



DRAFT

ENVIRONMENTAL IMPACT REPORT

FOR THE

THETA XI FRATERNITY REDEVELOPMENT
(SCH: 2019029127)

JULY 2019

Prepared for:

City of Davis
23 Russell Boulevard
Davis, CA 95616
(530) 757-5610

Prepared by:

De Novo Planning Group
1020 Suncoast Lane, Suite 106
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D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



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DRAFT EIR

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INTRODUCTION

The City of Davis (City) has determined that a project-level environmental impact report (EIR) is required for the proposed Theta Xi Fraternity Redevelopment Project (proposed project) pursuant to the requirements of the California Environmental Quality Act (CEQA).

This EIR is a Project EIR as defined in Section 15161 of the State CEQA Guidelines. A Project EIR is an EIR which examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction and operation. The Project EIR approach is appropriate for the Theta Xi Fraternity Redevelopment Project because it allows comprehensive consideration of the reasonably anticipated scope of the project, as described in greater detail in Section 2.0.

PROJECT DESCRIPTION

The following provides a brief summary and overview of the proposed project. Section 2.0 of this EIR includes a detailed description of the proposed project, including maps and graphics. The reader is referred to Section 2.0 for a more complete and thorough description of the components of the proposed project.

The project site consists of approximately 0.45 acres located in the central portion of the City of Davis, north of the Interstate 80 (I-80) Freeway, at 503, 509, and 515 First Street. The project site is currently developed with three two-story adjacent Theta Xi fraternity houses, totaling 19,800 square feet (sf). The three lots are owned by the Beta Epsilon Association of Theta Xi, a non-profit California corporation, and occupied by the fraternity. The site has provided student housing dating from 1950 when Theta Xi (TX) acquired the first of the three lots. From east to west, the fraternity houses include the “TX Main House” located at 515 First Street (3,964 total sf, excluding the basement), the “Bryson House” located at 509 First Street (2,009 total sf, excluding the basement), and the “Jackson House” located at 503 First Street (2,065 total sf, excluding the basement). There is a detached garage in the northwest corner of the project site, and the side yard of the Jackson House is used for off-street parking for approximately seven vehicles. Additionally, a paved recreation/patio area is situated behind the Jackson House and Bryson House. The site currently contains approximately 28 trees, including those located along the frontages of First Street and D Street.

The proposed project includes merging the three lots located at 503, 509, and 515 First Street and re-subdividing the property into two lots for the redevelopment of one parcel with a consolidated 35-bed, three-story building. The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main House) on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot.

The proposed three-story fraternity building would provide 35 total beds, nine total bathrooms and a kitchen. This would result in three fewer beds and four additional bathrooms compared to the existing houses. The project would also consolidate all living and study areas into the proposed three-story building with partial basement, a detached laundry, storage building, and trash enclosure, and associated site landscaping with exterior meeting and gathering spaces. Due to the increase in building height and square footage, the densification of the overall project site would be increased from an existing floor-area-ratio of approximately 0.41 to a proposed floor-area-ratio of approximately 0.97. This floor area ratio is consistent with the subject's zoning, Central Commercial district, which states that the "total floor area of a building shall not exceed three times the lot area."

There would also be a dedicated "Bike Barn" with bike maintenance space and a one-to-one ratio of covered and secured bike storage to beds. Additional guest bike parking would be provided along the landscape strip on First Street. The project would include a new parking lot accessed from D Street through a secured vehicle gate. The new concealed off-street parking and recreation area in the rear would significantly increase the number of conforming off-street parking spaces available to the fraternity.

During construction, the TX Main House would continue to serve the fraternity's housing and study needs. Once the proposed three-story fraternity building is completed, the fraternity would consolidate all of its activities onto the new western parcel. Once the fraternity is consolidated into the western parcel and associated three-story building, the TX Main House, along with its expanded lot, would be vacated and placed for sale or lease to a third party on the open market. As such, the TX Main House would not be retained for TX Fraternity uses.

The project site is in the Core Area Specific Plan, which also includes the City of Davis General Plan and its Land Use Map and Zoning. The project site is currently zoned Central Commercial.

Tier III Design Review approval is required because the project site is within 300-feet of a designated historical resource, Dresbach-Hunt-Boyer Home, and the site is within the Conservation Overlay District. According to the Davis Municipal Code, the Conservation Overlay District supports planning policy stipulating that new development and renovation of existing buildings should respect the traditional scale and character found within a defined area. Conservation Overlay Districts are designated under Chapter 40 of the Code. However, some individual buildings within the Conservation Overlay District are designated Landmarks or Merit Resources in the Davis Register of Historic Resources.

The fraternity use is a legal nonconforming use, based on a Settlement Agreement and Release of all Claims (the "Settlement Agreement") entered into by and between the City and Theta Xi in 1995. As proposed, the demolition of two of the buildings and their replacement with a new fraternity house on the western lot to be created will not retain the legal nonconforming status under the City's Zoning Code. The proposed new construction will still constitute a "living group" use, which is a conditional use within the Central Commercial District. Therefore, a Conditional Use Permit ("CUP") approval would be required to allow the proposed new fraternity building.

Refer to Section 2.0, Project Description, for a more complete description of the details of the proposed project.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the proposed Theta Xi Redevelopment Project that are known to the City of Davis, were raised during the Notice of Preparation (NOP) process, or raised during preparation of the Draft EIR. This Draft EIR discusses potentially significant impacts associated with cultural and tribal resources and land use. The remaining environmental topics were analyzed in the Initial Study prepared for the project (see Appendix A).

The City received nine written comment letters on the NOP for the proposed Theta Xi Fraternity Redevelopment Project Draft EIR. A copy of each letter is provided in Appendix A of this Draft EIR. A public scoping meeting was held on March 18, 2019 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Oral comments received at the NOP scoping meeting are also included in Appendix A.

Aspects of the proposed project that could be of public concern include the following:

- The noise, trash, and general disturbances in the front yard areas.
- The structural stability and efficiency of the existing structures.
- The proposed mitigation measures related to biological resources (specifically related to special-status birds and bats).
- The proposed mitigation measure related to tribal cultural resources.
- The demolition of the existing structures as related to hazardous materials.

ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6 of the CEQA Guidelines requires an EIR to describe a reasonable range of alternatives to the project or to the location of the project which would reduce or avoid significant impacts, and which could feasibly accomplish the basic objectives of the proposed project. The alternatives analyzed in this EIR include the following three alternatives in addition to the proposed Theta Xi Fraternity Redevelopment Project:

- No Project (No Build) Alternative;
- Renovation and Preservation Alternative;
- Preservation, Renovation, and New Build Alternative.

Alternatives are described in detail in Section 5.0, Alternatives to the Proposed Project. A comparative analysis of the proposed project and each of the project alternatives is provided in Table ES-1. The table includes a numerical scoring system, which assigns a score of “2,” “3,” or “4” to the proposed project and each of the alternatives with respect to how each alternative compares to the proposed project in terms of the severity of the environmental topics addressed in this EIR. A score of “2” indicates that the alternative would have a better (or lessened) impact

when compared to the proposed project. A score of “3” indicates that the alternative would have the same (or equal) level of impact when compared to the proposed project. A score of “4” indicates that the alternative would have a worse (or greater) impact when compared to the proposed project. The project alternative with the lowest total score is considered the environmentally superior alternative.

TABLE ES-1: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE PROPOSED PROJECT

<i>ENVIRONMENTAL ISSUE</i>	<i>PROPOSED PROJECT</i>	<i>NO PROJECT (NO BUILD) ALTERNATIVE</i>	<i>RENOVATION AND PRESERVATION ALTERNATIVE</i>	<i>PRESERVATION, RENOVATION, AND NEW BUILD ALTERNATIVE</i>
Cultural and Tribal Resources	3 – Same	3 – Same	3 – Same	3 – Same
Land Use	3 – Same	2 – Lesser	2 – Lesser	3 – Same
Summary	6	5	5	6

As shown in Table ES-1, the No Project (No Build) Alternative and the Renovation and Preservation Alternative are the environmentally superior alternatives when looked at in terms of all potentially significant environmental impacts. However, the No Project (No Build) Alternative would not achieve the project objectives. The Renovation and Preservation Alternative would result in five points and would reduce impacts similar to the No Project (No Build) Alternative, while the Preservation, Renovation, and New Build Alternative would result in six points. The Renovation and Preservation Alternative would reduce potential impacts to cultural and tribal cultural resources compared to the project. The Preservation, Renovation, and New Build Alternative would not reduce any impacts compared to the project. Therefore, the Renovation and Preservation Alternative is the next environmentally superior alternative to the proposed project. It is noted that the superior alternative would depend on the City’s local priorities (i.e., preservation of historical resources, etc.), as well as the ability to meet the proposed project’s objectives.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

The environmental impacts of the proposed project, the impact level of significance prior to mitigation, the proposed mitigation measures and/or adopted policies and standard measures that are already in place to mitigate an impact, and the impact level of significance after mitigation are summarized in Table ES-2.

TABLE ES-2: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
BIOLOGICAL RESOURCES (ANALYZED IN THE INITIAL STUDY)			
<p>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<p>Potentially Significant</p>	<p>Mitigation Measure Bio-1: <i>The project proponent shall implement Swainson’s hawk and white-tailed kite Avoidance and Mitigation Measure 16 (AMM16) of the Yolo Habitat Conservation Plan/ Natural Communities Conservation Plan, as follows:</i></p> <ul style="list-style-type: none"> • <i>The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.</i> • <i>If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson’s Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson’s hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson’s hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not</i> 	<p>Less than Significant</p>

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><i>occupied by Swainson's hawks.</i></p> <ul style="list-style-type: none"> • <i>For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.</i> <p>Mitigation Measure Bio-2: <i>If any project construction activities are to occur during the nesting season for birds protected under the California Fish and Game Code and/or Migratory Bird Treaty Act (approximately February 15-August 31), the project applicant shall retain a qualified avian biologist to perform preconstruction surveys for protected birds, including nesting raptors, not address in MM Bio-1, on the project site and in the immediate vicinity. At least two surveys shall be conducted no more than 14 days prior to the initiation of construction activities, including vegetation clearing. In the event that protected birds, including nesting raptors, are found on the project site, offsite improvement corridors, or the immediate vicinity, the project applicant shall:</i></p> <ul style="list-style-type: none"> • <i>Locate and map the location of the nest site. Within 2 working days of the surveys prepare a report and submit to the City;</i> • <i>Active nests shall be avoided. A qualified avian biologist shall establish suitable disturbance buffers prior to tree removal and/or ground-breaking activities for each nest. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established disturbance buffer(s) shall remain in effect until the young have fledged and are independent or the nest has been abandoned as confirmed by the qualified avian biologist. If birds are showing signs of agitation within the established buffer(s), the buffer(s) shall be expanded to prevent birds from abandoning their nest.</i> • <i>The qualified avian biologist shall be onsite daily for the first week of construction activities to monitor the birds. The qualified avian biologist shall</i> 	

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><i>expand the buffers if the birds are showing signs of agitation. On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction cannot encroach within the buffers until a qualified avian biologist has confirmed that the birds have fledged and are independent or the nest has been abandoned;</i></p> <ul style="list-style-type: none"> <i>In the event of destruction of a nest with eggs, or if a juvenile or adult raptor should become stranded from the nest, injured or killed, the qualified biologist shall immediately notify the CDFW and the City. The qualified biologist shall coordinate with the CDFW to have the injured raptor transferred immediately to a CDFW-approved raptor recovery center.</i> <p>Mitigation Measure Bio-3: <i>Within six months of project disturbance activities, the project proponent shall hire a qualified bat biologist to conduct a habitat assessment for potentially suitable bat habitat on the project site. If the habitat assessment reveals suitable bat habitat on-site, then tree trimming, tree removal, and/or building demolition shall only be conducted during seasonal periods of bat activity (from August 31-October 15, a period prior to hibernation when young are self-sufficiently volant, and from March 1-April 15, to avoid hibernating bats and prior to formation of maternity colonies) under supervision of a qualified bat biologist. Trees shall be trimmed and/or removed in a two-phased removal system conducted over two consecutive days. The first day (in the afternoon), limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and only branches or limbs without those features shall be removed. On the second day, the entire tree shall be removed.</i></p> <p><i>To exclude bats from structures, CDFW recommends exclusion devices be installed on structures during the periods stated above to prevent bats from accessing the structures. Actively used openings should have a one-way valve installed to allow the bats to leave the roost, but not re-enter. After 7 to 10 days, the one-way valves would be removed and the opening blocked or sealed. Because of the large variability in the way bats use structures, CDFW recommends that a plan on how to monitor and exclude bats be developed by a qualified biologist and submitted to CDFW for review and approval. The above requirements shall be noted on the project improvement plans, which shall be reviewed by the City's Community Development and Sustainability Department.</i></p>	

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
CULTURAL RESOURCES (ANALYZED IN THE DRAFT EIR)			
Impact 3.1-1: Project implementation has the potential to cause a substantial adverse change to a significant historical resource, as defined in CEQA Guidelines §15064.5	Potentially Significant	<p>Mitigation Measure 3.1-1: <i>The project applicant shall fund and implement the following measures:</i></p> <ol style="list-style-type: none"> 1. <i>A qualified architectural historian, as approved by the City of Davis Planning, Department, shall be retained to prepare a “Historic Documentation Report.” The report shall include current photographs of each building displaying each elevation, architectural details or features, and overview of the buildings, together with a textual description of the building along with additional history of the building, its principal architect or architects, and its original occupants to the extent that information about those occupants can be obtained. The photo-documentation shall be done in according to Historic American Building Survey/Historic Engineering Record (HABS/HAER) guidelines, which shall include archival quality negatives and prints. The final Report shall be deposited with the City of Davis Community Development and Sustainability Department, the Hattie Weber Museum, the State Office of Historic Preservation, and other appropriate organizations and agencies as identified by the Planning Department.</i> 2. <i>A publicly accessible space for a memorial or interpretive plaque/display shall be placed and maintained on or near the former location of the subject properties, identifying the former location of the building, its original owner, and its historic significance.</i> <p><i>These requirements shall be included as a note on the project’s Improvement Plans, subject to review and approval by the City of Davis Planning Department.</i></p>	Less than Significant
Impact 3.1-2: Project implementation has the potential to cause a substantial adverse change to a significant tribal cultural resource, as defined in Public Resources Code §21074	Potentially Significant	<p>Mitigation Measure 3.1-2: <i>All construction workers shall receive a sensitivity training session before they begin site work. The sensitivity training shall inform the workers of their responsibility to identify and protect any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, within the project site. The sensitivity training shall cover laws pertaining to cultural resources, examples of cultural resources that may be discovered in the project site, and what to do if a cultural resource, or anything that may be a cultural resource, is discovered.</i></p>	Less Than Significant

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><i>If any subsurface historic remains, prehistoric or historic artifacts, paleontological resources, other indications of archaeological resources, or cultural and/or tribal resources are found during grading and construction activities, all work within 100 feet of the find shall cease, the City of Davis Department of Community Development and Sustainability shall be notified, and the applicant shall retain an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, to evaluate the find(s). If tribal resources are found during grading and construction activities, the applicant shall notify the Yocha Dehe Wintun Nation. If paleontological resources are found during grading and construction activities, a qualified paleontologist shall be retained to determine the significance of the discovery.</i></p> <p><i>The archaeologist and/or paleontologist shall define the physical extent and the nature of any built features or artifact-bearing deposits. The investigation shall proceed immediately into a formal evaluation to determine the eligibility of the feature(s) for inclusion in the California Register of Historical Resources. The formal evaluation shall include, at a minimum, additional exposure of the feature(s), photo-documentation and recordation, and analysis of the artifact assemblage(s). If the evaluation determines that the feature(s) and artifact(s) do not have sufficient data potential to be eligible for the California Register, additional work shall not be required. However, if data potential exists (e.g., an intact feature is identified with a large and varied artifact assemblage), further mitigation would be necessary, which might include avoidance of further disturbance to the resource(s) through project redesign. If avoidance is determined to be infeasible, additional data recovery excavations shall be conducted for the resource(s), to collect enough information to exhaust the data potential of those resources.</i></p> <p><i>Pursuant to CEQA Guidelines Section 15126.4(b)(3)(C), a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Data recovery efforts can range from rapid photographic documentation to extensive excavation depending upon the physical nature of the resource. The degree of effort shall be determined at the discretion of a qualified archaeologist and should be sufficient to recover data considered important to the area's history and/or prehistory. Significance determinations for tribal cultural resources shall be measured in terms of criteria for inclusion on the California Register</i></p>	

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><i>of Historical Resources (Title 14 CCR, §4852[a]), and the definition of tribal cultural resources set forth in Public Resources Code Section 21074 and 5020.1 (k). The evaluation of the tribal cultural resource(s) shall include culturally appropriate temporary and permanent treatment, which may include avoidance of tribal cultural resources, in-place preservation, and/or re-burial on project property so the resource(s) are not subject to further disturbance in perpetuity. Any re-burial shall occur at a location predetermined between the landowner and the Yocha Dehe Wintun Nation. The landowner shall relinquish ownership of all sacred items, burial goods, and all archaeological artifacts that are found on the project area to the Yocha Dehe Wintun Nation for proper treatment and disposition. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.</i></p> <p><i>The language of this mitigation measure shall be included on any future grading plans, utility plans, and improvement drawings approved by the City for the development of the project.</i></p>	
Impact 3.1-3: Project implementation has the potential to cause a substantial adverse change to a significant archaeological resource, as defined in CEQA Guidelines §15064.5	Potentially Significant	Implement Mitigation Measure 3.1-2.	Less Than Significant
Impact 3.1-4: Project implementation has the potential to directly or indirectly destroy a unique paleontological resource	Potentially Significant	Implement Mitigation Measure 3.1-2.	Less Than Significant
Impact 3.1-5: Project implementation has the potential to disturb human remains, including those interred outside of formal cemeteries	Potentially Significant	<p>Mitigation Measure 3.1-3: <i>If human remains are discovered during the course of construction during any phase of the project, work shall be halted at the site and at any nearby area reasonably suspected to overlie adjacent human remains until the Yolo County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:</i></p> <ul style="list-style-type: none"> <i>The coroner shall contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner shall make a recommendation to the landowner or the person responsible for</i> 	Less Than Significant

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p><i>the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.</i></p> <ul style="list-style-type: none"> • <i>The landowner shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:</i> <ul style="list-style-type: none"> ○ <i>The Native American Heritage Commission is unable to identify a descendent.</i> ○ <i>The descendant identified fails to make a recommendation.</i> ○ <i>The City of Davis or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.</i> 	
GEOLOGY AND SOILS (ANALYZED IN THE INITIAL STUDY)			
<p>a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (iii) Seismic-related ground failure, including liquefaction?</p> <p>c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</p> <p>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect</p>	Potentially Significant	<p>Mitigation Measure Geo-1: <i>Prior to the development of the project site, further subsurface plan-level geotechnical investigation shall be performed to identify onsite soil conditions and identify any site-specific engineering measures to be implemented during the construction of building foundations, surface improvements, and subsurface improvements. The results of the subsurface geotechnical investigation shall be reflected on the Improvements Plans, subject to review and approval by the City's Building Division. During site grading, the project applicant shall remove and re-compact the existing on-site fill, in accordance with the recommendations provided in the subsurface plan-level geotechnical investigation.</i></p>	Less than Significant

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
risks to life or property?			
b) Result in substantial soil erosion or the loss of topsoil?	Potentially Significant	<p>Mitigation Measure Geo-2: The project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Davis and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.</p>	Less than Significant
HYDROLOGY AND WATER QUALITY (ANALYZED IN THE INITIAL STUDY)			
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion or siltation on- or off-site; (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) Impede or redirect flood flows?	Potentially Significant	<p>Mitigation Measure Hydro-1: Prior to issuance of building or grading permits, the applicant shall submit a plan identifying permanent stormwater control measures to be implemented by the project to the City. The plan shall be subject to review and approval by the Public Works Department.</p> <p>Mitigation Measure Hydro-2: Prior to any site disturbance, the project proponent shall document to the satisfaction of the City of Davis that stormwater runoff from the project site is treated per the standards in the California Stormwater Best Management Practice New Development and Redevelopment Handbook and Section E.12 of the Phase II Small MS4 General Permit. Drainage from all paved surfaces, including parking lots, driveways, and roofs, shall be routed either through swales, buffer strips, or sand filters or treated with a filtering system prior to discharge to the storm drain system. Landscaping shall be designed to provide water quality treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. Roofs shall be designed with down spouting into landscaped areas. Driveways should be curbed into landscaping so runoff drains first into the landscaping. The aforementioned requirements shall be noted on the Preliminary and Final Planned Developments for the</p>	Less than Significant

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
		<i>project.</i>	
LAND USE			
Impact 3.2-1: Project implementation would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted to avoid or mitigate an environmental effect	Potentially Significant	Mitigation Measure 3.2-1: <i>In conjunction with submittal of improvement plans for the project, the project applicant shall submit a final landscape plan to the City of Davis which shows that the project site (including all three residential lots) would maintain or increase the amount of greenery, especially trees, that currently (as of April 2019) exists on-site. The site currently (as of April 2019) contains 28 trees, including those located along the frontages of First Street and D Street. In addition, the landscape plan shall include a palette of shrubs, perennial ground cover, grasses, etc. that balances the need to maintain or increase greenery while being conscientious of drought tolerance and water conservation within the landscaping, consistent with the City's Model Water Efficient Landscape Ordinance.</i>	Less Than Significant
OTHER CEQA-REQUIRED TOPICS			
Impact 4.1: Project implementation would not contribute to cumulative impacts on known and undiscovered cultural and tribal cultural resources	Less Than Cumulatively Considerable	None required.	--
Impact 4.2: Project implementation would not to cumulative impacts on local land uses	Less Than Cumulatively Considerable	None required.	--

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This chapter summarizes the purpose of the Environmental Impact Report (EIR) for the Theta Xi Fraternity Redevelopment Project (the “project”). The following discussion addresses the environmental procedures that are to be followed according to State law, the intended uses of the EIR, the project’s relationship to the City’s General Plan, the EIR scope and organization, and a summary of the agency and public comments received during the public review period for the Notice of Preparation (NOP).

1.1 PURPOSE AND INTENDED USES OF THE EIR

The City of Davis, as lead agency, determined that the proposed Theta Xi Fraternity Redevelopment Project is a "project" within the definition of CEQA. CEQA requires the preparation of an environmental impact report prior to approving any project that may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development. CEQA further requires public agencies to balance a variety of public objectives, including economic, environmental, and social factors in making a decision to approve a development project with significant and unavoidable environmental impacts.

The City of Davis, as the lead agency, has prepared this Draft EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from construction and operation of the Theta Xi Fraternity Redevelopment Project. The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used by the City to determine whether to approve, modify, or deny the Theta Xi Fraternity Redevelopment Project and associated approvals in light of the project’s environmental effects. The EIR will be used as the primary environmental document to evaluate full project development, along with all associated infrastructure improvements, and permitting actions associated with the Theta Xi Fraternity Redevelopment Project. All of the actions and components of the proposed project are described in detail in Chapter 2.0 of this Draft EIR.

1.2 TYPE OF EIR

This EIR is a Project EIR as defined in Section 15161 of the State CEQA Guidelines. A Project EIR is an EIR which examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction and operation. The Project EIR approach is appropriate for the Theta Xi Fraternity Redevelopment Project because it allows comprehensive consideration of the reasonably anticipated scope of the project, as described in greater detail in Chapter 2.0.

1.3 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

As required by CEQA, this EIR defines lead, responsible, and trustee agencies. The City of Davis is the “Lead Agency” for the project because it holds principal responsibility for approving the project. The term “Responsible Agency” includes all public agencies other than the Lead Agency that have discretionary approval power over the project or an aspect of the project (CEQA Guidelines Section 15381). For the purpose of CEQA, a “Trustee” agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386).

The following agencies are considered Responsible or Trustee Agencies for this project, and may be required to issue permits or approve certain aspects of the proposed project:

- Central Valley Regional Water Quality Control Board (CVRWQCB) - Storm Water Pollution Prevention Plan (SWPPP) approval prior to construction activities;
- Yolo-Solano Air Quality Management District - Approval of construction-related air quality permits.

1.4 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION AND INITIAL STUDY

The City circulated an Initial Study and NOP of an EIR for the proposed project on February 25, 2019 to trustee agencies, the State Clearinghouse, and the public. A public scoping meeting was held on March 18, 2019 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. The NOP comment period ended at 5:00 p.m. on March 26, 2019, and a total of nine comments were received. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and responses to the NOP by interested parties are presented in Appendix A.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. The City has filed the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period on this Draft EIR.

PUBLIC NOTICE/PUBLIC REVIEW

The City has provided a public notice of availability for the Draft EIR, and invites comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA, a forty-five (45) day review period is required for this Draft EIR. Public comment on the Draft EIR will be accepted in written form and orally at a public meeting before the Davis Planning Commission. All comments or questions regarding the Draft EIR should be addressed to:

Ike Njoku, Planner and Historical Resources Manager
City of Davis
Community Development and Sustainability Department
23 Russell Boulevard, Suite 2
Davis, CA 95616
INjoku@cityofdavis.org

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period and to oral comments received at a public hearing during such review period.

It is noted that the California Department of Fish and Wildlife (CDFW) submitted a NOP comment letter on March 26, 2019 regarding the project's potential impacts to Swainson's hawk, white-tailed kite, and special-status bat species. The CDFW's NOP comment letter includes requested revisions and additions to the mitigation measures included in Section IV, Biological Resources, of the Initial Study that was prepared for the proposed project. The Initial Study and NOP comment letters are included as Appendix A of this Draft EIR. The requested revisions and additions to the mitigation measures included in Section IV, Biological Resources, of the Initial Study are reflected in this EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete", the City Council may certify the Final EIR in accordance with CEQA. The rule of adequacy generally holds that an EIR can be certified if:

1.0 INTRODUCTION

- 1) The EIR shows a good faith effort at full disclosure of environmental information; and
- 2) The EIR provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of environmental considerations.

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines and recent court decisions, which provide the standard of adequacy on which this document is based. The Guidelines state as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

Following review and consideration of the Final EIR, the City may take action to approve, modify, or reject the project. A statement of overriding considerations will be prepared at the Final EIR stage. A statement of overriding considerations that reflects the ultimate balancing of competing public objectives (including environmental, legal, technical, social, and economic factors) will be prepared for the City Council for consideration during the Final EIR certification stage. A Mitigation Monitoring Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Discussion of the environmental issues addressed in the Draft EIR was established through review of environmental and planning documentation developed for the project, environmental and planning documentation prepared for recent projects located within the City of Davis, applicable local and regional planning documents, and responses to the NOP.

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

This Executive Summary summarizes the characteristics of the proposed project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the proposed project.

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, and identifies the scope and organization of the Draft EIR.

CHAPTER 2.0 – PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the proposed project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, related infrastructure improvements, and a list of related agency action requirements.

CHAPTER 3.0 – ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the project.

Impacts and Mitigation Measures. Identification of the thresholds of significance by which impacts are determined, a description of project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact after the incorporation of mitigation measures.

The following environmental topics are addressed in this EIR:

- Cultural and Tribal Resources; and
- Land Use.

CHAPTER 4.0 – OTHER CEQA-REQUIRED TOPICS

Chapter 4.0 evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, cumulative, and significant and unavoidable environmental effects.

CHAPTER 5.0 – ALTERNATIVES TO THE PROJECT

State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the project. Chapter 5.0 provides a comparative analysis between the environmental impacts of the project and the selected alternatives.

CHAPTER 6.0 – REPORT PREPARERS

Chapter 6.0 lists all authors and agencies that assisted in the preparation of the EIR, by name, title, and company or agency affiliation.

CHAPTER 7.0 – REFERENCES

Chapter 7.0 lists all source documents used in the preparation of the EIR.

APPENDICES

The appendices include all notices and other procedural documents pertinent to the EIR, as well as technical material prepared to support the analysis. The EIR appendices are available in electronic format. The appendices can be viewed online at:

<https://cityofdavis.org/city-hall/community-development-and-sustainability/development-projects/theta-xi-redevelopment-project>

1.6 SIGNIFICANCE CRITERIA

In general, CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial” adverse change in the physical environment. A potential impact is considered significant if a project would substantially degrade the environmental quality of land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance (CEQA Guidelines §§15360, 15382).

Definitions of significance vary with the physical condition affected and the setting in which the change occurs. The CEQA Guidelines set forth physical impacts that trigger the requirement to make “mandatory findings of significance” (CEQA Guidelines §15065).

This CEQA document relies on three levels of impact significance:

1. Less-than-significant impact, for which no mitigation measures are warranted;
2. Significant impact that can be mitigated to a level that is less than significant; and
3. Significant impact that cannot be mitigated to a level that is less than significant. Such impacts are significant and unavoidable.

Each resource area uses a distinct set of significance criteria. The significance criteria are identified at the beginning of the impact discussion for each resource area. These significance criteria

promote consistent evaluation of impacts for all alternatives considered, even though significance criteria are necessarily different for each resource considered.

1.7 TOPICS FOUND IN INITIAL STUDY TO BE LESS THAN SIGNIFICANT OR LESS THAN SIGNIFICANT WITH MITIGATION

CEQA Guidelines Section 15128 provides that “[a]n EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study.”

An Initial Study was prepared for the proposed project (February 2019). The Initial Study is included as Appendix A to this Draft EIR. Included below is a brief summary of findings from the Initial Study on environmental topics that were either found to have no impact, be less than significant, or be less than significant with implementation of the mitigation measures included in the Initial Study, and thus are not included within individual sections of the Draft EIR. Appendix A contains the full Initial Study findings and individual topics found to be less than significant through the Initial Study process.

AESTHETICS

Federal and State agencies have not designated any scenic vistas or locations within the City of Davis for viewing and sightseeing. Similarly, the City of Davis has determined that the Planning Area of the General Plan has no officially designated scenic highways, corridors, vistas, or viewing areas. Further, there are no other identified scenic resources nearby that would be affected by development of the proposed project, including trees, rocks, outcroppings, and historic buildings. Given that established scenic vistas or scenic resources are not located on or adjacent to the proposed project site, the proposed project would have **no impact** related to scenic vistas or scenic resources.

Various temporary visual impacts could occur as a result of construction activities as the project develops, including grading, equipment and material storage, and staging. Though temporary, some of these impacts could last for several weeks or months during any single construction phase. The loss of existing landscaping and trees would also be a temporary impact until new landscaping matures. Because impacts would be temporary and viewer sensitivity in the majority of cases would be slight to moderate, significant impacts are not anticipated. Therefore, impacts related to degradation of the visual character of the site and its surroundings would be **less than significant**.

Adherence to the City’s Municipal Code would result in a development that is cohesive, well-designed, and visually pleasing. Although project implementation would alter the existing visual character of the project site, this alteration would not substantially degrade the visual quality of the project site. The proposed project would be consistent with the City of Davis General Plan, and would adhere to the requirements of the City’s site plan and architectural approval process.

There is a potential for the implementation of the proposed project to introduce new sources of light and glare into the project area. However, the project will be required to comply with the City's Outdoor Lighting Control Ordinance which includes provision of a lighting plan as part of the construction documents as a standard City requirement. Compliance with the City of Davis Outdoor Lighting Control Ordinance would ensure that all exterior lighting associated with the project is properly shielded and directed downward in order to eliminate light spillage onto adjacent properties, and reduce impacts to "dark skies" to the greatest extent feasible. Therefore, impacts related to light and glare would be *less than significant*.

AGRICULTURE AND FORESTRY RESOURCES

The project site is currently developed and there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the project site. The project site is not currently used for agricultural operations, and has not been used for agricultural operations in many decades. There are no agricultural operations or agriculturally zoned lands in the vicinity of the project site. The project site is not zoned for agricultural use nor is it under a Williamson Act contract. Therefore, the project would have *no impact* related to agricultural resources.

The project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, the project would have *no impact* related to forestry resources.

AIR QUALITY

Project generated emissions during both construction and operation would be below the Yolo-Solano Air Quality Management District (YSAQMD) thresholds for reactive organic gases, oxides of nitrogen, particulate matter 10 micrometers or less in diameter, and carbon monoxide. Impacts related to air quality plan conflicts, criteria pollutant increases, and substantial pollutant concentrations would be *less than significant*. Additionally, operation of the proposed project would not generate notable odors. Diesel fumes from construction equipment and delivery trucks are often found to be objectionable; however, construction of the proposed project would be temporary and diesel emissions would be temporary and regulated. Implementation of the proposed project would have a *less than significant* impact relative to odors.

BIOLOGICAL RESOURCES

Special-status plant or wildlife species have not been recorded on the project site. The project site is currently developed and disturbed. There is no riparian or other sensitive habitat types located on-site. Although various special-status plant species have been documented within five-miles of the site, none are present on the project site. Therefore, the proposed project would have *no impact* on special-status plants.

Historical and continuing site disturbance and urban activities makes the presence of many special-status animals on the project site unlikely. However, nesting birds can utilize the on-site trees. The

bird species which have been documented to occur within five miles of the project site include: burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), western snowy plover (*Charadrius alexandrinus nivosus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and white-tailed kite (*Elanus leucurus*). Suitable habitat for ground-nesting burrowing owl species is not present on the project site. Although not likely, due to the size of the on-site trees and documented occurrences of Swainson's hawk in the project area, suitable nesting habitat for Swainson's hawk may be found on the project site. Given the project site's urban surroundings, and lack of appropriate wetland habitat, tricolored blackbird is not anticipated to be found on the project site.

There are a variety of raptors and/or birds protected by the Migratory Bird Treaty Act that could utilize the on-site trees for nesting. Because the site does not contain open fields or grassland type habitats, the project would not eliminate foraging habitat on the project site. However, development of the project would require the removal of some on-site trees. Mitigation Measure Bio-1 is consistent with Avoidance and Mitigation Measure 16 of the Yolo Natural Heritage Program. Mitigation Measure Bio-2 is consistent with the standard industry practices to avoid and/or minimize potential impacts to protected birds. Implementation of Mitigation Measures Bio-1 and Bio-2 would reduce the potential impact to birds to a **less than significant** level.

Additionally, the project site may provide potential roosting habitat for special-status bat species. There are a variety of areas within the project site where bats could roost. Roosts commonly include: tree/shrub foliage, hollow trees, barns, attics, inoperable vehicles, bridges, rocks, and debris piles. Mitigation Measure Bio-3 is consistent with the standard industry practices to avoid and/or minimize potential impacts to bat roosts. Implementation of Mitigation Measure Bio-3 would reduce the potential impact to bats to a **less than significant** level.

The project site does not support any riparian habitat or sensitive natural communities. As such, implementation of the proposed project would result in a **less than significant** impact. Similarly, the proposed project does not include any construction activities that are within or immediately adjacent to wetlands, creeks, drainages, or other water bodies. These resources are not present on the project site, or in the immediate vicinity of the project site. As such, implementation of the proposed project would have **no impact** relative to this issue. Further, the site does not serve as a wildlife corridor, or nursery site. The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Implementation of the proposed project would result in a **less than significant** impact relative to this topic.

The site currently contains approximately 28 trees, including those located along the frontages of First Street and D Street. The trees surrounding the TX Main House are not anticipated for removal; however, the trees surrounding the Jackson House and Bryson House, which are proposed for demolition, would be removed. The project would landscape the site in conjunction with construction of the proposed three-story building. Compliance with the City's Tree Ordinance would be addressed by a standard City condition of approval which requires preparation of a Tree Protection Plan for trees being preserved and approval of Tree Modification Permit for trees being

removed with standard measures for tree replacement or payment for the appraised value of the trees. The Tree Protection Plan would include measures to ensure that all trees to be preserved would be protected during construction of the project. This would ensure that the project would have a **less than significant** impact relative to local policies and ordinances protecting biological resources.

The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Implementation of the proposed project would have a **less than significant** impact relative to this topic.

ENERGY

The proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal. PG&E, the current electricity and natural gas provider to the site, maintains sufficient capacity to serve the proposed project. Overall, the proposed project would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources. This is a **less than significant** impact.

GEOLOGY AND SOILS

There will always be a potential for groundshaking caused by seismic activity anywhere in California, including the project site. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Design in accordance with these standards would reduce any potential impact to a **less than significant** level.

Additionally, the project site has a low potential for liquefaction, lateral spreading, subsidence, and landslides. However, given that fill was encountered at the site, and the lack of information on the compaction and placement history of the fill, Mitigation Measure Geo-1 would be required. Overall, it was determined that the project site was suitable for development, and with implementation of Mitigation Measure Geo-1, this potential impact would be **less than significant**.

The project site is relatively flat and there are no major slopes in the vicinity of the project site. Slope instability at the project site, as a result of seismic events, has very low potential because of the lack of relief across the area and its distance from active and potentially active faults. The project site is not located in the foothills, mountain terrain, or along a river bank. As such, the project site is exposed to little or no risk associated with landslides. This is a **less than significant** impact and no mitigation is required.

The project site is currently developed and is not at significant risk of erosion under the existing conditions. The RWQCB requires a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each project that disturbs an area one acre or larger. The SWPPP will include project specific best management measures that are designed to control drainage and erosion.

The SWPPP and the project specific drainage plan would reduce the potential for erosion. Implementation of the Mitigation Measure Geo-2 would ensure that the proposed project would result in a ***less-than-significant*** impact relative to erosion and loss of topsoil.

The proposed project would not require the use of septic tanks or alternative waste water disposal systems for the disposal of waste water. Implementation of the proposed project would result in ***no impact*** relative to septic systems. Additionally, known paleontological resources or sites are not located on the project site. Additionally, unique geologic features are not located on the site. The site is currently developed and surrounded by existing urban development, and the proposed project is considered an infill development. As such, impacts to paleontological resources or unique geologic features would not occur. This is a ***less than significant*** impact.

GREENHOUSE GAS EMISSIONS

Greenhouse gas emission modeling was completed for the proposed project construction and operation. YSAQMD recommends using 1,100 metric tons of carbon monoxide equivalent (MT CO₂e) per year to analyze construction-related GHG emissions. Peak-year construction-generated greenhouse gas emissions would not exceed YSAQMD's recommended greenhouse gas emissions threshold of 1,100 MT CO₂e for construction of the proposed project. Therefore, this is a ***less than significant*** impact relative to this topic. Similarly, the operational greenhouse gas emissions resulting from the existing residences are higher than the proposed project. This is likely because the existing residences were constructed in approximately 1912 and, as such, are less energy efficient than the proposed three-story building. Overall, the operational greenhouse gas emissions are not anticipated to increase beyond the existing condition. This is a ***less than significant*** impact relative to this topic.

HAZARDS AND HAZARDOUS MATERIALS

Onsite reconnaissance and historical records indicate that there are no known underground storage tanks or pipelines located on the project site that contain hazardous materials. Therefore, the disturbance of such items during construction activities is unlikely. Construction equipment and materials would likely require the use of petroleum-based products (oil, gasoline, diesel fuel), and a variety of common chemicals including paints, cleaners, and solvents. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. Therefore, the proposed project would have a ***less than significant*** impact relative to creation of hazards and release of hazardous materials.

Additionally, the operations of a residential fraternity would not emit hazardous emissions or result in the storage or handling of hazardous or acutely hazardous materials, substances or waste above the level of existing conditions. Implementation of the proposed project would result in a ***less than significant*** impact relative to emitting hazards near schools. The project is also not located on a site which is included on a list of hazardous materials sites compiled pursuant to

Government Code Section 65962.5. Implementation of the proposed project would result in a ***less than significant*** impact relative to this environmental topic.

Further, the project site is not located near an existing airport and is not within an existing airport land use plan. The project site is not located within the approach or take-off zones of the UC Davis Airport, nor is it located within the overflight zones of the airport. There are no private airstrips within a 2-mile vicinity of the project site. Therefore, ***no impact*** would occur.

Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. The proposed project would also not interfere with any emergency response plan or emergency evaluation plan. This is a ***less than significant*** impact.

The site is not located within an area where wildland fires occur. The site is surrounded by developed land uses. The surrounding land uses consists of a mix of retail, single family, and apartment developments along First Street, D Street, and E Street. This is a ***less than significant*** impact.

HYDROLOGY AND WATER QUALITY

Implementation of proposed project would not violate any water quality or waste discharge requirements. Implementation of the proposed project would result in a ***less-than-significant*** impact relative to this topic. The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). Therefore, project construction and operation would not substantially deplete or interfere with groundwater supply or quality. This impact would be ***less than significant***.

The construction of storm water drainage facilities would not substantially alter the existing drainage pattern of the area, or alter the course of a stream or river. As required by Mitigation Measures Hydro-1, the applicant would be required to submit a plan identifying the stormwater control measures that would be implemented. Additionally, Mitigation Measures Hydro-2 requires documentation that the stormwater runoff from the site is treated per the standards in the California Stormwater Best Management Practice New Development and Redevelopment Handbook and Section E.12 of the Phase II Small MS4 General Permit. Implementation of the proposed project with Mitigation Measures Hydro-1 and Hydro-2 would have a ***less-than-significant*** impact relative to this environmental topic.

The proposed project is shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) number 06113C0611G dated June 18, 2010. The project site is located within FEMA Zone X (un-shaded), indicating that the site is located outside of the 100-year flood hazard zone. The project would not be subject to tsunamis or seiches. Impacts related to flood hazards, tsunamis and seiches would be ***less than significant***.

LAND USE AND PLANNING

The project site is located within the Davis city limits and is adjacent to developed land on all sides. The project would result in redevelopment of the site, and the proposed use would not change. Development of the project would not result in any physical barriers, such as a wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing utilities. The project would have **no impact** in regards to the physical division of an established community.

MINERAL RESOURCES

There are no known mineral resources located on the project site or in the immediate vicinity. Additionally, there is no land designated or zoned for mineral resources within the City limits. Given that no known mineral resources are located in the vicinity of the proposed project, implementation of the proposed project would not result in the loss of availability of a known mineral resource or of a locally-important mineral resource recovery site. Therefore, there would be **no impact** regarding the loss of availability of a known mineral resource that would be of value to the region.

NOISE

All construction activities will be subject to the requirements of Section 24.02.040 of the City of Davis Municipal Code with respect to limits on construction noise. Additionally, project-related traffic noise level increases under the existing plus project scenario would be a maximum of 0.1 A-weighted decibels (dBA) along First Street and E Street and a 0.0 dBA increase along B Street. This traffic noise increase is very small and not discernible to the human ear. These increases are well below the 3-dBA standard, making it an insignificant increase. Noise from on-site activities would be comparable to the existing condition. The project does not propose any new noise-generating uses beyond those that currently exist, such as a pool or other outdoor facilities. The existing site plan has outdoor lawn areas in the front, rear, and side yards. The proposed site plan would also provide side and rear yards with patio and/or lawn areas. No other noise-generating uses would be constructed. As such, construction and operational noise impacts associated with implementation of the proposed project would be **less than significant**.

Additionally, construction vibration levels anticipated for the proposed project are less than the 0.1 inches per second structural damage criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. Implementation of the proposed project would have a **less than significant** impact relative to this environmental topic.

Further, the project site is not located near an existing airport and is not within an existing airport land use plan. As such, project would not expose people residing or working in the project area to excessive noise levels associated with such airport facilities. Implementation of the proposed project would have **no impact** relative to this topic.

POPULATION AND HOUSING

The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. This would result in three fewer beds and four additional bathrooms compared to the existing houses. The project is consistent with the existing fraternity operations and would not increase the capacity of the project site. The proposed project would not include upsizing of offsite infrastructure or roadways. Implementation of the proposed project would not induce substantial population growth in an area, either directly or indirectly. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to population growth.

Although the proposed project would reduce the number of beds by three compared to the existing condition, this would not necessitate the construction of replacement housing elsewhere. The existing fraternity houses would be demolished and reconsolidated in order to serve the fraternity. Implementation of the proposed project would have a ***less than significant*** impact relative to displacement of people or housing.

PUBLIC SERVICES

The proposed project would not result in a need to construct a new fire station, police station, or physically alter an existing fire or police station. The Fire Department and Police Department would receive development impact fees from the project for capital improvements and infrastructure costs even though a new facility would not be created. The fair share funds are intended to pay for project financial impacts on fire and police protection service. The proposed project's environmental impact to fire service is considered ***less than significant***.

The future residents of the proposed fraternity building would be enrolled at UC Davis, and would not increase enrollment at any Davis Joint Unified School District schools. The proposed project would not directly, or indirectly increase the student population in the area. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not result in the need for new school facilities, thus it is anticipated to have ***no impact*** relative to this topic.

Additionally, the project would not directly introduce new residents to the City, and therefore would not substantially increase demand for public park facilities to the extent that modification of existing facilities or construction of new park facilities would be necessary. As such, the proposed project would have a ***less than significant*** impact relative to this topic. Further, the proposed project does not trigger the need for new facilities associated with other public services. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Consequently, new facilities or other public services are not proposed at this time. Implementation of the proposed project would have a ***less than significant*** impact relative to this issue.

RECREATION

As noted above, the project would not directly introduce new residents to the City, and therefore would not substantially increase demand for public park facilities to the extent that modification of

existing facilities or construction of new park facilities would be necessary. As such, the proposed project would have a **less than significant** impact relative to this topic.

TRANSPORTATION

The proposed project would not interfere with any existing pedestrian/bicycle facilities, and would not preclude construction of any future facilities. There are two Unitrans routes that pass the project site: the 'M' line and the 'W' line. The 'M' line provides service to the Memorial Union Terminal and the 'W' line provides service to the Silo Terminal. The project would not increase transit use during peak periods compared to the existing baseline. The amount of transit use would be comparable to the existing baseline. The proposed project would not interfere with any existing transit facilities, and would not preclude construction of any future facilities. Similarly, because the number of residents would be comparable the existing condition, the operations on the nearby project roadways are not expected to degrade. The proposed project would not reduce LOS on any streets or intersections to an unacceptable LOS, or substantially worsen an already existing peak-hour LOS F on any streets or intersections. Therefore, impacts related to conflicts with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be **less than significant**.

According to the air quality modeling outputs for the existing operations, the existing fraternity operations generate approximately 77.49 daily trips. The proposed fraternity operations (i.e., the three-story building with 35 total beds) would generate approximately 71.53 daily trips, and the single-family home which would be vacated and placed for sale or lease to a third party on the open market would generate approximately 9.52 daily trips. As such, the proposed project would result in an increase of 3.56 daily trips compared to the existing baseline condition. Therefore, the number of operational trips would be comparable to the existing baseline. As such, the proposed project would not reduce LOS on any streets or intersections to an unacceptable LOS, or substantially worsen an already existing peak-hour LOS F on any streets or intersections. As such, impacts related to conflicts or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b) are considered **less than significant** relative to this topic.

No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Therefore, project implementation would have a **less than significant** impact relative to this topic.

UTILITIES AND SERVICE SYSTEMS

Limited amounts of water would be necessary during the construction phase of the project, but this would be a temporary use of water for construction related activities, and would not be in substantial amounts. The existing houses provide 38 total beds and five total bathrooms (including seven toilets, ten basins, and nine showerheads). The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms (including ten toilets, eighteen basins, and

nine showerheads). Although the project would increase the number of toilets and basins compared to the existing condition, the proposed appliances and facilities would be more energy- and water-efficient. Additionally, the project would use a low water use landscaping and irrigation system. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current use. No additional demand for water will be created by the project beyond the existing condition. Therefore, a ***less than significant*** impact would occur related to water supply and water infrastructure.

Similarly, the current capacity of the wastewater treatment would be sufficient to handle the wastewater flow from the proposed project. In addition, the proposed project is required to pay sewer impact fees which would contribute towards the cost of future upgrades, when needed. As a result, the proposed project would not have adverse impacts to wastewater treatment capacity. Because the project applicant would pay City sewer impact fees to redevelop the site, and adequate long-term wastewater treatment capacity is available to serve full build-out of the project, a ***less than significant*** impact would occur related to requiring or resulting in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

No additional demand for landfill, or other waste facilities will be created by the project operation. However, limited amounts of solid waste could be generated during the construction phase of the project, but this would be temporary, and would not be in substantial amounts, and would not interfere with a waste facility's permitted capacity. The project would not interfere with regulations related to solid waste. Implementation of the proposed project would have a ***less than significant*** impact relative to solid waste.

WILDFIRE

Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. No additional demand for fire protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for fire protection services from the City of Davis Fire Department beyond the existing condition. The project would not exacerbate fire risk, or require the installation or maintenance of infrastructure that may exacerbate fire risk. Additionally, because the site is essentially flat and located in an existing urbanized area of the City, downstream landslides would not occur. Overall, impacts related to wildfire would be ***less than significant***.

MANDATORY FINDINGS OF SIGNIFICANCE

The proposed project would not: have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of a rare or endangered plant or animal. Special-status plant or wildlife species have not been recorded on the project site. The project site is currently developed and disturbed. There is no riparian or other sensitive habitat

types located on-site. Although various special-status plant species have been documented within five-miles of the site, none are present on the project site. Therefore, the project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. This impact would be ***less than significant***.

As discussed above, the construction phase could affect surrounding neighbors through increased air emissions and noise. With the implementation of the conditions of approval, regulatory standards, and best management practices, the project impacts would be less than significant related to these topics. The operational phase of the project would be comparable to the existing baseline condition. As discussed throughout the Initial Study, the proposed project would not cause substantial adverse effects on human beings. The proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. As such, a ***less than significant*** impact would result.

1.8 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received nine written comment letters on the NOP for the proposed Theta Xi Fraternity Redevelopment Project Draft EIR. A brief summary of each comment is provided in the list below. A copy of each letter is provided in Appendix A of this Draft EIR. A public scoping meeting was held on March 18, 2019 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Oral comments received at the NOP scoping meeting are also included in Appendix A.

The comment letters include the following:

1. Cynthia Goldberg (March 16, 2019):
 - Expressed concerns for a different fraternity regarding noise, trash, and general disturbances in the front yard area of a different fraternity located at corner of A Street and First Street, which is not Theta Xi fraternity.
2. Bob Testa and Skip Metzger (March 24, 2019) (project proponents):
 - Concerns regarding the structural stability and efficiency of the existing structures.
3. Todd Rogers, California Department of Transportation (February 28, 2019): No concerns listed.
4. Stephanie Buss, California Department of Fish and Wildlife (March 26, 2019):
 - Suggested revisions and additions to the mitigation measures in the Initial Study pertaining to biological resources (including birds and bats).
5. Gregor Blackburn, Federal Emergency Management Agency (March 6, 2019):
 - Summary of the National Flood Insurance Program requirements.
6. Burnam Lowell, Sr., Tribal Historic Preservation Officer, Yocha Dehe Wintun Nation (March 26, 2019) and Laverne Bill, Cultural Resources Manager, Yocha Dehe Wintun Nation (March 27, 2019):

1.0 INTRODUCTION

- Request for tribal monitors during all ground disturbance and cultural sensitivity training before all work begins.
 - Recommends including cultural monitors during development and ground disturbance, including backhoe trenching and excavations.
7. Steven Quinn, Native American Heritage Commission (March 6, 2019):
- Summary of the requirements of Assembly Bill 52, Senate Bill 18, and recommendations for cultural resources assessments.
8. Jordan Hensley, Central Valley Regional Water Quality Control Board (March 19, 2019):
- Summary of the regulatory requirements pertaining to surface and groundwater (including the Basin Plan, Clean Water Act, Waste Discharge Requirements, National Pollutant Discharge Elimination System, dewatering permit, commercially irrigated agriculture)
9. Yolo-Solano Air Quality Management District (March 5, 2019):
- Request for compliance with District Rule 9.9, Asbestos, for renovation and/or demolition projects.

1.9 POTENTIAL AREAS OF CONCERN

Aspects of the proposed project that could be of public concern include the following:

- The noise, trash, and general disturbances in the front yard areas.
- The structural stability and efficiency of the existing structures.
- The proposed mitigation measures related to biological resources (specifically related to special-status birds and bats).
- The proposed mitigation measure related to tribal cultural resources.
- The demolition of the existing structures as related to hazardous materials.

This chapter provides a comprehensive description of the Theta Xi Fraternity Redevelopment Project (proposed project), including proposed uses, infrastructure improvements, requested entitlements, and project objectives.

Figures referenced throughout this section are located at the end of the chapter.

2.1 PROJECT LOCATION AND ENVIRONMENTAL SETTING

PROJECT LOCATION

The project site consists of approximately 0.45 acres located in the central portion of the City of Davis, north of the Interstate 80 (I-80) Freeway, at 503, 509, and 515 First Street. The project site can be identified by its Yolo County Assessor's Parcel Numbers (APNs) 070-244-004, 070-244-005, and 070-244-006. The project site is located in the Davis Downtown Core Area, near what is considered the historic gateway to the City of Davis. The project's regional location is shown in Figure 2.0-1 and the project area and site boundary are shown in Figure 2.0-2.

EXISTING SITE USES

The project site is currently developed with three two-story adjacent Theta Xi fraternity houses, totaling 19,800 square feet (sf). The three lots are owned by the Beta Epsilon Association of Theta Xi, a non-profit California corporation, and occupied by the fraternity. The site has provided student housing dating from 1950 when Theta Xi (TX) acquired the first of the three lots. From east to west, the fraternity houses include the "TX Main House" located at 515 First Street (3,964 total sf, excluding the basement), the "Bryson House" located at 509 First Street (2,009 total sf, excluding the basement), and the "Jackson House" located at 503 First Street (2,065 total sf, excluding the basement). There is a detached garage in the northwest corner of the project site, and the side yard of the Jackson House is used for off-street parking for approximately seven vehicles. Additionally, a paved recreation/patio area is situated behind the Jackson House and Bryson House. The site currently contains approximately 28 trees, including those located along the frontages of First Street and D Street.

An aerial view of the project site is shown in Figure 2.0-3. The existing site plan and elevations are shown in Figure 2.0-4, and existing site context photos are shown in Figure 2.0-5.

SURROUNDING LAND USES

The project site is bounded by Second Street and existing mixed-use development to the north, D Street to the west, First Street to the south, and E Street and the Natsoulas Gallery to the east. The surrounding land uses consists of a mix of retail, single family, and apartment developments along First Street, D Street, and E Street. Adjacent parcels include a funeral home on D Street and Natsoulas Art Gallery on First Street adjacent to the TX Main House. The project site faces a landscaped buffer and the back of a retail building in a shopping plaza (i.e., Davis Commons) on the south side of First Street.

2.2 PROJECT GOALS, OBJECTIVES, AND ENTITLEMENT REQUESTS

GOALS AND OBJECTIVES

Consistent with California Environmental Quality Act (CEQA) Guidelines Section 15124(b), a clear statement of objectives and the underlying purpose of the project shall be discussed. The principal objective of the proposed project is the approval and subsequent redevelopment of the proposed project site. The quantifiable objective of the proposed project includes demolition of two of the three existing buildings, merging the three lots, re-subdividing the property into two lots, and redevelopment of one parcel with a consolidated 35-bed, three-story fraternity building.

The project proponent's objectives are as follows:

1. Address deficiencies in the structural integrity of the three houses used to house the undergraduate members of the Theta Xi Fraternity on First Street in Davis, CA, as identified in the report by Pemberton Engineering, dated July 27, 2016;
2. Renovate the subject properties in a way that provides for the needs of University of California, Davis students by ensuring that housing is competitive both in rent and amenities available within the City of Davis, including on-campus housing, in order to ensure the sustainability of the fraternity;
3. Use the value embedded in the three owned lots to assist in funding the renovation project by consolidating the housing needs of the fraternity onto a smaller footprint;
4. Construct the new building with features that will allow it to achieve a high level of energy efficiency and reduce ongoing maintenance costs; and
5. Continue to use the new facility as classrooms that, through fellowship and alumni guidance, lead to the wholesome mental, moral, physical, and spiritual growth that is the purpose of the Theta Xi Fraternity.

ENTITLEMENT REQUESTS AND OTHER APPROVALS

The City of Davis is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the CEQA, Section 15050.

This document will be used by the City of Davis in consideration of the following actions:

- Approval of the requested merging and re-subdivision of the three parcels (APNs 070-244-004, 070-244-005, and 070-244-006) to create two parcels that will accommodate the proposed project, while retaining the building at 515 First Street.
- Approval of the Conditional Use Permit to continue the existing living group use at the site.
- Approval of the Tier III Design Review.
- Approval of the demolition permit for the two buildings at 503 and 509 First Street.
- Approval of the building permit for the proposed three-story building.
- Approval of the Focused EIR.
- Adoption of the Mitigation Monitoring and Reporting Program (MMRP).

2.3 PROJECT DESCRIPTION

PROJECT OVERVIEW

The proposed project includes merging the three lots located at 503, 509, and 515 First Street and re-subdividing the property into two lots for the redevelopment of one parcel with a consolidated 35-bed, three-story building. The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main House) on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot.

The existing and proposed housing characteristics are summarized in Table 2.0-1.

TABLE 2.0-1: EXISTING VERSUS PROPOSED HOUSING CHARACTERISTICS

	<i>EXISTING JACKSON HOUSE</i>	<i>EXISTING BRYSON HOUSE</i>	<i>EXISTING TX MAIN HOUSE</i>	<i>TOTAL EXISTING HOUSES</i>	<i>PROPOSED NEW HOUSE</i>
# of stories	2	2	2	2	3
Basement	Partial	Partial	Partial	Partial	Partial
Site area sf	6,900	6,900	6,000	19,800	10,350
Building area (gross sf)	2,065	2,009	3,964	8,038	9,802
Ground floor	1,282	1,208	2,000	4,490	3,100
2 nd floor	783	801	1,964	3,548	3,351
3 rd floor	--	--	--	--	3,351
Total sf (excluding basement)	2,065	2,009	3,964	8,038	9,802
Basement sf	720	433	450	1,603	1,684
Storage/laundry sf	96	0	0	96	238
Trash enclosure sf	0	0	0	0	168
Garage sf	450	0	0	450	0
Libraries/meeting rooms	1	0	1	2	4
Kitchen	0	0	1	1	1
Living room	0	0	1	1	1
Dining room	0	0	1	1	1
On-site parking spaces	6	0	0	6	13
Bike barn # of bicycles)	0	0	0	0	24
Additional bicycle parking	0	0	0	0	24
# of bedrooms	7	7	7	21	18
# beds (single rooms)	5	2	0	7	1
# beds (double rooms)	2	4	5	11	18
# beds (triples rooms)	0	1	2	3	0
# beds (4-man rooms)	0	0	0	0	16
Total beds	9	13	16	38	35
# of bathrooms	1	2	2	5	9
# toilets	2	3	2	7	10
# basins	4	3	3	10	18
# showerheads	2	3	4	9	9

The proposed site plan and first floor plan is shown in Figure 2.0-6. The proposed elevations are shown in Figure 2.0-7, and visual simulations of the three-story building are shown in Figure 2.0-8.

FRATERNITY REDEVELOPMENT

As shown in Table 2.0-1, the proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. This would result in three fewer beds and four additional bathrooms compared to the existing houses. The project would also consolidate all living and study areas into the proposed three-story building with partial basement, a detached laundry, storage building, and trash enclosure, and associated site landscaping with exterior meeting and gathering spaces. Due to the increase in building height and square footage, the densification of the overall project site would be increased from an existing floor-area-ratio of approximately 0.41 to a proposed floor-area-ratio of approximately 0.97.

The proposed three-story fraternity building architectural theme would be similar to the Craftsman Bungalow style of the existing houses being replaced. The development would be handicap-accessible and would incorporate energy efficiency measures. Sustainable design features would include high levels of envelope insulation, high efficiency HVAC, LED Lighting, solar shading devices, electric vehicle charging outlets, and a low water use landscaping and irrigation system. Landscaped bio-swales would also be incorporated into the First and D street landscaping edges. It is anticipated that the project would target a “LEED Silver” equivalency. For example, the project would be required to comply with Chapter 8.01 of the City of Davis’ Municipal Code, which requires that buildings are to comply with the Tier 2 standards of the California Green Building Standards (CALGreen) Code. Further, the project would be required to provide solar photovoltaics, among other requirements, on the proposed fraternity building, as required by the City’s “Green Reach Code”¹.

There would also be a dedicated “Bike Barn” with bike maintenance space and a one-to-one ratio of covered and secured bike storage to beds. Additional guest bike parking would be provided along the landscape strip on First Street. The project would include a new parking lot accessed from D Street through a secured vehicle gate. The new concealed off-street parking and recreation area in the rear would significantly increase the number of conforming off-street parking spaces available to the fraternity.

During construction, the TX Main House would continue to serve the fraternity's housing and study needs. Once the proposed three-story fraternity building is completed, the fraternity would consolidate all of its activities onto the new western parcel. Once the fraternity is consolidated into the western parcel and associated three-story building, the TX Main House, along with its expanded lot, would be vacated and placed for sale or lease to a third party on the open market. As such, the TX Main House would not be retained for TX Fraternity uses.

¹ For more information on the ordinance, see:
<http://documents.cityofdavis.org/Media/Default/Documents/PDF/CityCouncil/CouncilMeetings/Agendas/20190423/04G-Second-Reading-Reach-Code-Ordinance.pdf>

DESIGN REVIEW

Tier III Design Review approval is required because the project site is within 300-feet of a designated historical resource, Dresbach-Hunt-Boyer Home, and the site is within the Conservation Overlay District. According to the Davis Municipal Code, the Conservation Overlay District supports planning policy stipulating that new development and renovation of existing buildings should respect the traditional scale and character found within a defined area. Conservation Overlay Districts are designated under Chapter 40 of the Code. However, some individual buildings within the Conservation Overlay District are designated Landmarks or Merit Resources in the Davis Register of Historic Resources.

LAND USE DESIGNATION

The project site is in the Core Area Specific Plan (CASP), which also includes the City of Davis General Plan and its Land Use Map and Zoning. The General Plan designation for the project site is CASP, and the CASP Land Use designation is Retail Stores. The Downtown of the Core Area (the area bounded by First and Third Streets and D Street and the railroad tracks) is intended to provide a concentration of stores and uses that allows each to benefit from the presence of the others. Retail uses at ground floor level with professional and administrative offices and residential units are encouraged for upper stories in this zone within the Core Area. Cultural and entertainment uses are also permitted at ground floor level. Total floor area may reach three times the site area. Parking structures are excluded from the calculations of floor area ratio.

The CASP further encourages retail uses at the ground floor level in the Retail Stores area, with professional and administrative offices and residential units in the upper stories. However, the CASP does not explicitly prohibit ground floor residential uses in the Retail Stores area, and does note that some residential uses exist in the Retail Stores area of the Downtown Core. The CASP, therefore, does not prohibit ground floor residential uses in the Retail Stores area, and the Planning Commission, or City Council, could find that the proposed project is consistent with the CASP and the General Plan, provided that the project as a whole is consistent with the CASP and the General Plan.

The existing Land Use Designation for the site and the surrounding area is shown on Figure 2.0-9.

ZONING DESIGNATION

The project site is currently zoned Central Commercial (C-C). As stated in Section 40.14.030 of the City's Municipal Code, permitted uses in the C-C district are as follows:

- (a) Retail stores, shops and offices supplying commodities or performing services such as department stores, specialty shops, banks, and other financial institutions, personal and business service establishments, antique shops, artists' supply stores and similar uses, but not including gasoline service stations.

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- (b) Restaurants, including outdoor eating areas and establishments, establishments serving alcoholic beverages, and similar enterprises, but not including formula fast food restaurants.
- (c) Professional and administrative offices. First floor office uses discouraged in the downtown core as defined by the core area specific plan. Offices are not discouraged in C-C zones outside the downtown core.
- (d) Medical clinics.
- (e) Hotels and motels.
- (f) Business and technical schools, and schools and studios for photography, art, music, and dance.
- (g) Any other retail business or service establishment which the planning commission finds to be consistent with the purposes of this article and which will not impair the present or potential use of adjacent properties.
- (h) Group care homes with six or fewer clients, subject to the provisions of Section 40.26.135.
- (i) Family and group day care homes as defined in Section 40.01.010.
- (j) Infill developments containing any of the above uses.
- (k) Auto service stations with frontage on Fifth Street.
- (l) Theaters and movie houses.
- (m) Supportive housing.
- (n) Transitional housing.
- (o) Residential structures and apartments with densities up to those permitted in the Residential High Density Apartment (R-HD) district.

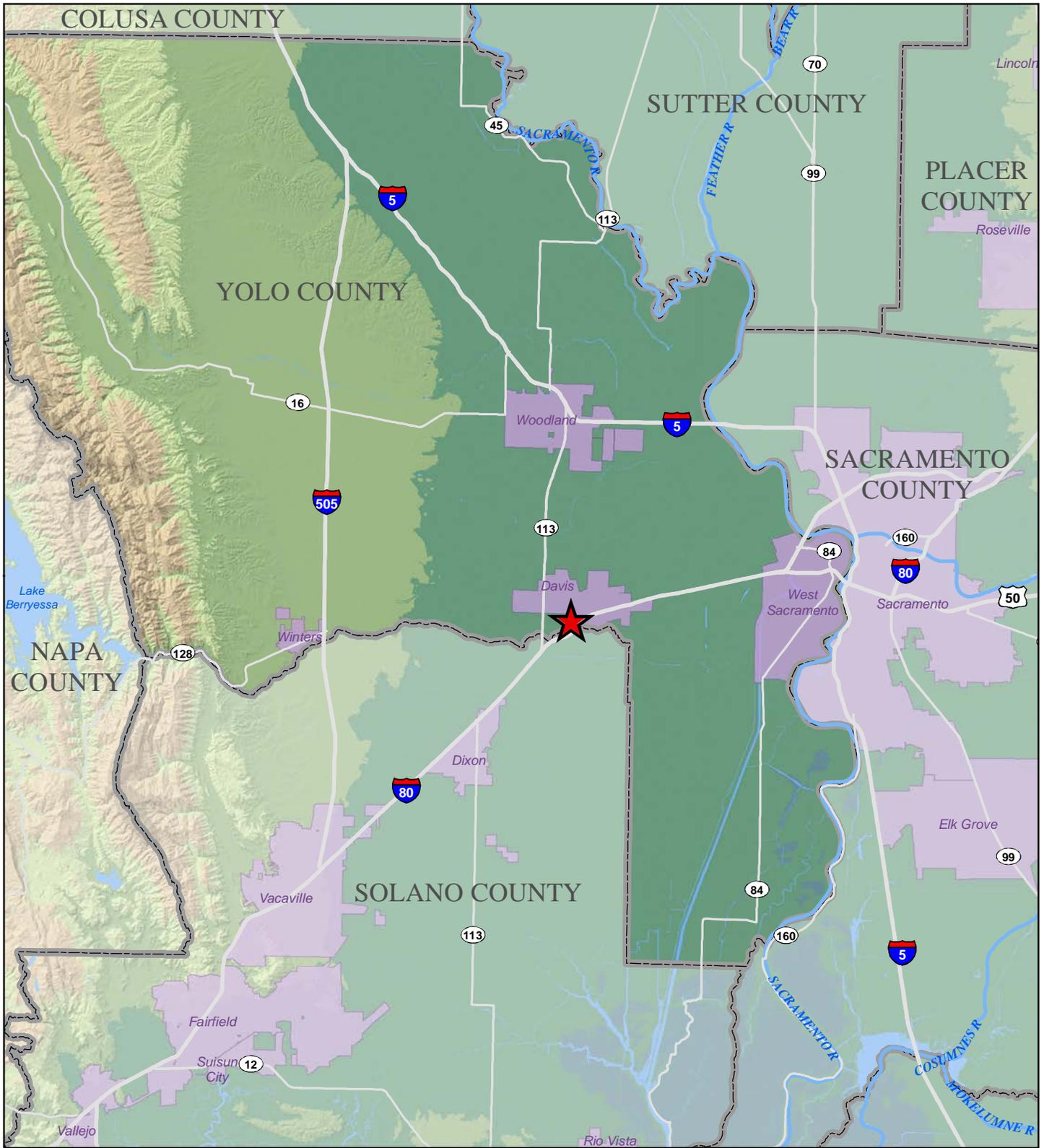
The fraternity house that is currently located on the project site is a legal nonconforming use, based on a Settlement Agreement and Release of all Claims entered into by and between the City and Theta Xi in 1995. However, if two of the buildings are demolished and Theta Xi constructs a new fraternity house on the western lot (as proposed), the new building would not retain the legal nonconforming status under the City's Zoning Code. The fraternity house constitutes a "living group" use, which is a conditional use within the Central Commercial District where the project site is located (see except of the Zoning Ordinance below). Therefore, the project would need approval of a Conditional Use Permit (CUP) for the proposed new fraternity house.

As stated in Section 40.14.050 of the City's Municipal Code, conditional uses in the C-C district are as follows:

- (a) Public and semipublic buildings and uses of a recreational, educational, religious, cultural or public services type, but not including corporation yards, storage or repair yards, warehouses and similar uses;
- (b) Infill developments containing any of the above uses;
- (c) On-site grade level parking;
- (d) Nursery schools and day care centers, subject to the provisions of Section 40.26.270;
- (e) Structures exceeding two stories;
- (f) Billiards/pool hall with two or fewer tables that are the sole or principal use or with three or more tables complying with the standards set forth in Section 40.26.055;

- (g) Drive-through facilities, subject to the provisions of Section 40.26.420;
- (h) Formula fast food restaurant. In addition to the considerations established in Section 40.30.080 for the granting of a conditional use permit, the planning commission or city council may consider the following in determining whether or not the use constitutes a nuisance, or is detrimental to the public welfare of the community: litter, odors, exterior design, signage, concentration of like uses, and the extent to which the use enhances the unique characteristics of the core area;
- (i) Group care homes with more than six clients, subject to the provisions of Section 40.26.135;
- (j) Cardrooms, subject to the provisions of Section 40.26.058, Sections 40.25.010 through 40.25.120, and Chapter 8A;
- (k) Drive-through facilities, subject to the provisions of Section 40.26.420;
- (l) Living groups;
- (m) Single room occupancy (SRO) units.

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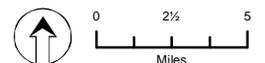


CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-1. Regional Location Map

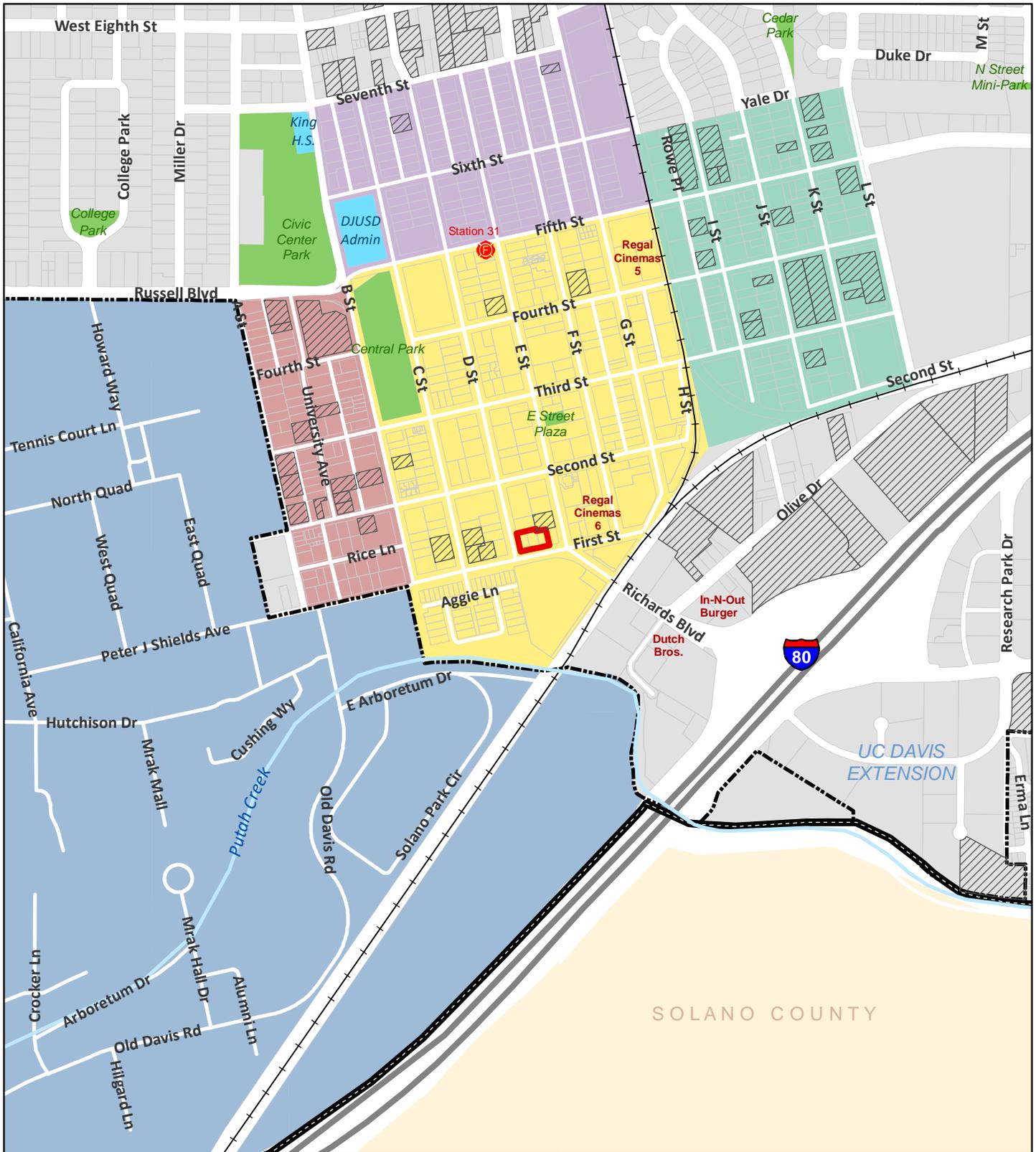
Legend

-  Project Location
-  City Area
-  County Boundary



Sources: CalAtlas; Yolo County; Sacramento County; Placer County; Solano County. Map date: January 16, 2019.

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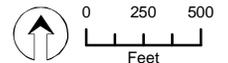


Legend

- | | | | | | |
|--|----------------------|---|---------------|---|-------------------|
|  | Project Boundary |  | Fire Station | Neighborhood Districts | |
|  | Davis City Boundary |  | City Park |  | Downtown Davis |
|  | Yolo County Boundary |  | Public School |  | Old East Davis |
|  | UCDavis |  | Apartments |  | Old North Davis |
| | | | |  | University Avenue |

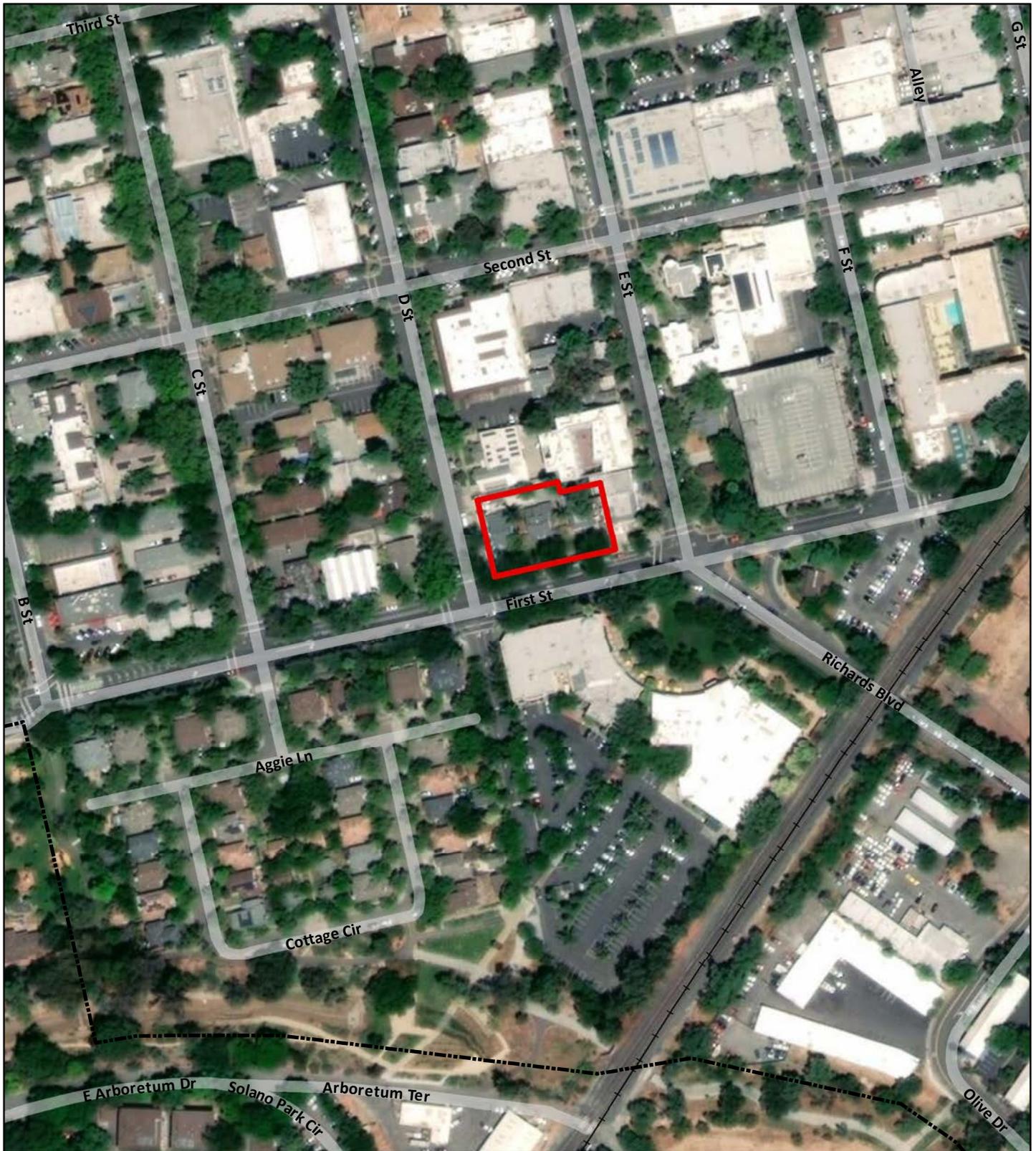
CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-2. Vicinity Map



Sources: Yolo County; City of Davis; CalTrans. Map date: January 16, 2019.

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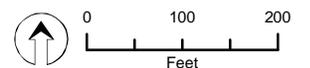


CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-3. Aerial View of Project Site

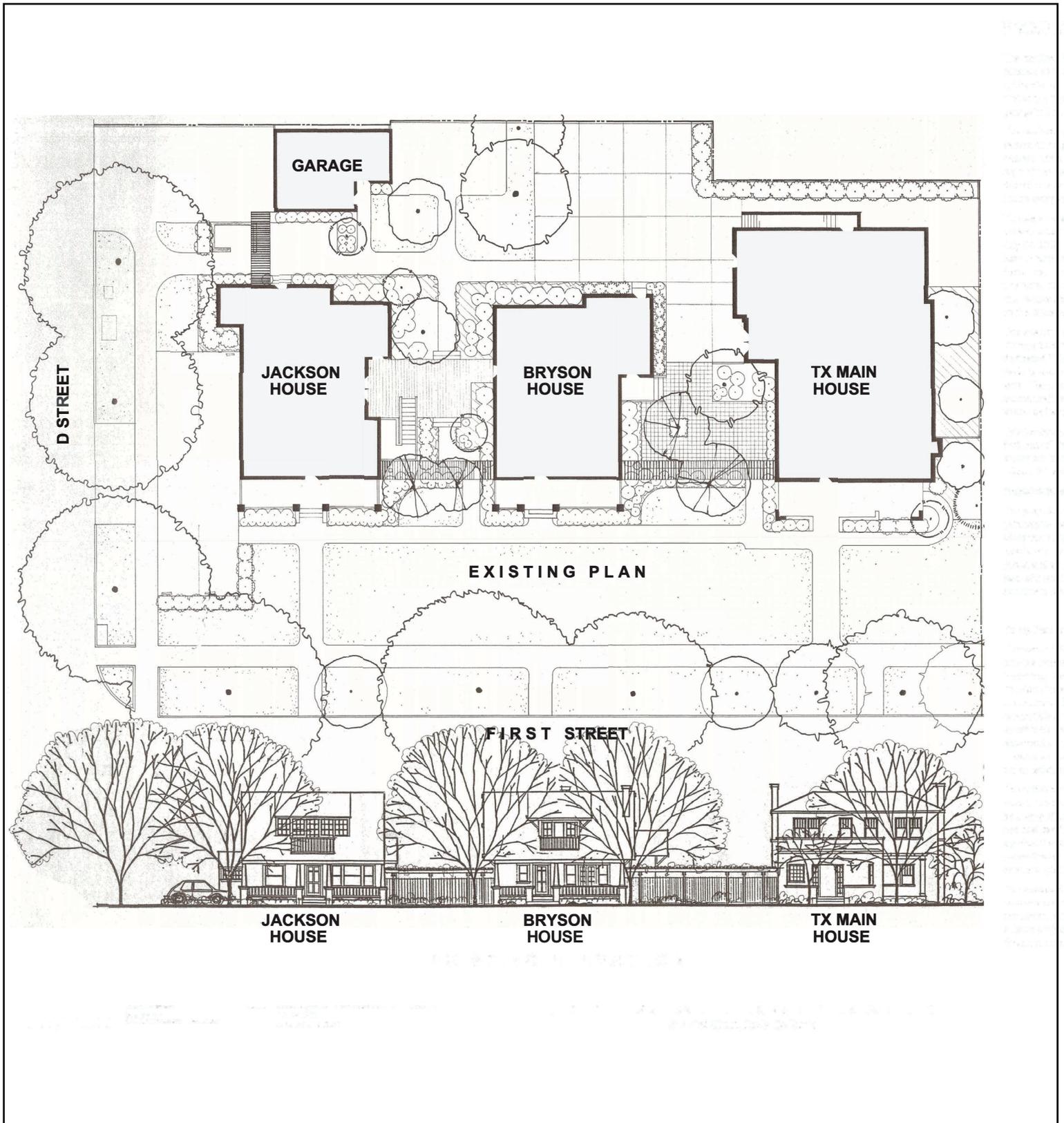
Legend

-  Project Boundary
-  Davis City Boundary



Sources: ArcGIS Online World Imagery Map Service; Yolo County; City of Davis; CalTrans. Map date: January 16,

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CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-4. Existing Site Plan and Elevations



Source: YHLA Architects, January 3, 2018.
 Map date: January 16, 2019.

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View northwest on First Street



View north on First Street - Bryson House



View northeast on First Street



View north on First Street - Jackson House



View north on First Street - TX Main House

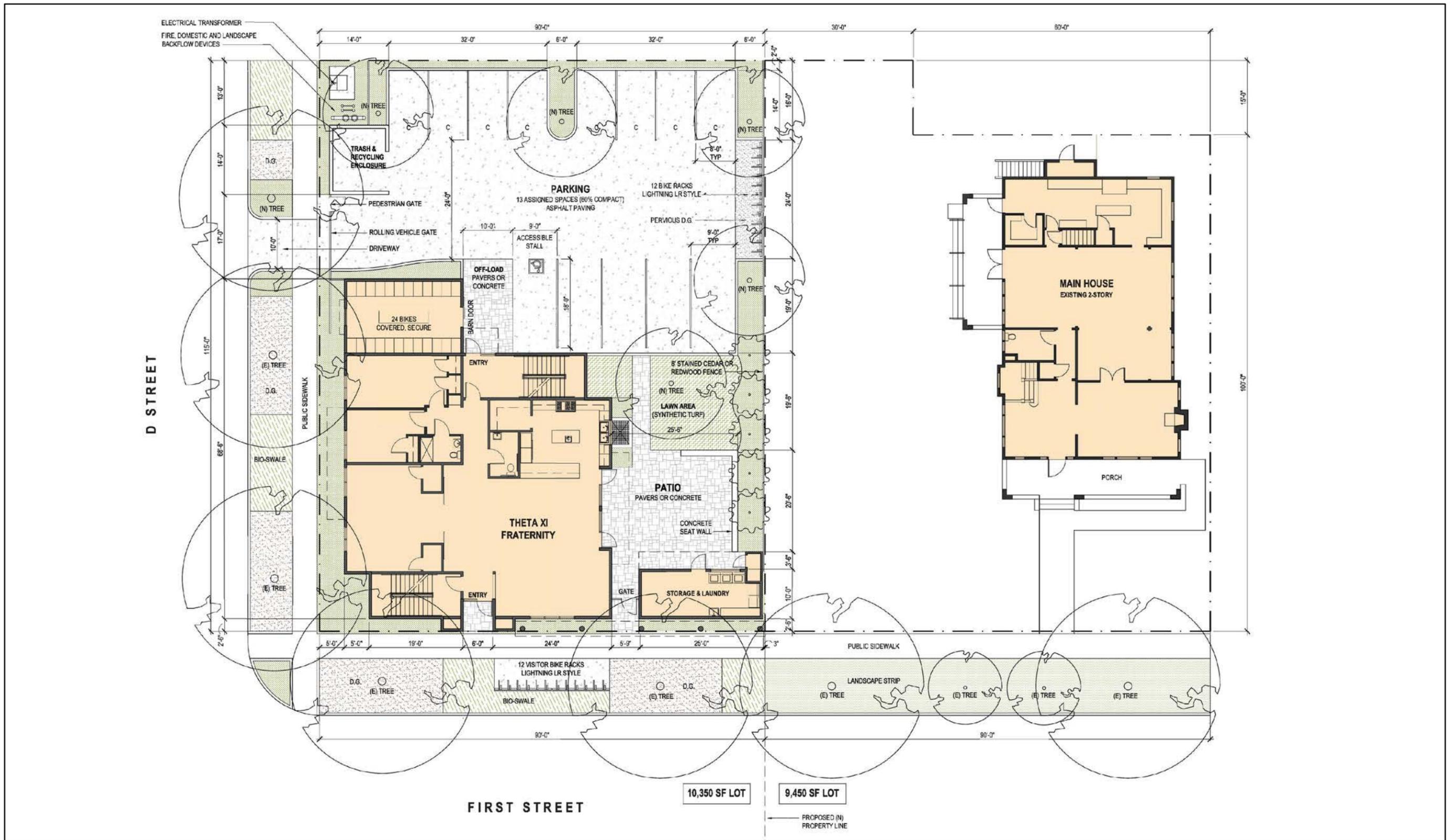


View east on D Street - Garage and Jackson House

CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-5. Existing Site Context Photos

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CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-6. Proposed Site and First Floor Plan



Source: YHLA Architects, January 3, 2018.
Map date: January 17, 2019.

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CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-7. Proposed Elevations



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View from 1st and D Streets looking northeast



View from north looking south



View from D Street looking southeast



View from 1st Street looking northwest



Birdseye view from 1st and D Streets looking northeast

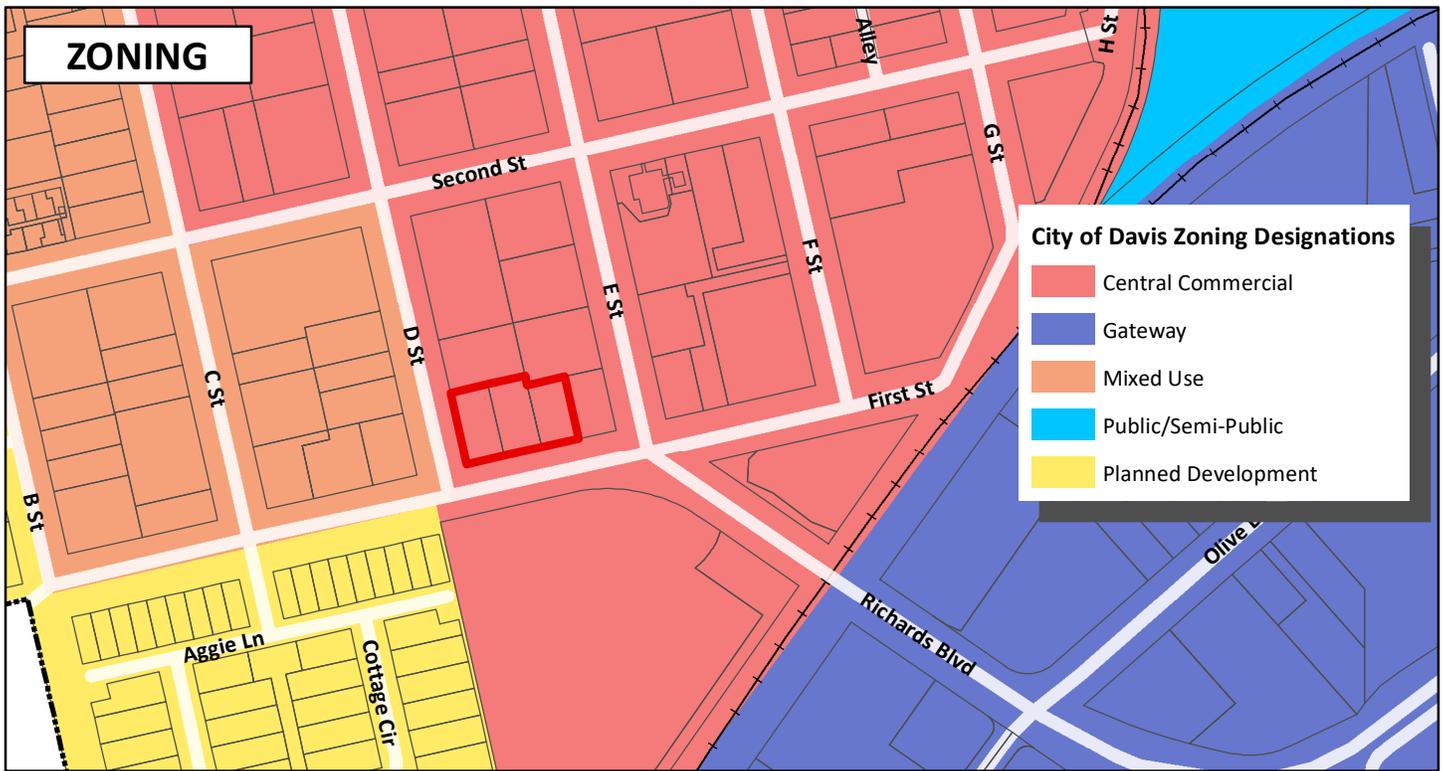
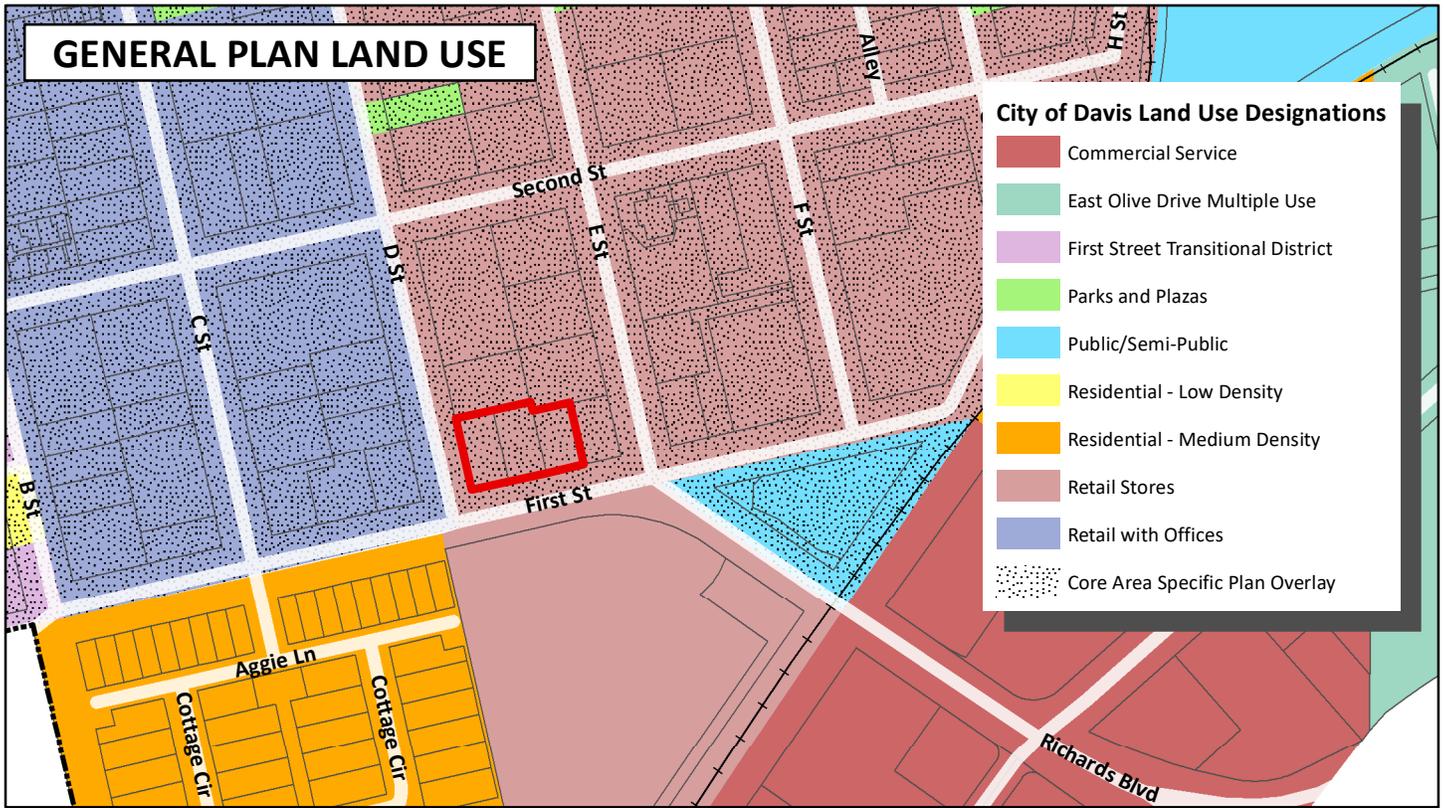


View from northeast looking southwest

CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-8. Visual Simulations

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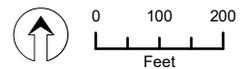


Legend

- Project Boundary
- Davis City Boundary

CITY OF DAVIS - THETA XI PROJECT

Figure 2.0-9. Existing General Plan and Zoning



Sources: ArcGIS Online World Imagery Map Service; Yolo County; City of Davis; CalTrans. Map date: January 16, 2019. Revised April 16, 2019.

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This EIR section provides a discussion of the archaeological, ethnographic, and historical background, known cultural resources in the region, the regulatory setting, an impact analysis, and mitigation measures.

Information in this section is derived primarily from the following reference documents:

- Historical Effects Analysis and Study of APN. 070-244-004-000; 070-244-006-000, & 070-244-005-000, 503, 509, and 515 First Street, Davis, Yolo County, California 95616 (Historical Resource Associates, 2018);
- Historical Resources Analysis Study of 503, 509, and 515 1st Street, Davis, Yolo County, California 95616 (Historical Resource Associates, 2016);
- City of Davis General Plan (Amended through January 2007).

Comments were received during the Notice of Preparation (NOP) comment period and NOP Scoping Meeting regarding cultural and tribal cultural resources from the following: Steven Quinn, Native American Heritage Commission (NAHC) (March 6, 2019); and Laverne Bill, Yocha Dehe Wintun Nation (NOP Scoping Meeting, March 18, 2019). These comment letters are addressed within this section.

3.1.1 ENVIRONMENTAL SETTING

PROJECT SETTING

The project site consists of approximately 0.45 acres located in the central portion of the City of Davis, north of the Interstate 80 (I-80) Freeway, at 503, 509, and 515 First Street. The project site can be identified by its Yolo County Assessor's Parcel Numbers (APNs) 070-244-004, 070-244-005, and 070-244-006. The project site is located in the Davis Downtown Core Area, near what is considered the historic gateway to the City of Davis.

The project site is currently developed with three two-story adjacent Theta Xi fraternity houses, totaling 19,800 square feet (sf). The three lots are owned by the Beta Epsilon Association of Theta Xi, a non-profit California corporation, and occupied by the fraternity. The site has provided student housing dating from 1950 when Theta Xi (TX) acquired the first of the three lots. From east to west, the fraternity houses include the "TX Main House" located at 515 First Street (3,964 total sf, excluding the basement), the "Bryson House" located at 509 First Street (2,009 total sf, excluding the basement), and the "Jackson House" located at 503 First Street (2,065 total sf, excluding the basement). There is a detached garage in the northwest corner of the project site, and the side yard of the Jackson House is used for off-street parking for approximately seven vehicles. Additionally, a paved recreation/patio area is situated behind the Jackson House and Bryson House. The site currently contains approximately 28 trees, including those located along the frontages of First Street and D Street. According to the Arborist Report (Tree Associates, 2019) six trees surveyed are considered "Trees of Significance" pursuant to the City's Tree Ordinance.

The project site is bounded by Second Street and existing mixed-use development to the north, D Street to the west, First Street to the south, and E Street and the Natsoulas Gallery to the east.

3.1 CULTURAL AND TRIBAL RESOURCES

The surrounding land uses consists of a mix of retail, single family, and apartment developments along First Street, D Street, and E Street. Adjacent parcels include a funeral home on D Street and Natsoulas Art Gallery on First Street adjacent to the TX Main House. The project site faces a landscaped buffer and the back of a retail building in a shopping plaza (i.e., Davis Commons) on the south side of First Street. See Figure 3.1-1, Vicinity Map, at the end of this chapter for a map of the surrounding uses and features.

ARCHAEOLOGICAL BACKGROUND

The Central Valley region was among the first in the state to attract intensive cultural and historical fieldwork, and research has continued to the present day. This has resulted in a substantial accumulation of data. In the early decades of the 1900s, E. J. Dawson explored numerous sites near Stockton and Lodi, later collaborating with W. E. Schenck (Schenck and Dawson, 1929). By 1933, the focus of work was directed to the Cosumnes locality, where survey and exploration were conducted by the Sacramento Junior College (Lillard and Purves, 1936). Excavation data, in particular, from the stratified Windmill Site (CA-Sac-107) suggested two temporally distinct cultural traditions. Later work at other mounds by Sacramento Junior College and the University of California enabled the investigators to identify a third cultural tradition intermediate between the previously postulated early and late horizons. The three-horizon sequence was based on discrete changes in ornamental artifacts and mortuary practices as well as an observed difference in soils within sites (Lillard, Heizer and Fenenga, 1939). This sequence was later refined by Beardsley (1954), with an expanded definition of artifacts diagnostic of each time period and was extended to parts of the central California coast. Traits held in common allow the application of this system within certain limits of time and space to other areas of prehistoric central California.

The Windmill Culture (Early Horizon) is characterized by ventrally-extended burials (some dorsal extensions are known), with westerly orientation of heads, a high percentage of burials with grave goods, frequent presence of red ocher in graves, large projectile points, of which 60 percent are of materials other than obsidian; rectangular *Haliotis* beads; *Olivella* shell beads (types Ala and L); rare use of bone; some use of baked clay objects; and well-fashioned charmstones, usually perforated.

The Cosumnes Culture (Middle Horizon) displays considerable changes from the preceding cultural expression. The burial mode is predominately flexed, with variable cardinal orientation and some cremations present. There are a lower percentage of burials with grave goods, and ocher staining is common in graves. *Olivella* beads of types C1, F and G predominate, and there is abundant use of green *Haliotis* sp. rather than red *Haliotis* sp. Other characteristic artifacts include perforated canid teeth, asymmetrical and "fishtail" charmstones, usually unperforated; cobble mortars and evidence of wooden mortars; extensive use of bone for tools and ornaments; large projectile points, with considerable use of rock other than obsidian; and use of baked-clay.

The Hotchkiss Culture (Late Horizon) burial pattern retains the use of the flexed mode, and there is widespread evidence of cremation, lesser use of red ocher, heavy use of baked clay, *Olivella* beads of Types E and M, extensive use of *Haliotis* ornaments of many elaborate shapes and forms,

shaped mortars and cylindrical pestles, bird-bone tubes with elaborate geometric designs, clamshell disc beads, small projectile points indicative of the introduction of the bow and arrow, flanged tubular pipes of steatite and schist, and use of magnetite (Moratto, 1984:181-183). The characteristics noted above are not all-inclusive, but cover the more important traits.

There have been other chronologies proposed for this general region. Fredrickson (1973) has correlated his research with Bennyhoff's (1977) work, and has defined, based upon the work of Bennyhoff, patterns, phases and aspects. Fredrickson also proposed periods of time associated heavily with economic modes, which provides a temporal term for comparing contemporary cultural entities.

ETHNOGRAPHIC BACKGROUND

The Patwin occupied the southern Sacramento Valley west of the Sacramento River from the town of Princeton, north of Colusa, south to San Pablo and Suisun bays. Patwin territory extended approximately 90 miles north to south and 40 miles east to west. Distinction is made between the River Patwin, who resided in large villages near the Sacramento River, especially between Colusa and Knights Landing, and the Hill Patwin, whose villages were situated in the small valleys along the lower hills of the Vaca Mountains and Coast Range, with concentrations in Long, Indian, Bear, Capay, Cortina and Napa valleys (Johnson, 1978:350; Powers, 1877:218). The term "Patwin" refers to the people belonging to the many small contiguous independent political entities in this area who shared linguistic and cultural similarities. Hill and River Patwin dialects are grouped into a North Patwin language, separate from South Patwin, spoken by people who live near present-day Knight's Landing and Suisun. Together, these are classified as southern Wintuan and belong to the Penutian language family as do the languages of the Miwok and Costanoan peoples in the study corridor (Johnson, 1978:350, 359; Kroeber, 1925:351-354).

Politically, the Patwin were organized in small tribes or tribelets, each consisting of a primary village with satellite villages. Tribelets were autonomous and differed from other such units in minor cultural variations. Dialects might encompass several tribelets. Territories were vaguely defined, but included fishing and gathering areas used by the group. In each village, a leader or chief administered subsistence ventures, such as hunting or gathering, and presided over ceremonies. Social and economic activities were divided among families within a village, with certain families responsible for different specialties such as trapping ducks, collecting salt, making foot drums, or performing particular dances or shamanistic rituals (Johnson, 1978:354-355).

Patwin territory includes the riverine environment of tule marshes, vines and brush near the Sacramento River, the flat grasslands dotted with oak groves, and the hills and small valley of the Coast Ranges. The villages situated on low bluffs near the river were often very large; in 1848, General Bidwell estimated at least 1000 residents at *Koru*, near Colusa (Powers, 1877:219). In the hills, the Patwin settled in the small valleys, particularly along Cache and Putah creeks, where large populations were reported. The plains were least hospitable; there, villages were sparse because of the seasonal flooding in winter and lack of reliable water sources during the dry months. As Powers described:

3.1 CULTURAL AND TRIBAL RESOURCES

In winter there was too much water on them, in summer none at all, and aborigines had no means of procuring an artificial supply. Besides there was no wood on them, and the overflowed portions in early summer breed millions of accursed gnats, which render human life a burden and weariness. Hence they were compelled to live beside water-sources, except during certain limited periods in the winter, when they established hunting-camps out on the plains (Powers 1877:219).

Kroeber noted that the Patwin responded to these seasonal changes by shifting their habitation sites:

The valley people evidently had their permanent villages on the river itself -- that is, in the marsh belt -- but appear to have left this during the dry half of the year to live on the adjacent plains, mostly by the side of tributaries. The upland people built their winter homes where the streams issue on these creeks, and in summer moved away from the main water courses into the hills or mountains (Kroeber 1925:354).

Within a village, the Patwin constructed earth-covered semi-subterranean structures. The Hill Patwin used a circular floor plan while the River Patwin favored an elliptical shape. Four types of building occurred in a predictable pattern: the ceremonial dance house was placed a short distance to the north or south of the village, the sudatory or sweat house was positioned to the east or west of the dance house, and the menstrual hut was built on the edge of the village, farthest from the dance house. Family dwellings could be erected anywhere within the community. Family lodges were built by one's paternal relatives while the other structures were the product of a communal effort. They used readily available materials, forming a framework of saplings, and covering the walls and roof with mud and brush (Johnson, 1978:357-358; Powers, 1877:220-221).

Natural resources flourished in Patwin territory. The Patwin gathered seeds and plant foods and hunted game animals on the plains, shot or netted ducks and other migratory water fowl in the thick tule marshes, and netted salmon and other fish in the rivers and streams. Some of these activities were conducted by groups or families assigned to particular resource areas by a village chief. Acorns were a staple in the Patwin diet. Two types of Valley oak and, rarely, live oak acorns were gathered at communally-owned groves (Johnson, 1978:355). Common practice was to store abundant quantities of acorns in tall granaries to assure against hunger in years of poor harvest. Kroeber observed a Patwin granary more than eight feet tall and three feet in diameter (Heizer and Elsasser, 1980:99). Women prepared the crop by pulverizing the acorns, then leaching out the bitter tannic acid before making bread or acorn soup. At privately-owned gathering tracts on the plains, families gathered seeds, including sunflower, alfalfa, clover, bunchgrass, wild oat and yellow-blossom. The Patwin also collected a variety of bulbs, nuts, roots and berries, including buckeye, pine nuts, juniper berries, manzanita berries, blackberries, wild grapes, brodiaea bulbs, and tule roots. To obtain salt, the Patwin scraped off rocks that were found near Cortina, burned a grass that grew on the plains or obtained it in trade from the neighboring Pomo (Johnson, 1978:355).

King salmon, silver salmon and steelhead trout that run from the ocean to fresh-water rivers and streams were an important diet item. Explorers observed Patwin fishing for salmon with a boom net in 1854 (Heizer and Elsasser, 1980: Figure 37). The Patwin also caught smaller fish and collected mussels from the river bottom. They attracted wild ducks by setting out realistic decoys, then drove the fowl into large nets stretched above the marshes. Hunters also netted mud hens, geese and quail. The Suisun tribelet pursued waterfowl in tule rafts (Powers 1877:220). The Patwin hunted large game, such as tule elk, deer, antelope and bear, and took many varieties of small animals, reptiles, insects and birds either to eat or to use for ceremonial and practical materials (Johnson, 1978:355).

The ceremonial life of the Patwin was centered on the Kuksu cult system, which features one or more secret societies, each with its own dances and rituals. The Kuksu cult occurs among several north central California tribes, but it was more elaborate among the Patwin who possessed three secret societies: the Kuksu, ghost and Hesi types, each with a slightly different purpose. The ghost society stressed initiation, the Kuksu emphasized curing the shamanistic functions, and the Hesi elaborated on ceremonial dancing (Johnson, 1978:353). In addition to ritual duties, shamans were called upon to heal the sick by applying native medicines or by sucking out the offending spiritual cause of the illness. The Patwin generally buried their dead, although the tribelets furthest south may have cremated the deceased. The Patwin near Colusa bent the body, wrapped it with strings of shell money and covered it with an animal skin secured with ropes. They interred the corpse with material goods in a grave situated within a village or within 100 yards of a dwelling or dance house (Kroeber, 1925:359-361).

Historic accounts of the Patwin include the early mission registers of baptisms, marriages and deaths of Indians taken to Mission Dolores and Mission San Jose as early as 1800. In 1823, Mission San Francisco Solano was established in nearby Sonoma and it continued the missions' work until about 1832-1836, when all the missions were secularized. During the Mexican period of the 1830s and 1840s, Mariano G. Vallejo maintained military control of the area and often negotiated with Patwin leader Chief Solano. During this time, several Mexican land grants were awarded and large ranchos were established on Putah and Cache creeks (Johnson, 1978:351).

Pre-contact population is difficult to estimate, but a survey of various sources seems to indicate that the Patwin may have numbered 4,000 before their first encounter with non-Indians. Missionization, punitive military expeditions and fatal confrontations with ranchers took their toll on the populace. John Work's party of trappers from the Hudson's Bay Company came down the Sacramento River in 1832, returning up the river in 1833. They unintentionally introduced a deadly disease to native California and, in their wake, a malaria epidemic swept through the Sacramento Valley. Just four years later, in 1837, smallpox raged through the villages and, as a result of these diseases, up to 75 percent of the Patwin died (Cook, 1955). Those who survived these tragedies eventually settled on small reservations or worked as ranch laborers. Throughout the 1800s and 1900s, the population decreased; in 1972, the Bureau of Indian Affairs counted only 11 Patwin in the entire territory. Three reservations--Colusa, Cortina and Rumsey--remain active in former Patwin territory; they are occupied primarily by descendants of Wintun and other groups (Bureau of Indian Affairs, 1983; Johnson, 1978:352).

3.1 CULTURAL AND TRIBAL RESOURCES

The City's location within the Patwin territory is shown in Figure 3.1-2 at the end of this chapter.

HISTORICAL BACKGROUND

The first settler in the Davis vicinity, Jerome Davis, settled on his land in the early 1850s. By 1856, Davis had 8000 acres of land, 1000 of which were enclosed. Davis irrigated portions of his land by pumping water from Putah Creek with a steam engine. Davis raised livestock, peaches, grapes, wheat and barley. By 1864, his ranch totaled about 13,000 acres, with 8,000 acres fenced.

In 1867, William Dresbach leased the Davis home, using it as a hotel, the "Yolo House." A settlement grew up in the vicinity, and Dresbach named it Davisville. This name persisted until 1907 when the University was established and the post office name was shortened to Davis.

In 1905, the State Legislature established the University Farm and the first buildings for the University were built in 1907. In 1922, the school was officially organized as a branch of the College of Agriculture of the University of California at Berkeley. More classes were added, and a College of Letters and Science organized in 1951. In 1959, Davis was authorized as a general campus of the University of California (Kyle, 1990:537).

The rich agricultural lands surrounding Davis continued to be developed and the railroad siding at Chiles became a busy shipping point. The mainline in this area was first constructed by the Central Pacific Railroad just after the Civil War. It was acquired by the Southern Pacific in 1884 and was their mainline from the Bay Area until the Union Pacific acquired the Southern Pacific in 1996.

The 1915 Official Map for Yolo County shows Henry C. Liggett as the owner of the project site, originally 175 acres. The property changed hands several times until the site was acquired by Joseph F. Silva in 1929. Silva was a Portugese immigrant. Between 1929 and 1937, Silva built some improvements on the property. One building appears to have been built on the site before 1907, but apparently removed in the 1930s by Silva. Silva owned and operated a dairy on the property until 1951. He then sold the project to Antony Machado (Supernowicz, 1994).

Machado owned the project site, originally 175 acres, until 1958. He sold the site to Ben and Victoria Williams, who retained the property until 1985 (Derr, 1991). At the time Supernowicz visited the property to record and evaluate the resource in 1994, there were four buildings and two structures as well as farm machinery (Supernowicz, 1994).

KNOWN CULTURAL AND HISTORICAL RESOURCES

The project site is located approximately 635 feet northeast of Putah Creek. Prehistoric period settlement in the project region was focused on areas with elevated terrain closer to permanent water sources. Additionally, the project site is located within 300 feet of a Merit Resource, the Boy Scout Hut, located at 616 First Street. "Merit Resource" means buildings, structures, objects, signs, features, sites, places, areas, cultural landscapes or other improvements with scientific, aesthetic, educational, cultural, archaeological, architectural, or historical value to the citizens of the City of Davis and designated as such by the City Council pursuant to the provisions of Article 40.23. Once

designated, Merit Resources are included in the Davis Register. Merit Resources were formerly designated as “Historical Resources.”

Historical Resource Analysis Study (2016)

According to the Historical Resources Analysis Study of 503, 509, and 515 1st Street, Davis, Yolo County, California 95616 (Historical Resource Associates, 2016), all three properties were formally recorded in 1996 by Bridget Maley (Architectural Resource Group); in 2003 by Roland-Nawi Associates; and in 2015 by Rand Herbert. The properties at 503 and 509 First Street were recently assigned a National Register of Historic Places (NRHP) status code of 5D2, while 515 First Street was recently assigned a NRHP status code of 5D3. Code 5D2 indicates that a resource is a contributor to a district that is eligible for local listing or designation. Code 5D3 indicates that a resource appears to be a contributor to a district that appears eligible for local listing or designation through survey evaluation. Resources with a code that starts with “5” indicate properties that are recognized as historically significant by a local government.

The disparity between the status codes appears to reflect a difference in whether the properties “appear” to be contributors to a local historic district based upon survey evaluation, as is the case with 503 and 509 First Street, or, in the case of 515 First Street, where the property is “eligible” for local listing or designation. In either case, all three properties appear to be eligible for local listing. As such, CEQA review of the three properties is warranted.

The Historic Property Database maintained by the State Historic Preservation Office (SHPO) was intended as a record of past actions either made directly by the SHPO through a consensus determination of eligibility, by National Register nomination, or by other actions of a local government. The Historic Property Database was not intended as a legal document in that the code is a “static” finding, but rather as a “status code” applied through some form of governmental action or decision. The disparity between the status codes arises because the status codes are out of date. Local governments have the ability to change or augment their previous actions as new information is gathered or updated. Many of the old status codes for the existing buildings were provided based upon cursory surveys which were funded through SHPO grants from the 1970s and 1980s, while others are related to other previous actions from the 1990s and early 2000s.

In conclusion, a local government, such as the City of Davis, has the responsibility and actionability to augment or change findings related to historic properties based upon new information or more detailed historical analysis. The status code assigned to the existing buildings does not invalidate the historical analysis completed for the project.

Historical Effects Analysis Study (2018)

As noted above, the existing Theta Xi Fraternity currently occupies three adjacent parcels containing three dwellings located on First Street between D Street and the Natsoulas Gallery Building. The three parcels at 503, 509, and 515 First Street are owned by the Beta Epsilon Association of Theta Xi, a non-profit California corporation, and occupied by the fraternity. The site

3.1 CULTURAL AND TRIBAL RESOURCES

has provided student housing dating from 1950, when Theta Xi acquired the first of the three parcels. From west to east are the “Jackson House,” the “Bryson House,” and the “TX Main House.” There is also a detached garage structure that includes an attached laundry room in the northwest corner behind the Jackson House. Each house is discussed in detail below.

503 FIRST STREET – JACKSON HOUSE

As previously described, 503 First Street was formally recorded and evaluate in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert. In 1996, Maley described 503 First Street as a one and a half story, wood-frame, Craftsman style house with a long sloping gable roof running parallel to First Street. According to Roland-Nawi Associates, the house was built in 1912. Based upon historic photographs, 503 First Street appears to have originally been a single-story house with a large attic and a basement. The shed roof dormer centered on the roof facing First Street had no veranda and railing or outside access when the house was built. This feature appears to have been added by Theta Xi Fraternity in the 1970s, when the attic was converted to a living area for fraternity members. In 2003, Roland-Nawi Associates stated that the house was built for the Anderson family of Davis. This has been verified through federal census data, however, it is unclear if Anderson was the original owner. According to Maley, Anderson was an important figure during the twentieth century in Davis, associated with commercial and civic life. Anderson was among a number of successful merchants in Davis, and the Anderson family continues in business to this day in the city.

Besides the entire interior having been altered to create bathrooms and additional rooms for students, the east elevation of the house has been altered with the addition of a raised wooden deck and exterior stairway to access the second-story rooms. The northwest corner of the house was also altered when the original extended porch was enclosed and the brick fireplace was removed.

Behind the residence is a garage/shed that was built after 1921 and expanded in later years. Today, the interior of the house features five bedrooms downstairs and two upstairs, with one bathroom downstairs.

509 FIRST STREET – BRYSON HOUSE

The home at 509 First Street, which was reportedly built in 1912, resembles its neighbor to the west (the Jackson House). The two houses were undoubtedly built at the same time by the same builder and designed by the same architect. The property was initially recorded in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert.

Based upon historic photographs, 509 First Street, unlike 503 First Street, appears to have had a rooftop balcony accessed from the central roof-top dormer. This would suggest the home was built with a second-story living area. The current railing is a more recent addition, as is the second door to the right of the replaced front door. It should also be noted one of the truncated wood

columns is missing, and, like 503 First Street, the brick fireplace was removed from the east wall. 509 First Street also features a basement.

Today, the interior of the residence features four bedrooms downstairs, three bedrooms upstairs, one bathroom downstairs, and one bathroom upstairs.

515 FIRST STREET – TX MAIN HOUSE

As previously described, 515 First Street, which was built in 1920, was initially recorded in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert. Maley described the building as eclectic, with Spanish or Mediterranean character, and that it appeared to have numerous alterations. In 2003, Roland-Nawi Associates stated that it appeared to retain integrity. In 2015, Rifkin recorded the residence on a 523 Update Sheet, and Herbert evaluated the property giving it a 5D3 rating. No additional research appears to have been done on the property since its recordation and evaluation by Maley in 1996.

This residence has been altered since its construction in circa 1920. Unlike 503 and 509 First Street, 515 First Street was a much larger home, but it also was designed with a full two-stories and basement. Unlike 503 and 509 First Street, which have horizontal board exterior siding, the walls of 515 First Street are clad with stucco.

Today, the interior of the residence features no bedrooms downstairs, seven bedrooms upstairs, one upstairs bathroom, one downstairs bathroom, and includes a kitchen, dining room, living room and entry hall downstairs. Most of the windows and doors in the house appear to be original wood-sash, many having gridded or divided lights.

The most dramatic change is to the front veranda, which was altered in the 1950s following acquisition by the Theta Xi Fraternity. The alteration involved demolishing the old porch, which extended half-way across the front of the building, followed by a decorative wood pergola. Instead, the replacement design featured a full front porch or veranda having two arches of unequal size, and a closed veranda wall on the second story that masks the fenestration, namely the doors and windows.

Consultation

The City has initiated tribal consultation in accordance with Assembly Bill (AB) 52. In letters dated April 27, 2018, the City sent tribal consultation letters to the Yocha Dehe Wintun Nation. In the letter, the City provided the tribe with information regarding the proposed project and requested that the tribes supply any information they might have concerning prehistoric sites or traditional use areas within the project site. The Yocha Dehe Wintun Nation responded to the letter on March 22, 2018. The Yocha Dehe letter notes that the project site is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, the Tribe has cultural interest and authority in the project area. The letter further notes that the Tribe has concerns that the project would impact known archaeological and/or cultural sites. The letter concludes that the Yocha Dehe Wintun Nation

3.1 CULTURAL AND TRIBAL RESOURCES

recommends including cultural monitors during development or ground disturbance, including backhoe and trenching excavations.

3.1.2 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

The National Historic Preservation Act was enacted in 1966 as a means to protect cultural resources that are eligible to be listed on the NRHP. The law sets forth criterion that is used to evaluate the eligibility of cultural resources. The NRHP is composed of districts, sites, buildings, structures, objects, architecture, archaeology, engineering, and culture that are significant to American History.

Virtually any physical evidence of past human activity can be considered a cultural resource. Although not all such resources are considered to be significant and eligible for listing, they often provide the only means of reconstructing the human history of a given site or region, particularly where there is no written history of that area or that period. Consequently, their significance is judged largely in terms of their historical or archaeological interpretive values. Along with research values, cultural resources can be significant, in part, for their aesthetic, educational, cultural and religious values.

STATE

California Register of Historic Resources

The CRHR was established in 1992 and codified in the Public Resource Code §5020, 5024 and 21085. The law creates several categories of properties that may be eligible for the CRHR. Certain properties are included in the program automatically, including: properties listed in the NRHP; properties eligible for listing in the NRHP; and certain classes of State Historical Landmarks. Determining the CRHR eligibility of historic and prehistoric properties is guided by CCR §§15064.5(b) and Public Resources Code (PRC) §§21083.2 and 21084.1. NRHP eligibility is based on similar criteria outlined in Section 106 of the National Historic Preservation Act (NHPA) (16 U.S. Code [USC] 470).

Cultural resources, under CRHR and NRHP guidelines, are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. A cultural resource may be eligible for listing on the CRHR and/or NRHP if it:

- is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- is associated with the lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values; or

- has yielded, or may be likely to yield, information important in prehistory or history.

If a prehistoric or historic period cultural resource does not meet any of the four CRHR criteria, but does meet the definition of a “unique” site as outlined in PRC §21083.2, it may still be treated as a significant resource if it is: an archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,
- it has a special and particular quality such as being the oldest of its type or the best available example of its type, or
- it is directly associated with a scientifically recognized important prehistoric or historic event.

California Environmental Quality Act

CEQA Guidelines §15064.5 provides guidance for determining the significance of impacts to archaeological and historical resources. Demolition or material alteration of a historical resource, including archaeological sites, is generally considered a significant impact. Determining the CRHR eligibility of historic and prehistoric properties is guided by CCR §§15064.5(b) and PRC §§21083.2 and 21084.1. NRHP eligibility is based on similar criteria outlined in Section 106 of the NHPA (16 U.S. Code [USC] 470).

CEQA also provides for the protection of Native American human remains (CCR §15064.5[d]). Native American human remains are also protected under the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001 et seq.), which requires federal agencies and certain recipients of federal funds to document Native American human remains and cultural items within their collections, notify Native American groups of their holdings, and provide an opportunity for repatriation of these materials. This act also requires plans for dealing with potential future collections of Native American human remains and associated funerary objects, sacred objects, and objects of cultural patrimony that might be uncovered as a result of development projects overseen or funded by the federal government.

Assembly Bill 52

AB 52, approved in September 2014, creates a formal role for California Native American tribes by creating a formal consultation process and establishing that a substantial adverse change to a tribal cultural resource has a significant effect on the environment. Tribal cultural resources are defined as:

- 1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A) Included or determined to be eligible for inclusion in the CRHR
 - B) Included in a local register of historical resources as defined in PRC §5020.1(k)

3.1 CULTURAL AND TRIBAL RESOURCES

- 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC §5024.1 (c). In applying the criteria set forth in PRC §5024.1 (c) the lead agency shall consider the significance of the resource to a California Native American tribe.

A cultural landscape that meets the criteria above is also a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. In addition, a historical resource described in PRC §21084.1, a unique archaeological resource as defined in PRC §21083.2(g), or a “non-unique archaeological resource” as defined in PRC §21083.2(h) may also be a tribal cultural resource if it conforms with above criteria.

AB 52 requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

Assembly Bill 978

In 2001, AB 978 expanded the reach of Native American Graves Protection and Repatriation Act of 1990 and established a state commission with statutory powers to assure that federal and state laws regarding the repatriation of Native American human remains and items of patrimony are fully complied with. In addition, AB 978 also included non-federally recognized tribes for repatriation.

LOCAL

City of Davis General Plan

The City of Davis General Plan contains the following goals, policies, and standards that are relevant to cultural resources:

HISTORIC AND ARCHAEOLOGICAL RESOURCES

Goal HIS 1. Designate, preserve and protect the archaeological and historic resources within the Davis community.

Policy HIS 1.2. Incorporate measures to protect and preserve historic and archaeological resources into all planning and development.

Standard HIS 1.2(b). A cultural resources survey shall be required for development sites where cultural resource conditions are not known (as required by the Planning and Building Department). Resources within a project site that cannot be avoided should be evaluated. Additional research and test excavations, where

appropriate, should be undertaken to determine whether the resource(s) meets CEQA and/or NRHP significance criteria. Impacts to significant resources that cannot be avoided will be mitigated in consultation with the lead agency for the project. Possible mitigation measures include:

- a data recovery program consisting of archaeological excavation to retrieve the important data from archaeological sites;
- development and implementation of public interpretation plans for both prehistoric and historic sites;
- preservation, rehabilitation, restoration, or reconstruction of historic structures according to Secretary of Interior Standards for Treatment of Historic Properties;
- construction of new structures in a manner consistent with the historic character of the region; and
- treatment of historic landscapes according to the Secretary of Interior Standards for Treatment of Historic Landscapes.

Policy HIS 1.3. Assist and encourage property owners and tenants to maintain the integrity and character of historic resources, and to restore and reuse historic resources in a manner compatible with their historic character.

City of Davis Municipal Code

The City of Davis Demolition Ordinance establishes requirements and procedures for the demolition of structures for the public safety and to ensure that potentially significant historical properties are not demolished without being identified. On March 11, 2014, The City Council adopted Ordinance 2433 which updated the Demolition Ordinance. The Demolition Ordinance requires the following:

- For demolitions in general subject to the Ordinance, preparation of a site management plan prior to issuance of a demolition permit with details such as a material recycling plan, tree identification and protection/preservation consistent with the City Tree Preservation Ordinance, site grading, sidewalk protection and pedestrian access around the site, runoff control, weed control, details of any proposed fencing or screening, and the site appearance control.
- For demolition of structures within the adopted conservation district (Article 40.13A) or historic district, all necessary discretionary entitlements, including, but not limited to, design review, conditional use permits, map applications, public hearings, CEQA clearance, and any other discretionary entitlements that may be necessary for the construction of a replacement project shall be completed prior to issuance of a demolition permit.
- For demolition of structures that are fifty or more years old, review of the demolition shall occur in accordance with the City's Historic Resources Management Ordinance (Municipal Code Article 40.23) which includes a determination if the structure meets the criteria for potential historic designation.

3.1 CULTURAL AND TRIBAL RESOURCES

Additionally, Article 40.23, Historical Resources Management, of the City’s Municipal Code aims to promote the general welfare by providing for the identification, designation, protection, enhancement, perpetuation, and use of historical resources including improvements, buildings, structures, objects, signs, features, sites, cultural landscapes, places, and areas within the city that reflect special elements of the city’s historical, architectural, archaeological, cultural, or aesthetic heritage. Section 40.23.040 of the Code establishes the City’s Historical Resources Management Commission, which has several powers and duties. Section 40.23.060 of the Code establishes the designation criteria required in order to be designated as a “Landmark” or a “Historic District.” The following summarizes the criteria required to be designated as a “Landmark”:

Upon the recommendation of the historical resources management commission and approval of the city council a historical resource may be designated a landmark if the resource meets any of the following four criteria at the local, state, or national level of significance and retains a high level of historic integrity as defined by this article.

- 1) Associated with events that have made a significant contribution to the broad patterns in the history of Davis, California, or the nation; or
- 2) Associated with the lives of significant persons in the history of Davis, California, or the nation; or
- 3) Embodies the distinctive characteristics of a type, period, architectural style or method of construction; or that represents the work of a master designer; or that possesses high artistic values; or that represents a significant and distinguishable entity whose components may lack individual distinction; or
- 4) Has yielded or may likely yield archaeological or anthropological information important in the study of history, prehistory, or human culture.

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on cultural resources if it will:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5;
- Cause a substantial adverse change in the significance of archaeological resource pursuant to CEQA Guidelines §15064.5;
- Directly or indirectly destroy a unique paleontological resource;
- Disturb any human remains, including those interred outside of formal cemeteries;
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either:
 - 1) a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code §5020.1(k), or

- 2) a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code §5024.1 (c), and considering the significance of the resource to a California Native American tribe.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: Project implementation has the potential to cause a substantial adverse change to a significant historical resource, as defined in CEQA Guidelines §15064.5 (Significant and Unavoidable)

The project site is located in an area known to have historical resources. As discussed previously, three locally-historic resources are located on the project site: the Jackson House (503 First Street), the Bryson House (509 First Street), and the TX Main House (515 First Street). As previously described, all three locally-historic resources were formally recorded and evaluate in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert. Each resource is discussed in detail below.

503 FIRST STREET – JACKSON HOUSE

This residence was recently assigned a NRHP status code of 5D2. Code 5D2 indicates that a resource is a contributor to a district that is eligible for local listing or designation. Resources with a code that starts with “5” indicate properties that are recognized as historically significant by a local government. This property is currently listed as significant historical resources under CEQA, having been determined to be eligible for the CRHR. During the NOP Scoping Meeting for the project, which was held by the City’s Historical Resources Management Commission, evidence was presented that suggests that this NRHP status code of 5D2 was erroneously applied to the building. According to Commissioner Miltenberger of the City’s Historical Resources Management Commission, this residence was first assigned a 5D3 status code during a 2003 survey. Commissioner Hickman asserts that subsequent evaluations have simply carried that code forward. The carrying forward appears to have been an error that failed to take into account a revision of status codes that was undertaken by the California State Office of Historic Preservation in August 2003. The revision was published in the California State Office of Historic Preservation’s Technical Assistance Bulletin No. 8. Prior to the revision, the 5D3 status code indicated that a resource had been determined ineligible for local listing but that it was part of a district that was eligible “for special consideration in local planning” (i.e., a conservation overlay district). Following the revision, the 5D3 status code for this residence was converted to 6L, retaining the same meaning that it was found ineligible for local listing but might warrant special consideration in local planning. In the State’s roster of historic resources (the California Historical Resources Information System [CHRIS] inventory), this residence was in fact converted to a 6L status. A structure with a 6L status code is not considered a historic resource for the purposes of CEQA. It is noted that this position is not shared by Historic Resource Associates, the historical consultant who prepared the Historical Resource Analysis Study and the Historical Effects Analysis Study for the proposed

3.1 CULTURAL AND TRIBAL RESOURCES

project. The NRHP status code is one of the many considerations a local government may use when determining if a structure is historically significant. Other considerations could include historical significance of a structure and historical analysis completed by historians. In conclusion, this property is currently listed as significant historical resources under CEQA, as determined by Historic Resource Associates.

This residence would be demolished as part of the proposed project. The previous studies of the residence have concluded that the residence has a status code of 5D2, meaning that the residence is a contributor to a district that is eligible for local listing or designation. According to the Historical Resources Analysis Study (Historical Resource Associates, 2016) and the Historical Effects Analysis Study (Historical Resource Associates, 2018), this property is currently listed as significant historical resources under CEQA, having been determined to be eligible for the CRHR. Because this residence would be demolished, a potentially significant impact would result to this resource.

509 FIRST STREET – BRYSON HOUSE

This residence was also recently assigned a NRHP status code of 5D2. As noted above, code 5D2 indicates that a resource is a contributor to a district that is eligible for local listing or designation. Resources with a code that starts with “5” indicate properties that are recognized as historically significant by a local government. This property is currently listed as significant historical resources under CEQA, having been determined to be eligible for the CRHR.

This residence would also be demolished as part of the proposed project. The previous studies of the residence have concluded that the residence has a status code of 5D2, meaning that the residence is a contributor to a district that is eligible for local listing or designation. As noted above, according to the Historical Resources Analysis Study (Historical Resource Associates, 2016) and the Historical Effects Analysis Study (Historical Resource Associates, 2018), this property is currently listed as significant historical resources under CEQA, having been determined to be eligible for the CRHR. Because this residence would be demolished, a potentially significant impact would result to this resource.

515 FIRST STREET – TX MAIN HOUSE

This residence was recently assigned a NRHP status code of 5D3. Code 5D3 indicates that a resource appears to be a contributor to a district that appears eligible for local listing or designation through survey evaluation. Resources with a code that starts with “5” indicate properties that are recognized as historically significant by a local government. This property is currently listed as significant historical resources under CEQA, having been determined to be eligible for the CRHR.

This residence would not be demolished as part of the proposed project. During construction of the project, the TX Main House would continue to serve the fraternity's housing and study needs. Once the proposed three-story fraternity building is completed, the fraternity would consolidate all of its activities onto the new western parcel. Once the fraternity is consolidated into the

western parcel and associated three-story building, the TX Main House, along with its expanded lot, would be vacated and placed for sale or lease to a third party on the open market. As such, the TX Main House would not be retained for TX Fraternity uses.

Because the project does not include demolition of this residence, a less-than-significant impact would result to this resource.

CONCLUSION

Because the Jackson House (503 First Street) and Bryson House (509 First Street) buildings are significant resources or historic properties, demolition of the buildings is a significant impact under CEQA. This is a potentially significant impact.

MITIGATION MEASURE(S)

Mitigation Measure 3.1-1: *The project applicant shall fund and implement the following measures:*

- 1. A qualified architectural historian, as approved by the City of Davis Community Development and Sustainability Department, shall be retained to prepare a "Historic Documentation Report." The report shall include current photographs of each building displaying each elevation, architectural details or features, and overview of the buildings, together with a textual description of the building along with additional history of the building, its principal architect or architects, and its original occupants to the extent that information about those occupants can be obtained. The photo-documentation shall be done prior to demolition of the Jackson House (503 First Street) and Bryson House (509 First Street) buildings. The photo-documentation shall also be done in accordance to Historic American Building Survey/Historic Engineering Record (HABS/HAER) guidelines, which shall include archival quality negatives and prints. The final Report shall be deposited with the City of Davis Community Development and Sustainability Department, the Hattie Weber Museum, the State Office of Historic Preservation, and other appropriate organizations and agencies as identified by the Planning Department, prior to issuance of the building permit for the proposed new structure.*
- 2. A publicly accessible space for a memorial or interpretive plaque/display shall be placed and maintained on or near the former location of the subject properties, identifying the former location of the building, its original owner, and its historic significance. The memorial or interpretive plaque/display shall be provided prior to issuance of the certificate of occupancy.*

These requirements shall be included as a note on the project's Improvement Plans, subject to review and approval by the City of Davis Community Development and Sustainability Department.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.1-1 would require preparation of a Historic Documentation Report which includes current photographs of each building displaying each

3.1 CULTURAL AND TRIBAL RESOURCES

elevation, architectural details or features, and overview of the buildings, together with a textual description of the building along with additional history of the building, its principal architect or architects, and its original occupants to the extent that information about those occupants can be obtained. The Report would be deposited with the City of Davis Community Development and Sustainability Department, the Hattie Weber Museum, the State Office of Historic Preservation, and other appropriate organizations and agencies as identified by the Planning Department. Mitigation Measure 3.1-1 also requires that a publicly-accessible memorial or interpretive plaque/display, which identifies the former location of the building, its original owner, and its historic significance, be maintained on the project site.

The Jackson House and Bryson House, both proposed for demolition, are currently listed as significant historical resources under CEQA, having been determined to be eligible for the CRHR. Based on the statements and conclusions shown in the *Historical Effects Analysis and Study* (Historical Resource Associates, 2018) and the *Historical Resources Analysis Study* (Historical Resource Associates, 2016), the project's impacts to historical resources would be **significant and unavoidable**.

Impact 3.1-2: Project implementation has the potential to cause a substantial adverse change to a significant tribal cultural resource, as defined in Public Resources Code §21074 (Less than Significant with Mitigation)

The Yocha Dehe Wintun Nation responded to the City's AB 52 letter for the proposed project on March 22, 2018. The Yocha Dehe letter notes that the project site is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, the Tribe has cultural interest and authority in the project area. The letter further notes that the Tribe has concerns that the project would impact archaeological and/or cultural sites. The letter concludes that the Yocha Dehe Wintun Nation recommends including cultural monitors during development or ground disturbance, including backhoe and trenching excavations.

While there are no known tribal resources known to exist on the project site, as with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural resource or tribal cultural resource. This is a potentially significant impact.

MITIGATION MEASURE(S)

Mitigation Measure 3.1-2: *All construction workers shall receive a sensitivity training session before they begin site work. The sensitivity training shall inform the workers of their responsibility to identify and protect any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, within the project site. The sensitivity training shall cover laws pertaining to cultural resources, examples of cultural resources that may be discovered in the project site, and what to do if a cultural resource, or anything that may be a cultural resource, is discovered.*

If any subsurface historic remains, prehistoric or historic artifacts, paleontological resources, other indications of archaeological resources, or cultural and/or tribal resources are found during grading and construction activities, all work within 100 feet of the find shall cease, the City of Davis Department of Community Development and Sustainability shall be notified, and the applicant shall retain an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, to evaluate the find(s). If tribal resources are found during grading and construction activities, the applicant shall notify the Yocha Dehe Wintun Nation. If paleontological resources are found during grading and construction activities, a qualified paleontologist shall be retained to determine the significance of the discovery.

The archaeologist and/or paleontologist shall define the physical extent and the nature of any built features or artifact-bearing deposits. The investigation shall proceed immediately into a formal evaluation to determine the eligibility of the feature(s) for inclusion in the California Register of Historical Resources. The formal evaluation shall include, at a minimum, additional exposure of the feature(s), photo-documentation and recordation, and analysis of the artifact assemblage(s). If the evaluation determines that the feature(s) and artifact(s) do not have sufficient data potential to be eligible for the California Register, additional work shall not be required. However, if data potential exists (e.g., an intact feature is identified with a large and varied artifact assemblage), further mitigation would be necessary, which might include avoidance of further disturbance to the resource(s) through project redesign. If avoidance is determined to be infeasible, additional data recovery excavations shall be conducted for the resource(s), to collect enough information to exhaust the data potential of those resources.

Pursuant to CEQA Guidelines Section 15126.4(b)(3)(C), a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Data recovery efforts can range from rapid photographic documentation to extensive excavation depending upon the physical nature of the resource. The degree of effort shall be determined at the discretion of a qualified archaeologist and should be sufficient to recover data considered important to the area's history and/or prehistory. Significance determinations for tribal cultural resources shall be measured in terms of criteria for inclusion on the California Register of Historical Resources (Title 14 CCR, §4852[a]), and the definition of tribal cultural resources set forth in Public Resources Code Section 21074 and 5020.1 (k). The evaluation of the tribal cultural resource(s) shall include culturally appropriate temporary and permanent treatment, which may include avoidance of tribal cultural resources, in-place preservation, and/or re-burial on project property so the resource(s) are not subject to further disturbance in perpetuity. Any re-burial shall occur at a location predetermined between the landowner and the Yocha Dehe Wintun Nation. The landowner shall relinquish ownership of all sacred items, burial goods, and all archaeological artifacts that are found on the project area to the Yocha Dehe Wintun Nation for proper treatment and disposition. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.

3.1 CULTURAL AND TRIBAL RESOURCES

The language of this mitigation measure shall be included on any future grading plans, utility plans, and improvement drawings approved by the City for the development of the project.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.1-2 would require construction to halt in the event that a buried and previously undiscovered cultural or tribal cultural resource is encountered during construction activities so that it can be appropriately evaluated by a qualified professional. Subsequently, this mitigation measure would ensure that any potential impact to unknown resources is reduced to a ***less than significant*** level.

Impact 3.1-3: Project implementation has the potential to cause a substantial adverse change to a significant archaeological resource, as defined in CEQA Guidelines §15064.5 (Less than Significant with Mitigation)

The project site is located in an area known to have cultural resources. The project site is located approximately 635 feet northeast of Putah Creek. Prehistoric period settlement in the project region was focused on areas with elevated terrain closer to permanent water sources. As such, archaeological resources may be found on the site, although none have been found or are known to exist on the site.

The project site was previously disturbed when the three buildings were constructed in 1912 and 1920. Because all of the buildings have basements, the site has been subject to underground excavations. There are no known archaeological resources that have been found or are known to exist on the site.

As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of previously unknown significant archeological resources. This is a potentially significant impact.

MITIGATION MEASURE(S)

*Implement **Mitigation Measure 3.1-2.***

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.1-2 would require construction to halt in the event that a buried and previously undiscovered archaeological resource is encountered during construction activities so that it can be appropriately evaluated by a qualified professional. Subsequently, this mitigation measure would ensure that any potential impact to unknown resources is reduced to a ***less than significant*** level.

Impact 3.1-4: Project implementation has the potential to directly or indirectly destroy a unique paleontological resource (Less than Significant with Mitigation)

The project site was previously disturbed when the three buildings were constructed in 1912 and 1920. Because all of the buildings have basements, the site has been subject to underground excavations. There are no known paleontological resources that have been found or are known to exist on the site.

The project site is not expected to contain subsurface paleontological resources, although it is possible. Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, state, or federal criteria. This is a potentially significant impact.

MITIGATION MEASURE(S)

Implement Mitigation Measure 3.1-2.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.1-2 would require construction to halt in the event that a paleontological resource is encountered during construction activities so that it can be appropriately evaluated by a qualified professional. Subsequently, this mitigation measure would ensure that any potential impact to unknown resources is reduced to a *less than significant* level.

Impact 3.1-5: Project implementation has the potential to disturb human remains, including those interred outside of formal cemeteries (Less than Significant with Mitigation)

Indications suggest that humans have occupied Yolo County for over 10,000 years and it is not always possible to predict where human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials.

Under CEQA, human remains are protected under the definition of archaeological materials as being “any evidence of human activity.” Additionally, PRC §5097 has specific stop-work and notification procedures to follow in the event that human remains are inadvertently discovered during project implementation.

While no human remains were found during field surveys of the project site, implementation of the following mitigation measure would ensure that all construction activities which inadvertently discover human remains implement state-required consultation methods to determine the disposition and historical significance of any discovered human remains. The following mitigation measure would reduce this impact to a *less-than-significant* level.

3.1 CULTURAL AND TRIBAL RESOURCES

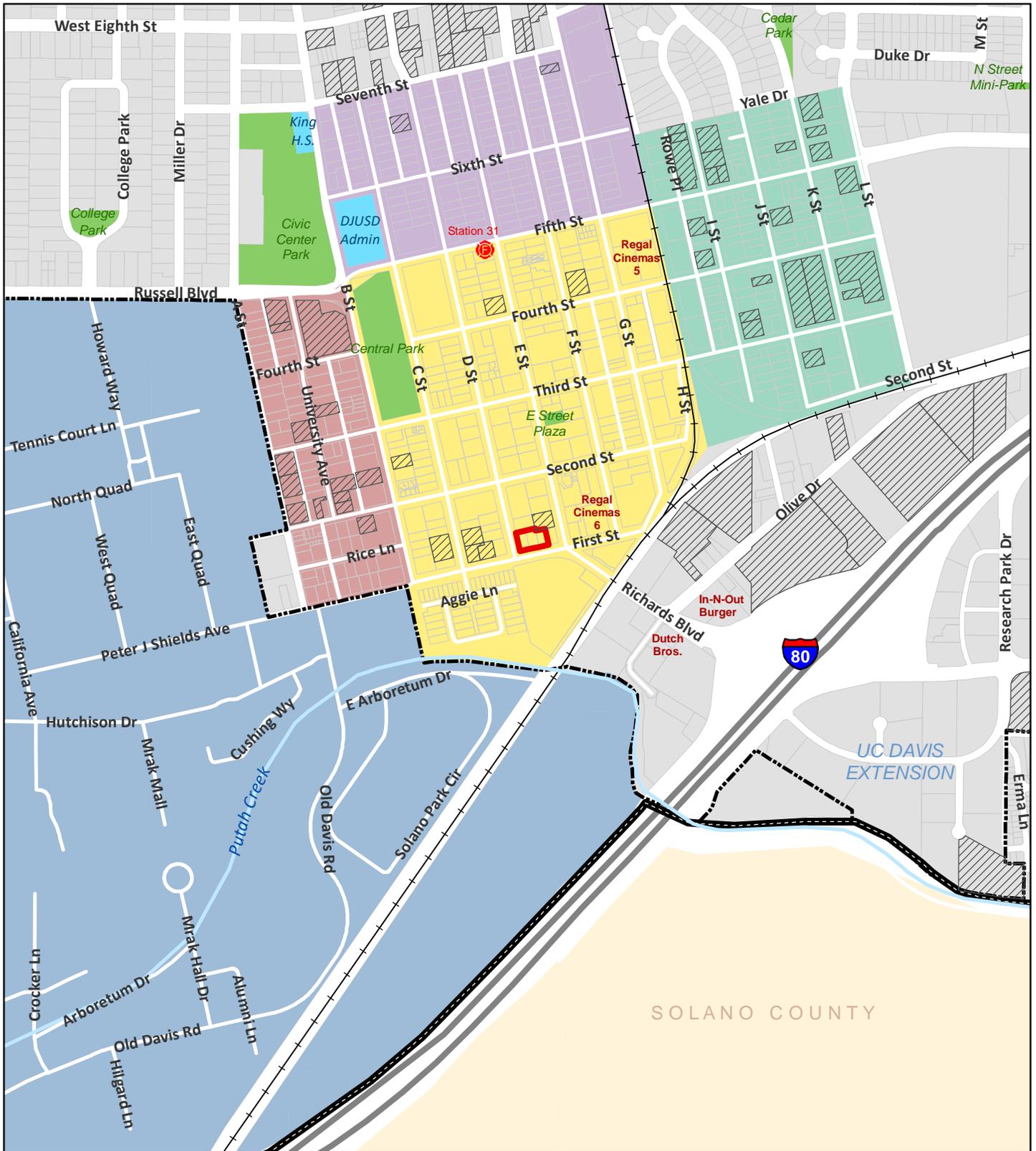
MITIGATION MEASURE(S)

Mitigation Measure 3.1-3: *If human remains are discovered during the course of construction during any phase of the project, work shall be halted at the site and at any nearby area reasonably suspected to overlie adjacent human remains until the Yolo County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:*

- *The coroner shall contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner shall make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.*
- *The landowner shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:*
 - *The Native American Heritage Commission is unable to identify a descendent.*
 - *The descendant identified fails to make a recommendation.*
 - *The City of Davis or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.*

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.1-3 would require construction to halt in the event that human remains are encountered during construction activities. Subsequently, this mitigation measure would ensure that any potential impact to unknown resources is reduced to a ***less than significant*** level.

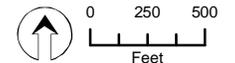


Legend

- | | | |
|---|---|---|
|  Project Boundary |  Fire Station | Neighborhood Districts |
|  Davis City Boundary |  City Park |  Downtown Davis |
|  Yolo County Boundary |  Public School |  Old East Davis |
|  UC Davis |  Apartments |  Old North Davis |
| | |  University Avenue |

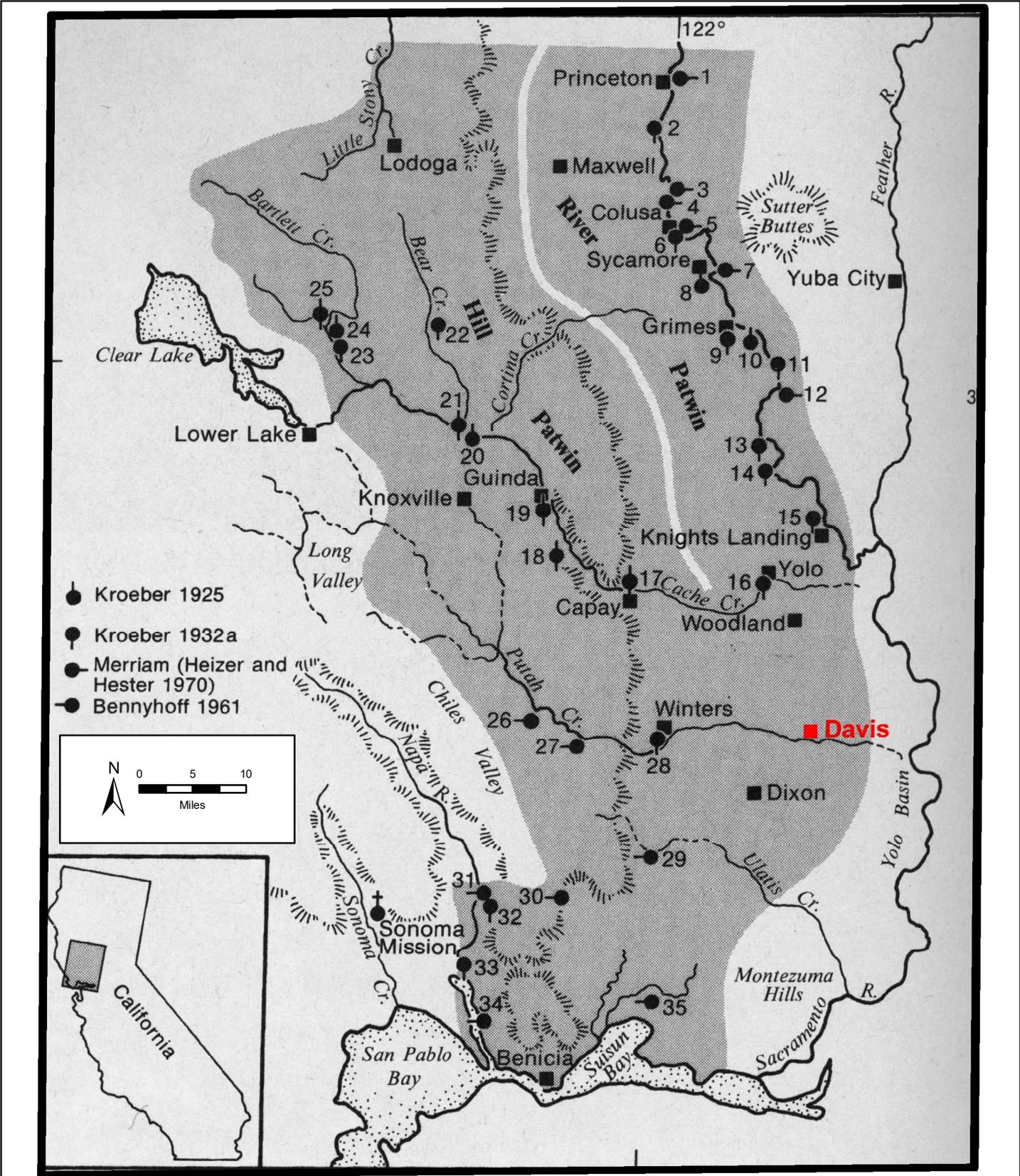
CITY OF DAVIS - THETA XI PROJECT

Figure 3.1-1. Vicinity Map



Sources: Yolo County; City of Davis; CalTrans. Map date: January 16, 2019.

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Source: Johnson, Patti J., 1978, Patwin. In California, edited by Robert F. Heizer, pp. 350-360. Handbook of North American Indians, Volume 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

De Novo map date: June 14, 2019.

CITY OF DAVIS - THETA XI PROJECT
Figure 3.1-2. Patwin Territory

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This EIR section provides a discussion of the existing land use conditions on the proposed project site and the surrounding areas, the regulatory setting, and an impact analysis.

Information in this section is based on information provided by the project applicant, a site visit conducted by De Novo Planning Group in 2019, ground and aerial photographs, and the following reference documents:

- City of Davis General Plan (Amended through January 2007);
- Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School (2000);
- City of Davis Housing Element (2015); and
- City of Davis Municipal Code (2019).

There were no comments regarding land use submitted during the Notice of Preparation (NOP) comment period for the project.

3.2.1 ENVIRONMENTAL SETTING

PROJECT SITE

The project site consists of approximately 0.45 acres located in the central portion of the City of Davis, north of the Interstate 80 (I-80) Freeway, at 503, 509, and 515 First Street. The project site can be identified by its Yolo County Assessor's Parcel Numbers (APNs) 070-244-004, 070-244-005, and 070-244-006. The project site is located in the Davis Downtown Core Area, near what is considered the historic gateway to the City of Davis.

The project's regional location is shown in Figure 2.0-1 and the project area and site boundary are shown in Figure 2.0-2.

SURROUNDING LAND USES

The project site is bounded by Second Street and existing mixed-use development to the north, D Street to the west, First Street to the south, and E Street and the Natsoulas Gallery to the east. The surrounding land uses consists of a mix of retail, single family, and apartment developments along First Street, D Street, and E Street. Adjacent parcels include a funeral home on D Street and Natsoulas Art Gallery on First Street adjacent to the TX Main House. The project site faces a landscaped buffer and the back of a retail building in a shopping plaza (i.e., Davis Commons) on the south side of First Street.

3.2.2 REGULATORY SETTING

STATE

Government Code

California Government Code §65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a jurisdiction and of any land outside its boundaries that, in the jurisdiction's judgment, bears relation to its planning. The general plan addresses a broad range of topics, including, at a minimum, land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the jurisdiction's vision for the area. The general plan is a long-range document that typically addresses the physical character of an area over a 20-year period. Although the general plan serves as a blueprint for future development and identifies the overall vision for the planning area, it remains general enough to allow for flexibility in the approach taken to achieve the plan's goals.

The State Zoning Law (California Government Code §65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific district, are required to be consistent with the general plan and any applicable specific plans. When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure the land uses designated in the general plan would also be allowable by the zoning ordinance (Government Code, §65860, subd. [c]).

LOCAL

City of Davis General Plan

The City of Davis General Plan articulates the community's vision of its long-term physical form and development. The general plan is comprehensive in scope and represents the city's expression of quality of life and community values. General plans are prepared under a mandate from the State of California, which requires that each city and county prepare and adopt a comprehensive, long-term general plan for its jurisdiction and any adjacent related lands. State law requires General Plans to address seven mandated components: circulation, conservation, housing, land use, noise, open space, and safety. Sections IV and VII contain the bulk of the City's General Plan in the form of goals, policies, standards, and actions for a total of 22 separate topics, which address the State-required components as well as additional issues identified by the City. Each of the 22 chapters within these sections provides background information on a topic and the goals, policies, standards and actions that apply to it. Sections IV through VII include:

- Section IV, Community Form, addresses Land Use and Growth Management; Mobility; Urban Design, Neighborhood Preservation, and Community Forest Management Housing; and Economic and Business Development;

- Section V, Community Facilities and Services, addresses Water; Materials, Solid Waste and Recycling, Computers and Technology; Parks, Recreation, and Open Space; Youth and Education; Human Services; Art and Culture; and Diversity;
- Section VI, Community Resource Conservation, addresses Habitat and Natural Areas; Agriculture, Soils, and Minerals; Historic and Archaeological Resources; and Energy;
- Section VII, Community Safety, addresses Police and Fire, Hazards, Air Quality, and Noise.

GENERAL PLAN GOALS, POLICIES, AND STANDARDS

General Plan goals, policies, and standards applicable to environmental issues associated with land use are summarized below.

Goal LU 3 Integrate land use, economic development, environmental, and transportation planning.

Policy LU 3.1 Create an efficient system of planning and zoning.

Standard LU 3.1(a). Specific plans or master site plans that indicate land use densities and intensities, building types, building variety, transit provision, bicycle and pedestrian facilities, and open space areas shall be required for major development areas.

Goal UD 1 Encourage community design throughout the City that helps to build community, encourage human interaction and support non-automobile transportation.

Policy UD 1.1 Promote urban/community design which is human-scaled, comfortable, safe and conducive to pedestrian use.

Goal UD 2 Maintain an aesthetically pleasing environment and manage a sustainable community forest to optimize environmental, aesthetic, social and economic benefits.

Policy UD 2.2 Maintain and increase the amount of greenery, especially street trees, in Davis, both for aesthetic reasons and to provide shade, cooling, habitat, air quality benefits, and visual continuity.

Policy UD 2.3 Require an architectural "fit" with Davis' existing scale for new development projects.

Standard UD 2.3(a). There should be a scale transition between intensified land uses and adjoining lower intensity land uses.

Policy UD 2.4 Create affordable and multi-family residential areas that include innovative designs and on-site open space amenities that are linked with public bicycle/pedestrian ways, neighborhood centers.

Standard UD 2.4(a). Multi-family buildings should provide easy pedestrian access to the nearest transit stop and/or neighborhood center.

Standard UD 2.4(b). Multi-family development design should be compatible with adjoining single family areas.

Standard UD 2.4(c). High density housing should be organized around usable common space.

Standard UD 2.4(a). Multi-family housing complexes should be designed, constructed and managed in projects of no more than 150 units, not including any density bonus.

Goal UD 3 Use good design as a means to promote human safety.

Policy UD 3.1 Use good design to promote safety for residents, employees, and visitors to the City.

Policy UD 3.2 Provide exterior lighting that enhances safety and night use in public spaces, but minimizes impacts on surrounding land uses.

Goal HOUSING 1 Promote an adequate supply of housing for people of all ages, income, lifestyles and types of households consistent with General Plan policies and goals.

Policy HOUSING 1.1 Encourage a variety of housing types that meet the housing needs of an economically and socially diverse Davis.

Standard HOUSING 1(a). Housing, including affordable housing, should include a range of unit sizes appropriate to meet Davis housing needs.

Standard HOUSING 1(b). Each new development area should include a mix of housing types, densities, prices and rents, and designs.

Standard HOUSING 1(c). All new housing construction shall meet minimum densities and will have limited number of overly-large homes.

Policy HOUSING 1.2 Strive to maintain an adequate supply of rental housing in Davis to meet the needs of all renters, including students.

Policy HOUSING 1.3 Encourage the construction of housing to meet the needs of single persons and households with children with extremely low, very low, and low incomes.

GENERAL PLAN LAND USE MAP

The Land Use Map portrays the anticipated uses of land in and around Davis through land use designations. The Land Use Map designates areas intended for urban development, parks/recreation, open space, public/semi-public uses, UC Davis and related research park uses, agriculture, urban/agriculture transition, natural habitat, and urban reserve.

The project site is in the Core Area Specific Plan (CASP), which also includes the City of Davis General Plan and its Land Use Map and Zoning. The General Plan land use designations within the boundaries of the CASP are set forth in the CASP. The General Plan designation for the project site is CASP, and the CASP Land Use designation is Retail Stores. The Downtown of the Core Area (the area bounded by First and Third Streets and D Street and the railroad tracks) is intended to provide a concentration of stores and uses that allows each to benefit from the presence of the others. Retail uses at ground floor level with professional and administrative offices and residential units are encouraged for upper stories in this zone within the Core Area. Cultural and entertainment uses are also permitted at ground floor level. Total floor area may reach three times the site area. Parking structures are excluded from the calculations of floor area ratio.

The Davis CASP is discussed in detail below.

City of Davis Core Area Specific Plan

The CASP study area is located in the City of Davis, Yolo County, California. The study area encompasses approximately 152 acres which is bounded on the south by First Street, on the north by Fifth Street, on the west by A Street and on the east by the Southern Pacific Railroad tracks east of G Street except between Third and Fifth Streets where it is bounded by the alley west of I Street and between G and H Streets where it is bounded to the north by Eighth Street. The study area also includes the commercial area along G Street between Fifth Street and Eighth Street. The heart of the Core Area, referred to as the Downtown Core in the CASP, is bounded by First and Third Streets and D Street and the railroad tracks. The Downtown Core contains the highest concentration of retail uses in the Core Area.

The CASP was prepared as a means of implementing the City's General Plan for the area covered by the CASP. The purpose of the CASP is to provide a comprehensive set of policies, guidelines and implementation strategies for promoting, guiding and regulating growth in the Core Area of Davis. Adopting and implementing the Core Area Specific Plan will allow the area to continue to function as the City's social, cultural, retail center, and professional and administrative office district in a manner that enhances pedestrian activity. The CASP establishes the strategies which are required for the systematic execution of the City's General Plan for the area covered by the CASP. The City General Plan land use designations within the boundaries of the CASP are set forth in the CASP.

The CASP is currently under review for update. In addition, the zoning for the CASP area is also under review for changes from conventional zoning districts to a form-based zoning district. It is anticipated that the living group use would still be conditionally permitted in the form-based zoning code.

The CASP land use designations for the project site and surrounding lands are described as follows.

Retail Stores. The Downtown of the Core Area (the area bounded by First and Third Streets and D Street and the railroad tracks) is intended to provide a concentration of stores and uses that allows each to benefit from the presence of the others. Retail uses at ground floor level with professional and administrative offices and residential units encouraged for upper stories in this zone within the

Core Area. Cultural and entertainment uses are also permitted at ground floor level. Total floor area may reach three times the site area. Parking structures are excluded from the calculations of floor area ratio.

Retail with Offices. This designation allows for mixed retail and office uses with retail uses dominant at ground floor level and offices encouraged as tenants for upper stories. Uses need not be mixed on individual parcels. Retail uses include stores, restaurants, cultural, entertainment, hotels and commercial recreation (such as recreation centers and athletic clubs). Offices include business, professional, government and medical offices. Apartments and owner-occupied condominiums and town homes may be included and are encouraged as tenants for upper stories. Single-family, two-family and duplexes may also be included.

Total floor area in the Retail with Offices District located along Third Street between University Avenue and B Streets and on the northwest corner of B and 2nd Streets are allowed a floor area ratio (FAR) of up to 2:1 maximum including bonus: commercial only 1:1, mixed use 1:1.5; 0.5 FAR bonus allowed for preservation of designated historic structure, underground parking or “Trees Worth Saving”; 0.2:1 FAR bonus for plaza or preservation of “Trees of Significance.” Parking structures are excluded from the calculations of floor area ratio.

Residential – Medium Density. This designation allows for single-family or multi-family residential with densities from 4.2 to 10.0 units per gross acre.

City of Davis Zoning Code

The Davis Zoning Code standards that are applicable to the proposed project are summarized below.

CENTRAL COMMERCIAL DISTRICT

The project site is currently zoned Central Commercial (C-C) by the City of Davis. Section 40.14.030 of the City’s Municipal Code sets forth the permitted uses in the C-C district.

The purposes of the C-C district are as follows: To implement the core area plan; to provide for an increased variety and density of commercial activities; to preserve older architectural styles where feasible, and to encourage a harmonious intermingling of other structures; to permit residential uses where feasible; to promote pedestrian use and enjoyment of the core; to provide an area of intensive commercial activity.

As stated in Section 40.14.030 of the City’s Municipal Code, permitted uses in the C-C district shall be as follows:

- (a) Retail stores, shops and offices supplying commodities or performing services such as department stores, specialty shops, banks, and other financial institutions, personal and business service establishments, antique shops, artists’ supply stores and similar uses, but not including gasoline service stations.

- (b) Restaurants, including outdoor eating areas and establishments, establishments serving alcoholic beverages, and similar enterprises, but not including formula fast food restaurants.
- (c) Professional and administrative offices. First floor office uses discouraged in the downtown core as defined by the core area specific plan. Offices are not discouraged in C-C zones outside the downtown core.
- (d) Medical clinics.
- (e) Hotels and motels.
- (f) Business and technical schools, and schools and studios for photography, art, music, and dance.
- (g) Any other retail business or service establishment which the planning commission finds to be consistent with the purposes of this article and which will not impair the present or potential use of adjacent properties.
- (h) Group care homes with six or fewer clients, subject to the provisions of Section 40.26.135.
- (i) Family and group day care homes as defined in Section 40.01.010.
- (j) Infill developments containing any of the above uses.
- (k) Auto service stations with frontage on Fifth Street.
- (l) Theaters and movie houses.
- (m) Supportive housing.
- (n) Transitional housing.
- (o) Residential structures and apartments with densities up to those permitted in the Residential High Density Apartment (R-HD) district.

As stated in Section 40.14.050 of the City's Municipal Code, conditional uses in the C-C district are as follows:

- (a) Public and semipublic buildings and uses of a recreational, educational, religious, cultural or public services type, but not including corporation yards, storage or repair yards, warehouses and similar uses;
- (b) Infill developments containing any of the above uses;
- (c) On-site grade level parking;
- (d) Nursery schools and day care centers, subject to the provisions of Section 40.26.270;
- (e) Structures exceeding two stories;
- (f) Billiards/pool hall with two or fewer tables that are the sole or principal use or with three or more tables complying with the standards set forth in Section 40.26.055;
- (g) Drive-through facilities, subject to the provisions of Section 40.26.420;
- (h) Formula fast food restaurant. In addition to the considerations established in Section 40.30.080 for the granting of a conditional use permit, the planning commission or city council may consider the following in determining whether or not the use constitutes a nuisance, or is detrimental to the public welfare of the community: litter, odors, exterior design, signage, concentration of like uses, and the extent to which the use enhances the unique characteristics of the core area;
- (i) Group care homes with more than six clients, subject to the provisions of Section 40.26.135;
- (j) Cardrooms, subject to the provisions of Section 40.26.058, Sections 40.25.010 through 40.25.120, and Chapter 8A;

- (k) Drive-through facilities, subject to the provisions of Section 40.26.420;
- (l) Living groups;
- (m) Single room occupancy (SRO) units.

DESIGN REVIEW

Article 40.31 of the City's Municipal Code sets forth the site plan and architectural review process, including the Design Review process. The purpose of the design review process is comprehensive site plan and architectural review so as to determine compliance with Article 40.31 and to promote the orderly and harmonious growth of the city and the stability of land values and investments and the general welfare; and to help prevent the impairment or depreciation of land values and the development by the erection of structures, additions or alterations thereto without proper attention to siting, or of unsightly, undesirable or obnoxious appearance; and to prepare for and help to prevent problems arising affecting the community due to the nature of existing and planned uses of land and structures, such as traffic, public, safety, public facilities, utilities and services, among others.

A site plan and architectural (design review) application shall be approved, conditionally approved, or denied by the community development and sustainability director, planning commission, or city council. Such application may be approved only if the following findings are made:

- (a) The proposed project is consistent with the objectives of the general plan, complies with applicable zoning regulations, and is consistent with any adopted design guidelines for the district within which the project is located;
- (b) The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community;
- (c) The architectural design of the proposed project is compatible with the existing properties and anticipated future developments within the neighborhood in terms of such elements as height, mass, scale, and proportion;
- (d) The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation; and
- (e) The location, climate, and environmental conditions of the site are adequately considered in determining the use of appropriate construction materials and methods. Sufficient conditions are included with the approval to ensure the long-term maintenance of the project. (Ord. 2067 § 1, 2001; Ord. 2390 § 2, 2012)

Pursuant to Zoning Ordinance and the Davis Downtown and Traditional Residential Neighborhoods Design Guidelines, a Tier III Design Review approval is required because the project site is within 300-feet of a designated historical resource, Dresbach-Hunt-Boyer Home, the site is within the Conservation Overlay District, involves merger of two or more parcels, requires approval of a conditional use permit, and involves the demolition of primary buildings 45 years of age or older.

According to the Davis Municipal Code, the Conservation Overlay District supports planning policy stipulating that new development and renovation of existing buildings should respect the traditional scale and character found within a defined area. Conservation Overlay Districts are designated

under Chapter 40 of the Code. However, some individual buildings within the Conservation Overlay District are designated Landmarks or Merit Resources in the Davis Register of Historic Resources.

Settlement Agreement and Release of Claims

The fraternity house that is currently located on the project site is a legal nonconforming use, based on a Settlement Agreement and Release of all Claims (the “Settlement Agreement”) entered into by and between the City and Theta Xi in 1995. However, if two of the buildings are demolished and Theta Xi constructs a new fraternity house on the western lot, the new building will not retain the legal nonconforming status under the City’s Zoning Code. Additionally, if the proposed project is approved, the TX Main House parcel will not retain the legal nonconforming status to operate as a fraternity and/or living group. The fraternity house constitutes a “living group” use, which is a conditional use within the Central Commercial District where the project site is located. Theta Xi therefore would need a Conditional Use Permit (“CUP”) for the proposed new fraternity house.

Section 40.28.050 of the Davis Municipal Code provides that nonconforming uses shall not be enlarged, extended, reconstructed, substituted, or structurally altered, unless the use is changed to a permitted use. For the proposed project, the existing nonconforming use on the three parcels (which would be consolidated into two parcels as part of the project) is a single fraternity. If the TX Main House were to operate as a separate fraternity, next to the proposed three-story Theta Xi fraternity building, the result would be two fraternities operating on the property, rather than just one fraternity. This would be considered an enlargement of the use, and is prohibited by Section 40.28.050 of the Municipal Code.

Davis Downtown and Traditional Residential Neighborhoods Design Guidelines

The Davis Downtown and Traditional Residential Neighborhoods Design Guidelines were adopted by the City in July 2001 and updated in June 2007. The Design Guidelines provide guidance to City staff and policy makers in implementing the policies of the General Plan and the CASP within the Downtown and Traditional Neighborhood Overlay District. The Design Guidelines respond to community concerns about the manner in which new investment in the center of Davis can enhance, rather than erode, its valued character. The proposed goals for the design guidelines are as follows:

- Conserve the traditional neighborhood character, fabric and setting while guiding future development, reuse, and reinvestment.
- Discourage the demolition of structures consistent with the district’s historic character by providing incentives for reuse of non-designated contributing structures.
- Plan for new commercial and residential infill construction that is compatible and complementary to the character of existing neighborhood areas within the district.
- Support the unique function of special character areas in balance with community goals.
- Foster reinvestment and economic development in the core that is consistent with historic conservation.

- Provide guidelines to clarify the community's expectations for the type and quality of development within the district.

The Design Guidelines build on existing General Plan and CASP policies.

The proposed project site is located within the Downtown Core Commercial & Mixed-Use area of Central Davis. The Design Guidelines for projects in this part of Central Davis are included in Part 2 of the Davis Downtown and Traditional Residential Neighborhoods Design Guidelines.

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on land use and planning if it will:

- Physically divide an established community; and/or
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

As discussed in the Initial Study for the proposed project, the project site is located within the Davis city limits and is adjacent to developed land on all sides. The project would result in redevelopment of the site, and the proposed use would not change. Development of the project would not result in any physical barriers, such as a wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing utilities. The project would have **no impact** in regards to the physical division of an established community. Impacts related to this topic will not be discussed further.

IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: Project implementation would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted to avoid or mitigate an environmental effect (Less than Significant with Mitigation)

Consistency with the Davis General Plan, Davis CASP, and Davis Zoning Code are discussed in detail below.

CONSISTENCY WITH THE CITY OF DAVIS GENERAL PLAN

The General Plan designation for the project site is CASP, and the CASP Land Use designation is Retail Stores. As described above, the project site is in the CASP, which also includes the City of Davis

General Plan and its Land Use Map and Zoning. The land use consistency discussion is discussed under the “Consistency with the Davis CASP” section further below. The following discussion focuses on consistency with the applicable General Plan policies related to land use, including those identified above under the “Regulatory Setting” section.

The project is consistent with Urban Design policies related to land use. Policy UD 1.1 promotes urban/community design which is human-scaled, comfortable, safe and conducive to pedestrian use. Visual Simulations (Figure 2.0-8 in Chapter 2.0 Project Description) illustrates the proposed three-story fraternity building from various viewpoints. As shown in the figure, the project has been designed to be human-scale. The building is setback from the adjacent streets (including First Street and D Street), and the building includes articulations which provide visual relief. One of the project objectives is to address the deficiencies in the structural integrity of the three houses to increase safety for its occupants. The project would increase the comfort and safety of the site structures compared to the existing condition.

Policy UD 2.2 aims to maintain and increase the amount of greenery, especially street trees, in Davis, both for aesthetic reasons and to provide shade, cooling, habitat, air quality benefits, and visual continuity. The project would retain some of the on-site trees. The site currently contains approximately 28 trees, including those located along the frontages of First Street and D Street. Eleven of these trees (all locust trees) are located along First and D Streets. The street trees along First and D Streets would not be removed with redevelopment of the site. The retention of the eleven street trees and proposed landscaping on the redevelopment site would ensure that the amount of greenery along First and D Streets is maintained. Other trees located internal to the site would be removed. The trees surrounding the TX Main House are not anticipated for removal; however, the trees surrounding the Jackson House and Bryson House, which are proposed for demolition, would be removed. The project would landscape the site in conjunction with construction of the proposed three-story building. According to the landscape plan for the project, the completed project site (including all three residential lots) would contain 14 trees on-site. This is a reduction from the current number of trees on the site. As such, the project as proposed is not consistent with Policy UD 2.2.

Mitigation Measure 3.2-1 requires, in conjunction with submittal of improvement plans for the project, that the project applicant submit a final landscape plan to the City of Davis which shows that the project site (including all three residential lots) would maintain or increase the amount of greenery, especially trees, that currently (as of April 2019) exists on-site. In addition, the landscape plan must include a palette of shrubs, perennial ground cover, grasses, etc. that balances the need to maintain or increase greenery while being conscientious of drought tolerance and water conservation within the landscaping. Implementation of Mitigation Measure 3.2-1 would ensure compliance with Policy UD 2.2. It is noted that the project would be subject to the City’s Tree Ordinance. Compliance with the City’s Tree Ordinance would be addressed by a standard City condition of approval, which requires preparation of a Tree Protection Plan for trees being preserved and approval of Tree Modification Permit for trees being removed with standard measures for tree replacement or payment for the appraised value of the trees. The Tree Protection Plan would include measures to ensure that all trees to be preserved would be protected during

construction of the project. For instance, the standard conditions of approval would include the following requirements:

1. Applicant needs to submit a complete tree inventory of all trees 5" in diameter and greater. The Arborist report only has six trees listed with other trees being shown on the site map.
2. Applicant needs to submit a tree protection plan and plan set sheet for tree protection of the trees to remain and the street trees on First and D Streets.
3. Applicant needs to submit the trees to be removed with species and diameters.

Policy UD 2.3 requires an architectural "fit" with Davis' existing scale for new development projects. The project proposes to preserve one on-site building, demolish two of the on-site buildings, and construct a three-story residential building for use by the Theta Xi Fraternity. The proposed three-story building would be constructed at a similar size and scale as existing buildings in the immediate vicinity. For example, the Regency Square office and retail building at the corner of D and Second Streets is three stories tall with limited building setbacks adjacent to the sidewalks. Additionally, several mixed-use buildings along E Street are two to three stories.

Further, as noted above, Tier III Design Review approval is required given that the project site is within 300-feet of a designated historical resource, Dresbach-Hunt-Boyer Home. Tier III Design Review projects are reviewed by staff, the Historical Resources Management Commission, and finally by the Planning Commission. The action of the Planning Commission may be appealed by any party to the City Council. The City's Community Development and Sustainability Department would provide a preliminary review of the applicant-provided final project plans. Preliminary review by the Community Development and Sustainability Department for compliance with the following findings in addition to review for compliance with the guidelines in the DDTRN Design Guidelines:

- (a) Indicate to the applicant major areas of deficiency and good design;
- (b) Instruct the applicant as to sections of the project which are unacceptable or need minor revision; and
- (c) Inform the community development and sustainability department on the scope of the project of the final review stage.

The Design Review application may be approved only if the following findings are made:

- (a) The proposed project is consistent with the objectives of the general plan, complies with applicable zoning regulations, and is consistent with any adopted design guidelines for the district within which the project is located;
- (b) The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community;
- (c) The architectural design of the proposed project is compatible with the existing properties and anticipated future developments within the neighborhood in terms of such elements as height, mass, scale, and proportion;
- (d) The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation; and
- (e) The location, climate, and environmental conditions of the site are adequately considered in

determining the use of appropriate construction materials and methods. Sufficient conditions are included with the approval to ensure the long-term maintenance of the project.

The Design Review process is an established administrative process that is designed to ensure that proposed buildings “fit” with the existing architectural scale in the project vicinity, although Tier III is not an administrative action design review. The proposed project is subject to the Design Review process and any design revisions required during that process. As such, the project does not conflict with Policy UD 2.3.

Policy UD 2.4 requires creation of affordable and multi-family residential areas that include innovative designs and on-site open space amenities that are linked with public bicycle/pedestrian ways, neighborhood centers. The project would create student housing, which functions like multi-family housing. The tenants would be UC Davis students that are members of the Theta Xi Fraternity.

Additionally, the project includes on-site amenities (including, but not limited to, a Bike Barn, back yard area with gathering spaces, living and study areas, etc.) for Theta Xi Fraternity members. The project site is also located in an area of Davis that is linked with bicycle/pedestrian facilities adjacent to a commercial center (including downtown Davis to the east and the Davis Commons shopping plaza to the south). As such, the project is consistent with Policy UD 2.4.

Policy UD 3.1 requires the use of good design to promote safety for residents, employees, and visitors to the City. Energy efficiency and sustainable design features would include high levels of envelope insulation, high efficiency HVAC, LED Lighting, solar shading devices, electric vehicle charging outlets, and a low water use landscaping and irrigation system. It is anticipated that the project would target a “LEED Silver” equivalency. The project would improve the safety of the site by constructing a new building that addresses the current deficiencies in the structural integrity. As such, the project is consistent with Policy UD 3.1.

Policy UD 3.3 requires the provision of exterior lighting that enhances safety and night use in public spaces, but minimizes impacts on surrounding land uses. The project design includes improved exterior lighting that would enhance safety in the immediate area while also minimizing impacts on surrounding uses. The proposed LED lighting would result in an improvement of the light spillage compared to the existing condition and would illuminate the adjacent public sidewalk areas. As such, the project is consistent with Policy UD 3.3.

Policy HOUSING 1.1 encourages a variety of housing types that meet the housing needs of an economically and socially diverse Davis. The project would improve the supply of rental housing for the Theta Xi Fraternity members by addressing the structural deficiencies of the existing housing site. Additionally, the TX Main House would be placed on the open market for purchase at a market rate. As such, the project is consistent with Policy HOUSING 1.1.

Policy HOUSING 1.2 strives to maintain an adequate supply of rental housing in Davis to meet the needs of all renters, including students. The TX Main House would be placed on the open market for purchase at a market rate. It is not known if the future purchaser would be an owner occupied or

make the property available for rent. The proposed beds of the Fraternity House would be rented out to Theta Xi Fraternity members, who are members of the student population in Davis. As such, the project is consistent with Policy HOUSING 1.2.

Policy HOUSING 1.3 encourages the construction of housing to meet the needs of single persons and households with children with extremely low, very low, and low incomes. The project would create student housing, which is generally composed of single persons. The Theta Xi Fraternity house is not intended for households with children. The proposed beds of the Fraternity House would be rented out by the bed (and not by room or by unit). The TX Main House would be placed on the open market for purchase at a market rate. It is not known if the future purchaser would be an owner occupied or make the property available for rent. This property is not currently rent restricted, nor is it proposed to be rent restricted. As such, the project does not conflict with Policy HOUSING 1.3.

CONSISTENCY WITH THE DAVIS CASP

The General Plan and CASP Land Use designation of the site is Retail Stores. The CASP provides the following guidance for the Retail Stores designation: “The Downtown of the Core Area (the area bounded by First and Third Streets and D Street and the railroad tracks) is intended to provide a concentration of stores and uses that allows each to benefit from the presence of the others. Retail uses at ground floor level with professional and administrative offices and residential units encouraged for upper stories in this zone within the Core Area. Cultural and entertainment uses are also permitted at ground floor level. Total floor area may reach three times the site area. Parking structures are excluded from the calculations of floor area ratio. As there is a significant need for child-care facilities to be included in private developments, child-care facilities may be appropriate uses within any of the following land-use classifications.”

The CASP encourages retail uses at the ground floor level in the Retail Stores area, with professional and administrative offices and residential units in the upper stories. The CASP does not list allowed, conditionally allowed, or prohibited uses for the Retail Stores land use designation. Additionally, the CASP does not explicitly prohibit ground floor residential uses in the Retail Stores area, and does note that some residential uses exist in the Retail Stores area of the Downtown Core.

As discussed above, the project is consistent with the City’s General Plan. Additionally, because the CASP does not prohibit ground floor residential uses in the Retail Stores area, the proposed residential use, living group, would not conflict with the applicable CASP land use designation. Approval of the living group would not conflict with any other applicable Core Area Specific Plan objectives, policies, standards or actions.

CONSISTENCY WITH THE ZONING CODE

The project site is currently zoned C-C. As stated in Section 40.14.030 of the City’s Municipal Code, permitted uses in the C-C district shall be as follows:

- (a) Retail stores, shops and offices supplying commodities or performing services such as department stores, specialty shops, banks, and other financial institutions, personal and

- business service establishments, antique shops, artists' supply stores and similar uses, but not including gasoline service stations.
- (b) Restaurants, including outdoor eating areas and establishments, establishments serving alcoholic beverages, and similar enterprises, but not including formula fast food restaurants.
 - (c) Professional and administrative offices. First floor office uses discouraged in the downtown core as defined by the core area specific plan. Offices are not discouraged in C-C zones outside the downtown core.
 - (d) Medical clinics.
 - (e) Hotels and motels.
 - (f) Business and technical schools, and schools and studios for photography, art, music, and dance.
 - (g) Any other retail business or service establishment which the planning commission finds to be consistent with the purposes of this article and which will not impair the present or potential use of adjacent properties.
 - (h) Group care homes with six or fewer clients, subject to the provisions of Section 40.26.135.
 - (i) Family and group day care homes as defined in Section 40.01.010.
 - (j) Infill developments containing any of the above uses.
 - (k) Auto service stations with frontage on Fifth Street.
 - (l) Theaters and movie houses.
 - (m) Supportive housing.
 - (n) Transitional housing.
 - (o) Residential structures and apartments with densities up to those permitted in the R-H-D district.

According to the City of Davis City Attorney, the fraternity house that is currently located on the project site is a legal nonconforming use, based on a Settlement Agreement and Release of all Claims entered into by and between the City and Theta Xi in 1995. However, as noted previously in the Regulatory Setting, if two of the buildings are demolished and Theta Xi constructs a new fraternity house on the western lot (as proposed), the new building would not retain the legal nonconforming status under the City's Zoning Code. The fraternity house constitutes a "living group" use, which is a conditional use within the Central Commercial District where the project site is located. Therefore, the project would need approval of a Conditional Use Permit (CUP) for the proposed new fraternity house.

Upon approval of the CUP, the proposed project would not conflict with any land use plan, policy or regulation given that the CUP would facilitate consistency for the proposed residential fraternity uses. The project would not require a rezone.

Additionally, as noted above, Tier III Design Review approval is required because the project site is within 300-feet of a designated historical resource, Dresbach-Hunt-Boyer Home, and the site is within the Conservation Overlay District. According to the Davis Municipal Code, the Conservation Overlay District supports planning policy stipulating that new development and renovation of existing buildings should respect the traditional scale and character found within a defined area. Conservation Overlay Districts are designated under Chapter 40 of the Code. However, some

individual buildings within the Conservation Overlay District are designated Landmarks or Merit Resources in the Davis Register of Historic Resources. Compliance with the City's Tier III Design Review process would ensure that the proposed building respect the traditional scale and character found in the project area.

Further, as noted above, the City's Community Development and Sustainability Department would provide a preliminary review of the applicant-provided final project plans. The Design Review application may be approved only if the following findings are made:

- (a) The proposed project is consistent with the objectives of the general plan, complies with applicable zoning regulations, and is consistent with any adopted design guidelines for the district within which the project is located;
- (b) The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community;
- (c) The architectural design of the proposed project is compatible with the existing properties and anticipated future developments within the neighborhood in terms of such elements as height, mass, scale, and proportion;
- (d) The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation; and
- (e) The location, climate, and environmental conditions of the site are adequately considered in determining the use of appropriate construction materials and methods. Sufficient conditions are included with the approval to ensure the long-term maintenance of the project.

CONCLUSION

Overall, the project would be generally consistent with the City's General Plan, Davis CASP, and Davis Zoning Code. However, as discussed above, the completed project site (including all three residential lots) would contain 14 trees on-site (which would be a reduction from the current number of trees on the site). Therefore, the project is not consistent with General Plan Policy UD 2.2, which aims to maintain and increase the amount of greenery, especially street trees, in Davis. This is a potentially significant impact.

MITIGATION MEASURE(S)

Mitigation Measure 3.2-1: *In conjunction with submittal of improvement plans for the project, the project applicant shall submit a final landscape plan to the City of Davis which shows that the project site (including all three residential lots) would maintain or increase the amount of greenery, especially trees, that currently (as of April 2019) exists on-site. The site currently (as of April 2019) contains 28 trees, including those located along the frontages of First Street and D Street. In addition, the landscape plan shall include a palette of shrubs, perennial ground cover, grasses, etc. that balances the need to maintain or increase greenery while being conscientious of drought tolerance and water conservation within the landscaping, consistent with the City's Model Water Efficient Landscape Ordinance.*

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.2-1 would require submittal of a final landscape plan, which shows that the project would maintain or increase the amount of greenery, including trees, shrubs, perennial ground cover, grasses, etc. The measure calls for consideration of water conservation in addition to the need to maintain or increase greenery.

Subsequently, this mitigation measure would ensure that any potential impact related to General Plan consistency is reduced to a *less than significant* level.

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The California Environmental Quality Act (CEQA) requires an Environmental Impact Report (EIR) to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents discussion of CEQA-mandated analysis for cumulative impacts and irreversible impacts associated with the Theta Xi Fraternity Redevelopment Project. As described below, this section also includes an analysis of the project's growth-inducing impacts.

4.1 CUMULATIVE SETTING AND IMPACT ANALYSIS

INTRODUCTION

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the proposed project. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

...the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

- 1) Either:
 - (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,
 - (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.
- 2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

- 3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

CUMULATIVE SETTING

The cumulative analysis for this EIR is based on the City of Davis General Plan (May 2001) and the Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School (General Plan Update EIR) (January 2000). In addition to the cumulative growth projections provided by these documents, the cumulative analysis also used the following list of probable future projects within the City of Davis to determine cumulative growth in the area:

- **Paso Fino:** 6 single-family units
- **2860 West Covell Boulevard Building:** 8,657 square feet of retail
- **Grande Subdivision:** 41 single-family units
- **Chiles Ranch:** 96 single-family units
- **Villages at Willow Creek:** 35 single-family units
- **Lincoln 40:** 130 multi-family, student-oriented units
- **Sterling Apartments:** 198 multi-family units
- **Cannery Park (Remainder of Buildout):** 86,250 square feet of retail, 49,800 square feet of office, 22,000 square feet of medical-office, 311 single-family dwelling units, and 264 multi-family units.
- **Sutter Hospital Expansion:** Based on discussions with Sutter Davis Hospital representatives, a net increase of 100,000 square feet of medical-office space was assumed on the hospital property, which is located directly east of the project site.
- **West Davis Active Adult Community:** According to the December 2017 Draft EIR for the West Davis Active Adult Community Project, the project includes development of: 150 affordable, age-restricted apartments; 32 attached, age-restricted cottages; 94 attached, age-restricted units; 129 single-family detached, age-restricted units; 77 single-family detached, non-age-restricted units; an approximately three-acre continuing care retirement community, which would likely consist of 30 assisted living, age-restricted detached units; an approximately 4.3-acre mixed use area, which would likely consist of a health club, restaurant, clubhouse, and up to 48 attached, age-restricted units; dog exercise area and tot lot; associated greenways, drainage, agricultural buffers; and off-site stormwater detention facilities. Upon completion of the project, the approximately 74-acre site would provide up to 560 dwelling units and 4.5 miles of off-street biking and walking paths within the project area and an additional 0.22 miles of off-street biking and walking paths offsite.

- **UC Davis Long Range Development Plan (LRDP):** According to the 2017 Notice of Preparation for the update to the LRDP (dated January 4, 2017), the UC Davis campus is assumed to have a net increase of 6,229 students and 2,000 employees between existing conditions and the 2027-2028 academic year. The LRDP NOP makes no mention of further growth beyond the 2027-2028 year.

CUMULATIVE EFFECTS OF THE PROJECT

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). Consistent with state CEQA Guidelines §15130(a), the discussion of cumulative impacts in this Draft EIR focuses on significant and potentially significant cumulative impacts. According to §15130(b) of the State CEQA Guidelines, in part, "The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

The goal of analysis of cumulative impacts is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant; and second, to determine whether the proposed project itself would cause a "cumulatively considerable" (and thus significant) incremental contribution to any such cumulatively significant impacts. (See state CEQA Guidelines §§15130[a]-[b], §15355[b], §15064[h], §15065[c]; *Communities for a Better Environment v. California Resources Agency* [2002] 103 Cal.App.4th 98, 120.) In other words, the required analysis first creates a broad context in which to assess the project's incremental contribution to anticipated cumulative impacts, viewed on a geographic scale well beyond the project site itself, and then determines whether the proposed project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable").

There are two approaches to identifying cumulative projects and the associated impacts. The list approach identifies individual projects known to be occurring or proposed in the surrounding area in order to potential cumulative impacts. The projection approach uses a summary of projections

in adopted General Plans or related planning documents to identify potential cumulative impacts. This EIR uses a combination of the list approach and the projection approach for the cumulative analysis and considers the development anticipated to occur upon buildout of the Davis General Plan in addition to the aforementioned planning projects (Paso Fino, 2860 West Covell Boulevard Building, Grande Subdivision, Chiles Ranch, Villages at Willow Creek, Lincoln 40, Sterling Apartments, Cannery [remainder of buildout], Sutter Hospital Expansion, West Davis Active Adult Community, and UC Davis LRDP) that are presumed not to have been included within the projections provided by the Davis General Plan.

Project Assumptions

The project's contribution to environmental impacts under cumulative conditions is based on full buildout of the proposed project. See Chapter 2.0, Project Description, for a complete description of the proposed project.

Cumulative Impacts

Cumulative impacts for Cultural and Tribal Resources and Land Use are not quantifiable and are therefore discussed in qualitative terms as they pertain to development patterns in the surrounding region. In consideration of the cumulative scenario described above, the proposed project may result in the following cumulative impacts.

CULTURAL AND TRIBAL RESOURCES

Impact 4.1: Project implementation would not contribute to cumulative impacts on known and undiscovered cultural and tribal cultural resources (Less than Cumulatively Considerable)

The cumulative setting for cultural resources includes the City of Davis Planning Area and the surrounding areas of Yolo County. Cumulative development anticipated in Davis and the greater Yolo County area, including growth projected by adopted general plans, may result in the discovery and removal of cultural resources, including archaeological, paleontological, historical, and Native American resources and human remains. As discussed in Section 3.1, Cultural and Tribal Resources, three locally-historic resources are located on the project site: the Jackson House (503 First Street), the Bryson House (509 First Street), and the Theta Xi (TX) Main House (515 First Street). Because the Jackson House (503 First Street) and Bryson House (509 First Street) buildings are significant resources or historic properties, demolition of the buildings is a significant impact under CEQA.

Implementation of Mitigation Measure 3.1-1 would require preparation of a Historic Documentation Report which includes current photographs of each building displaying each elevation, architectural details or features, and overview of the buildings, together with a textual description of the building along with additional history of the building, its principal architect or architects, and its original occupants to the extent that information about those occupants can be obtained. The Report would be deposited with the City of Davis Community Development and Sustainability Department, the Hattie Weber Museum, the State Office of Historic Preservation,

and other appropriate organizations and agencies as identified by the Planning Department. Mitigation Measure 3.1-1 also requires that a publicly-accessible memorial or interpretive plaque/display, which identifies the former location of the building, its original owner, and its historic significance, be maintained on the project site.

Additionally, the project site is located in an area known to have cultural and tribal cultural resources. The project site is not expected to contain subsurface paleontological resources, although it is possible. Mitigation measures provided in Section 3.1 would require the proposed project to evaluate any resources discovered during construction activities. Any significant finds would be required to be preserved, either through relocation or documentation and the project is not anticipated to considerably contribute to a significant reduction in cultural resources. Therefore, the project would have a **less than cumulatively considerable** contribution to impacts to cultural resources and no further mitigation is required.

LAND USE

Impact 4.2: Project implementation would not to cumulative impacts on local land uses (Less than Cumulatively Considerable)

The cumulative setting for land use and planning impacts includes the City of Davis and the Davis Planning Area, as well the aforementioned planning projects (Paso Fino, 2860 West Covell Boulevard Building, Grande Subdivision, Chiles Ranch, Villages at Willow Creek, Lincoln 40, Sterling Apartments, Cannery [remainder of buildout], Sutter Hospital Expansion, West Davis Active Adult Community, and UC Davis LRDP). Cumulative land use and planning impacts, such as consistency with adopted plans and regulations, are typically site- and project-specific. Subsequent projects allowed by the Davis General Plan may result in site specific land use conflicts; however, these effects are not anticipated to be cumulatively considerable.

Prior to project construction, the City of Davis would review the proposed improvement plans for compliance with the Tier III Design Review process. As part of the project approval process, the project would need approval of a Conditional Use Permit (CUP) for the proposed new fraternity house.

The proposed project has been designed to be consistent with applicable aspects of the City's General Plan, Central Area Specific Plan, and Municipal Code. The project's contribution to cumulative land use impacts is **less than cumulatively considerable**, and no further mitigation is required.

4.2 GROWTH-INDUCING EFFECTS

INTRODUCTION

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

Section 15126 of the CEQA Guidelines identifies criteria for evaluating the extent to which growth could be induced, accelerated, intensified, or shifted as a result of the proposed project. Subsection (d) provides the framework for a discussion of these potential growth-inducing impacts, as follows:

- Would the project foster economic or population growth or the construction of additional housing?
- Would the project remove obstacles to population growth?
- Would the project tax existing community facilities?
- Would the project encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

The proposed project would result in the construction of additional housing within the City of Davis. As discussed in Section XIV, Population and Housing, of the Initial Study for the project (see Appendix A of this EIR), the proposed project would result in the construction of replacement residential housing on a site that currently contains residential uses. The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. This would result in three fewer beds and four additional bathrooms compared to the existing houses. The project is consistent with the existing fraternity operations and would not increase the capacity of the project site. Therefore, the project would not foster population growth.

By providing replacement fraternity housing within the City of Davis, the project would provide an area for the Theta Xi Fraternity members to live. The project would not remove obstacles to population growth.

Additionally, as discussed in Section XV, Public Services, and Section XVI, Recreation, the proposed project would not include additional residential units, or people to the City of Davis. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for fire protection, police protection, schools, parks, or other public facilities will be created by the project. The proposed project does not trigger the need for new facilities associated with other public services.

As demonstrated throughout this Draft EIR, the proposed project would not encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively. Any significant or potentially significant impacts discussed throughout this Draft EIR would occur within the proposed project site only.

4.3 SIGNIFICANT IRREVERSIBLE EFFECTS

Legal Considerations

CEQA Section 15126.2(c) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), requires that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irrecoverable commitments of resources should be evaluated to assure that such current consumption is justified.

Analysis

Implementation of the proposed project would result in demolition of two of the three existing buildings, merging the three lots, re-subdividing the property into two lots, and redevelopment of one parcel with a consolidated 35-bed, three-story fraternity building. The project site is currently developed with three two-story adjacent Theta Xi fraternity houses, totaling 19,800 square feet (sf). The three lots are owned by the Beta Epsilon Association of Theta Xi, a non-profit California corporation, and occupied by the fraternity. The site has provided student housing dating from 1950 when Theta Xi acquired the first of the three lots. Development of the proposed project would constitute a continued, long-term commitment to residential uses.

A variety of resources, including land, energy, water, construction materials, and human resources would be irretrievably committed for the project's initial construction, infrastructure installation, and its continued maintenance. Construction of the project would require the commitment of a variety of other non-renewable or slowly renewable natural resources such as lumber and other forest products, sand and gravel, asphalt, petrochemicals, and metals.

The demolition of the two residences and subsequent development of the proposed three-story fraternity residence would result in three fewer beds (i.e., three fewer residents) compared to the existing condition.

Additionally, a variety of resources would be committed to the continued, ongoing operation and life of the proposed fraternity uses. As discussed in Section XVII, Transportation, of the Initial Study

for the project, the demolition of the two residences and subsequent development of the proposed three-story fraternity residence would result in three fewer beds (i.e., three fewer residents) compared to the existing condition. Therefore, as noted above, the number of operational trips would be comparable to the existing baseline. The increase of 3.56 daily trips would be spread out throughout the day, meaning that the number of peak hour trips would be negligible. No other uses or visitor serving areas are included in the project. Therefore, the project is not expected to result in an overall increase in vehicle trips within the area. Fossil fuels are the principal source of energy and the project will negligibly increase consumption of available supplies, including gasoline and diesel fuel, and natural gas. These energy resource demands relate to initial project construction, project operation, and site maintenance and the transport of people and goods to and from the project site.

The proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal. Additional information the estimated energy usage of the proposed project can be found in Section VI, Energy, of the Initial Study for the project. This impact concluded that project implementation would not result in the inefficient, wasteful, or unnecessary use of energy resources.

4.4 SIGNIFICANT AND UNAVOIDABLE IMPACT

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impact of the Theta Xi Fraternity Redevelopment Project is discussed in Section 3.1:

- Impact 3.1-1: Project implementation has the potential to cause a substantial adverse change to a significant historical resource, as defined in CEQA Guidelines §15064.5.

5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all project objectives while reducing or avoiding one or more significant environmental effects of the project. The range of alternatives required in an EIR is governed by a “rule of reason” that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

Alternatives that are evaluated in the EIR must be potentially feasible alternatives. However, not all possible alternatives need to be analyzed. An EIR must “set forth only those alternatives necessary to permit a reasoned choice.” (CEQA Guidelines, Section 15126.6(f).) The CEQA Guidelines provide a definition for a “range of reasonable alternatives” and, thus limit the number and type of alternatives that need to be evaluated in an EIR.

First and foremost, alternatives in an EIR must be potentially feasible. In the context of CEQA, “feasible” is defined as:

... capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. (CEQA Guidelines 15364)

The inclusion of an alternative in an EIR is not evidence that it is feasible as a matter of law, but rather reflects the judgment of lead agency staff that the alternative is potentially feasible. The final determination of feasibility will be made by the lead agency decision-making body through the adoption of CEQA Findings at the time of action on the Project. (Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 477, 489 see also CEQA Guidelines, §§ 15091(a) (3)(findings requirement, where alternatives can be rejected as infeasible); 15126.6 ([an EIR] must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation”). The following factors may be taken into consideration in the assessment of the feasibility of alternatives: site suitability, economic viability, availability of infrastructure, general plan consistency, other plan or regulatory limitations, jurisdictional boundaries, and the ability of the proponent to attain site control (Section 15126.6 (f) (1)).

Equally important to attaining the project objectives is the reduction of some or all significant impacts, particularly those that could not be mitigated to a less than significant level. The following significant and unavoidable impact of the Theta Xi Fraternity Redevelopment Project is discussed in Section 3.1:

- Impact 3.1-1: Project implementation has the potential to cause a substantial adverse change to a significant historical resource, as defined in CEQA Guidelines §15064.5.

5.0 ALTERNATIVES TO THE PROPOSED PROJECT

The following analysis of alternatives focuses on significant impacts, including both those that can be mitigated to a less than significant level and the one impact that would remain significant even if mitigation is applied or for which no feasible mitigation is available.

A Notice of Preparation was circulated to the public to solicit recommendations for a reasonable range of alternatives to the proposed project. Additionally, a public scoping meeting was held during the public review period to solicit recommendations for a reasonable range of alternatives to the proposed project. The following comment was received related to potential alternatives to the project to be addressed in the EIR:

- The EIR should include a project alternative that preserves two of the three buildings: preserve one for ultimate sale (i.e., the building near the Natsoulas Gallery), and renovate one for use by the fraternity.

This suggested alternative is discussed below (see the Preservation, Renovation, and Addition Alternative and Preservation, Renovation, and New Build Alternative).

PROJECT OBJECTIVES

The alternatives to the proposed project selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic objectives of the project. As described in Chapter 2.0, Project Description, the following objectives have been identified for the Theta Xi Fraternity Redevelopment Project:

1. Address deficiencies in the structural integrity of the three houses used to house the undergraduate members of the Theta Xi Fraternity on First Street in Davis, CA, as identified in the report by Pemberton Engineering, dated July 27, 2016;
2. Renovate the subject properties in a way that provides for the needs of UCD students by ensuring that housing is competitive both in rent and amenities available within the City of Davis, including on-campus housing, in order to ensure the sustainability of the fraternity;
3. Use the value embedded in the three owned lots to assist in funding the renovation project by consolidating the housing needs of the fraternity onto a smaller footprint;
4. Construct the new building with features that will allow it to achieve a high level of energy efficiency and reduce ongoing maintenance costs; and
5. Continue to use the new facility as classrooms that, through fellowship and alumni guidance, lead to the wholesome mental, moral, physical, and spiritual growth that is the purpose of the Theta Xi Fraternity.

ALTERNATIVES NOT SELECTED FOR FURTHER ANALYSIS

The City of Davis and the project applicant considered alternative locations early in the public scoping process. The City's key considerations in identifying an alternative location were as follows:

- Is there an alternative location where significant effects of the project would be avoided or substantially lessened?
- Is there a site available within the City or the City's Sphere of Influence with the appropriate size and characteristics such that it would meet the basic project objectives?

Two hypothetical off-site alternatives were developed: the New Construction (Off-Site) Alternative, and the Acquisition and Renovation (Off-Site) Alternative. It is noted that alternative locations for these project alternatives have not been specifically identified, and may or may not be available or feasible for the project applicant. Under the New Construction (Off-Site) Alternative, land would be purchased off-site and the proposed facilities would be constructed at an off-site location. This alternative would be very similar to the proposed project, except that: 1) the project would not be constructed on First Street in an area determined to be ideally situated among the campus, the downtown area, and the Amtrak Railroad Station; and 2) the project could be more expensive because of land acquisition costs that would include costs for previously installed infrastructure (e.g., roads, sewer, flood control, utilities, etc.), and could also necessitate expenditures for required infrastructure if the infrastructure has not been previously provided. The number of beds and bathrooms is assumed to be comparable to the proposed project.

The project applicant has not been able to identify a potential site for acquisition that meets the fraternity's project objectives. Because of the size of the rural land surrounding UC Davis and the City of Davis, any potential land acquisition would be at a considerable distance from campus and much farther away from downtown Davis and the Amtrak Station. This alternative could also result in additional environmental impacts compared to the proposed project because of increased construction impacts (noise, air quality, water runoff, etc.) stemming from the provision of the basic infrastructure. Therefore, the New Construction (Off-Site) Alternative is dismissed from further analysis.

Under the Acquisition and Renovation (Off-Site) Alternative, existing improved land (i.e., land which is currently developed with residential uses) in the project area with a comparable proximity to the campus, the downtown area, and the Amtrak Station would be purchased, and the structures would be remodeled to meet the needs of the fraternity. The number of beds and bathrooms is assumed to be comparable to the proposed project.

The project applicant has not been able to identify a site that is currently on the market for potential acquisition, and it is unlikely that such a site would be on the market in the near future. The potential land acquisition cost would significantly increase the cost of the project and would likely be prohibitive. Additionally, if such a site were to be identified, neighborhood opposition to a new fraternity in the neighborhood would be anticipated, which would present a substantial obstacle to implementation. Therefore, the Acquisition and Renovation (Off-Site) Alternative is dismissed from further analysis.

In addition, as discussed in *Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553 (Goleta II)*, where a project is consistent with an approved general plan, no off-site alternative

5.0 ALTERNATIVES TO THE PROPOSED PROJECT

need be analyzed in the EIR. The EIR “is not ordinarily an occasion for the reconsideration or overhaul of fundamental land-use policy.” (Goleta II, supra, 52 Cal.3d at p. 573.) In approving a general plan, the local agency has already identified and analyzed suitable alternative sites for particular types of development and has selected a feasible land use plan. “Informed and enlightened regional planning does not demand a project EIR dedicated to defining alternative sites without regard to feasibility. Such ad hoc reconsideration of basic planning policy is not only unnecessary, but would be in contravention of the legislative goal of long-term, comprehensive planning.” (Goleta II, supra, 52 Cal.3d at pp. 572-573.) Here, the proposed Project is generally consistent with the types of uses considered in the Davis General Plan and associated EIR. As discussed in Section 3.2, Land Use, of this EIR, the project site is in the Core Area Specific Plan (CASP), which also includes the City of Davis General Plan and its Land Use Map and Zoning. The General Plan and CASP Land Use designation of the site is Retail Stores. The CASP further encourages retail uses at the ground floor level in the Retail Stores area, with professional and administrative offices and residential units in the upper stories. However, the CASP does not explicitly prohibit ground floor residential uses in the Retail Stores area, and does note that some residential uses exist in the Retail Stores area of the Downtown Core. The CASP, therefore, does not prohibit ground floor residential uses in the Retail Stores area, and the Planning Commission, or City Council, could find that the proposed project is consistent with the CASP and the General Plan, provided that the project as a whole is consistent with the CASP and the General Plan. As discussed above, the project is consistent with the City’s General Plan. Additionally, because the CASP does not prohibit ground floor residential uses in the Retail Stores area, the proposed residential uses would not conflict with the applicable CASP land use designation. Thus, in addition to the reasons discussed above, an off-site alternative need not be further discussed in this EIR.

In addition to the two off-site alternatives discussed above, the City and applicant contemplated two additional alternatives: the Building Relocation Alternative, and the Preservation, Renovation, and Addition Alternative. Under the Building Relocation Alternative, two of the three existing buildings proposed to be demolished would be relocated to another location within the City of Davis. Once the buildings are relocated, they would be restored and preserved. While this alternative would preserve each building, finding a suitable parcel inside the City of Davis may not be possible for the project applicant. In addition, the City of Davis Historical Resources Management Ordinance states that inappropriate relocation of a designated historical resources is a demolition. Additionally, the challenges of moving each building, including high costs, could make this alternative prohibitive. Further, given the structural condition of the buildings as reported by the applicant’s hired structural engineer, each building may not be safely and successfully moved intact to a new location. Therefore, the Building Relocation Alternative is dismissed from further analysis.

Under the Preservation, Renovation, and Addition Alternative, all three of the existing buildings would be retained and renovated. Appropriate additions to the buildings, resulting in building enlargement and expansion, would be constructed in order accommodate the objectives of the proposed project. This alternative has been previously discussed by City staff with the project

applicant team. The applicant team indicated that, given the structural engineering report prepared for the three buildings, and the cost associated with renovating and constructing additions to the buildings, this alternative is not a feasible option. The financial hardship claim made by the applicant team is further articulated in the project narrative and the Notice of Preparation comment letter for the project that was submitted by the project applicant (see Appendix A for the comment letter). Therefore, the Preservation, Renovation, and Addition Alternative is dismissed from further analysis.

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

Three alternatives to the proposed project were developed based on City of Davis staff and Historical Resources Management Commission input and the technical analysis performed to identify the environmental effects of the proposed project. The alternatives analyzed in this EIR include the following three alternatives in addition to the proposed Theta Xi Fraternity Redevelopment Project:

- No Project (No Build) Alternative;
- Renovation and Preservation Alternative;
- Preservation, Renovation, and New Build Alternative.

NO PROJECT (NO BUILD) ALTERNATIVE

The CEQA Guidelines (Section 15126.6[e]) require consideration of a No Project Alternative that represents the existing conditions, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved. For purposes of this analysis, the No Project (No Build) Alternative assumes that the project site remains in its existing state and no additional development would occur. The project site is currently developed with three two-story adjacent Theta Xi fraternity houses, totaling 19,800 square feet (sf). From east to west, the fraternity houses include the “TX Main House” located at 515 First Street (3,964 total sf, excluding the basement), the “Bryson House” located at 509 First Street (2,009 total sf, excluding the basement), and the “Jackson House” located at 503 First Street (2,065 total sf, excluding the basement). There is a detached garage in the northwest corner of the project site, and the side yard of the Jackson House is used for off-street parking for approximately seven vehicles. Additionally, a paved recreation/patio area is situated behind the Jackson House and Bryson House.

It is noted that the No Project (No Build) Alternative would fail to meet the project applicant’s objectives.

RENOVATION AND PRESERVATION ALTERNATIVE

Under the Renovation and Preservation Alternative, the three existing buildings would be preserved and undergo modest interior renovations that do not require significant structural changes to the building for Theta Xi Fraternity Use. This alternative would avoid the loss of any or all of the fraternity buildings that would occur under the proposed project as a result of demolition. While this alternative would retain all three buildings in their current exterior

5.0 ALTERNATIVES TO THE PROPOSED PROJECT

design, this alternative would not address deficiencies as a result of recommendations made by Pemberton Engineering of Davis, who conducted a structural/engineering study of the buildings in 2017. Additionally, this alternative would not meet the applicant objective relative to current and future needs of the Theta Xi Fraternity in regards to providing a safe, secure, and livable space for its fraternity members.

PRESERVATION, RENOVATION, AND NEW BUILD ALTERNATIVE

Under the Preservation, Renovation, and New Build Alternative, two of the three existing buildings would be preserved and/or renovated, and one would be demolished. The two buildings that would be preserved and/or renovated would include the TX Main House (located at 515 First Street, totaling 3,964 total sf, excluding the basement) and the Bryson House (located at 509 First Street, totaling 2,009 total sf, excluding the basement), while the Jackson House (located at 503 First Street, totaling 2,065 total sf, excluding the basement) and associated garage would be demolished and the site redeveloped.

Similar to the proposed project, under this alternative, the TX Main house would be vacated and placed for sale or lease to a third party on the open market. The Bryson House would be renovated for continued use by the Theta Xi Fraternity for housing and study. The renovation would include structural and safety improvements only and would not change the number of beds or bathrooms. Once the Jackson House and associated garage are demolished, this alternative would redevelop the Jackson House lot with a new three-story residential structure for use by the Theta Xi Fraternity. This new residential structure would include 22 beds and seven bathrooms. The capacity of the overall site would be similar to the proposed project.

Under this alternative, the parking capacity would remain comparable to the existing condition, and outdoor activities would take place in the backyard of the renovated Bryson House. The other proposed amenities and landscaping would be comparable to the proposed project.

It is noted that the Preservation, Renovation, and New Build Alternative would fail to meet most of the project objectives and would partially meet some of the project objectives identified by the City of Davis.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR. Following the analysis of each alternative, Table 5.0-1 summarizes the comparative effects of each alternative.

NO PROJECT (NO BUILD) ALTERNATIVE

Cultural and Tribal Resources

The No Project (No Build) Alternative assumes that the project site remains in its existing state and no additional development or renovation would occur. The No Project (No Build)

Alternative would not result in ground disturbing activities and would reduce the potential to disturb or destroy cultural, tribal, historic, archaeological, and paleontological resources. The No Project (No Build) Alternative would reduce the risk of the unintentionally discovery of such resources. Therefore, impacts to cultural and tribal cultural resources would be reduced under this alternative. The significant and unavoidable impact to historical resources would not occur under this alternative.

Land Use

The No Project (No Build) Alternative would not require a Conditional Use Permit to continue the existing living group use at the site as the fraternity house that is currently located on the project site is a legal nonconforming use, based on a Settlement Agreement and Release of all Claims entered into by and between the City and Theta Xi in 1995. It is noted that, if future changes and/or renovations to the buildings were proposed in the future under this alternative, a Conditional Use Permit may be required. The No Project (No Build) Alternative would also not require Design Review as alterations to the site and/or structures would not occur.

While the proposed project would require Design Review and a Conditional Use Permit, the No Project (No Build) Alternative would maintain this site in its current state with no new construction or housing. Maintenance of the site for fraternity uses would be consistent with the Settlement Agreement and Release of all Claims. While the analysis in Section 3.2 concluded that the proposed project would not result in any significant land use impacts, the No Project (No Build) Alternative would not reduce impacts related to land use, and therefore, would have similar impacts related to land use compared to the proposed project.

RENOVATION AND PRESERVATION ALTERNATIVE

Cultural and Tribal Resources

Under the Renovation and Preservation Alternative, the three existing buildings would be preserved and renovated for Theta Xi Fraternity Use. This alternative would avoid the loss of any or all of the fraternity buildings that would occur under the proposed project as a result of demolition. As such, impacts to historical resources would be reduced compared to the proposed project. Additionally, because major ground disturbance would not be required for this alternative, impacts to human remains, tribal cultural, archaeological, and paleontological resources would be reduced compared to the proposed project. The significant and unavoidable impact to historical resources would not occur under this alternative.

Land Use

Unlike the proposed project, the Renovation and Preservation Alternative would not require a Conditional Use Permit because demolition would not be required. Similarly, this alternative would not require Design Review because new construction would not occur, and the renovations would be internal to the buildings only. This alternative would be required to be consistent with the General Plan, including the goals, policies, and standards and with the

5.0 ALTERNATIVES TO THE PROPOSED PROJECT

Zoning Code. Because the analysis in Section 3.2 concluded that the proposed project would not result in any significant land use impacts, the Renovation and Preservation Alternative would not reduce impacts related to land use, and therefore, would have similar impacts related to land use compared to the proposed project.

PRESERVATION, RENOVATION, AND NEW BUILD ALTERNATIVE

Cultural and Tribal Resources

Under this alternative, two of the three existing buildings would be preserved and/or renovated, and one would be demolished. The TX Main House (located at 515 First Street) would be vacated and placed for sale or lease to a third party on the open market, the Bryson House (located at 509 First Street) would be renovated, and the Jackson House (located at 503 First Street) and associated garage would be demolished and the site redeveloped. Because demolition of one of the buildings would be required for this alternative, this alternative would not avoid the loss of one of the fraternity buildings. As such, impacts to historical resources would be similar to the proposed project. Because major ground disturbance would be required for redevelopment of the Jackson House site under this alternative, impacts to human remains, tribal cultural, archaeological, and paleontological resources would be similar to the proposed project. It is worth noting, however, that because two buildings would be preserved and/or renovated (compared to one building preserved under the proposed project), the significant and unavoidable impact to historical resources would be reduced (although not avoided).

Land Use

Similar to the proposed project, the Preservation, Renovation, and New Build Alternative would require a Conditional Use Permit because demolition would be required. Similarly, this alternative would require Design Review because new construction would occur associated with redevelopment of the Jackson House site under this alternative. This alternative would be required to be consistent with the General Plan, including the goals, policies, and standards and with the Zoning Code. Because the analysis in Section 3.2 concluded that the proposed project would not result in any significant land use impacts, the Preservation, Renovation, and New Build Alternative would not reduce impacts related to land use, and therefore, would have similar impacts related to land use compared to the proposed project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project (No Build) Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project.

A comparative analysis of the proposed project and each of the project alternatives is provided in Table 5.0-1 below. The table includes a numerical scoring system, which assigns a score of “2,” “3,” or “4” to the proposed project and each of the alternatives with respect to how each alternative compares to the proposed project in terms of the severity of the environmental topics addressed in this EIR. A score of “2” indicates that the alternative would have a better (or lessened) impact when compared to the proposed project. A score of “3” indicates that the alternative would have the same (or equal) level of impact when compared to the proposed project. A score of “4” indicates that the alternative would have a worse (or greater) impact when compared to the proposed project. The project alternative with the lowest total score is considered the environmentally superior alternative.

TABLE 5.0-1: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE PROPOSED PROJECT

<i>ENVIRONMENTAL ISSUE</i>	<i>PROPOSED PROJECT</i>	<i>NO PROJECT (NO BUILD) ALTERNATIVE</i>	<i>RENOVATION AND PRESERVATION ALTERNATIVE</i>	<i>PRESERVATION, RENOVATION, AND NEW BUILD ALTERNATIVE</i>
Cultural and Tribal Resources	3 – Same	3 – Same	3 – Same	3 – Same
Land Use	3 – Same	2 – Lesser	2 – Lesser	3 – Same
Summary	6	5	5	6

As shown in Table 5.0-1, the No Project (No Build) Alternative and the Renovation and Preservation Alternative are the environmentally superior alternatives when looked at in terms of all potentially significant environmental impacts. However, the No Project (No Build) Alternative would not achieve the project objectives. The Renovation and Preservation Alternative would result in five points and would reduce impacts similar to the No Project (No Build) Alternative, while the Preservation, Renovation, and New Build Alternative would result in six points. The Renovation and Preservation Alternative would reduce impacts to cultural and tribal cultural resources compared to the project. The Preservation, Renovation, and New Build Alternative would not reduce any impacts compared to the project. Therefore, the Renovation and Preservation Alternative is the next environmentally superior alternative to the proposed project. It is noted that the superior alternative would depend on the City’s local priorities (i.e., preservation of historical resources, etc.), as well as the ability to meet the proposed project’s objectives. Each alternative’s ability to satisfy the project objectives is discussed in the following section.

5.4 COMPARATIVE EVALUATION OF THE PROJECT AND ALTERNATIVES TO SATISFY PROJECT OBJECTIVES

This section examines how each of the alternatives selected for more detailed analysis meets the project objectives.

1. *Address deficiencies in the structural integrity of the three houses used to house the undergraduate members of the Theta Xi Fraternity on First Street in Davis, CA, as identified in the report by Pemberton Engineering, dated July 27, 2016.*

The No Project (No Build) Alternative would not satisfy this project objective because under this alternative, no development would occur and the structural deficiencies would continue. The

5.0 ALTERNATIVES TO THE PROPOSED PROJECT

Renovation and Preservation Alternative would also not meet this objective because the renovations would not address the current structural deficiencies, only interior form and functionality. In contrast, the Preservation, Renovation, and New Build Alternative would partially meet this objective because the alternative would address the structural deficiencies at the Jackson House, but would not address the deficiencies at the other two buildings.

- 2. Renovate the subject properties in a way that provides for the needs of University of California, Davis students by ensuring that housing is competitive both in rent and amenities available within the City of Davis, including on-campus housing, in order to ensure the sustainability of the fraternity.*

The No Project (No Build) Alternative would not satisfy this project objective because under this alternative, no development would occur and the buildings would remain unchanged. This alternative would not be competitive in amenities. The Renovation and Preservation Alternative would partially meet this objective because the alternative would renovate the structures, which could increase the competitiveness of the houses by providing additional amenities and updates. However, this alternative would not achieve this objective to the same degree as the proposed project. The Preservation, Renovation, and New Build Alternative would meet this objective by providing structural and safety improvements at the Bryson House and redeveloping the Jackson House site with additional space and amenities. However, this alternative would also not achieve this objective to the same degree as the proposed project.

- 3. Use the value embedded in the three owned lots to assist in funding the renovation project by consolidating the housing needs of the fraternity onto a smaller footprint.*

The No Project (No Build) Alternative would not satisfy this project objective because under this alternative, no building sale or consolidation would occur. The Renovation and Preservation Alternative would also not meet this objective because the alternative would not consolidate the housing needs onto a smaller footprint in order to assist in funding. The Preservation, Renovation, and New Build Alternative would partially meet this objective as redevelopment of the Jackson House lot and renovations to the Bryson House would add value to the two lots in the long-term, and the sale of the TX Main House would assist in funding. However, because this alternative would not consolidate the housing needs onto a smaller footprint, this objective is only partially satisfied.

- 4. Construct the new building with features that will allow it to achieve a high level of energy efficiency and reduce ongoing maintenance costs.*

The No Project (No Build) Alternative would not satisfy this project objective because under this alternative, no development would occur, the energy efficiency would not be increased, and the maintenance costs would not be reduced. The Renovation and Preservation Alternative would partially meet this objective because the renovations would slightly increase the efficiency (i.e., by potentially improving the lighting and appliance efficiency) of the buildings and reduce some of the maintenance costs. However, this alternative would not achieve this objective to the

same degree as the proposed project. The Preservation, Renovation, and New Build Alternative would largely meet this objective because the renovations to the Bryson House would slightly increase the efficiency (i.e., by potentially improving the lighting and appliance efficiency), and would slightly decrease maintenance costs. Additionally, redevelopment of the Jackson House lot would decrease maintenance costs and increase energy efficiency. However, this alternative would not achieve this objective to the same degree as the proposed project.

5. *Continue to use the new facility as classrooms that, through fellowship and alumni guidance, lead to the wholesome mental, moral, physical, and spiritual growth that is the purpose of the Theta Xi Fraternity.*

The No Project (No Build) Alternative would not satisfy this project objective because under this alternative, no new facilities would be provided. The Renovation and Preservation Alternative would also not meet this objective because new facilities with classrooms would not be provided, although the renovated buildings could be used for educational purposes. The Preservation, Renovation, and New Build Alternative would meet this objective because a new facility would be constructed which may have classrooms and/or opportunities for gathering and hosting alumni.

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Appendix A

Initial Study, Notice of Preparation, and NOP Comments



NOTICE OF PREPARATION AND INITIAL STUDY

FOR THE

THETA XI FRATERNITY REDEVELOPMENT PROJECT

FEBRUARY 2019

Prepared for:

City of Davis
23 Russell Boulevard
Davis, CA 95616
(530) 757-5610

Prepared by:

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D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



NOTICE OF PREPARATION AND INITIAL STUDY

FOR THE

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Prepared for:

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(916) 949-3231



Notice of Scoping Meeting and Preparation of a Draft Environmental Impact Report

Date: February 25, 2019

Subject: Notice of Scoping Meeting and Preparation of a Draft Environmental Impact Report for the Theta Xi Fraternity Redevelopment Project

To: State Clearinghouse
State Responsible Agencies
State Trustee Agencies
Other Public Agencies
Organizations and Interested Persons

Lead Agency: City of Davis
Community Development and Sustainability Department
23 Russell Boulevard, Suite 2
Davis, CA 95616
Phone: 530-757-5652
Email: injoku@cityofdavis.org

SCOPING MEETING: On Monday, March 18, 2019 starting at 7:00 p.m. the City of Davis Community Development and Sustainability Department will conduct a public scoping meeting to solicit input and comments from public agencies and the general public on the proposed Draft Environmental Impact Report (EIR) for the Theta Xi Project. **This meeting will be held at Senior Center Activity Room, located at 646 A Street, Davis, CA 95616.** The meeting will run from 7:00 p.m. to 9:00 p.m.

This meeting will be held by the Historical Resources Management Commission (HRMC). The meeting will be open to the general public and all interested parties. The applicant's proposed project exhibits will be available for review. The public and interested parties may submit written comments at any time during the comment period that will end at 5:00 p.m. on March 26, 2019, including at the meeting. The project proponent team, representatives from the City of Davis, and the EIR consultant will be available to address questions regarding the EIR process. Members of the public may provide written comments throughout the meeting, and until 5:00 p.m. March 26, 2019.

If you have any questions regarding this scoping meeting, contact the project planner, Ike Njoku, at injoku@cityofdavis.org, or by phone at: 530-757-5610 ext. 7230.

NOTICE OF PREPARATION: This is to notify public agencies and the general public that the City of Davis, as the Lead Agency, will prepare a Draft EIR for the Theta Xi Project. The City is interested in the input and/or comments of public agencies and the general public as to the scope and content of the environmental information that is germane to the agencies' statutory responsibilities in connection with the proposed project, and public input. Public agencies will need to use the EIR prepared by the City when considering applicable permits, or other approvals for the proposed project.

Project Title: Theta Xi Fraternity Redevelopment

Project Location: 503, 509, and 515 First Street

COMMENT PERIOD: Consistent with the time limits mandated by State law, your input, comments or responses must be received in writing and sent at the earliest possible date, but not later than **5:00 p.m., Tuesday, March 26, 2019.**

COMMENTS/INPUT: Please send your input, comments or responses (including the name for a contact person in your agency) to: Attn: Ike Njoku, City of Davis Community Development and Sustainability Department, 23 Russell Boulevard, Suite 2, Davis, CA 95616, or by email at: injoku@cityofdavis.org.

PROJECT DESCRIPTION: The project site is currently developed with three two-story adjacent Theta Xi fraternity houses, totaling 19,800 square feet (sf). The proposed project includes merging the three lots located at 503, 509, and 515 First Street and re-subdividing the property into two lots for the redevelopment of one parcel with a consolidated 35-bed, three-story building. The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main House) on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot. The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. The project would also consolidate all living and study areas into the proposed three-story building with partial basement, a detached laundry, storage building, and trash enclosure, and associated site landscaping with exterior meeting and gathering spaces. There would also be a dedicated "Bike Barn" with bike maintenance space and a one-to-one ratio of covered and secured bike storage to beds. Additional guest bike parking would be provided along the landscape strip on First Street. The project would include a new parking lot accessed from D Street through a secured vehicle gate.

AREAS OF POTENTIAL IMPACTS: The Draft EIR will examine some of the environmental areas contained in Appendix G of the State CEQA Guidelines. The topics to be addressed in the Draft EIR include: Cultural Resources, Land Use/Planning, Cumulative Impacts, and Growth Inducing Impacts.

INITIAL STUDY: An Initial Study has been prepared for this project. The Initial Study identifies environmental areas/issues that would result in No Impact or a Less than Significant Impact, and environmental areas/issues that would result in a Potentially Significant Impact. All Potentially Significant Impact areas/issues will be addressed in greater detail in the Draft EIR. Areas/issues that would result in No Impact or a Less than Significant Impact, as identified in the Initial Study, will not be addressed further in the Draft EIR.

ADDITIONAL INFORMATION: Copies of the Initial Study, including additional information on the project proposal, is on the city's website at:
<https://cityofdavis.org/city-hall/community-development-and-sustainability/development-projects/theta-xi-redevelopment-project>.

Date: February 25, 2019

Signature: Ike Njoku

Name/Title: Planner & Historical Resources Manager

Phone/Email: (530) 757-5610, Extension 7230 & injoka@cityofdavis.org

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INITIAL STUDY CHECKLIST

PROJECT TITLE

Theta Xi Fraternity Redevelopment Project

LEAD AGENCY NAME AND ADDRESS

City of Davis
23 Russell Boulevard
Davis, CA 95616

CONTACT PERSON AND PHONE NUMBER

Ike Njoku, Planner and Historical Resources Manager
City of Davis, Department of Community Development and Sustainability
(530) 757-5610 ext. 7230

PROJECT SPONSOR'S NAME AND ADDRESS

Robert D. Testa and/or Skip Mezger, Directors
Beta Epsilon Association of Theta Xi
515 First Street
P. O. Box 4450, Davis, CA 95617

PURPOSE OF THE INITIAL STUDY

An Initial Study (IS) is a preliminary analysis which is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project will have a significant adverse effect on the environment, thereby triggering the need to prepare an Environmental Impact Report (EIR). It also functions as an evidentiary document containing information which supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a "Less Than Significant" or "No Impact" level. If there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the lead agency shall prepare a Negative Declaration (ND). If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) shall be prepared.

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the proposed Theta Xi Project (project) may have a significant effect upon the environment. Based upon the findings and mitigation measures contained within this report, an EIR will be prepared.

PROJECT LOCATION AND SETTING

PROJECT LOCATION

The project site consists of approximately 0.45 acres located in the central portion of the City of Davis, north of the Interstate 80 (I-80) Freeway, at 503, 509, and 515 First Street. The project

site can be identified by its Yolo County Assessor's Parcel Numbers (APNs) 070-244-004, 070-244-005, and 070-244-006. The project site is located in the Davis Downtown Core Area, near what is considered the historic gateway to the City of Davis. The project's regional location is shown in Figure 1 and the project area and site boundary are shown in Figure 2.

EXISTING SITE USES

The project site is currently developed with three two-story adjacent Theta Xi fraternity houses, totaling 19,800 square feet (sf). The three lots are owned by the Beta Epsilon Association of Theta Xi, a non-profit California corporation, and occupied by the fraternity. The site has provided student housing dating from 1950 when Theta Xi (TX) acquired the first of the three lots. From east to west, the fraternity houses include the "TX Main House" located at 515 First Street (3,964 total sf, excluding the basement), the "Bryson House" located at 509 First Street (2,009 total sf, excluding the basement), and the "Jackson House" located at 503 First Street (2,065 total sf, excluding the basement). There is a detached garage in the northwest corner of the project site, and the side yard of the Jackson House is used for off-street parking for approximately seven vehicles. Additionally, a paved recreation/patio area is situated behind the Jackson House and Bryson House. The site currently contains approximately 28 trees, including those located along the frontages of First Street and D Street.

An aerial view of the project site is shown in Figure 3. The existing site plan and elevations are shown in Figure 4, and existing site context photos are shown in Figure 5.

SURROUNDING LAND USES

The project site is bounded by Second Street and existing mixed-use development to the north, D Street to the west, First Street to the south, and E Street and the Natsoulas Gallery to the east. The surrounding land uses consists of a mix of retail, single family, and apartment developments along First Street, D Street, and E Street. Adjacent parcels include a funeral home on D Street and Natsoulas Art Gallery on First Street adjacent to the TX Main House. The project site faces a landscaped buffer and the back of a retail building in a shopping plaza (i.e., Davis Commons) on the south side of First Street.

GENERAL PLAN AND ZONING DESIGNATIONS

The project site is in the Core Area Specific Plan (CASP), which also includes the City of Davis General Plan and its Land Use Map and Zoning. The General Plan and CASP Land Use designation of the site is Retail Stores. The Downtown of the Core Area (the area bounded by First and Third Streets and D Street and the railroad tracks) is intended to provide a concentration of stores and uses that allows each to benefit from the presence of the others. Retail uses at ground floor level with professional and administrative offices and residential units are encouraged for upper stories in this zone within the Core Area. Cultural and entertainment uses are also permitted at ground floor level. Total floor area may reach three times the site area. Parking structures are excluded from the calculations of floor area ratio.

The CASP further encourages retail uses at the ground floor level in the Retail Stores area, with professional and administrative offices and residential units in the upper stories. However, the CASP does not explicitly prohibit ground floor residential uses in the Retail Stores area, and does note that some residential uses exist in the Retail Stores area of the Downtown Core. The CASP, therefore, does not prohibit ground floor residential uses in the Retail Stores area, and the Planning Commission, or City Council, could find that the proposed project is consistent with the CASP and the General Plan, provided that the project as a whole is consistent with the CASP and the General Plan.

The project site is currently zoned Central Commercial (C-C). As stated in Section 40.14.030 of the City's Municipal Code, permitted uses in the C-C district shall be as follows:

- (a) Retail stores, shops and offices supplying commodities or performing services such as department stores, specialty shops, banks, and other financial institutions, personal and business service establishments, antique shops, artists' supply stores and similar uses, but not including gasoline service stations.
- (b) Restaurants, including outdoor eating areas and establishments, establishments serving alcoholic beverages, and similar enterprises, but not including formula fast food restaurants.
- (c) Professional and administrative offices. First floor office uses discouraged in the downtown core as defined by the core area specific plan. Offices are not discouraged in C-C zones outside the downtown core.
- (d) Medical clinics.
- (e) Hotels and motels.
- (f) Business and technical schools, and schools and studios for photography, art, music, and dance.
- (g) Any other retail business or service establishment which the planning commission finds to be consistent with the purposes of this article and which will not impair the present or potential use of adjacent properties.
- (h) Group care homes with six or fewer clients, subject to the provisions of Section 40.26.135.
- (i) Family and group day care homes as defined in Section 40.01.010.
- (j) Infill developments containing any of the above uses.
- (k) Auto service stations with frontage on Fifth Street.
- (l) Theaters and movie houses.
- (m) Supportive housing.
- (n) Transitional housing.
- (o) Residential structures and apartments with densities up to those permitted in the R-H-D district.

The fraternity house that is currently located on the project site is a legal nonconforming use, based on a Settlement Agreement and Release of all Claims entered into by and between the City and Theta Xi in 1995. However, if two of the buildings are demolished and Theta Xi constructs a new fraternity house on the western lot (as proposed), the new building would not retain the legal nonconforming status under the City's Zoning Code. The fraternity house constitutes a "living group" use, which is a conditional use within the Central Commercial District where the project site is located. Therefore, the project would need approval of a Conditional Use Permit (CUP) for the proposed new fraternity house.

The existing General Plan Land Use Designation for the site, and the surrounding area is shown on Figure 6.

PROJECT DESCRIPTION

The proposed project includes merging the three lots located at 503, 509, and 515 First Street and re-subdividing the property into two lots for the redevelopment of one parcel with a consolidated 35-bed, three-story building. The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main House) on a reconfigured lot of

approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot.

The proposed site plan and first floor plan is shown in Figure 7. The proposed elevations are shown in Figure 8, and visual simulations of the three-story building are shown in Figure 9.

The existing and proposed housing characteristics are summarized in Table 1.

Table 1: Existing Versus Proposed Housing Characteristics

	<i>Existing Jackson House</i>	<i>Existing Bryson House</i>	<i>Existing TX Main House</i>	<i>Total Existing Houses</i>	<i>Proposed New House</i>
# of stories	2	2	2	2	3
Basement	Partial	Partial	Partial	Partial	Partial
Site area sf	6,900	6,900	6,000	19,800	10,350
Building area (gross sf)	2,065	2,009	3,964	8,038	9,802
Ground floor	1,282	1,208	2,000	4,490	3,100
2 nd floor	783	801	1,964	3,548	3,351
3 rd floor	--	--	--	--	3,351
Total sf (excluding basement)	2,065	2,009	3,964	8,038	9,802
Basement sf	720	433	450	1,603	1,684
Storage/laundry sf	96	0	0	96	238
Trash enclosure sf	0	0	0	0	168
Garage sf	450	0	0	450	0
Libraries/meeting rooms	1	0	1	2	4
Kitchen	0	0	1	1	1
Living room	0	0	1	1	1
Dining room	0	0	1	1	1
On-site parking spaces	6	0	0	6	13
Bike barn # of bicycles)	0	0	0	0	24
Additional bicycle parking	0	0	0	0	24
# of bedrooms	7	7	7	21	18
# beds (single rooms)	5	2	0	7	1
# beds (double rooms)	2	4	5	11	18
# beds (triples rooms)	0	1	2	3	0
# beds (4-man rooms)	0	0	0	0	16
Total beds	9	13	16	38	35
# of bathrooms	1	2	2	5	9
# toilets	2	3	2	7	10
# basins	4	3	3	10	18
# showerheads	2	3	4	9	9

As shown in the table, the proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. This would result in three fewer beds and four additional bathrooms compared to the existing houses. The project would also consolidate all living and study areas into the proposed three-story building with partial basement, a detached laundry, storage building, and trash enclosure, and associated site landscaping with exterior meeting and gathering spaces. Due to the increase in building height and square footage, the densification of the parcel would be increased by 50 percent.

The proposed three-story fraternity building architectural theme would be similar to the Craftsman Bungalow style of the existing houses being replaced. The development would be handicap-accessible and would incorporate energy efficiency measures. Sustainable design

features would include high levels of envelope insulation, high efficiency HVAC, LED Lighting, solar shading devices, electric vehicle charging outlets, and a low water use landscaping and irrigation system. Landscaped bio-swales would also be incorporated into the First and D street landscaping edges. It is anticipated that the project would target a “LEED Silver” equivalency.

There would also be a dedicated “Bike Barn” with bike maintenance space and a one-to-one ratio of covered and secured bike storage to beds. Additional guest bike parking would be provided along the landscape strip on First Street. The project would include a new parking lot accessed from D Street through a secured vehicle gate. The new concealed off-street parking and recreation area in the rear would significantly increase the number of conforming off-street parking spaces available to the fraternity.

During construction, the TX Main House would continue to serve the fraternity's housing and study needs. Once the proposed three-story fraternity building is completed, the fraternity would consolidate all of its activities onto the new western parcel. Once the fraternity is consolidated into the western parcel and associated three-story building, the TX Main House, along with its expanded lot, would be vacated and placed for sale or lease to a third party on the open market. As such, the TX Main House would not be retained for TX Fraternity uses.

Tier III Design Review approval is required because the project site is within 300-feet of a designated historical resource, Dresbach-Hunt-Boyer Home, and the site is within the Conservation Overlay District. According to the Davis Municipal Code, the Conservation Overlay District supports planning policy stipulating that new development and renovation of existing buildings should respect the traditional scale and character found within a defined area. Conservation Overlay Districts are designated under Chapter 40 of the Code. However, some individual buildings within the Conservation Overlay District are designated Landmarks or Merit Resources in the Davis Register of Historic Resources.

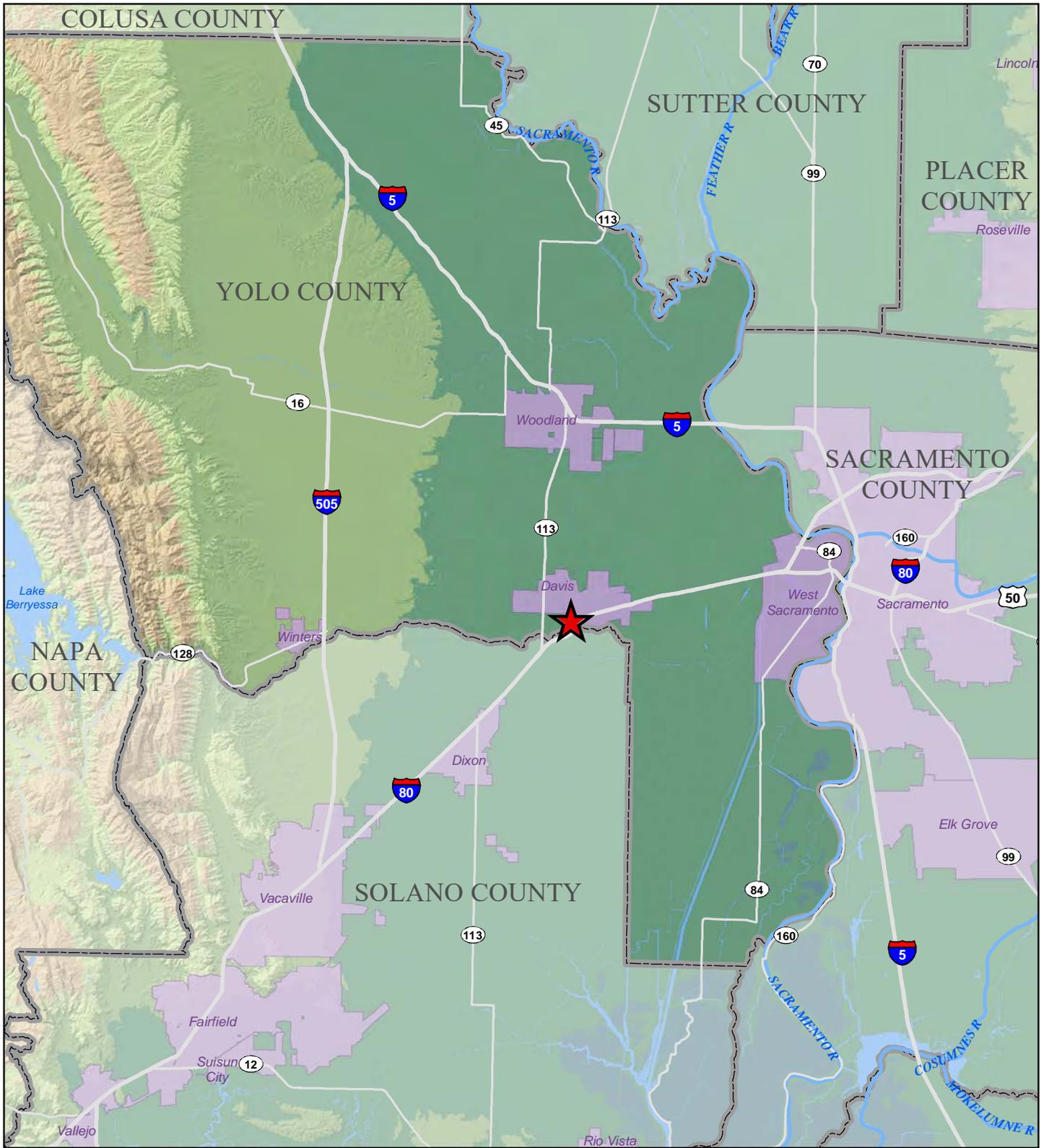
REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The City of Davis is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050.

This document will be used by the City of Davis in consideration of the following actions:

- Approval of the requested merging and re-subdivision of the three parcels (APNs 070-244-004, 070-244-005, and 070-244-006) to create two parcels that will accommodate the proposed project, while retaining the building at 515 First Street.
- Approval of the Conditional Use Permit to continue the existing living group use at the site.
- Approval of the Tier III Design Review.
- Approval of the demolition permit for the two buildings at 503 and 509 First Street.
- Approval of the building permit for the proposed three-story building.
- Approval of the Focused EIR.
- Adoption of the Mitigation Monitoring and Reporting Program (MMRP).

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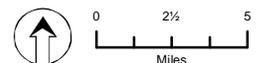


CITY OF DAVIS - THETA XI PROJECT

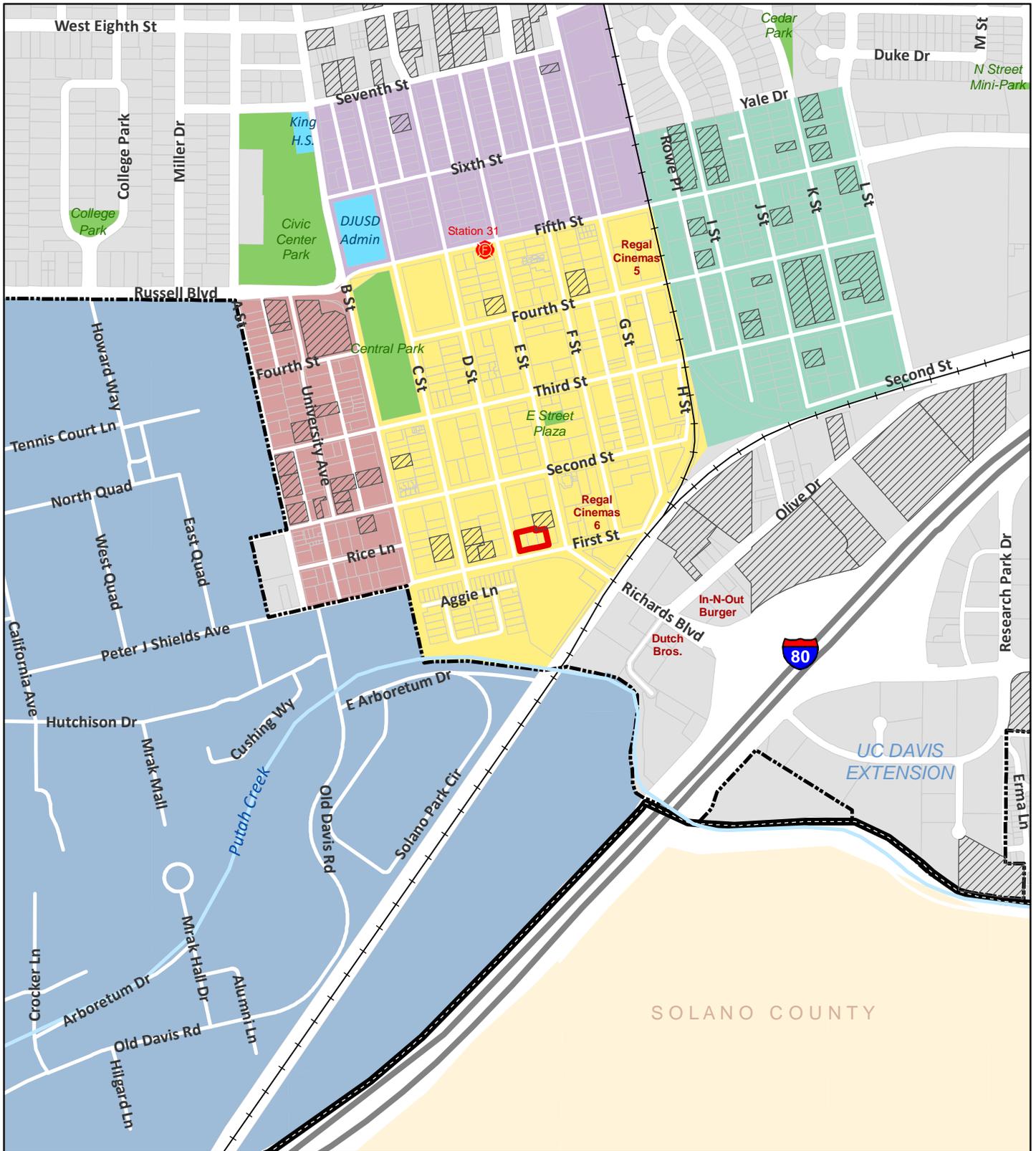
Figure 1. Regional Location Map

Legend

-  Project Location
-  City Area
-  County Boundary



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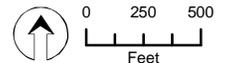


Legend

- | | | |
|---|---|---|
|  Project Boundary |  Fire Station | Neighborhood Districts |
|  Davis City Boundary |  City Park |  Downtown Davis |
|  Yolo County Boundary |  Public School |  Old East Davis |
|  UC Davis |  Apartments |  Old North Davis |
| | |  University Avenue |

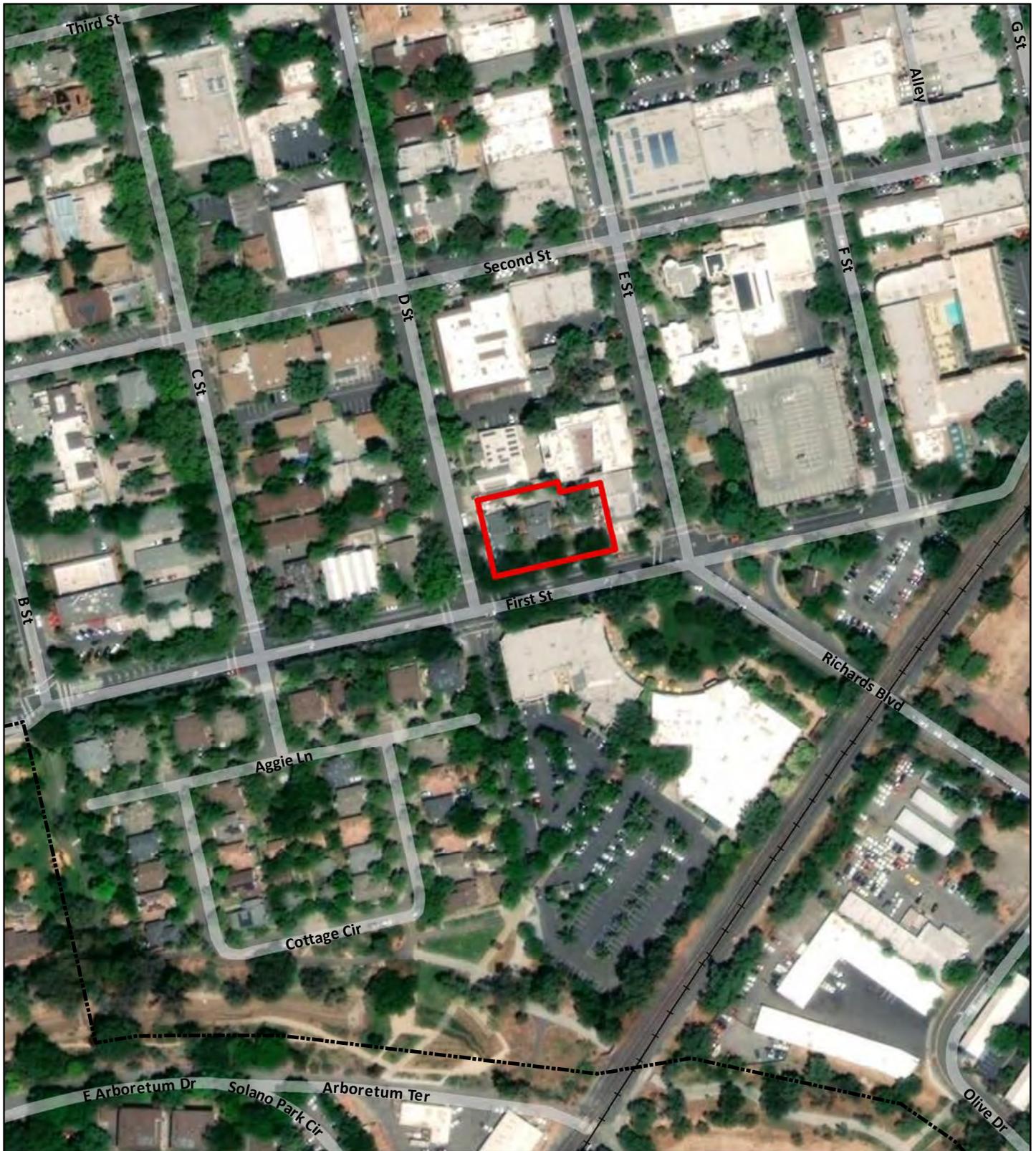
CITY OF DAVIS - THETA XI PROJECT

Figure 2. Vicinity Map



Sources: Yolo County; City of Davis; CalTrans. Map date: January 16, 2019.

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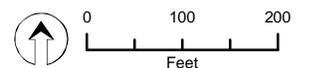


CITY OF DAVIS - THETA XI PROJECT

Figure 3. Aerial View of Project Site

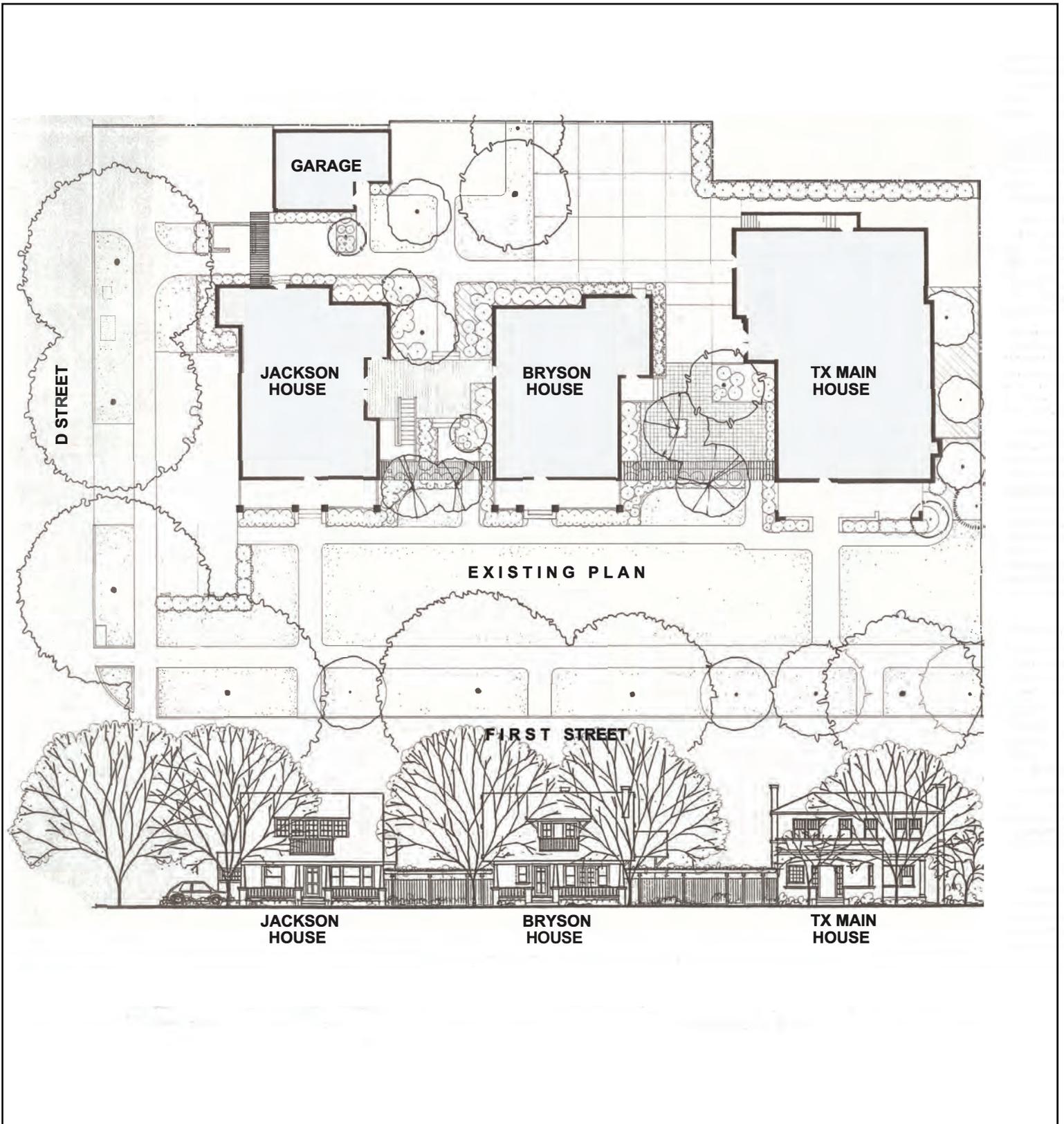
Legend

-  Project Boundary
-  Davis City Boundary



Sources: ArcGIS Online World Imagery Map Service; Yolo County; City of Davis; CalTrans. Map date: January 16,

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CITY OF DAVIS - THETA XI PROJECT

Figure 4. Existing Site Plan and Elevations



Source: YHLA Architects, January 3, 2018.
Map date: January 16, 2019.

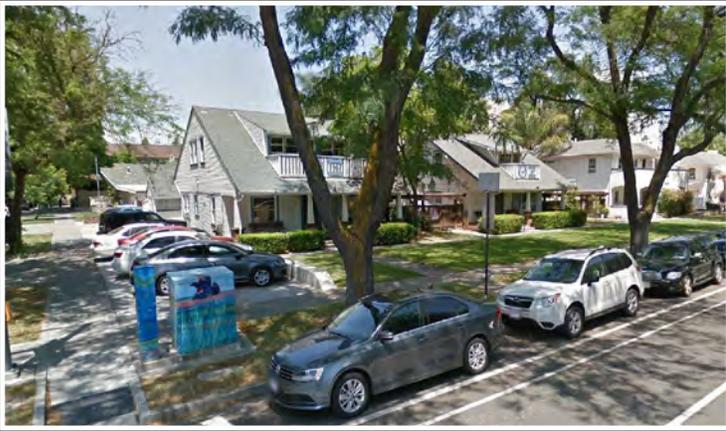
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View northwest on First Street



View north on First Street - Bryson House



View northeast on First Street



View north on First Street - Jackson House



View north on First Street - TX Main House

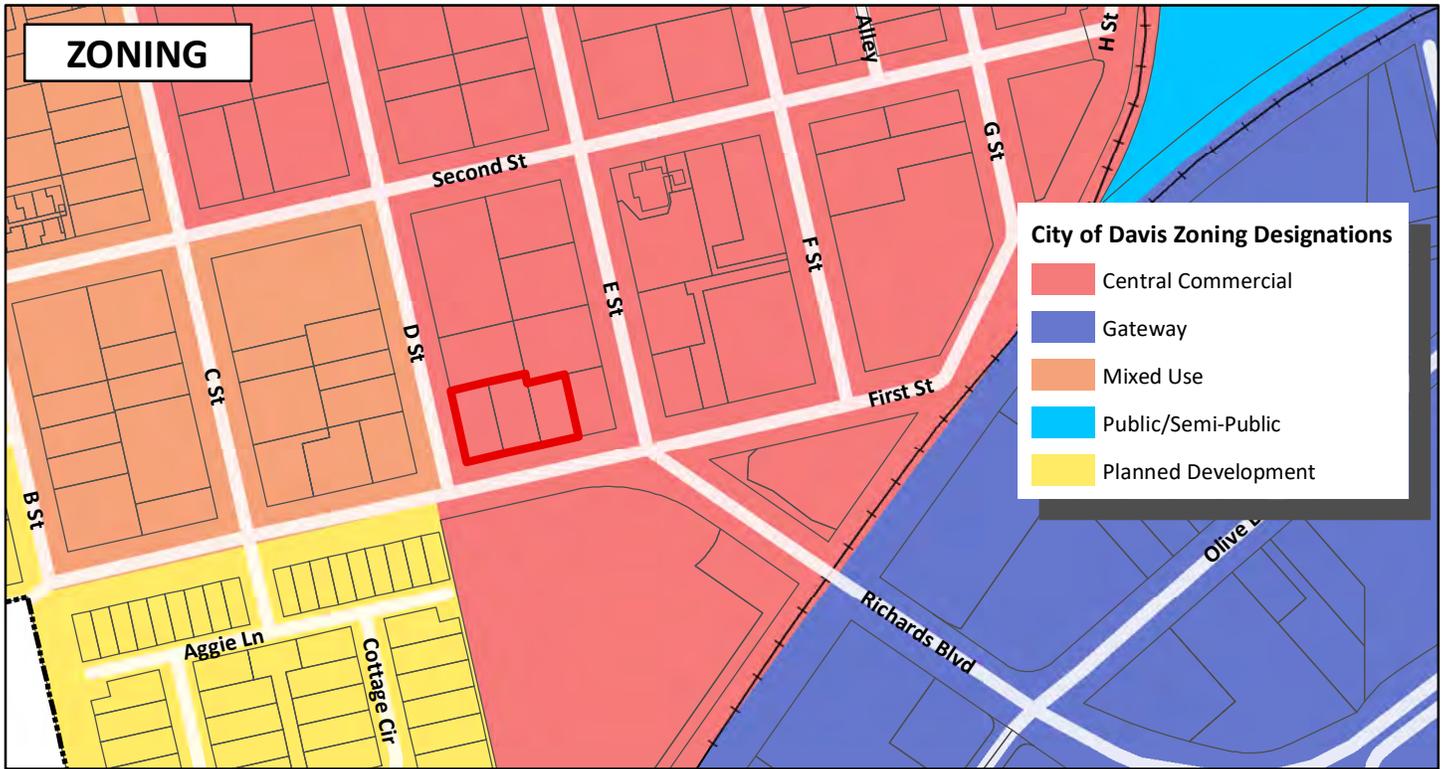
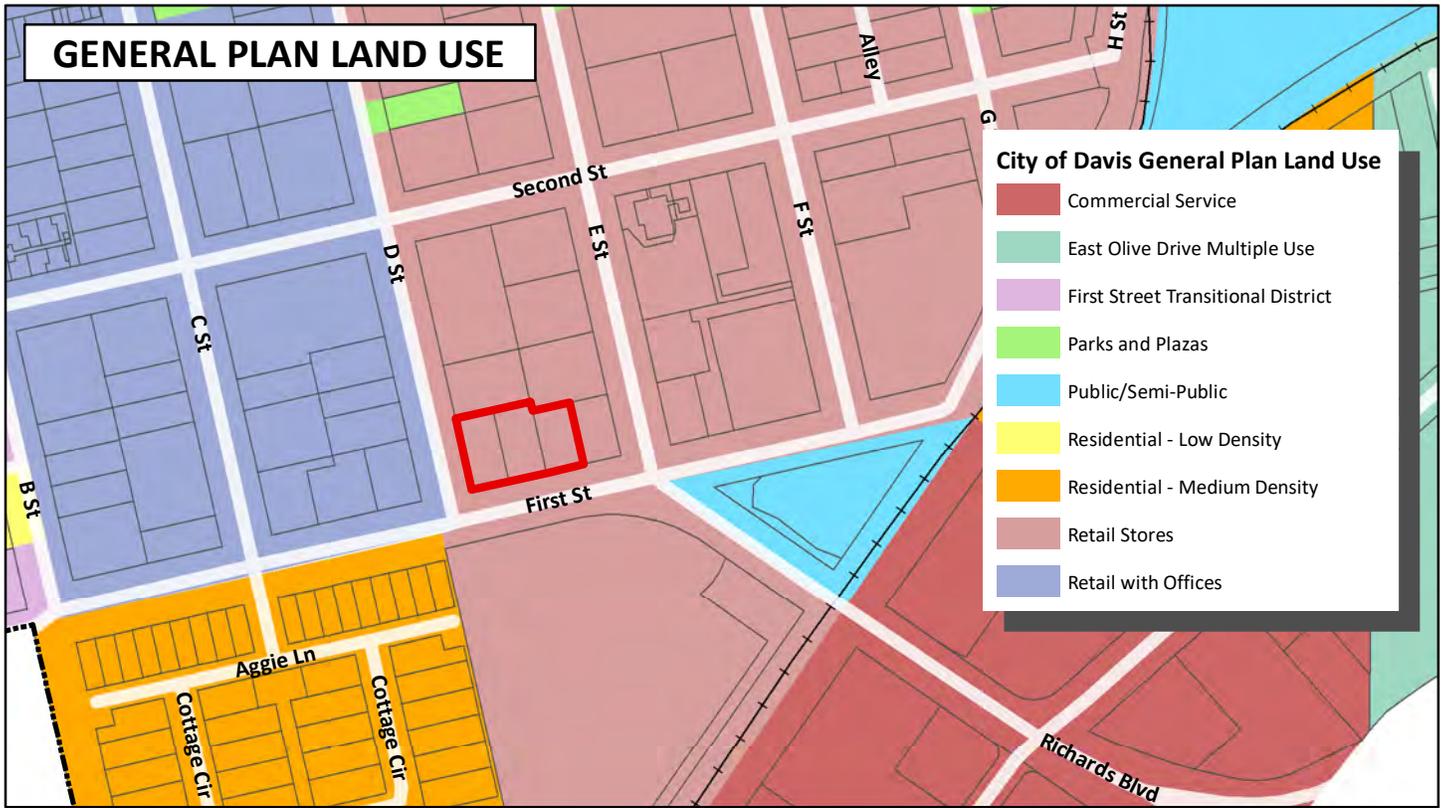


View east on D Street - Garage and Jackson House

CITY OF DAVIS - THETA XI PROJECT

Figure 5. Existing Site Context Photos

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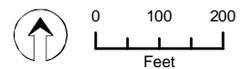


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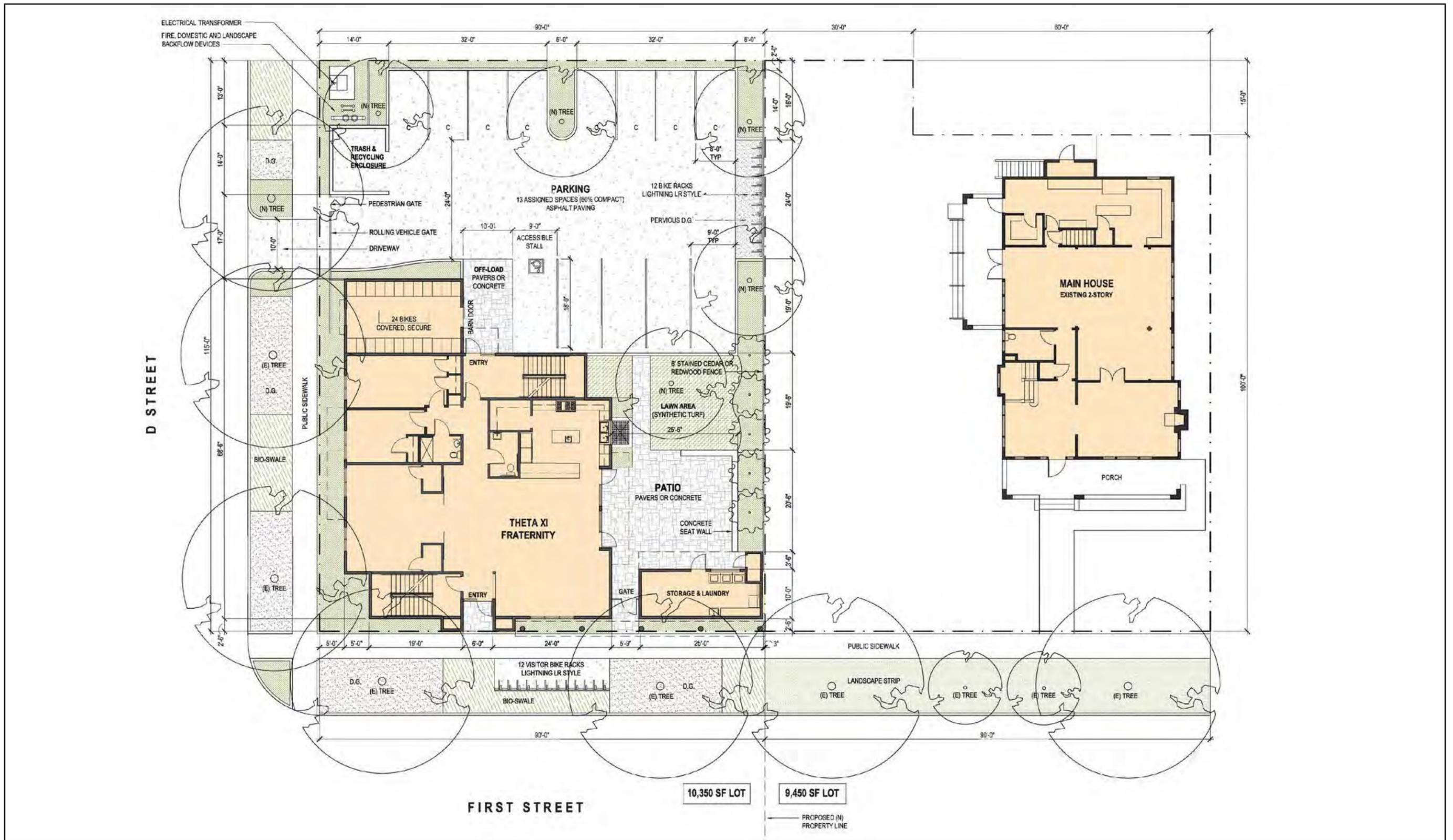
- Project Boundary
- Davis City Boundary

CITY OF DAVIS - THETA XI PROJECT

Figure 6. Existing General Plan and Zoning

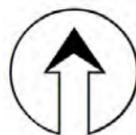


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CITY OF DAVIS - THETA XI PROJECT

Figure 7. Proposed Site and First Floor Plan



Source: YHLA Architects, January 3, 2018.
Map date: January 17, 2019.

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CITY OF DAVIS - THETA XI PROJECT
Figure 8. Proposed Elevations



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View from 1st and D Streets looking northeast



View from north looking south



View from D Street looking southeast



View from 1st Street looking northwest



Birdseye view from 1st and D Streets looking northeast



View from northeast looking southwest

CITY OF DAVIS - THETA XI PROJECT

Figure 9. Visual Simulations

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Two of the environmental factors listed below would have potentially significant impacts as a result of development of this project, as described on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources	X	Cultural Resources		Energy
	Geology and Soils		Greenhouse Gasses		Hazards and Hazardous Materials
	Hydrology and Water Quality	X	Land Use and Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation		Transportation	X	Tribal Cultural Resources
	Utilities and Service Systems		Wildfire		Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
X	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

EVALUATION INSTRUCTIONS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significant.

EVALUATION OF ENVIRONMENTAL IMPACTS

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- **Potentially Significant Impact.** This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- **Less than Significant With Mitigation Incorporated.** This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- **Less than Significant Impact.** A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- **No Impact.** These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 21 environmental topic areas.

I. AESTHETICS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Responses to Checklist Questions

Responses a), b): A scenic vista is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. Federal and State agencies have not designated any such locations within the City of Davis for viewing and sightseeing. Similarly, the City of Davis, according to the City of Davis General Plan Program EIR, has determined that the Planning Area of the General Plan has no officially designated scenic highways, corridors, vistas, or viewing areas.¹

Additionally, there are no other identified scenic resources nearby that would be affected by development of the proposed project, including trees, rocks, outcroppings, and historic buildings. Given that established scenic vistas or scenic resources are not located on or adjacent to the proposed project site, the proposed project would have **no impact** related to scenic vistas or scenic resources. This environmental issue will not be addressed further in the EIR.

Response c): Project implementation would result in the development of a residential project on a site that is currently developed with three 2-story residential buildings, totaling approximately 19,800 square feet. From east to west, the fraternity houses include the "TX Main House" located at 515 First Street (3,964 total sf, excluding the basement), the "Bryson House" located at 509 First Street (2,009 total sf, excluding the basement), and the "Jackson House" located at 503 First

¹ City of Davis. Draft Program EIR [pg. 5-2]. January 2000.

Street (2,065 total sf, excluding the basement). There is a detached garage in the northwest corner of the project site, and the side yard of the Jackson House is used for off-street parking for approximately seven vehicles. Additionally, a paved recreation/patio area is situated behind the Jackson House and Bryson House. The site currently contains approximately 28 trees, including those located along the frontages of First Street and D Street.

The proposed project includes merging the three lots located at 503, 509, and 515 First Street and re-subdividing the property into two lots for the redevelopment of one parcel with a consolidated 35-bed, three-story building. The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main House) on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot.

The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. This would result in three fewer beds and four additional bathrooms compared to the existing houses. The project would also consolidate all living and study areas into the proposed three-story building with partial basement, a detached laundry, storage building, and trash enclosure, and associated site landscaping with exterior meeting and gathering spaces. Due to the increase in building height and square footage, the densification of the parcel would be increased by 50 percent.

The proposed three-story fraternity building architectural theme would be similar to the Craftsman Bungalow style of the existing houses being replaced. As shown in Figure 8, the building facades would utilize a variety of architectural features and materials to provide visual interest, avoid monotonous building lines, and include a variety of colors and materials to enhance the visual appearance of the structures.

The project would be subject to the City's site plan and architectural approval process. As described in Article 40.31.020 of the Davis Municipal Code, the purpose of the site plan and architectural approval process is to determine compliance with the Article and to promote the orderly and harmonious growth of the city and the stability of land values and investments and the general welfare; and to help prevent the impairment or depreciation of land values and the development by the erection of structures, additions or alterations thereto without proper attention to siting, or of unsightly, undesirable or obnoxious appearance; and to prepare for and help to prevent problems arising affecting the community due to the nature of existing and planned uses of land and structures, such as traffic, public, safety, public facilities, utilities and services, among others.

Additionally, as noted previously, Tier III Design Review approval is required because the project site is within 300-feet of a designated historical resource, Dresbach-Hunt-Boyer Home, and the site is within the Conservation Overlay District. According to the Davis Municipal Code, the Conservation Overlay District supports planning policy stipulating that new development and renovation of existing buildings should respect the traditional scale and character found within a defined area. Conservation Overlay Districts are designated under Chapter 40 of the Code. However, some individual buildings within the Conservation Overlay District are designated Landmarks or Merit Resources in the Davis Register of Historic Resources.

The City of Davis General Plan includes goals and policies designed to protect visual resources and promote quality design in urban areas. The proposed project must be developed to be consistent with the policies and goals of the Davis General Plan. Under Article 40.31.020 of the Davis Municipal Code, a site plan and architectural (design review) application shall be approved,

conditionally approved, or denied by the Community Development and Sustainability Director, Planning Commission, or City Council. Such application may be approved only if the following findings are made:

- a) The proposed project is consistent with the objectives of the General Plan, complies with applicable zoning regulations, and is consistent with any adopted design guidelines for the district within which the project is located;
- b) The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community;
- c) The architectural design of the proposed project is compatible with the existing properties and anticipated future developments within the neighborhood in terms of such elements as height, mass, scale, and proportion;
- d) The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation; and
- e) The location, climate, and environmental conditions of the site are adequately considered in determining the use of appropriate construction materials and methods. Sufficient conditions are included with the approval to ensure the long-term maintenance of the project.

While development of the proposed project would change and alter the existing visual character of the project site, these changes would not degrade the visual quality of the site or the surrounding areas. The proposed building incorporates a mix of materials, architectural features, varied roof lines, building recesses and articulation which provide visual interest and maintain the City's urban character.

Various temporary visual impacts could occur as a result of construction activities as the project develops, including grading, equipment and material storage, and staging. Though temporary, some of these impacts could last for several weeks or months during any single construction phase. The loss of existing landscaping and trees would also be a temporary impact until new landscaping matures. Because impacts would be temporary and viewer sensitivity in the majority of cases would be slight to moderate, significant impacts are not anticipated.

Adherence to the City's Municipal Code would result in a development that is cohesive, well-designed, and visually pleasing. Although project implementation would alter the existing visual character of the project site, this alteration would not substantially degrade the visual quality of the project site. The proposed project would be consistent with the City of Davis General Plan, and would adhere to the requirements of the City's site plan and architectural approval process. Therefore, this is considered a *less than significant* impact, and no additional mitigation is required.

Response d): The project site is currently developed and contains three fraternity houses. Existing lighting at the project site includes exterior building lighting, interior building lighting, and street lighting. There is a potential for the proposed project to create new sources of light and glare, although the amount of light and glare would likely be similar to the existing condition. Examples of lighting would include construction lighting, exterior building lighting, interior building lighting, and automobile lighting. Examples of glare would include reflective building materials and automobiles.

There is a potential for the implementation of the proposed project to introduce new sources of light and glare into the project area. However, the project will be required to comply with the City's Outdoor Lighting Control Ordinance which includes provision of a lighting plan as part of the construction documents as a standard City requirement. Compliance with the City of Davis Outdoor Lighting Control Ordinance would ensure that all exterior lighting associated with the project is properly shielded and directed downward in order to eliminate light spillage onto adjacent properties, and reduce impacts to "dark skies" to the greatest extent feasible. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

II. AGRICULTURE AND FORESTRY RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Responses to Checklist Questions

Responses a), e): The project site is currently developed and there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the project site. The project site is not currently used for agricultural operations, and has not been used for agricultural operations in many decades. There are no agricultural operations or agriculturally zoned lands in the vicinity of the project site. Because the proposed project only includes redevelopment of the project site within an urban area of the City designated for urban uses, the project has no potential to convert any off-site agricultural land, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, there is **no impact**. This environmental issue will not be addressed further in the EIR.

Response b): The project site is not zoned for agricultural use nor is it under a Williamson Act contract. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Implementation of the proposed project would have **no impact** relative to this issue.

Response c): The project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Implementation of the proposed project would have **no impact** relative to this issue.

Response d): The project site is not forest land. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Implementation of the proposed project would have **no impact** relative to this issue.

III. AIR QUALITY

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Existing Setting

The project site is located within the Yolo-Solano Air Quality Management District (YSAQMD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the Sacramento Valley Air Basin (SVAB) and has jurisdiction over most air quality matters within its borders.

Responses to Checklist Questions

Responses a)-c):

Operational Emissions

The proposed project would be a direct and indirect source of air pollution, in that it would generate and attract vehicle trips in the region (mobile source emissions), require the use of grid energy (natural gas and electricity), and generate area source emissions. The mobile source emissions would be entirely from vehicles, while the area source emissions would be primarily from landscape fuel combustion, consumer products, and architectural coatings.

The proposed project would result in the construction of replacement residential housing on a site that currently contains residential uses. The three existing residences were constructed in approximately 1912. The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms, and the existing TX Main House, along with its expanded lot, would be vacated and placed for sale or lease to a third party on the open market. As such, the TX Main House would not be retained for TX Fraternity uses once the three-story building is complete. The consolidation would result in three fewer beds and four additional bathrooms compared to the existing houses. The project is consistent with the existing fraternity operations and would not increase the capacity of the project site. Nevertheless, out of an abundance of caution, the operational emissions resulting from the project were quantified and compared to the YSAQMD thresholds. Additionally, the operational emissions from the existing three residences were quantified and compared to the proposed project's operational emissions.

The California Emission Estimator Model (CalEEMod)TM (v.2016.3.2) was used to estimate operational emissions for the proposed project and the existing three residences, without any mitigation measures incorporated. Table 2 shows the operational emissions, which includes both mobile and area source emissions of criteria pollutants, that would result from the existing three

residences. Table 3 shows the operational emissions, which includes both mobile and area source emissions of criteria pollutants, that would result from the proposed project. Detailed CalEEMod emissions calculations are presented in Appendix A.

Table 2: Existing Residences Operational Emissions (Unmitigated Scenario)

<i>Emissions</i>	<i>ROG (tons/year)</i>	<i>NO_x (tons/year)</i>	<i>PM₁₀ (lbs/day)</i>	<i>CO (tons/year)</i>
Area	1.2594	0.0226	0.2099	1.6374
Energy	6.1000e-004	5.1800e-003	4.2000e-004	2.2000e-003
Mobile	0.1985	0.7026	4.6654	2.4634
Total	1.4585	0.7303	4.8757	4.1029
Threshold	10	10	80	Violation of State Ambient Air Quality Standard for CO
Above Threshold?	N	N	N	N/A

SOURCE: CAL EEMOD (v.2016.3.2)

Table 3: Proposed Project Operational Emissions (Unmitigated Scenario)

<i>Emissions</i>	<i>ROG (tons/year)</i>	<i>NO_x (tons/year)</i>	<i>PM₁₀ (lbs/day)</i>	<i>CO (tons/year)</i>
Area	0.0653	1.1200e-003	5.3000e-004	0.0969
Energy	5.7000e-004	4.8500e-003	3.9000e-004	2.0600e-003
Mobile	0.0299	0.2106	4.8558	0.3189
Total	0.0958	0.2166	4.8568	0.4178
Threshold	10	10	80	Violation of State Ambient Air Quality Standard for CO
Above Threshold?	N	N	N	See Response D

SOURCE: CAL EEMOD (v.2016.3.2)

The YSAQMD has established an operational emissions threshold of significance for ozone precursors of 10 tons per year for ROG and NO_x, and 80 pounds per day for PM₁₀. The YSAQMD utilizes a screening process and separate model for CO impacts. As shown in Table 2, the ROG and CO emissions resulting from the existing residences (Table 2) are approximately ten-times the amount resulting from the proposed project (Table 3). This is likely because the existing residences were constructed in approximately 1912 and, as such, are less energy efficient than the proposed three-story building.

It is noted that the earliest operational year available in CalEEMod, year 2000, was used to calculate the operational emissions of the existing residences. However, the three existing residences were constructed in approximately 1912. California' building requirements have become stricter over time, resulting in more energy efficient buildings. As such, the ROG, NO_x, PM₁₀, and CO emissions resulting from operation of the existing residences are likely much higher than what is shown in Table 2.

Further, as shown in Table 3, project generated emissions would be below the YSAQMD's threshold for ROG, NO_x, PM₁₀, and CO. This is a **less than significant** impact.

Construction Emissions

Construction activities associated with construction and implementation of the proposed project would result in temporary short-term emissions associated with vehicle trips from construction workers, operation of construction equipment, and the dust generated during construction activities. These temporary and short-term emissions would generate additional ozone

precursors (ROG and NO_x) as well as PM₁₀, which could exacerbate the County's existing non-attainment status for these criteria pollutants. It should be noted that construction vehicle emissions requirements in California have become stricter over time.

Below is an estimated construction schedule for the proposed project:

- Demolition: July 1, 2019 – July 12, 2019
- Site Preparation: July 3, 2019 – July 26, 2019
- Grading: July 26, 2019 – August 22, 2019
- Building Construction: September 18, 2019 – January 7, 2020
- Paving: August 22, 2019 – September 18, 2019
- Architectural Coating: January 7, 2020 – March 2, 2020

CalEEMod was used to estimate construction emissions for the proposed project. Table 4 shows the construction emissions that would result from the proposed project. Detailed CalEEMod emissions calculations are presented in Appendix A.

Table 4: Project Construction Emissions (Unmitigated Scenario)

<i>Emissions Year</i>	<i>ROG (tons/year)</i>	<i>NO_x (tons/year)</i>	<i>PM₁₀ (lbs/day)</i>	<i>CO (tons/year)</i>
2019	0.1357	1.3445	26.6600	0.9831
2020	0.0865	0.2341	1.8713	0.2200
Maximum	0.1357	1.3445	26.6600	0.9831
Threshold	10	10	80	Violation of State Ambient Air Quality Standard for CO
Above Threshold?	N	N	N	See Response D

SOURCE: CAL EEMOD (v.2016.3.2)

The YSAQMD has established a construction emissions threshold of significance for ozone precursors of 10 tons per year for ROG and NO_x, and 80 pounds per day for PM₁₀. The YSAQMD utilizes a screening process and separate model for CO impacts. As shown in the table above, construction emissions of ROG would be at its maximum in year 2019, with approximately 0.1357 tons of ROG, which is below the 10 tons per year threshold for ROG. Year 2019 would be the peak year for construction emissions of NO_x, with approximately 1.3445 tons of NO_x in that year, which is below the 10 tons per year threshold for NO_x. Construction emissions of PM₁₀ would be at its maximum in year 2019, with approximately 26.66 tons of ROG, which is below the 80 tons per year threshold for ROG. This is a **less than significant** impact.

Response d):

Odors

According to the California Air Resources Board (CARB) Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The surrounding land uses consists of a mix of retail, single family, and apartment developments along First Street, D Street, and E Street. Accordingly, the proposed project is not located in the vicinity of any substantial objectionable odor sources such as those mentioned above.

Operation of the proposed project would not generate notable odors. The proposed project is a residential development, which is compatible with the surrounding land uses. Residential land uses are not typically associated with the creation of substantial objectionable odors. Occasional mild odors may be generated during landscaping maintenance (equipment exhaust), but the project would not otherwise generate odors.

Diesel fumes from construction equipment and delivery trucks are often found to be objectionable; however, construction of the proposed project would be temporary and diesel emissions would be temporary and regulated. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Other Emissions

Sensitive receptors are those parts of the population that can be severely impacted by air pollution. Sensitive receptors include children, the elderly, and the infirm. The residents located to the north and west of the project site are considered sensitive receptors. However, as described below, the construction and operation of the proposed project would not contribute substantial concentrations of pollutants to sensitive receptors. Additionally, the proposed project would not contribute to any CO hotspots.

There are no existing or planned schools within a quarter mile of the project site. The closest school is UC Davis, which located approximately 0.29 miles to the west of the site.

There are several existing residences located within the project vicinity. However, implementation of the proposed project would not expose these sensitive receptors to substantial pollutant concentrations. Air emissions would be generated during the construction phase of the project, but would be short term in duration. The construction phase of the project would be temporary and short-term, and the construction-related emissions would not exceed the YSAQMD thresholds. As described under Response a) – c) above, the proposed project would not generate significant concentrations of air emissions.

The CO screening approach outlined in the YSAQMD's *Handbook for Assessing and Mitigating Air Quality Impacts* was used to estimate whether or not the proposed project's traffic impact would cause a potential CO hotspot. The CO screening approach uses the following screening criteria:

- Does the peak-hour Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity reduce to an unacceptable LOS (typically LOS E or F²)? or
- Will the proposed project substantially worsen an already existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity? (Note: This includes situations where the average delay would increase by 10 seconds or more when project-generated traffic is included.)

If the answer to the screening criteria is “yes,” then the proposed project can be said to have the potential to create a violation of the CO standard and further modeling may be warranted. If the answer to the screening criteria is “no,” then further modeling is not warranted and the proposed project would not create a violation of the CO standard.

² The City of Davis has generally established LOS E as the significance level for intersection operations within the City. However, LOS F is acceptable in the downtown core area, and within areas with a corridor plan. The project site is located in the downtown core area. As such, LOS F was used in the CO screening analysis.

As discussed in Section XVII, Transportation, the proposed project would not reduce LOS on any streets or intersections to an unacceptable LOS, or substantially worsen an already existing peak-hour LOS F on any streets or intersections.

Implementation of the proposed project would not result in a significant increased exposure of sensitive receptors to localized concentrations of toxic air contaminants (TACs), or create a CO hotspot. This project would have a ***less than significant*** impact relative to this topic.

IV. BIOLOGICAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

Responses to Checklist Questions

Response a): Special-status plant or wildlife species have not been recorded on the project site. The project site is currently developed and disturbed. There is no riparian or other sensitive habitat types located on-site. Although various special-status plant species have been documented within five-miles of the site, none are present on the project site. Therefore, the proposed project would have **no impact** on special-status plants.

Historical and continuing site disturbance and urban activities makes the presence of many special-status animals on the project site unlikely. However, nesting birds can utilize the on-site trees. The bird species which have been documented to occur within five miles of the project site include: burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), western snowy plover (*Charadrius alexandrinus nivosus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and white-tailed kite (*Elanus leucurus*). Suitable habitat for ground-nesting burrowing owl species is not present on the project site.

There are a variety of raptors and/or birds protected by the Migratory Bird Treaty Act (MBTA) that could utilize this habitat for nesting. Because the site does not contain open fields or grassland type habitats, the project would not eliminate foraging habitat on the project site. However, as discussed below, development of the project would require the removal of some on-site trees.

The proposed project would retain some of the on-site trees, which could be used for future nesting habitat, although the presence of the residents would make it a less desirable location for nesting in the retained trees by many species. Construction activities that occur during the nesting season (generally March 1-August 31) could disturb nesting sites if they were present during construction. It is also noted that additional trees would be planted in conjunction with development of the residential structure.

The project site is designated for urban development by the City's General Plan, and potential impacts associated with the loss of nesting habitat located on the project site were previously analyzed in the City's General Plan EIR. Nevertheless, due to the proposed tree removal, mitigation is required to avoid impacts related to nesting birds. Mitigation Measure Bio-1 is consistent with Avoidance and Mitigation Measure 16 (AMM16) of the Yolo Natural Heritage Program. Mitigation Measure Bio-2 is consistent with the standard industry practices to avoid and/or minimize potential impacts to protected birds. Implementation of the following mitigation measures would reduce this potential impact to a **less than significant** level.

Mitigation Measure Bio-1: *The project proponent shall implement Avoidance and Mitigation Measure 16 (AMM16) of the Yolo Natural Heritage Program, as follows:*

- *The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.*
- *If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.*
- *For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30*

within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

Mitigation Measure Bio-2: *If any project construction activities are to occur during the nesting season for birds protected under the California Fish and Game Code and/or Migratory Bird Treaty Act (approximately March 1-August 31), the project applicant shall retain a qualified biologist to perform preconstruction surveys for protected birds, including nesting raptors, on the project site and in the immediate vicinity. At least two surveys shall be conducted no more than 15 days prior to the initiation of construction activities, including vegetation clearing. In the event that protected birds, including nesting raptors, are found on the project site, offsite improvement corridors, or the immediate vicinity, the project applicant shall:*

- *Locate and map the location of the nest site. Within 2 working days of the surveys prepare a report and submit to the City and CDFW;*
- *A no-disturbance buffer of 250 feet shall be established;*
- *On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction can resume when a qualified biologist has confirmed that the birds have fledged.*
- *In the event of destruction of a nest with eggs, or if a juvenile or adult raptor should become stranded from the nest, injured or killed, the qualified biologist shall immediately notify the CDFW. The qualified biologist shall coordinate with the CDFW to have the injured raptor either transferred to a raptor recovery center or, in the case of mortality, transfer it to the CDFW within 48 hours of notification. If directed/authorized by the CDFW during the notification, the qualified biologist may transfer the injured raptors to a raptor recovery center.*

Response b): Riparian habitat is found in the interface between land and a river or stream. This habitat is significant in ecology, environmental management, and civil engineering because of its role in soil conservation, its habitat biodiversity, and the influence it has on fauna and aquatic ecosystems, including grassland, woodland, wetland or even non-vegetative.

Sensitive natural communities are those that are considered rare in the region, support special-status plant or wildlife species, or receive regulatory protection (i.e., §404 and 401 of the Clean Water Act, the CDFG §1600 et seq. of the California Fish and Game Code, and/or the Porter-Cologne Act). In addition, the California Natural Diversity Data Base (CNDDDB) has designated a number of communities as rare; these communities are given the highest inventory priority (Holland 1986, CDFG 2003e).

The CNDDDB record search revealed documented occurrences of one sensitive habitat, Valley Oak Woodland, within the 9-quad region for the project site. This sensitive habitat does not occur within the project site. The project site does not support any riparian habitat or sensitive natural communities. As such, implementation of the proposed project would result in a **less than significant** impact.

Response c): The proposed project does not include any construction activities that are within or immediately adjacent to wetlands, creeks, drainages, or other water bodies. These resources are not present on the project site, or in the immediate vicinity of the project site. As such, implementation of the proposed project would have **no impact** relative to this issue. This environmental issue will not be addressed further in the EIR.

Response d): The project site is currently developed and surrounded by existing urban development. The site does not serve as a wildlife corridor, or nursery site. The proposed project would not interfere substantially with the movement of any native resident or migratory fish or

wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Response e): The potential local policy or ordinance protecting biological resources includes the City of Davis Tree Preservation Ordinance. The City of Davis regulates tree planting and removal within the community in Chapter 37, Tree Planting, Preservation, and Protection, of the Municipal Code. The City's Tree Ordinance defines five categories of protected trees:

- **Landmark Trees:** Any tree which has been determined by resolution of the City Council to be of high value because of its species, size, age, form, historical significance, or some other professional criterion. The Landmark Tree List, available from the Public Works Department, lists and identifies these trees.
- **Trees of Significance:** Any tree which measures 5 inches or more in Diameter at Breast Height (4'-6" above ground height).
- **Street Trees:** Any tree planted and/or maintained by the City, or recorded as a street tree, adjacent to a street or within a city easement or right-of-way, on private property, within the street tree easement. The Public Works Department maintains a master list of street trees.
- **City Trees:** Any tree, other than a street tree, planted or maintained by the City within a City easement, right-of-way, park, greenbelt, public place or property owned or leased by the City.
- **Private Tree:** Any tree privately owned and growing on private property, which may include a tree designated as a landmark tree and/or tree of significance, as defined within the definitions section of the Tree Ordinance, Chapter 37.

The site currently contains approximately 28 trees, including those located along the frontages of First Street and D Street. Eleven of these trees (all locust trees) are located along First and D Streets. Ten of the eleven trees along First and D Streets would not be removed with redevelopment of the site. Although one tree along the street frontages would be removed, the proposed landscape plan indicates that a Texas red oak tree would be planted as a replacement in the same location. The other 17 trees are located internal to the site. The trees surrounding the TX Main House are not anticipated for removal; however, the trees surrounding the Jackson House and Bryson House, which are proposed for demolition, would be removed. The project would landscape the site in conjunction with construction of the proposed three-story building.

The diameters of all of the trees are unknown at this time. However, all of the trees fall into either the Trees of Significance, Street Trees, City Trees, or Private Trees. No Landmark Trees are located on-site. Removal of some of the trees on the project site is subject to the City's Tree Ordinance. The project would be required to retain a qualified arborist to perform a survey of any trees within the footprint of the proposed disturbance area. The survey would detail the number, species, size, and relative health and structure of all trees in the disturbance area. Once the survey is complete, which details which trees are subject to regulation under the City's Tree Ordinance, the Tree protection Plan would be prepared.

Compliance with the City's Tree Ordinance would be addressed by a standard City condition of approval which requires preparation of a Tree Protection Plan for trees being preserved and approval of Tree Modification Permit for trees being removed with standard measures for tree replacement or payment for the appraised value of the trees. The Tree Protection Plan would include measures to ensure that all trees to be preserved would be protected during construction

of the project. This would ensure that the project would have a *less than significant* impact relative to local policies and ordinances protecting biological resources.

Response f): The Yolo Natural Heritage Program is a county-wide Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) for the 653,820-acre planning area. The Yolo Natural Heritage Program is being developed to conserve the natural open space and agricultural landscapes that provide habitat for many special status and at-risk species found within the habitats and natural communities in Yolo County. The Yolo Natural Heritage Program will establish measures that will be undertaken to conserve important biological resources, obtain permits for urban growth and public infrastructure projects, and continue Yolo County's rich agricultural heritage.

The HCP/NCCP was adopted by the Davis City Council in May 2018. Per the HCP/NCCP, the land cover type on the project site is "Developed". Developed areas are dominated by pavement and building structures. Vegetation in developed areas generally consists of vegetated corridors (e.g., vegetation maintained adjacent to highways) and patches of mostly ornamental vegetation, such as tree groves, street strips, shade trees, lawns, and shrubs that are typically supported by irrigation. Urban lands cover 45,700 acres, or seven percent, of the Yolo HCP/NCCP Area. This area includes urban vegetation and all areas with structures, graded lots, road and highway medians, anthropogenic drainage canal vegetation, rail rights-of-way, and sewage treatment ponds that do not provide habitat. Based on the Developed HCP/NCCP land cover type on the project site, the site does not contain high-quality habitat for covered species and the proposed project would not be subject to payment of habitat mitigation fees. The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Implementation of the proposed project would have a *less than significant* impact relative to this topic.

V. CULTURAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	X			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	X			
c) Disturb any human remains, including those interred outside of formal cemeteries?	X			

Responses to Checklist Questions

Response a)-c): A Historical Resources Analysis Study (October 2016) and a Historical Effects Analysis Study (June 2018) were prepared by Historical Resources Associate. The analysis concluded that the Bryson House and Jackson House are significant historical resources because both houses have been determined to be eligible for the California Register of Historic Resources.

Based on known historical and archaeological resources in the region, and the potential for undocumented underground cultural resources in the region, it has been determined that the potential impacts on cultural resources caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the three environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include an overview of the prehistory and history of the area, the potential for surface and subsurface cultural resources to be found in the area, the types of cultural resources that may be expected to be found, a review of existing regulations and policies that protect cultural resources, a review of the Historical Resources Analysis Study completed for the project site, an impact analysis, and mitigation that should be implemented in order to reduce potential impacts to cultural resources.

VI. ENERGY

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Responses to Checklist Questions

Responses a), b): Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered “wasteful, inefficient, and unnecessary” if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project includes demolition of two residential structures and construction of one three-story residential structure. The amount of energy used at the project site would directly correlate to the size of the proposed residence, the energy consumption of associated unit appliances, and outdoor lighting. Other major sources of proposed project energy consumption include fuel used by vehicle trips generated during project construction and operation, and fuel used by off-road construction vehicles during construction.

The demolition of the two residences and subsequent development of the proposed three-story fraternity residence would result in three fewer beds (i.e., three fewer residents) compared to the existing condition. During construction, the TX Main House would continue to serve the fraternity's housing and study needs. Once the proposed three-story fraternity building is completed, the fraternity would consolidate all of its activities onto the new western parcel. Once the fraternity is consolidated into the western parcel and associated three-story building, the TX Main House, along with its expanded lot, would be vacated and placed for sale or lease to a third party on the open market. As such, the TX Main House would not be retained for TX Fraternity uses. The number of operational trips would be comparable to the existing baseline. As discussed in Section XVI, Transportation, the existing fraternity operations generate approximately 77.49 daily trips. The proposed fraternity operations (i.e., the three-story building with 35 total beds) would generate approximately 71.53 daily trips, and the single-family home which would be vacated and placed for sale or lease to a third party on the open market would generate approximately 9.52 daily trips. As such, the proposed project would result in an increase of 3.56 daily trips compared to the existing baseline condition. Similarly, the amount of general energy use associated with operation of the proposed building would also be comparable to the existing baseline.

Additionally, the development would incorporate energy efficiency measures. Sustainable design features would include high levels of envelope insulation, high efficiency HVAC, LED Lighting, solar shading devices, electric vehicle charging outlets, and a low water use landscaping and irrigation system. It is anticipated that the project would target a “LEED Silver” equivalency. Therefore, due to the above design features, and the age of the two buildings which would be demolished and replaced, the energy required to operate proposed building, including energy demands for heating and cooling, appliances, and lighting, may even be less than the existing condition.

The proposed project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E is expected to achieve at least a 33 percent mix of renewable energy resources by 2020, and 50 percent by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards (“part 6”), would be applicable to the proposed project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. It is also noted that the City of Davis recently established its own utility company, Valley Clean Energy, which utilizes 100 percent renewable energy sources. The project may be required subscribe to the City’s utility company for energy use.

As a result, the proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal. PG&E, the current electricity and natural gas provider to the site, maintains sufficient capacity to serve the proposed project. The proposed project would comply with all existing energy standards, including those established by the City of Davis, and would not result in significant adverse impacts on energy resources. Furthermore, existing connections exist between the project site and nearby pedestrian and bicycle pathways, and public transit access exists nearby, reducing the need for local motor vehicle travel. For these reasons, the proposed project would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources. This is a *less than significant* impact.

VII. GEOLOGY AND SOILS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Responses to Checklist Questions

Responses a.i), a.ii): The California Geologic Survey (CGS) evaluates faults and determines if a fault should be zoned as active, potentially active, or inactive. All active faults are incorporated into a Special Studies Zone, also referred to as an Alquist-Priolo Special Study Zone. The project site is not within an Alquist-Priolo Special Study Zone. In fact, there are no known faults (active, potentially active, or inactive) that traverse through the City of Davis.

The San Andreas fault system located to the west and the Eastern Sierra fault system located to the east are the closest significant fault systems. Numerous quakes along these fault systems have

been felt in Davis. Major quakes occurred in 1833, 1868, 1892, 1902, 1906, and most recently in 2014, but Davis suffered no significant damage.

The Office of Planning and Research has placed the Davis area in Seismic Activity Intensity Zone II, which indicates that the maximum intensity of an earthquake would be VII or VIII on the Modified Mercalli Intensity Scale. An earthquake of such magnitude would result in slight damage in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures.” The Uniform Building Code places all of California in the zone of greatest earthquake severity because recent studies indicate high potential for severe ground shaking.

There will always be a potential for groundshaking caused by seismic activity anywhere in California, including the project site. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Design in accordance with these standards would reduce any potential impact to a *less than significant* level.

Responses a.iii), c), d): Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, landsliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present. Because the compaction and placement history of the fill is unknown, and the anticipated seismic and groundwater conditions, the exact liquefaction potential is unknown, although it is expected to be low during seismic events.

Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of liquefaction. Areas in the region that are susceptible to this hazard are located along creeks or open water bodies, or within the foothills to the west. There are no creeks or open bodies of water within an appropriate distance from the project site for lateral spreading to occur on the project site. For this reason, the probability of lateral spreading occurring on the project site is low.

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

Soil expansion is dependent on many factors. The more clayey, critically expansive surface soil and fill materials will be subjected to volume changes during seasonal fluctuations in moisture content. Sycamore silt loam, drained, zero percent slopes, is the only soil located on the project site. The Sycamore series consists of soils formed under poorly drained conditions, although the project site soils are drained. The soils formed in mixed sedimentary alluvium. The site surface soils have low expansion potential.

Monitoring of subsidence in Yolo has been occurring since 1999 on a regional level. The monitoring efforts show that the greatest subsidence occurs in the corridor that runs north from Davis, through Woodland, north to Zamora and through to the northeast corner of the county. The subsidence does not appear to be strictly uniform, a characteristic of subsidence, but rather a result of several factors. Subsidence is likely a result of the groundwater pumping, water usage, and other related issues, but additional regional studies are needed over an extended period of time to better understand the subsidence. Subsidence is present throughout the City of Davis including the project site, albeit at a low level.

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform compaction of the soil strata, resulting in movement of the near-surface soils. Since the compaction and placement history of the fill is unknown, removal and re-compaction would likely be required during grading.

Overall, the project site has a low potential for liquefaction, lateral spreading, subsidence, and landslides. However, given that fill was encountered at the site, and the lack of information on the compaction and placement history of the fill, Mitigation Measure Geo-1 below would be required. Overall, it was determined that the project site was suitable for development, and with implementation of the following mitigation measure, this potential impact would be **less than significant**.

***Mitigation Measure Geo-1:** Prior to the development of the project site, further subsurface plan-level geotechnical investigation shall be performed to identify onsite soil conditions and identify any site-specific engineering measures to be implemented during the construction of building foundations, surface improvements, and subsurface improvements. The results of the subsurface geotechnical investigation shall be reflected on the Improvements Plans, subject to review and approval by the City's Building Division. During site grading, the project applicant shall remove and re-compact the existing on-site fill, in accordance with the recommendations provided in the subsurface plan-level geotechnical investigation.*

Response a.iv): There are several categories of landslides including: rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill).

The project site is relatively flat and there are no major slopes in the vicinity of the project site. Slope instability at the project site, as a result of seismic events, has very low potential because of the lack of relief across the area and its distance from active and potentially active faults. The project site is not located in the foothills, mountain terrain, or along a river bank. As such, the project site is exposed to little or no risk associated with landslides. The proposed project would be required to comply with all applicable development requirements included in the Uniform Building Code. This is a **less than significant** impact and no mitigation is required.

Response b): The project site is currently developed and is not at significant risk of erosion under the existing conditions. Construction activities including grading could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters. The RWQCB requires a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each project that disturbs an area one acre or larger. The SWPPP will include project specific best management measures that are designed to control drainage and erosion. The SWPPP and the project specific drainage plan would reduce the potential for erosion. Implementation of the following mitigation measure

would ensure that the proposed project would result in a ***less-than-significant*** impact relative to this topic.

Mitigation Measure Geo-2: *The project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Davis and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

Response e): The proposed project would not require the use of septic tanks or alternative waste water disposal systems for the disposal of waste water. The project has been designed to connect to the existing City sewer system, and septic systems will not be used. Implementation of the proposed project would result in ***no impact*** relative to this topic.

Response f): Known paleontological resources or sites are not located on the project site. Additionally, unique geologic features are not located on the site. The site is currently developed and surrounded by existing urban development, and the proposed project is considered an infill development. As such, impacts to paleontological resources or unique geologic features would not occur. This is a ***less than significant*** impact.

It is noted that a Focused EIR will be completed for the project, which will analyze potential impacts to cultural resources (including paleontological resources) and tribal cultural resources that may result from project implementation. The EIR will include an overview of the prehistory and history of the area, the potential for surface and subsurface cultural resources to be found in the area, the types of cultural resources that may be expected to be found, a review of existing regulations and policies that protect cultural resources, a review of the Historical Resources Analysis Study completed for the project site, an impact analysis, and mitigation that should be implemented in order to reduce potential impacts to cultural resources. In addition, the CEQA process will include a request to the Native American Heritage Commission for a list of local Native American groups that should be contacted relative to this project. The CEQA process will also include consultation with any Native American groups that have requested consultation with the City of Davis.

VIII. GREENHOUSE GAS EMISSIONS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

EXISTING SETTING

Background

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO₂, CH₄, and N₂O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively (Intergovernmental Panel on Climate Change [IPCC], 2013).

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs).

The emissions from a single project will not cause global climate change, however, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the proposed project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone

would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b):

Construction GHG Analysis

Construction-related activities that would generate GHGs include construction worker commute trips, haul trucks carrying supplies and materials to and from the project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Construction of the project is expected to occur during the years 2019 and 2020. Annual construction emissions are summarized in Table 5, in units of metric tons per year (MT/year).

Table 5: Project Construction-Related GHG Emissions (MT/Year) (Unmitigated Scenario)

Year	Bio- CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
2019	0.000	153.0189	153.0189	0.0353	0.0000	153.9016
2020	0.000	30.4055	30.4055	7.5800-e-003	0.0000	30.5949
Maximum	0.000	153.0189	153.0189	0.0353	0.0000	153.9016

SOURCE: CALFEEMOD (v.2016.3.2)

As shown in Table 5, annual GHG emissions from project construction would range from a low of approximately 30.6 MT/year of carbon dioxide equivalents (CO₂e) to a high of 153.9 MT CO₂e.

YSAQMD recommends using 1,100 MT CO₂e per year to analyze construction-related GHG emissions. Peak-year construction-generated GHG emissions would not exceed YSAQMD's recommended GHG emissions threshold of 1,100 MT CO₂e for construction of the proposed project, as shown in Table 5. Therefore, this is a **less than significant** impact relative to this topic.

Operational GHG Analysis

The proposed project would be a direct and indirect source of GHG emissions, in that it would generate and attract vehicle trips in the region (mobile source GHG emissions), and generate area source GHG emissions. The mobile source GHG emissions would be entirely from vehicles, while the area source GHG emissions would be primarily from landscape fuel combustion, consumer products, and architectural coatings. Operational GHG emissions would also be generated from solid waste disposal, water usage, and electricity usage.

The proposed project would result in the construction of replacement residential housing on a site that currently contains residential uses. The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. This would result in three fewer beds and four additional bathrooms compared to the existing houses.

Table 6 shows the operational GHG emissions that would result from the existing three residences. Table 7 shows the operational GHG emissions that would result from the proposed project.

Table 6: Existing Residences Operational Emissions (Unmitigated Scenario)

Emissions	Bio-CO₂	NBio-CO₂	Total CO₂	CH₄	N₂O	CO₂e
Area	19.9607	5.7894	25.7501	0.0190	1.5100e-003	26.6772
Energy	0.0000	21.6062	21.6062	8.2000e-004	2.6000e-004	21.7030
Mobile	0.0000	115.2476	115.2476	0.0183	0.0000	115.7047
Waste	1.2139	0.0000	1.2139	0.0717	0.0000	3.0074
Water	0.2687	1.8770	2.1457	0.0277	6.7000e-004	3.0372
Total	21.4433	144.5202	165.9635	0.1376	2.4400e-003	170.1296

SOURCE: CALCEEMOD (v.2016.3.2)

Table 7: Proposed Project Operational Emissions (Unmitigated Scenario)

Emissions	Bio-CO₂	NBio-CO₂	Total CO₂	CH₄	N₂O	CO₂e
Area	18.6749	5.3562	24.0311	0.0180	1.4100e-003	24.8999
Energy	0.0000	14.6643	14.6643	8.9000e-004	2.9000e-004	14.7721
Mobile	0.0000	109.4318	109.4318	5.9600e-003	0.0000	109.5809
Waste	1.3580	0.0000	1.3580	0.0803	0.0000	3.3644
Water	0.2687	0.8487	1.1174	0.0277	6.7000e-004	2.0090
Total	20.3016	130.3010	150.6026	0.1328	2.3700e-003	154.6263

SOURCE: CALCEEMOD (v.2016.3.2)

As shown, the operational GHG emissions resulting from the existing residences (Table 6) are higher than the proposed project (Table 7). This is likely because the existing residences were constructed in approximately 1912 and, as such, are less energy efficient than the proposed three-story building.

It is noted that the earliest operational year available in CalEEMod, year 2000, was used to calculate the operational emissions of the existing residences. However, the three existing residences were constructed in approximately 1912. California' building requirements have become stricter over time, resulting in more energy efficient buildings. As such, the operational GHG emissions resulting from operation of the existing residences are likely much higher than what is shown in Table 6.

The project is consistent with the existing fraternity operations and would not increase the capacity of the project site. Additionally, the two residential structures which would be demolished and replaced were constructed in approximately 1912. The replacement house would be significantly more energy efficient compared to the existing older buildings. For example, the proposed residential units would be required to install Energy Star-compliant refrigerators and dishwashers. These energy efficient appliances would reduce the operational GHG emissions associated with water usage. Further, the development would incorporate sustainable design features, including high levels of envelope insulation, high efficiency HVAC, LED Lighting, solar shading devices, electric vehicle charging outlets, and a low water use landscaping and irrigation system. It is anticipated that the project would target a "LEED Silver" equivalency. Therefore, due to the above design features, and the age of the two buildings which would be demolished and replaced, the energy required to operate proposed building, including energy demands for heating and cooling, appliances, and lighting, may even be less than the existing condition.

It is also noted that the applicant would be required to comply with Chapter 8.01 of the City of Davis' Municipal Code, which requires that buildings are to comply with the Tier 2 standards of the California Green Building Standards (CALGreen) Code.

Overall, the operational GHG emissions are not anticipated to increase beyond the existing condition. This is a ***less than significant*** impact relative to this topic.

Conclusion

As demonstrated above, the construction-generated GHG emissions would not exceed YSAQMD's recommended GHG emissions threshold of 1,100 MT CO₂e for construction of the proposed project, as shown in Table 4. Additionally, the operational GHG emissions would be comparable, or less, than the existing baseline condition. Therefore, GHG impacts would be considered ***less than significant***.

IX. HAZARDS AND HAZARDOUS MATERIALS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

Responses to Checklist Questions

Responses a), b): The proposed project would place residential uses in an area of the City that currently contains residential uses. The proposed residential land uses do not routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common hazardous materials such as household cleaners, paint, etc. The operational phase of the proposed project does not pose a significant hazard to the public or the environment.

Onsite reconnaissance and historical records indicate that there are no known underground storage tanks or pipelines located on the project site that contain hazardous materials. Therefore, the disturbance of such items during construction activities is unlikely. Construction equipment and materials would likely require the use of petroleum-based products (oil, gasoline, diesel fuel), and a variety of common chemicals including paints, cleaners, and solvents. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance

would ensure that human health and the environment are not exposed to hazardous materials. Therefore, the proposed project would have a ***less than significant*** impact relative to this issue.

Response c): The project site is outside a ¼ mile radius of the nearest school. The closest school is UC Davis, located approximately 0.29 miles to the west of the project site. The operations of a residential fraternity would not emit hazardous emissions or result in the storage or handling of hazardous or acutely hazardous materials, substances or waste above the level of existing conditions. Implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Response d): According the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, or in the near vicinity of the project site. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. The nearest investigation sites include:

- Davis Honda Yamaha (site #T0611300180): This site is a Leaking Underground Storage (LUST) Site which has a current status of Completed – Case Closed (as of September 23, 1993). The potential contaminant of concern was gasoline. The potential contamination concern was for soil.
- Chevron #9-5631 (site #T0611300030): This site is a LUST Site which has a current status of Completed – Case Closed (as of as of March 3, 1997). The potential contaminant of concern was gasoline. The potential contamination concern was for the groundwater aquifer, which is used for drinking water.

Implementation of the proposed project would result in a ***less than significant*** impact relative to this environmental topic.

Response e): The project site is not located near an existing airport and is not within an existing airport land use plan. The nearest airport, UC Davis Airport, is a private airfield located approximately 2.5 miles west of the project site. The UC Davis Airport is operated as a general aviation airport. The Airport offers the sale of aviation fuel (100 LL) and rents hangers, open shades and tie downs for aircraft storage. Additionally, there are two fixed base operators located at the Airport that provide aircraft maintenance (Davis Air Repair), flight instruction, and aircraft rentals (Cal Aggie Flying Farmers). The project site is not located within the approach or take-off zones of the UC Davis Airport, nor is it located within the overflight zones of the airport. There are no private airstrips within a 2-mile vicinity of the project site. Therefore, ***no impact*** would occur.

Response f): Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. The proposed project would also not interfere with any emergency response plan or emergency evaluation plan. As shown on Figure 7, the project site would include one point along D Street. This is a ***less than significant*** impact.

Response g): The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels

such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The site is not located within an area where wildland fires occur. The site is surrounded by developed land uses. The surrounding land uses consists of a mix of retail, single family, and apartment developments along First Street, D Street, and E Street. This is a *less than significant* impact, and will not be further addressed in the EIR.

X. HYDROLOGY AND WATER QUALITY

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:		X		
(i) Result in substantial erosion or siltation on- or off-site;		X		
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;		X		
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or		X		
(iv) Impede or redirect flood flows?		X		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Responses to Checklist Questions

Responses a), e): Implementation of proposed project would not violate any water quality or waste discharge requirements. Construction activities including grading could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of soil and could adversely affect water quality in nearby surface waters. The RWQCB requires a project specific SWPPP to be prepared for each project that disturbs an area one acre or larger. The SWPPP is required to include project specific best management measures that are designed to control drainage and erosion. Mitigation Measure Geo-2 would require the preparation of a SWPPP to ensure that the proposed project prepares and implements a SWPPP throughout the construction phase of the project. The SWPPP (Mitigation Measure Geo-2) and the project specific drainage plan would reduce the potential for the proposed project to violate water quality standards during construction. Implementation of the proposed project would result in a *less-than-significant* impact relative to this topic.

Response b): The proposed project would connect to the City of Davis water system. There are three primary water rights and contracts (collectively, “water supplies”) that are used within the City’s existing service area and Sphere of Influence (SOI). All three of these water supplies are used to meet the water demands for the City’s residents. In several areas within the City, the water supplies can be interchanged and commingled for delivery to end users. The water supplies are:

- Woodland-Davis Clean Water Agency (WDCWA) State Water Resources Control Board (SWRCB) Appropriative Water Right Permit 20281;
- WDCWA’s Central Valley Project (CVP) Contract No. 14-06-200-7422X-R-1; and
- City of Davis’ groundwater rights.

The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

The new impervious surfaces, such as pavement, concrete, and structures that would be built on the project site, could reduce infiltration capacity. However, the project site is currently developed with pervious and impervious surfaces. Once the project site is redeveloped, the amount of impervious surfaces would likely be similar to the existing condition. For example, the front and back yard spaces would remain largely pervious, which would allow infiltration to underlying groundwater. The project would also use low water use irrigation systems and landscaped bio-swales along the First and D Street landscaping edges. In addition, the project is not anticipated to significantly affect groundwater quality because sufficient stormwater infrastructure would be constructed as part of project to detain and filter stormwater runoff and prevent long-term water quality degradation. Therefore, project construction and operation would not substantially deplete or interfere with groundwater supply or quality. This impact would be *less than significant*.

Responses c.i)-c.iv): When land is in a natural or undeveloped condition, precipitation will infiltrate/percolate the soils and mulch. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off of a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed with urban uses. Houses, buildings, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff can result in flooding in some areas if adequate storm drainage facilities are not provided.

There are no rivers, streams, or water courses located on or immediately adjacent to the project site. As such, there is no potential for the project to alter a water course, which could lead to on

or offsite flooding. Drainage improvements associated with the project site would be located on the project site, and the project would not alter or adversely impact offsite drainage facilities.

The proposed project would not likely increase the amount of impervious surfaces on the project site compared to the existing condition. The proposed project would require the installation of storm drainage infrastructure to ensure that storm waters properly drain from the project site. Stormwater would be routed to proposed landscaped bio-swales along the First and D Streets landscaping edges.

The proposed project will be required to comply with the Phase II Small MS4 General Permit (see Article 30.02 and 30.04 of the City of Davis Municipal Code). The proposed project must meet the guidelines and requirements set forth in the “Phase II Small MS4 General Permit, 2013-0001-DWQ,” dated February 5, 2013, adopted by the City of Davis. Permittees must implement a post-construction stormwater management program, as specified in Section E.12 of the Phase II Small MS4 General Permit

In order to meet the guidelines and requirements set forth in the “Phase II Small MS4 General Permit, 2013-0001-DWQ,” permanent storm water control measures would be incorporated into the project in order to mitigate the impacts of pollutants in storm water runoff from the proposed project. The proposed project would incorporate site design measures, source control measures, and treatment control measures.

The construction of storm water drainage facilities would not substantially alter the existing drainage pattern of the area, or alter the course of a stream or river. As required by Mitigation Measures Hydro-1, the applicant would be required to submit a plan identifying the stormwater control measures that would be implemented. Additionally, Mitigation Measures Hydro-2 requires documentation that the stormwater runoff from the site is treated per the standards in the California Stormwater Best Management Practice New Development and Redevelopment Handbook and Section E.12 of the Phase II Small MS4 General Permit. Implementation of the proposed project with the following mitigation measures would have a **less-than-significant** impact relative to this environmental topic.

Mitigation Measure Hydro-1: *Prior to issuance of building or grading permits, the applicant shall submit a plan identifying permanent stormwater control measures to be implemented by the project to the City. The plan shall be subject to review and approval by the Public Works Department.*

Mitigation Measure Hydro-2: *Prior to any site disturbance, the project proponent shall document to the satisfaction of the City of Davis that stormwater runoff from the project site is treated per the standards in the California Stormwater Best Management Practice New Development and Redevelopment Handbook and Section E.12 of the Phase II Small MS4 General Permit. Drainage from all paved surfaces, including parking lots, driveways, and roofs, shall be routed either through swales, buffer strips, or sand filters or treated with a filtering system prior to discharge to the storm drain system. Landscaping shall be designed to provide water quality treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. Roofs shall be designed with down spouting into landscaped areas. Driveways should be curbed into landscaping so runoff drains first into the landscaping. The aforementioned requirements shall be noted on the Preliminary and Final Planned Developments for the project.*

Response d): The risks of flooding hazards in the City of Davis and immediate surroundings are primarily related to large, infrequent storm events. These risks of flooding are greatest during the rainy season between November and March. Flooding events can result in damage to structures, injury or loss of human and animal life, exposure to waterborne diseases, and damage

to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater.

The 100-Year floodplain denotes an area that has a one percent chance of being inundated during any particular 12-month period. Floodplain zones (Special Flood Hazard Areas [SFHA]) are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs). These tools assist communities in mitigating flood hazards through land use planning. FEMA also outlines specific regulations, intended to be adopted by the local jurisdictions, for any construction, whether residential, commercial, or industrial within 100-year floodplains.

Lands within the FEMA-designated 100-year floodplain (SFHA) are subject to mandatory flood insurance as required by FEMA. The insurance rating is based on the difference between the base flood elevation (BFE), the average depth of the flooding above the ground surface for a specific area, and the elevation of the lowest floor. Because the City of Davis participates in the National Flood Insurance Program, it must require development permits to ensure that construction materials and methods will mitigate future flood damage, and to prevent encroachment of development within floodways. New construction and substantial improvements of residential structures are also required to “have the lowest habitable floor (including the basement if it is, or easily could be ‘habitable’) elevated to or above the base flood level.”

The proposed project is shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) number 06113C0611G dated June 18, 2010. The project site is located within FEMA Zone X (un-shaded), indicating that the site is located outside of the 100-year flood hazard zone.

Tsunamis are defined as sea waves created by undersea fault movement. A tsunami poses little danger away from shorelines; however, when a tsunami reaches the shoreline, a high swell of water breaks and washes inland with great force. Waves may reach 50 feet in height on unprotected coasts. Historic records of the Bay Area used by one study indicate that nineteen tsunamis were recorded in San Francisco Bay during the period of 1868-1968. Since Davis is many miles inland from the San Francisco Bay Area and associated water bodies, the project site is not exposed to flooding risks from tsunamis and adverse impacts would not result.

A seiche is a standing wave in an enclosed or partially enclosed body of water. Seiches and seiche-related phenomena have been observed on lakes, reservoirs, swimming pools, bays, harbors and seas. The key requirement for formation of a seiche is that the body of water be at least partially bounded, allowing the formation of the standing wave. There are no large bodies of standing water in the vicinity of the project site. As such, there is no potential for the project to be exposed to seiches.

Overall, this impact is *less than significant*.

XI. LAND USE AND PLANNING

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	X			

Responses to Checklist Questions

Response a): The project site is located within the Davis city limits and is adjacent to developed land on all sides. The project would result in redevelopment of the site, and the proposed use would not change. Development of the project would not result in any physical barriers, such as a wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing utilities. The project would have **no impact** in regards to the physical division of an established community.

Response b): The proposed project may cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect This land use and planning impact will require a detailed analysis in the EIR. As such, the lead agency will examine this environmental issue in the EIR and will decide whether the proposed project has the potential to have a significant impact. At this point a definitive impact conclusion for this environmental topic will not be made; rather, this is considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include a detailed discussion of the project entitlements as they relate to the existing General Plan, Zoning Code, and other local regulations. The local, regional, state, and federal jurisdictions potentially affected by the project will be identified, as well as their respective plans, policies, laws, and regulations, and potentially sensitive land uses. The proposed project will be evaluated for consistency the City of Davis General Plan, the Zoning Ordinance, and other local planning documents. Planned development and land use trends in the region will be identified based on currently available plans. Reasonably foreseeable future development projects within the region will be noted, and the potential land use impacts associated with the project will be presented.

This section will provide an analysis including the thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to ensure consistency with the existing and planned land uses.

XII. MINERAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Responses to Checklist Questions

Responses a), b): According to the Davis General Plan, the most important mineral resources in the region are sand and gravel, which are mined on Cache Creek and other channels in Yolo County. There are no known mineral resources located on the project site or in the immediate vicinity. Additionally, there is no land designated or zoned for mineral resources within the City limits. Given that no known mineral resources are located in the vicinity of the proposed project, implementation of the proposed project would not result in the loss of availability of a known mineral resource or of a locally-important mineral resource recovery site. Therefore, there would be **no impact** regarding the loss of availability of a known mineral resource that would be of value to the region. This issue will not be addressed further in the EIR.

XIII. NOISE

<i>Would the project result in:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60-dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is like L_{dn} , but includes a +5-dB penalty for evening noise. Table 8 lists several examples of the noise levels associated with common situations.

Table 8: Typical Noise Levels

<i>Common Outdoor Activities</i>	<i>Noise Level (dBA)</i>	<i>Common Indoor Activities</i>
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. SEPTEMBER 2013.

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the

less acceptable the new noise will be judged by those hearing it. The following relationships occur regarding increases in A-weighted noise level:

- Except in carefully controlled laboratory experiments, a 1 dBA change cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

Responses to Checklist Questions

Response a):

Construction Noise

Construction activities have the potential to create temporary, or periodic increases in ambient noise levels in the project vicinity above levels existing without the project. During the construction of the project, including roads, water, and sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the project vicinity. Existing sensitive receptors are located in the nearby residences, some of which are as close as 75 feet from the proposed construction activities. As indicated in Table 9, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at 50 feet.

Table 9: Construction Equipment Noise

<i>Type of Equipment</i>	<i>Maximum Level, dB at 50 feet</i>
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours which are the least sensitive hours. Additionally, the majority of construction activities would occur at distances of 300 to 500 feet from the nearest residences.

At these further distances, the maximum noise levels due to construction at the interior of the site would range from 60 to 70 dBA.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration and would likely occur primarily during daytime hours.

Construction could result in periods of elevated ambient noise levels and the potential for annoyance. However, the City of Davis Noise Ordinance (Section 24.02.040, Special provisions) establishes allowable hours of operation and noise limits for construction activities as follows:

(b) Construction and landscape maintenance equipment. Notwithstanding any other provision of this chapter, between the hours of 7:00 a.m. and 7:00 p.m. on Mondays through Fridays, and between the hours of 8:00 a.m. and 8:00 p.m. on Saturdays and Sundays, construction, alteration, repair or maintenance activities which are authorized by valid city permit or business license, or carried out by employees of contractors of the city shall be allowed if they meet at least one of the following noise limitations:

- (1) No individual piece of equipment shall produce a noise level exceeding eighty-three dBA at a distance of twenty-five feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to twenty feet from the equipment as possible.
- (2) The noise level at any point outside of the property plane of the project shall not exceed eighty-six dBA.
- (3) The provisions of subdivisions (1) and (2) of this subsection shall not be applicable to impact tools and equipment; provided, that such impact tools and equipment shall have intake and exhaust mufflers recommended by manufacturers thereof and approved by the director of public works as best accomplishing maximum noise attenuation, and that pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof and approved by the director of public works as best accomplishing maximum noise attenuation. In the absence of manufacturer's recommendations, the director of public works may prescribe such means of accomplishing maximum noise attenuation as he/she may determine to be in the public interest.

Construction projects located more than two hundred feet from existing homes may request a special use permit to begin work at six a.m. on weekdays from June 15th until September 1st. No percussion type tools (such as ramsets or jackhammers) can be used before 7:00 a.m. The permit shall be revoked if any noise complaint is received by the police department.

- (4) No individual powered blower shall produce a noise level exceeding seventy dBA measured at a distance of fifty feet.
- (5) No powered blower shall be operated within one hundred feet radius of another powered blower simultaneously.

- (6) On single-family residential property, the seventy dBA at fifty feet restriction shall not apply if operated for less than ten minutes per occurrence.

Because all construction activities will be subject to the requirements of Section 24.02.040 of the City of Davis Municipal Code with respect to limits on construction noise, this impact would be ***less than significant***.

Operational Noise

Operational noise would include traffic noise and noise from on-site activities. As discussed in Section XVII, Transportation, the existing fraternity operations generate approximately 77.49 daily trips. The proposed fraternity operations (i.e., the three-story building with 35 total beds) would generate approximately 71.53 daily trips, and the single-family home which would be vacated and placed for sale or lease to a third party on the open market would generate approximately 9.52 daily trips. As such, the proposed project would result in an increase of 3.56 daily trips compared to the existing baseline condition.

To describe future noise levels due to the nominal increase in traffic, FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. Direct inputs to the model included traffic volumes available on the City of Davis' website.³ Table 10 shows the predicted traffic noise levels associated with First Street, B Street, and E Street (with and without the project). These roadways are proximate to the project site.

Table 10: Noise Calculations for Surrounding Roadway Segments

Roadway	ADT	Contours (ft)			Level, dBA	Change
		60 dBA	65 dBA	70 dBA		
Existing						
First Street	7,853	57	26	12	60.8	--
B Street	9,659	67	31	14	61.9	--
E Street	4,329	39	18	8	58.4	--
Existing Plus Project						
First Street	7,664	57	27	12	60.9	0.1
B Street	9,740	67	31	14	61.9	0.0
E Street	4,410	40	18	9	58.5	0.1

SOURCES: FHWA-RD-77-108, AND SAXELBY ASSOCIATES, 2019.

The data in the table shows that project-related traffic noise level increases under the existing plus project scenario would be a maximum of 0.1 dBA along First Street and E Street and a 0.0 dBA increase along B Street. This traffic noise increase is very small and not discernible to the human ear. These increases are well below the 3-dBA standard, making it an insignificant increase.

Additionally, the proposed parking areas would be moved from the current location along D Street to the internal portion of the project site. The revised parking layout would not increase noise associated with parking. As such, traffic noise is not anticipated to increase as a result of the project.

³ Available at: <https://cityofdavis.org/city-hall/public-works/transportation/traffic-division-home/traffic-data-map>.

Noise from on-site activities would be comparable to the existing condition. The project does not propose any new noise-generating uses beyond those that currently exist, such as a pool or other outdoor facilities. The existing site plan has outdoor lawn areas in the front, rear, and side yards. The proposed site plan would also provide side and rear yards with patio and/or lawn areas. No other noise-generating uses would be constructed.

As such, operational noise impacts associated with implementation of the proposed project would be *less than significant*.

Response b): Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 11 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

Table 11: Effects of Vibration on People and Buildings

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/sec.	in./sec.		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBOEN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

The vibration-generating activities typically happen during construction when activities such as grading, utilities placement, and road construction occur. Sensitive receptors which could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located approximately 75 feet or further from the activity. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 12 shows the typical vibration levels produced by construction equipment.

Table 12: Vibration Levels for Varying Construction Equipment

Type of Equipment	Peak Particle Velocity @ 25 feet (inches/second)	Peak Particle Velocity @ 100 feet (inches/second)
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006

Table 12 data indicate that construction vibration levels anticipated for the proposed project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. Implementation of the proposed project would have a **less than significant** impact relative to this environmental topic.

Response c): The project site is not located near an existing airport and is not within an existing airport land use plan. The nearest airport, UC Davis Airport, is a private airfield located approximately 2.5 miles west of the project site. The proposed project would, therefore, not expose people residing or working in the project area to excessive noise levels associated with such airport facilities. Implementation of the proposed project would have **no impact** relative to this topic.

XIV. POPULATION AND HOUSING

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Responses to Checklist Questions

Response a): According to the 2017 US Census population estimates, the population in Davis is 68,986 people. The proposed project would result in the construction of replacement residential housing on a site that currently contains residential uses. The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. This would result in three fewer beds and four additional bathrooms compared to the existing houses. The project is consistent with the existing fraternity operations and would not increase the capacity of the project site. The proposed project would not include upsizing of offsite infrastructure or roadways. Implementation of the proposed project would not induce substantial population growth in an area, either directly or indirectly. Therefore, Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response b): The project site is currently developed with three two-story adjacent Theta Xi fraternity houses. The proposed project includes merging the three lots located at 503, 509, and 515 First Street and re-subdividing the property into two lots for the redevelopment of one parcel with a consolidated 35-bed, three-story building. The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main House) on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot. The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. This would result in three fewer beds and four additional bathrooms compared to the existing houses.

Although the proposed project would reduce the number of beds by three compared to the existing condition, this would not necessitate the construction of replacement housing elsewhere. The existing fraternity houses would be demolished and reconsolidated in order to serve the fraternity. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

XV. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?				X
Parks?			X	
Other public facilities?			X	

Responses to Checklist Questions

Response a):

Fire Protection

The City of Davis Fire Department (Fire Department) provides pre-hospital emergency medical services at the EMT-1D level; minimizes loss from fires, hazardous materials incidents and natural disasters and other emergency services; and ensures that the community's emergency service resources are effectively and efficiently managed. The Fire Department coordinates citywide planning for large scale disasters and emergency incidents.

The Fire Department is staffed by 44 shift personnel (nine captains and 35 firefighters), one fire chief, two division chiefs, one fire prevention captain and three administrative staff. The department consists of three fire stations located in Central, West, and South Davis. The shift personnel (firefighters) are divided into three shifts, each shift working a 24-hour day (56-hour work week). Fire Department equipment consists of three engines, one rescue, one squad, two grass/wildland units, one water tender and two reserve engines and two antique fire apparatus.

The department consists of three fire stations located in Central, West, and South Davis. The nearest fire station to the project site is located approximately 0.32 miles north of the site.

The proposed project would not include additional residential units, or people to the City of Davis. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for fire protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for fire protection services from the City of Davis Fire Department. Therefore, implementation of the proposed project will have a **less than significant** impact relative to this topic.

The proposed project would not result in a need to construct a new fire station or physically alter an existing fire station. The Fire Department would receive development impact fees from the project for capital improvements and infrastructure costs even though a new facility would not be created. The fair share funds are intended to pay for project financial impacts on fire

protection service. The proposed project's environmental impact to fire service is considered ***less than significant***.

Police Protection

The City of Davis Police Department currently operates out of a single station at 2600 Fifth Street in Davis. There are currently 61 sworn police officers, 45 support professionals and normally two police patrol dogs, plus Police Department volunteers. The Police Department provides professional law enforcement, maintenance of public order and safety, crime prevention planning, and coordination services that contribute to discouraging criminal behavior and enhancing community livability and sustainability.

The proposed project would not include additional residential units, or people to the City of Davis. The existing fraternity houses would be demolished and reconsolidated in order to serve the fraternity. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for police protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for police protection services from the City of Davis Police Department. Therefore, implementation of the proposed project will have ***no impact*** relative to this topic.

The proposed project would not result in a need to construct a new police station or physically alter an existing police station. As previously stated, the development impact fees for capital improvements and infrastructure costs would be collected. The fair share funds are intended to pay for project financial impacts on police protection service. The proposed project's environmental impact to police service is considered ***less than significant***.

Schools

The proposed project is located within the service boundaries of the Davis Joint Unified School District (DJUSD). The DJUSD covers an area of 126 square miles and employs approximately 1,000 people. The district maintains eight (8) standard elementary schools, one (1) "magnet" elementary school (César Chávez), three (3) junior high schools, one (1) comprehensive high school, one "magnet" high school, one School for Independent Study, and one continuation school. The future residents of the proposed fraternity building would be enrolled at UC Davis, and would not increase enrollment at any DJUSD schools. The proposed project would not directly, or indirectly increase the student population in the area. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not result in the need for new school facilities, thus it is anticipated to have ***no impact*** relative to this topic.

Parks

The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not significantly increase the use of existing facilities. Furthermore, it is not anticipated that any substantial physical deterioration of existing facilities would occur, or be accelerated.

The project would consolidate all living and study areas into the proposed three-story building with partial basement, a detached laundry, storage building, and trash enclosure, and associated site landscaping with exterior meeting and gathering spaces. There would also be a dedicated "Bike Barn" with bike maintenance space and a one-to-one ratio of covered and secured bike storage to beds. A new concealed off-street parking and recreation area would also be constructed in the rear of the site.

The project would result in the demolition of two fraternity houses and the construction of one replacement house which would consolidate the existing use into one structure and lot. The project would not directly introduce new residents to the City, and therefore would not substantially increase demand for public park facilities to the extent that modification of existing facilities or construction of new park facilities would be necessary. As such, the proposed project would have a ***less than significant*** impact relative to this topic.

Other Public Facilities

The proposed project would not result in a need for other public facilities that are not addressed in the Utilities and Service Section. The proposed project does not trigger the need for new facilities associated with other public services. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Consequently, new facilities or other public services are not proposed at this time. Implementation of the proposed project would have a ***less than significant*** impact relative to this issue.

XVI. RECREATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Responses to Checklist Questions

Responses a), b): The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not significantly increase the use of existing facilities. Furthermore, it is not anticipated that any substantial physical deterioration of existing facilities would occur, or be accelerated.

The project would consolidate all living and study areas into the proposed three-story building with partial basement, a detached laundry, storage building, and trash enclosure, and associated site landscaping with exterior meeting and gathering spaces. There would also be a dedicated “Bike Barn” with bike maintenance space and a one-to-one ratio of covered and secured bike storage to beds. A new concealed off-street parking and recreation area would also be constructed in the rear of the site.

The proposed project would not increase the use of existing parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Implementation of the proposed project would have a *less than significant* impact relative to

XVII. TRANSPORTATION

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Responses to Checklist Questions

Response a): The proposed project would redevelop an existing fraternity site with new fraternity uses. The project site is located along a major arterial roadway and many bicycle and pedestrian facilities are available for alternative transportation modes. The proposed project would not interfere with any existing pedestrian/bicycle facilities, and would not preclude construction of any future facilities.

There are two Unitrans routes that pass the project site: the ‘M’ line and the ‘W’ line. The ‘M’ line provides service to the Memorial Union Terminal and the ‘W’ line provides service to the Silo Terminal. The project would not increase transit use during peak periods compared to the existing baseline. The demolition of the two residences and subsequent development of the proposed three-story fraternity residence would result in three fewer beds (i.e., three fewer residents) compared to the existing condition. Therefore, the amount of transit use would be comparable to the existing baseline. The proposed project would not interfere with any existing transit facilities, and would not preclude construction of any future facilities.

Similarly, because the number of residents would be comparable the existing condition, the operations on the nearby project roadways are not expected to degrade. The proposed project would not reduce LOS on any streets or intersections to an unacceptable LOS, or substantially worsen an already existing peak-hour LOS F on any streets or intersections.

In summary, impacts related to conflicts with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be **less than significant**.

Response b): Vehicle-miles-traveled (VM) is considered a useful metric in understanding how a project can affect the efficiency of the transportation system. By definition, one VMT occurs when a vehicle is driven one mile. In addition, a given VMT value represents vehicular miles of travel for entire weekday. Lastly, VMT values in this section represent the full length of a given trip, and are not truncated at city, county, or region boundaries.

According to the CalEEMod outputs for the existing operations, the existing fraternity operations generate approximately 77.49 daily trips. The proposed fraternity operations (i.e., the three-story building with 35 total beds) would generate approximately 71.53 daily trips, and the single-

family home which would be vacated and placed for sale or lease to a third party on the open market would generate approximately 9.52 daily trips. As such, the proposed project would result in an increase of 3.56 daily trips compared to the existing baseline condition. Therefore, the number of operational trips would be comparable to the existing baseline. As such, the proposed project would not reduce LOS on any streets or intersections to an unacceptable LOS, or substantially worsen an already existing peak-hour LOS F on any streets or intersections.

As noted above, the demolition of the two residences and subsequent development of the proposed three-story fraternity residence would result in three fewer beds (i.e., three fewer residents) compared to the existing condition. Therefore, as noted above, the number of operational trips would be comparable to the existing baseline. The increase of 3.56 daily trips would be spread out throughout the day, meaning that the number of peak hour trips would be negligible. No other uses or visitor serving areas are included in the project. Therefore, the project is not expected to result in an overall increase in vehicle trips within the area. As such, impacts are considered *less than significant* relative to this topic.

Responses c), d): No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project would include a new parking lot accessed from D Street through a secured vehicle gate. The new concealed off-street parking and recreation area in the rear would significantly increase the number of conforming off-street parking spaces available to the fraternity. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Therefore, project implementation would have a *less than significant* impact relative to this topic.

XVIII. TRIBAL CULTURAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	X			
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.	X			

Responses to Checklist Questions

Responses a.i), a.ii): The City has initiated tribal consultation in accordance with Assembly Bill (AB) 52. In letters dated April 27, 2018, the City sent tribal consultation letters to the Yocha Dehe Winun Nation. In the letter, the City provided the tribe with information regarding the proposed project and requested that the tribes supply any information they might have concerning prehistoric sites or traditional use areas within the project site. The Yocha Dehe Winun Nation responded to the letter on Mar 22, 2018. The Yocha Dehe letter notes that the project site is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, the Tribe has cultural interest and authority in the project area. The letter further notes that the Tribe has concerns that the project would impact known archaeological and/or cultural sites. The letter concludes that the Yocha Dehe Wintun Nation recommends including cultural monitors during development or ground disturbance, including backhoe and trenching excavations.

Based on known historical and archaeological resources in the region, and the potential for undocumented underground cultural resources in the region, it has been determined that the potential impacts on cultural resources caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the three environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include an overview of the prehistory and history of the area, the potential for surface and subsurface cultural resources to be found in the area, the types of cultural resources that may be expected to be found, a review of existing regulations and policies that protect cultural resources, a review of the Historical Resources Analysis Study completed for the project site, an impact analysis, and mitigation that should be implemented in order to reduce potential impacts to cultural resources. In addition, the CEQA process will include a request to the Native American Heritage Commission for a list of local Native American groups that should be

contacted relative to this project. The CEQA process will also include consultation with any Native American groups that have requested consultation with the City of Davis.

XIX. UTILITIES AND SERVICE SYSTEMS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Responses to Checklist Questions

Responses a)-c):

Water

The City currently provides water service to the project site. The proposed project, if approved by the City, is capable of being served by the City from the City’s existing and future portfolio of water supplies. The proposed project would connect to the City’s existing water distribution infrastructure, including the infrastructure located adjacent to the project site, along First Street and D Street. The water supply for the proposed project would have the same water supply reliability and water quality as the water supply available to each of the City’s other existing and future water customers.

There are three primary water rights and contracts (collectively, “water supplies”) that are used within the City’s existing service area and SOI. All three of these water supplies are used to meet the water demands for the City’s residents. In several areas within the City, the water supplies can be interchanged and commingled for delivery to end users. The water supplies are:

- WDCWA SWRCB Appropriative Water Right Permit 20281;
- WDCWA’s CVP Contract No. 14-06-200-7422X-R-1; and
- City of Davis’ groundwater rights.

The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main

House) on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot. The existing houses provide 38 total beds and five total bathrooms (including seven toilets, ten basins, and nine showerheads). The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms (including ten toilets, eighteen basins, and nine showerheads).

Limited amounts of water would be necessary during the construction phase of the project, but this would be a temporary use of water for construction related activities, and would not be in substantial amounts.

Although the project would increase the number of toilets and basins compared to the existing condition, the proposed appliances and facilities would be more energy- and water-efficient. Additionally, the project would use a low water use landscaping and irrigation system. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current use. No additional demand for water will be created by the project beyond the existing condition. Therefore, a ***less than significant*** impact would occur related to water supply and water infrastructure.

Wastewater

The City currently provides wastewater service to the project site. Wastewater generated at the project site would be conveyed to the City's Wastewater Treatment Plant (WWTP) for treatment and disposal. The WWTP would be sized to accommodate 6.0 million gallons per day (MGD) of average dry weather flow (ADWF). ADWF is defined as the average of the three consecutive lowest-flow calendar months, which for the City usually coincides with the period of July through September. Now that the Secondary and Tertiary Improvements (STI) Phase of the WWTP upgrade project has been completed, West Yost has estimated that the available ADWF capacity of the WWTP is 1.66 MGD, or 28 percent of design capacity⁴.

As noted above, the project would include demolition of the buildings at 503 and 509 First Street, the retention of the building at 515 First Street on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot. The three existing houses provide 38 total beds and five total bathrooms. The proposed three-story fraternity building would provide 35 total beds and nine total bathrooms. The TX Main House would not be retained for TX Fraternity uses, and no changes (i.e., addition or removal of bedrooms or bathrooms) to the TX Main House are proposed as part of the project. This would result in three fewer beds and four additional bathrooms compared to the existing houses. The increase in wastewater generated by the four additional bathrooms would be nominal, and would not result in exceedance of the design capacity of the WWTP.

The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current use. No additional demand for wastewater treatment will be created by the project.

The current capacity of the WWTP would be sufficient to handle the wastewater flow from the proposed project. In addition, the proposed project is required to pay sewer impact fees which would contribute towards the cost of future upgrades, when needed. As a result, the proposed

⁴ West Yost Associates. Impacts of Innovation Center/Nishi Property Development on Wastewater Collection System Capacity. Technical Memorandum. March 25, 2015.

project would not have adverse impacts to wastewater treatment capacity. Because the project applicant would pay City sewer impact fees to redevelop the site, and adequate long-term wastewater treatment capacity is available to serve full build-out of the project, a ***less than significant*** impact would occur related to requiring or resulting in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Responses d), e): Solid waste collection and disposal in the City of Davis (including the project site) is provided by Davis Waste Removal, Inc. (DWR). Non-recyclable waste generated by the City of Davis is disposed of at the 722-acre Yolo County Central Landfill. This landfill has a permitted maximum disposal of 1,800 tons per day. The total permitted capacity of the landfill is 49,035,200 cubic yards, which is expected to accommodate an operational life of about 68 years (January 1, 2081).

As previously stated, the proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current use. No additional demand for landfill, or other waste facilities will be created by the project operation. However, limited amounts of solid waste could be generated during the construction phase of the project, but this would be temporary, and would not be in substantial amounts, and would not interfere with a waste facility's permitted capacity.

The proposed project would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. Specifically, Chapter 32 of the City's Municipal Code regulates the management of garbage, recyclables, and other wastes. Chapter 32 sets forth solid waste collection and disposal requirements for residential and commercial customers, and addresses yard waste, hazardous materials, recyclables, and other forms of solid waste.

The project would not interfere with regulations related to solid waste. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

XX. WILDFIRE

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
d) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

Responses to Checklist Questions

Response a): Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. The proposed project would also not interfere with any emergency response plan or emergency evaluation plan. As shown on Figure 7, the project site would include one point along D Street. Therefore, impacts from project implementation would be considered **less than significant** relative to this topic.

Responses b), c): The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main House) on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot. The project site is surrounded by existing urban uses and is considered an infill development. The proposed three-story fraternity building would be constructed in accordance with the most recent California Building Standards Code, which requires sprinkler systems in all new one-and two-family dwellings and townhouse construction statewide.

No additional demand for fire protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for fire protection services from the City of Davis Fire Department beyond the existing condition. The project would not exacerbate fire risk, or require the installation or maintenance of infrastructure that may exacerbate fire risk. Therefore, impacts from project implementation would be considered **less than significant** relative to this topic.

Response d): Runoff from the project site currently flows to the existing City storm drains located in First Street and D Street. Upon development of the site, stormwater would continue to flow to the storm drains in the adjacent roadways. As such, the proposed drainage would be nearly identical to the existing condition. Additionally, the project site is located within FEMA Zone X (un-shaded), indicating that the site is located outside of the 100-year flood hazard zone.

Further, because the site is essentially flat and located in an existing urbanized area of the City, downstream landslides would not occur. Therefore, impacts from project implementation would be considered *less than significant* relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	X			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Responses to Checklist Questions

Responses a)-b): As discussed in Section IV, Biological Resources, the proposed project would not: have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of a rare or endangered plant or animal. Special-status plant or wildlife species have not been recorded on the project site. The project site is currently developed and disturbed. There is no riparian or other sensitive habitat types located on-site. Although various special-status plant species have been documented within five-miles of the site, none are present on the project site.

There is limited potential for some special-status bird species to be found on-site. The bird species which have been documented to occur within five miles of the project site include: burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), western snowy plover (*Charadrius alexandrinus nivosus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and white-tailed kite (*Elanus leucurus*). Suitable habitat for ground-nesting burrowing owl species is not present on the project site.

There are a variety of raptors and/or birds protected by the MBTA that could utilize this habitat for nesting. Because the site does not contain open fields or grassland type habitats, the project would not eliminate foraging habitat on the project site. However, development of the project would require the removal of some on-site trees. Construction activities that occur during the nesting season (generally March 1-August 31) could disturb nesting sites if they were present during construction. Mitigation Measure Bio-1 requires preconstruction surveys for protected

birds if construction would occur during the nesting season for birds protected under the MBTA and/or California Fish and Game Code.

As such, the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

However, it has been determined that the potential for the proposed project to: eliminate important examples of the major periods of California history or prehistory; create cumulatively considerable impacts; or adversely affect human beings will require more detailed analysis in an EIR. As such, the City of Davis will examine each of these environmental issues in the EIR and will decide whether the proposed project has the potential to have significant impacts on these environmental issues. At this point a definitive impact conclusion for each of these two environmental topics will not be made, rather both are considered *potentially significant* until a detailed analysis is prepared in the EIR.

Response c): The construction phase could affect surrounding neighbors through increased air emissions and noise. With the implementation of the conditions of approval, regulatory standards, and best management practices, the project impacts would be less than significant related to these topics. The operational phase of the project would be comparable to the existing baseline condition. As discussed throughout this Initial Study, the proposed project would not cause substantial adverse effects on human beings. the proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. As such, a *less than significant* impact would result.

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Appendix A

Air Quality and Greenhouse Gas Modeling Outputs

THETA XI CALLEEMOD ASSUMPTIONS

Existing Uses (Operational Only)

- Air District: YSAQMD
- Climate Zone: 4
- Land Use Setting: Urban
- Start of Construction: Monday, July 3, 2000
- Operational Year: 2000
- Utility Company: PG&E
- Land Uses:

LAND USE TYPE AND SUBTYPE	UNIT AMOUNT AND METRIC	LOT ACREAGE	SQUARE FOOTAGE	POPULATION
Residential – Apartments Mid Rise	13 DU ¹	--	8,038	38
<i>CALCULATED USING THE UC DAVIS LONG RANGE DEVELOPMENT PLAN EIR (2018) OCCUPANCY RATE OF 0.342 UNITS PER RESIDENT (38 BEDS × 0.342 = 12.996 DU).</i>				

- Operational Tab – Mobile:
 - According to the Sterling 5th Street Apartments Draft EIR, student housing uses generate 5.961 daily trips per unit.
- Operational Tab – Energy:
 - Using Historical Data (due to the age of the existing structures)
- Mitigation Tab:
 - Traffic:
 - Low Density Suburban Project Setting

Proposed Project (Operation and Construction)

- Air District: YSAQMD
- Climate Zone: 4
- Land Use Setting: Urban
- Start of Construction: Monday, July 1, 2019
- Operational Year: 2020
- Utility Company: PG&E
- CO2 Intensity Factor: 290 lbs/MWh
 - Note: Updated PG&E emission factor for 2020 reflecting RPS reductions per PG&E's Greenhouse Gas Emission Factors: Guidance for PG&E Customers (November 2015). Available: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf
- Land Uses:

LAND USE TYPE AND SUBTYPE	UNIT AMOUNT AND METRIC	LOT ACREAGE	SQUARE FOOTAGE	POPULATION
Residential – Single Family	1 DU	--	3,964	--
Residential – Apartments Mid Rise	12 DU ¹	--	9,802	35
<i>CALCULATED USING THE UC DAVIS LONG RANGE DEVELOPMENT PLAN EIR (2018) OCCUPANCY RATE OF 0.342 UNITS PER RESIDENT (35 BEDS × 0.342 = 11.97 DU).</i>				

- Construction Tab – Phasing:

PHASE #	PHASE NAME	START DATE	END DATE	# DAYS/WEEK	# DAYS
1	Demolition	7/1/2019	7/12/2019	5	10
2	Site Preparation	7/13/2019	7/26/2019	5	10
3	Grading	7/26/2019	8/22/2019	5	20
5	Paving	8/22/2019	9/18/2019	5	20
4	Building Construction	9/18/2019	1/7/2020	5	80
6	Architectural Coating	1/7/2020	3/2/2020	5	40

- Construction Tab – Demolition:
 - Jackson House (includes garage): 2,065 sf
 - Bryson House: 2,009 sf
 - *Total: 4,074 sf*
- Operational Tab – Mobile:
 - According to the Sterling 5th Street Apartments Draft EIR, student housing uses generate 5.961 daily trips per unit.
- Mitigation Tab:
 - Construction:
 - Water exposed areas 2 times per day
 - Unpaved road mitigation 10 MPH
 - Traffic:
 - Low Density Suburban Project Setting
 - Energy:
 - Exceed Title 24 (30% improvement)
 - Note: The Project would meet or exceed this mitigation by conforming to Tier 2 of the Title 24 Energy Efficiency Standards (as required by Chapter 8.01 of the City's Municipal Code).
 - Install High Efficiency Lighting (16% lighting energy reduction)
 - Note: According to CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*, a minimum of a 16% reduction in electricity usage is expected compared with low-efficiency lighting (i.e., metal halide post top lights as opposed to typical mercury cobrahead lights).
 - Area:
 - No Hearths
 - Water:
 - Install low flow bathroom faucets
 - Install low-flow kitchen faucets
 - Install low-flow toilets
 - Install low-flow showers
 - Use water-efficient irrigation systems

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	3,964.00	3
Apartments Mid Rise	12.00	Dwelling Unit	0.32	9,802.00	35

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - See CalEEMod Assumptions

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Demolition -

Vehicle Trips - See CalEEMod Assumptions

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	10
tblConstructionPhase	NumDays	5.00	40.00
tblConstructionPhase	NumDays	100.00	80.00
tblConstructionPhase	NumDays	2.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	PhaseEndDate	12/18/2019	3/2/2020
tblConstructionPhase	PhaseEndDate	12/4/2019	1/7/2020
tblConstructionPhase	PhaseEndDate	7/17/2019	8/22/2019
tblConstructionPhase	PhaseEndDate	12/11/2019	9/18/2019
tblConstructionPhase	PhaseEndDate	7/15/2019	7/26/2019
tblConstructionPhase	PhaseStartDate	12/12/2019	1/7/2020
tblConstructionPhase	PhaseStartDate	7/18/2019	9/18/2019
tblConstructionPhase	PhaseStartDate	7/16/2019	7/26/2019
tblConstructionPhase	PhaseStartDate	12/5/2019	8/22/2019
tblGrading	AcresOfGrading	5.00	0.50
tblLandUse	LandUseSquareFeet	1,800.00	3,964.00
tblLandUse	LandUseSquareFeet	12,000.00	9,802.00
tblLandUse	Population	34.00	35.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	WD_TR	6.65	5.96

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	0.3271	0.3271
2	10-1-2019	12-31-2019	0.3604	0.3604
3	1-1-2020	3-31-2020	0.1496	0.1496
		Highest	0.3604	0.3604

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1902	0.0210	1.4914	2.5300e-003		0.1962	0.1962		0.1962	0.1962	18.6749	5.3562	24.0311	0.0180	1.4100e-003	24.8999
Energy	7.2000e-004	6.1200e-003	2.6000e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	14.6643	14.6643	8.9000e-004	2.9000e-004	14.7721
Mobile	0.0299	0.2106	0.3189	1.1900e-003	4.8545	1.3200e-003	4.8558	0.4965	1.2500e-003	0.4978	0.0000	109.4318	109.4318	5.9600e-003	0.0000	109.5809
Waste						0.0000	0.0000		0.0000	0.0000	1.3580	0.0000	1.3580	0.0803	0.0000	3.3644
Water						0.0000	0.0000		0.0000	0.0000	0.2687	0.8487	1.1174	0.0277	6.7000e-004	2.0090
Total	1.2208	0.2377	1.8129	3.7600e-003	4.8545	0.1980	5.0525	0.4965	0.1979	0.6944	20.3016	130.3010	150.6026	0.1328	2.3700e-003	154.6263

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0653	1.1200e-003	0.0969	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	0.1577	0.1577	1.5000e-004	0.0000	0.1615
Energy	5.7000e-004	4.8500e-003	2.0600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	12.8043	12.8043	8.3000e-004	2.5000e-004	12.9000
Mobile	0.0299	0.2106	0.3189	1.1900e-003	4.8545	1.3200e-003	4.8558	0.4965	1.2500e-003	0.4978	0.0000	109.4318	109.4318	5.9600e-003	0.0000	109.5809
Waste						0.0000	0.0000		0.0000	0.0000	1.3580	0.0000	1.3580	0.0803	0.0000	3.3644
Water						0.0000	0.0000		0.0000	0.0000	0.2150	0.7131	0.9281	0.0222	5.4000e-004	1.6417
Total	0.0958	0.2166	0.4178	1.2300e-003	4.8545	2.2400e-003	4.8568	0.4965	2.1700e-003	0.4987	1.5730	123.1069	124.6799	0.1094	7.9000e-004	127.6485

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	92.16	8.89	76.95	67.29	0.00	98.87	3.87	0.00	98.90	28.19	92.25	5.52	17.21	17.63	66.67	17.45

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2019	7/12/2019	5	10	
2	Site Preparation	Site Preparation	7/13/2019	7/26/2019	5	10	
3	Grading	Grading	7/26/2019	8/22/2019	5	20	
4	Building Construction	Building Construction	9/18/2019	1/7/2020	5	80	
5	Paving	Paving	8/22/2019	9/18/2019	5	20	
6	Architectural Coating	Architectural Coating	1/7/2020	3/2/2020	5	40	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 27,876; Residential Outdoor: 9,292; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	19.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	9.00	1.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3500e-003	0.0000	2.3500e-003	3.6000e-004	0.0000	3.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	4.7700e-003	0.0430	0.0385	6.0000e-005	2.3500e-003	2.6900e-003	5.0400e-003	3.6000e-004	2.5600e-003	2.9200e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.7700e-003	4.5000e-004	1.0000e-005	0.0144	1.0000e-005	0.0144	1.4600e-003	1.0000e-005	1.4800e-003	0.0000	0.7472	0.7472	3.0000e-005	0.0000	0.7481
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.3000e-004	1.3500e-003	0.0000	0.0379	0.0000	0.0379	3.8300e-003	0.0000	3.8400e-003	0.0000	0.3463	0.3463	1.0000e-005	0.0000	0.3466
Total	2.7000e-004	2.9000e-003	1.8000e-003	1.0000e-005	0.0523	1.0000e-005	0.0523	5.2900e-003	1.0000e-005	5.3200e-003	0.0000	1.0936	1.0936	4.0000e-005	0.0000	1.0946

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0600e-003	0.0000	1.0600e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	4.7700e-003	0.0430	0.0385	6.0000e-005	1.0600e-003	2.6900e-003	3.7500e-003	1.6000e-004	2.5600e-003	2.7200e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.7700e-003	4.5000e-004	1.0000e-005	7.2800e-003	1.0000e-005	7.2900e-003	7.5000e-004	1.0000e-005	7.6000e-004	0.0000	0.7472	0.7472	3.0000e-005	0.0000	0.7481
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.3000e-004	1.3500e-003	0.0000	0.0191	0.0000	0.0191	1.9600e-003	0.0000	1.9600e-003	0.0000	0.3463	0.3463	1.0000e-005	0.0000	0.3466
Total	2.7000e-004	2.9000e-003	1.8000e-003	1.0000e-005	0.0264	1.0000e-005	0.0264	2.7100e-003	1.0000e-005	2.7200e-003	0.0000	1.0936	1.0936	4.0000e-005	0.0000	1.0946

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-003	0.0446	0.0207	5.0000e-005		1.8400e-003	1.8400e-003		1.6900e-003	1.6900e-003	0.0000	4.3779	4.3779	1.3900e-003	0.0000	4.4126
Total	3.6000e-003	0.0446	0.0207	5.0000e-005	2.7000e-004	1.8400e-003	2.1100e-003	3.0000e-005	1.6900e-003	1.7200e-003	0.0000	4.3779	4.3779	1.3900e-003	0.0000	4.4126

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3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	6.7000e-004	0.0000	0.0189	0.0000	0.0189	1.9200e-003	0.0000	1.9200e-003	0.0000	0.1732	0.1732	0.0000	0.0000	0.1733
Total	1.0000e-004	7.0000e-005	6.7000e-004	0.0000	0.0189	0.0000	0.0189	1.9200e-003	0.0000	1.9200e-003	0.0000	0.1732	0.1732	0.0000	0.0000	0.1733

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-003	0.0446	0.0207	5.0000e-005		1.8400e-003	1.8400e-003		1.6900e-003	1.6900e-003	0.0000	4.3779	4.3779	1.3900e-003	0.0000	4.4126
Total	3.6000e-003	0.0446	0.0207	5.0000e-005	1.2000e-004	1.8400e-003	1.9600e-003	1.0000e-005	1.6900e-003	1.7000e-003	0.0000	4.3779	4.3779	1.3900e-003	0.0000	4.4126

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3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	6.7000e-004	0.0000	9.5500e-003	0.0000	9.5500e-003	9.8000e-004	0.0000	9.8000e-004	0.0000	0.1732	0.1732	0.0000	0.0000	0.1733
Total	1.0000e-004	7.0000e-005	6.7000e-004	0.0000	9.5500e-003	0.0000	9.5500e-003	9.8000e-004	0.0000	9.8000e-004	0.0000	0.1732	0.1732	0.0000	0.0000	0.1733

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5300e-003	0.0000	7.5300e-003	4.1400e-003	0.0000	4.1400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5300e-003	0.0860	0.0769	1.2000e-004		5.3700e-003	5.3700e-003		5.1200e-003	5.1200e-003	0.0000	10.5202	10.5202	2.0100e-003	0.0000	10.5704
Total	9.5300e-003	0.0860	0.0769	1.2000e-004	7.5300e-003	5.3700e-003	0.0129	4.1400e-003	5.1200e-003	9.2600e-003	0.0000	10.5202	10.5202	2.0100e-003	0.0000	10.5704

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3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.7000e-004	2.6900e-003	1.0000e-005	0.0757	1.0000e-005	0.0757	7.6700e-003	0.0000	7.6700e-003	0.0000	0.6927	0.6927	2.0000e-005	0.0000	0.6931
Total	3.8000e-004	2.7000e-004	2.6900e-003	1.0000e-005	0.0757	1.0000e-005	0.0757	7.6700e-003	0.0000	7.6700e-003	0.0000	0.6927	0.6927	2.0000e-005	0.0000	0.6931

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3900e-003	0.0000	3.3900e-003	1.8600e-003	0.0000	1.8600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5300e-003	0.0860	0.0769	1.2000e-004		5.3700e-003	5.3700e-003		5.1200e-003	5.1200e-003	0.0000	10.5202	10.5202	2.0100e-003	0.0000	10.5704
Total	9.5300e-003	0.0860	0.0769	1.2000e-004	3.3900e-003	5.3700e-003	8.7600e-003	1.8600e-003	5.1200e-003	6.9800e-003	0.0000	10.5202	10.5202	2.0100e-003	0.0000	10.5704

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3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.7000e-004	2.6900e-003	1.0000e-005	0.0382	1.0000e-005	0.0382	3.9200e-003	0.0000	3.9200e-003	0.0000	0.6927	0.6927	2.0000e-005	0.0000	0.6931
Total	3.8000e-004	2.7000e-004	2.6900e-003	1.0000e-005	0.0382	1.0000e-005	0.0382	3.9200e-003	0.0000	3.9200e-003	0.0000	0.6927	0.6927	2.0000e-005	0.0000	0.6931

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0359	0.3683	0.2829	4.3000e-004		0.0227	0.0227		0.0209	0.0209	0.0000	38.3627	38.3627	0.0121	0.0000	38.6661
Total	0.0359	0.3683	0.2829	4.3000e-004		0.0227	0.0227		0.0209	0.0209	0.0000	38.3627	38.3627	0.0121	0.0000	38.6661

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	4.6200e-003	9.6000e-004	1.0000e-005	0.0199	3.0000e-005	0.0199	2.0300e-003	3.0000e-005	2.0600e-003	0.0000	1.0043	1.0043	7.0000e-005	0.0000	1.0059
Worker	1.2900e-003	9.0000e-004	9.0800e-003	3.0000e-005	0.2555	2.0000e-005	0.2555	0.0259	2.0000e-005	0.0259	0.0000	2.3377	2.3377	7.0000e-005	0.0000	2.3393
Total	1.4500e-003	5.5200e-003	0.0100	4.0000e-005	0.2754	5.0000e-005	0.2754	0.0279	5.0000e-005	0.0280	0.0000	3.3420	3.3420	1.4000e-004	0.0000	3.3453

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0359	0.3683	0.2829	4.3000e-004		0.0227	0.0227		0.0209	0.0209	0.0000	38.3626	38.3626	0.0121	0.0000	38.6661
Total	0.0359	0.3683	0.2829	4.3000e-004		0.0227	0.0227		0.0209	0.0209	0.0000	38.3626	38.3626	0.0121	0.0000	38.6661

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	4.6200e-003	9.6000e-004	1.0000e-005	0.0101	3.0000e-005	0.0101	1.0500e-003	3.0000e-005	1.0700e-003	0.0000	1.0043	1.0043	7.0000e-005	0.0000	1.0059
Worker	1.2900e-003	9.0000e-004	9.0800e-003	3.0000e-005	0.1289	2.0000e-005	0.1289	0.0132	2.0000e-005	0.0132	0.0000	2.3377	2.3377	7.0000e-005	0.0000	2.3393
Total	1.4500e-003	5.5200e-003	0.0100	4.0000e-005	0.1389	5.0000e-005	0.1390	0.0143	5.0000e-005	0.0143	0.0000	3.3420	3.3420	1.4000e-004	0.0000	3.3453

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1500e-003	0.0221	0.0185	3.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	2.5015	2.5015	8.1000e-004	0.0000	2.5217
Total	2.1500e-003	0.0221	0.0185	3.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	2.5015	2.5015	8.1000e-004	0.0000	2.5217

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3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.9000e-004	6.0000e-005	0.0000	1.3300e-003	0.0000	1.3300e-003	1.4000e-004	0.0000	1.4000e-004	0.0000	0.0664	0.0664	0.0000	0.0000	0.0665
Worker	8.0000e-005	5.0000e-005	5.4000e-004	0.0000	0.0170	0.0000	0.0170	1.7300e-003	0.0000	1.7300e-003	0.0000	0.1510	0.1510	0.0000	0.0000	0.1510
Total	9.0000e-005	3.4000e-004	6.0000e-004	0.0000	0.0184	0.0000	0.0184	1.8700e-003	0.0000	1.8700e-003	0.0000	0.2174	0.2174	0.0000	0.0000	0.2176

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1500e-003	0.0221	0.0185	3.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	2.5015	2.5015	8.1000e-004	0.0000	2.5217
Total	2.1500e-003	0.0221	0.0185	3.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	2.5015	2.5015	8.1000e-004	0.0000	2.5217

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3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.9000e-004	6.0000e-005	0.0000	6.7000e-004	0.0000	6.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0664	0.0664	0.0000	0.0000	0.0665
Worker	8.0000e-005	5.0000e-005	5.4000e-004	0.0000	8.5900e-003	0.0000	8.5900e-003	8.8000e-004	0.0000	8.8000e-004	0.0000	0.1510	0.1510	0.0000	0.0000	0.1510
Total	9.0000e-005	3.4000e-004	6.0000e-004	0.0000	9.2600e-003	0.0000	9.2600e-003	9.5000e-004	0.0000	9.5000e-004	0.0000	0.2174	0.2174	0.0000	0.0000	0.2176

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.3000e-003	0.0785	0.0715	1.1000e-004		4.4300e-003	4.4300e-003		4.1100e-003	4.1100e-003	0.0000	9.5725	9.5725	2.7400e-003	0.0000	9.6409
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.3000e-003	0.0785	0.0715	1.1000e-004		4.4300e-003	4.4300e-003		4.1100e-003	4.1100e-003	0.0000	9.5725	9.5725	2.7400e-003	0.0000	9.6409

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3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.8000e-004	4.8400e-003	1.0000e-005	0.1363	1.0000e-005	0.1363	0.0138	1.0000e-005	0.0138	0.0000	1.2468	1.2468	3.0000e-005	0.0000	1.2477
Total	6.9000e-004	4.8000e-004	4.8400e-003	1.0000e-005	0.1363	1.0000e-005	0.1363	0.0138	1.0000e-005	0.0138	0.0000	1.2468	1.2468	3.0000e-005	0.0000	1.2477

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.3000e-003	0.0785	0.0715	1.1000e-004		4.4300e-003	4.4300e-003		4.1100e-003	4.1100e-003	0.0000	9.5724	9.5724	2.7400e-003	0.0000	9.6409
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.3000e-003	0.0785	0.0715	1.1000e-004		4.4300e-003	4.4300e-003		4.1100e-003	4.1100e-003	0.0000	9.5724	9.5724	2.7400e-003	0.0000	9.6409

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3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.8000e-004	4.8400e-003	1.0000e-005	0.0687	1.0000e-005	0.0687	7.0500e-003	1.0000e-005	7.0600e-003	0.0000	1.2468	1.2468	3.0000e-005	0.0000	1.2477
Total	6.9000e-004	4.8000e-004	4.8400e-003	1.0000e-005	0.0687	1.0000e-005	0.0687	7.0500e-003	1.0000e-005	7.0600e-003	0.0000	1.2468	1.2468	3.0000e-005	0.0000	1.2477

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8400e-003	0.0337	0.0366	6.0000e-005		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003	0.0000	5.1065	5.1065	4.0000e-004	0.0000	5.1164
Total	0.0910	0.0337	0.0366	6.0000e-005		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003	0.0000	5.1065	5.1065	4.0000e-004	0.0000	5.1164

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3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	9.0000e-005	9.6000e-004	0.0000	0.0303	0.0000	0.0303	3.0700e-003	0.0000	3.0700e-003	0.0000	0.2684	0.2684	1.0000e-005	0.0000	0.2685
Total	1.4000e-004	9.0000e-005	9.6000e-004	0.0000	0.0303	0.0000	0.0303	3.0700e-003	0.0000	3.0700e-003	0.0000	0.2684	0.2684	1.0000e-005	0.0000	0.2685

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8400e-003	0.0337	0.0366	6.0000e-005		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003	0.0000	5.1065	5.1065	4.0000e-004	0.0000	5.1164
Total	0.0910	0.0337	0.0366	6.0000e-005		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003	0.0000	5.1065	5.1065	4.0000e-004	0.0000	5.1164

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3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	9.0000e-005	9.6000e-004	0.0000	0.0153	0.0000	0.0153	1.5700e-003	0.0000	1.5700e-003	0.0000	0.2684	0.2684	1.0000e-005	0.0000	0.2685
Total	1.4000e-004	9.0000e-005	9.6000e-004	0.0000	0.0153	0.0000	0.0153	1.5700e-003	0.0000	1.5700e-003	0.0000	0.2684	0.2684	1.0000e-005	0.0000	0.2685

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0299	0.2106	0.3189	1.1900e-003	4.8545	1.3200e-003	4.8558	0.4965	1.2500e-003	0.4978	0.0000	109.4318	109.4318	5.9600e-003	0.0000	109.5809
Unmitigated	0.0299	0.2106	0.3189	1.1900e-003	4.8545	1.3200e-003	4.8558	0.4965	1.2500e-003	0.4978	0.0000	109.4318	109.4318	5.9600e-003	0.0000	109.5809

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	71.53	76.68	70.32	189,194	189,194
Single Family Housing	9.52	9.91	8.62	24,792	24,792
Total	81.05	86.59	78.94	213,986	213,986

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Single Family Housing	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.516533	0.039972	0.192974	0.121896	0.024730	0.005840	0.032766	0.052716	0.001342	0.002151	0.007335	0.000694	0.001052
Single Family Housing	0.516533	0.039972	0.192974	0.121896	0.024730	0.005840	0.032766	0.052716	0.001342	0.002151	0.007335	0.000694	0.001052

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.1893	7.1893	7.2000e-004	1.5000e-004	7.2516
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.5809	7.5809	7.6000e-004	1.6000e-004	7.6466
NaturalGas Mitigated	5.7000e-004	4.8500e-003	2.0600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.6150	5.6150	1.1000e-004	1.0000e-004	5.6484
NaturalGas Unmitigated	7.2000e-004	6.1200e-003	2.6000e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	7.0834	7.0834	1.4000e-004	1.3000e-004	7.1255

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	103673	5.6000e-004	4.7800e-003	2.0300e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5324	5.5324	1.1000e-004	1.0000e-004	5.5653
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Total		7.2000e-004	6.1200e-003	2.6000e-003	4.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	7.0834	7.0834	1.4000e-004	1.3000e-004	7.1255

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	83929.4	4.5000e-004	3.8700e-003	1.6500e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4788	4.4788	9.0000e-005	8.0000e-005	4.5054
Single Family Housing	21292.1	1.1000e-004	9.8000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1362	1.1362	2.0000e-005	2.0000e-005	1.1430
Total		5.6000e-004	4.8500e-003	2.0700e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.6150	5.6150	1.1000e-004	1.0000e-004	5.6484

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	49540.2	6.5166	6.5000e-004	1.3000e-004	6.5731
Single Family Housing	8090.57	1.0643	1.1000e-004	2.0000e-005	1.0735
Total		7.5809	7.6000e-004	1.5000e-004	7.6466

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	46918.5	6.1718	6.2000e-004	1.3000e-004	6.2252
Single Family Housing	7735.43	1.0175	1.0000e-004	2.0000e-005	1.0264
Total		7.1893	7.2000e-004	1.5000e-004	7.2516

6.0 Area Detail

6.1 Mitigation Measures Area

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No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0653	1.1200e-003	0.0969	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	0.1577	0.1577	1.5000e-004	0.0000	0.1615
Unmitigated	1.1902	0.0210	1.4914	2.5300e-003		0.1962	0.1962		0.1962	0.1962	18.6749	5.3562	24.0311	0.0180	1.4100e-003	24.8999

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0538					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.1249	0.0199	1.3945	2.5300e-003		0.1957	0.1957		0.1957	0.1957	18.6749	5.1985	23.8734	0.0178	1.4100e-003	24.7384
Landscaping	2.9500e-003	1.1200e-003	0.0969	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	0.1577	0.1577	1.5000e-004	0.0000	0.1615
Total	1.1902	0.0210	1.4914	2.5400e-003		0.1962	0.1962		0.1962	0.1962	18.6749	5.3562	24.0311	0.0180	1.4100e-003	24.8999

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0538					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.9500e-003	1.1200e-003	0.0969	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	0.1577	0.1577	1.5000e-004	0.0000	0.1615
Total	0.0653	1.1200e-003	0.0969	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	0.1577	0.1577	1.5000e-004	0.0000	0.1615

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9281	0.0222	5.4000e-004	1.6417
Unmitigated	1.1174	0.0277	6.7000e-004	2.0090

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0.781848 / 0.492904	1.0315	0.0256	6.2000e-004	1.8544
Single Family Housing	0.065154 / 0.0410754	0.0860	2.1300e-003	5.0000e-005	0.1545
Total		1.1174	0.0277	6.7000e-004	2.0090

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0.625479 / 0.462837	0.8567	0.0205	4.9000e-004	1.5154
Single Family Housing	0.0521232 / 0.0385698	0.0714	1.7000e-003	4.0000e-005	0.1263
Total		0.9281	0.0222	5.3000e-004	1.6417

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.3580	0.0803	0.0000	3.3644
Unmitigated	1.3580	0.0803	0.0000	3.3644

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	5.52	1.1205	0.0662	0.0000	2.7760
Single Family Housing	1.17	0.2375	0.0140	0.0000	0.5884
Total		1.3580	0.0803	0.0000	3.3644

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	5.52	1.1205	0.0662	0.0000	2.7760
Single Family Housing	1.17	0.2375	0.0140	0.0000	0.5884
Total		1.3580	0.0803	0.0000	3.3644

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	13.00	Dwelling Unit	0.34	8,038.00	38

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2000
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See CalEEMod Assumptions

Vehicle Trips - See CalEEMod Assumptions

Energy Use - See CalEEMod Assumptions

Mobile Land Use Mitigation -

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Table Name	Column Name	Default Value	New Value
tblEnergyUse	NT24E	2,558.55	3,054.10
tblEnergyUse	NT24NG	1,735.98	3,155.00
tblEnergyUse	Refrigerator	691.75	660.00
tblEnergyUse	T24E	282.15	332.81
tblEnergyUse	T24NG	6,872.73	5,484.45
tblLandUse	LandUseSquareFeet	13,000.00	8,038.00
tblLandUse	Population	37.00	38.00
tblVehicleTrips	WD_TR	6.65	5.96

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-3-2000	9-30-2000	0.8613	0.8613
		Highest	0.8613	0.8613

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2594	0.0226	1.6374	2.7000e-003		0.2099	0.2099		0.2099	0.2099	19.9607	5.7894	25.7501	0.0190	1.5100e-003	26.6772
Energy	6.1000e-004	5.1800e-003	2.2000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	21.6062	21.6062	8.2000e-004	2.6000e-004	21.7030
Mobile	0.1985	0.7026	2.4634	4.5100e-003	4.6497	0.0158	4.6654	0.4755	0.0150	0.4905	0.0000	115.2476	115.2476	0.0183	0.0000	115.7047
Waste						0.0000	0.0000		0.0000	0.0000	1.2139	0.0000	1.2139	0.0717	0.0000	3.0074
Water						0.0000	0.0000		0.0000	0.0000	0.2687	1.8770	2.1457	0.0277	6.7000e-004	3.0372
Total	1.4585	0.7303	4.1029	7.2400e-003	4.6497	0.2261	4.8757	0.4755	0.2253	0.7008	21.4433	144.5202	165.9635	0.1376	2.4400e-003	170.1296

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2594	0.0226	1.6374	2.7000e-003		0.2099	0.2099		0.2099	0.2099	19.9607	5.7894	25.7501	0.0190	1.5100e-003	26.6772
Energy	6.1000e-004	5.1800e-003	2.2000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	21.6062	21.6062	8.2000e-004	2.6000e-004	21.7030
Mobile	0.1985	0.7026	2.4634	4.5100e-003	4.6497	0.0158	4.6654	0.4755	0.0150	0.4905	0.0000	115.2476	115.2476	0.0183	0.0000	115.7047
Waste						0.0000	0.0000		0.0000	0.0000	1.2139	0.0000	1.2139	0.0717	0.0000	3.0074
Water						0.0000	0.0000		0.0000	0.0000	0.2687	1.8770	2.1457	0.0277	6.7000e-004	3.0372
Total	1.4585	0.7303	4.1029	7.2400e-003	4.6497	0.2261	4.8757	0.4755	0.2253	0.7008	21.4433	144.5202	165.9635	0.1376	2.4400e-003	170.1296

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/3/2000	7/14/2000	5	10	
2	Site Preparation	Site Preparation	7/15/2000	7/17/2000	5	1	
3	Grading	Grading	7/18/2000	7/19/2000	5	2	
4	Building Construction	Building Construction	7/20/2000	12/6/2000	5	100	
5	Paving	Paving	12/7/2000	12/13/2000	5	5	
6	Architectural Coating	Architectural Coating	12/14/2000	12/20/2000	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 16,277; Residential Outdoor: 5,426; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	9.00	1.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Demolition - 2000

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0183	0.1097	0.0479	6.6000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003	0.0000	5.6973	5.6973	1.4900e-003	0.0000	5.7346
Total	0.0183	0.1097	0.0479	6.6000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003	0.0000	5.6973	5.6973	1.4900e-003	0.0000	5.7346

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3.2 Demolition - 2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	1.3000e-003	0.0111	1.0000e-005	0.0379	2.0000e-005	0.0379	3.8300e-003	1.0000e-005	3.8500e-003	0.0000	0.4112	0.4112	7.0000e-005	0.0000	0.4129
Total	1.0800e-003	1.3000e-003	0.0111	1.0000e-005	0.0379	2.0000e-005	0.0379	3.8300e-003	1.0000e-005	3.8500e-003	0.0000	0.4112	0.4112	7.0000e-005	0.0000	0.4129

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0183	0.1097	0.0479	6.6000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003	0.0000	5.6973	5.6973	1.4900e-003	0.0000	5.7346
Total	0.0183	0.1097	0.0479	6.6000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003	0.0000	5.6973	5.6973	1.4900e-003	0.0000	5.7346

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3.2 Demolition - 2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	1.3000e-003	0.0111	1.0000e-005	3.5000e-004	2.0000e-005	3.6000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	0.4112	0.4112	7.0000e-005	0.0000	0.4129
Total	1.0800e-003	1.3000e-003	0.0111	1.0000e-005	3.5000e-004	2.0000e-005	3.6000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	0.4112	0.4112	7.0000e-005	0.0000	0.4129

3.3 Site Preparation - 2000

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2700e-003	9.3600e-003	3.4600e-003	6.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	0.5117	0.5117	1.0000e-004	0.0000	0.5143
Total	1.2700e-003	9.3600e-003	3.4600e-003	6.0000e-005	2.7000e-004	5.7000e-004	8.4000e-004	3.0000e-005	5.7000e-004	6.0000e-004	0.0000	0.5117	0.5117	1.0000e-004	0.0000	0.5143

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3.3 Site Preparation - 2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	7.0000e-005	5.5000e-004	0.0000	1.8900e-003	0.0000	1.8900e-003	1.9000e-004	0.0000	1.9000e-004	0.0000	0.0206	0.0206	0.0000	0.0000	0.0206
Total	5.0000e-005	7.0000e-005	5.5000e-004	0.0000	1.8900e-003	0.0000	1.8900e-003	1.9000e-004	0.0000	1.9000e-004	0.0000	0.0206	0.0206	0.0000	0.0000	0.0206

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2700e-003	9.3600e-003	3.4600e-003	6.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	0.5117	0.5117	1.0000e-004	0.0000	0.5143
Total	1.2700e-003	9.3600e-003	3.4600e-003	6.0000e-005	2.7000e-004	5.7000e-004	8.4000e-004	3.0000e-005	5.7000e-004	6.0000e-004	0.0000	0.5117	0.5117	1.0000e-004	0.0000	0.5143

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3.3 Site Preparation - 2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	7.0000e-005	5.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0206	0.0206	0.0000	0.0000	0.0206
Total	5.0000e-005	7.0000e-005	5.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0206	0.0206	0.0000	0.0000	0.0206

3.4 Grading - 2000

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6700e-003	0.0219	9.5800e-003	1.3000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	1.1395	1.1395	3.0000e-004	0.0000	1.1469
Total	3.6700e-003	0.0219	9.5800e-003	1.3000e-004	7.5000e-004	1.7400e-003	2.4900e-003	4.1000e-004	1.7400e-003	2.1500e-003	0.0000	1.1395	1.1395	3.0000e-004	0.0000	1.1469

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3.4 Grading - 2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	2.6000e-004	2.2100e-003	0.0000	7.5700e-003	0.0000	7.5700e-003	7.7000e-004	0.0000	7.7000e-004	0.0000	0.0823	0.0823	1.0000e-005	0.0000	0.0826
Total	2.2000e-004	2.6000e-004	2.2100e-003	0.0000	7.5700e-003	0.0000	7.5700e-003	7.7000e-004	0.0000	7.7000e-004	0.0000	0.0823	0.0823	1.0000e-005	0.0000	0.0826

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6700e-003	0.0219	9.5800e-003	1.3000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	1.1395	1.1395	3.0000e-004	0.0000	1.1469
Total	3.6700e-003	0.0219	9.5800e-003	1.3000e-004	7.5000e-004	1.7400e-003	2.4900e-003	4.1000e-004	1.7400e-003	2.1500e-003	0.0000	1.1395	1.1395	3.0000e-004	0.0000	1.1469

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3.4 Grading - 2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	2.6000e-004	2.2100e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0823	0.0823	1.0000e-005	0.0000	0.0826
Total	2.2000e-004	2.6000e-004	2.2100e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0823	0.0823	1.0000e-005	0.0000	0.0826

3.5 Building Construction - 2000

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1846	1.1335	0.4836	6.8700e-003		0.0892	0.0892		0.0892	0.0892	0.0000	60.0010	60.0010	0.0150	0.0000	60.3765
Total	0.1846	1.1335	0.4836	6.8700e-003		0.0892	0.0892		0.0892	0.0892	0.0000	60.0010	60.0010	0.0150	0.0000	60.3765

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3.5 Building Construction - 2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0300e-003	0.0176	0.0131	1.2000e-004	0.0266	5.4000e-004	0.0271	2.7100e-003	5.1000e-004	3.2200e-003	0.0000	1.3416	1.3416	2.1000e-004	0.0000	1.3467
Worker	9.7400e-003	0.0117	0.0996	6.0000e-005	0.3406	1.4000e-004	0.3408	0.0345	1.3000e-004	0.0346	0.0000	3.7011	3.7011	5.9000e-004	0.0000	3.7159
Total	0.0118	0.0293	0.1127	1.8000e-004	0.3672	6.8000e-004	0.3678	0.0372	6.4000e-004	0.0379	0.0000	5.0427	5.0427	8.0000e-004	0.0000	5.0626

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1846	1.1335	0.4836	6.8700e-003		0.0892	0.0892		0.0892	0.0892	0.0000	60.0009	60.0009	0.0150	0.0000	60.3764
Total	0.1846	1.1335	0.4836	6.8700e-003		0.0892	0.0892		0.0892	0.0892	0.0000	60.0009	60.0009	0.0150	0.0000	60.3764

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3.5 Building Construction - 2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0300e-003	0.0176	0.0131	1.2000e-004	3.0000e-004	5.4000e-004	8.4000e-004	9.0000e-005	5.1000e-004	6.0000e-004	0.0000	1.3416	1.3416	2.1000e-004	0.0000	1.3467
Worker	9.7400e-003	0.0117	0.0996	6.0000e-005	3.1400e-003	1.4000e-004	3.2800e-003	8.4000e-004	1.3000e-004	9.6000e-004	0.0000	3.7011	3.7011	5.9000e-004	0.0000	3.7159
Total	0.0118	0.0293	0.1127	1.8000e-004	3.4400e-003	6.8000e-004	4.1200e-003	9.3000e-004	6.4000e-004	1.5600e-003	0.0000	5.0427	5.0427	8.0000e-004	0.0000	5.0626

3.6 Paving - 2000

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.4100e-003	0.0531	0.0232	3.3000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	2.7483	2.7483	6.9000e-004	0.0000	2.7654
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.4100e-003	0.0531	0.0232	3.3000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	2.7483	2.7483	6.9000e-004	0.0000	2.7654

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3.6 Paving - 2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	1.1700e-003	9.9600e-003	1.0000e-005	0.0341	1.0000e-005	0.0341	3.4500e-003	1.0000e-005	3.4600e-003	0.0000	0.3701	0.3701	6.0000e-005	0.0000	0.3716
Total	9.7000e-004	1.1700e-003	9.9600e-003	1.0000e-005	0.0341	1.0000e-005	0.0341	3.4500e-003	1.0000e-005	3.4600e-003	0.0000	0.3701	0.3701	6.0000e-005	0.0000	0.3716

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.4100e-003	0.0531	0.0232	3.3000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	2.7483	2.7483	6.9000e-004	0.0000	2.7654
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.4100e-003	0.0531	0.0232	3.3000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	2.7483	2.7483	6.9000e-004	0.0000	2.7654

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3.6 Paving - 2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	1.1700e-003	9.9600e-003	1.0000e-005	3.1000e-004	1.0000e-005	3.3000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.3701	0.3701	6.0000e-005	0.0000	0.3716
Total	9.7000e-004	1.1700e-003	9.9600e-003	1.0000e-005	3.1000e-004	1.0000e-005	3.3000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.3701	0.3701	6.0000e-005	0.0000	0.3716

3.7 Architectural Coating - 2000

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1257					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0127	5.6300e-003	7.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	0.6383	0.6383	1.8000e-004	0.0000	0.6428
Total	0.1279	0.0127	5.6300e-003	7.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	0.6383	0.6383	1.8000e-004	0.0000	0.6428

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3.7 Architectural Coating - 2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.3000e-004	1.1100e-003	0.0000	3.7800e-003	0.0000	3.7900e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.0411	0.0411	1.0000e-005	0.0000	0.0413
Total	1.1000e-004	1.3000e-004	1.1100e-003	0.0000	3.7800e-003	0.0000	3.7900e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.0411	0.0411	1.0000e-005	0.0000	0.0413

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1257					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0127	5.6300e-003	7.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	0.6383	0.6383	1.8000e-004	0.0000	0.6428
Total	0.1279	0.0127	5.6300e-003	7.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	0.6383	0.6383	1.8000e-004	0.0000	0.6428

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

3.7 Architectural Coating - 2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.3000e-004	1.1100e-003	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0411	0.0411	1.0000e-005	0.0000	0.0413
Total	1.1000e-004	1.3000e-004	1.1100e-003	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0411	0.0411	1.0000e-005	0.0000	0.0413

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1985	0.7026	2.4634	4.5100e-003	4.6497	0.0158	4.6654	0.4755	0.0150	0.4905	0.0000	115.2476	115.2476	0.0183	0.0000	115.7047
Unmitigated	0.1985	0.7026	2.4634	4.5100e-003	4.6497	0.0158	4.6654	0.4755	0.0150	0.4905	0.0000	115.2476	115.2476	0.0183	0.0000	115.7047

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	77.49	83.07	76.18	204,960	204,960
Total	77.49	83.07	76.18	204,960	204,960

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.490127	0.105989	0.177133	0.099243	0.039602	0.005527	0.027619	0.045141	0.000805	0.001318	0.004134	0.000693	0.002669

5.0 Energy Detail

Historical Energy Use: Y

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15.6128	15.6128	7.1000e-004	1.5000e-004	15.6740
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15.6128	15.6128	7.1000e-004	1.5000e-004	15.6740
NaturalGas Mitigated	6.1000e-004	5.1800e-003	2.2000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	5.9934	5.9934	1.1000e-004	1.1000e-004	6.0291
NaturalGas Unmitigated	6.1000e-004	5.1800e-003	2.2000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	5.9934	5.9934	1.1000e-004	1.1000e-004	6.0291

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	112313	6.1000e-004	5.1800e-003	2.2000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	5.9934	5.9934	1.1000e-004	1.1000e-004	6.0291
Total		6.1000e-004	5.1800e-003	2.2000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	5.9934	5.9934	1.1000e-004	1.1000e-004	6.0291

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	112313	6.1000e-004	5.1800e-003	2.2000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	5.9934	5.9934	1.1000e-004	1.1000e-004	6.0291
Total		6.1000e-004	5.1800e-003	2.2000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	5.9934	5.9934	1.1000e-004	1.1000e-004	6.0291

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	53668.6	15.6128	7.1000e-004	1.5000e-004	15.6740
Total		15.6128	7.1000e-004	1.5000e-004	15.6740

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	53668.6	15.6128	7.1000e-004	1.5000e-004	15.6740
Total		15.6128	7.1000e-004	1.5000e-004	15.6740

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2594	0.0226	1.6374	2.7000e-003		0.2099	0.2099		0.2099	0.2099	19.9607	5.7894	25.7501	0.0190	1.5100e-003	26.6772
Unmitigated	1.2594	0.0226	1.6374	2.7000e-003		0.2099	0.2099		0.2099	0.2099	19.9607	5.7894	25.7501	0.0190	1.5100e-003	26.6772

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0314					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.2080	0.0213	1.4935	2.7000e-003		0.2094	0.2094		0.2094	0.2094	19.9607	5.6317	25.5924	0.0187	1.5100e-003	26.5101
Landscaping	7.4600e-003	1.2500e-003	0.1439	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	0.1577	0.1577	3.8000e-004	0.0000	0.1671
Total	1.2594	0.0226	1.6374	2.7100e-003		0.2099	0.2099		0.2099	0.2099	19.9607	5.7894	25.7501	0.0190	1.5100e-003	26.6772

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0314					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.2080	0.0213	1.4935	2.7000e-003		0.2094	0.2094		0.2094	0.2094	19.9607	5.6317	25.5924	0.0187	1.5100e-003	26.5101
Landscaping	7.4600e-003	1.2500e-003	0.1439	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	0.1577	0.1577	3.8000e-004	0.0000	0.1671
Total	1.2594	0.0226	1.6374	2.7100e-003		0.2099	0.2099		0.2099	0.2099	19.9607	5.7894	25.7501	0.0190	1.5100e-003	26.6772

7.0 Water Detail

7.1 Mitigation Measures Water

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.1457	0.0277	6.7000e-004	3.0372
Unmitigated	2.1457	0.0277	6.7000e-004	3.0372

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0.847002 / 0.53398	2.1457	0.0277	6.7000e-004	3.0372
Total		2.1457	0.0277	6.7000e-004	3.0372

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0.847002 / 0.53398	2.1457	0.0277	6.7000e-004	3.0372
Total		2.1457	0.0277	6.7000e-004	3.0372

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.2139	0.0717	0.0000	3.0074
Unmitigated	1.2139	0.0717	0.0000	3.0074

Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	5.98	1.2139	0.0717	0.0000	3.0074
Total		1.2139	0.0717	0.0000	3.0074

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	5.98	1.2139	0.0717	0.0000	3.0074
Total		1.2139	0.0717	0.0000	3.0074

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Theta Xi_Existing - Yolo/Solano AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NOP Comments

THETA XI FRATERNITY REDEVELOPMENT PROJECT
NOP SCOPING MEETING
March 18, 2019 – 7:00 PM
11 Attendees

Chairperson Miltenberger opened the public meeting and introduced Scoping meeting process. Commissioners asked clarifying questions. Staff Liaison Njoku and EIR Consultant representative Elise Carroll addressed the questions, and further explained the Scoping meeting process. On behalf of the Theta Xi fraternity, Co-applicant Bob Testa provided background on the project. The comments provide can be summarized as follows:

- The EIR should recognize the tribal cultural resources in the area. The mitigation in the EIR should reflect the recommendations made in the Yocha Dehe Wuntun Nation’s response letter to the City.
- There needs to be clarification regarding the structures’ status as historic resources for the purpose of the California Environmental Quality Act (CEQA). The buildings have been evaluated three times since 2015 (Rand Herbert, June 2015; Historic Resources Associate, October 2016 and June 2018). All of those evaluations assigned the buildings the California Historical Resource Status Codes of 5D2 or 5D3, indicating that they are contributors or potential contributors to a district this is eligible or potentially eligible for local designation. With that status, the buildings would be considered historic resources for the purposes of CEQA. However, Commissioner Hickman presented evidence to suggest that the status codes had been erroneously applied to the buildings, and that if the error were corrected, the buildings would not be considered historic resources for CEQA purposes.

The buildings were first assigned a 5D3 status code during a 2003 survey. Subsequent evaluations have simply carried that code forward. The carrying forward appears to have been an error that failed to take into account a revision of status codes that was undertaken by the California State Office of Historic Preservation in August 2003. The revision was published in Technical Assistance Bulletin No. 8. Prior to the revision, the 5D3 status code indicated that a resource had been determined ineligible for local listing but that it was part of a district that was eligible “for special consideration in local planning” (i.e.: a conservation overlay district). Following the revision, the 5D3 status code was converted to 6L, retaining the same meaning that it was found ineligible for local listing but might warrant special consideration in local planning. In the State’s roster of historic resources (the California Historical Resources Information System [CHRIS] inventory), the buildings were in fact converted to a 6L status. Structures with that status are not considered historic resources for the purposes of CEQA. Commissioner Hickman believes that this is the correct status for the buildings. The three recent evaluations apparently were done without knowledge of the status

code revision and thus arrived at the wrong conclusion. It was recommended that the project applicant relook the buildings' statuses in light of this information.

- The EIR should include a project alternative that preserves two of the three buildings: preserve one for ultimate sale (i.e., the building near the Natsoulas Gallery), and renovate one for use by the fraternity.
- The EIR should consider the overall (i.e., cumulative) impact of the project on the downtown area, especially addressing the look and feel of the area relative to historical setting; the goal being to avoid the death by a thousand cuts of historical resources within the downtown core area.
- The EIR should include a mitigation which considers the Yocha Dehe Wintun Nation response letter. Any mitigation measure which requires a cultural monitor should not be "dual purpose" (i.e., the backhoe operator also functioning as a monitor on the ground). There should be a qualified separate monitor whose sole responsibility is to monitor the ground disturbing activities.

From: Ike Njoku

Sent: Monday, March 18, 2019 10:47 AM

To: 'CYNTHIA GOLDBERG' <hgpig@comcast.net>

Cc: 'Elise Carroll' <ecarroll@denovoplanning.com>

Subject: RE: Frat house @ first @ A

Thanks, Ms. Goldberg. No need for apologies.

Best,

Ike

From: CYNTHIA GOLDBERG <hgpig@comcast.net>

Sent: Monday, March 18, 2019 10:45 AM

To: Ike Njoku <INjoku@cityofdavis.org>

Subject: RE: Frat house @ first @ A

oops. good to know. sorry. cg

On March 18, 2019 at 9:42 AM Ike Njoku <INjoku@cityofdavis.org> wrote:

Dear Ms. Goldberg,

Thanks for your comment. However, you may want to verify the address of the subject project with the address that you have expressed concerns. The subject project addresses are 503, 509 and 515 1st Street, and is across from Davis Commons shopping center. It appears that you are referring to a fraternity across from UC Davis parking lot further west of the subject addresses.

Sincerely,

Ike

Ike Njoku, Planner & Historical Resources Manager

Department of Community Development & Sustainability

23 Russell Boulevard, Suite 2

Davis, CA 95616

Phone: (530) 757-5610; Extension 7230 — Fax: (530) 757-5660 — Email: injoku@cityofdavis.org

“The world will not be destroyed by those who do evil, but by those who watch them without doing anything”
-- Albert Einstein

"Integrity is doing the right thing, even when no one is watching." -- C. S. Lewis

From: webmaster@cityofdavis.org <webmaster@cityofdavis.org>
Sent: Saturday, March 16, 2019 2:11 PM
To: Ike Njoku <INjoku@cityofdavis.org>
Subject: Frat house @ first @ A

Message submitted from the <City of Davis, CA> website.

Site Visitor Name: Cynthia Goldberg
Site Visitor Email: hgpig@comcast.net

I would just want to add one area of concern for the plans for this renovation. Having worked at UCD for many years, I usually parked in the UCD parking lot across from this fraternity. Year after year the front yard of this frat house was the scene of beer pong fests and pissing contests in the shrubbery. Yes, kids will be kids. But this is a location that greets thousands of cars, buses and walkers who are visiting Davis and UC Davis for Picnic Day, Whole Earth Fest, Admissions recruitment events, businesses and employers doing business on campus, visiting scholars, and the general public. I pray that in the revised fraternity, there is a private yard where social gatherings will occur. I understand I'm not part of the college student culture, but I am offended by drunk people screaming at passersby, trashed sidewalks, and the bare butts of men peeing in public. I would support any plan that allows for social gatherings to be a tiny bit more private.

Cynthia Goldberg (I would not want my name shared in public without my prior permission)

Davis, CA

MAR 27 2019

City of Davis
Community Development

March 24, 2019

To: City of Davis Community Development and Sustainability Department
Attention Ike Njoku
23 Russell Blvd., Suite 2 (INjoku@cityaofdavis.org)
Davis, CA 95616

From: Bob Testa & Skip Mezger, representing the Board of Directors
Beta Epsilon Association of Theta Xi, a CA non-profit Corporation
P. O. Box 4450
Davis, CA 95616

Cc: Elise Carroll (ecarroll@denovoplanning.com)
De Novo Planning Group

Subject: Comments related to the draft Environmental Impact Report for the redevelopment project proposed for Theta Xi Fraternity

These comments are submitted in response to the request by the City of Davis for public comments related to the scoping of the draft EIR and the proposed alternatives to be addressed.

The objectives of the proposed project as outlined in the application are to:

- Address deficiencies in the structural integrity of the three houses used to house the undergraduate members of the Theta Xi Fraternity on First Street in Davis, CA, as identified in the report by Pemberton Engineering, dated July 27, 2016;
- Redevelop the subject properties in a way that provides for the needs of UCD students by ensuring that housing is competitive both in rent and amenities available within the City of Davis, including on-campus housing, in order to ensure the sustainability of the fraternity;
- Use the value embedded in the three owned lots to assist in funding the redevelopment project by consolidating the housing needs of the fraternity onto a smaller footprint;
- Construct the new building with features that will allow it to achieve a high level of energy efficiency and reduce ongoing maintenance costs; and
- Continue to use the new facility as classrooms that, through fellowship and alumni guidance, lead to the wholesome mental, moral, physical and spiritual growth that is the purpose of the Theta Xi Fraternity.

BACKGROUND

For over 68 years, the subject houses on First Street have been a home away from home for almost 1,300 young men, including the undersigned. The property contains the following improvements:

- **TX House:** A 2-story structure built in 1920 consisting of approximately 3,964 sf plus a partial basement that includes a 400 sf Chapter Room and open storage. The house includes a front porch and 2 balconies.
- **Bryson House:** A 2-story structure built in 1912 consisting of approximately 2,449 sf plus a partial basement used for open storage. The house includes a front porch and one balcony.
- **Jackson House:** A 2-story structure built in 1912 consisting of approximately 2,585 sf plus a partial basement used for open storage. The house includes a front porch and one balcony.

The Jackson lot also includes a single-story Garage/Laundry Room structure of approximately 500 sf and an off-street parking area located along D Street. Though designed to park 4 vehicles, it often accommodates 12 or more cars. The front yards of all three houses, the area behind the Bryson House and the areas between the three houses serve as outdoor recreational areas.

Because all three houses are currently considered by the City as significant historical resources under the California Environmental Quality Act and eligible for listing in the California Register of Historic Resources, we are advised that their remodeling or demolition would require a focused Environmental Impact report that examines feasible alternatives to any exterior alterations proposed, including demolition. At the HRMC meeting on March 18, 2019, however, the suggestion was advanced by Commissioner Hickman that 2003 revisions by the California State Office of Historic Preservation as documented in its Technical Assistance Bulletin #8 call into question whether the houses are in fact eligible for listing in the California Register. We understand that the issue will be clarified in the EIR, which, among other things, will address alternatives to the project, including specifically an alternative that would preserve at least one of the two western houses. These comments are intended to share with you a summary of the alternatives pursued by the Beta Epsilon Association Board of Directors, the project applicant.

The ages and dilapidated condition of the complex and the substantial maintenance costs being incurred to provide housing to an annually decreasing number of occupants led the Association Board of Directors to begin to explore alternatives in October 2015. The Board wants to ensure the provision of suitable housing on a sustainable basis to meet the future needs of the fraternity in the highly competitive housing market that exists in Davis.

There is a myriad of public and private housing arrangements, both on- and off-campus, competing to meet the needs of UCD students. Together, they provide over 12,000 multi-family housing units on campus and in the City. These include 23 on-campus residence Halls and several on-campus Student Housing Apartment Communities and 8 on-campus sorority and fraternity houses. Other fraternities and sororities are located off-campus. Official UCD Student Housing also includes off-campus apartment complexes, some of which are operated in partnership with private owners and operators. The apartment vacancy rate within the City of Davis is acknowledged to be extremely low.

Most official and many private student housing complexes offer fully furnished 1-, 2-, 3- and 4-bedroom units that include community rooms, a swimming pool, a fitness center, lounges, study spaces, recreation and game areas, and laundry rooms. University complexes provide access to all residence hall resources, dining commons meal plans and computer centers with high speed internet access. Bathrooms can be locker-room style, arranged in clusters of 1 bathroom for every 4 rooms, or contained in individual suites. All are ADA compliant. Common areas are maintained by custodial staff while a maintenance staff generally responds to routine requests within 2 days. While many fraternities do not have a house, others have remodeled existing structures to meet their needs. The Phi Delta Theta fraternity, one of the oldest fraternities at UCD, recently demolished its old house at 3rd and C Streets and built a 19-bed new house with modern amenities at the same location. We have had contact with the Phi Delta Theta alumnus who oversaw its project, toured their new house and have spoken to both their architect and their contractor.

It is against this background that the fraternity competes for top quality men to become members, without much recent success. Many members choose not to live in the fraternity's houses. Though there may be several reasons for choosing to live elsewhere, the conditions of the existing structures play a large role.

EXISTING STRUCTURES

Though much of the structural framing of the buildings is not directly observable, a structural inspection commissioned by the Board confirmed sloped floors, interior wall and ceiling distress and cracked foundations, likely caused by differential soil settlement. Such settlement has heavily fractured and incrementally degraded the stiffness and strength of the foundation walls and the foundations themselves, which appear to be nearing the end of their useful lives. Actions have been taken to address all identified safety issues. In addition, all balconies have been declared off-limits by the Board because of safety concerns.

The current occupancy level is 38 in designated 2-man or 3-man rooms, each of which contains one or more beds. Generally, the current state of the property can be described as follows:

- The last major remodel occurred in 1982.
- Energy is wasted because of single pane windows that don't close properly, outdated lighting and the lack of insulation; central air conditioning does not exist, and the heating system is inefficient. Students often install high energy consuming portable air conditioning units and heaters. Utility bills are high.
- Electrical service panels and wiring may be outdated. Electrical connections are inadequate. Low-voltage wiring is tacked onto the outside of walls.
- The main sewer line runs under the neighboring art gallery to D Street and often backs up. Bathroom and shower facilities are sub-standard, overcrowded and lack privacy. *The laundry room is inadequate for the needs of today's students.*
- Degraded floors exist throughout.
- Exterior stucco and wood siding are cracked or deteriorated and allow water that could threaten the underlying support structure to be trapped inside the framing cavity. Several upstairs bedrooms recently suffered damage because of roof leaks in the TX House. Interior walls exhibit numerous repair patches.
- The exterior grounds and parking area are unsightly; 12 cars often are parked in an area designed for 6 cars.
- Maintenance costs are high and rising.
- Handicapped accessible areas are limited to the TX House.

It is the Board's conclusion that the house and property do not project an inviting presence to alumni, those who live there, their parents, guests, prospective new members or the Davis community at large.

THE BOARD'S VISION

The Board's vision is to ensure the continued viability of the fraternity by providing a substantial incentive to attract high quality future members. It expects to implement its vision by (1) renovating the existing structures, demolishing and re-building the Chapter house(s) at the existing location, or relocating to a new location with similar attributes and (2) substantially augmenting the Scholarship Fund so that it operates more like an endowment, offering meaningful merit-based scholarships to deserving members who live in the chapter house. Achieving the Board's vision is dependent upon the generosity of alumni and their willingness to assist in funding the endeavor and the willingness of the City of Davis to approve the Board's plans. The Board expects to implement its vision by:

- Raising funds from the alumni community (already begun),
- Augmenting funding by leasing or selling any property deemed surplus to the needs of the fraternity,
- Acquiring a construction loan and mortgage as necessary, striving to become debt-free as soon as practical,

- Setting aside enough reserves each year for the future maintenance, repair and replacement of major capital components whose expected lives exceed 1-year, and
- Making substantial annual contributions to the fraternity's Scholarship Fund.

HOUSING ALTERNATIVES

The Board has hired YHLA Architects and collaborated with Harrison Construction Co. for cost estimating purposes. Pennington & Co., a fundraising firm that specializes in Greek organization fundraising, has been engaged by the Board to conduct a capital campaign. During the process, we have examined several alternatives to accomplish the vision. These are summarized below:

On-Campus Relocation. Relocation to an on-campus location involves a competitive application process to choose new occupants when and if current occupants terminate their existing leases with the private company that manages the properties they built and own on University land. Such a location would involve a landlord-tenant relationship and subject the fraternity to more stringent oversight by the University. Such conditions are not acceptable to the Board at this time and this option was not pursued beyond the discussion stage.

Other Relocation in Davis. Relocation to other lots currently vacant or that could be made vacant within the City or acquiring existing structures that could be remodeled is problematic because of cost, the lack of desirable sites and the expectation of significant opposition from within the Davis community. A single story uninhabitable professional office building occupying just over 29,000 sf of land at the corner of Oak Street and Russel Blvd recently sold. It had earlier been the subject of a potential sale to a fraternity, but the sale was not consummated because of neighborhood opposition to the planned conversion. The old Sigma Nu fraternity house on Oxford Circle, that occupied approximately 37,000 sf of land, is currently being redeveloped as an apartment complex. Sigma Nu is now located in one of the on-campus fraternity houses. This option was not pursued beyond the discussion stage.

Renovation. We occupy our current site as a "legal non-conforming use". The land is zoned for mixed use under the City's General Plan (multi-story residential above retail stores below, built out to the sidewalk). By virtue of a Settlement Agreement entered with the City of Davis in 1995, we have a right in perpetuity to continued occupancy of our current site if we don't change our current use or apply for and receive a conditional use permit. A new house construction proposal would involve a conditional use permit; a renovation proposal would not.

There are at least three big unknowns with respect to renovating our existing property: (1) the cost of *repairing the underlying structural supports and the cost of the renovations that will follow*, (2) the requirements that must be met to assure compliance with the guidelines of the Secretary of the Interior designed to minimize change to the distinctive materials, features, spaces and spatial relationships of historical property, if, in fact, the property is considered to be historic, and (3) the construction period and its impact on continued fraternity operations.

At a minimum, repair of the structural supports will require jacking up each house to rebuild the foundations. At least a portion of the wood siding and the roofs will need to be replaced. Those costs alone were estimated two years ago to be at least \$500,000. In addition, the site needs to be re-graded so that the drainage around the perimeter of all three structures can be improved. What is unknown is the condition of the underlying frame and how much of it will need to be replaced. Renovation of the rest of the structure could proceed only when the structural issues have been addressed. Because of the many unknowns, the contractor with whom we have worked would only provide a generic cost

estimate with a very high contingency factor. In any such remodel, we would expect about 20% of the cost to be devoted to bringing the structure into conformance with code changes that have occurred since the last major remodel.

The unknown requirements for remodeling historic structures and unknown other costs that can't be identified until the "skins" of the structures are removed make it difficult to assemble a project budget. Regardless, we know that a renovation option includes much more than a simple renovation.

Because of the need to minimize disruption to ongoing fraternity operations, construction likely would need to be scheduled in phases so that the 14-bed TX House would remain functional until the refurbished Jackson and Bryson houses are ready for occupancy. Jackson and Bryson construction could be done sequentially or concurrently. At some point, the common areas that include the living, dining and laundry rooms and the kitchen would not be available for most of one academic year and that could threaten current recruitment efforts and the future of the fraternity. The most optimistic construction schedule would likely overlap two academic years. Added project management and other costs would be incurred as construction trades workforces are scheduled and re-scheduled. The contractor with whom we have consulted has advised that a remodel effort not involving the structural fixes we face would be significantly more expensive (20% or more) in construction costs alone when compared to a demolition and build-new approach.

In addition to the added costs described above, the renovation option forecloses the opportunity to develop a more efficient design that would enable us to extract value from the existing property to assist in financing the project. Some combination of increased donations or increased debt would be required. A Pro Forma Operating Budget spanning the anticipated construction period and beyond has not been prepared because of the cost uncertainties associated with this option.

It is unclear as to whether renovated "old" structures would be an attractive alternative to prospective new members who face a myriad of housing choices. The renovation option is not the Board's preferred option for the reasons noted. The Board does not consider that option to be economically viable.

Consolidation/Construction of New House on Existing Site. Initially, we proposed to demolish the Jackson and Bryson properties and build one 38-bed 2-story replacement structure spanning the two lots, rendering the TX lot and house thereon surplus to our needs. The thought was that the TX House could be converted to restaurant use downstairs and office space upstairs to provide an ongoing revenue stream to the Association. Alternatively, it could be sold outright to a 3rd party, providing an infusion of cash to help fund the project.

Informal City reaction suggested that community opposition would make it difficult for the political bodies to make the necessary findings to approve such a proposal that would demolish historic structures, would not result in increased densification and generally not be in conformance with the City's General Plan or Specific Plan for the Downtown Core Area, and arguably was not the highest and best use of the land. Planning staff suggested we consider a plan that would relegate the fraternity to the upper floors of a multi-use project with retail storefronts build out to the sidewalk on the ground floor.

The suggestion that we be relegated to the upper floors of a mixed-use building is unacceptable to the Board. However, the Board expressed a willingness to consider a separate multi-story fraternity house on a smaller footprint to provide increased densification, resulting in property surplus to the needs of the fraternity that could be made available to a 3rd party developer for purposes specifically desired by the City. Thus, was born the proposal now presented to split the three parcels into two approximately

equal parcels, with the western-most parcel (an expanded Jackson lot) being the site of a 35-bed, 3-story fraternity house with a full basement totaling approximately 11,000 sf. Off-street parking would be provided in the rear in space that would be part of an outdoor recreational area, though it may not be enough to satisfy fully zoning code requirements and discussion with the City would be required. We would continue to occupy the 14-bed TX House until the new house was completed, assuring uninterrupted fraternity operations during the anticipated 10-12-month construction period.

It is hoped that we may have the makings of a win-win proposal that would satisfy both our needs and the City's desires for First Street. A 6-year Pro Forma Operating Budget spanning the anticipated construction period and beyond has been prepared for this option and its results are favorable. Though we've had to make some assumptions as to project costs and the value to be gained from the sale of surplus property, the initial conclusions are that:

- Donations, the sale of surplus property and a construction loan rolled into a mortgage would enable the project to be financed,
- Rent would increase over the current level and would still be about 70% of the cost of a comparable on-campus apartment,
- Enough reserves would be maintained throughout, and
- Net Annual Operating Income would be enough to enable substantial annual contributions from the Board to the Scholarship Fund.

THE PREFERRED OPTION

There is widespread support within the fraternity alumni and undergraduate community for remaining in the current location because of its proximity to the campus and the downtown restaurant, shopping and transportation centers. There is sentimental attraction to retaining all our land and renovating the structures thereon. And there is support as well for demolishing the existing structures and building a new house.

Some suggest the value of the property is greater than if valued as separate parcels and for that reason, *we should not consider splitting the lots.* Others suggest the rationale for focusing on total value of the property makes sense only if the Board were to consider disposing of the entire property.

Some express concern about giving up any of our current outdoor recreational area in order to secure City approval for our plans, believing that we have a historical claim to a continued use of all the property and should surrender none of it to others, regardless of the reason. Some are skeptical about building a new house, claiming that it was the open space surrounding 3 historic houses that first attracted them to the fraternity and it is these qualities that contribute to Theta Xi being unique among all the fraternities. Others accept the political reality and tradeoffs that are inherent in the approval processes of local governments and believe that a new house can be designed and built in a way that accommodates the needs of the fraternity.

Some suggest that we can get more years for our money by a more efficient consolidation of our activities under one roof without foregoing any of the amenities that make Theta Xi unique among UCD fraternities. Some note the additional costs required to address the structural issues and the lost opportunity to extract significant value from our current equity, both of which would be additive to the cost of renovation, as the reason why building a new house makes more sense.

Though the City would have a say in the way we proceed, in the final analysis it could not say "No" if the Board decides to pursue the renovation option. It could say "No" to any proposal that significantly modifies the exterior of the existing buildings, including any proposal to demolish them, however.

As a result, the Board's preferred option is to propose for City consideration a proposal designed to consolidate our footprint onto a smaller area and build a new, 3-story, 35-bed house. In the final analysis, the Board's ultimate decision is likely to turn on the cost of the project, the generosity of the alumni and the willingness of the City to approve the plan. The preferred option gives us and the City part of what each wants.

East vs. West Location

The needs of the fraternity require at least half of the current property width to be used in any new construction alternative. The current proposal requires the three lots to be combined, then split roughly in half in order to accommodate the needs of the fraternity and comply with City requirements.

At the March 18 hearing, several commissioners asked that the alternatives to be examined during the EIR process include one in which at least one of the western houses would be renovated and maintained as an historic structure in lieu of demolition. Because half of the width is required to meet the fraternity's needs, either the western Jackson house or the eastern TX Main House would be the one to be preserved under a new construction scenario. The Board weighed such an option in settling on its proposal and chose to preserve the eastern house in its current configuration, leaving to the next owner any decisions as to whether and how to renovate it. It did so for several reasons, including, but not limited to the following:

- Preservation of the eastern TX House with its kitchen, living room and dining room provides for continued operation of the fraternity during the construction process. The other two houses do not have kitchens, living rooms or dining rooms. If the TX House were to be demolished, the continued operation and future of the fraternity could be jeopardized,
- The eastern TX House was determined to have greater potential for future use by a third party than the western Jackson House,
- The western half of reconfigured lots provides the larger footprint on which to develop the project,
- Access to and egress from secluded parking is better suited from D Street than it would be from First Street,
- Presentation of the young valley oak tree in the rear of the property can be assured in the proposed western configuration, and
- The outdoor recreation area to be provided is enhanced by a western building site.

Thank you for the opportunity to provide these comments. Please include them in the record.

Sincerely,

Bob Testa & Skip Metzger

Bob Testa & Skip Metzger,
for the Board of Directors,
Beta Epsilon Association of Theta Xi,
A California Non-profit Corporation



Elise Carroll

From: Rogers, Todd@DOT <Todd.Rogers@dot.ca.gov>
Sent: Thursday, February 28, 2019 3:40 PM
To: Ike Njoku
Subject: Theta Xi Fraternity Redevelopment Project, SCH 2019029127

Hello Ike,

Caltrans has no comment on the Theta Xi Fraternity Redevelopment Project.
SCH 2019029127

Todd Rogers
Transportation Planning – South
530-741-4507
Todd.Rogers@dot.ca.gov

Caltrans - District 3
703 B Street
Marysville, CA 95901

From: Buss, Stephanie@Wildlife <Stephanie.Buss@wildlife.ca.gov>
Sent: Tuesday, March 26, 2019 4:07 PM
To: Ike Njoku
Cc: Wildlife R2 CEQA
Subject: Theta Xi Fraternity NOP

Hello Mr. Njoku,

CDFW received the Notice of Preparation (NOP) for Theta Xi Fraternity Redevelopment project (SCH #2019029127). Thank you for the opportunity to provide recommendations regarding your request that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide recommendations regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code. CDFW is California's Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the state.

The project proposes to merge three lots located at 503, 509, and 515 First Street and re-subdivide the property into two lots for the redevelopment of one parcel with a consolidated 35-bed, three-story building. The project would include demolition of the buildings at 503 and 509 First Street (Bryson House, Jackson House, and a garage structure), the retention of the building at 515 First Street (TX Main House) on a reconfigured lot of approximately 9,450 sf, and the construction of a new three-story fraternity on the new 10,350 sf lot. There would also be a dedicated "Bike Barn" with bike maintenance space and a one-to-one ratio of covered and secured bike storage to beds. Additional guest bike parking would be provided along the landscape strip on First Street. The project would include a new parking lot accessed from D Street through a secured vehicle gate.

The Initial Study (IS) was completed and as stated on page 3 of the NOP, only those areas identified as potentially significant impact will be evaluated in the Environmental Impact Report (EIR) which included Cultural Resources, Land Use/Planning, Cumulative Impacts, and Growth Inducing Impacts. Those areas identified as no impact or less than significant will not be addressed further in the EIR. As the site contains trees which may be used by nesting birds, the IS included mitigation measures for nesting birds in the Biological section which will not be addressed in the EIR. Mitigation measures identified in the IS will need to be included in the EIR in order to be enforceable. The impacts should also be evaluated in the EIR as the IS does not completely analyze the impacts.

The IS included a mitigation measure for Swainson's hawk (*Buteo swainsoni*) and white-tailed kite (*Elanus leucurus*) (*Mitigation Measure Bio-1*). As the IS states on page 44, the project site does not contain high quality habitat for these species and the project site is currently developed and surrounded by existing urban development. This measure does not appear to be appropriate for this project site based on the information provided in the IS. If the project site does include habitat to support these species, please describe in the biological assessment.

The IS contains *Mitigation Measure Bio-2* for nesting birds. CDFW recommends this mitigation measure be revised as indicated below. Additional language is marked by an underline while language to be removed is indicated by a strikethrough.

Mitigation Measure Bio-2: *If any project construction activities are to occur during the nesting season for birds protected under the California Fish and Game Code and/or Migratory Bird Treaty Act (approximately ~~March 1~~February 15 -August 31), the project applicant shall retain a qualified avian biologist to perform preconstruction surveys for protected birds, including nesting raptors, on the project site and in the immediate vicinity. At least two surveys shall be conducted no more than ~~15~~ 14 days prior to the initiation*

of construction activities, including vegetation clearing. In the event that protected birds, including nesting raptors, are found on the project site, offsite improvement corridors, or the immediate vicinity, the project applicant shall:

- Locate and map the location of the nest site. Within 2 working days of the surveys prepare a report and submit to the City ~~and CDFW~~;
- ~~A no-disturbance buffer of 250 feet shall be established;~~
- A qualified avian biologist shall establish suitable buffers prior to tree removal and/or ground-breaking activities for each nest. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged and are independent or the nest has been abandoned as confirmed by the qualified avian biologist. If birds are showing signs of agitation within the established buffer(s), the buffer(s) shall be expanded to prevent birds from abandoning their nest.
- The qualified avian biologist shall be onsite daily for the first week of construction activities to monitor the birds. The qualified avian biologist shall expand the buffers if the birds are showing signs of agitation. On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction cannot encroach within the buffers until resume when a qualified avian biologist has confirmed that the birds have fledged and are independent or the nest has been abandoned.
- In the event of destruction of a nest with eggs, or if a juvenile or adult raptor should become stranded from the nest, injured or killed, the qualified biologist shall immediately notify the CDFW and the City. The qualified biologist shall coordinate with the CDFW to have the injured raptor either transferred immediately to a CDFW-approved raptor recovery center, or, in the case of mortality, transfer it to the CDFW within 48 hours of notification. If directed/authorized by the CDFW during the notification, the qualified biologist may transfer the injured raptors to a raptor recovery center.

To more effectively identify active nests and to facilitate project scheduling, CDFW recommends initial nesting surveys begin as early as February when the foliage on the trees are at a minimum and the nest building activity is high.

The project proposes to eliminate buildings and trees which may be inhabited by bats. Disturbance of roost sites during the maternity and hibernation seasons are considered primary factors that may negatively impact bats and have the potential to result in take. During the hibernation period, bats are very slow to respond to disturbance during torpor and can lose fat stores needed to survive the winter. During the maternity season, young are not self-sufficiently volant. CDFW does not support eviction of bats during the maternity or hibernation periods. CDFW recommends that the CEQA document include a mitigation measure for bats. A qualified bat biologist should conduct a habitat assessment for potentially suitable bat habitat within six months of Project activities. If the habitat assessment reveals suitable bat habitat then tree trimming, tree removal, and/or building demolition should only be conducted during seasonal periods of bat activity (from August 31 through October 15, a period prior to hibernation when young are self-sufficiently volant, and from March 1 to April 15, to avoid hibernating bats and prior to formation of maternity colonies) under supervision of a qualified bat biologist. Trees should be trimmed and/or removed in a two-phased removal system conducted over two consecutive days. The first day (in the afternoon), limbs and branches should be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures should be avoided, and only branches or limbs without those features should be removed. On the second day, the entire tree should be removed. To exclude bats from structures, CDFW recommends exclusion devices be installed on structures during the periods stated above to prevent bats from accessing the structures. Actively used openings should have a one-way valve installed to allow the bats to leave the roost, but not re-enter. After 7

to 10 days, the one-way valves would be removed and the opening blocked or sealed. Because of the large variability in the way bats use structures, CDFW recommends that a plan on how to monitor and exclude bats be developed by a qualified biologist and submitted to CDFW for review and approval.

CDFW may have additional comments once the CEQA document and biological assessment have been completed and circulated for public comment.

Stephanie Buss

Senior Environmental Scientist (Specialist)
CA Dept of Fish and Wildlife
1701 Nimbus Road
Rancho Cordova, CA 95670

Please note the new phone number
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MAR 13 2019

City of Davis
Community Development

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052



FEMA

March 6, 2019

Ike Njoku
City of Davis
Community Development & Sustainability Department
23 Russell Boulevard, Suite 2
Davis, California 95616

Dear Mr. Njoku:

This is in response to your request for comments regarding the Notice of Scoping Meeting and Preparation of a Draft Environmental Impact Report for the Theta Xi Fraternity Redevelopment Project, Project location: 503, 509, and 515 First Street, Davis, California.

Please review the current effective Flood Insurance Rate Maps (FIRMs) for the County of Yolo (Community Number 060423), Maps revised May 16, 2012 and City of Davis (Community Number 060424), Maps revised June 18, 2010. Please note that the City of Davis, Yolo County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.
- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any *development* must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

Ike Njoku, City of Davis
Page 2
March 6, 2019

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtm>.

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The Davis floodplain manager can be reached by calling Greg Mahoney, Chief Building Official, at (530) 757-5610. The Yolo County floodplain manager can be reached by calling Scott Doolittle, Plan Check Engineer, at (530) 666-8609.

If you have any questions or concerns, please do not hesitate to call Xing Liu of the Mitigation staff at (510) 627-7267.

Sincerely,


Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:

Greg Mahoney, Chief Building Official, City of Davis
Scott Doolittle, Plan Check Engineer, Yolo County
Ray Lee, WREA, State of California, Department of Water Resources, North Central Region
Office
Xing Liu, NFIP Planner, DHS/FEMA Region IX
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

Elise Carroll

From: Laverne Bill <LBill@yochadehe-nsn.gov>
Sent: Wednesday, April 3, 2019 8:00 AM
To: Ike Njoku
Cc: Sherri Metzker
Subject: Re: Theta Xi Fraternity at 503 509 and 515 1st Street Davis Ca 95616 Demolition and Replacement Project Consultation
Attachments: image001.png

That sounds great. Thanks

Laverne Bill
Cultural Resources Department Manager
Tewe Kewe Cultural Center
PO Box 18, Brooks, CA 95606
c 530-723-3891
f 530-796-2143

Sent from my iPhone

On Apr 3, 2019, at 7:48 AM, Ike Njoku <INjoku@cityofdavis.org> wrote:

Hi Laverne,
As stated below by our EIR consultant, it would be included in the DEIR Cultural section, and frankly, it is a standard mitigation measure that the City adopts in most development projects.
Best regards,
Ike Njoku, Planner & Historical Resources Manager
Department of Community Development & Sustainability
23 Russell Boulevard, Suite 2
Davis, CA 95616
Phone: (530) 757-5610; Extension 7230 — Fax: (530) 757-5660 — Email: injoku@cityofdavis.org
"The world will not be destroyed by those who do evil, but by those who watch them without doing anything" -- Albert Einstein
"Integrity is doing the right thing, even when no one is watching." -- C. S. Lewis

From: Elise Carroll <ecarroll@denovoplanning.com>
Sent: Tuesday, April 2, 2019 1:35 PM
To: Ike Njoku <INjoku@cityofdavis.org>
Subject: RE: Theta Xi Fraternity at 503 509 and 515 1st Street Davis Ca 95616 Demolition and Replacement Project Consultation
Ike –

We can definitely make sure both of these recommendations are in the Cultural section of the DEIR. It's worth noting that we were already planning to do so, though.
Regarding the previous CDFW comment, I believe it would be appropriate for the revisions to the tree-related mitigation measures to be made in the Errata section of the Final EIR.

--

Elise Carroll | Senior Planner
De Novo Planning Group | www.denovoplanning.com

ecarroll@denovoplanning.com | 916-235-0116

Northern California | 1020 Suncast Lane #106 | El Dorado Hills, CA 95762

Southern California | 180 East Main Street # 108 | Tustin, CA 92780

From: Laverne Bill <LBill@yochadehe-nsn.gov>

Sent: Tuesday, April 2, 2019 1:26 PM

To: 'Ike Njoku' <INjoku@cityofdavis.org>

Cc: Isaac Bojorquez <Bojorquez@yochadehe-nsn.gov>; Robert J. Geary <RGeary@yochadehe-nsn.gov>;

'Elise Carroll' <ecarroll@denovoplanning.com>; Sherri Metzker <SMetzker@cityofdavis.org>; 'Skip

Mezger' <scmezger89@gmail.com>; 'papabobtesta@gmail.com' <papabobtesta@gmail.com>

Subject: RE: Theta Xi Fraternity at 503 509 and 515 1st Street Davis Ca 95616 Demolition and Replacement Project Consultation

I definitely want to ensure it says in the agreement that the applicant must have tribal monitors that monitor all ground disturbance for this project and that we will conduct cultural sensitivity training before all work begins. Thanks.

Laverne Bill

Cultural Resources Manager

Tewe Kewe Cultural Center

PO Box 18 | Brooks, CA 95606

p 530.796.3400 | c 530.723.3891

f 530.796.2143

lbill@yochadehe-nsn.gov

www.yochadehe.org

From: Ike Njoku <INjoku@cityofdavis.org>

Sent: Tuesday, April 02, 2019 12:21 PM

To: Laverne Bill <LBill@yochadehe-nsn.gov>

Cc: Isaac Bojorquez <Bojorquez@yochadehe-nsn.gov>; Robert J. Geary <RGeary@yochadehe-nsn.gov>;

'Elise Carroll' <ecarroll@denovoplanning.com>; Sherri Metzker <SMetzker@cityofdavis.org>; 'Skip

Mezger' <scmezger89@gmail.com>; 'papabobtesta@gmail.com' <papabobtesta@gmail.com>

Subject: RE: Theta Xi Fraternity at 503 509 and 515 1st Street Davis Ca 95616 Demolition and Replacement Project Consultation

Hi Laverne,

I don't know much about the agreement, but if there is a need for one, it would be with the property owners. We at the City level would add a mitigation measure that will require the applicant to provide onsite qualified expert to monitor excavations.

Thanks,

Ike

Ike Njoku, Planner & Historical Resources Manager

Department of Community Development & Sustainability

23 Russell Boulevard, Suite 2

Davis, CA 95616

Phone: (530) 757-5610; Extension 7230 — Fax: (530) 757-5660 — Email: injoku@cityofdavis.org

"The world will not be destroyed by those who do evil, but by those who watch them without doing anything" -- Albert Einstein

"Integrity is doing the right thing, even when no one is watching." -- C. S. Lewis

From: Laverne Bill <LBill@yochadehe-nsn.gov>

Sent: Wednesday, March 27, 2019 11:33 AM

To: Ike Njoku <INjoku@cityofdavis.org>

Cc: Isaac Bojorquez <Bojorquez@yochadehe-nsn.gov>; Robert J. Geary <RGeary@yochadehe-nsn.gov>

Subject: RE: Theta Xi Fraternity at 503 509 and 515 1st Street Davis Ca 95616 Demolition and Replacement Project Consultation

Good afternoon, Ike. I wanted to touch base with you and see who we need to contact about the monitor's agreement for the Theta Xi project. Let me know. Thanks.

Laverne Bill

Cultural Resources Manager

Tewe Kewe Cultural Center

PO Box 18 | Brooks, CA 95606

p 530.796.3400 | c 530.723.3891

f 530.796.2143

lbill@yochadehe-nsn.gov

www.yochadehe.org

From: Ike Njoku <INjoku@cityofdavis.org>

Sent: Wednesday, May 09, 2018 1:17 PM

To: Laverne Bill <LBill@yochadehe-nsn.gov>

Subject: RE: Theta Xi Fraternity at 503 509 and 515 1st Street Davis Ca 95616 Demolition and Replacement Project Consultation

Hi Laverne,

I wanted to check in with you regarding this proposed demolition and replacement project. Any comments for us?

Thanks,

Ike

From: Ike Njoku

Sent: Friday, April 27, 2018 2:20 PM

To: 'lbill@yochadehe-nsn.gov' <lbill@yochadehe-nsn.gov>

Subject: Theta Xi Fraternity at 503 509 and 515 1st Street Davis Ca 95616 Demolition and Replacement Project Consultation

Hi Laverne,

Attached are relevant document regarding a proposed demolition of two buildings and their replacement with one new building for the Theta Xi Fraternity here in Davis, California.

Please review the information provided and let us know if you have any concerns. There are three parcels involved and they will be merged and subdivided into two equal sizes, and one will retain the existing building (515 1 Street) , while the new parcel containing 503 and 509 1st Street will be demolished and replaced with a new building.

Because the two buildings are found to have historical significance, a focused environmental impact report (EIR) is being prepared for the project.

Thanks for your usual prompt response.

Best,

Ike

Ike Njoku, Planner & Historical Resources Manager

Department of Community Development & Sustainability

23 Russell Boulevard, Suite 2

Davis, CA 95616

Phone: (530) 757-5610; Extension 7230 — Fax: (530) 757-5660 — Email: injoku@cityofdavis.org

"The world will not be destroyed by those who do evil, but by those who watch them without doing anything -- Albert Einstein & "Integrity is doing the right thing, even when no one is watching." -- C. S. Lewis

RECEIVED

STATE OF CALIFORNIA

Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC

MAR 07 2019
City of Davis
Community Development



March 6, 2019

Ike Njoku
City of Davis
23 Russell Boulevard
Davis, CA 95616

RE: SCH# 2019029127 Theta Xi Fraternity Redevelopment, Yolo County

Dear Mr. Njoku:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
 - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
 - a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
 - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email

address: Steven.Quinn@nahc.ca.gov.

Sincerely,



for

Steven Quinn

Associate Governmental Program Analyst

cc: State Clearinghouse



RECEIVED

MAR 26 2019

City of Davis
Community Development



GAVIN NEWSOM
GOVERNOR



JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

19 March 2019

Ike Njoku
City of Davis
23 Russell Boulevard
Davis, CA 95616

CERTIFIED MAIL
7018 3090 0000 5203 5274

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, THETA XI FRATERNITY REDEVELOPMENT PROJECT, SCH#2019029127, YOLO COUNTY

Pursuant to the State Clearinghouse's 25 February 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Theta Xi Fraternity Redevelopment Project, located in Yolo County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases,

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board’s Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently \$1,277 + \$8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
<https://www.waterboards.ca.gov/centralvalley/help/permit/>

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.



Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento



YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT

March 5, 2019

Mr. Ike Njoku
Planner, Community Development Dept.
23 Russell Blvd., Suite 2
Davis, CA 95616

RECEIVED

MAR 08 2019

City of Davis
Community Development

Dear Mr. Njoku:

The Yolo-Solano Air Quality Management District (District) has received the notice of preparation for the Theta Xi Fraternity Redevelopment Project (project). The District has reviewed the document and has the following comments:

1. Renovation and/or demolition projects are subject to District review in order to determine the applicability of the District's Rule 9.9 – Asbestos. Demolition projects subject to Rule 9.9 are required to submit a demolition notification, an asbestos survey report of the structure, meet a 10 working day waiting period requirement and pay the applicable demolition fee. Renovation project subject to the rule and involving the removal/disturbance of 160 square feet or more of building materials are required to have a thorough asbestos report. If regulated asbestos materials are found to be present, a renovation notification and fee may be required depending on the quantity of asbestos materials to be removed/abated before the renovation may proceed. The District should be consulted for the specific requirements that will apply to the project if it is determined to be subject to Rule 9.9 for asbestos.

The District appreciates the opportunity to comment on the notice of preparation for this project. If you have any questions about the comments included in this letter, please feel free to contact me at 530-757-3668 or email me at mjones@ysaqmd.org.

Sincerely,

Matthew Jones
Planning Manager, YSAQMD

Appendix B

Historical Effects Analysis Study (2018)

**HISTORICAL EFFECTS ANALYSIS STUDY OF
APN. 070-244-004-000; 070-244-006-000, & 070-244-005-000,
503, 509, AND 515 FIRST STREET, DAVIS,
YOLO COUNTY, CALIFORNIA 95616**

JUNE 2018



PREPARED FOR:

Beta Epsilon Association of Theta Xi

P.O. Box 4450

Davis, CA 95617

PREPARED BY:

Historic Resource Associates

2001 Sheffield Drive

El Dorado Hills, CA 95762

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FIGURES

Figure 1: Project Location Map.

Figure 2: Project Parcel Map.

Figure 3: Jackson House.

Figure 4: Jackson House Garage.

Figure 5: Bryson House.

Figure 6: TX Main House.

Figure 7: Sketch of 3 Fraternity Houses.

Figure 8: View looking east along 1st Street with 503, 509, and 515 1st Street on the left just beyond D Street, circa 1920s.

Figure 9: Photograph of 515 1st Street not long after its purchase by Theta Xi Fraternity in the 1950s.

Figure 10: Photograph of 515 1st Street in the 1970s.

Figure 11: Current view of 515 1st Street with the altered porch or veranda.

I. INTRODUCTION AND PURPOSE

This summary is provided in accordance with the California Environmental Quality Act (CEQA) Guidelines §15123. As stated in CEQA Guidelines §15123(a) “an Environmental Impact Report (EIR) shall contain a brief summary of the proposed actions and its consequences.” As required by the Guidelines, this section includes: (1) a summary description of the affected cultural resources, (2) recommended alternatives, and (3) possible mitigation measures.

II. PROJECT LOCATION

The subject properties are located at 503, 509, and 515 First Street, Davis, Yolo County, California. The properties lie within Assessor's Parcel Numbers (APN) 070-244-004-000; 070-244-006-000, & 070-244-005-000 and are owned by the Beta Epsilon Association of Theta Xi, a fraternity associated with University of California, Davis (UCD). There is one Merit Resource within 300’ of the subject properties – Boy Scout Hut (#1282), located at 616 First Street.

III. PROJECT HISTORY AND DESCRIPTION

The existing Theta Xi Fraternity currently occupies three adjacent parcels containing three dwellings located on First Street between D Street and the Natsoulas Gallery Building (Figures 1 and 2). The three parcels at 503, 509, and 515 First Street are owned by the Beta Epsilon Association of Theta Xi, a non-profit California corporation, and occupied by the fraternity. The site has provided student housing dating from 1950, when Theta Xi acquired the first of the three parcels. From west to east are the “Jackson House,” the “Bryson House,” and the “TX Main House.” There is also a detached garage structure that includes an attached laundry room in the northwest corner behind the Jackson House.

The redevelopment proposal anticipates demolition of the Bryson and Jackson houses and garage, as well as lot line adjustments to create two parcels of approximately equal width, with addresses of 515 and 521 First Street. This will allow for construction of a more compact, consolidated singular fraternity building, creating a more urban edge, consistent with city planning goals for the neighborhood. The architectural theme recalls the Craftsman Bungalow style of the houses being replaced. During construction, the TX Main House will continue to serve the fraternity’s housing and study needs. Once the new fraternity building is completed, the fraternity will consolidate all of its activities onto the new western parcel, and the TX Main House, along with its expanded lot, will be vacated and made available for another tenant with a higher and better use redevelopment proposal. Construction is anticipated to commence in June 2019 and be completed in time for occupancy when the fall term begins at UCD in September 2020.

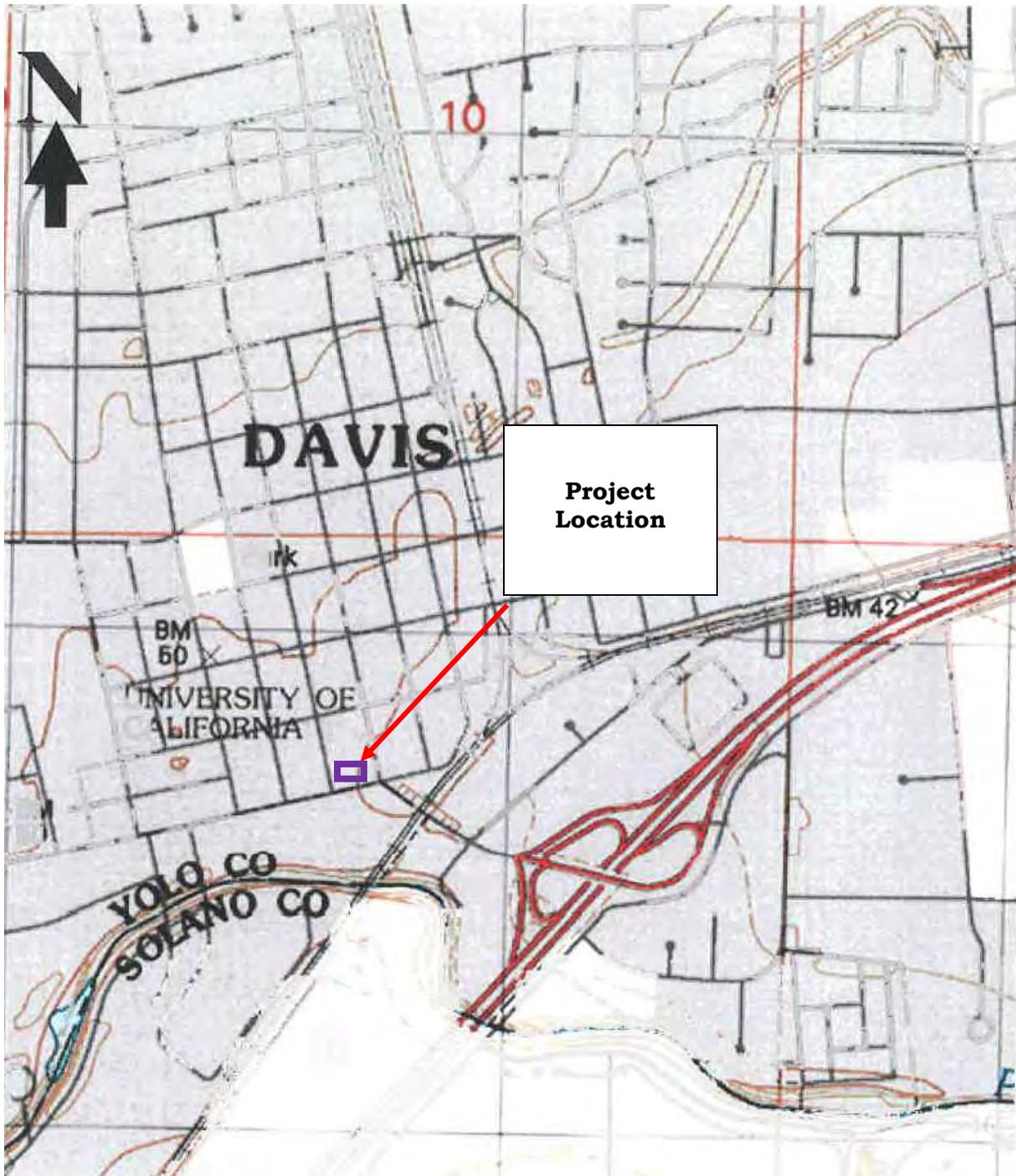


FIGURE 1: Project Location Map
(Courtesy Bole and Associates, 2014).

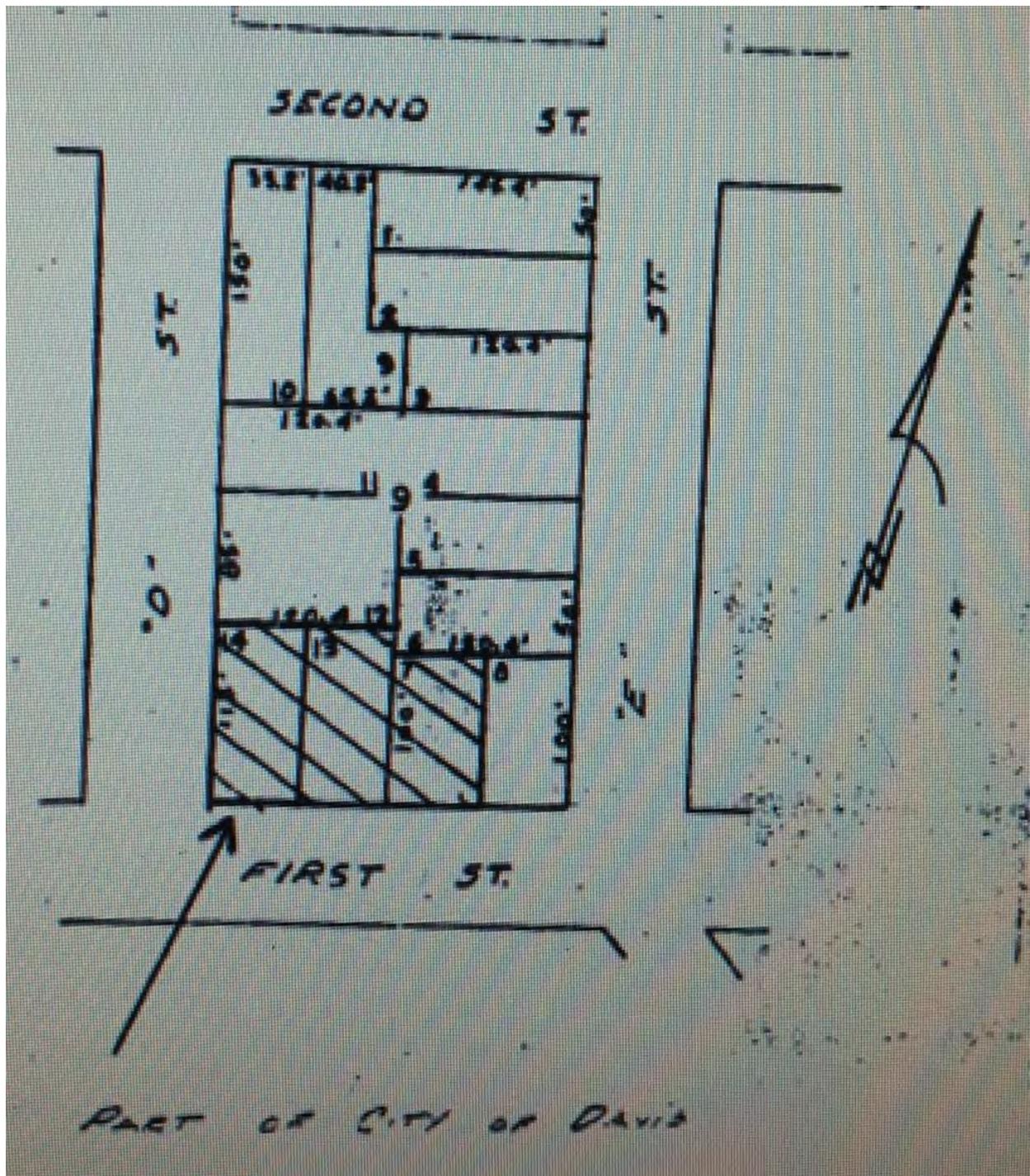


FIGURE 2: Project Parcel Map
(City of Davis Building Department Records).

The three houses are two-story, wood framed buildings constructed approximately 100 years ago. While the Jackson and Bryson Houses represent a classic Craftsman Bungalow style of architecture, the TX Main House reflects Mediterranean style Revivalist architecture that garnered popularity in Davis during the late 1910s through 1930s.

The Jackson House, located at 503 First Street, was constructed about 1912 and appears to have originally been a single-story house with a large attic and a partial basement. The Jackson House has a horizontal board exterior wood siding. The shed roof dormer centered on the roof facing First Street had no veranda, railing or outside access when the house was built; these features were added by the current owner. The original brick fireplace was removed from the east wall by the current owner. Figure 4 is a photograph of the garage.



FIGURE 3: Jackson House.



FIGURE 4: Jackson House Garage.

The Bryson House (Figure 5) at 509 First Street is of similar design and was built in the same time frame as the Jackson House, but with a second-story living area. The Bryson House also has a horizontal board exterior wood siding. The house has a partial basement. One of the truncated wood columns was removed, as was the brick fireplace from the east wall. The current railing is a more recent addition, as is the door to the right of the front door. The Bryson House was named in honor of Ellen Loree “Cookie” Bryson, the fraternity’s initial cook who served in that capacity for about 18 years.



FIGURE 5: Bryson House.

The original two western structures that housed the Beta Epsilon Chapter of Theta Xi Fraternity at what was then 503 and 509 First Street were built about 1912 and represented a classic Craftsman Bungalow style of architecture. The original eastern structure at what was then 515 First Street was built in 1920 and reflected a Mediterranean Revivalist style of architecture. In that era, First Street was part of the Lincoln Transcontinental Highway, later named US 40, before it was abandoned for present day Interstate 80. All three residential properties were converted to fraternity housing in the decade of the 1950s, beginning with 515 First Street and continuing westward. From 1950 through 2019, over 1,300 undergraduate men of Theta Xi called those three houses their home away from home, changing rooms and roommates at the end of each term.

The Jackson House was named in honor of W. Turrentine “Turpie” Jackson, the fraternity’s long-time advisor who served in that capacity for over 47 years. He was an internationally renowned Western historian, author of numerous books, and a professor of History at UCD. His scholarly interest in the transportation, natural resources and economics of the American West earned him numerous awards for his promotion of history. Turpie was the rock that the men of Theta Xi clung to, their mentor, their moral compass, and their cheerleader, both during their college days and afterward. He was fiercely proud of his boys and of the men whom they became, successful in their own chosen professions as teachers, professors, doctors, lawyers, veterinarians, engineers, scientists, farmers, ranchers, business men, bankers and many other walks of life.



FIGURE 6: *TX Main House.*

All three houses are two-story wood framed buildings. Each has a covered front porch with a balcony above and a partial basement. The buildings are set up dorm style, with each having several bedrooms and community bathrooms. The 1st floor of the TX Main House has a large kitchen and a large community dining room. The Jackson and Bryson Houses do not have kitchens or large community rooms. The roofing for all three houses is composed of composite shingles supported by sheathing over rafters. The walls of all three house are composed of 2x4 rough sawn redwood joists. The floor joists are supported by a perimeter foundation wall, basement walls, and by 4x6 girders running orthogonal to the joists. The girders are supported by piers and pad footings and posts which extend down into the basement. The foundation for each house is similar. The basement wall thicknesses are all approximately 8 inches. The basements of the Jackson and Bryson Houses are located below the back half of the buildings, while the basement of the TX Main House is located towards the central portion of the structure.

The project site is flat and currently consists of three parcels. The westernmost lot is paved between the sidewalk and the structure for off-street parking. The area has several trees scattered about. There is a paved recreation/patio area behind the two houses and the front area is landscaped with shrubbery and lawn. The site is bounded by a mix of uses and facilities. Adjacent parcels include a funeral home on D Street and an art gallery on First Street, adjacent to the eastern lot owned by the fraternity on which the TX Main House is located. The project site faces a landscaped buffer and the back of a retail building in a shopping plaza on the south side of First Street. The surrounding area is a mix of retail, single family, and apartment developments along First Street and D and E Streets.

Since 1950, over 1,300 undergraduate men of Theta Xi called the TX Main House, the Bryson House, and the Jackson House their home away from home. As part of the proposed project, the applicant proposes to commemorate the original structures that housed the fraternity with a suitable, prominently displayed commemorative plaque containing a sketch of the houses and a summary of the fraternity's history similar to the following:



FIGURE 7: Sketch of the 3 Fraternity Houses.

Specifically, the objectives of the proposed project are to:

- Address deficiencies in the structural integrity of the three houses used to house the undergraduate members of Theta Xi Fraternity on First Street in Davis, CA, as identified in the report by Pemberton Engineering, dated July 27, 2016;
- Renovate the subject properties in a way that provides for the needs of UCD students by ensuring that housing is competitive both in rent and amenities available within the City of Davis, including on-campus housing, in order to ensure the sustainability of the fraternity;
- Use the value embedded in the three owned lots to assist in funding the renovation project by consolidating the housing needs of the fraternity onto a smaller footprint;
- Construct the new building with features that will allow it to achieve a high level of energy efficiency and reduce ongoing maintenance costs; and

- Continue to use the new facility as classrooms that, through fellowship and alumni guidance, lead to the wholesome mental, moral, physical and spiritual growth that is the purpose of the Theta Xi Fraternity.

The proposal calls for consolidating all living and study areas into a single new 3-story building with partial basement, a detached laundry and storage building and trash enclosure, and associated site landscaping with exterior meeting and gathering spaces. There will also be a dedicated “Bike Barn” with bike maintenance space and a one-to-one ratio of covered and secured bike storage to beds. Additional guest bike parking is planned for the city landscape strip on First Street. It includes a new parking lot accessed from D Street through a secured vehicle gate. The new concealed off-street parking and recreation area in the rear significantly increases the number of conforming off-street parking spaces available to the fraternity. The number of beds housing the fraternity would be reduced from 38 to 35; the densification of the parcel would be increased by 50%.

The proposed redevelopment would be handicap-accessible, safer and incorporate state-of-the art energy efficiency measures. Sustainable design features will include high levels of envelope insulation, high efficiency HVAC, LED lighting, solar shading devices, EV charging outlets and a low water use landscaping and irrigation system. Landscaped bio-swales are proposed to be incorporated into the First and D Street landscaping edges. It is anticipated that the project will target a “LEED Silver” equivalency.

IV. REGULATORY FRAMEWORK

CEQA Section 15064.5(a) defines a “historical resource” as a resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register;
- Listed in a local register of historical resources (as defined at Public Resources Code Section 5020.1(k));
- Identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code; or
- Determined to be a historical resource by a project's lead agency (CCR Title 14(3) Section 15064.5(a)).

A historical resource consists of “Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource shall be considered by the lead

agency to be ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources.”

If an impact to a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact. Mitigation must avoid or substantially lessen the physical impact that the project will have on the resource. Generally, the use of drawings, photographs, and/or displays does not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource. However, CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less than significant level.

The California Register of Historical Resources (California Register) is an authoritative guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The California Register helps government agencies identify and evaluate California’s historical resources, and indicates which properties are to be protected, to the extent prudent and feasible, from substantial adverse change. Any resource listed in, or eligible for listing in, the California Register is to be taken into consideration during the CEQA process. A significant environmental impact would result to cultural resources if a proposed project were to: cause a substantial adverse change in the significance of a historic resource as defined in CEQA Guidelines §15064.5.

V. FINDING OF SIGNIFICANCE

All three properties were formally recorded in 1996 by Bridget Maley of Architectural Resources Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rand Herbert.¹ In October 2016, Historic Resource Associates completed a “Historical Analysis” of the three aforementioned properties on First Street. The primary objective was to augment the previous recordation of each building, correct any inaccuracies regarding the historic or physical integrity of the buildings, and make a more defensible finding of each properties significance.² The properties at 503 and 509 First Street were recently assigned a NRHP status of code of 5D2, while 515 First Street was recently assigned a NRHP status code of 5D3.³

The disparity between the status codes appears to reflect a difference in whether the properties "appear" to be contributors to a local historic district based upon survey evaluation, as is the case with 503 and 509 First Street, or, in the case of 515 First Street, where the property is "eligible"

¹ Maley, Bridget. City of Davis: Cultural Resources Inventory and Context Statement. 1996; Roland-Nawi Associates. Central Davis Historic Conservation District: City of Davis, Historical Resources Survey. August 2003; Rifkin, Rich and Rand Herbert. City of Davis, Citywide Survey and Evaluation of Buildings Constructed Prior to 1976. July 2, 2015.

² Historic Resource Associates. Analysis Study of 503, 509, and 515 1st Street, Davis, Yolo County, California 95616. Prepared for Beta Epsilon Association of Theta Xi, P.O. Box 4450, Davis, CA 95617. October 2016.

³ Rifkin, Rich and Rand Herbert. City of Davis. Citywide Survey and Evaluation of Buildings Constructed Prior to 1976. July 2, 2015; Herbert and Rifkin assisted in the Davis, California: Citywide Survey and Historic Context Update (2015) prepared by Brunzell Historical.

for local listing or designation.⁴ In either case, all three properties retain adequate integrity to be considered “Merit Resources” within the City of Davis, significant for their architecture and association with U.C. Davis. All have housed members of the fraternity since the 1950s. Besides the Theta Xi Fraternity, who has owned and occupied the three residences since the 1950s, the Jackson House is associated with the Anderson family of Davis, particularly A. Gordon Anderson, who served on the Board of Trustees, the precursor to the city council and as major. Gordon’s descendants, Don Anderson and Don’s daughter Jennifer Anderson, have continuously run Davis Lumber & Hardware Company, today known as Davis Ace, and like their parents have played an important role in community’s civic and economic development.⁵



FIGURE 8: View looking east along 1st Street with 503, 509, and 515 1st Street on the left just beyond D Street, circa 1920s (courtesy Theta Xi Fraternity).

⁴ Department of Parks and Recreation. Instructions for Recording Historical Resources. Office of Historic Preservation, Sacramento, CA, March 1995.

⁵ Anderson Road in Davis bears the name the family.



Davis Colony Chapter House, University of California at Davis

FIGURE 9: Photograph of 515 1st Street not long after its purchase by Theta Xi Fraternity in the 1950s. Note the half porch, clip roof off the porch, and pergola to the right (courtesy Theta Xi Fraternity).



FIGURE 10: Photograph of 515 1st Street in the 1970s. Note the original half porch, clipped roof off the porch, and pergola to the right were still intact (courtesy Theta Xi Fraternity).



FIGURE 11: Current view of 515 1st Street with the altered porch or veranda.

All three properties, located at 503, 509, and 515 First Street, are currently listed as significant historical resources under CEQA, having been determined to be eligible for the California Register of Historic Resources. This finding was addressed in 2015, when Rich Rifkin and Rand Herbert reassessed each property as part of the updated historic resource inventory, and again in October 2016 by Historic Resource Associates.⁶ However, due to time constraints, neither Rifkin or Herbert were able to carefully research the three properties in terms of their ownership, date of construction, or integrity. The study by Historic Resource Associates in 2016 analyzed in more detail the integrity of each property as described below:

503 1st Street retains overall good integrity of design, materials, workmanship, association, setting, feeling, and location. The most serious alteration is opening what was once a closed dormer to a rooftop access porch/dormer on the front façade. Other alterations that have changed the character of the residence include removal of the exterior brick fireplace on the east elevation and the addition of an exterior wooden stairway leading to the second-story, where a door has been cut into the sidewall for access. The entire interior design is radically altered since its original configuration. While condition issues were addressed by Pemberton Engineering, none of those issues have dramatically altered the historic character of the residence. Structural issues, however, are identified throughout the residence, and the living environment for students is consistent with the age of the building.

⁶ Rifkin, Rich and Rand Herbert. City of Davis. Citywide Survey and Evaluation of Buildings Constructed Prior to 1976, July 2, 2015.

509 1st Street retains overall good integrity of design, materials, workmanship, association, setting, feeling, and location. The most serious alterations are the addition of a second door entrance on the front façade and removal of one of the original truncated wood porch columns. Much like 503 1st Street, the entire interior of 509 1st Street has been altered. While condition issues were addressed by Pemberton Engineering, none of those issues have dramatically altered the historic character of the residence. Structural issues, however, are identified throughout the residence, and the living environment for students is consistent with the age of the building.

515 1st Street is the largest of the three buildings and serves as the primary kitchen and meeting hall. The building retains marginal integrity of design, materials, workmanship, but good integrity of association, setting, feeling, and location. The most serious alterations include the demolition of the original front veranda and pergola, the construction of a much larger veranda that alters the front fenestration and design of the front of the house, the construction of a similar style veranda on the west elevation of the building, and the addition of rear access stairs on the rear of the building. Unlike 503 and 509 1st Street, the interior of 515 1st Street is fairly original, and the rooms are more spacious. While condition issues were addressed by Pemberton Engineering, none of those issues have dramatically altered the historic character of the residence. Structural issues, however, are identified throughout the residence, and the living environment for students is consistent with the age of the building.

VI. CEQA FINDING AND PROJECT ALTERNATIVES

Because the buildings are significant resources or historic properties, demolition of the buildings is a significant impact under CEQA. Alternatives 1-4 will not result in a significant adverse effect to the historic properties. Although the loss of a historic building is generally unmitigable, project alternatives should be taken into consideration, along with mitigation measures. Furthermore, the potential loss through demolition of two of the three historically significant buildings may warrant a focused Environmental Impact Report (EIR).

Demolition under Alternative 5 would not result in a significant adverse effect, either directly or indirectly, to the Boy Scout Hut (#1282) at 616 First Street, a Merit Resource. The Boy Scout Hut is screened by mature trees and its significance is not tangent to the three aforementioned properties.

VII. SIGNIFICANT EFFECTS AND MITIGATION MEASURES

A. Alternatives Considered

Several alternatives were considered and rejected for the Theta Xi Fraternity Project, because they would not meet basic project objectives and/or were determined to be infeasible for technological, environmental, legal, social, or other reasons.

1. No Project Alternative

This alternative focused on what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and public services. Under the “No Project” alternative, the fraternity would continue to use its existing facilities on First Street as long as safe use could be assured and as long as the fraternity continued to attract new members. It currently suffers from not being able to compete with amenities offered by alternative housing in Davis. Continued deterioration of the existing property would exacerbate this problem. Without the ability to extract value from the existing properties, as would occur by consolidating the fraternity’s activities on a smaller footprint as the proposed project would do, the fraternity would not have the resources to modify significantly the existing facilities to make them competitive with alternative housing options available to UCD students. The no project alternative would not enable the fraternity to correct structural deficiencies, lower its ongoing maintenance costs, or attract new members to ensure its survivability or sustainability, all of which are project objectives. The “No Project” alternative would not meet the basic project objectives.

This alternative is infeasible because it would not meet the project objectives, would result in the continued deterioration of the properties, and would threaten the future safety of the occupants of the existing structures and the continued existence of the Theta Xi Fraternity. This Alternative, however, would not result in a significant adverse effect to any of the buildings owned by Theta Xi Fraternity.

2. New Construction at an Alternative Location

This alternative would involve purchasing land and constructing the proposed facilities at an alternative location. The alternative would be very similar to the proposed project, except that: 1) the facility would not be constructed on First Street in an area determined to be ideally situated among the campus, the downtown area, and the Amtrak Railroad Station; and 2) the project would be more expensive because of land acquisition costs that would either include costs for previously installed infrastructure (e.g., roads, sewer, flood control, utilities, etc.), but could also necessitate expenditures for required infrastructure if the infrastructure has not been previously provided. The

owner has not been able to identify a potential site for acquisition that meets the fraternity's requirements. Because of the size of the rural nature of land surrounding UC Davis and the City of Davis, any potential land acquisition would be at a considerable distance from campus and much farther away from downtown Davis and the Amtrak Station. This alternative could have additional environmental impacts because of increased construction impacts (noise, air quality, water runoff, etc.) stemming from the provision of the basic infrastructure.

This alternative was rejected as infeasible, because it would establish a location that would not be an attractive location to members or prospective members of the fraternity or competitive with available alternative housing available to students of UCD. This Alternative would not result in a significant adverse effect to the any of the buildings owned by Theta Xi Fraternity. However, this Alternative would not result in preservation of the buildings either and would likely result in the sale of the buildings as part of the Theta Xi Fraternity.

3. Acquisition and Remodeling of Existing Improved Property at an Alternative Location

This alternative would involve purchasing existing improved property in an area with a comparable proximity to the campus, the downtown area, and the Amtrak Station and remodeling it to meet the needs of the fraternity. An affordable site for potential acquisition was not identified as being on the market and is unlikely to be on the market now or in the near future. Even if such a site were to be identified, expected neighborhood opposition to a proposed location of a fraternity in the neighborhood would be anticipated and would present a substantial obstacle to implementation. This alternative was rejected because it cannot be reasonably ascertained and it is considered remote and speculative.

This Alternative would not result in a significant adverse effect to the any of the buildings owned by Theta Xi Fraternity. However, this Alternative would not result in preservation of the buildings either and would likely result in the sale and loss of the buildings as part of the Theta Xi Fraternity.

4. Preservation Alternative

This alternative would involve preserving and renovating all three fraternity buildings, thus addressing the potential adverse effect of the loss of any or all of the fraternity buildings as a result of demolition or other factors, including neglect. While this alternative retains all three buildings in their current exterior design, it does not address deficiencies as a result of recommendations made by Pemberton Engineering of Davis, who conducted a structural/engineering study of the buildings in 2017. Nor does this alternative meet the current and future needs of the Theta Xi Fraternity in regards to providing a safe, secure, and livable space for its fraternity members. In summary, this alternative suffers from the same deficiencies described in the "No Project Alternative" discussed above and would not meet the basic project objectives. It too is infeasible for the same reasons described in the "No Project Alternative."

5. Relocating or Moving Buildings Alternative

This alternative would involve relocating the buildings to another location within the City of Davis where they can be restored and preserved. While this alternative would likely preserve each building, finding a suitable parcel inside the City of Davis may not be possible, the costs of moving each building would be prohibitive, and each building may not be safely moved intact to a new location given their structural condition. This alternative would not likely reduce the effects to each building to a level that the project would be found to be “less than significant: under CEQA, since the new location would dramatically alter the setting of each property, an important part of the building’s historic context.

6. Demolition and New Construction (Preferred Alternative)

The preferred alternative anticipates demolition of the Bryson and Jackson houses and garage, and lot line adjustments to create two parcels of approximately equal width with addresses of 515 and 521 First Street, which will allow for construction of a more compact, consolidated singular fraternity building with a more urban edge, consistent with city planning goals for the neighborhood. The architectural theme recalls the Craftsman Bungalow style of the houses being replaced. During construction, the TX Main House will continue to serve the fraternity’s housing and study needs. Once the new fraternity building is completed, the fraternity will consolidate all of its activities onto the new western parcel, and the TX Main House, along with its expanded lot, will be vacated and made available for another tenant or higher and better use redevelopment proposal. Construction is anticipated to commence in June 2019 and be completed in time for occupancy, when the fall term begins at UCD in September 2020.

Even with adherence to the following mitigation measures, this alternative would not fully mitigate the loss of the properties or historic resources, which are significant for the purposes of CEQA. Therefore, this Alternative would be considered a significant and unavoidable impact.

Proposed Mitigation Measures:

Prior to demolition of the buildings the Applicant shall:

- a) Retain a qualified architectural historian, as approved by the City of Davis Planning, Department, to prepare a “Historic Documentation Report.” The report shall include current photographs of each building displaying each elevation, architectural details or features, and overview of the buildings, together with a textual description of the building along with additional history of the building, its principal architect or architects, and its original occupants to the extent that information about those occupants can be obtained. The photo-documentation shall be done in according to Historic American Building Survey/Historic Engineering Record (HABS/HAER) guidelines, which should include archival quality negatives and prints. The final Report shall be deposited with the City of Davis Community Development and Sustainability Department, the Hattie Weber Museum, and the State

Office of Historic Preservation, and other appropriate organizations and agencies as identified by the Planning Department.

- b) Place and maintain a publicly accessible space for a memorial or interpretive plaque/display on or near the former location of the subject properties, identifying the former location of the building, its original owner, and its historic significance.

B. Cumulative Analysis

CEQA Guidelines Section 15130 (a) states that “an EIR shall discuss cumulative impacts of a project when the project’s incremental effects is cumulatively considerable, as defined in CEQA Guidelines Section 15065 (c).” 503 and 509 First Street represent an important class or style of architecture reflective of post-1900 Davis, and while not unique, their location along First Street, formally part of the Lincoln Transcontinental Highway and now a busy thoroughfare, makes them visually important to residents and visitors to the city.

There are, however, other similar Craftsman Bungalow style residential homes in Davis that are of equal or greater architectural significance and the loss of 503 and 509 First Street will not result in the demise of the last building of this type or design in Davis. Other factors that should be considered include the city’s long-range plan for this urban section of Davis, the non-historic contemporary or modern commercial infill across First Street from the subject properties, and the loss of integrity of the Natsoulas Gallery Building at 521 First Street, which when constructed mirrored 515 First Street.

VIII. REFERENCES

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Appendix C

Historical Resource Analysis Study (2016)

**HISTORICAL RESOURCE ANALYSIS STUDY OF
503, 509, AND 515 1ST STREET, DAVIS,
YOLO COUNTY, CALIFORNIA 95616**

OCTOBER 2016



PREPARED FOR:

Beta Epsilon Association of Theta Xi
P.O. Box 4450
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PREPARED BY:

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El Dorado Hills, CA 95762

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Figure 2: Project Parcel Map.

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Figure 5: Theta Xi Fraternity existing floor plans - 2nd Floor.

Figure 6: Theta Xi Fraternity proposed renovation plans - 1st Floor.

Figure 7: Theta Xi Fraternity proposed renovation plans - 2nd Floor.

Figure 8: Theta Xi Fraternity proposed new construction plans - 1st Floor.

Figure 9: Theta Xi Fraternity proposed new construction plans - 2nd Floor.

Figure 10: View circa 1920s looking east along 1st Street with 503, 509, and 515 1st Street on the left just beyond D Street.

Figure 11: Sanborn Fire Insurance Map, Davis, California, 1921.

Figure 12: View looking west at 503 1st Street in the background and 509 1st Street in the foreground, circa 1960s.

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Figure 15: Current view of 503 1st Street with the rooftop conversion.

Figure 16: View looking east at the west elevation of 503 1st Street.

Figure 17: View looking west at the shed/garage with the later addition behind 503 1st Street.

Figure 18: View looking east at the rear of 503 1st Street.

Figure 19: Sanborn Fire Insurance Map, Davis, California, 1921.

Figure 20: View looking east at 509 1st Street with 515 1st Street in the distance, circa 1970s.

Figure 21: Current view of the property compared to a similar view in Figure 20, looking northeast at 509 1st Street with 515 1st Street in the background.

Figure 22: Current view looking north at the front elevation of 509 1st Street.

Figure 23: Current view looking southeast at the northwest elevation of 509 1st Street.

Figure 24: Sanborn Fire Insurance Map, Davis, California, 1921.

Figure 25: Photograph of 515 1st Street not long after its purchase by Theta Xi Fraternity in the 1950s.

Figure 26: Photograph of 515 1st Street in the 1970s.

Figure 27: Current view of 515 1st Street with the altered veranda.

Figure 28: Current view of 515 1st Street, looking east at the west elevation.

Figure 29: Another view of the west elevation of 515 1st Street.

Figure 30: View of the north elevation of 515 1st Street.

ATTACHMENTS

Primary Records (DPR 523A), Building, Structure and Object Records (DPR 523B), and Update Sheets (DPR 523L) 1996, 2003, and 2015

Continuation Update Sheets (DPR 523L) 2016

ACKNOWLEDGMENTS

Thanks to Davis Historian John Lofland for his insight and period photographs of the properties.

1.0 INTRODUCTION

The purpose of this study is to review the existing historic information regarding 503, 509, and 515 1st Street, Davis, Yolo County, California, of which all three of these properties have been determined to be historic resources under CEQA through survey and evaluation; to determine the accuracy of the previous studies or data; and to analyze the potential effects under CEQA in respect to the proposed development plan for each property. The project site is located on the north side of 1st Street bordered on D Street on the west and one building shy of E Street on the east. 515 1st Street is identified as Lot 8, Block 9, while, 503 1st is Lot 13, Block 9, and 509 1st Street is Lot 14, Block 9 (Figures 1 and 2). The Assessor Parcel Numbers (APN) for each building are APN 70-244-04 (503 1st Street); APN 70-244-05 (509 1st Street); APN 70-244-06 (515 1st Street).

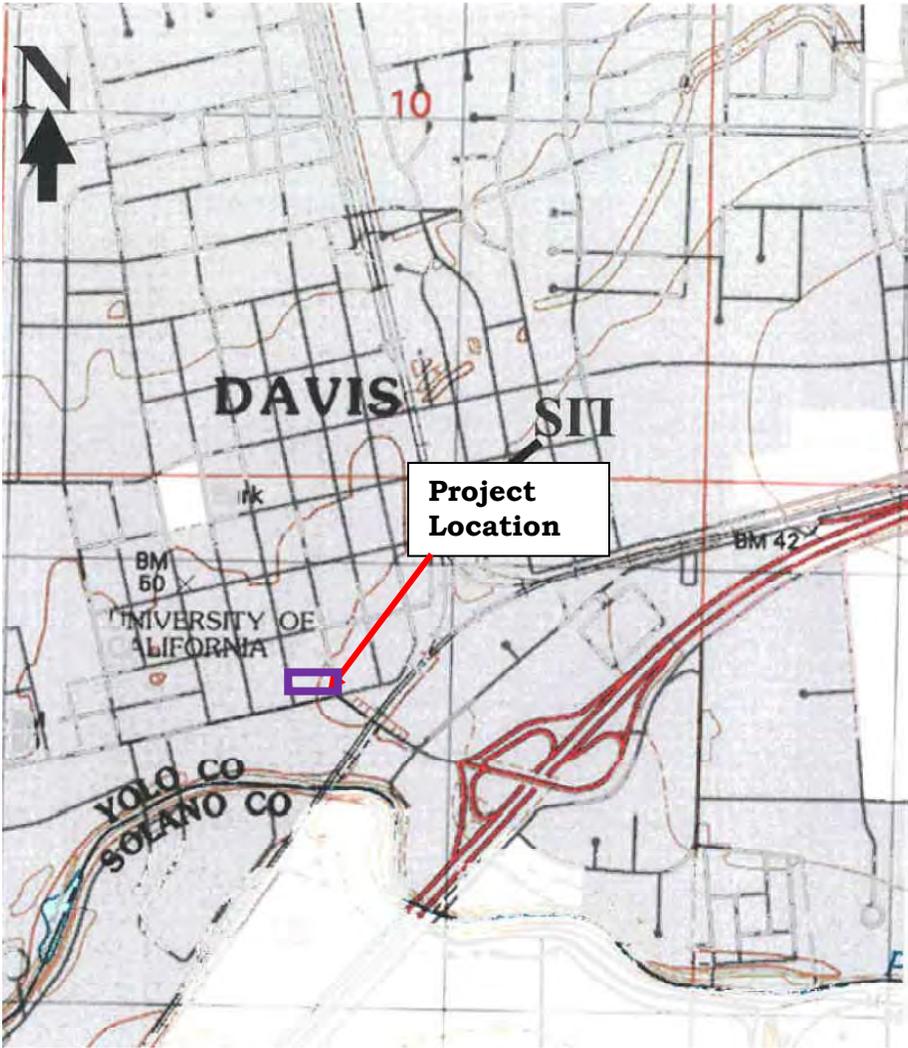


FIGURE 1: Project Location Map
(Courtesy Bole and Associates, 2014).

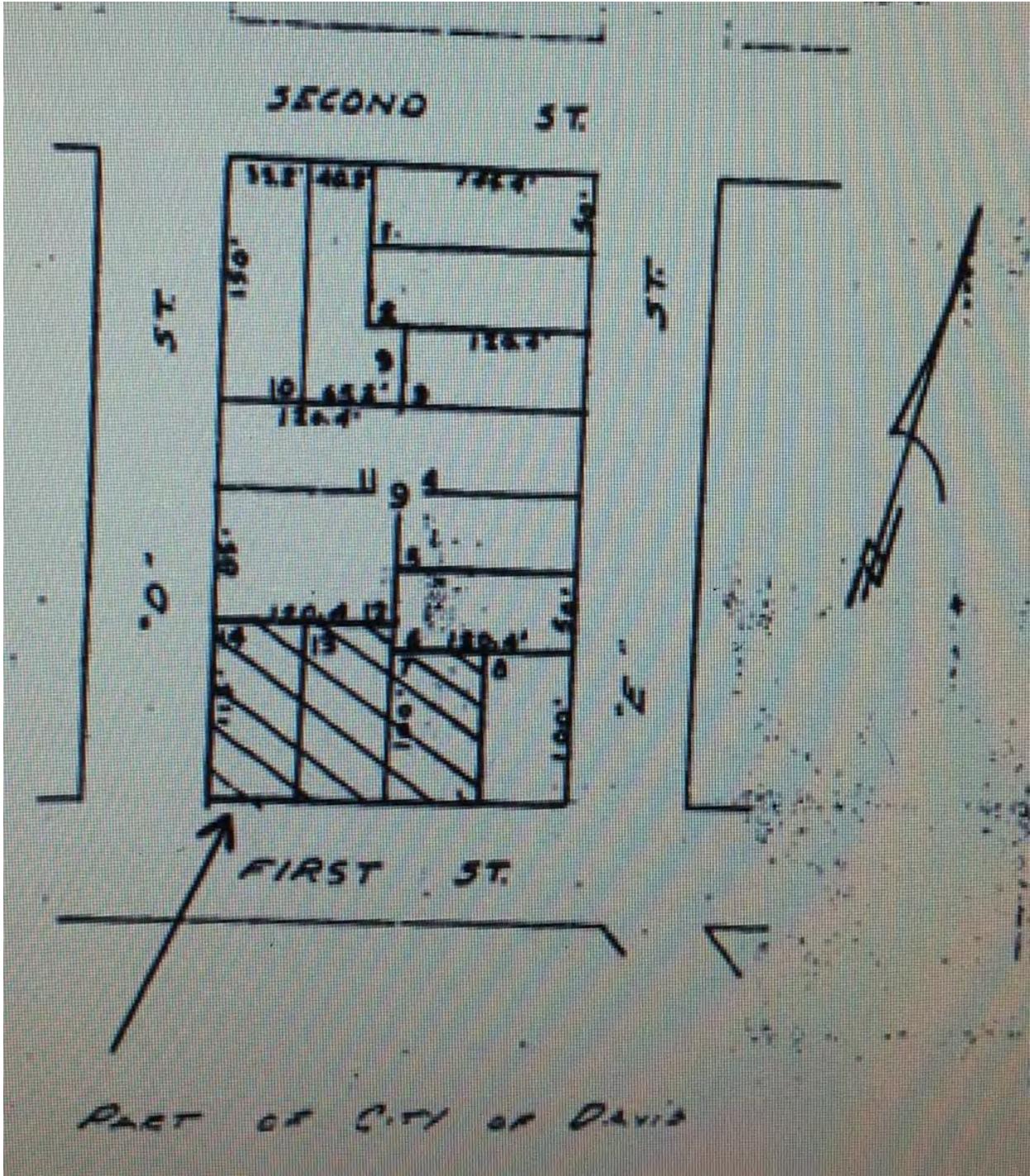


FIGURE 2: Project Parcel Map
 (City of Davis Building Department Records).

2.0 Project Description

There are three detached buildings within the proposed project, 505, 509, and 515 1st Street, which comprise student housing, being part of Beta Epsilon Association of Theta Xi, a non-profit corporation that owns the three buildings. The properties have been continuously occupied since the 1950s by the undergraduate members of Theta Xi Fraternity, and prior to that were in residential use. While 503 and 509 1st Street are 1½ stories tall, 515 1st Street is a full 2 stories.

The current capacity of the three houses is 38 beds, with 503 and 509 1st Street consisting primarily of bedrooms and bathrooms, while 515 1st Street has a kitchen, dining room, living room and foyer in addition to bedrooms and bathrooms. Each house has a partial basement. While minor repairs have occurred on an annual basis, there have been periodic large-scale remodels of the structures during the period of ownership; the last major remodel occurred in 1983.

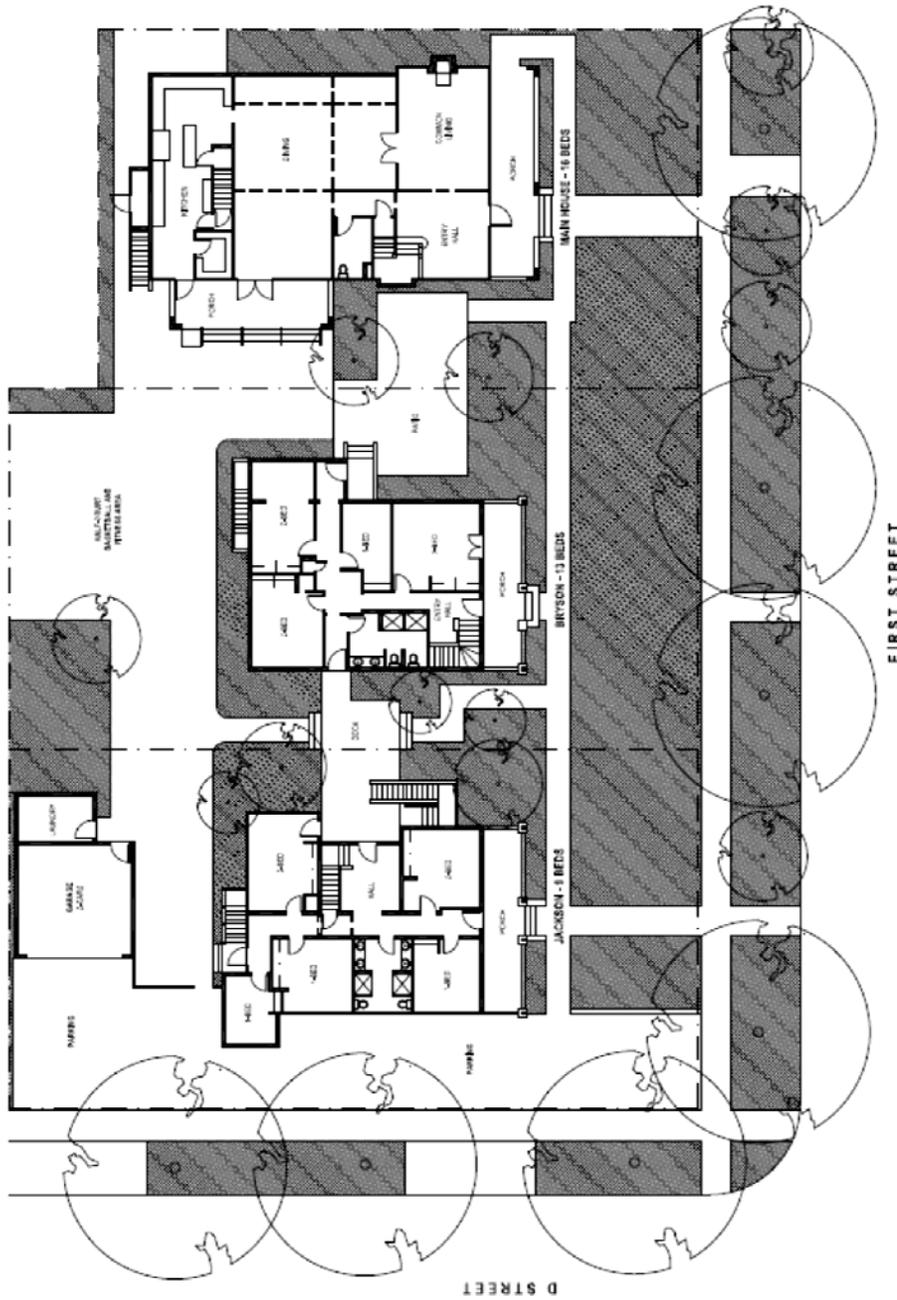
The proposed project initially involved extensive renovations to each building, however, upon completion of a structural report,¹ the board members of the Beta Epsilon Association of Theta Xi recognized serious structural issues with each building. They now propose to demolish 503 1st Street and 509 1st Street to consolidate the fraternity's activities in one, new replacement building of similar occupancy to be constructed on those two lots. The new building is proposed to reflect the historic character of the original buildings.

The future of 515 1st Street would be addressed upon completion of the new construction, but it would not be used to house members of the fraternity. The existing floor plans are shown in Figures 4 and 5. Figures 6 and 7 show the preliminary floor plans of the initial proposal for extensive renovations to each building. Figures 8 and 9 show the preliminary floor plans of the current proposal for one structure to replace the two existing structures at 503 1st Street and 509 1st Street.

¹ Pemberton Engineering. Structural Report of 503, 509, and 515 1st Street, Davis, CA. Prepared for Theta Xi Fraternity House, July 27, 2016.



FIGURE 3: Aerial Photograph (Google Earth 2016).



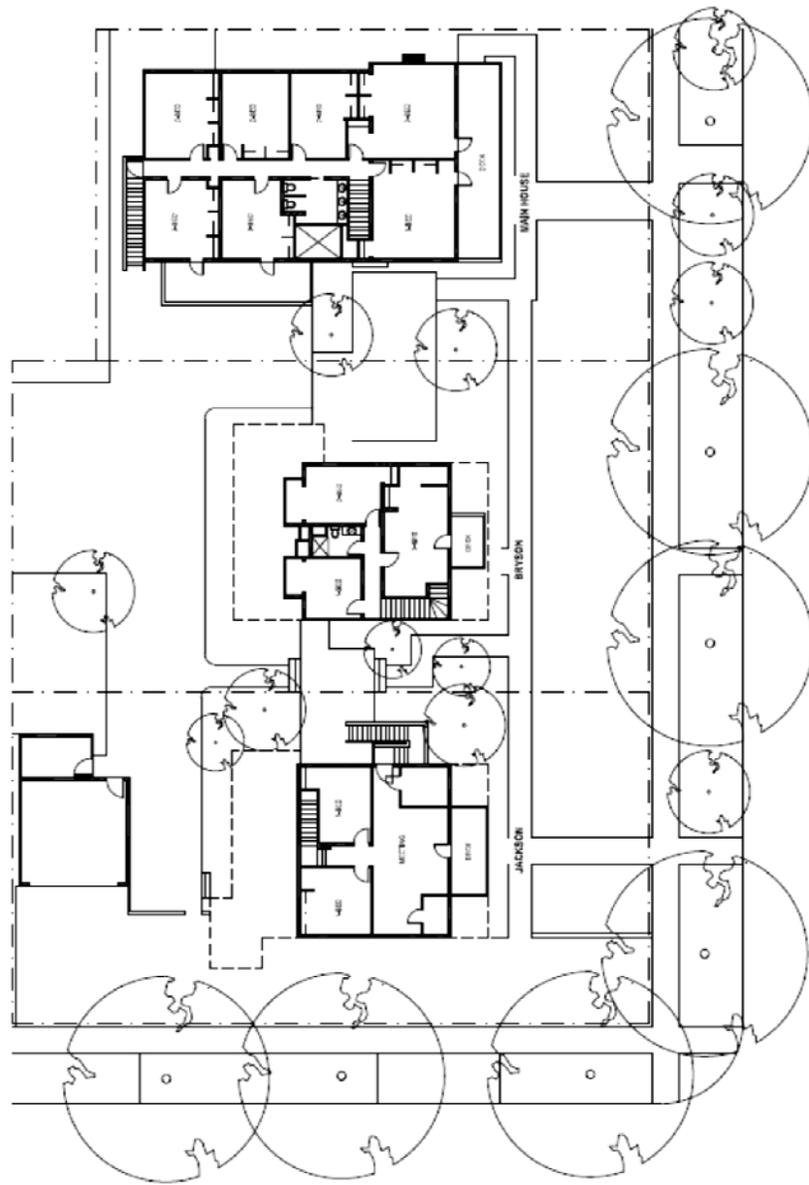
Scale: 1/8" = 1'-0"

EXISTING SITE AND 1ST FLOOR PLAN

THETA XI FRATERNITY
515 First Street, Clarksville, TN

Theta Xi Fraternity
304 Clarksville, TN

FIGURE 4: Theta Xi Fraternity existing floor plans -1st Floor (courtesy Beta Epsilon Association of Theta Xi).



A1.2
DATE: 05.13.2011

EXISTING SITE AND 2ND FLOOR PLAN

THETA XI FRATERNITY
315 1/2 3rd Street, Clark, California

THETA XI FRATERNITY
 315 1/2 3rd Street, Clark, California



FIGURE 5: Theta Xi Fraternity existing floor plans -2nd Floor (courtesy Beta Epsilon Association of Theta Xi).

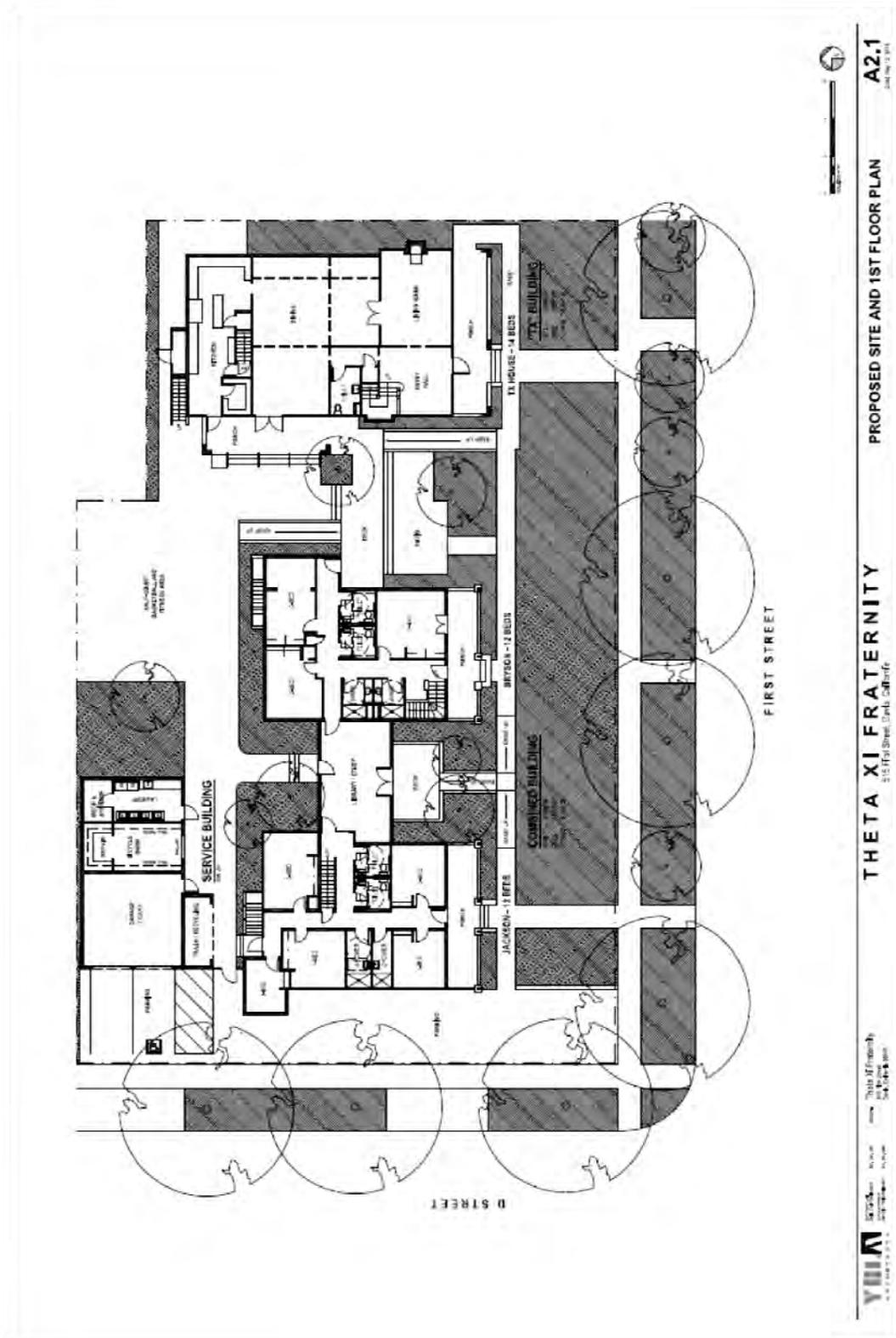


FIGURE 6: *Theta Xi Fraternity proposed renovation plans - 1st Floor (courtesy Beta Epsilon Association of Theta Xi).*

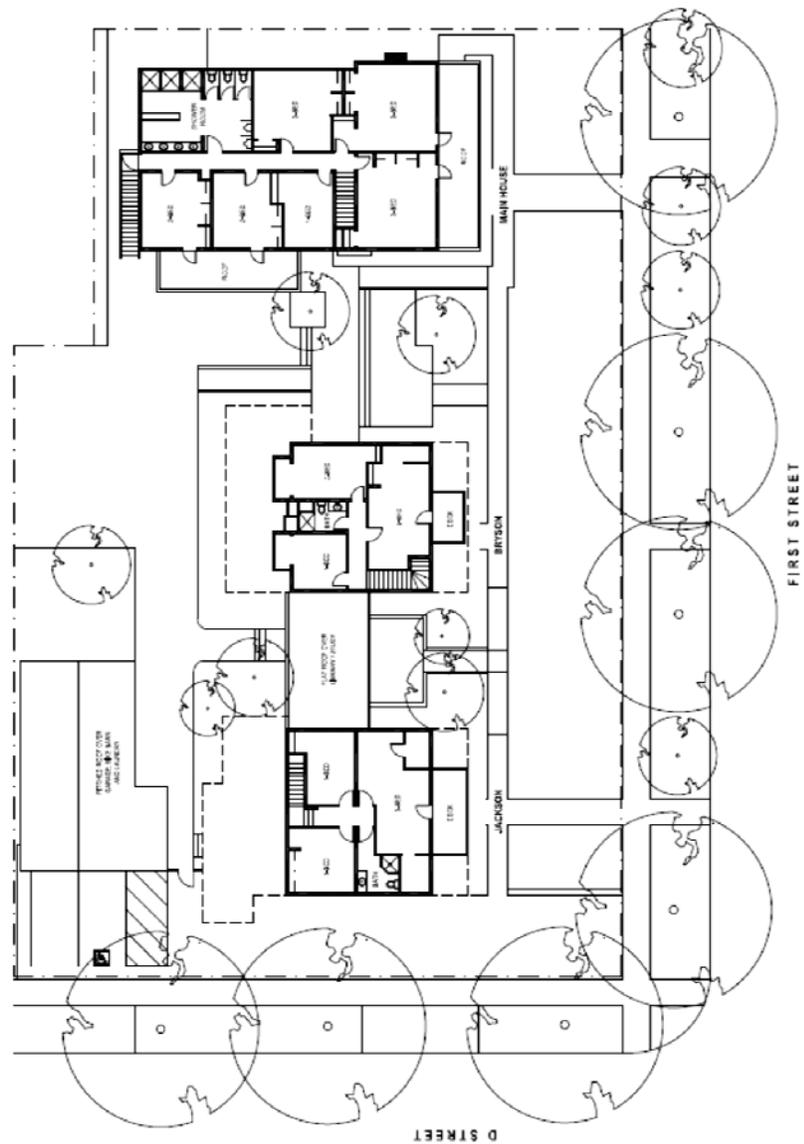


FIGURE 7: Theta Xi Fraternity proposed renovation plans - 2nd Floor (courtesy Beta Epsilon Association of Theta Xi).

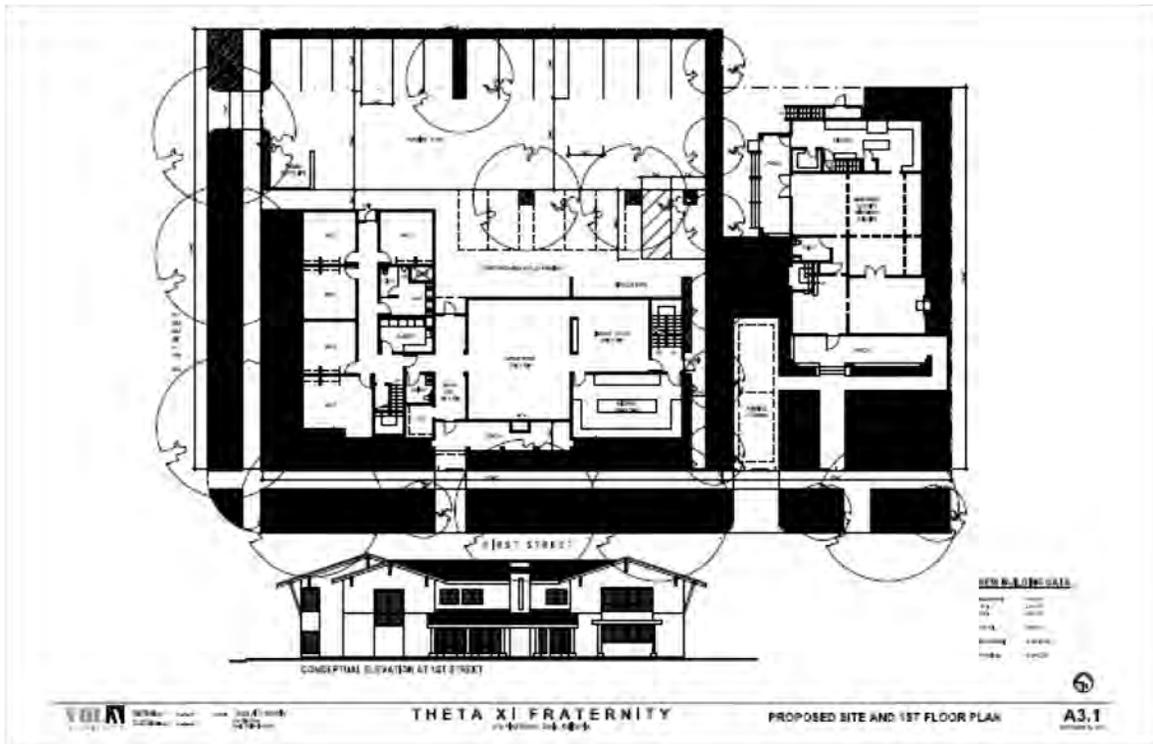


FIGURE 8: *Theta Xi Fraternity proposed new construction plans - 1st Floor (courtesy Beta Epsilon Association of Theta Xi).*

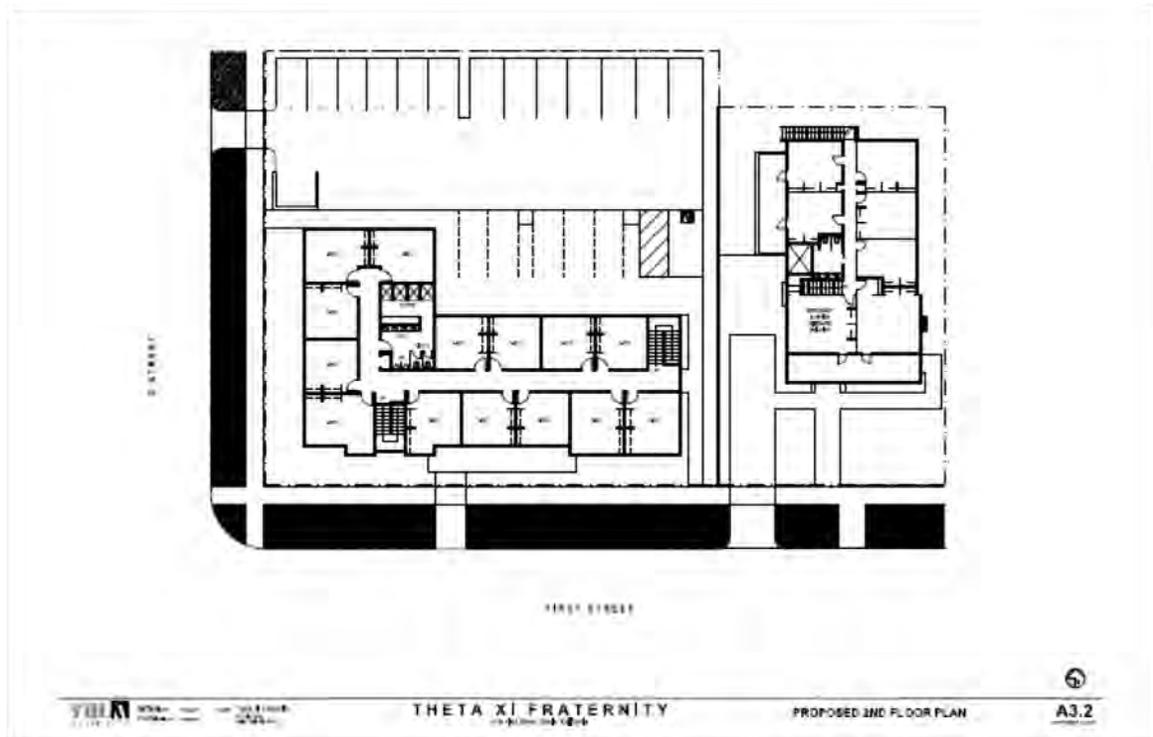


FIGURE 9: *Theta Xi Fraternity proposed new construction plans - 2nd Floor (courtesy Beta Epsilon Association of Theta Xi).*

3.0 CULTURAL RESOURCE IMPACT ANALYSIS

Under CEQA, if an impact to a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact. Mitigation must avoid or substantially lessen the physical impact that the project will have on the resource. Under CEQA a significant environmental impact would result to cultural resources if a proposed project were to cause a substantial adverse change in the significance of a historic resource as defined in CEQA Guidelines §15064.5. Besides the aforementioned criteria, several other forms of guidance relate to the proposed project. They include Davis Article 40.13A "Downtown and Traditional Neighborhood Overlay District" criteria and "Davis Downtown and Traditional Residential Neighborhoods Design Guidelines" (2001, updated 2007).

4.0. PREVIOUS STUDIES

All three properties were formally recorded in 1996 by Bridget Maley (Architectural Resource Group); in 2003 by Roland-Nawi Associates; and in 2015 by Rand Herbert.² The properties at 503 and 509 1st Street were recently assigned a NRHP status of code of 5D2, while 515 1st Street was recently assigned a NRHP status code of 5D3.³

The disparity between the status codes appears to reflect a difference in whether the properties "appear" to be contributors to a local historic district based upon survey evaluation, as is the case with 503 and 509 1st Street, or, in the case of 515 1st Street, where the property is "eligible" for local listing or designation.⁴ In either case, all three properties appear to eligible for local listing.

5.0 HISTORY OF THE PROPERTIES

The three subject properties, 503, 509, and 515 1st Street are aligned on the north side of 1st Street, separated by large lawns and mature trees. Beginning in the 1920s, 1st Street was designated as part of the Lincoln Transcontinental Highway, later named U.S. 40 before it was abandoned for present-day U.S. 80. U.S. Federal Census records also list 1st Street in 1920 as "Highway Street," reflective of the fact that the state highway followed the same route. Unlike

² Historic Environment Consultants. Cultural Resources Inventory, Final Report: Davis California. June 1980; Bridget Maley of Architectural Resources Group. City of Davis: Cultural Resources Inventory and Context Statement. 1996; Roland-Nawi Associates. Central Davis Historic Conservation District: City of Davis, Historical Resources Survey. August, 2003.

³ Rifkin, Rich and Rand Herbert. City of Davis. Citywide Survey and Evaluation of Buildings Constructed Prior to 1976. July 2, 2015; Herbert and Rifkin assisted in the Davis, California: Citywide Survey and Historic Context Update (2015) prepared by Brunzell Historical.

⁴ Department of Parks and Recreation. Instructions for Recording Historical Resources. Office of Historic Preservation, Sacramento, CA, March 1995.

other sections of Davis where the highway ran through, this part of Davis remained largely residential until the late twentieth century when commercial infill began to occur or when older residences were converted to some form of commercial use, such as the residence at 521 1st Street which was converted in the past decade or so to an art gallery.



FIGURE 10: View circa 1920s looking east along 1st Street with 503, 509, and 515 1st Street on the left just beyond D Street (courtesy Theta Xi Fraternity).

Based upon city directories and U.S. Federal Census records, 503 1st Street was owned and occupied by the Anderson family. In 1910, Gordon Anderson was single, working as an ice dealer, and living on Olive Street.⁵ The 1930 U.S. Federal Census lists Gordon Anderson, 53 years of age; Essie Anderson, his wife, 45 years of age; and Donald Anderson, their son, 13 years of age. Gordon Anderson, who was from Canada, owned the hardware store at 207 G Street until 1937, the year he died. After his death, the family acquired interest in the Davis Lumber Company owned by Edwin McBride. On June 22, 1962, Donald, Gordon's son, acquired the lumber company and changed the name to Davis Lumber and Hardware Company.⁶ In 1930, Anderson's residence was valued at \$8,500 in 1930.⁷ By 1940, Donald and Essie Anderson were living at 503 1st Street.

⁵ U.S. Federal Census, Putah Township, Davis, Yolo County, California 1910, Sheet, No. 10.

⁶ Costabil, Dominick. "Davis Ace." *Davis Enterprise*, July 22, 2012; Donald Anderson died in 1986, and Dora his wife in 2014, according to obituaries from the *Davis Enterprise*.

⁷ U.S. Federal Census, Putah Township, Davis, Yolo County, California, 1930, Sheet No. 6.

From 1920 through 1930, 509 1st Street was occupied by John Thompson, his wife Cleo, and his two sons, Irwin and James. Thompson is listed as a manager or instructor at the University Farm in Davis. The Thompson residence in 1930 was valued at \$5,000.⁸ In 1940, the Hoff family owned the residence.

In the 1900 United States Federal Census for Putah Township, Davis, Clara Anderson was enumerated as 44 years of age, born in Missouri, living with John Anderson and Eliza Cecil, her mother.⁹ The 1920 United States Federal Census enumerated John Anderson, 72 years of age; his wife, Clara, 65 years of age; and their daughter, Cecil, 26 years of age, all living on 1st Street, likely at 515 1st Street.¹⁰ By 1930, 515 1st Street was owned by Clara Anderson, who lived in the house with a servant, Mrs. C. Albertion [sic]. Clara Anderson was 75 years of age at the time. In 1915, the home was rented to John Morris.

If U.S. Federal Census data is accurate then both 503 and 509 1st Street were rented for a time, prior to the Andersons and Thompsons either buying or moving into the houses, and perhaps prior to the acquisition of all three properties by Theta Xi Fraternity in the 1950s.

All three properties share a common historic context associated with residential architecture in Davis beginning in the late 1910s, and the demand for student housing that occurred quite early in the history of U.C. Davis. All three residential properties were converted to fraternity housing beginning in the early 1950s through the "colonization" as it was called by the Theta Xi Fraternity.

Plans for establishing the Davis colony of the Theta Xi Fraternity were first made during the Christmas of 1949, when Bill Bretz, assistant secretary of the fraternity, discussed the establishment of the Fraternity with Robert Wayne Mumby, who at the time was residing at the North Hall of U.C. Davis. The alumni had several additional discussions the following year, including Davis students, William Reutenbush, Jr., H. L. Murdock, and Jay Wolfgang. In March 1950 votes were taken with unanimous approval to authorize colonization of the fraternity at U.C. Davis. The next step was to form a charter.

On October 1, 1951, the fraternity purchased its first house at 515 1st Street. On November 12, eleven pledges were initiated. Six additional pledges were initiated on February 19th. By the close of 1951, the fraternity house was being furnished. During the fall semester of 1951-52, the house was improved with the addition of a large dormitory and a kitchen by redesigning existing rooms. The house was painted the same year. By 1952, the colony included 21 actives,

⁸U.S. Federal Census, Putah Township, Davis, Yolo County, California, 1930, Sheet No. 6.

⁹ U.S. Federal Census, Putah Township, Davis, Yolo County, California, 1910, Sheet No. 9.

¹⁰ U.S. Federal Census, Putah Township, Davis, Yolo County, California, 1920, Sheet No. 8.

including faculty members, 11 pledges, and a housekeeper who was also the secretary to the Dean of the College of Agriculture.¹¹

A careful review of building permit and planning records was conducted at the City of Davis Community Development and Sustainability Department Office, Davis, California. The City's database had records of the three properties dating from approximately 1970 through the present. Most of the records listed incremental improvement and maintenance, including electrical, plumbing, handicapped ramps, and parking. Other issues included the number of rooms subject to permit and code regulations and the elimination of the fireplace at 503 1st Street, because it had separated from the wall.

Many of the records referred to the major remodeling that occurred to the properties in 1983. The remodel project was overseen by local Davis Architect Richard Berteaux. Most of the major improvements to the buildings are a product of the 1980s remodeling efforts. What was also revealed in the planning records was the desire by the fraternity to examine different alternatives for a major remodeling of each building, due to deficiencies in regards to compliance with local and state agencies, and the deteriorating condition of the buildings.

6.0 DESCRIPTION OF THE PROPERTIES

While 503 and 509 1st Street represent a classic Craftsman Bungalow style of architecture, 515 1st Street reflects Revivalist architecture that garnered popularity in Davis during the late 1910s through the 1920s and 1930s. Common styles included Northern European designs, such as English Cottage, Tudor, French, and Mediterranean, which is primarily the style of 515 1st Street.

6.1 503 1st Street

As previously described, 503 1st Street, was formally recorded and evaluate in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert. In 1996, Maley described 503 1st Street as a one and a half story, wood-frame, Craftsman style house with a long sloping gable roof running parallel to 1st Street. According to Roland-Nawi Associates, the house was built in 1912. Based upon historic photographs, 503 1st Street appears to have originally been a single-story house with a large attic and a basement. The shed roof dormer centered on the roof facing 1st Street had no veranda and railing or outside access when the house was built. This feature appears to have been added by Theta Xi

¹¹ Theta Xi Colony. Historical Sketch of the Theta Xi Colony at Davis, undated; Early History of Beta Epsilon Chapter of the Theta Xi Fraternity, undated (copy available at Theta Xi Fraternity, 209 1st Street, Davis, CA.

Fraternity in the 1970s, when the attic was converted to a living area for fraternity members. In 2003, Roland-Nawi Associates stated that the house was built for the Anderson family of Davis. This has been verified through federal census data, however, it is unclear if Anderson was the original owner. According to Maley, Anderson was an important figure during the twentieth century in Davis, associated with commercial and civic life.¹² Certainly Anderson was among a number of successful merchants in Davis, and the Anderson family continues in business to this day in the city.

Besides the entire interior having been altered to create bathrooms and additional rooms for students, the east elevation of the house has been altered with the addition of a raised wooden deck and exterior stairway to access the second-story rooms. The northwest corner of the house was also altered when the original extended porch was enclosed and the brick fireplace was removed.

Behind the residence is a garage/shed that was built after 1921 and expanded in later years. Today, the interior of the house features five bedrooms downstairs and two upstairs, with one bathroom downstairs. A very detailed description of the structural elements of the residence is provided by Pemberton Engineering.¹³

¹² Maley 1996.

¹³ Pemberton Engineering 2016.

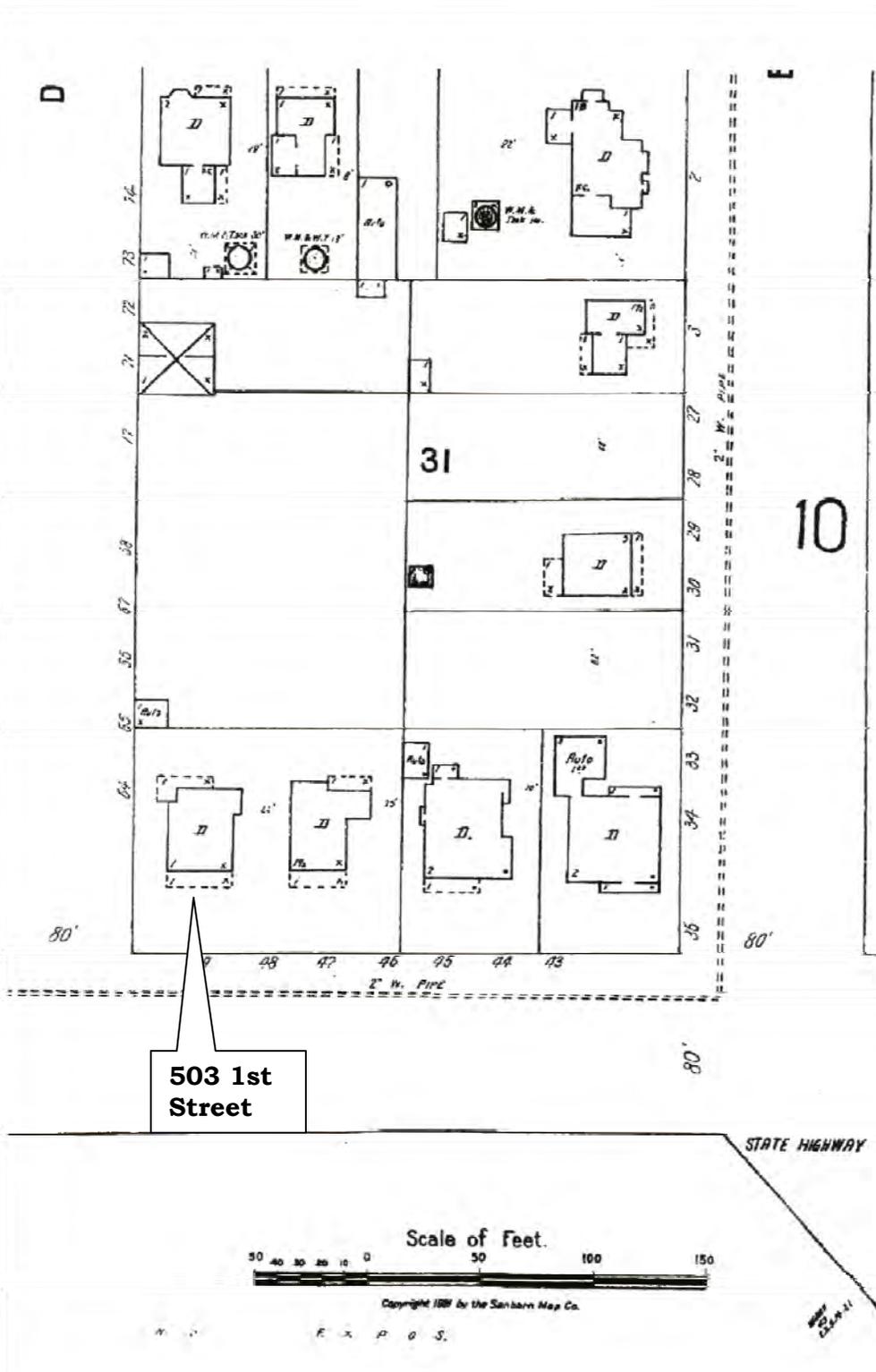


FIGURE 11: Sanborn Fire Insurance Map, Davis, CA 1921.
 Note that 503 1st Street is depicted as a 1-story residence in 1921.



FIGURE 12: View looking west at 503 1st Street in the background and 509 1st Street in the foreground with students performing a safari hunt, circa 1960s (courtesy Theta Xi Fraternity).



FIGURE 13: View looking west from 509 1st Street towards 503 1st Street, 1958. Note the brick chimney on the right that has since been removed on 503 1st Street (courtesy Theta Xi Fraternity).



FIGURE 14: View looking west towards 503 1st Street in the 1980s depicting the added side entrance exterior stairway after opening the attic area to create dorm rooms (courtesy Theta Xi Fraternity).



FIGURE 15: Current view of 503 1st Street with the rooftop veranda conversion.



FIGURE 16: View looking east at the west elevation of 503 1st Street with the extended porch enclosure and addition of windows, including adding windows to what was once an attic on the second floor.



FIGURE 17: View looking west at the shed/garage with the later addition behind 503 1st Street.



FIGURE 18: View looking east at the rear of 503 1st Street.

6.2 509 1st Street

As previously described, 509 1st Street, which was reportedly built in 1912, resembles its neighbor to the west. The two houses were undoubtedly built at the same time by the same builder and designed by the same architect. The property was initially recorded in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert.

Based upon historic photographs, 509 1st Street, unlike 503 1st Street, appears to have had a rooftop balcony accessed from the central roof-top dormer. This would suggest the home was built with a second-story living area. The current railing (Figures 22 and 23) is a more recent addition, as is the second door to the right of the replaced front door. It should also be noted one of the truncated wood columns is missing, and, like 503 1st Street, the brick fireplace was removed from the east wall. 509 1st Street also features a basement.

Today, the interior of the residence features four bedrooms downstairs, three bedrooms upstairs, one bathroom downstairs, and one bathroom upstairs. A very detailed description of the structural elements of the residence is provided by Pemberton Engineering.¹⁴

¹⁴ Pemberton Engineering 2016.

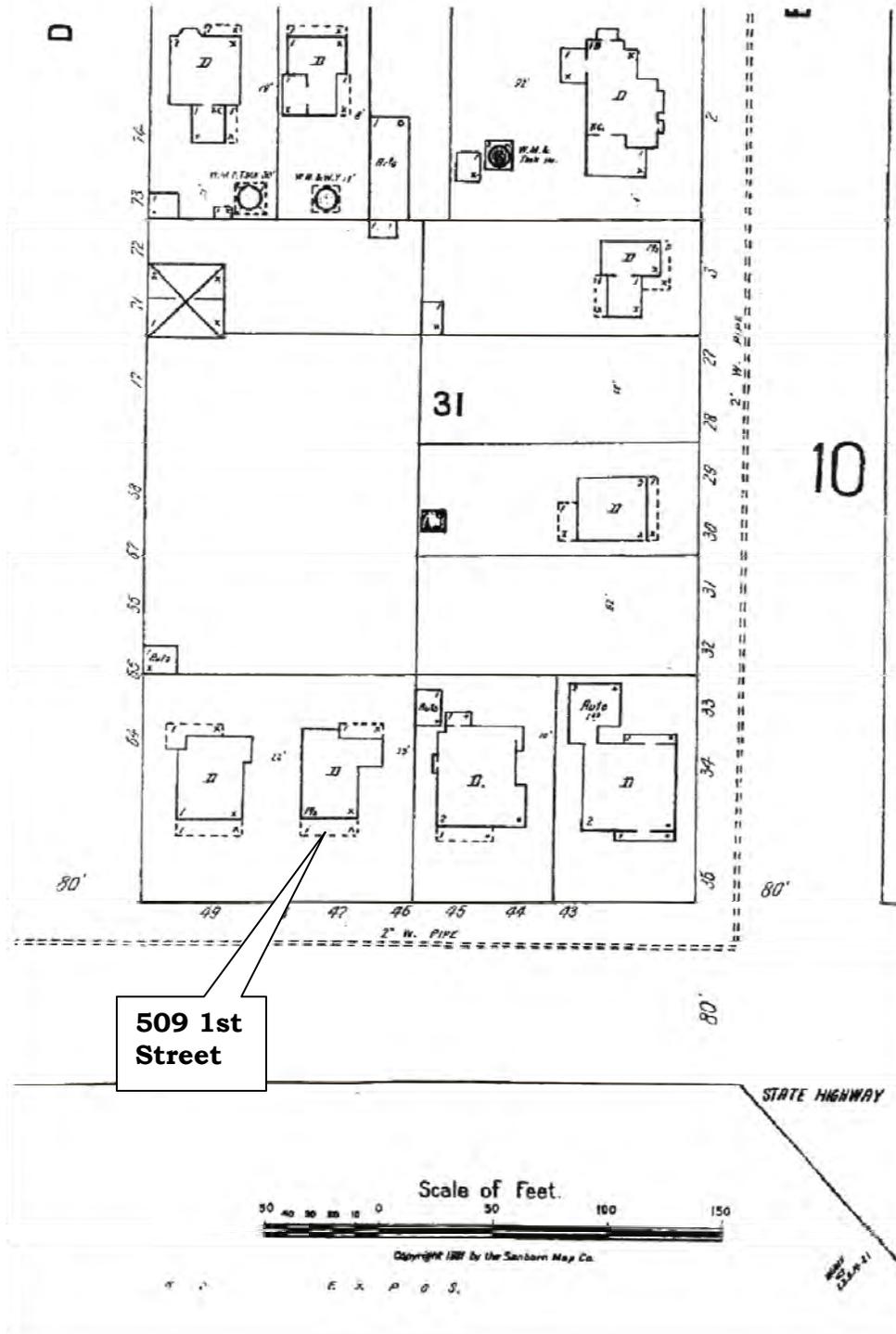


FIGURE 19: Sanborn Fire Insurance Map, Davis, California, 1921. Note that 509 1st Street is depicted as a 1½-story residence with no garage depicted.



FIGURE 20: View looking east at 509 1st Street with 515 1st Street in the distance, circa 1970s (courtesy Theta Xi Fraternity).



FIGURE 21: Current view of the property compared to a similar view in Figure 20, looking northeast at 509 1st Street with 515 1st Street in the background.



FIGURE 22: Current view looking north at the front elevation of 509 1st Street.



FIGURE 23: Current view looking southeast at the northwest elevation of 509 1st Street. Note the contemporary deck addition between 503 and 509 1st Street.

6.3 515 1st Street

As previously described, 515 1st Street, which was built in 1920, was initially recorded in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert. Maley described the building as eclectic, with Spanish or Mediterranean character, and that it appeared to have numerous alterations.¹⁵ In 2003, Roland-Nawi Associates stated that it appeared to retain integrity. In 2015, Rifkin recorded the residence on a 523 Update Sheet, and Herbert evaluated the property giving it a 5D3 rating. No additional research appears to have been done on the property since its recordation and evaluation by Maley in 1996.

Figures 27-30 illustrate how the residence was altered since its construction in circa 1920. Unlike 503 and 509 1st Street, 515 1st Street was a much larger home, but it also was designed with a full two-stories and basement. Unlike 503 and 509 1st Street, which have horizontal board exterior siding, the walls of 515 1st Street are clad with stucco.

Today, the interior of the residence features no bedrooms downstairs, seven bedrooms upstairs, one upstairs bathroom, one downstairs bathroom, and includes a kitchen, dining room, living room and entry hall downstairs. Most of the windows and doors in the house appear to be original wood-sash, many having gridded or divided lights.

The most dramatic change is to the front veranda, which was altered in the 1950s following acquisition by the Theta Xi Fraternity. The alteration involved demolishing the old porch, which extended half-way across the front of the building, followed by a decorative wood pergola. Instead, the replacement design featured a full front porch or veranda having two arches of unequal size, and a closed veranda wall on the second story that masks the fenestration, namely the doors and windows. A very detailed description of the structural elements of the residence is provided by Pemberton Engineering.¹⁶

¹⁵ Maley 1996.

¹⁶ Pemberton Engineering 2016.

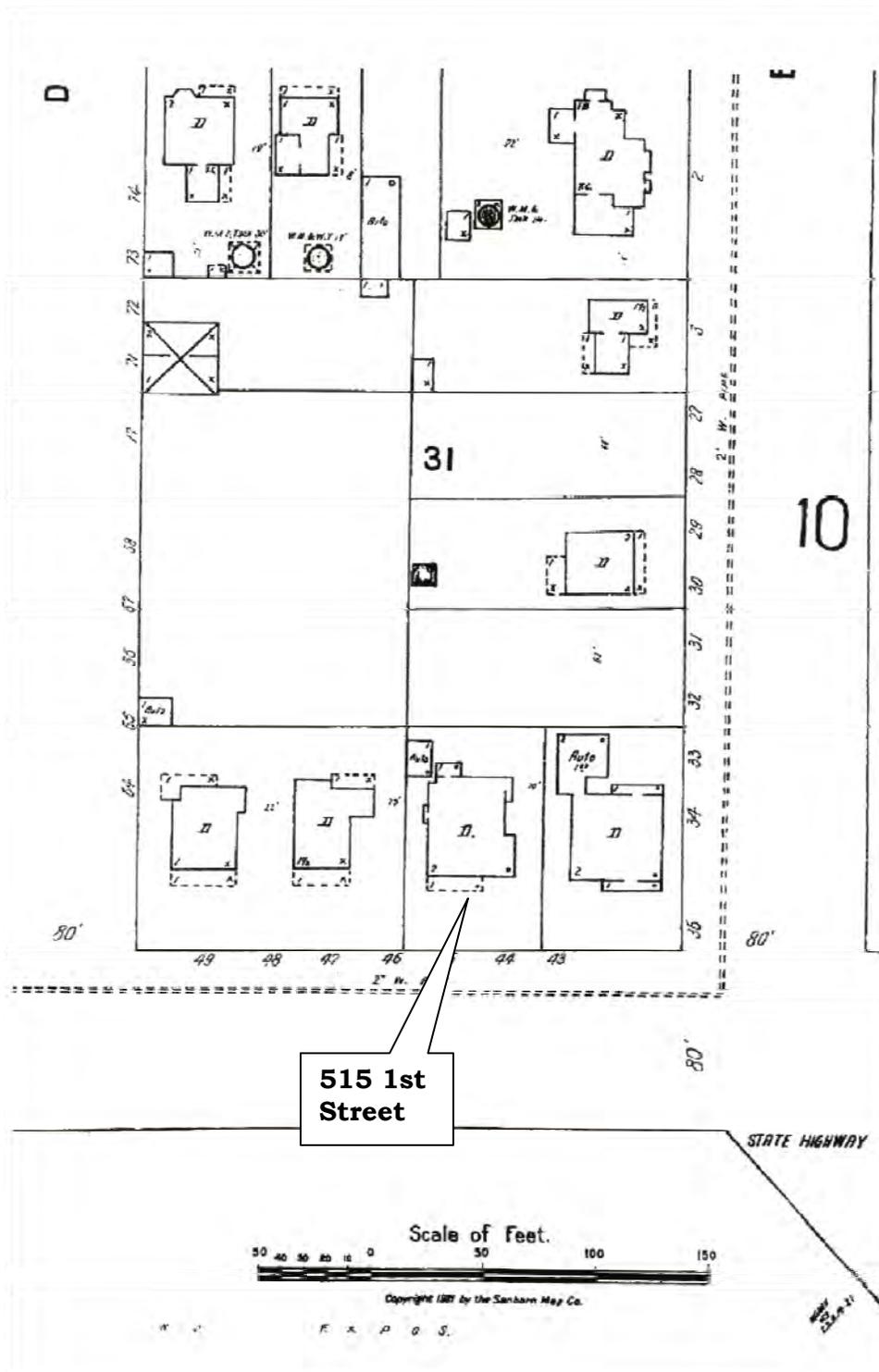


FIGURE 24: Sanborn Fire Insurance Map, Davis, California, 1921. Note that the auto garage in the rear no longer exists. The half porch is also illustrated in the Sanborn Fire Insurance Map before it was removed and expanded to form a full front porch or veranda.



Davis Colony Chapter House, University of California at Davis

FIGURE 25: Photograph of 515 1st Street not long after its purchase by Theta Xi Fraternity in the 1950s. Note the half porch, clip roof off the porch, and pergola to the right (courtesy Theta Xi Fraternity).



FIGURE 26: Photograph of 515 1st Street in the 1970s. Note that the half porch, clip roof off the porch, and pergola to the right still remain (courtesy Theta Xi Fraternity).



FIGURE 27: Current view of 515 1st Street with the altered veranda.



FIGURE 28: Current view of 515 1st Street, looking east at the west elevation.



FIGURE 29: Another view of the west elevation of 515 1st Street showing the side veranda, probably remodeled the same time the front porch was reconstructed.



FIGURE 30: View of the north elevation of 515 1st Street. The rear stairway was apparently added when the porches were altered to provide outside access to the second story.

7.0 REPORT OF STUDY FINDINGS

All three properties, located at 503, 509, and 515 1st Street, are currently listed as significant historical resources under CEQA, having been determined to be eligible for the California Register of Historic Resources. This finding was addressed in 2015, when Rich Rifkin and Rand Herbert reassessed each property as part of the updated historic resource inventory.¹⁷ Due to time constraints, neither Rifkin or Herbert were able to carefully research the three properties, in terms of their ownership, date of construction, or integrity.

This study presents new evidence regarding each of the three properties and discusses the degree of change that has occurred since their original construction. This information is important in considering the future disposition of each property and alternatives to create a living environment that is suitable and safe for U.C. Davis students in the twenty-first century.

Integrity is defined by the National Park Service as follows:

Location

Location is the place where the historic property was constructed or the place where the historic event occurred. The relationship between the property and its location is often important to understanding why the property was created or why something happened. The actual location of a historic property, complemented by its setting, is particularly important in recapturing the sense of historic events and persons. Except in rare cases, the relationship between a property and its historic associations is destroyed if the property is moved.

Design

Design is the combination of elements that create the form, plan, space, structure, and style of a property. It results from conscious decisions made during the original conception and planning of a property (or its significant alteration) and applies to activities as diverse as community planning, engineering, architecture, and landscape architecture. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials. A property's design reflects historic functions and technologies as well as aesthetics. It includes such considerations as the structural system; massing; arrangement of spaces; pattern of fenestration; textures and colors of surface materials; type, amount, and style of ornamental detailing; and arrangement and type of plantings in a designed landscape.

¹⁷ Rich Rifkin and Rand Herbert. City of Davis. Citywide Survey and Evaluation of Buildings Constructed Prior to 1976, July 2, 2015.

Design can also apply to districts, whether they are important primarily for historic association, architectural value, information potential, or a combination thereof. For districts significant primarily for historic association or architectural value, design concerns more than just the individual buildings or structures located within the boundaries. It also applies to the way in which buildings, sites, or structures are related: for example, spatial relationships between major features; visual rhythms in a streetscape or landscape plantings; the layout and materials of walkways and roads; and the relationship of other features, such as statues, water fountains, and archeological sites.

Setting

Setting is the physical environment of a historic property. Whereas location refers to the specific place where a property was built or an event occurred, setting refers to the *character* of the place in which the property played its historical role. It involves *how*, not just *where*, the property is situated and its relationship to surrounding features and open space.

Setting often reflects the basic physical conditions under which a property was built and the functions it was intended to serve. In addition, the way in which a property is positioned in its environment can reflect the designer's concept of nature and aesthetic preferences. The physical features that constitute the setting of a historic property can be either natural or manmade, including such elements as:

- Topographic features (a gorge or the crest of a hill);
- Vegetation;
- Simple manmade features (paths or fences); and
- Relationships between buildings and other features or open space.

These features and their relationships should be examined not only within the exact boundaries of the property, but also between the property and its *surroundings*. This is particularly important for districts.

Materials

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. The choice and combination of materials reveal the preferences of those who created the property and indicate the availability of particular types of materials and technologies. Indigenous materials are often the focus of regional building traditions and thereby help define an area's sense of time and place.

A property must retain the key exterior materials dating from the period of its historic significance. If the property has been rehabilitated, the historic materials and significant features must have been preserved. The property must also be an actual historic resource, not a recreation; a recent structure fabricated to look historic is not eligible. Likewise, a property whose historic features and materials have been lost and then reconstructed is usually not eligible (refer to Criteria Consideration E in Part VII: *How to Apply the Criteria Considerations* for the conditions under which a reconstructed property can be eligible.)

Workmanship

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. It is the evidence of artisans' labor and skill in constructing or altering a building, structure, object, or site. Workmanship can apply to the property as a whole or to its individual components. It can be expressed in vernacular methods of construction and plain finishes or in highly sophisticated configurations and ornamental detailing. It can be based on common traditions or innovative period techniques. Workmanship is important because it can furnish evidence of the technology of a craft, illustrate the aesthetic principles of a historic or prehistoric period, and reveal individual, local, regional, or national applications of both technological practices and aesthetic principles. Examples of workmanship in historic buildings include tooling, carving, painting, graining, turning, and joinery.

Feeling

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character. For example, a rural historic district retaining original design, materials, workmanship, and setting will relate the feeling of agricultural life in the 19th century. A grouping of prehistoric petroglyphs, unmarred by graffiti and intrusions and located on its original isolated bluff, can evoke a sense of tribal spiritual life.

Association

Association is the direct link between an important historic event or person and a historic property. A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Like feeling, association requires the presence of physical features that convey a property's historic character. For example, a Revolutionary War battlefield whose natural and manmade elements have remained intact since the 18th century will retain its quality of association with the battle. Because feeling and association depend on individual perceptions,

their retention *alone* is never sufficient to support eligibility of a property for the National Register.

This assessment considered condition issues for each property, but only in so much as that the condition issue effects the integrity of each of the properties. As such, condition thresholds are important if the condition has altered character defining features of the property. Thus, this study takes into consideration the degree of change that has occurred to each property, where that change occurred, and how it effects the original determinations of significance.

8.0 SUMMARY OF INTEGRITY AND CONDITIONS

8.1 503 1st Street

503 1st Street retains overall good integrity of design, materials, workmanship, association, setting, feeling, and location. The most serious alteration is opening what was once a closed dormer to a rooftop access porch/dormer on the front façade. Other alterations that have changed the character of the residence include removal of the exterior brick fireplace on the east elevation and the addition of an exterior wooden stairway leading to the second-story, where a door has been cut into the sidewall for access. The entire interior design is radically altered since its original configuration. While condition issues were addressed by Pemberton Engineering, none of those issues have dramatically altered the historic character of the residence. Structural issues, however, are identified throughout the residence, and the living environment for students is consistent with the age of the building.

8.2 509 1st Street

509 1st Street retains overall good integrity of design, materials, workmanship, association, setting, feeling, and location. The most serious alterations are the addition of a second door entrance on the front façade and removal of one of the original truncated wood porch columns. Much like 503 1st Street, the entire interior of 509 1st Street has been altered. While condition issues were addressed by Pemberton Engineering, none of those issues have dramatically altered the historic character of the residence. Structural issues, however, are identified throughout the residence, and the living environment for students is consistent with the age of the building.

8.3 515 1st Street

515 1st Street is the largest of the three buildings, and serves as the primary kitchen and meeting hall. The building retains marginal integrity of design, materials, workmanship, but good integrity of association, setting, feeling, and location. The most serious alterations include the demolition of the original

front veranda and pergola, the construction of a much larger veranda that alters the front fenestration and design of the front of the house, the construction of a similar style veranda on the west elevation of the building, and the addition of rear access stairs on the rear of the building. Unlike 503 and 509 1st Street, the interior of 515 1st Street is fairly original, and the rooms are more spacious. While condition issues were addressed by Pemberton Engineering, none of those issues have dramatically altered the historic character of the residence. Structural issues, however, are identified throughout the residence, and the living environment for students is consistent with the age of the building.

9.0 CEQA FINDINGS

Given the alterations and condition of 503, 509, and 515 1st Street, are the properties still significant resources under CEQA? Yes.

While 503 and 509 retain good integrity, 515 1st Street has compromised integrity, due to façade alterations as previously described. While these alterations diminish the integrity of the building's architecture, the alterations do not rise to a level that the building would be delisted from the CRHR. Another consideration is the fact that the fraternity itself has garnered some degree of historical credibility since its ownership of the property now extends over 50 years. One of the important themes in Davis is the relationship of the university, its faculty and students, to houses built in the city from the early twentieth through the latter part of the twentieth century. Historical information does not suggest that the Gordon Anderson family, associated with the hardware business in town, were the original owners of 503 1st Street, although the Andersons lived in the house for several decades. The rear shed/garage behind 503 1st Street has been added onto in later years and converted to use by the Fraternity. This structure is not a significant resource, nor was it called out in the previous studies.

Would the removal of the existing raised wooden deck and exterior stairway to access the second-story rooms at 503 1st Street and the construction in their place of a Library/Study room connecting the buildings at 503 1st Street and 509 1st Street result in a significant effect under CEQA to the two Merit Resources? No.

If carried out in such a manner that the new addition is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties.¹⁸ The Standards provide a blueprint for a wide range of treatments for historic properties, including additions, and adaptive reuse. Ultimately, the design of the proposed addition and renovations will determine if the Standards are met.

¹⁸ National Park Service. The Secretary of the Interior's Standards for the Treatment of Historic Properties, <https://www.nps.gov/tps/standards.htm>, accessed October 8, 2016.

It should also be pointed out that the stairway and wooden deck are not "contributing" or historic elements of either property. Therefore, their removal would not harm either property.

Will the proposed demolition of 503, 509, or 515 1st Street result in a significant effect under CEQA to the three Merit Resources. Yes.

Demolition of the three properties is considered a significant effect under CEQA. Demolition will result in the loss of all three properties. Because the properties align a historic highway and part of what might be considered the "gateway" to the historic downtown, their loss will also affect the overall continuity of the historic downtown corridor, although modern infill has already degraded the historic gateway or visual continuity through the development of the shopping plaza on the south side of 1st Street.

9.1 Proposed Mitigation Measures

If demolition were to be accepted as the preferred alternative, mitigation should include HABS/HAER recordation, including a written report, scaled drawings of each building, and archival quality photographs and negatives.

10.0 CONCLUSIONS

In summary, taking into consideration the new information gathered on 503, 509, or 515 1st Street, the three properties, which each having different degrees of diminished integrity, still appear to meet the CRHR criteria, and, therefore, are significant resources under CEQA. However, 515 1st Street, only marginally meets the CRHR Criteria, due to a number of alterations to its primary facades, particularly the front façade facing 1st Street.

The existing conditions of each of the properties, however, must be weighed against historic values, along with the functionality and safety of the members of the fraternity. The balance between these two sometimes competing goals should be clearly articulated before a final decision is made regarding the disposition of the historic properties, including demolition or an addition between 503 and 509 1st Street.

11.0 PROFESSIONAL QUALIFICATIONS

Dana E. Supernowicz, principal of Historic Resource Associates, earned his M.A. degree in History at California State University, Sacramento in 1983, with an emphasis in California and Western United States history. Supernowicz has over 38 years of experience working in the field of cultural resources management for federal and state agencies, as well as 30 years in private consulting. He is a Register Professional Archaeologist (RPA), has also served as president of the El Dorado County Historical Society, and is a member of the

Society for California Archaeology, Oregon-California Trails Association, and the National Trust for Historic Preservation.

12.0 REFERENCES

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State of California -- The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
 HRI # _____
 Trinomial _____
 NRHP Status Code _____

Other Listings _____
 Review Code _____ Reviewer _____ Date / / _____

Page 1 of 2

*Resource Name or #: 503 First Street

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted a. County Yolo

b. USGS 7.5' Quad _____ Date _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; _____ B.M.

c. Address 503 First Street City Davis Zip 95616

d. UTM: (Give more than one for large and/or linear feature) Zone _____, _____ mE/ _____ mN

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTM's, etc. as appropriate)

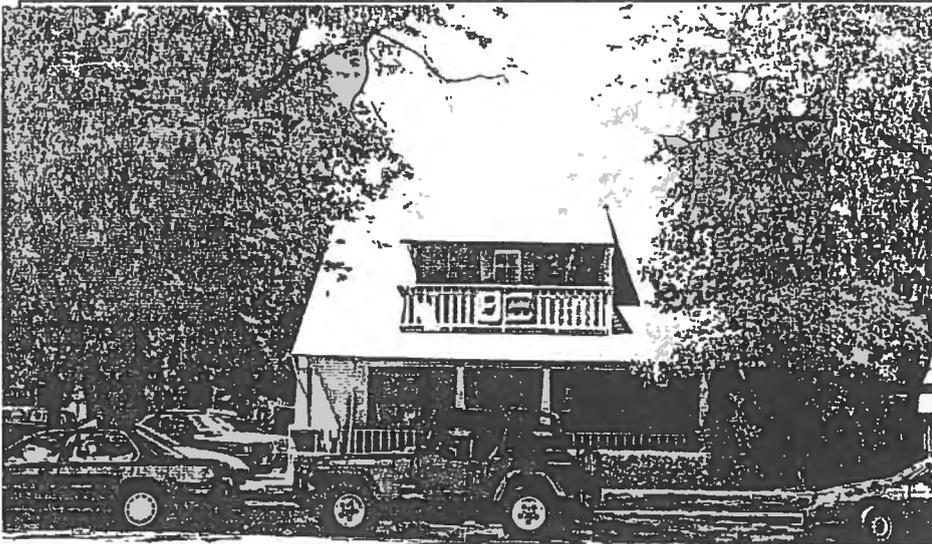
Assessor's Parcel Number: 70-244-04

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This one and a half story, wood frame, Craftsman style house has a long sloping gable roof running parallel to First Street. The roof is punctured by a large dormer. This attic room dormer has a door that leads to a small balcony. The first floor porch is covered by the long overhang of the gable roof and is supported by four canted, but thin, posts that rest on brick bases. There is a slat railing present. The house is sheathed in clapboard and is painted tan with blue trim. The house appears to be in fair condition and is presently occupied by a fraternity associated with the University.

*P3b. Resources Attributes: (List attributes and codes) HP2. Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo: (View, date, etc.)
Front elevation

Looking North

*P6. Date Constructed/Age and Sources:
 Prehistoric Historic Both
pre-1921

*P7. Owner and Address: _____

*P8. Recorded by: (Name, affiliation, address)
Architectural Resources Group
Pier 9, The Embarcadero
San Francisco, CA 9411
Bridget Maley, Project Manager

*P9. Date Recorded: 09/04/1996

*P10. Survey Type: (Describe)
Cultural Resources Inventory
by Certified Local Government
C-Comprehensive Survey

*P11. Report Citation: (Cite survey report/other sources or "none") Davis Updated Cultural Resources Inventory and Context Statement September, 1996, Architectural Resources Group, San Francisco

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record
 Photograph Record Other: (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

*NRHP Status Code _____

*Resource Name or #: 503 First Street

B1. Historic Name: _____

B2. Common Name: _____

B3. Original Use: Residential

B4. Present Use: R--Residential

*B5. Architectural Style: Craftsman

*B6. Construction History: (Construction date, alterations, and date of alterations.)

This house appears on the 1953, 1945, 1933 and 1921 Sanborn Map indicating it was constructed prior to the production of the 1921 map.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:

This house is very similar to the house at 509 First Street.

B9a. Architect: unknown

b. Builder: unknown

*B10. Significance: Theme Residential Architecture

Area Davis

Period of Significance 1910's 20's

Property Type Residential

Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This house appears on the 1921 Sanborn Map but not on the 1911 Sanborn Map indicating the likely date of construction as 1911 to 1920. The house contributes to the overall character of the streetscape along this end of First Street. The house at 509 First Street is similar in character and detailing to this house. Both houses are presently occupied by the same fraternity. The houses are in fair condition.

B11. Additional Resource Attributes: (List attributes and codes) HP2. Single Family Property

*B12. References:

Sanborn Insurance Co. Maps

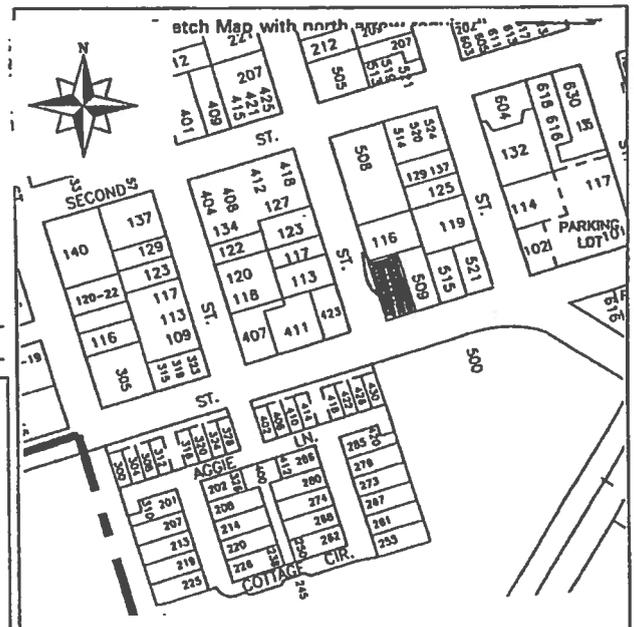
Davis Cultural Resources Inventory June 1980

B13. Remarks:

*B14. Evaluator: Bridget Maley, Arch. Res. Group

Date of Evaluation: 07/15/1996

(This space reserved for official comments.)



State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #: _____
 HRI # _____
 Trinomial _____
 NRHP Status Code: **5D3** _____
 Other Listings _____
 Review Code _____ Reviewer _____ Date _____

*Resource Name or Address 503 1st Street

- P1. Other Identifier: Anderson House
- *P2. Location: *a. County Yolo
- b. Address 503 1st Street
- *c. City Davis Zip 95616
- d. UTM: N/A
- e. USGS Quad: Davis Quadrangle
- *f. Other Locational Data (APN #): 070-244-004

***P3a. Description:**

This residence building was constructed for the Anderson family. Anderson was an important figure in both the commercial and civic life of Davis. A large Craftsman Bungalow, it was identified in the 1996 resources survey. Based on historical photographs, it appears that the front dormer has been somewhat altered by the addition of a porch and rail, which allows outside access from the dormer. Otherwise the building retains integrity of design, materials, workmanship, location, setting and association. It appears to contribute to the historic character of the Downtown/ Commercial area of the Conservation District.

***P3b. Resource Attributes:** HP2

***P4. Resources Present:** Building Structure Object Site District Element of District

P5b. Description of Photo:

View north*

P6. Date Constructed/Age:

- 1912 91 years old documented
- Prehistoric Historic
- Both

P5. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



***P7. Owner and Address:**

Theta Xi Fraternity
 503 1st Street
 Davis, CA 95616

***P8. Recorded by:**

Carol Roland
 Roland-Nawi Associates
 4829 Crestwood Way
 Sacramento, CA 95822

***P9. Date Recorded:** 04/07-10/2003

***P10. Type of Survey:** Intensive
 Reconnaissance Other
Describe: Determination of Local District Eligibility

***P11. Report Citation:** none

***Attachments:** NONE Map Sheet Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List):

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 5D2

Page 1 of 1

*Resource Name or # (Assigned by recorder) 503 First Street
 Continuation Update

P1. Other Identifier: Theta Xi Fraternity

*P2 e. Other Locational Data: APN:
503 First Street.

*P3a. **Description:** See original form for architectural style and features. No changes noted from 2003 other than re-roofing with similar materials.

*P3b. **Resource Attributes:** HP2

*P8. **Recorded by:** Rich Rifkin, Davis, CA 95616

*P11. **Report Citation:** Davis, California: Citywide Survey and Evaluation of Buildings Constructed Prior to 1976

*B10. **Significance:**

See original form

Historic Context

See original form

Evaluation

See original form

*B14. **Evaluator:** Rand Herbert

*Date of Evaluation: July 2, 2015

Photographs:



Previous Historic Resources Inventory

“Cultural Resources Inventory, Final Report: Davis California, June 1980.” Prepared by Historic Environment Consultants.

“City of Davis: Cultural Resources Inventory and Context Statement.” 1996. Prepared by Architectural Resources Group.

“Central Davis Historic Conservation District: City of Davis, Historical Resources Survey, August, 2003.” Prepared by Roland-Nawi Associates: Preservation Consultants.

DPR 523L (1/95)

*Required Information

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date / /

Page 1 of 2

*Resource Name or #: 509 First Street

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted a. County Yolo

b. USGS 7.5' Quad _____ Date _____ T _____; R _____; _____ 1/4 of _____ 1/4 of Sec _____; _____ B.M.

c. Address 509 First Street City Davis Zip 95616

d. UTM: (Give more than one for large and/or linear feature) Zone _____, _____ mE/ _____ mN

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTM's, etc. as appropriate)

Assessor's Parcel Number: 70-244-05

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This house resembles its neighbor, 503 First Street. The structure is a one and a half story Craftsman house with a gable roof running parallel to First Street. The gable roof is punctured by a large attic dormer with a balcony. The first floor porch is supported by three canted, but thin posts, that rest on brick bases. A slat railing is present. The house is sheathed in clapboard and is painted tan with blue trim. The house appears to be in fair condition and is presently occupied by a fraternity associated with the University.

*P3b. Resources Attributes: (List attributes and codes) HP2. Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing: (Photograph required for buildings, structures, and objects)



P5b. Description of Photo: (View, date, etc.)

Front facade

looking north

*P6. Date Constructed/Age and Sources:

Prehistoric Historic Both

*P7. Owner and Address:

*P8. Recorded by: (Name, affiliation, address)

Architectural Resources Group

Pier 9, The Embarcadero

San Francisco, CA 94111

Bridget Maley, Project Manager

*P9. Date Recorded: 07/09/1996

*P10. Survey Type: (Describe)

Cultural Resources Inventory

by Certified Local Government

C-Comprehensive Survey

*P11. Report Citation: (Cite survey report/other sources or "none") Davis Updated Cultural Resources Inventory and Context Statement September, 1996, Architectural Resources Group San Francisco

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record
 Photograph Record Other: (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

*NRHP Status Code _____

*Resource Name or #: 509 First Street

B1. Historic Name: _____

B2. Common Name: _____

B3. Original Use: Residential B4. Present Use: R--Residential

*B5. Architectural Style: _____

*B6. Construction History: (Construction date, alterations, and date of alterations.)

This house appears on the 1953, 1945, 1933, and 1921 Sanborn Maps indicating it was constructed prior to the production of the 1921 Map.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:

This house is very similar to the house at 503 First Street.

B9a. Architect: unknown b. Builder: unknown

*B10. Significance: Theme Residential Architecture Area Davis

Period of Significance 1910's 20's Property Type Residential Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This house appears on the 1921 Sanborn Map but not the 1911 Map indicating the likely date of construction as 1911 to 1920. The house contributes to the overall character of the streetscape along this end of First Street. The house at 503 First Street is similar in character and detailing to this house. Both houses are presently occupied by the same fraternity. The houses are in fair condition.

B11. Additional Resource Attributes: (List attributes and codes) HP2. Single Family Property

*B12. References:

Sanborn Insurance Co. Maps

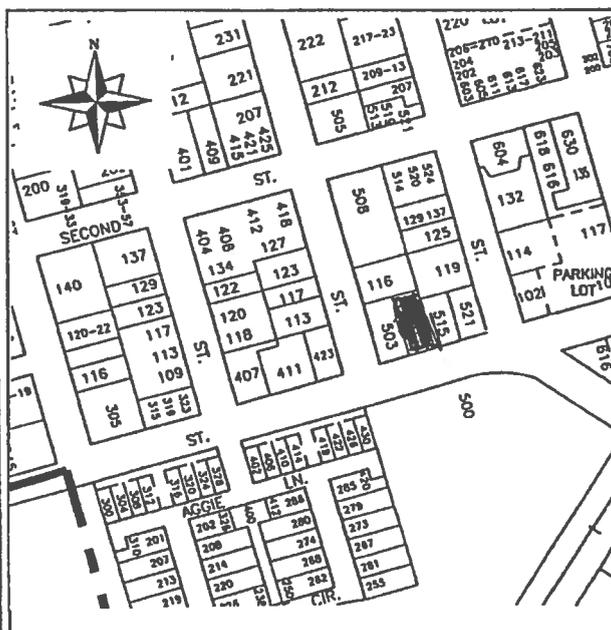
Davis Cultural Resources Inventory June 1980

B13. Remarks:

*B14. Evaluator: Bridget Maley, Arch. Res. Group

Date of Evaluation: 07/15/1996

(This space reserved for official comments.)



State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #: _____
 HRI # _____
 Trinomial _____
NRHP Status Code: 5D3
 Other Listings _____
 Review Code _____ Reviewer _____ Date _____

*Resource Name or Address 509 1st Street

P1. Other Identifier:

*P2. Location: *a. County Yolo

b. Address 509 1st Street

*c. City Davis Zip 95616

d. UTM: N/A

e. USGS Quad: Davis Quadrangle

*f. Other Locational Data (APN #): 070-244-005

*P3a. Description:

This residence building is almost an exact replica of 503 1st Street, its next door neighbor. The houses were undoubtedly designed and constructed by the same builder. A large Craftsman Bungalow, it was identified in the 1996 resources survey. The front dormer opens onto a porch with a rail. This detail is an alteration on the house at 503 1st and may also be an alteration here. However, it is possible that this house originally had a dormer that opened to the exterior, and the other house was altered in imitation. The building retains integrity of design, materials, workmanship, location, setting and association. It appears to contribute to the historic character of the Downtown/ Commercial area of the Conservation District.

*P3b. Resource Attributes: HP2

*P4. Resources Present: Building Structure Object Site District Element of District

P5b. Description of Photo:

View north*

P6. Date Constructed/Age:

1912 91 years old estimated

Prehistoric Historic

P5. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



Both

*P7. Owner and Address:

Theta Xi Fraternity

515 1 St Street

Davis, CA 95616

*P8. Recorded by:

Carol Roland

Roland-Nawi Associates

4829 Crestwood Way

Sacramento, CA 95822

*P9. Date Recorded: 04/07-10/2003

*P10. Type of Survey: Intensive

Reconnaissance Other

Describe: Determination of Local District Eligibility

*P11. Report Citation: none

*Attachments: NONE Map

Sheet Continuation Sheet

Building, Structure, and Object Record

Linear Resource Record

Archaeological Record District Record

Milling Station Record Rock Art

Record

Artifact Record Photograph Record

Other (List):

P1. Other Identifier: Theta Xi Fraternity

*P2 e. Other Locational Data: APN:
509 First Street.

*P3a. **Description:** See original form for architectural style and features. No changes noted from 2003 other than re-roofing with similar materials.

*P3b. **Resource Attributes:** HP2

*P8. **Recorded by:** Rich Rifkin, Davis, CA 95616

*P11. **Report Citation:** Davis, California: Citywide Survey and Evaluation of Buildings Constructed Prior to 1976

*B10. **Significance:**

See original form

Historic Context

See original form

Evaluation

See original form

*B14. **Evaluator:** Rand Herbert

*Date of Evaluation: July 2, 2015

Photographs:



Previous Historic Resources Inventory

“Cultural Resources Inventory, Final Report: Davis California, June 1980.” Prepared by Historic Environment Consultants.

“City of Davis: Cultural Resources Inventory and Context Statement.” 1996. Prepared by Architectural Resources Group.

“Central Davis Historic Conservation District: City of Davis, Historical Resources Survey, August, 2003.” Prepared by Roland-Nawi Associates: Preservation Consultants.

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date 1/1

Page 1 of 2

*Resource Name or #: 515 First Street

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted a. County Yolo

b. USGS 7.5' Quad _____ Date _____ T _____; R _____; _____ 1/4 of _____ 1/4 of Sec _____; _____ B.M.

c. Address 515 First Street City Davis Zip 95616

d. UTM: (Give more than one for large and/or linear feature) Zone _____, _____ mE/ _____ mN

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as appropriate)

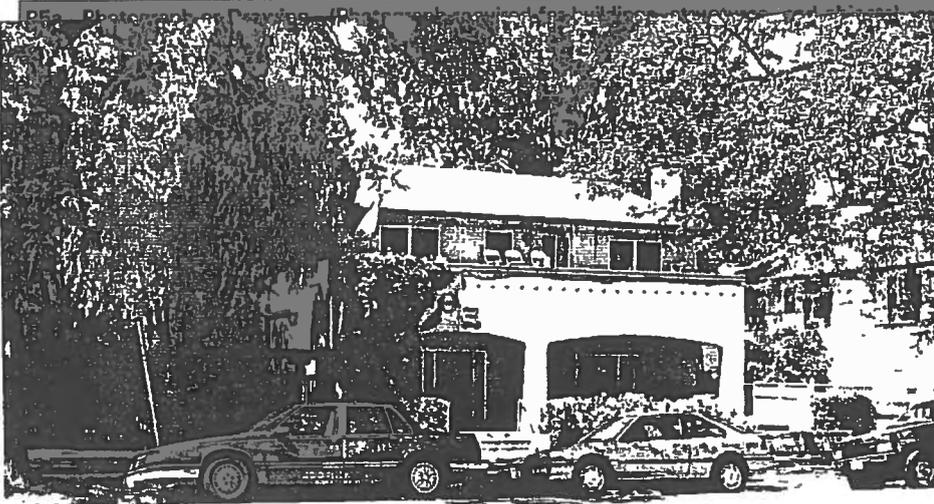
Assessor's Parcel Number: 70-244-06

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

This is an eclectic house stylistically. The overall composition is somewhat Spanish or Mediterranean in character. The building serves as a fraternity house and appears to have had numerous alterations. The house is two stories with a porch with two large arched openings supported by canted piers. Stucco painted beige, the house is large and has a strong presence along the street. An exterior chimney is present on the east side of the house.

*P3b. Resources Attributes: (List attributes and codes) HP2. Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo: (View, date, etc.)

Front elevation
looking northeast

*P6. Date Constructed/Age and Sources:
 Prehistoric Historic Both
pre 1921

*P7. Owner and Address:

*P8. Recorded by: (Name, affiliation, address)
Architectural Resources Group
Pier 9, The Embarcadero
San Francisco, Ca 94111
Bridget Maley, Project Manager

*P9. Date Recorded: 09/17/1996

*P10. Survey Type: (Describe)
Cultural Resources Inventory
by Certified Local Government
C-Comprehensive Survey

*P11. Report Citation: (Cite survey report/other sources or "none") Davis Updated Cultural Resources Inventory and Context
Statement September, 1996 Architectural Resources Group San Francisco

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record
 Photograph Record Other: (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

*NRHP Status Code _____

*Resource Name or #: 515 First Street

B1. Historic Name: _____

B2. Common Name: _____

B3. Original Use: Residential

B4. Present Use: R--Residential

*B5. Architectural Style: Spanish or Mediteranean Revival

*B6. Construction History: (Construction date, alterations, and date of alterations.)

This house appears on the 1921 Sanborn map indicating it was constructed sometime before that date.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:

none

B9a. Architect: unknown

b. Builder: unknown

*B10. Significance: Theme Residential Architecture

Area Davis

Period of Significance 1920's

Property Type Residential

Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Little is known about the history of this house. It appears on the 1921 Sanborn Map indicating a construction date prior to the production of that map. The house has a strong presence on the block. Although it appears to have been altered over the years, the overall character of the structure has remained.

B11. Additional Resource Attributes: (List attributes and codes) HP3. Multiple Family Property

*B12. References:

Sanborn Insurance Co. Maps

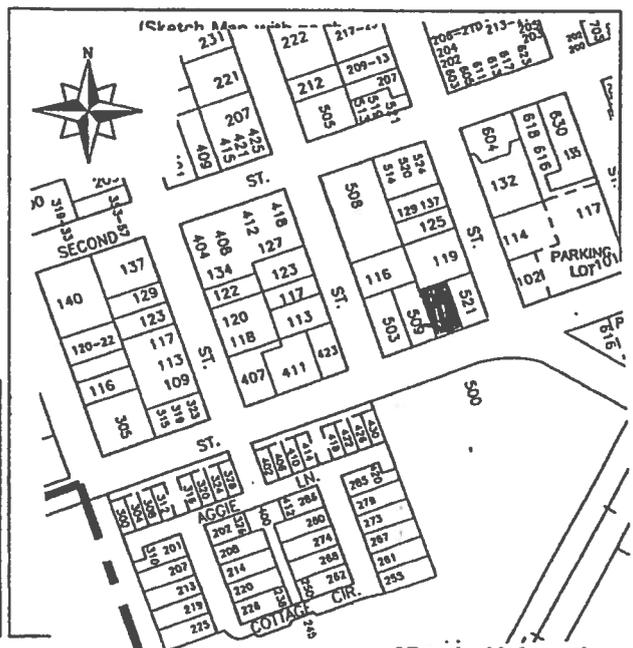
Davis Cultural Resources Inventory June 1980

B13. Remarks:

*B14. Evaluator: Bridget Maley

Date of Evaluation: 07/15/1996

(This space reserved for official comments.)



State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #: _____
 HRI # _____
 Trinomial _____
NRHP Status Code: 5D3 _____
 Other Listings _____
 Review Code _____ Reviewer _____ Date _____

*Resource Name or Address 515 1st Street
 P1. Other Identifier:
 *P2. .Location: *a. County Yolo
 b. Address 515 1st Street
 *c. City Davis Zip 95616
 d. UTM: N/A
 e. USGS Quad: Davis Quadrangle
 *f. Other Locational Data (APN #): 70-244-006

*P3a. Description:
 This building was recorded in 1996. It appears to continue to retain its integrity. It continues to be a character defining historic property within the Downtown/ Commercial area of the Conservation District .

*P3b. Resource Attributes: HP3
 *P4. Resources Present: Building Structure Object Site District Element of District

P5b. Description of Photo:
 View north

*P6. Date Constructed/Age:
 c 1920 83years old documented
 Prehistoric Historic
 Both

*P7. Owner and Address:
 Theta Xi Fraternity
 515 1st Street
 Davis, CA 95616

P5. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



*P8. Recorded by:
 Carol Roland
 Roland-Nawi Associates
 4829 Crestwood Way
 Sacramento, CA 95822

*P9. Date Recorded: 04/07-10/2003
 *P10. Type of Survey: Intensive
 Reconnaissance Other
 Describe: Determination of
 Local District Eligibility

*P11. Report Citation: none
 *Attachments: NONE Map
 Sheet Continuation Sheet
 Building, Structure, and Object Record
 Linear Resource Record
 Archaeological Record District Record
 Milling Station Record Rock Art
 Record
 Artifact Record Photograph Record
 Other (List):

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 5D3

Page 1 of 1

*Resource Name or # (Assigned by recorder) 515 First Street
 Continuation Update

P1. Other Identifier: Theta Xi Fraternity

*P2 e. Other Locational Data: APN:
515 First Street.

*P3a. **Description:** See original form for architectural style and features. No changes noted from 1996 and 2003 other than re-roofing with similar materials.

*P3b. **Resource Attributes:** HP3

*P8. **Recorded by:** Rich Rifkin, Davis, CA 95616

*P11. **Report Citation:** Davis, California: Citywide Survey and Evaluation of Buildings Constructed Prior to 1976

*B10. **Significance:**

See original form

Historic Context

See original form

Evaluation

See original form

*B14. **Evaluator:** Rand Herbert

*Date of Evaluation: July 2, 2015

Photographs:



Previous Historic Resources Inventory

“Cultural Resources Inventory, Final Report: Davis California, June 1980.” Prepared by Historic Environment Consultants.

“City of Davis: Cultural Resources Inventory and Context Statement.” 1996. Prepared by Architectural Resources Group.

“Central Davis Historic Conservation District: City of Davis, Historical Resources Survey, August, 2003.” Prepared by Roland-Nawi Associates: Preservation Consultants.

DPR 523L (1/95)

*Required Information

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*Resource Name or #: 503 1st Street

NRHP Status Code: 5D2/5D3

Recorded by: Dana E. Supernowicz

*Date: October 7, 2016

Continuation

Update

A review of Sanborn Fire Insurance Maps, historic photographs, and a field review of 503 1st Street, Davis, Yolo County, California revealed new information regarding its physical characteristics and history of ownership. As previously described, 503 1st Street, which was reportedly built in 1912, was recorded in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert. In 1996, Maley described 503 1st Street as a one and a half story, wood-frame, Craftsman style house with a long sloping gable roof running parallel to 1st Street. According to Roland-Nawi Associates, the house was built in 1912.

Based upon historic photographs, 503 1st Street appears to have originally been a single-story house with a large attic and a basement. The shed roof dormer centered on the roof facing 1st Street had no veranda and railing or outside access when the house was built. This feature appears to have been added by Theta Xi Fraternity in the 1970s, when the attic was converted to a living area for fraternity members. In 2003, Roland-Nawi Associates stated that the house was built for the Anderson family of Davis. This has been verified through United States Federal Census data, however, it is unclear if Anderson was the original owner. According to Maley, Anderson was an important figure during the twentieth century in Davis, associated with commercial and civic life.¹ Certainly Anderson was among a number of successful merchants in Davis, and the Anderson family continues in business to this day in the city.

Besides the entire interior having been altered to create bathrooms and additional rooms for students, the east elevation of the house has been altered with the addition of a raised wooden deck and exterior stairway to access the second-story rooms. The northwest corner of the house was also altered, when the original extended porch was enclosed and the brick fireplace was removed. Behind the residence is a garage/shed that was built after 1921 and expanded in later years. Today, the interior of the house features five bedrooms downstairs and two upstairs, with one bathroom downstairs.

Based upon city directories and U.S. Federal Census records, 503 1st Street was owned and occupied by the Anderson family. In 1910, Gordon Anderson was single, working as an ice dealer, and living on Olive Street.² The 1930 U.S. Federal Census lists Gordon Anderson, 53 years of age; Essie Anderson, his wife, 45 years of age; and Donald Anderson, their son, 13 years of age. Gordon Anderson, who was from Canada, owned the hardware store at 207 G Street until 1937, the year he died. After his death, the family acquired interest in the Davis Lumber Company owned by Edwin McBride. On June 22, 1962, Donald, Gordon's son, acquired the lumber company and changed the name to Davis Lumber and Hardware Company.³ In 1930, Anderson's residence was valued at \$8,500 in 1930.⁴ By 1940, Donald and Essie Anderson were living at 503 1st Street. The Theta XI Fraternity acquired 503 1st Street in the early 1950s, along with 509 and 515 1st Streets.

¹ Maley, Bridget. City of Davis: Cultural Resources Inventory and Context Statement, 1996.

² U.S. Federal Census, Putah Township, Davis, Yolo County, California 1910, Sheet, No. 10.

³ Costabil, Dominick. "Davis Ace." *Davis Enterprise*, July 22, 2012; Donald Anderson died in 1986, and Dora his wife in 2014, according to obituaries from the *Davis Enterprise*.

⁴ United States Federal Census, Putah Township, Davis, Yolo County, California, 1930, Sheet No. 6.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary#
HRI #
Trinomial

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*Resource Name or #: 509 1st Street

NRHP Status Code: 5D2/5D3

Recorded by: Dana E. Supernowicz

*Date: October 7, 2016

Continuation

Update

A review of Sanborn Fire Insurance Maps, historic photographs, and a field review of 509 1st Street, Davis, Yolo County, California revealed new information regarding its physical characteristics and history of ownership. As previously described, 509 1st Street, which was reportedly built in 1912, resembles its neighbor to the west. The two houses were undoubtedly constructed at the same time by the same builder and designed by the same architect. The property was recorded in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert.

Based upon historic photographs, 509 1st Street, unlike 503 1st Street, appears to have had a rooftop balcony accessed from the central roof-top dormer. This would suggest the house was built with a second-story living area. The current railing is a more recent addition, as is the second door to the right of the replaced front door. It should also be noted one of the truncated wood columns is missing, and, like 503 1st Street, the brick fireplace was removed from the east wall. The residence at 509 1st Street also features a basement.

Today, the interior of the residence features no bedrooms downstairs, seven bedrooms upstairs, one upstairs bath, and one downstairs bath, and includes a kitchen, dining room, living room, and an entry hall downstairs.

From 1920 through 1930, 509 1st Street was occupied by John Thompson, his wife Cleo, and his two sons, Irwin and James. Thompson is listed as a manager or instructor at the University Farm in Davis. The Thompson residence in 1930 was valued at \$5,000.¹ In 1940, the Hoff family owned the residence. The Theta XI Fraternity acquired 509 1st in the early 1950s, along with 503 and 515 1st Street.

¹U.S. Federal Census, Putah Township, Davis, Yolo County, California, 1930, Sheet No. 6.

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*Resource Name or #: 515 1st Street

NRHP Status Code: 5D3

Recorded by: Dana E. Supernowicz

*Date: October 7, 2016

Continuation

Update

A review of Sanborn Fire Insurance Maps, historic photographs, and a field review of 515 1st Street, Davis, Yolo County, California revealed new information regarding its physical characteristics and history of ownership. As previously described, 515 1st Street, which was built in circa 1920, was recorded in 1996 by Bridget Maley of Architectural Resource Group; in 2003 by Roland-Nawi Associates; and in 2015 by Rich Rifkin and Rand Herbert. Maley described the building as eclectic, with Spanish or Mediterranean character, and determined that it appeared to have numerous alterations.¹ In 2003, Roland-Nawi Associates stated that it appeared to retain integrity. In 2015, Rifkin recorded the residence on a 523 Update Sheet, and Herbert evaluated the property giving it a 5D3 rating. No additional research appears to have been done on the property since its recordation and evaluation by Maley in 1996.

Unlike 503 and 509 1st Street, 515 1st Street was a much larger home, but it also was designed with a full two-stories and basement. Unlike 503 and 509 1st Street, which have horizontal board exterior siding, the walls of 515 1st Street are clad with stucco.

Today, the interior of the residence features no bedrooms downstairs, and seven bedrooms upstairs, along with a large kitchen and meeting room. The most dramatic change is to the front veranda, which was altered in the 1950s following acquisition by the Theta Xi Fraternity. The alteration involved demolishing the old porch, which extended half-way across the front of the building, followed by a decorative wood pergola. The replacement design featured a full front porch or veranda having two arches of unequal size, and a closed veranda wall on the second story that masks the fenestration, namely the doors and windows. Most of the windows and doors in the house appear to be original wood-sash, many having gridded or divided lights.

In regards to ownership, the 1900 United States Federal Census for Putah Township, Davis enumerated Clara Anderson, 44 years of age, born in Missouri, living with John Anderson and Eliza Cecil, her mother.² The 1920 United States Federal Census enumerated John Anderson, 72 years of age; his wife, Clara, 65 years of age; and their daughter, Cecil, 26 years of age, all living on 1st Street, likely at 515 1st Street.³ By 1930, 515 1st Street was owned by Clara Anderson, who lived in the house with a servant, Mrs. C. Albertion [sic]. Clara Anderson was 75 years of age at the time. In 1915, the home was rented to John Morris. The Theta XI Fraternity acquired 515 1st Street in the early 1950s, along with 503 and 509 1st Streets.

¹ Maley 1996.

² U.S. Federal Census, Putah Township, Davis, Yolo County, California, 1910, Sheet No. 9.

³ U.S. Federal Census, Putah Township, Davis, Yolo County, California, 1920, Sheet No. 8.