground within 20-feet of the property line.
 - d. The property owner is responsible for the back-flow prevention assembly. The assembly will be registered and require an annual test certification. All manufacturer warranties shall be transferred upon installation and certification to the property owner.
 - e. The owner/developer is responsible for certifying and testing the assembly after installation by a person that possesses a current and valid license, and must be certified by the County of Los Angeles Department of Health Services.
 - f. The owner/developer shall submit the results of the test to the Water Utility Service Section for approval. Upon approval, the City will maintain domestic water to the property and will automatically register the assembly.
 - g. All water services shall be protected from cross connections by means of approved backflow prevention techniques and assemblies.
 - h. An administrative fee of \$180.94 will be charged for each backflow prevention assembly installed.
65. Cross Connection Control Requirements for Fire Service (if required):
- a. The fire service requires a detector meter and back-flow prevention assembly.
 - b. The assembly shall be located in a readily accessible location for meter reading, test and maintenance.
 - c. All fire sprinkler systems require installation of an approved double check valve backflow prevention assembly at the sprinkler lateral off the domestic system.
 - d. Contract service other than PWP, providing the backflow prevention assembly shall contact the Water Utility Services Section to verify assembly approval or contact the University of Southern California foundation for Cross Connection Control and Hydraulic Research for an approve list of assemblies.
 - e. All manufacturer warranties shall be transferred upon installation and certification to the property owner. The property owner shall assume ownership of the back-flow prevention assembly. The assembly will be registered and require an annual test certification.
 - f. If PWP is to provide DCDA for fire service, PWP will install Wilkins, model 450 DA.
 - g. Choose from one of the below listed options and incorporate into the fire sprinkler plans.
66. Option 1: Detector meter located on double check detector check assembly (DCDA) outside the structure on private property.
- a. The Water Division will install the service tap, lateral, DCDA (optional Wilkins, models 350 DA or 450 DA) and designate the distribution main and service tap.
 - b. The location of the back-flow prevention assembly shall be a minimum of 12-inches above grade within 10-feet of the property line, on private property. Reference Water Division Plan Check for certification and registration.
67. Option 2: Detector meter located in a vault within the public right of way with a double check valve backflow prevention assembly (DCA) provided and installed inside or outside the building by the owner/developer.
- a. The Water Division will install the service tap, lateral, detector water meter and designate the distribution main and service tap.

b. The location of the back-flow prevention assembly shall be a minimum of 12-inches above grade within 20-feet of the property line on private property. Reference Water Division Plan Check for certification and registration.

68. All Other Cross Connection Requirements: The owner/developer is also responsible for additional cross connection requirements for irrigation system, swimming pool and/or spa, boiler / chilled water / cooling tower (using chemical additives), domestic water line at makeup to carbonation system, sewage ejector, decorative water fountain, and makeup water to reverse osmosis filtration equipment.

69. Fire Flow and Fire Hydrants: The Pasadena Fire Department (PFD) has jurisdiction and establishes the requirements for fire protection within the City of Pasadena. PFD must be consulted in this regard. Any cost incidental to providing adequate fire protection for the project must be paid for by the owner/developer. A Fire Plan approved by the Pasadena Fire Department is required prior to water service installations.

There are two fire hydrants in close proximity to the project site:

a. Fire hydrant number 719-13 is located on the south curb of East California Boulevard, approximately 559 feet east of east property line of South Wilson Avenue.

There are no current fire flow tests available for these hydrants. If you would like to request a fire flow test, please contact Linette Vasquez at (626) 744-4495.

Fire Hydrants Details:

