ATTACHMENT 1

PROJECT-SPECIFIC MITIGATION MONITORING AND REPORTING PROGRAM FOR VETERINARY MEDICAL CENTER VISION PROJECT ELEMENT 2: ALL-SPECIES IMAGING CENTER

In accordance with the California Environmental Quality Act (CEQA) Public Resources Code Section 21000 et seq.), UC Davis prepared a Mitigated Negative Declaration (MND) for the Veterinary Medical Center Vision (VMC Vision) Project that identified contribution to significant impacts that would result from implementation of the 2003 Long Range Development Plan (LRDP). The VMC Vision Project incorporated all applicable mitigation measures contained in the 2003 LRDP environmental impact report (EIR) Mitigation Monitoring and Reporting Program (MMRP) as well as three project-specific mitigation measures related to greenhouse gas (GHG) emissions.

Since approval of the VMC Vision Project, UC Davis certified the 2018 LRDP EIR and approved the 2018 LRDP. The University adopted and is now implementing and monitoring the 2018 LRDP MMRP; the land uses proposed by the VMC Vision Project are consistent with the land uses covered in the 2018 LRDP. To ensure the VMC Vision Project Element 2, All-Species Imaging Center (ASIC), implements all mitigation required for the project, UC Davis has prepared a project-specific MMRP that reflects the 2003 LRDP EIR mitigation measures adopted in the MND, three GHG emission mitigation measures adopted in the VMC Vision Project MND, and the applicable 2018 LRDP EIR mitigation measures. These mitigation measures shall apply to address the Project's contribution to impacts in the following resource categories: Aesthetics; Air Quality; Biological Resources; Cultural Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; and Transportation, Circulation, and Parking.

CEQA and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." Because Project Element 2, the ASIC, is a VMC Vision Project element being approved by UC Davis since adoption of the 2018 LRDP, the University is adopting this project-specific MMRP with approval of the ASIC.

3.1 PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner before and during project construction and operation, as applicable.

The MMRP table provided herein has been prepared to assist the responsible parties in implementing the applicable mitigation measures for VMC Vision Project Element 2, the ASIC. The table identifies the impact, individual mitigation measures, monitoring responsibility, mitigation timing, and provides space to confirm implementation of the mitigation measures. The numbering of the impacts and mitigation measures follows the organization of the VMC Vision Project Initial Study MND. The mitigation numbering is listed consistent with that found in the 2003 LRDP MMRP and the 2018 LRDP MMRP. Mitigation measures that are referenced more than once in either the 2003 LRDP EIR or the 2018 LRDP EIR are not duplicated in the MMRP table.

3.2 ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, UC Davis is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. UC Davis, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent. Section 21081.6 of the Public Resources Code requires the lead agency to identify the "custodian of documents and other material" which constitutes the "record of proceedings" upon which the action on the project was based. The UC Davis Office of Campus Planning and Environmental Stewardship, or designee, is the custodian of such documents for the 2018 LRDP. Inquiries should be directed to:

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The location of this information is:

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UC Davis is responsible for overall administration of the MMRP and for verifying that UC Davis staff and/or the construction contractor has completed the necessary actions for each measure. The responsible party for implementation of each item will identify the staff members responsible for coordinating with UC Davis on the MMRP.

3.3 REPORTING

UC Davis shall, or may require the contractor(s) to, maintain records documenting compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required.

3.4 MITIGATION MONITORING AND REPORTING PROGRAM TABLE

The categories identified in the attached MMRP tables are described below.

- Impact – This column provides the verbatim text of the identified impact.
- Mitigation Measure – This column provides the verbatim text of the adopted mitigation measure
- Monitoring and Reporting Procedure – This column identifies discrete actions to be implemented as part of the broader mitigation measure.
- Timing – This column identifies the time frame in which the mitigation will be implemented.
- Verification – This column identifies the party responsible for verifying compliance and is to be dated and signed by that party (either project manager or his/her designee).

Table 3-1 Veterinary Medical Center Vision Project Element 2: All Species Imaging Center Mitigation Monitoring and Reporting Program

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
Project stage at which implementation of the measure is required - SS=site selection; DE=detailed project planning or project design prior to project approval; CO=construction; OC=prior to occupancy; OP=operation					
7.1 Aesthetics and Visual Resources					
Impact 7.1c: Substantially degrade the existing visual character or quality of the site and its surroundings?	**2003 LRDP EIR Mitigation Measure 4.1-2a:** New structures, roads, and landscaping at UC Davis shall be designed to be compatible with the visual elements and policies identified in the 2003 LRDP. **2003 LRDP EIR Mitigation Measure 4.1-2b:** Prior to design approval of development projects under the 2003 LRDP, the Campus Design Review Committee must determine that project designs are consistent with the valued elements of the visual landscape identified in the 2003 LRDP, applicable planning guidelines, and the character of surrounding development so that the visual character and quality of the project area are not substantially degraded.	Review project design for compatibility with the visual elements and policies identified in the 2003 LRDP. Revise design, if necessary.	DE	Prior to final design approval.	UC Davis Design Review Committee; UC Davis Campus Planning and Environmental Stewardship
Impact 7.1d: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	**2003 LRDP Mitigation Measure 4.1-3a:** Design for specific projects shall provide for the use of textured nonreflective exterior surfaces and nonreflective glass. **2018 LRDP Mitigation Measure 3.1-3a: Building surfaces.** UC Davis shall require the use of textured, non-reflective exterior surfaces and non-reflective (mirrored) glass during design review of all new/redeveloped structures.	Review project design for use of non-reflective exterior surfaces and glass. Revise design, if necessary.	DE	Prior to final design approval.	UC Davis Design Review Committee; UC Davis Campus Planning and Environmental Stewardship
	2003 LRDP Mitigation Measure 4.1-3b: Except as provided in LRDP Mitigation 4.1-3(c), all new outdoor lighting shall utilize directional lighting methods with shielded and cutoff type light fixtures to minimize glare and upward directed lighting. **2018 LRDP Mitigation Measure 3.1-3b: Lighting fixtures.** UC Davis shall require all new outdoor lighting to utilize directional lighting methods with shielded and cutoff type light fixtures to minimize glare and upward directed lighting such that light spillover onto adjacent structures does not occur. Verification of inclusion in project design shall be provided at the time of design review.	Review project design for use of directional lighting.	DE	Prior to final design approval.	UC Davis Design Review Committee; UC Davis Campus Planning and Environmental Stewardship
	2003 LRDP Mitigation Measure 4.1-3c: Non-cutoff, non-shielded lighting fixtures used to enhance nighttime views of walking paths, specific landscape features, or specific architectural features shall be reviewed by the Campus Design Review Committee prior to installation to ensure that: (1) the minimum amount of required lighting is proposed to achieve the desired nighttime emphasis, and (2) the proposed illumination creates no adverse effect on nighttime views.	Review project design for use of directional lighting.	DE	Prior to final design approval.	UC Davis Design Review Committee; UC Davis Campus Planning and Environmental Stewardship
	2003 LRDP Mitigation Measure 4.1-3d: The campus will implement the use of the specified lighting design and equipment when older lighting fixtures and designs are replaced over time.	Review project design for use of directional lighting.	DE	Prior to final design approval.	UC Davis Design Review Committee; UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
7.3 Air Quality					
Impact 7.3 a,b,c,d: Conflict with or obstruct implementation of the applicable air quality plan? **Violate any air quality standard or contribute substantially to an existing or projected air quality violation?** **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?** **Expose sensitive receptors to substantial pollutant concentrations?**	**Construction-Generated Emissions of Criteria Air Pollutants and Precursors** **2003 LRDP Mitigation Measure 4.3-3a:** The campus shall include in all construction contracts the measures specified below to reduce fugitive dust impacts, including but not limited to the following: • All disturbed areas, including storage piles, which are not being actively utilized for construction purpose, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover. • All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. • When demolishing buildings up to six stories in height, all exterior surfaces of the building shall be wetted during demolition. • When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least two feet of freeboard space from the top of the container shall be maintained. • All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices also is expressly forbidden. • Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions by utilizing sufficient water or chemical stabilizer/ suppressant. **2003 Mitigation Measure 4.3-3b:** The campus shall include in construction contracts for large construction projects near receptors, the following control measures: • Limit traffic speeds on unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. • To the extent feasible, limit area subject to excavation, grading, and other construction activity at any one time. • Limit the area subject to excavation, grading, and other construction activity at any one time.	Incorporation of measures as part of construction specifications documentation and inspect construction site at regular intervals during construction to verify compliance with specified construction-generated emissions reduction measures.	DE CO	Regular intervals throughout construction period.	UC Davis Design and Construction Management

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	2003 Mitigation Measure 4.3-3c: The campus shall implement the following control measures to reduce emissions of ozone precursors from construction equipment exhaust: • To the extent that equipment is available and cost effective, the campus shall encourage contractors to use alternate fuels and retrofit existing engines in construction equipment. • Minimize idling time to a maximum of 5 minutes when construction equipment is not in use. • To the extent practicable, manage operation of heavy-duty equipment to reduce emissions. **2018 LRDP Mitigation Measure 3.3-1: Reduce construction-generated emissions of ROG, NO_X, and PM_{10}.** Land use development project implemented under the 2018 LRDP shall require its prime construction contractor to implement the following measures: 1) Use construction equipment with engines rated at Tier 3 or better prior to 2025 and Tier 4 or better beginning in 2025. 2) Use no- or low-solids content (i.e., no- or low-VOC) architectural coatings with a maximum VOC content of 50 g/L. 3) Limit passenger vehicles (i.e., non-vendor and non-hauling vehicles) from being driven on extended unpaved portions of project construction sites. UC Davis shall provide off-site paved parking and compliant site-transport arrangements for construction workers, as needed. 4) Water all active construction sites at least twice daily. 5) Plant vegetative ground cover in disturbed areas as soon as possible. 6) Apply soil stabilizers on unpaved roads and inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days). 7) Establish a 15 mile-per-hour speed limit for vehicles driving on unpaved portions of project construction sites. UC Davis shall ensure that the implementation of this mitigation measure is consistent with the UC Davis stormwater program and the California Stormwater Quality Association *Stormwater BMP Handbook for New Development/Redevelopment* and does not result in off-site runoff as a result of watering for dust control purposes.				
	Long-term Operational Emissions of Criteria Air Pollutants and Precursors **2003 Mitigation Measure 4.3-1a: Vehicular Sources.** The following measures will be implemented to reduce emissions from vehicles, as feasible. • The campus shall continue to actively pursue Transportation Demand Management to reduce reliance on private automobiles for travel to and from the campus.	Develop and implement program in conjunction with TDM strategies to incentivize alternative fuel usage and	OP	Implemented on a continuing basis.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	• Provide pedestrian-enhancing infrastructure to encourage pedestrian activity and discourage vehicle use. • Provide bicycle facilities to encourage bicycle use instead of driving. • Provide transit-enhancing infrastructure to promote the use of public transportation. • Provide facilities to accommodate alternative-fuel vehicles such as electric cars and CNG vehicles. • Improve traffic flows and congestion by timing traffic signals to facilitate uninterrupted travel. • When the campus purchases new vehicles, the campus will evaluate the practicality and feasibility of acquiring low-pollution vehicles that are appropriate for the task and will purchase these types of vehicles when practical and feasible. When replacing diesel engines in existing equipment, the campus will install up-to-date technology. **2018 LRDP Mitigation Measure 3.3-2: Reduce emissions of ROG and NO_x.** UC Davis shall implement the following measures to reduce operational emissions to the extent feasible: 1) Implement a program that incentivizes employees and students living off-campus to carpool, use EVs, or use public transit to commute to and from the campus. This program shall provide preferential parking to carpool vehicles, vanpool vehicles, and EVs. At a minimum, the program shall include a virtual or real "ride board" for employees and students to organize carpools and incentives for employees using public transit to commute to and from campus. The program shall include, but is not limited to, the following features. a) Limit parking capacity to meet on-site demand. Provide no more on-site parking \ (including battery electric vehicles and hydrogen fuel cell vehicles). The number of dedicated spaces should be no less than two spaces or 5 percent of the total parking spaces on the project site, whichever is greater. These dedicated spaces shall be in preferential locations such as near the main entrances to the buildings served by the parking lot and/or under the shade of a structure or trees. These spaces shall be clearly marked with signs and pavement markings. This measure shall not be implemented in a way that prevents compliance with requirements in the California Vehicle Code regarding parking spaces for disabled persons or disabled veterans.	alternative transportation use.			
	2) Work with Unitrans to convert natural gas buses to electric or lower-emission fuels or implement emission control technologies to reduce criteria air pollutant emissions from existing conditions.	Coordinate with and contribute funds to Unitrans re: conversion of existing fleet to electric or other clean fuel.	OP	On a continuing basis with annual reporting.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	3) Implement a program that incentivizes vendors to reduce the emissions associated with vehicles and equipment serving the campus. The goal of the program is to reduce ROG and NO_X emissions from vendors trip by at least 50 percent by 2030 as compared to existing conditions. The program shall implement the following sub-measures to reduce vendor-related, mobile-source emissions. a) Incentivize the use of EVs or other clean fuels in their trucks and equipment to reduce ROG and NO_X emissions. b) Work with vendors, especially those using trucks, to reduce the number of vendor trips made to the campus through trip chaining, reducing the number of shipments, or other methods.	Develop and implement program in conjunction with vendors and appropriate UC Davis campus services to reduce/consolidate vendor trips and incentivize the use of alternative fuel vehicles.	OP	Adoption within one-year of approval of 2018 LRDP; Implemented on a continuing basis.	UC Davis Campus Planning and Environmental Stewardship
	4) Convert landscaping equipment to electric or alternatively-fueled equipment.	Transition from gasoline/diesel-powered landscaping equipment to electric/alternative-fueled equipment by 2025 or sooner.	OP	On a continuing basis with annual reporting.	UC Davis Campus Planning and Environmental Stewardship
	2018 LRDP Mitigation Measure 3.3-4: Reduce short-term construction-generated TAC emissions. UC Davis shall require construction activities under the 2018 LRDP to follow YSAQMD recommended mitigation measures for construction exhaust emissions. To ensure sensitive receptors are not exposed to substantial TAC concentrations, UC Davis shall require its prime construction contractor to implement the following measures prior to project approval: 1) Locate operation of diesel-powered construction equipment as far away from sensitive receptors as possible; 2) Limit excess equipment idling to no more than 5 minutes; 3) Use construction equipment with engine ratings of Tier 3 or better (included in Mitigation Measure 3.3-1); and 4) Use electric, compressed natural gas, or other alternatively fueled construction equipment instead of the diesel counterparts, where available. In addition, for any construction site located within 150 feet of a childcare center or park/recreation field, UC Davis shall schedule the use of heavy construction equipment to times when children are not present. Alternatively, UC Davis shall arrange for temporary relocation of childcare facilities to areas outside of a 150-foot buffer or temporarily close available park space within the 150-foot buffer during operation of heavy construction equipment.	Inspect construction site at regular intervals during construction to verify compliance with specified construction-generated emissions reduction measures.	CO	Regular intervals throughout construction period.	UC Davis Campus Planning and Environmental Stewardship; UC Davis Design and Construction Management

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	2003 LRDP Mitigation Measure 4.3-1(b): Area Sources. The following measures will be implemented to reduce emissions from area sources, as feasible. • Use solar or low-emission water heaters in new or renovated buildings. • Orient buildings to take advantage of solar heating and natural cooling and use passive solar designs. • Increase wall and attic insulation in new or renovated buildings. • For fireplaces or wood-burning appliances, require low-emitting EPA certified wood-burning appliances, or residential natural-gas fireplaces. • Provide electric equipment for landscape maintenance.	Incorporation of measures as part of design documentation and inspect site for implementation.	OP	On a continuing basis with annual reporting.	UC Davis Campus Planning and Environmental Stewardship
	2003 LRDP Mitigation Measure 4.3-1(c): The campus will work with the YSAQMD to ensure that emissions directly and indirectly associated with the campus are adequately accounted for and mitigated in applicable air quality planning efforts. The YSAQMD can and should adopt adequate measures consistent with applicable law to ensure that air quality standard violations are avoided.	Coordination with and reporting to YSAQMD.	OP	On a continuing basis with annual reporting.	UC Davis Campus Planning and Environmental Stewardship
7.5 Cultural Resources					
7.5b Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	**2003 LRPD Mitigation Measure 4.5-1(a)** As early as possible in the project planning process, the campus shall define the project's area of potential effects (APE) for archaeological resources and, if structures are present on the site, for historic structures. The campus shall determine the potential for the project to result in cultural resource impacts, based on the extent of ground disturbance and site modification anticipated for the proposed project. Based on this information, the campus shall: (i) Prepare an inventory of all buildings and structures within the APE that will be 50 years of age or older at the time of project construction for review by a qualified architectural historian. If no structures are present on the site, there would be no impact to historic built environment resources from the project. If potentially historic structures are present, LRDP Mitigation 4.5-1(c) shall be implemented. (ii) Determine the level of archaeological investigation that is appropriate for the project site and activity, as follows: • Minimum: excavation less than 18 inches deep and in a relatively small area (e.g., a trench for lawn irrigation, tree planting, etc.). Implement LRDP Mitigation 4.5-1(b)(i). • Moderate: excavation below 18 inches deep and/or over a large area on any site that has not been characterized and is not suspected to be a likely location for archaeological resources. Implement LRDP Mitigation 4.5-1 (b)(i) and (ii).	Define area of potential effects. Determine appropriate level of archaeological investigation. Include specified avoidance and control measures in construction specifications. Contractors and employees shall be notified when they are required to watch for potential archaeological sites and attend a training session to be provided by a qualified archaeologist.	DE	During project design, prior to construction.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	• Intensive: excavation below 18 inches and/or over a large area on any site that is within 800 feet of the historic alignment of Putah Creek, or that is adjacent to a recorded archaeological site. Implement LRDP Mitigation 4.5-1 (b)(i), (ii) and (iii). **2003 LRPD Mitigation Measure 4.5-1(b)** During the planning phase of the project, the campus shall implement the following steps to identify and protect archaeological resources that may be present in the APE: (i) For project sites at all levels of investigation, contractor crews shall be required to attend an informal training session prior to the start of earth moving, regarding how to recognize archaeological sites and artifacts. In addition, campus employees whose work routinely involves disturbing the soil shall be informed how to recognize evidence of potential archaeological sites and artifacts. Prior to disturbing the soil, contractors shall be notified that they are required to watch for potential archaeological sites and artifacts and to notify the campus if any are found. In the event of a find, the campus shall implement item (vi), below. (ii) For project sites requiring a moderate or intensive level of investigation, a surface survey shall be conducted by a qualified archaeologist during project planning and design and prior to soil disturbing activities. For sites requiring moderate investigation, in the event of a surface find, intensive investigation will be implemented, as per item (iii), below. Irrespective of findings, the qualified archaeologist shall, in consultation with the campus, develop an archaeological monitoring plan to be implemented during the construction phase of the project. The frequency and duration of monitoring shall be adjusted in accordance with survey results, the nature of construction activities, and results during the monitoring period. In the event of a discovery, the campus shall implement item (vi), below. (iii) For project sites requiring intensive investigation, irrespective of subsurface finds, the campus shall retain a qualified archaeologist to conduct a subsurface investigation of the project site, to ascertain whether buried archaeological materials are present and, if so, the extent of the deposit relative to the project's area of potential effects. If an archaeological deposit is discovered, the archaeologist will prepare a site record and file it with the California Historical Resource Information System. (iv) If it is determined through step (iii), above, that the resource extends into the project's area of potential effects, the resource will be evaluated by a qualified archaeologist, who will determine whether it qualifies as a historical resource or a unique archaeological resource under the criteria of CEQA Guidelines § 15064.5. If the resource does not qualify, or if no resource is present within the project area of potential effects (APE), this will be noted in the environmental document and no further mitigation is required unless there is a discovery during construction (see (vi), below).				

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	(v) If a resource within the project APE is determined to qualify as an historical resource or a unique archaeological resource (as defined by CEQA), the campus shall consult with the qualified archaeologist to consider means of avoiding or reducing ground disturbance within the site boundaries, including minor modifications of building footprint, landscape modification, the placement of protective fill, the establishment of a preservation easement, or other means that will permit avoidance or substantial preservation in place of the resource. If avoidance or substantial preservation in place is not possible, the campus shall implement LRDP Mitigation 4.5-2(a). (vi) If a resource is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease. The campus shall contact a qualified archaeologist to provide and implement a plan for survey, subsurface investigation as needed to define the deposit, and assessment of the remainder of the site within the project area to determine whether the resource is significant and would be affected by the project. LRDP Mitigation 4.5-1(b), steps (iii) through (vii) shall be implemented. (vii) A written report of the results of investigations will be prepared by a qualified archaeologist and filed with the appropriate Information Center of the California Historical Resources Information System.				
	2003 LRDP Mitigation Measure 4.5-2(a) For an archaeological site that has been determined by a qualified archaeologist to qualify as an historical resource or a unique archaeological resource through the process set forth under LRDP Mitigation 4.5-1(b), and where it has been determined under LRDP Mitigation 4.5-1(b) that avoidance or preservation in place is not feasible, a qualified archaeologist, in consultation with the campus, shall: (i) Prepare a research design and archaeological data recovery plan for the recovery that will capture those categories of data for which the site is significant, and implement the data recovery plan prior to or during development of the site. (ii) Perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for the permanent curation of recovered materials. (iii) If, in the opinion of the qualified archaeologist and in light of the data available, the significance of the site is such that data recovery cannot capture the values that qualify the site for inclusion on the CRHR, the campus shall reconsider project plans in light of the high value of the resource, and implement more substantial modifications to the proposed project that would allow the site to be preserved intact, such as project redesign, placement of fill, or project relocation or abandonment. If no such measures are feasible, the campus shall implement LRDP Mitigation 4.5 3.	A surface survey shall be conducted by a qualified archaeologist. If resources are discovered, archaeologist shall prepare/implement monitoring plan.	DE	During project design, prior to construction.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	2003 LRDP Mitigation Measure 4.5-3 If a significant historic resource or unique archaeological resource cannot be preserved intact, before the property is damaged or destroyed the campus shall ensure that the resource is appropriately documented, as follows. (i) For a built environment feature, appropriate documentation is described under LRDP 4.5-2 (b) (iii). (ii) For an archaeological site, a program of research-directed data recovery shall be conducted and reported consistent with LRDP Mitigation 4.5-2(a).	Coordination by UC Davis with a qualified archaeologist regarding appropriate treatment methods that will be incorporated into project design and construction.	DE	During project design, prior to construction.	UC Davis Campus Planning and Environmental Stewardship
	2018 LRDP Mitigation Measure 3.4-1a: Identify and protect unknown archaeological resources. During project-specific environmental review of development under the 2018 LRDP, the campus shall define each project's area of effect for archaeological resources. The campus shall determine the potential for the project to result in cultural resource impacts, based on the extent of ground disturbance and site modification anticipated for the proposed project. The campus shall determine the level of archaeological investigation that is appropriate for the project site and activity, as follows: • Minimum: excavation less than 18 inches deep and less than 1,000 sf of disturbance (e.g., a trench for lawn irrigation, tree planting, etc.). Implement Mitigation Measure 3.4-1a(1). • Moderate: excavation below 18 inches deep and/or over a large area on any site that has not been characterized as sensitive and is not suspected to be a likely location for archaeological resources. Implement Mitigation Measure 3.4-1a(1) and (2). • Intensive: excavation below 18 inches and/or over a large area on any site that is within the zone of archaeological sensitivity identified in Exhibit 3.4-1, or that is adjacent to a recorded archaeological site. Implement Mitigation Measure 3.4-1a(1), (2), and (3). UC Davis shall implement the following steps to identify and protect archaeological resources that may be present in the project's area of effects: 1) For project sites at all levels of investigation, contractor crews shall be required to attend a training session prior to the start of earth moving, regarding how to recognize archaeological sites and artifacts and what steps shall be taken to avoid impacts to those sites and artifacts. In addition, campus employees whose work routinely involves disturbing the soil shall be informed how to recognize evidence of potential archaeological sites and artifacts. Prior to disturbing the soil, contractors shall be notified that they are required to watch for potential archaeological sites and artifacts and to notify the UC Davis Office of Campus Planning and Environmental Stewardship if any are found. In the event of a find, the campus shall implement item (5), below.	Define area of potential effects. Determine appropriate level of archaeological investigation. Include specified avoidance and control measures in construction specifications. Contractors and employees shall be notified when they are required to watch for potential archaeological sites and attend a training session to be provided by a qualified archaeologist.	DE	During project design, prior to construction.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	2) For project sites requiring a moderate or intensive level of investigation, a surface survey shall be conducted by a qualified archaeologist once the area of ground disturbance has been identified and prior to soil disturbing activities. For sites requiring moderate investigation, in the event of a surface find, intensive investigation will be implemented, as per item (3), below. Irrespective of findings, the qualified archaeologist shall, in consultation with the UC Davis Office of Campus Planning and Environmental Stewardship, develop an archaeological monitoring plan to be implemented during the construction phase of the project. If the project site is located within the zone of archaeological sensitivity or it is recommended by the archaeologists, the campus shall notify the appropriate Native American tribe and extend an invitation for monitoring. The frequency and duration of monitoring shall be adjusted in accordance with survey results, the nature of construction activities, and results during the monitoring period. A written report of the results of the monitoring will be prepared and filed with the appropriate Information Center of the California Historical Resources Information System. In the event of a discovery, the campus shall implement item (5), below.	A surface survey shall be conducted by a qualified archaeologist. If resources are discovered, archaeologist shall prepare/implement monitoring plan.	DE	During project design, prior to construction.	UC Davis Campus Planning and Environmental Stewardship
	3) For project sites requiring intensive investigation, irrespective of surface finds, the campus shall retain a qualified archaeologist to conduct a subsurface investigation of the project site, to ascertain whether buried archaeological materials are present and, if so, the extent of the deposit relative to the project's area of effects. If an archaeological deposit is discovered, the archaeologist will prepare a site record and a written report of the results of investigations and filed with the appropriate Information Center of the California Historical Resources Information System. If it is determined that the resource extends into the project's area of effects, the resource will be evaluated by a qualified archaeologist, who will determine whether it qualifies as a historical resource or a unique archaeological resource under the criteria of CEQA Guidelines § 15064.5. If the resource does not qualify, or if no resource is present within the project's area of effects, this will be noted in the environmental document and no further mitigation is required unless there is a discovery during construction. In the event of a discovery item (5), below shall be implemented.	A qualified archaeologist shall conduct a subsurface investigation for projects needing intensive investigation. If resources are encountered, archaeologist shall file site record/report.	DE	During project design, prior to construction.	UC Davis Campus Planning and Environmental Stewardship
	4) If archaeological material within the project's area of effects is determined to qualify as an historical resource or a unique archaeological resource (as defined by CEQA), the UC Davis Office of Campus Planning and Environmental Stewardship shall consult with the qualified archaeologist to consider means of avoiding or reducing ground disturbance within the site boundaries, including minor modifications of building footprint, landscape modification, the placement of protective fill, the establishment of a preservation easement, or other means that will permit avoidance	Coordination by UC Davis with a qualified archaeologist regarding appropriate treatment methods that will be incorporated into project design and construction.	DE	During project design, prior to construction.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	or substantial preservation in place of the resource. If avoidance or substantial preservation in place is not possible, the campus shall implement Mitigation Measure 3.4-1b.				
	5) If archaeological material is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease. The UC Davis Office of Campus Planning and Environmental Stewardship shall contact a qualified archaeologist to provide and implement a plan for survey, subsurface investigation as needed to define the deposit, and assessment of the remainder of the site within the project area to determine whether the resource is significant and would be affected by the project. Mitigation Measure 3.4-1a, steps (3) and (4) shall be implemented.	If archaeological material is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease.	CO	During construction activities.	UC Davis Campus Planning and Environmental Stewardship
	2018 LRDP Mitigation Measure 3.4-1b: Protect known unique archaeological resources. For an archaeological site that has been determined by a qualified archaeologist to qualify as a unique archaeological resource through the process set forth under Mitigation Measure 3.4-1a, and where it has been determined under Mitigation Measure 3.4-1a that avoidance or preservation in place is not feasible, a qualified archaeologist, in consultation with the UC Davis Office of Campus Planning and Environmental Stewardship, and Native American tribes as applicable, shall: 1) Prepare a research design and archaeological data recovery plan for the recovery that will capture those categories of data for which the site is significant, and implement the data recovery plan prior to or during development of the site. 2) Perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for the permanent curation of recovered materials. 3) If, in the opinion of the qualified archaeologist and in light of the data available, the significance of the site is such that data recovery cannot capture the values that qualify the site for inclusion on the CRHR, the UC Davis Office of Campus Planning and Environmental Stewardship shall reconsider project plans in light of the high value of the resource, and implement more substantial modifications to the proposed project that would allow the site to be preserved intact, such as project redesign, placement of fill, or project relocation or abandonment. If no such measures are feasible, the campus shall implement Mitigation Measure 3.4-1c.	Retain qualified archaeologist who shall perform work as specified.	SS DE	During site selection and/or project design.	UC Davis Campus Planning and Environmental Stewardship
	2018 LRDP Mitigation Measure 3.4-1c: Document unique archaeological resources. If a significant unique archaeological resource cannot be preserved intact, before the property is damaged or destroyed, the UC Davis Office of Campus Planning and Environmental Stewardship shall ensure that the resource is appropriately documented. For	Define area of potential effects. Retain qualified archaeologist who shall	SS DE	During site selection and/or project design.	UC Davis Campus Planning and Environmental Stewardship

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	an archaeological site, a program of research-directed data recovery shall be conducted and reported, consistent with Mitigation Measure 3.4-1a.	perform work as specified.			
7.5d Disturb any human remains, including those interred outside of formal cemeteries?	**2003 LRDP Mitigation Measure 4.5-4(a)** Implement LRDP Mitigation 4.5-1, 4.5-2 and 4.5-3 to minimize the potential for disturbance or destruction of human remains in an archaeological context and to preserve them in place, if feasible. **2003 LRDP 4.5-4(b)** Provide a representative of the local Native American community an opportunity to monitor any excavation (including archaeological excavation) within the boundaries of a known Native American archaeological site. **2003 LRDP 4.5-4(c)** In the event of a discovery on campus of human bone, suspected human bone, or a burial, all excavation in the vicinity will halt immediately and the area of the find will be protected until a qualified archaeologist determines whether the bone is human. If the qualified archaeologist determines the bone is human, or if a qualified archaeologist is not present, the campus will notify the Yolo or Solano County Coroner (depending on the county of the find) of the find before additional disturbance occurs. Consistent with California Health and Safety Code § 7050.5(b), which prohibits disturbance of human remains uncovered by excavation until the Coroner has made a finding relative to PRC 5097 procedures, the campus will ensure that the remains and vicinity of the find are protected against further disturbance. If it is determined that the find is of Native American origin, the campus will comply with the provisions of PRC § 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD). **2003 LRDP 4.5-4(d)** If human remains cannot be left in place, the campus shall ensure that the qualified archaeologist and the MLD are provided opportunity to confer on archaeological treatment of human remains, and that appropriate studies, as identified through this consultation, are carried out prior to reinternment. The campus shall provide results of all such studies to the local Native American community, and shall provide an opportunity of local Native American involvement in any interpretative reporting. As stipulated by the provisions of the California Native American Graves Protection and Repatriation Act, the campus shall ensure that human remains and associated artifacts recovered from campus projects on state lands are repatriated to the appropriate local tribal group if requested.	Define area of potential effects. Retain qualified archaeologist who shall perform work as specified.	SS DE	During site selection and/or project design.	UC Davis Campus Planning and Environmental Stewardship
7.6 Geology, Soils, and Seismicity					
7.6b Result in substantial soil erosion or the loss of topsoil?	**2018 LRDP Mitigation Measure 3.7-4: Manage stormwater flows to reduce soil erosion.** Prior to approval of individual projects proposed under the 2018 LRDP, UC Davis shall conduct a drainage study in the vicinity of the site proposed for development to determine if the development could produce additional runoff that may exceed the capacity of campus stormwater infrastructure, cause localized ponding to worsen, or	Prepare drainage study and document findings. If runoff would exceed capacity of existing campus storm drainage system, implement	DE	During project design and prior to project approval.	UC Davis Design and Construction Management; UC Davis Campus Planning and

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	increase the potential for property damage from flooding. Recommendations identified in the drainage study shall be incorporated into project design such that any projected increase in surface water runoff is detained/retained in accordance with applicable requirements and does not exceed current flow rates. Measures may include, but are not limited to, installation of detention/retention basins to capture and manage water, installation of water-retaining landscaping or green-roof features, modifications to existing stormwater capture/conveyance systems, and/or other measures at project-level or campus-wide to capture and manage stormwater.	necessary and feasible improvements.			Environmental Stewardship
7.7 Greenhouse Gas Emissions and Climate Change					
Project Specific Impact 7.7-1	**VMC Vision Project Specific Mitigation Measure 7.7-1. Incorporate design features to reduce operational GHG emissions** The University shall incorporate mitigation measures into the project to reduce operational emissions of GHGs to zero, if feasible. Such measures may include the following: **Energy** • Reduce on-site electricity use by 50 percent through use of on-site renewable energy (e.g., solar photovoltaic panels) where possible. Building design, landscape plans, and solar installation shall take into account solar orientation to maximize solar exposure. • Install roofing materials with a minimum aged or Solar Reflective Index equal to 25. Area Sources. • Provide electrical outlets on the exterior of project buildings to allow sufficient power of electric landscaping equipment. **Water Conservation** • Install a recycled water irrigation system for all on-site irrigation demand. **Transportation** • Install 6 electric vehicle charging spaces (at least 10 percent of the project-generated demand for 57 parking spaces) consistent with the Tier 1 standards identified in Table A5.106.5.3.1 of the 2016 Title 24 CALGreen Code. • Provide 6 designated parking spaces for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles (at least 10 percent of the project-generated demand for 57 parking spaces) consistent with the Tier 1 standards identified in Table A5.106.5.1.1 of the 2016 Title 24 CALGreen Code.	Review project plans and design for design features that reduce operational GHG emissions. Construct project features that reduce operational GHG emissions.	DE OC	Prior to final design approval Prior to project occupancy	Design Review Committee, Resource Management and Planning Architects & Engineers
7.7a Generate greenhouse gas emissions, either directly or indirectly, that may have a	**VMC Vision Project Specific Mitigation Measure 7.7-2. Purchase Carbon Offsets** YSAQMD does not provide recommendations for prioritizing project mitigation; therefore, guidance from SCAQMD is being used. SCAQMD recommends that mitigation be considered in the following prioritized manner: 1) project design features/on-site reduction measures; 2)	Demonstrate purchase of GHG credits (carbon offsets) in an approved registry to mitigate the remaining GHG	OC	Prior to final building permits	Resource Management and Planning

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
significant impact on the environment?	off-site within neighborhood; 3) off-site within district; 4) off-site within state; 5) and off-site out of state. As such, UC Davis shall prioritize the implementation of on-site measures specified by Mitigation Measure 7.7-1 (SCAQMD 2008). Implementation of the measures identified under Mitigation Measure 7.7-1 would reduce GHG emissions, but not to an extent that the no net increase threshold is met. The CEQA Guidelines recommend several options for mitigating GHG emissions. Section 15126.4(C)(3) of the Guidelines states that measures to mitigate the significant effects if GHG emissions may include "off-site measures, including offsets that are not otherwise required…" Through the purchase of GHG credits through voluntary participation in an approved registry, GHG emissions may be reduced at the project level. Prior to issuing building permits for development within the project site, the University shall confirm that the project's remaining (i.e., post implementation of Mitigation Measure 7.7-1) construction and operational GHG emissions over a 30-year project life be offsetting through the implementation of Mitigation Measure 7.7-2, described in detail below. This measure is inherently scalable based on the volume of offsets. Further, consistent with statewide goals of reducing GHGs, offset programs should be prioritized by location (i.e., in state). As such, the University shall invest in on-campus programs to reduce GHG emissions from energy consumption (e.g., the University's Energy Efficiency Program) to offset project-related emissions to the extent feasible. If, after feasible local investments have been exhausted, project-related GHG emissions remain, the University shall purchase additional carbon offsets, giving priority to carbon offset projects occurring within the state. It should also be noted that purchases of offsets would occur once and remain effective throughout the lifetime of the project, which, consistent with SCAMQD guidance, is assumed to be 30 years (SCAQMD 2008). In order for an offset to be considerable viable, it must exhibit "permanence." To adequately reduce emissions of GHGs, carbon offsets must be able to demonstrate the ability to counterbalance GHG emissions over the lifespan of a project or "in perpetuity" (The Nature Conservancy 2016). For example, the purchase of a carbon offset generated by a reforestation project would entail the replanting or maintenance of carbon sequestering trees, which would continue to sequester carbon over several years, decades, or centuries (Forest Trends 2015). As such, carbon offsets purchased to reduce project-related emissions should demonstrate a lifespan of at least 30 years (i.e., the life of the project). Compliance with Mitigation Measure 7.7-2 shall be demonstrated prior to obtaining building permits, and shall follow the preferred geographic hierarchy recommended by SCAQMD. Prior to commencing construction, the University shall purchase carbon offsets to mitigate the remaining GHG emissions following implementation of on-site mitigation as described under Mitigation Measure 7.7-1.	emissions following implementation of on-site mitigation as described under Mitigation Measure 7.7-1.			

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
7.7b Conflict with an applicable plan, policy, or regulation adopted for the purpose or reducing the emissions of greenhouse gases?	**VMC Vision Project Specific Mitigation Measures 7.7-1 and 7.7-2.** The project applicant shall implement Mitigation Measures 7.7-1 and 7.7-2 to the extent that GHG emissions are reduced by 1,467 MT CO2e per year.	See 7.7-1 and 7.7-1, above	OC	See 7.7-1 and 7.7-1, above	See 7.7-1 and 7.7-1, above
7.8 Hazards and Hazardous Materials					
7.8a Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? **7.8b 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?**	**2003 LRDP Mitigation Measure 4.7-1** The campus shall continue to implement the same (or equivalent) safety plans, programs, practices, and procedures related to the use, storage, and disposal of hazardous chemical materials during the 2003 LRDP planning horizon, including, but not necessarily limited to, the Business Plan, Hazardous Materials Communication Program, Chemical Inventory System, CUPA Self-Audit program, Injury and Illness Prevention Program, Chemical Hygiene Plans, Medical Surveillance Program, Chemical Safety Advisory Committee, Chemical Carcinogen Safety Program, and EH&S audits and safety training. These programs may be replaced by other programs that incorporate similar health and safety measures. **2003 LRDP Mitigation Measure 4.7-2(a)** Implement LRDP Mitigation 4.7-1 **2003 LRDP Mitigation Measure 4.7-2(b)** The campus shall continue to implement the same (or equivalent) hazardous waste management programs during the 2003 LRDP planning horizon, including, but not necessarily limited to, hazardous waste storage and handling procedures, the waste minimization program, the pretreatment program, and the Waste Exclusion Program. These programs may be subject to modification as more stringent standards are developed or if the programs become obsolete through replacement by other programs that incorporate similar health and safety protection measures. **2003 LRDP Mitigation Measure 4.7-3(a)** Implement LRDP Mitigation 4.7-1 **2003 LRDP Mitigation Measure 4.7-3(b)** The campus shall continue to implement the same (or equivalent) Health Physics Program during the 2003 LRDP planning horizon. This program may be subject to modification as more stringent standards are developed or if the program becomes obsolete through replacement by other programs that incorporate similar health and safety protection measures. **2003 LRDP Mitigation Measure 4.7-4(a)** Implement LRDP Mitigation 4.7-1 **2003 LRDP Mitigation Measure 4.7-4(b)** Implement LRDP Mitigation 4.7-3(b) **2003 LRDP Mitigation Measure 4.7-4(c)** The campus shall continue to implement measures to reduce the generation of radioactive waste, including the requirement that employees working with radioactive materials be trained in radioactive waste minimization, EH&S online information about radioactive waste minimization, and exploration of waste minimization techniques by EH&S staff. **2003 LRDP Mitigation Measure 4.7-5(a)** Implement LRDP Mitigation 4.7-1	Prepare hazardous materials safety plan. Conduct survey and document findings. Conduct remediation activities as necessary.	DE	During project siting or planning phase. Remediation prior to ground-disturbing construction.	UC Davis Campus Planning and Environmental Stewardship; UC Davis Safety Services

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	2003 LRDP Mitigation Measure 4.7-5(b) The campus shall continue to implement the same (or equivalent) Biosafety Program during the 2003 LRDP planning horizon. This program may be subject to modification as more stringent standards are developed or if the program becomes obsolete through replacement by other programs that incorporate similar health and safety protection measures. **2003 LRDP Mitigation Measure 4.7-6(a)** Implement LRDP Mitigation 4.7-1 **2003 LRDP Mitigation Measure 4.7-6(b)** Implement LRDP Mitigation 4.7-5(b) **2003 LRDP Mitigation Measure 4.7-7(a)** Implement LRDP Mitigation 4.7-1 **2003 LRDP Mitigation Measure 4.7-7(b)** Implement LRDP Mitigation 4.7-5(b) **2003 LRDP Mitigation Measure 4.7-7(c)** The campus shall continue to implement the same (or equivalent) programs related to laboratory animal use during the 2003 LRDP planning horizon, including, but not necessarily limited to, inspections of animal facilities and study areas by the Campus Veterinarian, requiring investigators to prepare Animal Use and Care Protocols, review of Animal Use and Care Protocols by the AUCAAC and EH&S, employee training in animal handling, and the campus animal health program. These programs may be subject to modification as more stringent standards are developed or if the programs become obsolete through replacement by other programs that incorporate similar health and safety protection measures. **2003 LRDP Mitigation Measure 4.7-8** The campus shall continue to require that packaging of chemicals to be transported on public roads conform with all legal requirements. **2003 LRDP Mitigation Measure 4.7-9** Implement LRDP Mitigations 4.7-1 through 4.7-8 **2003 LRDP Mitigation Measure 4.7-12** The campus shall perform due diligence assessments of all sites where ground-disturbing construction is proposed. **2003 LRDP Mitigation Measure 4.7-13** The campus shall survey buildings for potential contamination before any demolition or renovation work is performed.				
	2018 LRDP Mitigation Measure 3.9-2a: Site-specific investigation and work plan implementation. Where initial investigations indicate the potential for contamination, UC Davis shall conduct soil sampling within the boundaries of the plan area prior to initiation of grading or other groundwork. This investigation will follow the American Society for Testing and Materials standards for preparation of a Phase II Environmental Site Assessment and/or other appropriate testing guidelines. If the results indicate that contamination exists at levels above regulatory action standards, then the site will be remediated in accordance with recommendations made by applicable regulatory agencies, including YCEHD, RWQCB, and DTSC. The agencies involved shall depend on the type and extent of contamination.	Conduct survey and document findings. Conduct remediation activities as necessary.	DE	During project siting or planning phase. Remediation prior to ground-disturbing construction.	UC Davis Campus Planning and Environmental Stewardship; UC Davis Safety Services

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	Based on the results and recommendations of the investigation described above, UC Davis shall prepare a work plan that identifies any necessary remediation activities, including excavation and removal of on-site contaminated soils, and redistribution of clean fill material within the plan area. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil removed from the site.				
	2018 LRDP Mitigation Measure 3.9-2b: Hazardous materials contingency plan. Prior to initiation of grading or other groundwork, UC Davis shall provide a hazardous materials contingency plan to Campus Safety Services and YCEHD, as appropriate. The plan will describe the necessary actions that would be taken if evidence of contaminated soil or groundwater is encountered during construction. The contingency plan shall identify conditions that could indicate potential hazardous materials contamination, including soil discoloration, petroleum or chemical odors, and presence of underground storage tanks or buried building material. If at any time during the course of construction, evidence of soil and/or groundwater contamination with hazardous material is encountered, UC Davis shall immediately halt construction and contact Campus Safety Services and YCEHD. Work shall not recommence until the discovery has been assessed/treated appropriately (through such mechanisms as soil or groundwater sampling and remediation if potentially hazardous materials are detected above threshold levels) to the satisfaction of YCEHD, RWQCB, and DTSC (as applicable). The plan, and obligations to abide by and implement the plan, shall be incorporated into the construction and contract specifications of the project.	Prepare hazardous materials contingency plan.	DE	During project design before project approval.	UC Davis Campus Planning and Environmental Stewardship; UC Davis Safety Services
		Monitor construction site, perform testing, and consult with Campus Safety Services and YCEHD, as necessary.	CO	Inspect construction site during earth moving activities.	UC Davis Campus Planning and Environmental Stewardship, UC Davis Safety Services
	2018 LRDP Mitigation Measure 3.9-2c: Minimization of hazards during demolition. Minimize potential for accidental release of hazardous materials during demolition. Prior to demolition of existing structures, UC Davis shall complete the following: 1) Locate and dispose of potentially hazardous materials in compliance with all applicable federal, state, and local laws. This shall include: 1) identify locations that could contain hazardous residues; 2) remove plumbing fixtures known to contain, or potentially containing, hazardous materials; 3) determine the waste classification of the debris; 4) package contaminated items and wastes; and 5) identify disposal site(s) permitted to accept such wastes. 2) Provide written documentation to the appropriate County (Yolo or Solano) department that asbestos testing and abatement, as appropriate, has occurred in compliance with applicable federal, state, and local laws. 3) Provide written documentation to the appropriate County (Yolo or Solano) department that lead-based paint testing and abatement, as appropriate, has been completed in	Monitor construction site, perform testing, and consult with Campus Safety Services and YCEHD, as necessary.	CO	Inspect construction site during demolition of existing structures.	UC Davis Campus Planning and Environmental Stewardship; UC Davis Safety Services

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	accordance with applicable state and local laws and regulations. Abatement shall include the removal of lead contaminated soil (considered soil with lead concentrations greater than 400 parts per million in areas where children are likely to be present). If lead-contaminated soil is to be removed, UC Davis shall submit a soil management plan to YCEHD.				
7.8g Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	**2003 LRDP Mitigation Measure 4.7-17** To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available due to construction-related road closures, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway, the campus shall provide appropriate signage indicating alternative routes. To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, the campus shall inform emergency services, including the UC Davis Police and Fire Departments, and American Medical Response, of the closures and alternative travel routes.	Develop and implement a traffic management plan. Inform UC Davis Police and Fire Departments, and American Medical Response.	DE CO	Prior to construction.	UC Davis Design and Construction Management; UC Davis Campus Planning and Environmental Stewardship
	2018 LRDP Mitigation Measure 3.9-6. Prepare and implement site-specific construction traffic management plans. UC Davis shall prepare and implement site-specific construction traffic management plans for any construction effort that would require work within existing roadways. To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways during construction activities. At any time only a single lane is available due to construction-related road closures, the campus shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway, the campus shall provide appropriate signage indicating alternative routes. To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, the campus shall inform emergency services, including the UC Davis Police Department, UC Davis Fire Department, and American Medical Response, of the closures and alternative travel routes.	Develop and implement a traffic management plan.	DE CO	Prior to construction.	UC Davis Design and Construction Management; UC Davis Campus Planning and Environmental Stewardship
7.9 Hydrology and Water Quality					
7.9a Violate any water quality standards or waste discharge requirements? **7.9f Otherwise substantially degrade water quality?**	**2003 LRDP Mitigation Measure 4.8-1** The campus shall continue to comply with the NPDES state-wide General Permit for Discharge of Stormwater Associated with Construction Activity by implementing control measures and BMPs required by project-specific SWPPPs and with the Phase II SWMP to eliminate or reduce non-storm and stormwater discharges to receiving waters.	Prepare and implement SWPPP. Comply with WDRs	DE CO OP	Prior to/during construction and during operations.	UC Davis Campus Planning and Environmental Stewardship

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	2003 LRDP Mitigation Measure 4.8-2 The campus shall comply with the measures in the Phase II SWMP to ensure that project design includes a combination of BMPs, or equally effective measures as they become available in the future, to minimize the contribution of pollutants to receiving waters. **2003 LRDP Mitigation Measure 4.8-4(a)** The campus shall continue to monitor and modify its pretreatment program, WWTP operation, and/or treatment processes as necessary to comply with WDRs. **2003 LRDP Mitigation Measure 4.8-4(b)** The campus shall implement a monitoring program specifically targeted at the following constituents: copper, cyanide, iron and nitrate + nitrite, and make appropriate modifications as necessary to the campus pretreatment program to avoid exceedance of permit limits for these constituents.				
7.9b 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)?	**2003 LRDP Mitigation Measure 4.8-5(a)** The campus shall continue to implement water conservation strategies to reduce demand for water from the deep aquifer. Domestic water conservation strategies shall include the following or equivalent measures: (i) Install water efficient shower heads and low-flow toilets that meet or exceed building code conservation requirements in all new campus buildings, and where feasible, retrofit existing buildings with these water efficient devices. (ii) Continue the leak detection and repair program. (iii) Continue converting existing single-pass cooling systems to cooling tower systems. (iv) Use water-conservative landscaping on the west and south campuses where domestic water is used for irrigation. (v) Replace domestic water irrigation systems on the west and south campuses with an alternate water source (shallow/intermediate or reclaimed water), where feasible. (vi) Install water meters at the proposed neighborhood to encourage residential water conservation. (vii) Identify and implement additional feasible water conservation strategies and programs including a water awareness program focused on water conservation. **2003 LRDP Mitigation Measure 4.8-5(b)** The campus shall continue hydrogeologic monitoring and evaluation efforts to determine the long-term production and quality trends of the deep aquifer. **2003 LRDP Mitigation Measure 4.8-5(c)** To the extent feasible, new water supply wells in the deep aquifer should be located on the west campus in sands and gravels that are not used by or available to the City of Davis for deep water extraction. **2003 LRDP Mitigation Measure 4.8-5(d)** If continued hydrogeologic monitoring and evaluation efforts identify constraints in the deep aquifer's ability to provide for the campus'	Implement water conservation strategies. Monitor groundwater.	DE CO OP	Prior to/during construction and during operations.	UC Davis Campus Planning and Environmental Stewardship

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	long-term water needs, the campus will treat shallow/intermediate aquifer and/or surface water from the Solano Project to serve domestic water demand. **2003 LRDP Mitigation Measure 4.8-6(a)** The campus shall continue to implement water conservation strategies to reduce demand for water from the intermediate aquifer. Utility water conservation strategies shall include the following or equivalent measures: (i) Landscape, where appropriate, with native, drought resistant plants and use lawns only where needed for pedestrian traffic, activity areas, and recreation. (ii) Install efficient irrigation systems including centrally controlled automatic irrigation systems and lowflow spray systems. (iii) Apply heavy applications of mulch to landscaped areas to reduce evaporation (iv) Use treated wastewater for landscape irrigation where feasible. **2003 LRDP Mitigation Measure 4.8-6(b)** The campus shall continue to monitor shallow/intermediate aquifer water elevations at existing campus wells to ascertain whether there is any long-term decline in water levels. **2003 LRDP Mitigation Measure 4.8-6(c)** The campus shall continue to participate in regional subsidence monitoring, including by installing an extensometer, to determine the vertical location of local subsidence. **2003 LRDP Mitigation Measure 4.8-6(d)** If shallow/intermediate aquifer monitoring or subsidence monitoring indicate that campus water use from the intermediate aquifer is contributing to a net deficit in aquifer volume and/or significant subsidence, the campus will reduce use of water from the aquifer by using surface water and/or treated wastewater effluent to irrigate campus recreation fields. **2003 LRDP Mitigation Measure 4.8-6(e)** The campus shall incorporate the following or equally effective measures into project designs under the 2003 LRDP where feasible, to increase percolation and infiltration of precipitation into the underlying shallow/intermediate aquifers: (i) Minimize paved surfaces. (ii) Use grassy swales, infiltration trenches, or grass filter strips to intercept stormwater runoff. (iii) Implement LRDP Mitigation 4.8-3(b), which specifies construction of detention and infiltration facilities in those areas that do not discharge stormwater to the Arboretum.				
7.9c Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner	**2003 LRDP Mitigation Measure 4.8-3(a)** Prior to approval of specific projects under the 2003 LRDP, the campus shall perform a drainage study to evaluate each specific development to determine whether project runoff would exceed the capacity of the existing storm drainage system, cause ponding to worsen, and/or increase the potential for property damage from flooding.	Perform a drainage study	DE CO	Prior to and during construction.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
which would result in substantial erosion or siltation on- or off-site? **7.9d Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?** **7.9e 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?**	**2003 LRDP Mitigation Measure 4.8-3(b)** If it is determined that existing drainage capacity would be exceeded, ponding could worsen, and/or risk of property damage from flooding could increase, the campus shall design and implement necessary and feasible improvements. Such improvements could include, but would not be limited to, the following: (i) The expansion or modification of the existing storm drainage system. (ii) Single-project detention or retention basins incorporated into project design with features including but not limited to: small onsite detention or retention basins; rooftop ponding; temporary flooding of parking areas, streets and gutters; landscaping designed to temporarily retain water; and gravel beds designed to collect and retain runoff. (iii) Multi-project stormwater detention or retention basins.				
7.9i Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	**2018 LRDP Mitigation Measure 3.10-6: Implement project-level stormwater controls.** Implement Mitigation Measure 3.7-4.	See 2018 LRDP Mitigation Measure 3.7-4	See 2018 LRDP Mitigation Measure 3.7-4	See 2018 LRDP Mitigation Measure 3.7-4	See 2018 LRDP Mitigation Measure 3.7-4
7.12 Noise					
7.12b Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? **7.12d A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**	**2003 LRDP Mitigation Measure 4.10-1** Prior to initiation of construction, the campus shall approve a construction noise mitigation program including but not limited to the following: • Construction equipment shall be properly outfitted and maintained with feasible noise-reduction devices to minimize construction-generated noise. • Stationary noise sources such as generators or pumps shall be located 100 feet away from noise-sensitive land uses as feasible. • Laydown and construction vehicle staging areas shall be located 100 feet away from noise-sensitive land uses as feasible. • Whenever possible, academic, administrative, and residential areas that will be subject to construction noise shall be informed a week before the start of each construction project.	Include measures in contract specifications. Inspect construction site to verify that measures are being implemented.	CO	During construction.	UC Davis Design and Construction Management; UC Davis Campus Planning and Environmental Stewardship

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	• Loud construction activity (i.e., construction activity such as jackhammering, concrete sawing, asphalt removal, and large-scale grading operations) within 100 feet of a residential or academic building shall not be scheduled during finals week. • Loud construction activity as described above within 100 feet of an academic or residential use shall, to the extent feasible, be scheduled during holidays, Thanksgiving breaks, Christmas break, Spring break, or Summer break. • Loud construction activity within 100 feet of a residential or academic building shall be restricted to occur between 7:30 AM and 7:30 PM.				
	2018 LRDP Mitigation Measure 3.12-1: Reduce construction noise. For all construction activities, UC Davis shall implement or incorporate the following noise reduction measures into construction specifications for contractor(s) implementation during project construction: 1) Construction activity shall be limited to the daytime hours between 7:00 a.m. and 7:00 p.m. on weekdays and between 8:00 a.m. and 8:00 p.m. on weekends and holidays, where possible. 2) All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses, and/or located to the extent feasible such that existing or constructed noise attenuating features (e.g., temporary noise wall or blankets) block line-of-site between affected noise-sensitive land uses and construction staging areas. 3) All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation. 4) Individual operations and techniques shall be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete off-site instead of on-site) where feasible and consistent with building codes and other applicable laws and regulations. 5) Stationary noise sources such as generators or pumps shall be located 100 feet away or more from noise-sensitive land uses, as feasible. 6) Loud construction activity (i.e., construction activity such as jackhammering, concrete sawing, asphalt removal, and large-scale grading operations) shall not be scheduled during finals week and preferably during holidays, summer/winter break, Thanksgiving break, and spring break.	Include measures in contract specifications. Inspect construction site to verify that measures are being implemented.	CO	During construction.	UC Davis Design and Construction Management; UC Davis Campus Planning and Environmental Stewardship

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	7) No less than one week prior to the start of construction activities at a particular location, notification shall be provided to academic, administrative, and residential uses located within 100 feet of the construction site. 8) When construction would occur within 100 feet of sensitive receptors and may result in temporary noise levels in excess of 86 dBA L_{max} at the exterior of the adjacent receptor, temporary noise barriers (e.g., noise-insulating blankets or temporary plywood structures) shall be erected that reduce construction-related noise levels to less than 86 dBA L_{max} at the receptor. 9) For any construction activity that must extend beyond the daytime hours of 7:00 a.m. and 7:00 p.m. on weekdays and between 8:00 a.m. and 8:00 p.m. on weekends and occur within 1,120 feet of a building where people sleep, UC Davis shall ensure that interior noise levels of 45 dBA L_{max} are not exceeded at any receiving land use by not exceeding 70 dBA L_{max} at the receiving land use property line. Typical residential structures with windows closed achieve a 25-30 dBA exterior-to-interior noise reduction (Caltrans 2002). Thus, using the lower end of this range, an exterior noise level of 70 dBA L_{max} would ensure interior noise levels do not result in an increased risk for sleep disturbance. To achieve this performance standard, the following measures shall be implemented: a) Use of noise-reducing enclosures and techniques around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors). b) Installation of temporary noise curtains installed as close as possible to the boundary of the construction site within the direct line of sight path of the nearby sensitive receptor(s) and consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot. c) Retain a qualified noise specialist to conduct noise monitoring to ensure that noise reduction measures are achieved the necessary reductions such that levels at the receiving land uses do not exceed exterior noise levels of 70 dBA L_{max}. Exceedances of noise standards shall result in immediate halt of construction until additional noise-reduction measures are implemented.				
7.16 Transportation and Circulation					
7.16a Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking	**2003 LRDP Mitigation Measure 4.14-1(a)** UC Davis shall continue to actively pursue Transportation Demand Management strategies to reduce vehicle-trips to and from campus. **2003 LRDP Mitigation Measure 4.14-1(b)** UC Davis shall continue to monitor AM and PM peak hour traffic operations at critical intersections and roadways on campus.				

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? 7.16b Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways?	**2003 LRDP Mitigation Measure 4.14-1(c)** UC Davis shall review individual projects proposed under the 2003 LRDP as they advance through the environmental clearance phase of development to determine if intersection or roadway improvements are needed with the additional traffic generated by the proposed project. If intersection operations are found to degrade to unacceptable levels, UC Davis shall construct physical improvements such as adding traffic signals or roundabouts at affected study intersections. **2003 LRDP Mitigation Measure 4.14-2(a)** UC Davis shall continue to actively pursue Transportation Demand Management strategies to reduce vehicle-trips to and from campus. **2003 LRDP Mitigation Measure 4.14-2(b)** UC Davis shall continue to monitor AM and PM peak hour traffic operations at critical intersections and roadways in the campus vicinity at least every three years to identify locations operating below UC Davis, City of Davis, Yolo County, Solano County, or Caltrans LOS thresholds and to identify improvements to restore operations to an acceptable level. **2003 LRDP Mitigation Measure 4.14-2(c)** UC Davis shall review individual projects proposed under the 2003 LRDP as they advance through the environmental clearance phase of development to determine if intersection or roadway improvements are needed with the additional traffic generated by the proposed project. If intersection operations are found to degrade to unacceptable levels, UC Davis shall contribute its fair share towards roadway improvements at affected study intersections.				
	2018 LRDP Mitigation Measure 3.16-1: Implement TDM strategies to reduce peak hour vehicle trips on I-80. UC Davis shall use the 2016-2017 academic year as the baseline by which to determine 2018 LRDP-related growth in peak hour student and employee commute vehicle trips on I-80. During the 2018-2019 academic year and every two years thereafter, UC Davis shall determine the number of peak hour student and employee commute vehicle trips that utilize I-80. In instances where this figure exceeds baseline levels, UC Davis shall institute TDM strategies to reduce campus-related peak hour vehicle trips on I-80. This figure could be estimated from the results of the annual Campus Travel Survey administered by the UC Davis Institute of Transportation Studies. The implementation of TDM strategies shall reduce peak hour student and employee commute vehicle trips on I-80 equal to or below baseline levels. TDM strategies that would reduce peak hour vehicle trips on I-80 include strategies to reduce commute and business vehicle trips to and from campus using I-80. Specific potential TDM strategies include, but are not limited to, the following: • expand public transit service, including additional regional service for UC Davis students and employees living off-campus and outside of Davis,	Document implementation of campus TDM strategies and progress. Detail any needed improvements to program.	OP	At least every three years.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	• support alternative congestion management policies/projects on I-80, including a toll for all vehicles utilizing I-80 across the Yolo Causeway, • implement a fair value commuting program, where fees charged to SOV commuters (e.g., through parking pricing) are tied to UC Davis vehicle trip reduction targets and fee revenue is rebated to non-SOV commuters, or other pricing of vehicle travel and parking, • provide carpool and/or vanpool incentive programs, • allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours, and • offer remote working options. The TDM strategies implemented to reduce peak hour vehicle trips on I-80 will be consistent with existing and planned TDM programs on campus, including the UC Davis TDM Plan currently in development. If these TDM strategies are not sufficient to reduce peak hour trips to baseline levels, additional TDM measures or adjustments to the measures above shall be implemented, as needed to reduce peak hour trips to baseline levels.				
	2018 LRDP Mitigation Measure 3.16-2a: Implement TDM strategies to reduce peak hour vehicle delay at the Hutchison Drive/SR 113 NB Ramps intersection. During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions at the Hutchison Drive/SR 113 NB Ramps intersection. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions at the Hutchison Drive/SR 113 NB Ramps intersection for individual development projects proposed under the 2018 LRDP that are expected to affect operations at the intersection. When operations at the Hutchison Drive/SR 113 NB Ramps intersection are found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay, or when a project-level analysis indicates the same, UC Davis shall institute TDM strategies to reduce peak hour vehicle trips and, in turn, vehicle delay at the Hutchison Drive/SR 113 NB Ramps intersection. The implementation of TDM strategies shall reduce peak hour average intersection delay caused by the 2018 LRDP to acceptable levels in accordance with the intersection level of service significance criteria, including the level of service thresholds established by Caltrans or the Yolo County CMP. Since the 2018 LRDP would cause intersection operations at Hutchison Drive/SR 113 NB Ramps to degrade from an acceptable LOS to an unacceptable LOS, TDM strategies would be required to reduce peak hour intersection delay to an acceptable LOS. According to the Yolo County CMP, LOS E or better, or 50	Document implementation of campus TDM strategies and progress as it relates to the intersection of Hutchison Drive/SR 133. Detail any needed improvements to program.	OP	Annually.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	seconds or less, is acceptable for the Hutchison Drive/SR 113 NB Ramps stop-controlled intersection. The growth at West Village accounts for most of the increase (approximately 280 trips) in the stop-controlled northbound left-turn volume during the p.m. peak hour between 2030 no project and 2030 plus 2018 LRDP conditions. This movement is largely responsible for the high intersection delays. These trips tend to be longer distance commute trips using SR 113 and I-80. As such, TDM strategies that would reduce peak hour intersection delay at this location include strategies to reduce commute and business vehicle trips utilizing the Hutchison Drive/SR 113 interchange as well as strategies to reduce peak hour vehicle trip use of Hutchison Drive between the central campus and west campus. Specific potential TDM strategies include, but are not limited to, the following: • expand public transit service, including additional service connecting West Village and the central campus, • shift UC Davis service vehicles to use the Garrod Drive overcrossing of SR 113, • promote bicycle use between West Village and the central campus, • implement a fair value commuting program or other pricing of vehicle travel and parking, • provide carpool and/or vanpool incentive programs, • allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours, and • offer remote working options. The TDM strategies implemented to reduce peak hour intersection delay at this location will be consistent with existing and planned TDM programs on campus, including the UC Davis TDM Plan currently in development. If these TDM strategies are not sufficient to reduce peak hour intersection delay consistent with the significance criteria, additional TDM measures or adjustments to the measures above shall be implemented, as needed to reduce peak hour intersection delay consistent with the significance criteria.				
	2018 LRDP Mitigation Measure 3.16-2b: Modify SR 113/Hutchison Drive interchange. During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions at the SR 113/Hutchison Drive interchange. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions at the SR 113/Hutchison Drive interchange for individual development projects proposed under the 2018 LRDP that are expected to affect operations at the interchange. When operations at the SR 113/Hutchison Drive ramp terminal intersections are found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay criteria, or	Construct necessary intersection improvements. Monitor projects for impact that would cause operations to fall below the intersection level of service significance threshold.	OC	Prior to project occupancy when project would cause operations to fall below the intersection level of service significance threshold.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	when a project-level analysis indicates the same, the SR 113/Hutchison Drive interchange shall be modified to increase the capacity of the ramp terminal intersections and to modify uncontrolled turning movements that conflict with bicycle and pedestrian movements as specified in WVE Mitigation Measure 3.16-4a. Potential modifications include ramp widening and alignment changes plus the addition of ramp approach turn lanes, traffic signals, or roundabouts. Both ramp terminal intersections meet peak hour signal warrants with the project. Implementation of signals alone would be sufficient to provide acceptable peak hour traffic operations. Since the interchange is owned and operated by Caltrans, any improvements will be subject to Caltrans review, project development procedures, and approval.				
	2018 LRDP Mitigation Measure 3.16-2c: Implement TDM strategies to reduce peak hour vehicle delay at the First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections. The First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections and the adjacent intersections are part of the downtown grid street system. This network is limited in terms of physical modification or expansion due to right-of-way constraints. As such, reducing vehicle delays for these intersections will require UC Davis to implement its TDM program to reduce vehicle travel to and from campus. During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions at the First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions at the First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections for individual development projects proposed under the 2018 LRDP that are expected to affect operations at the intersection. When operations at the First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections are found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay, or when a project-level analysis indicates the same, UC Davis shall institute TDM strategies to reduce peak hour vehicle trips and, in turn, vehicle delay at the First Street/D Street and Russell Boulevard/Fifth Street intersections. The implementation of TDM strategies shall reduce peak hour average intersection delay caused by the 2018 LRDP to acceptable levels in accordance with the intersection level of service significance criteria, including the level of service thresholds established by the City of Davis. Since the 2018 LRDP would cause intersection operations at First Street/D Street and Russell Boulevard/Fifth Street/B Street to degrade from an acceptable LOS to an unacceptable LOS, TDM strategies would be required to reduce peak hour intersection delay to an acceptable LOS.	Document implementation of campus TDM strategies and progress as it relates to First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections. Detail any needed improvements to program.	OP	At least every three years.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	According to the City of Davis General Plan, LOS E or better, or 80 seconds or less, is acceptable for the First Street/D Street and Russell Boulevard/Fifth Street signalized intersections. TDM strategies that would reduce peak hour intersection delay at these locations include strategies to reduce vehicle travel to and from campus. Specific potential TDM strategies include, but are not limited to, the following: • promote walking and bicycling for student and employee trips between UC Davis, City of Davis residential neighborhoods, and Downtown Davis, • shift the timing of service vehicles and/or deliveries from peak periods, • expand public transit service, including additional service connecting UC Davis and City of Davis residential neighborhoods, • implement a fair value commuting program or other pricing of vehicle travel and parking, • provide carpool and/or vanpool incentive programs, • allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours, and • offer remote working options. The TDM strategies implemented to reduce peak hour intersection delay at this location will be consistent with existing and planned TDM programs on campus, including the UC Davis TDM Plan currently in development. If these TDM strategies are not sufficient to reduce peak hour intersection delay consistent with the significance criteria, additional TDM measures or adjustments to the measures above shall be implemented, as needed to reduce peak hour intersection delay consistent with the significance criteria.				
	2018 LRDP Mitigation Measure 3.16-2d: Implement TDM strategies to reduce peak hour vehicle delay at study intersections on the Old Davis Road corridor. During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions at the Old Davis Road corridor study intersections between and inclusive of the Old Davis Road/I-80 EB Ramps and First Street/A Street intersections. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions at the Old Davis Road corridor study intersections between and inclusive of the Old Davis Road/I-80 EB Ramps and First Street/A Street intersections for individual development projects proposed under the 2018 LRDP that are expected to affect operations at the intersections. When operations at the Old Davis Road corridor study intersections between and inclusive of the Old Davis Road/I-80 EB Ramps and First Street/A Street	Document implementation of campus TDM strategies and progress as it relates to Old Davis Road between I-80 and First Street. Detail any needed improvements to program.	OP	At least every three years.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	intersections are found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay, or when a project-level analysis indicates the same, UC Davis shall institute TDM strategies to reduce peak hour vehicle trips and, in turn, vehicle delay at study intersections located on the segment of Old Davis Road between I-80 and First Street. The implementation of TDM strategies shall reduce peak hour average intersection delay caused by the 2018 LRDP to acceptable levels in accordance with the intersection level of service significance criteria, including the level of service thresholds established by UC Davis, the City of Davis, and Caltrans. Every study intersection along this segment of Old Davis Road would operate at LOS F conditions during the p.m. peak hour both with and without the 2018 LRDP. Moreover, the 2018 LRDP would increase delay in excess of 10 percent at each study intersection along the Old Davis Road corridor. Therefore, for each Old Davis Road corridor study intersection between and inclusive of the Old Davis Road/I-80 EB Ramps and First Street/A Street intersections, UC Davis shall implement TDM strategies to reduce the 2018 LRDP's contribution to LOS F conditions until the incremental increase in peak hour intersection volume or delay caused by the 2018 LRDP does not exceed 10 percent compared to 2030 no project conditions. TDM strategies that would reduce peak hour intersection delay at these locations include strategies to reduce commute and business vehicle trips utilizing the Old Davis Road corridor. Specific potential TDM strategies include, but are not limited to, the following: • promote walking and bicycling for student and employee trips during peak periods, • shift the timing of service vehicles and/or deliveries from peak periods, • expand public transit service, including additional regional service for UC Davis students and employees living off-campus and outside of Davis as well as local service for on-campus residents traveling to nearby destinations on-campus and in Davis, • manage parking lot access along Old Davis Road, • limit parking supply and/or unbundle parking costs for future student housing located along the Old Davis Road corridor, • implement a fair value commuting program or other pricing of vehicle travel and parking, • provide carpool and/or vanpool incentive programs, • allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours, and • offer remote working options.				

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	The TDM strategies implemented to reduce peak hour intersection delay at this location will be consistent with existing and planned TDM programs on campus, including the UC Davis TDM Plan currently in development. If these TDM strategies are not sufficient to reduce peak hour intersection delay consistent with the significance criteria, additional TDM measures or adjustments to the measures above shall be implemented, as needed to reduce peak hour intersection delay consistent with the significance criteria.				
	2018 LRDP Mitigation Measure 3.16-2e: Upgrade Old Davis Road between I-80 and First Street to an arterial. Implement 2018 LRDP Mitigation Measure 3.16-7, which will monitor traffic volumes and upgrade the segment of Old Davis Road between I-80 and First Street to arterial status under both 2030 and 2036 plus project conditions. Unacceptable roadway operations can be attributed to substantial growth in on- and off-campus student housing within the immediate vicinity of the affected roadway segment, as well as the incompatibility between the existing roadway segment design and anticipated peak hour vehicle, bicycle, and pedestrian traffic demand. These factors would be present under both 2030 and 2036 plus 2018 LRDP conditions.	Monitor projects for impact that would cause operations to fall below the intersection level of service significance threshold.	OC	Prior to project occupancy when project would cause operations to fall below the intersection level of service significance threshold.	UC Davis Design and Construction Management
7.16e Result in inadequate emergency access?	**2003 LRDP Mitigation Measure 4.7-17** To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available due to construction-related road closures, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway, the campus shall provide appropriate signage indicating alternative routes. To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, the campus shall inform emergency services, including the UC Davis Police and Fire Departments, and American Medical Response, of the closures and alternative travel routes.	Develop and implement a traffic management plan. Inform UC Davis Police and Fire Departments, and American Medical Response.	DE CO	Prior to construction.	UC Davis Design and Construction Management; UC Davis Campus Planning and Environmental Stewardship
7.16f Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	**2003 LRDP Mitigation Measure 4.14-3(a)** UC Davis shall continue to actively pursue Transportation Demand Management strategies to reduce parking demand. **2003 LRDP Mitigation Measure 4.14-3(b)** UC Davis shall continue to monitor parking demand on a quarterly basis to identify campus parking areas with a parking utilization over 90 percent. UC Davis shall provide additional parking if a proposed project is expected to increase the winter utilization rate to over 90 percent on the central campus, Health Sciences District, and/or major facilities of the west and south campus. **2003 LRDP Mitigation Measure 4.14-4** UC Davis shall monitor transit ridership to identify routes operating over capacity with increased campus growth. UC Davis shall work with	Monitor transit ridership and document results; confer with providers to identify necessary improvements.	OP	Annually.	UC Davis Campus Planning and Environmental Stewardship; Unitrans; Yolo Bus

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	transit providers to identify additional service required with campus growth or new transit routes needed to serve future development areas. **2003 LRDP Mitigation Measure 4.14-5** UC Davis shall monitor core area pedestrian and bike activity and accidents. UC Davis shall improve bike and pedestrian facilities or alter transit operations to avoid increased bicycle accident rates or safety problems.				
	2018 LRDP Mitigation Measure 3.16-3a: Monitor transit service performance and support transit improvements. Currently, Unitrans regularly monitors transit service performance and adjusts service levels, as feasible, according to established service standards. Unitrans shall continue to implement this monitoring and service change process annually over the duration of the 2018 LRDP implementation. UC Davis shall work with Unitrans staff to identify and support the implementation of transit service and/or facility improvements necessary to adhere to established service standards and, in turn, maintain a high quality customer experience so as not to deter existing and potential ridership. Potential transit improvements include modifying existing transit routes or adding new routes to serve areas of the campus underserved by transit, adding service capacity (through increased headways and/or larger vehicles) to prevent chronic overcrowding, improving terminal facilities to accommodate additional passengers and transit vehicles, and improving coordination between transit providers. Transit improvements shall result in service performance that meets the capacity standard established in the most up-to-date City of Davis Short Range Transit Plan. Currently, this standard requires Unitrans to maintain acceptable loading conditions (fewer than 150 percent of seated capacity) on more than 95 percent of all bus trips and for more than 90 percent of bus passengers. Transit facility and roadway improvements shall be designed and constructed in accordance with industry best practices and applicable UC Davis, City of Davis, and State of California standards. Improvements shall be implemented or constructed in a manner that would not physically disrupt existing transit service or facilities (e.g., additional bus service that exceeds available bus stop or transit terminal capacity) or otherwise adversely affect transit operations.	Monitor transit ridership and document results; confer with providers to identify necessary improvements. Monitor projects for impact that would cause operations to exceed service capacity and provide additional capacity as needed threshold.	OP OC	Annually Prior to project occupancy when project would cause operations to fall exceed capacity.	UC Davis Campus Planning and Environmental Stewardship; Unitrans; Yolo Bus Unitrans; UC Davis Campus Planning and Environmental Stewardship
	2018 LRDP Mitigation Measure 3.16-3b: Monitor transit-related collisions and implement countermeasures to minimize potential conflicts with transit service and facilities. During the 2018-2019 academic year and every two years thereafter, UC Davis shall record on-campus collisions involving a transit vehicle and establish a transit vehicle collision rate. The rate should be sensitive to transit provider, location context (e.g., campus core area versus West Village) and facility type (e.g., intersection versus	Monitor and report transit-related collisions at the identified locations, at minimum.	OP	During the 2018-2019 academic year and every two years thereafter.	UC Davis Campus Planning and Environmental Stewardship; UC Davis Police Department; UC Davis Campus

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	segment). UC Davis shall determine the on-campus transit vehicle collision rate as part of its biennial mitigation monitoring program established in the LRDP EIR. In instances where the rate increases from the prior observation period, UC Davis shall develop and implement countermeasures that address collision hot-spots and common primary collision factors. UC Davis shall also identify and develop countermeasures for locations where the change in the mix of travel patterns and behavior is determined to be incompatible with the facility as designed. Potential countermeasures include physically separating modes in shared operating environments, particularly high- versus low-speed travel modes, and increased education and enforcement. At a minimum, UC Davis shall include the following locations in the mitigation monitoring program: ◢ Silo Terminal, ◢ Memorial Union Terminal, ◢ La Rue Road, ◢ Hutchison Drive, ◢ Howard Way, ◢ Sage Street, and ◢ Russell Boulevard. Transit facility and roadway improvements that intend to minimize conflicts between transit vehicles and other travel modes shall be designed and constructed in accordance with industry best practices and applicable UC Davis, City of Davis (for facilities within the City of Davis), and State of California standards. Improvements shall be implemented or constructed in a manner that would not physically disrupt existing transit service or facilities or otherwise adversely affect transit operations.	Improve facilities/operations as needed.		As needed and when identified through bi-annual monitoring.	Planning and Environmental Stewardship
Impact 3.16-4: Impacts to bicycle facilities.	**2018 LRDP Mitigation Measure 3.16-4: Monitor bicycle-related collisions to implement countermeasures minimizing potential conflicts with bicycle facilities.** During the 2018-2019 academic year and every two years thereafter, UC Davis shall record on-campus bicycle volumes and collisions involving bicyclists and establish a bicycle collision rate. The rate should be sensitive to context (e.g., campus core area versus West Village) and facility type (e.g., intersection versus segment). UC Davis shall determine the on-campus bicycle collision rate as part of its biennial mitigation monitoring program established in the LRDP EIR. In instances where the rate increases from the prior observation period, UC Davis shall develop and implement countermeasures designed to reduce the rate and primary collision factors. UC Davis shall also identify and develop countermeasures for locations where the change in the mix of travel patterns and	Monitor and report bicycle-related collisions at the identified locations, at minimum.	OP	During the 2019-2020 academic year and every two years thereafter.	UC Davis Police Department; UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	behavior is determined to be incompatible with the facility as designed. Potential countermeasures include the following: ◢ construct physically separated facilities for each mode in shared operating environments (particularly high- versus low-speed travel modes), ◢ restrict select modes in certain areas where one mode is prioritized over another to minimize collision potential, ◢ widen existing facilities, ◢ construct new facilities, ◢ increase the number of bicycle parking facilities and distribute them to minimize crowding on connecting bicycle facilities, ◢ consider TDM measures that would alter demand to minimize collision potential, ◢ enforcement of 'rules of the road' per the California Vehicle Code and applicable University policies, ◢ education of existing and prospective bicyclists to give people the skills and abilities to ride, ◢ control class schedules and passing periods to minimize effects of peak bicycle traffic, and ◢ expand core area restrictions on service vehicles. Anticipated increases in bicycle activity would be concentrated near focal points for students and staff activities, including new on-campus housing developments, existing and new academic and recreational facilities (e.g., classrooms, lecture halls, athletic fields) in the core campus area, off-campus activity centers (e.g., Downtown Davis, University Mall) and along bicycle facilities connecting activity generators. Therefore, at a minimum, UC Davis shall include the following locations in the mitigation monitoring program: ◢ core campus area; ◢ La Rue Road between Russell Boulevard and Old Davis Road; ◢ SR 113 bike/pedestrian overcrossing, Orchard Park Circle, and Orchard Road; ◢ Sprocket Bikeway; ◢ California Avenue between Russell Boulevard and Old Davis Road; ◢ Hutchison Drive between Sage Street and Old Davis Road; ◢ Old Davis Road between I-80 and First Street; ◢ Howard Way between Russell Boulevard and North Quad; ◢ Third Street between A Street and Downtown Davis; ◢ First Street between A Street and Downtown Davis;	Improve facilities/operations as needed if collision rate increases from the prior observation period. Develop and implement an Active Transportation Management Plan, if selected as part of mitigation performance.	OP OP	As needed and when identified through bi-annual monitoring. If selected, implement as updated every two years in line with monitoring.	UC Davis Campus Planning and Environmental Stewardship; UC Davis Design and Construction Management UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	◢ Russell Boulevard corridor between SR 113 and Downtown Davis (including intersections with north-south roadways, especially those involving campus connections); and ◢ West Village. Bicycle facility and roadway improvements that intend to minimize conflicts between bicyclists and other travel modes shall be designed and constructed in accordance with applicable UC Davis, City of Davis, and State of California standards.				
Impact 3.16-5: Impacts to pedestrian facilities.	**2018 LRDP Mitigation Measure 3.16-5: Monitor pedestrian-related collisions implement countermeasures minimizing potential conflicts with pedestrian facilities.** During the 2018-2019 academic year and each two years thereafter, UC Davis shall record on-campus pedestrian volumes and collisions involving pedestrians and establish a pedestrian collision rate. The rate should be sensitive to context (e.g., campus core area versus West Village) and facility type (e.g., intersection versus segment). UC Davis shall determine the on-campus pedestrian collision rate as part of its biennial mitigation monitoring program established in the LRDP EIR. In instances where the rate increases from the prior observation period, UC Davis shall develop and implement countermeasures to reduce the rate and address primary collision factors. UC Davis shall also identify and develop countermeasures for locations where the change in the mix of travel patterns and behavior is determined to be incompatible with the facility as designed. Potential countermeasures include the following: ◢ construct physically separated facilities for each mode in shared operating environments (particularly high- versus low-speed travel modes), ◢ restrict select modes in certain areas where one mode is prioritized over another to minimize collision potential, ◢ widen existing facilities, ◢ construct new facilities, and ◢ consider TDM measures that would alter demand to minimize collision potential. Anticipated increases in pedestrian activity would be concentrated near focal points for students and staff activities, including new on-campus housing developments, existing and new academic and recreational facilities (e.g., classrooms, lecture halls, athletic fields) in the core campus area, off-campus activity centers (e.g., Downtown Davis, University Mall) and along pedestrian facilities connecting activity generators. Therefore, at a minimum, UC Davis shall include the following locations in the mitigation monitoring program: ◢ core campus area; ◢ La Rue Road between Russell Boulevard and Old Davis Road;	Monitor and report pedestrian-related collisions at the identified locations, at minimum. Improve facilities/operations as needed if collision rate increases from the prior observation period Develop and implement an Active Transportation Management Plan, if selected as part of mitigation performance.	OP OC OP	During the 2019-2020 academic year and every two years thereafter. Prior to occupancy and if warranted based on projected collision rate. If selected, implement as updated every two years in line with monitoring.	UC Davis Police Department; UC Davis Campus Planning and Environmental Stewardship UC Davis Campus Planning and Environmental Stewardship; UC Davis Design and Construction Management UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	◢ SR 113 bike/pedestrian overcrossing, Orchard Park Circle, and Orchard Road; ◢ Sprocket Bikeway; ◢ Hutchison Drive between Sage Street and Old Davis Road; ◢ Old Davis Road between I-80 and First Street; ◢ Howard Way between Russell Boulevard and North Quad; ◢ Third Street between A Street and Downtown Davis; ◢ First Street between A Street and Downtown Davis; ◢ Russell Boulevard corridor between SR 113 and Downtown Davis (including intersections with north-south roadways, especially those involving campus connections); and ◢ West Village. Pedestrian facility and roadway improvements that intend to minimize conflicts between pedestrians and other travel modes shall be designed and constructed in accordance with applicable UC Davis, City of Davis, and State of California standards.				
Impact 3.16-6: Cumulative impacts to freeway level of service.	**2018 LRDP Mitigation Measure 3.16-6: Implement TDM strategies to reduce peak hour vehicle trips on I 80.** Implement 2018 LRDP Mitigation Measure 3.16-1 (see page 45).	See Mitigation Measure 3.16-1.	See Mitigation Measure 3.16-1.	See Mitigation Measure 3.16-1.	See Mitigation Measure 3.16-1.
Impact 3.16-7: Cumulative impacts to local roadway segment level of service.	**2018 LRDP Mitigation Measure 3.16-7: Upgrade Old Davis Road between I-80 and First Street to an arterial.** During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions on Old Davis Road between I-80 and First Street. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions on Old Davis Road between I-80 and First Street for individual development projects proposed under the 2018 LRDP that are expected to affect operations on the roadway segment. When the segment of Old Davis Road between I-80 and First Street is found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay, or when a project-level analysis indicates the same, UC Davis shall upgrade Old Davis Road between I-80 and First Street from collector to arterial status. Physical and operational characteristics of arterial roadways include: ◢ Improved access control, ◢ Removal of all-way stops and installation of traffic signals or roundabouts, as warranted, per UC Davis design standards, ◢ Lane additions at intersection approaches and;	Monitor and analyze conditions on Old Davis Road between I-80 and First Street.	OP	Every two years.	UC Davis Campus Planning and Environmental Stewardship

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	◢ Enhanced control or physical separation of conflicting vehicular, bicycle, and pedestrian movements. Examples of specific improvements that would help transition Old Davis Road towards arterial status include the installation of a roundabout at the Old Davis Road/Arboretum Drive intersection and the construction of a grade-separated crossing for the / Arboretum Trail located north of Arboretum Waterway at Old Davis Road (in place of the stop-controlled intersection at Old Davis Road / Hutchison Drive). UC Davis could also consider a realignment of Old Davis Road immediately south of First Street in order to adequately accommodate the arterial roadway features listed above. Although a significant impact is not identified for the segment of Old Davis Road north of I-80, arterial improvements along this segment would facilitate improved operations at upstream/downstream locations along the corridor. Upgrading this segment of Old Davis Road to arterial status would improve p.m. peak hour operations to an acceptable LOS D under cumulative conditions. The ultimate improvements shall be determined through the UC Davis project development process involving alternatives evaluation and any environmental impact review required under CEQA. Cumulative roadway improvements should be designed to operate at the boundary of LOS E/F.				
		Upgrade Old Davis Road between I-80 and First Street from collector to arterial status, if necessary, based on project-level analysis.	OC	Prior to occupancy and if warranted based on projected level of service for individual projects that may affect Old Davis Road.	UC Davis Campus Planning and Environmental Stewardship
	2018 LRDP Mitigation Measure 3.16-8a: Monitor transit service performance and support transit improvements. Implement 2018 LRDP Mitigation Measure 3.16-3a (see page 50).	See Mitigation Measure 3.16-3a.	See Mitigation Measure 3.16-3a.	See Mitigation Measure 3.16-3a.	See Mitigation Measure 3.16-3a.
	2018 LRDP Mitigation Measure 3.16-8b: Monitor transit-related collisions and implement countermeasures to minimize potential conflicts with transit service and facilities. Implement 2018 LRDP Mitigation Measure 3.16-3b (see page 50).	See Mitigation Measure 3.16-3b.	See Mitigation Measure 3.16-3b.	See Mitigation Measure 3.16-3b.	See Mitigation Measure 3.16-3b.
	2018 LRDP Mitigation Measure 3.16-9: Monitor bicycle-related collisions and implement countermeasures to minimize potential conflicts with bicycle facilities. Implement 2018 LRDP Mitigation Measure 3.16-4 (see page 51).	See Mitigation Measure 3.16-4.	See Mitigation Measure 3.16-4.	See Mitigation Measure 3.16-4.	See Mitigation Measure 3.16-4.

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
	2018 LRDP Mitigation Measure 3.16-10: Monitor pedestrian-related collisions and implement countermeasures to minimize potential conflicts with pedestrian facilities. Implement 2018 LRDP Mitigation Measure 3.16-5 (see page 53).	See Mitigation Measure 3.16-5.	See Mitigation Measure 3.16-5.	See Mitigation Measure 3.16-5.	See Mitigation Measure 3.16-5.
7.17 Utilities and Service Systems					
7.17b Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? **7.17d Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?** **7.17e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?**	**2003 LRDP Mitigation Measure 4.15-1(a)** Once preliminary project design is developed, the campus shall review each project to determine if existing domestic/fire water supply is adequate at the point of connection. If domestic/fire water is determined inadequate, the campus will upgrade the system to provide adequate water flow and pressure to the project site before constructing the project. **2003 LRDP Mitigation Measure 4.15-1(b)** Implement domestic water conservation strategies as indicated in LRDP Mitigation 4.8-5(a) (see Section 7.9, "Hydrology & Water Quality," of the Tiered Initial Study). **2003 LRDP Mitigation Measure 4.15-2(a)** Once preliminary project design is developed, the campus shall review each project to determine whether existing utility water supply is adequate at the point of connection. If the utility water supply is determined to be inadequate, the campus will upgrade the system to provide adequate water flow to the project site prior to occupation or operation. **2003 LRDP Mitigation Measure 4.15-2(b)** Implement utility water conservation strategies as indicated in LRDP Mitigation 4.8-6(a) (see Section 7.9, "Hydrology & Water Quality," of the Tiered Initial Study). **2003 LRDP Mitigation Measure 4.15-3** Once preliminary project design is developed, the campus shall review each project to determine whether existing capacity of the sanitary sewer line at the point of connection is adequate. If the capacity of the sewer line is determined inadequate, the campus will upgrade the system to provide adequate service to the project site prior to occupation or operation.	Review preliminary project designs.	DE	Prior to construction.	UC Davis Design and Construction Management; UC Davis Campus Planning and Environmental Stewardship
7.17c Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	**2003 LRDP Mitigation Measure 4.15-4** Once preliminary project design is developed, the campus shall review each project to determine whether existing storm drainage system is adequate at the point of connection. If the storm drainage system is determined inadequate, the campus will upgrade the system to provide adequate stormwater drainage and/or detention prior to occupation or operation.	Review preliminary project designs.	DE	Prior to construction.	UC Davis Design and Construction Management; UC Davis Campus Planning and Environmental Stewardship
7.17h) Require or result in the construction or expansion of	**2003 LRDP Mitigation Measure 4.15-6(a)** Once preliminary project design is developed, the campus shall review each project to determine whether the existing electrical system is adequate at the point of connection. If the electrical system is determined inadequate, the	Review preliminary project designs.	DE	Prior to construction.	UC Davis Design and Construction Management; UC Davis Campus

Impact	Mitigation Measure	Monitoring and Reporting Procedure	Timing	Timing	Verification
electrical, natural gas, chilled water, or steam facilities, which would cause significant environmental impacts?	campus will upgrade the system to provide adequate service to the project prior to occupation or operation. **2003 LRDP Mitigation Measure 4.15-6(b)** The campus would continue to meet or exceed Title 24 energy conservation requirements for new buildings, and it would continue to incorporate energy efficient design elements outlined in the *UC Davis Campus Standards & Design Guide* in new construction and retrofit projects. These energy conservation standards may be subject to modification as more stringent standards are developed. **2003 LRDP Mitigation Measure 4.15-7(a)** Once preliminary project design is developed, the campus shall review each project to determine whether existing capacity of the natural gas supply pipeline at the point of connection is adequate. If capacity of the pipeline is determined inadequate, the system will be updated to provide adequate service to the project site prior to occupation or operation. **2003 LRDP Mitigation Measure 4.15-7(b)** To minimize disturbance to archaeological resources associated with CA-Yol-118, PG&E can and should implement directional drilling or other alternative means to trenching, or should have a qualified archaeologist monitor present and provide a representative of the local Native American community an opportunity to monitor during construction. **2003 LRDP Mitigation Measure 4.15-8** Once preliminary project design is developed, the campus shall review each project to determine whether existing capacity of the chilled water and/or steam system at the point of connection is adequate. If the capacity of the pipelines is determined inadequate, the campus will upgrade the system to provide adequate service to the project site prior to occupation or operation.				Planning and Environmental Stewardship
7.17i) Require or result in the construction or expansion of telecommunication facilities, which would cause significant environmental impacts?	**2003 LRDP Mitigation Measure 4.15-9** Once preliminary project design is developed, the campus shall review each project to determine whether existing capacity of the telecommunications system is adequate. If the capacity is determined to be inadequate, the campus will upgrade the system to provide adequate service to the project site prior to occupation or operation.	Review preliminary project designs.	DE	Prior to construction.	UC Davis Design and Construction Management; UC Davis Campus Planning and Environmental Stewardship

Notes: Project stage at which implementation of the measure is required: SS=during site selection; DE=during detailed project planning or project design prior to project approval; CO=during construction; OC=prior to occupancy; OP=during operation