

California State University MONTEREY BAY



California State University, Monterey Bay Master Plan

Mitigation Monitoring and Reporting Program

Prepared for California State University, Monterey Bay May 2022 - SCH No. 2017051042

MITIGATION MONITORING AND REPORTING PROGRAM

California State University Monterey Bay Master Plan

MAY 2022

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2.1 INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.), California State University, Monterey Bay (CSUMB) prepared an Environmental Impact Report (EIR) (State Clearinghouse No. 2017051042) that identified potentially significant and significant impacts prior to mitigation related to: Biological Resources, Cultural Resources and Tribal Cultural Resources, Geology (Paleontological Resources), Greenhouse Gas Emissions, and Noise and Vibration. The EIR also identifies mitigation measures that would reduce the identified impacts to less-than-significant levels, with the exception of Noise at one off-campus location, which would remain significant with implementation of feasible mitigation measures. CEQA and the CEQA Guidelines (Public Resources Code Section 21081.6 and 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." A Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the proposed Master Plan because the EIR identifies significant adverse impacts related to the Project implementation, and mitigation measures have been identified to reduce those impacts. Adoption of the MMRP would occur along with approval of the proposed Master Plan.

2.2 PURPOSE OF THE MITIGATION AND MONITORING PROGRAM

The MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a sufficient manner before and during project construction and operation. It also includes the project design features (PDFs) incorporated into the Project that serve to reduce environmental impacts. The MMRP table has been prepared to assist the responsible parties in implementing the mitigation measures. The table identifies each mitigation measure or PDF; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring conditions; and the agency or party responsible for ensuring that the monitoring is performed. Figure references provided in the PDFs are to figures presented in the Final EIR Chapter 3, Project Description.

2.3 ROLES AND RESPONSIBILITIES

Unless otherwise specified, CSUMB 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. CSUMB, 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. CSUMB is the custodian of such documents for the proposed Master Plan. Inquiries should be directed to:

CSUMB Office of the President California State University, Monterey Bay 100 Campus Center, Building I Seaside, California, 93955

2.4 REPORTING

CSUMB shall require the contractor(s) to maintain records documenting compliance of the activity with the required mitigation measures or PDFs. Information regarding inspections and other requirements shall be compiled and explained in monthly or annual reports, as relevant. The reports 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.

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party		
	MITIGATION MEASURES					
	Biological Resources					
Impact BIO-1: Special-Status Species. The Project could result in substantial adverse effects to special- status plant and wildlife species and their habitat.	 MM-BIO-1a: Project-Specific Biological Assessments (HMP Species). The CSUMB CPD [Campus Planning and Development] Department shall require that a biological survey of development sites be conducted by a qualified biologist to determine if the development could potentially impact HMP species or potential habitat (HMP Species include: California tiger salamander, Smith's blue butterfly, Northern California legless lizard, Monterey ornate shrew, Monterey spineflower, sand gilia, sandmat manzanita, Hooker's manzanita, Toro manzanita, Monterey ceanothus, seaside bird's-beak, sand-loving wallflower, Eastwood's goldenbush and Yadon's piperia). A report describing the results of the surveys shall be provided to the CSUMB CPD Department prior to any ground disturbing activities. The report shall include, but not be limited to: 1) a description of the biological conditions at the site; 2) identification of the potential for HMP species to occur or HMP species observed, if any; and 3) maps of the locations of HMP species or potential habitat, if observed. If HMP species that do not require take authorization from the USFWS or CDFW are identified within the development site, salvage efforts for these species shall be evaluated by a qualified biologist in coordination with CSUMB CPD Department to further reduce impacts per the requirements of the HMP and BO. Where salvage is determined feasible and proposed, seed collection should occur from plants within the development site and/or topsoil should be salvaged within occupied areas to be disturbed. Seeds shall be collected during the appropriate time of year for each species by qualified biologists. The collected seeds and topsoil shall be used to revegetate temporarily disturbed construction areas and reseeding 	Properly-timed survey to be conducted during project planning or design to allow lead time for mitigation planning and implementation. Report to be provided prior to any ground disturbance. No further action required if surveys are negative. Comply with HMP and BO if surveys are positive, including seed and topsoil salvage, if feasible. Comply with ESA and/or CESA if surveys are positive for listed species. Incorporate measures into construction contracts, as relevant.	Initial survey and reporting. Conduct monitoring if required to comply with HMP/BO or ESA and CESA.	CSUMB Campus Planning and Development		

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	and restoration efforts on- or off-site, as determined appropriate by the qualified biologist and CSUMB CPD Department. For impacts to the HMP species within the development site that do require take authorization from the USFWS and/or CDFW, the CSUMB CPD Department shall comply with ESA and CESA and obtain necessary permits prior to construction. If non-HMP special-status species are identified during the implementation of this measure, MM-BIO-1b shall also be implemented.			
	 MM-BIO-1b: Project-Specific Biological Assessments (Non- <u>HMP Species)</u>. The CSUMB CPD Department shall require that a biological survey of development sites be conducted by a qualified biologist to determine if the development could potentially impact a special-status species or their habitat. A report describing the results of the surveys shall be provided to the CSUMB CPD Department prior to any ground disturbing activities. The report shall include, but not be limited to: 1) a description of the biological conditions at the site; 2) identification of the potential for special-status species to occur or special-status species observed, if any; 3) maps of the locations of special-status species or potential habitat, if observed; and 4) recommended mitigation measures, if applicable. If special-status species are determined not to occur at the development site, no additional mitigation is necessary. If special-status species are observed or determined to have the potential to occur, the project biologist shall recommend measures necessary to avoid, minimize, and/or compensate for identified impacts. Measures shall include, but are not limited to, revisions to the project design and project modifications, pre-construction surveys, construction buffers, construction best management practices, monitoring, non-native species control, restoration and preservation, and salvage and relocation. 	Conduct properly- timed survey during project planning or design to allow lead time for mitigation planning and implementation. Report to be provided prior to any ground disturbance. No further action required if surveys are negative. Implement additional measures if surveys are positive; incorporate measures into construction contracts, as relevant.	Initial survey and reporting. Conduct pre- construction surveys and monitoring if recommended.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	MM-BIO1c: Pre-Construction Surveys for Protected Avian <u>Species.</u> Construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species shall be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 16 and before January 31. Alternatively, a qualified biologist shall be retained by the CSUMB CPD Department to conduct pre-construction surveys for nesting raptors and other protected avian species within 500 feet of proposed construction activities if construction occurs between February 1 and September 15. Pre-construction surveys shall be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing of these continued surveys shall be determined by the qualified biologist based on review of the final construction plans and in coordination with the USFWS and CDFW, as needed for protected avian species nests. If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist shall notify the CSUMB CPD Department and an appropriate no-disturbance buffer shall be imposed within which no construction activities or disturbance shall take place (generally 500 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.	Schedule vegetation/tree removal after September 16 and before January 31. Or, if construction occurs between February 1 and September 15, conduct pre-construction surveys within 14 days prior to construction activities, and ongoing during construction as needed. Incorporate measure into construction contracts.	One time prior to construction and ongoing during construction, depending on breeding and nesting seasons	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 MM-BIO-1d: Implement Open Space Protection Requirements. For open space areas adjacent to proposed campus development, the following measures shall be implemented: Conduct an access assessment to identify necessary access controls. In some cases, structures including fences or other appropriate barriers may be required within the new development parcel to control access into the habitat areas. An assessment of access issues and necessary controls shall be completed as part of planning for the development and submitted to the CSUMB CPD Department for review and approval, prior to development. Signs, interpretive displays, trailhead markers, or other information shall be installed and maintained at identified urban/wildland interface that illustrate the importance of the adjacent habitat area and prohibit trespass, motor vehicle entry, dumping of trash or yard wastes, pets off-leash, capture or harassment of wildlife, impacts to special-status species, and other unauthorized activities. Incorporate non-native species control features into site design. Detention ponds or other water features associated with new development shall be sited as far from the urban/wildland interface as possible. Suitable barriers shall be located between these features and the habitat area boundary to prevent these features from becoming "sinks" for special- status wildlife species, as well as sources for invasive non-natives that could then move into the adjacent habitat area. If detention ponds or other waterbodies must be located at the urban/wildland interface, a specific management program addressing control of non- native animals (e.g., bullfrogs) must be prepared and 	Prior to final design approval. Incorporate measure into design contracts when proposed project is adjacent to open space areas.	Confirm measure is being implemented during design review	CSUMB Campus Planning and Development

 submitted for review and approval by the CSUMB CPD Department, prior to development. Landscaping within the areas adjacent to open space areas shall consist of native or non-native plant species that shall not colonize reserve areas in the former Fort Ord outside the campus boundaries. Any landscaping or replanting required for the Project shall not use species listed as noxious by the CDFA. All landscape plans shall be reviewed by the CSUMB CPD Department. Limit artificial lighting at the urban/wildland interface. Outdoor lighting associated with new development shall be low intensity, focused, and directional to preclude night illumination of the adjacent habitat area. Outdoor lighting shall be placed as far from the urban/wildland interface as possible given safety constraints. Facilities such as ball parks and fields that require high intensity night lighting (i.e., flood lights) shall be sited as far from the urban/wildland interface as possible. High-intensity lighting facing the habitat areas shall be directional and as low to the ground as possible to minimize long distance glare. Develop and implement erosion control measures to prevent sediment transport into and within habitat areas. Erosion control measures shall be required where vegetation removal or solid disturbance occurs as a result of all facility construction and maintenance, including trail, road, or fuel break construction/maintenance, access controls, or 	Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
stormwater management plans. Specific measures to be implemented shall be detailed in an erosion control plan. The erosion control plan shall include, at a minimum, the following measures.		 submitted for review and approval by the CSUMB CPD Department, prior to development. Landscaping within the areas adjacent to open space areas shall consist of native or non-native plant species that shall not colonize reserve areas in the former Fort Ord outside the campus boundaries. Any landscaping or replanting required for the Project shall not use species listed as noxious by the CDFA. All landscape plans shall be reviewed by the CSUMB CPD Department. Limit artificial lighting at the urban/wildland interface. Outdoor lighting associated with new development shall be low intensity, focused, and directional to preclude night illumination of the adjacent habitat area. Outdoor lighting shall be placed as far from the urban/wildland interface as possible given safety constraints. Facilities such as ball parks and fields that require high intensity night lighting facing the habitat areas shall be directional and as low to the ground as possible to minimize long distance glare. Develop and implement erosion control measures to prevent sediment transport into and within habitat areas. Erosion control measures shall be required where vegetation removal or soil disturbance occurs as a result of all facility construction and maintenance, including trail, road, or fuel break construction/maintenance, access controls, or stormwater management plans. Specific measures to be implemented shall be detailed in an erosion control plan. The erosion control plan shall include, at a minimum, the following measures. 			

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 Maintain and grade areas along the reserve perimeter and main roads as appropriate to avoid washouts. Gullies shall be repaired as needed. Install drainage features such as outlet ditches, rolling dips (similar to waterbars), and berms as needed to facilitate the proper drainage of storm runoff. Add soil amendments such as fertilizers and gypsum for designated development areas only. Prevent sediments from entering basins or swales that could be used by HMP species during erosion control activities. Design and conduct erosion control measures to minimize the footprint of the structures and repairs, and design structures to minimize potential impacts on CTS that may be moving between breeding and upland habitats. Use weed-free mulch, weed-free rice, sterile barley straw, or other similar functioning product where needed for erosion control. Seed native plant species to stabilize soils disturbed by erosion control activities and prevent colonization by invasive weeds. Incorporate native plant species to the extent practicable. 			
	MM-BIO-1e: <u>Pre-Construction Bat Assessment and</u> <u>Surveys.</u> To avoid and reduce impacts to Townsend's big- eared bat, a qualified bat specialist or wildlife biologist shall conduct site surveys during the reproductive season (May 1 through September 15) to characterize bat utilization of the site and potential species present (techniques utilized to be determined by the biologist) prior to structure removal. Based on the results of these initial surveys, one or more of the following shall occur:	Prior to construction activities. Conduct initial surveys between May 1-September 15 when mature trees or structures will be removed. No further action required if surveys are negative.	Initial survey and reporting. Conduct pre- construction surveys and monitoring if recommended.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 If it is determined that bats are not present at the site, no additional mitigation is required. If it is determined that bats are utilizing the site and may be impacted by the development, preconstruction surveys shall be conducted no more than 30 days prior to any structure removal. If, according to the bat specialist, no bats or bat signs are observed in the course of the pre-construction surveys, structure removal may proceed. If bats and/or bat signs are observed during the preconstruction surveys, the biologist shall determine if disturbance will jeopardize the roost (i.e., maternity, day, or night). If a single bat and/or only adult bats are roosting, removal of buildings may proceed after the bats have been safely excluded from the roost. Exclusion techniques shall be determined by the biologist and depend on the roost type; the biologist shall prepare a mitigation plan for provision of alternative habitat to be approved by the CDFW. If an active maternity roost is detected, avoidance is preferred. Work in the vicinity of the roost (buffer to be determined by biologist) shall be postponed until the biologist monitoring the roost(s) determines that the young are no longer dependent on the roost. If avoidance is not possible and a maternity roost must be disrupted, a depredation permit would be required prior to removal of the roost. 	Implement additional measures if surveys are positive; incorporate measures into construction contracts, as relevant. Prepare mitigation plan in coordination with CDFW, if necessary to exclude bats from habitat.		
	MM-BIO-1f: <u>Pre-Construction Monterey Dusky-Footed</u> <u>Woodrat Surveys.</u> Not more than thirty (30) days prior to the start of construction (including vegetation removal), a qualified biologist shall conduct a survey of the development sites to locate existing Monterey dusky-	Conduct pre-constructions surveys within 30 days prior to start of construction activities.	Initial survey and mapping. On-going monitoring during relocation of woodrat nests.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	footed woodrat nests. All Monterey dusky-footed woodrat nests shall be mapped and flagged for avoidance. Graphics depicting all Monterey dusky-footed woodrat nests shall be provided to CSUMB and the construction contractor. Any Monterey dusky-footed woodrat nests that cannot be avoided shall be relocated according to the following procedures. Each active nest shall be disturbed by the qualified biologist to the degree that the woodrats leave the nest and seek refuge elsewhere. After the nests have been disturbed, the nest sticks shall be removed from the impact areas and placed outside of areas planned for impacts. Nests shall be dismantled during the non- breeding season (between October 1 and December 31), if possible. If a litter of young is found or suspected, nest material shall be replaced and the nest left alone for 2-3 weeks, after this time the nest shall be rechecked to verify that young are capable of independent survival before proceeding with nest dismantling.	No further action required if surveys are negative. Implement additional measures if surveys are positive; incorporate measures into construction contracts, as relevant.		
	MM-BIO-1g: Smith's Blue Butterfly Habitat <u>Avoidance/ESA Compliance.</u> Smith's Blue Butterfly habitat (i.e., dune buckwheat) shall be avoided to the greatest extent feasible. Smith's Blue Butterfly habitat that will not be impacted by the Project shall be protected prior to and during construction to the maximum possible using exclusionary fencing and/or flagging. A biological monitor shall supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact. If all Smith's Blue Butterfly habitat is avoided, no additional mitigation is necessary. If the Project will impact SBB habitat, CSUMB shall comply with the FESA and obtain necessary authorizations prior to construction due to the assumed presence of the federally listed SBB.	Conduct properly- timed survey to confirm presence of dune buckwheat during project planning or design to allow lead time for mitigation planning and implementation. Incorporate avoidance measures into construction contracts. If avoidance is not feasible, comply with FESA.	Monitor installation of protective fencing/flagging. Monitor fencing at least once per week until construction is complete.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
Impact BIO-2: Riparian and Wetland Habitat. The Project could result in a substantial adverse effect on riparian habitat or other sensitive community as identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, or on state or federally protected wetlands.	Mitigation Measure / Project Design Feature CSUMB shall be required to initiate consultation with the USFWS to receive take authorization. Take authorization would be granted through the issuance of an individual, project-specific incidental take permit. Mitigation for take likely will require restoration at a 3:1 ratio of impacted habitat. Dune buckwheat plants and/or seed salvage may also be required prior to ground disturbing activities. MM-BIO-2: Project-Specific Sensitive Natural Community <u>Assessments.</u> The CSUMB CPD Department shall require that for any development that could potentially impact a sensitive natural community, a survey of the site by a qualified biologist shall be required. A report describing the results of the survey shall be provided to CSUMB prior to any ground-disturbing activities. The report shall include but shall not be limited to: 1) a description of the biological conditions at the site; 2) identification of the potential for sensitive habitats or sensitive habitats observed, if any; 3) maps of the locations of sensitive habitats or potential sensitive habitat, if observed; and 4) recommended avoidance and minimization measures, if applicable. If a potential state or federally protected wetland is newly identified to be present on the site, a formal wetland delineation shall be conducted in accordance with ACOE methodology. If a proposed development cannot avoid impacts to sensitive habitat areas, CSUMB shall require a compensatory habitat-based mitigation to reduce impacts. Compensatory mitigation must involve the preservation, restoration, or purchase of off-site mitigation credits for impacts to sensitive habitats. Mitigation must be conducted in-kind or within an approved mitigation bank	Implementation Timing Conduct survey during project planning or design to allow lead time for mitigation planning and implementation. Report to be provided prior to any ground disturbance. No further action required if surveys are negative, or if habitat can be avoided. Comply with Fish and Game Code Section 1600 and/or Sections 401 and 404 of the Clean Water Act if surveys are positive and habitat cannot be avoided. Incorporate measures into construction contracts, as relevant.	_	
	in the region. The specific mitigation ratio for habitat- based mitigation shall be determined through consultation with the appropriate agency (i.e., CDFW, USFWS, or ACOE) on a project-by-project basis.			

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	Impacts to sensitive habitats, including but not limited to, vernal pools, streambeds, waterways, or riparian habitat, protected under FGC Section 1600 and Sections 401 and 404 of the Clean Water Act, require regulatory permitting to reduce impacts. Acquisition of permits and implementation of the approved mitigation strategy would ensure impacts are fully mitigated and "no net loss" of wetland habitat would occur.			
	Cultural Resources and Tribal Cultura	al Resources		
Impact CUL-1: Archaeological Resources. The Project could cause a substantial adverse change in the significance of unique archaeological resources or historic resources of an archaeological nature.	MM-CUL-1a: <u>Sensitivity Training.</u> CSUMB shall include a standard clause in every construction contract for the Project that requires cultural resource sensitivity training by a qualified archaeologist for workers prior to conducting earth disturbance in the vicinity of a documented cultural-resource-sensitive area, should one be identified in the future. Additionally, campus staff involved in earth-disturbing work in the vicinity of a documented resource sensitive area will also receive such training.	Prior to and ongoing during any ground disturbance in the vicinity of a documented cultural resource-sensitive area. Incorporate measures into construction contracts, as relevant.	Prior to and ongoing during any ground disturbance in the vicinity of a documented cultural resource-sensitive area.	CSUMB Campus Planning and Development
	 MM-CUL-1b: Inadvertent Discovery Evaluation and <u>Recordation.</u> CSUMB shall include a standard inadvertent discovery clause in every construction contract for the Project, which requires that in the event that an archaeological resource is discovered during construction (whether or not an archaeologist is present), all soil- disturbing work within 100 feet of the find shall cease until a qualified archaeologist can evaluate the find and make a recommendation for how to proceed. For an archaeological resource that is encountered during construction, the campus shall: Retain a qualified archaeologist to determine whether the resource has potential to qualify as a historical resource or a unique archaeological resource as outlined in the California Environmental 	Implement during soil- disturbing work. Incorporate measure into construction contracts.	Ongoing during soil- disturbing construction activities.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 Quality Act (CEQA) (Public Resources Code § 21083.2). If the resource has potential to be a historical resource or a unique archaeological resource, the qualified archaeologist, in consultation with CSUMB, shall prepare a research design and archaeological evaluation plan to assess whether the resource should be considered significant under CEQA criteria. If the resource is determined significant, CSUMB shall provide for preservation in place, if feasible. If preservation in place is not feasible, in consultation with CSUMB, a qualified archaeologist will prepare a data recovery plan for retrieving data that is specific to the site's geographic extent and the significance of any resources encountered. The data recovery plan shall be developed prior to site development (with a 100-foot buffer around the resource). The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the Northwest Information Center, and provide for the permanent curation of recovered materials. 			
	MM-CUL-1c: <u>Construction Monitoring</u> . A Native American and archaeological monitor shall be present for earth- disturbing work in native soils within 750 feet of a documented archaeological resource or tribal cultural resource, if such resources are discovered and documented in the future. Depth to native soils on specific project sites is typically identified in project-specific geotechnical investigations.	On-going during ground- disturbing activities in native soil with the specified resources present. Incorporate measure into construction contracts.	Ongoing during ground-disturbing activities in native soil with the specified resources present.	CSUMB Campus Planning and Development
Impact CUL-2: Disturbance of Human Remains. The Project could inadvertently disturb human remains.	MM-CUL-2: <u>Proper Handling of Human Remains.</u> Should human remains be discovered at any time, work will halt in that area and procedures set forth in the California Public Resources Code (§ 5097.98) and State Health and Safety Code (§ 7050.5) will be followed, beginning with	Implement during ground- disturbing work. Incorporate measure into construction contracts.	Ongoing during ground-disturbing construction activities.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	notification to CSUMB and the County Coroner. If Native American remains are determined to be present, the County Coroner will contact the Native American Heritage Commission to designate a Most Likely Descendant, who will arrange for the dignified disposition and treatment of the remains. The Ohlone/Costanoan-Esselen Nation (OCEN) shall be notified of the discovery even if not assigned as Most Likely Descendant.			
	Geology, Soils, and Paleonto	logy		
Impact GEO-5: Paleontological Resources. Project construction could directly or indirectly destroy a unique paleontological resource or site.	MM-GEO-1: <u>Monitoring, Discovery, and Treatment of</u> <u>Paleontological Resources.</u> Prior to the commencement of any grading activity, CSUMB shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontological monitoring that is warranted. The qualified paleontologist shall make these determinations based on construction plans, geotechnical reports if available, and subsurface geological observations that indicate the likely depth to undisturbed native sands that possess high paleontological sensitivity. The level of monitoring may range from full-time, part-time (spot- check), or unnecessary based on the qualified paleontologist's review of plans and relevant documentation as well as observations. Monitoring shall not be required under any conditions if excavations for proposed development do not extend into undisturbed native sands that possess high paleontological sensitivity. If it is determined that paleontological monitoring is required, qualified paleontologist shall attend any preconstruction meetings and manage the paleontological monitor(s) if he or she is not doing the monitoring. For monitoring that is required in a given work area, the paleontological monitor shall be equipped with necessary tools for the collection of fossils and associated geological and paleontological data. The monitor shall complete daily	Implement prior to ground- disturbing work. Incorporate measure into construction contracts. Final reporting following construction completion.	Initial determination of monitoring location and frequency. Ongoing during construction, if recommended	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	logs detailing the day's excavation activities and pertinent geological and paleontological data. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery shall be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, which in most circumstances, is less than a day, the monitor shall remove the rope and allow grading to recommence in the area of the find. If it will require more than one (1) day to document and/or salvage the find, the qualified paleontologist shall work with CSUMB to determine an appropriate treatment plan to ensure the protection of fossil resources while not impeding development. Following the paleontological monitoring program, a final monitoring report shall be submitted to CSUMB for approval. The report should summarize the monitoring program and include geological observations and be accompanied by any paleontological resources recovered during paleontological monitoring for the development. The qualified paleontologist shall be responsible for ensuring that all fossils associated with the paleontological monitoring program are permanently curated with an accredited institution that maintains paleontological collections.			
	Greenhouse Gas Emission	ıs		
Impact GHG-1: Greenhouse Gas Emissions. The Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	MM-GHG-1 : <u>Building Decarbonization: Replace Natural</u> <u>Gas with Electricity in New and Existing Buildings.</u> CSUMB shall replace natural gas energy use with electricity energy use in new and existing buildings to reduce natural gas consumption and associated greenhouse gas (GHG) emissions generated by CSUMB. Building electrification shall result in a minimum natural gas reduction of 603,330 therms (60,333 Metric Million	Calculate and report on building energy demand projections during the design phase. Prior to schematic design approval for buildings, provide a natural gas estimate with and without	Ongoing annually	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	British Thermal Unit [MMBTU]), which equates to an approximately 54% reduction in the 2035 Master Plan's estimated natural gas consumption (1,106,827 therms Master Plan buildout in 2035 – 603,330 therms reduction in natural gas = 503,497 therms in 2035 [110,683 MMBTU – 60,330 MMBTU = 50,353 MMBTU]). Replacing 603,330 therms of natural gas is estimated to require an increase in approximately 15,271 megawatt hours of electricity to achieve a reduction of approximately 2,068 metric tons per year of carbon dioxide equivalent per year (MT CO ₂ e) because electricity is a less GHG intensive energy source. This building decarbonization requirement in new and existing buildings can be met using different combinations of building electrification in new and existing residential and non-residential buildings, provided that 603,330 therms of natural gas is replaced with 15,271 megawatt hours of electricity by 2035. To ensure that a minimum of 603,330 therms of natural gas is replaced by electricity-provided energy in new and existing buildings by 2035, building energy demand projections will be calculated and reported on during the building design phase for new and existing buildings to be retrofitted. Prior to the schematic design approval for each new building or existing building to be retrofitted, CSUMB shall provide a natural gas estimate with and without electrification, which shall be tracked internally. Annually, CSUMB shall review the amount of natural gas replaced by electricity in new buildings to ensure that substantial progress is being made towards meeting the 603,330 therms replacement requirement for new and existing buildings under the Master Plan by 2035. CSUMB may pursue and implement other GHG-reducing strategies (e.g., additional solar PV, heat pump conversion, expanded TDM plan implementation) as a mechanism for achieving the required GHG reductions <td>electrification, which shall be tracked internally. Annually, review the amount of natural gas replaced by electricity and the amount of GHG emissions reductions associated with other GHG-reducing strategies.</td> <td></td> <td></td>	electrification, which shall be tracked internally. Annually, review the amount of natural gas replaced by electricity and the amount of GHG emissions reductions associated with other GHG-reducing strategies.		

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	(approximately 2,051 MT CO ₂ e) by 2035. To ensure GHG emissions reductions from such strategies are properly accounted for, the GHG emissions reductions associated with such strategies shall be calculated and reported on during the design phase of these strategies. Annually, CSUMB shall review the amount of GHG emissions reductions associated with these other GHG-reducing strategies, along with the GHG reductions associated with building electrification, as indicated previously, to ensure that substantial progress is being made towards meeting the required GHG reductions under the Master Plan by 2035.			
	Noise and Vibration			
Impact NOI-1: Substantial Temporary Increase in Ambient Noise Levels. The Project would generate a substantial temporary construction- related increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	 MM-NOI-1: CSUMB shall require that construction contractors implement the following practices and measures: Construction activity shall generally 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. If nighttime construction is required, noise levels shall not exceed 65 dB L_{max} (slow response) when measured at the construction site boundary between the hours of 7:00 p.m. and 7:00 a.m. Loud construction activity (e.g., asphalt removal, large-scale grading operations) shall not be schedule during finals week and preferably will be scheduled during holidays, summer/winter break, etc. All construction equipment shall be properly maintained and equipped with noise-reducing air intakes, exhaust mufflers, and engine shrouds in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation. Electrical power, rather than diesel equipment, shall be used to run compressors and similar power tools 	During construction activities. Incorporate measure into construction contracts.	Ongoing during construction.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 and to power any temporary structures, such as construction trailers. All stationary construction equipment (e.g., electrical generators, pumps, refrigeration units, and air compressors) and equipment staging areas shall be located as far as feasible from occupied residences or educational land uses. When anticipated construction activities are expected to occur less than 175 feet from an existing on-campus or off-campus residential land use, one or more of the following techniques shall be employed to keep noise levels below an eight-hour A-weighted energy-equivalent level (Leq8h) of 80 dBA at the potentially affected sensitive receptors: Reduce construction equipment and vehicle idling and active operation duration. Install or erect on-site a temporary, solid noise wall (or acoustical blanket having sufficient mass, such as the incorporation of a mass-loaded vinyl skin or septum) of adequate height and horizontal extent so that it linearly occludes the direct sound path between the noise-producing construction process(es) or equipment and the sensitive receptor(s) of concern. Where impact-type equipment is anticipated on site, apply noise-attenuating shields, shrouds, portable barriers or enclosures, to reduce the magnitudes of generated impulse noises. 			
Impact NOI-2: Substantial Permanent Increase in Ambient Noise Levels. The Project could generate a substantial permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local	MM-NOI-2: <u>Stadium Noise</u> . To minimize noise levels generated by the replacement of the existing stadium with an expanded stadium with additional seating capacity, a noise assessment shall be conducted by a qualified acoustical engineer or noise specialist to evaluate potential increases in noise levels associated with the proposed new and expanded stadium. The assessment	Prior to final design. Incorporate measure into design contracts.	Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
general plan or noise ordinance, or applicable standards of other agencies, due to roadway noise and stadium noise.	shall be conducted prior to final design. Noise reduction measures shall be incorporated into the design to reduce increases in existing operational noise levels at nearby noise-sensitive land uses to below the applicable threshold (i.e., less than 65 dBA CNEL). Such measures may include, but are not limited to, the incorporation of structural shielding, enclosed bleachers, and revised placement for amplified sound system speakers.			
Impact NOI-3: Excessive Vibration. The Project would not generate excessive groundborne vibration or groundborne noise levels.	MM-NOI-3: <u>Recommended Vibration Monitoring Plan.</u> While not required to reduce a significant impact, it is recommended that CSUMB or its designee prepare a vibration monitoring plan by a qualified acoustician prior to beginning construction of any project that involves pile driving (or any heavy construction operation known to exhibit a reference vibration velocity level of 0.2 ips PPV or greater magnitude at 25 feet) within 250 feet of an existing facility housing medical, semiconductor, testing, manufacturing, musical recording, or other instruments and processes that are known to be highly sensitive to vibration and may thus have function compromised by undue levels of groundborne-transmitted vibration. At a minimum, the vibration monitoring plan shall require data be sent to the University noise control officer or designee on a weekly basis or more frequently as determined by the noise control officer. The data shall include vibration level measurements taken during the previous work period. In the event that there is reasonable probability that future measured vibration levels would exceed FTA guidance (65 VdB or more stringent criteria as the existing facility activities may require), the University shall take the steps necessary to ensure that future vibration levels do not exceed such limits, including suspending further construction activities that would result in excessive vibration levels until either alternative equipment or alternative construction procedures can be	Prior to construction of projects that require pile driving or other heavy construction operation within 250 feet of existing buildings housing sensitive instruments. Incorporate measure into construction contracts, as warranted.	Ongoing during construction activities that require pile driving or other heavy construction operation.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	used. Construction activities not associated with vibration generation could continue.			
	In addition to the data described previously, the vibration monitoring plan shall also include the location of vibration monitors, the vibration instrumentation used, a data acquisition and retention plan, and exceedance notification and reporting procedures.			
	PROJECT DESIGN FEATUR	ES		•
	Open Space Framework		1	
PDF-OS-1	<u>Open Space Types and Management.</u> Manage and designate open space types consistent with Figure 3-8. Manage the natural open space and connecting landscape holistically to connect and protect habitats and sensitive species, percolate storm water runoff, visually unify the campus and connect bicycle and pedestrians to the built and natural environments. Avoid fragmenting natural open space and connecting landscape. Any development should allow for trail connections, peripheral streetscape improvements and the protection and access to viewsheds for the campus population.	Ongoing during Master Plan implementation. Prior to final design. Incorporate measure into design contracts.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-OS-2	<u>Natural Open Space Protection.</u> Maintain, enhance and/or restore natural open spaces, native habitats and sensitive species, while allowing for educational and passive recreation uses, such as trails. At a minimum, manage in accordance with the Fort Ord Habitat Management Plan and Habitat Conservation Plan EIR requirements and/or other best management practices.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-OS-3	<u>Construction Best Management Practices.</u> Establish and employ construction best management practices to avoid special-status plant and animal species and avoid or minimize erosion and sedimentation, where possible. Remove invasive species using best management practices during construction, demolition and landscape projects.	Ongoing during Master Plan implementation. Incorporate measure into construction contracts, as warranted.	Ongoing	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
PDF-OS-4	 <u>Tree Restoration and Management Program.</u> Continue and expand the CSUMB tree restoration program to maximize the health and stability of existing and replacement trees, while minimizing damage typically caused by the lack of proper tree care. The plan will include the following: a. All tree management will be performed under the guidance of a Certified Arborist. b. Heritage and mature trees, including those species no longer on the approved planting list, will be identified and managed with specific care. c. Campus Planning will approve and direct major trimming (over 30%) and replacement of all removed trees over 4-inches in diameter. d. Replacement of all removed trees 4-inches or greater in diameter at breast height (dbh), shall be provided at a minimum 2:1 ratio. The replacement ratio shall be based on the ultimate survival of planted trees and therefore the initial planting ratio will likely need to be higher. e. No vehicles, with the exception of grounds service vehicles, shall park on or in landscaped areas or within the root line of any tree, which is equal to a distance half the height of the tree from the trunk. f. Tree Campus USA certification will be pursued. g. Establish comprehensive oak woodland management program and associated measures for the Southern Oak Woodland, East Campus Open Space and East Campus Housing oak habitats. 	Ongoing during Master Plan implementation. Incorporate measure into construction contracts, as warranted.	Ongoing	CSUMB Campus Planning and Development
PDF-OS-5	Habitat Restoration Fund. Establish a habitat restoration fund to collect funds for the replacement of trees and/or habitat that may be removed or disturbed during construction of proposed development. Restoration costs would be included in project budgets and/or provided by third parties doing work on campus to ensure funds are available.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
PDF-OS-6	Planting Specifications. After demolition and construction, stabilize newly created bare land with native plants and seed mixes to eliminate erosion. For permanent landscaping use consistent, low maintenance, native and drought-tolerant landscaping strategies that visually unify the campus by using a campus wide landscape palette informed by the campus Landscape Maintenance Plan and FORA Regional Urban Design Guidelines ¹ (RUDG) palettes (FORA 2016). Limit turf to formal, athletic and recreational, and residential neighborhood open space types.	Ongoing during Master Plan implementation. Incorporate measure into construction contracts, as warranted.	Ongoing	CSUMB Campus Planning and Development
PDF-OS-7	<u>Trail Features</u> . Maximize landscaping, natural material surfaces and permeability along existing and future trails in the built environment in order to locally percolate stormwater runoff, encourage trail use and serve as a defining campus feature. Minimize human caused impacts along trail corridors by: minimizing obtrusive lighting, separating users by type and connecting people to and protecting the natural environment.	Ongoing during Master Plan implementation. Incorporate measure into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-OS-8	Outdoor Seating. Expand outdoor seating options in landscaped open spaces associated with transit/bike/pedestrian malls, formal open space, pathway improvement projects and residential courtyards.	Ongoing during Master Plan implementation. Incorporate measure into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-OS-9	Sustainability Commons. Establish the Sustainability Commons as the art, education and community-building center that serves as a model space for sustainable development and education.	Ongoing during Master Plan implementation. Incorporate measure into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-OS-10	Academic Open Space. As part of academic building projects, create academic open spaces such as plazas and courtyards adjacent to academic buildings to create opportunities for student and faculty interaction, and for studying, socializing and rest.	Ongoing during Master Plan implementation.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing Incorporate measure into	Monitoring Frequency	Responsible Party
		design contracts, as warranted.		
PDF-OS-11	Minimize Wildland Fire Hazards. Prepare and implement a defensible space plan to address landscape requirements for structures located: (1) along the eastern edge of the Main Campus, along Eighth Street (east of Fifth Avenue) and along Eighth Avenue between Inter- Garrison Road and Colonel Durham Street; (2) adjacent to the Southern Oak Woodlands; (3) along the undeveloped portions of Inter-Garrison Road; and (4) at the East Campus Housing area. Review and enhance the existing University evacuation plans, as part of the defensible space plan, to incorporate preplanned evacuation routes and safe refuge areas for the entire campus community in the event of a wildfire or threat of a wildfire, which would provide for the safe evacuation along key access routes around and through the campus. The defensible space plan shall conform to the requirements of California Public Resources Code § 4291 and California Government Code § 51182, which require creating and maintaining defensible space within 100 feet of structures. The plan shall also adhere to the defensible space standards outlined by the California Department of Forestry and Fire Protection.	Within first five years of Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
	Transportation and Circulation (y ,	1	
PDF-MO-1	<u>Faculty and Staff Housing.</u> Move East Campus Housing student residents to the Main Campus, and reduce Community Housing Partner ² residents in the East Campus Housing in order to accommodate housing for a minimum of 65% of faculty and staff. Continue to offer housing to staff and faculty at a minimum of 15% below market rate at units in Schoonover Park.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
PDF-MO-2	Student Housing. Expand the Main Campus student housing to accommodate the existing East Campus Housing student residential population and to continue to house a minimum of 60% of FTES. Continue to require first and second year undergraduate students not residing in the tri-county area (Santa Cruz, San Benito and Monterey Counties) to live on campus. Require and provide housing for 90% of International Students to live on campus. These student housing requirements are specified in the CSUMB Student Housing and Parking Guidelines (see Appendix C).	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-MO-3	<u>Mixed-Use Campus Development.</u> To provide amenities that support and improve campus life and reduce vehicle travel off campus establish a mixture of uses in new and renovated residence halls, including but not limited to: multi-purpose classroom and social spaces, dining halls, convenience stores, mail services, housing staff offices and quiet study spaces.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-MO-4	Mixture of Student Housing Types. Provide a mixture of bedroom and suite types across housing areas at a variety of rates. Accommodate a range of student types such as those with dependents, first year, returning students, residents, including traditional doubles, multiple occupant suites, student family apartments, accessible rooms, and live-in staff and faculty apartments.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-MO-5	<u>Compact Campus Core.</u> Create a compact campus with increased density in the campus core to foster interaction and collaboration, reduce vehicle travel, and to create a vital campus community by implementing the following: a. Establish future development sites in the campus core on existing parking lots or on low density building occupied sites when buildings are at the end of their useful life. Maintain a minimum floor area ratio (FAR)	Ongoing during Master Plan implementation. Incorporate FAR requirements into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 of 1.0 for the aggregate non-residential program, and 0.75 for the residential program. b. Maintain the concentration of academic buildings within the campus core, allowing for pedestrian travel between buildings in under 10 minutes. Maintain student housing on Main Campus within a ten-minute walking radius of the campus core (see Figure 3-3). 			
PDF-MO-6	 <u>TDM Plan.</u> The campus will continue to implement, enhance, and expand TDM strategies to reduce single- occupant vehicle trips as part of a formal TDM Plan. The TDM Plan will include the following components: a. <u>TDM Strategies.</u> Expand upon existing alternative transportation programs (carshare, universal transit pass, late night CSUMB-specific Monterey shuttle or shared ride credit, Otter Cycle Center, bike rentals, bike repair, guided bike tours, and bike counter programs) by using strategies taken from the CSU Transportation Demand Management (TDM) Manual (2012) and other best practices as a guide for project and program development. <u>Incentives Program.</u> Establish and promote an incentives-based commuter program to encourage students, faculty and staff commuters to carpool and take active and transit modes of travel to campus. <u>Parking Management.</u> Implement strategies and measures to reduce parking demand including the following: Consolidate academic and/or residential parking on the periphery of the campus and remove non- essential parking lots from the campus core per Figure 3-9. (See also PDF-MO-7 for information about multi-modal hubs.) Maintain the existing parking supply of approximately 4,720 parking spaces at the consolidated lots by implementing increased 	Ongoing during Master Plan implementation.	Ongoing Conduct periodic campus-wide travel surveys, as specified.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
Impact	 Mitigation Measure / Project Design Feature parking prices (i.e., no net increase in parking will be provided). Prohibit residential Freshmen and Sophomores from purchasing a parking permit, as specified in the CSUMB Student Housing and Parking Guidelines (Appendix C), to discourage Freshmen and Sophomores from using a car for travel. Limit purchase of multiple permits by one individual at one time to maintain the integrity of different permit types. Encourage transit and active transportation travel over single occupancy driving between East Campus Housing and the Main Campus. Expand Electrical Vehicle Charging (charging only) stalls in accordance with State regulations and CSU Executive Order direction, and equitably distribute locations across campus. Establish residential parking in proximity to new student residential development. Establish parking permit programs/restrictions and lot assignments that discourage movement of vehicles between campus parking locations (i.e., establish "park once" policy), Main and East Campus housing, and encourage active and transit modes of travel. Designate parking stalls in preferred locations for the promotion of carpooling, vanpooling, ridesharing and low and zero emission vehicles. Allow limited special parking stalls throughout campus to accommodate accessible and service vehicles, deliveries, loading and unloading activities. 	Implementation Timing	Frequency	Party
	 d. <u>Transit Services</u>. Analyze unmet transit needs and expand transit services in collaboration with Monterey 			
	Salinas Transit and other local agencies as needed to provide the level of off-campus connections, inter-			

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 campus circulation and para-transportation identified in the TDM plan. (See also PDF-MO-12 through PDF- MO-16 for more information about transit services.) <u>Bicycle, Scooter and Pedestrian Improvements.</u> Identify, prioritize, and design bicycle, scooter and pedestrian improvements using connecting landscape features where appropriate. Identify capital project improvements and prioritize for implementation. Implement improvements as part of nearby capital projects, where possible. Provide a maintenance plan that creates a system for maintaining pavement quality, signage, bicycle racks and painted markings. (See also PDF-MO-17 and PDF-MO-18 for more information about bicycle and pedestrian mobility.) <u>Monitoring.</u> Conduct periodic campus-wide travel surveys to collect data on CSUMB student and faculty/staff transportation behavior, experiences, mode preferences, and mode shares. <u>TDM Program Administration.</u> Expand and manage TDM services and programs. Establish new staff position(s) to coordinate TDM services and programs and encourage office administration roles to take on advocacy roles for these programs within their offices. Establish an annual budget for non-capital transportation facilities maintenance and upgrades, planning, and TDM programs. 			
PDF-MO-7	<u>Multi-Modal Infrastructure.</u> Expand the campus multi- modal transportation system infrastructure and programs. Establish two multimodal hubs, consistent with Figure 3-9, to provide centralized arrival points on campus from the four campus entries. The multimodal hubs will prioritize regional transit connections, shuttle service, carsharing, and visitors.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-MO-8	<u>Vehicle Restrictions.</u> Establish restrictions to general vehicle travel through the campus core and locate vehicle	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	circulation and parking on the campus periphery consistent with Figure 3-9. Establish consistent place- making roadway barriers, signs, special paving and landscaping to communicate restricted access roadway entrances. Eliminate the use of bollards, k-rails or industrial looking measures to restrict vehicle access. Maintain traffic speeds at safe levels for all road users and implement traffic calming measures where vehicle behavior routinely exceeds safe levels.			Planning and Development
PDF-MO-9	<u>Campus Entries.</u> Create four major entries with signs which lead to two key arrival areas, including: Divarty Street and General Jim Moore Boulevard on the west side (Peninsula Gateway) and Inter-Garrison Road and Sixth Avenue on the east side (Valley Gateway) (see Figure 3-9).	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-MO-10	Wayfinding. Expand and maintain a comprehensive regional wayfinding sign sequence, in coordination with state and local agencies, from the primary campus entrances, to campus parking locations.	Ongoing during Master Plan implementation. Incorporate wayfinding requirements into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-MO-11	Design Standards. Pursue universally accessible design throughout campus.	Ongoing during Master Plan implementation. Incorporate universally accessible design requirements into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-MO-12	Access to Transit Services. Maintain free or discounted access to campus, local and regional transit services, free at the time of boarding on campus, for all students with an active Otter ID. CSUMB and its contractors will coordinate with MST to ensure timed connections and to strive to implement multi-year agreements.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
PDF-MO-13	<u>Regional Connections.</u> Maintain connections on regional transit from Main Campus to East Campus, surrounding cities, and regional urban centers.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-MO-14	Expansion of On-Campus Services. Improve campus circulator shuttle via a new campus shuttle service and/or regional transit stops, on Main Campus, to provide service within one-quarter mile of all occupied buildings or high traffic programmed sites, and directly on site at multimodal hubs and general parking lots consistent with Figure 3-10. Timing for the development of this shuttle will be based on the TDM plan. Provide access to on-campus service within ¼ mile walk of campus of all occupied Main Campus buildings.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-MO-15	Para-Transportation Service. Expand para-transportation services on campus. Maintain wheelchair accessibility on transit service through campus.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-MO-16	Design Standards. At a minimum, maintain and design facilities serviced by transit to the standards developed by MST. Expand lighting and sheltered space with seating and posted service information at or within 100 feet of all transit fixed route stops. Expand wayfinding and live information for transit service at buildings with high pedestrian traffic.	Ongoing during Master Plan implementation. Incorporate MST design standards into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-MO-17	 <u>Bicycle/Scooter Mobility.</u> Establish bicycle mobility as an important travel consideration, prioritized before internal vehicle travel, in campus development and programs by implementing the following: a. Establish at least one form of bicycle route facility on or adjacent to all campus roadways consistent with Figure 3-11. 	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 b. Maintain bicycle route facilities that connect to all local jurisdiction and regional bicycle route facilities consistent with Figure 3-11. c. Expand bicycle connections from campus residential neighborhoods in the direction of commercial developments along the campus periphery. d. Implement separated bicycle routes from regular vehicle travel lanes with physical buffers or develop separated paths as the preferred design alternative, where possible. e. Establish bicycle and skateboard dismount zones in areas that experience regular heavy pedestrian traffic. Mark and sign consistently with the campus wayfinding plans/standards. f. Expand and maintain both Class I (secure and covered facility) and Class II (standard outdoor rack) bicycle parking on site at every occupied building, and Class II bicycle parking at every outdoor event space, athletic venue, bus stop, and parking lot. Provide enough bicycle parking spaces to meet at a minimum LEED BD+C and or LEED ND standards. (See bicycle parking definitions in the Master Plan Guidelines.) Identify and develop scooter parking slow zones, prohibited zones and parking areas. g. Expand pedestrian-scale lighting and wayfinding along all bicycle pathways. h. Report and maintain a Bicycle Friendly University status from the League of American BicyclistsSM. 			
PDF-MO-18	 <u>Pedestrian Mobility.</u> Establish pedestrian mobility as the primary travel consideration in campus development and programs by implementing the following: a. Expand accessible pedestrian pathways at every bus stop, bicycle parking area and parking lot and connect to the closest appropriate building consistent with Figure 3-12. 	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 b. Expand pedestrian connections from campus residential neighborhoods in the direction of commercial developments along the campus periphery. c. Expand campus trails and pathway networks linking to surrounding destinations, including Marina, Seaside, regional transportation hubs, FORTAG, Fort Ord Dunes State Park, Fort Ord National Monument, the Presidio of Monterey, and Monterey County lands. d. Expand and improve campus trails through natural open space areas with select amenities and trailhead signs at conveniently located entry points linked to popular campus pathways. e. Maintain a paved pathway width for at least two people to walk side by side comfortably on roadside sidewalks and primary pedestrian paths. Minimum 8-foot width where possible. f. Expand pedestrian-scale lighting, benches and wayfinding along all pedestrian pathways. 			
PDF-MO-19	Construction Traffic Control Plan. When construction projects require significant work within existing roadways CSUMB will require the design team and/or the project contractor and their qualified registered Civil Engineer to implement a construction traffic control plan. This requirement will be incorporated into construction bid packages. The plans will conform with the current version of the State of California Department of Transportation Standard Specifications, where applicable, and will be reviewed and approved by CSUMB prior to implementation. The traffic control plan will include any detour plans and/or temporary traffic control devices warranted, per the current version of the California Manual on Uniform Traffic Controls Devices to provide for public safety, maintenance of access, temporary roadway closures, if needed, and construction-area signage. CSUMB shall inform emergency services, campus	Ongoing during Master Plan implementation. Incorporate measure into construction contracts, as warranted.	Ongoing during construction.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	transportation and MST of any roadway or lane closures and alternative travel routes to ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures.			
	Water and Wastewater Syste	ems	·	
PDF-W-1	 Water Supply. Pursue development within the campus's water allocation,³ or campus-generated supply by implementing the following: a. Establish and implement indoor and outdoor water use thresholds below CalGreen Building Code standards for new development. b. Establish internal water modeling for each capital project during the feasibility phase. c. Establish potable water conservation projects in high water demand areas first, such as residential housing and sports facilities. d. Retrofit high-using campus water fixtures with low-flow toilets and urinals. e. Pursue reduced cooling demand and implement a district scale heat recovery chilling system to reduce the water needs of cooling towers. f. Study expansion of non-potable water use to meet non-potable water demands in areas such as new projects, landscaping, toilet flushing, and industrial uses. Establish strategies for expanding methods of irrigating with recycled water supplies, including greywater, stormwater, and reclaimed water from either an outside supplier or self-production. g. Work with partner agencies, such as MCWD, to achieve fiscally responsible water conservation measures. h. Pursue aggressive water conservation and evaluate campus generated water supply sosibilities on an ongoing basis to remain within the campus water allocation. i. Maintain an active role in planning regional potable and reclaimed water supplies. If regional water 	Ongoing during Master Plan implementation. Incorporate building standards into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	augmentation efforts are infeasible or supply cannot meet campus needs, study the establishment of an on-site water recycling facility, with a corresponding CSUMB-owned collection network.			
PDF-W-2	 Low-Impact Development (LID) Approach. Establish all landscapes as self-retaining stormwater management areas by using campus and building scale LID systems to maximize infiltration or retention for irrigation, and minimize stormwater runoff volumes into existing and larger campus-scale drain systems. This will be accomplished by implementing the following: a. Maximize use of building-scale LID design features to protect water quality such as green roofs, rain gardens, swales, stormwater harvesting, infiltration trenches and pervious paving. b. Maximize use of campus-scale LID design features to protect water quality such as porous paving, green streets, recreation fields, swales and basins. c. Infiltrate all storm water runoff within campus boundaries or easements. d. Develop standards for pervious pavement and pavement draining to natural areas as well as maintenance programs to support alternatives to concrete for pathways and outdoor gathering spaces. e. Conduct project-specific drainage analysis and/or consistency analysis during the design of individual developments to demonstrate that all criteria of the CSUMB Stormwater Master Plan are met. Incorporate the above LID features, as needed, into the design of each development project to ensure these criteria are met. 	Ongoing during Master Plan implementation. Incorporate project-specific drainage analysis and/or consistency analysis and LID requirements into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-W-3	Storm Water Quality - Implement a regular storm water maintenance program to protect water quality and follow best management practices, including but not limited to the following:	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 a. Minimize use of pesticides and quick release fertilizers and use principles of integrated pest management. Do not use such materials in or near storm water facilities. b. Employ non-chemical controls (biological, physical and cultural controls) before using chemicals to treat a pest problem. c. Maintain compliance with existing standards for special handling, removal, and disposal of hazardous materials to an approved location during any improvements to water supply and distribution systems when undertaken by the University, or by others on University Property. 			
	Energy Systems and GHG Red	uction		
PDF-E-1	 <u>Carbon Neutrality.</u> Strive to meet the Second Nature Climate Commitment of achieving carbon neutrality for scope 1 and 2⁴ emissions by 2030, as described in the Campus Sustainability Plan and its Carbon Neutrality Roadmap (CSUMB 2020), and strive to approach net positive energy⁵ by implementing the following: a. Pursue limiting use of natural gas to only lab space and select food preparation areas, and sourcing heating needs from renewable or electric sources. (This could be achieved through Central Plant Expansion and Heat Pump Conversion Project identified in the Carbon Neutrality Roadmap.) b. Establish targeted applications for alternative energy sourcing when resources permit. If additional solar generation is developed, one priority application involves panel arrays as shade structures over parking lots, bus and bike shelters and walkways. For example, add solar on top of the Seventh Avenue parking lot. c. Establish the baseline embodied carbon footprint of each new development during the CSU Feasibility Study phase of a project and develop strategies for 	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	 reducing this footprint and funding any additional associated costs as part of the Project. d. Pursue multiple financing strategies for infrastructure and building improvements. e. Pursue potential participation in a CSU system Community Choice Aggregation (CCA) program,⁶ as an energy procurement option and as a vehicle for net positive energy, if this option can enhance campusbased strategies. f. Explore public-private partnerships to fund renewable energy infrastructure. g. Create a renewable energy strategic plan to align growth, phasing, and infrastructure investment. h. Pursue low-emission or alternative fuel vehicles, when vehicle type allows, for campus service, department and program support fleet vehicles. 			
PDF-E-2	 Design for Energy Efficiency. Design and retrofit infrastructure and buildings to minimize energy use by implementing the following: a. Establish district-scale on-site energy production and distribution strategies rather than building by building. b. Study expansion of the district-scale electrical, chilled and hot water distribution, to serve building heating and cooling needs. c. Achieve a minimum 15% energy performance improvement target goal over current Title 24 code in new construction. d. Achieve a minimum 5% energy performance improvement target goal over 2016-17 usage in existing facilities in aggregate. e. Establish passive heating and cooling and thermal- mass building designs to reduce reliance on HVAC and ultimately to reduce required HVAC capacity. f. Establish standards for campus-scale energy conversion systems by cost, performance, and the 	Ongoing during Master Plan implementation. Incorporate project-specific energy requirements into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party	
	 extent to which they can meet the campus carbon neutrality and net zero energy goals. g. CSUMB shall design and build all new buildings and major renovations to meet minimum requirements equivalent to LEED "Silver," while aiming for the highest green building energy standards possible, which includes designing systems to meet LEED Platinum or equivalent, or net zero energy (on a campus wide basis). 				
PDF-E-3	 <u>Manage Energy Supply.</u> Meet future demand for energy in a safe, reliable, and cost-effective manner by implementing the following: a. Maintain and perform regular energy efficiency upgrades to reduce energy use and maintain system resilience. b. Recommission major buildings every five years, as funding is available. c. Establish energy system efficiency retrofit projects with the assistance of the UC/CSU Energy Efficiency Partnership and programs like Savings by Design or other energy incentive programs. d. Establish funding mechanisms and replacement and rehabilitation thresholds for existing energy systems as they near the end of their usable life. 	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development	
PDF-E-4	Promote Resiliency. Expand or improve systems to be resilient to extreme weather or natural disasters and provide undisrupted service. Move overhead power lines underground and encourage Pacific, Gas & Electric to do the same with their overhead power lines on campus. Develop additional loop systems and points of supply to provide redundancy and reliability.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development	
Design Themes and Special Area Plans					
PDF-D-1	Building and Design Guidelines. The campus and/or Institutional Partners will implement the Design Themes and associated design concepts included in the Master Plan	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus	

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	Guidelines as all building and landscape projects are pursued. Additionally, FORA RUDG will be voluntarily complied with in all future improvements along the campus edges.	Incorporate design requirements into design contracts, as warranted.	Confirm measure is being implemented during design review.	Planning and Development
PDF-D-2	<u>Design Review.</u> Establish a Design Review Committee (DRC) on campus to review project architectural and stylistic consistency and contribution to the campus.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-D-3	Building Height Limits. Within the campus core, new buildings would not exceed the existing Library's elevation above mean sea level (approximately 310 feet above sea level). Outside of the campus core, new buildings would not exceed 5 stories.	Ongoing during Master Plan implementation. Incorporate height limits into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-D-4	Accessibility. Expand wayfinding cues for sight and mobility impaired pedestrians. Establish interior design standards for supplemental accessible design elements, such as automatic door push plates.	Ongoing during Master Plan implementation. Incorporate standards into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-D-5	Safety. Maintain lines of sight and incorporate crime prevention design principles into formal open spaces for safety and ease of surveillance.	Ongoing during Master Plan implementation. Incorporate standards into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-D-6	Waste Collection and Diversion. Continue to implement and update the CSUMB 2018 Materials Management and Conservation Plan and the Campus Sustainability Plan to achieve a solid waste diversion rate of 90% by 2035, including but not limited to the hiring of a full-time, zero-waste staff person to oversee and implement the plan. Related to design, centralize, conceal, color code and consistently sign waste collection across several buildings and exterior locations to reduce pick-up locations and cost. Exterior dumpsters should	Ongoing during Master Plan implementation. Incorporate standards into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
	be shielded from view by pedestrians and building occupants by landscaping and/or enclosures.			
PDF-D-7	Lighting. Meet Neighborhood Development (LEED ND) light pollution reduction requirements in all new building and pathway development. The LEED ND requirements reference the Engineering Society and International Dark Sky Association (IES/IDA) model light ordinance user guide (IES/IDA 2011). Lighting power density will adhere to Title 24 maximums. New lighting at the replacement stadium shall use LED lights, reflectors, visors, shields and customized optics and technology to precisely aim and illuminate the field.	Ongoing during Master Plan implementation. Incorporate lighting requirements into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-D-8	<u>Noise.</u> During the design phase of new buildings CSUMB, or its designee will prepare an acoustical study(s) of exterior proposed sound emissions generated from new stationary noise sources (outdoor-exposed HVAC systems, testing of emergency generators, etc.) that are to be located near existing sensitive receptor locations, including such receptor locations within 150 feet of new stationary noise sources. The study will inform measures to reduce noise to acceptable levels for nearby sensitive receptors. Additionally, the acoustical study(s) will determine the need for sound insulation within new buildings with noise-sensitive occupants (e.g., residences, classrooms) to ensure that exterior-to-interior noise intrusion from traffic or operation of stationary sources does not cause interior background sound levels of habitable spaces to exceed 45 dBA CNEL. Best engineering practices will be implemented in the design and selection of these systems and their noise-producing components, as well as means for noise control or sound abatement that would be expected to reduce noise from such stationary sources to comply with applicable standards at existing sensitive receptor locations.	Ongoing during Master Plan implementation. Incorporate project-specific acoustical studies and noise control measures into design contracts, as specified.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development

Impact	Mitigation Measure / Project Design Feature	Implementation Timing	Monitoring Frequency	Responsible Party
PDF-D-9	Signage. Establish ecological, sustainable and historical interpretive signage within the natural open space and connecting landscape and near, and as part of, new pathway development. Highlight and educate users about the natural and cultural heritage of CSUMB property. Prohibit large advertising signs on campus, except those that may be associated with bus shelters.	Ongoing during Master Plan implementation. Incorporate signage requirements into design contracts, as warranted.	Ongoing Confirm measure is being implemented during design review.	CSUMB Campus Planning and Development
PDF-D-10	Special Area Plans. The campus will pursue implementation of the special area plans included in the Master Plan Guidelines for the Main Quad, Divarty Pedestrian Mall, Inter- Garrison Road, the Crescent, Sustainability Commons and the Athletics and Recreation District.	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development
PDF-D-11	<u>Emerging Living Community</u> . To the extent feasible, maintain status of an "emerging living community" as defined by "Living Community Challenge Plan," and described in the Master Plan Guidelines and the Living Community Challenge Vision Plan. ⁷	Ongoing during Master Plan implementation.	Ongoing	CSUMB Campus Planning and Development

Notes:

Prior to its dissolution, FORA adopted Regional Urban Design Guidelines (RUDG) that govern the visual quality of Fort Ord. The guidelines focus on enhancing the region making this area attractive and inviting to ensure the economic vitality of the entire Monterey Peninsula. The guidelines establish criteria for road design, setbacks, building height, landscaping, signage, and other matters of visual importance.

Community Housing Partners are made up of educational partners and military partners. Per the housing property conveyance to the CSU, CSU agreed to permit active duty military personnel, Department of Defense civilian employees and their families residing in on-campus housing units to remain until such time as 90% of the units are occupied by students and/or CSU employees and students and/or employees of other area institutions of higher education.

The campus has been allocated 1,035-acre feet per year (AFY) of potable water and contracted for 87 AFY of recycled water from MCWD for landscape irrigation.

Scope 1 carbon emissions are directly from fuel burned on campus (primarily natural gas for heating) or in university-owned vehicles. Scope 2 carbon emissions are associated with energy purchased by CSUMB and generated elsewhere, primarily grid electricity used on campus (CSUMB 2020).

A net-positive energy building produces more energy than it consumes. These types of buildings may consume energy from electric utilities, but the energy they export to the energy grid equals or exceeds their consumption.

A Community Choice Aggregation program is an alternative to the investor-owned utility energy supply system in which local entities aggregate the buying power of individual customers within a defined jurisdiction in order to secure alternative energy supply.

The Living Community Challenge is a framework for master planning, design, and construction and a tool to create a symbiotic relationship between people and all aspects of the built environment that was developed by the International Living Future Institute and strives to create a "socially just, culturally rich, and ecologically restorative" community.

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