AGREEMENT TO IMPLEMENT MITIGATION MONITORING AND REPORTING PROGRAM

Record No.:	2021-004847ENV	*Block/Lot:*	4852/001–022 and 4877/001–004
Project Title:	San Francisco Fire Department Fire Training Facility	*Lot Size:*	317,300 square feet
		Project Sponsor:	Magdalena Ryor, San Francisco Public Works, on behalf of the San Francisco Fire Department
Zoning:	P (Public) Use District; PDR-2 (Core Production, Distribution, and Repair) Use District 40-X Height and Bulk District	*Lead Agency:*	San Francisco Planning Department
		Staff Contact:	Jeanie Poling – 628.652.7559

The table below indicates when compliance with each mitigation measure must occur. Some mitigation measures span multiple phases. Substantive descriptions of each mitigation measure's requirements are provided on the following pages in the Mitigation Monitoring and Reporting Program.

Adopted Mitigation Measure	Period of Compliance			Compliance with Mitigation Measure Completed?
	Prior to the Start of Construction*	During Construction**	Post-construction or Operational	
Mitigation Measure M-CR-2: Archeological Testing Program	X	X	X	
Mitigation Measure M-TCR-1: Tribal Cultural Resources Archeological Resource Program		X	X	
Mitigation Measure M-NO-1: Construction Noise Control	X	X		
Mitigation Measure M-NO-2: Protection of Utility Structures & Vibration Monitoring During Construction	X	X		
Mitigation Measure M-AQ-4: Exhaust Capture Control Systems for Live-Fire Training Operations	X	X	X	
Mitigation Measure M-BI-2a: Nesting Bird Protection	X	X		
Mitigation Measure M-BI-2b: Wildlife Exclusion	X	X		

NOTES:

* Prior to any ground disturbing activities at the project site.

** Construction is broadly defined to include any physical activities associated with construction of a development project including, but not limited to: site preparation, clearing, demolition, excavation, shoring, foundation installation, and building construction.

Adopted Improvement Measure	Period of Compliance			Compliance with Improvement Measure Completed
	Prior to the Start of Construction*	During Construction**	Post-construction or Operational	
Improvement Measure I-TCR-1: Local Native American Land Acknowledgment Program	X	X	X	

MITIGATION MONITORING AND REPORTING PROGRAM

Adopted Mitigation Measure	Monitoring and Reporting Program[a]			
	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
MITIGATION MEASURES AGREED TO BY PROJECT SPONSOR				
CULTURAL RESOURCES				
Mitigation Measure M-CR-2: Archeological Testing Program Based on a reasonable potential that archeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effects from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the rotational qualified archeological consultants list (QACL) maintained by the planning department. After the first project approval action or as directed by the Environmental Review Officer (ERO), the project sponsor shall contact the department archeologist to obtain the names and contact information for the next three archeological consultants on the QACL. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archeological resource as defined in CEQA Guidelines Sect. 15064.5 (a)(c).	Project sponsor's qualified archeological consultant and construction contractor	Prior to issuance of construction permits and throughout the construction period	Environmental Review Officer (ERO)	Considered complete after Archeological Resources Report is approved.

Adopted Mitigation Measure	Monitoring and Reporting Program[a]			
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Archeological Testing Program. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA. The archeological testing program shall be conducted in accordance with the approved Archeological Testing Plan (ATP). The archeological consultant and the ERO shall consult on the scope of the ATP, which shall be approved by the ERO prior to any project-related soil-disturbing activities commencing. The ATP shall be submitted first and directly to the ERO for review and comment and shall be considered a draft subject to revision until final approval by the ERO. The archeologist shall implement the testing as specified in the approved ATP prior to and/or during construction. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, lay out what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ATP shall also identify the testing method to be used, the depth or horizonal extent of testing, and the locations recommended for testing and shall identify archeological monitoring requirements for construction soil disturbance as warranted. A local Native American representative shall be present throughout the portion of the archeological investigation program that focuses on testing for prehistoric resources, which includes inspection of geoarcheological cores. The local Native American representative at their discretion shall provide a training on Native American cultural sensitivity to all project contractors.	Project sponsor's qualified archeological consultant and construction contractor	Prior to issuance of construction permits and throughout the construction period	Planning Department	Considered complete after approval of Archeological Testing Plan.
Paleoenvironmental analysis of paleosols. When a submerged paleosol is identified during the testing program, irrespective of whether cultural material is present, samples shall be extracted and processed for dating, flotation for paleobotanical analysis, and other applicable special analyses pertinent to identification of possible cultural soils and for environmental reconstruction.	The archeological consultant, project sponsor, and project contractor at the direction of the ERO.	Monitoring of soil-disturbing activities	The archeological consultant to conduct the analysis	Considered complete upon incorporation of analysis data into results report

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Discovery Treatment Determination. At the completion of the archeological testing program, the archeological consultant shall submit a written summary of the findings to the ERO. The findings memo shall describe and identify each resource and provide an initial assessment of the integrity and significance of encountered archeological deposits. If the ERO in consultation with the archeological consultant determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, the ERO, in consultation with the project sponsor, shall determine whether preservation of the resource in place is feasible. If so, the proposed project shall be re-designed so as to avoid any adverse effect on the significant archeological resource and the archeological consultant shall prepare an archeological resource preservation plan (ARPP), which shall be implemented by the project sponsor during construction. The consultant shall submit a draft ARPP to the planning department for review and approval. If preservation in place is not feasible, a data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible. The ERO in consultation with the archeological consultant shall also determine if additional treatment is warranted, which may include additional testing and/or construction monitoring.	The archeological consultant, project sponsor and project contractor at the direction of the ERO	At the completion of archeological testing and/ or discovery of a potentially significant archeological resource	Planning Department / project sponsor	If preservation in place is feasible, complete when approved ARPP is implemented. If preservation in place is not feasible, complete when treatment is determined and implemented.
Consultation with Descendant Communities. On discovery of an archeological site associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group an appropriate representative of the descendant group shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. The representative shall be appropriately compensated by the project sponsor. A copy of the Archeological Resources Report (ARR) shall be provided to the representative of the descendant group.	The Archeological consultant, project sponsor, and project contractor at the direction of the ERO	During testing and, if applicable, during monitoring of soil-disturbing activities	Consultation with ERO on identified descendant group	Descendant group provides recommendations and is given a copy of the ARR.

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Archeological Data Recovery Program. An archeological data recovery program shall be conducted in accordance with an Archeological Data Recovery Plan (ADRP) if all three of the following apply: 1) a resource has potential to be significant, 2) preservation in place is not feasible, and 3) the ERO determines that an archeological data recovery program is warranted. The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.	Project sponsor's qualified archeological consultant and construction contractor	In the event that an archeological site is uncovered during the construction period	Planning Department / project sponsor	Considered complete approval of Archeological Results Report
The scope of the ADRP shall include the following elements: • *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations. • *Cataloguing and Laboratory Analysis.* Description of selected cataloguing system and artifact analysis procedures. • *Discard and Deaccession Policy*. Description of and rationale for field and post-field discard and deaccession policies. • *Security Measures.* Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities. • *Final Report.* Description of proposed report format and distribution of results. *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.	Project sponsor's qualified archeological consultant and construction contractor	In the event that an archeological site is uncovered during the construction period	Planning Department / project sponsor	Considered complete approval of Archeological Results Report

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Human Remains and Funerary Objects. The treatment of human remains and funerary objects discovered during any soil-disturbing activity shall comply with applicable State and federal laws. This shall include immediate notification of the Medical Examiner of the City and County of San Francisco. The ERO also shall be notified immediately upon the discovery of human remains. In the event of the Medical Examiner's determination that the human remains are Native American remains, the Medical Examiner shall notify the California State Native American Heritage Commission, which will appoint a Most Likely Descendant (MLD). The MLD will complete his or her inspection of the remains and make recommendations or preferences for treatment within 48 hours of being granted access to the site (Public Resources Code section 5097.98(a)). The project sponsor and ERO shall make all reasonable efforts to develop a Burial Agreement ("Agreement") with the MLD, as expeditiously as possible, for the treatment and disposition, with appropriate dignity, of human remains and associated or unassociated funerary objects (as detailed in CEQA Guidelines section 15064.5(d)). The Agreement shall take into consideration the appropriate excavation, removal, recordation, scientific analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. If the MLD agrees to scientific analyses of the remains and/or associated or unassociated funerary objects, the archeological consultant shall retain possession of the remains and associated or unassociated funerary objects until completion of any such analyses, after which the remains and associated or unassociated funerary objects shall be reinterred or curated as specified in the Agreement. If human remains cannot be permanently preserved in place, the landowner shall consult with the project archeologist, project sponsor, ERO, and the MLD on feasible recovery and treatment alternatives. The landowner shall then make all reasonable efforts to develop a Burial Agreement ("Agreement") with the MLD, as expeditiously as possible, for the treatment and disposition, with appropriate dignity, of human remains and associated or unassociated funerary objects (as detailed in CEQA Guidelines section 15064.5(d)). Per PRC 5097.98 (c)(1), the Agreement shall address, as applicable and to the degree consistent with the wishes of the MLD, the appropriate excavation, removal, recordation, scientific analysis, custodianship prior to reinternment or curation, and final disposition of the human remains and associated or unassociated funerary objects.	Project sponsor/ archeological consultant in consultation with the City, San Francisco Medical Examiner, California State Native American Heritage Commission, and most likely descendant	Discovery of human remains	Notification of County/City Coroner and, as warranted, notification of NAHC.	Considered complete on finding by ERO that all State laws regarding human remains/burial objects have been adhered to, consultation with MLD is completed as warranted, that sufficient opportunity has been provided to the archeological consultant for any scientific/historical analysis of remains/funerary objects specified in the Agreement, and the agreed-upon disposition of the remains has occurred

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Both parties are expected to make a concerted and good faith effort to arrive at an Agreement, consistent with the provisions of PRC 5097.98. However, if the landowner and the MLD are unable to reach an Agreement, the landowner, ERO, and project sponsor shall ensure that the remains and/or mortuary materials are stored securely and respectfully until they can be reinterred on the property, with appropriate dignity, in a location not subject to further or future subsurface disturbance, consistent with state law. Treatment of historic-period human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity, additionally, shall follow protocols laid out in the project's Archeological treatment documents, and in any related agreement established between the project sponsor, Medical Examiner and the ERO.				
Archeological Public Interpretation Plan. The project archeological consultant shall submit an Archeological Public Interpretation Plan (APIP) if a significant archeological resource is discovered during a project. If the resource to be interpreted is a tribal cultural resource, the APIP shall be prepared in consultation with and developed with the participation of local Native American representatives. The APIP shall describe the interpretive product(s), locations or distribution of interpretive materials or displays, the proposed content and materials, the producers or artists of the displays or installation, and a long-term maintenance program. The APIP shall be sent to the ERO for review and approval. The APIP shall be implemented prior to occupancy of the project.	Archeological consultant at the direction of the ERO will prepare APIP. Measure laid out in APIP are implemented by sponsor and consultant.	Following completion of cataloguing, analysis, and interpretation of recovered archeological data.	Archeological consultant submits draft APIP to ERO for review and approval.	APIP is complete on review and approval of ERO. Interpretive program is complete on certification to ERO that program has been implemented.
Archeological Resources Report. Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the testing program to the ERO. The archeological consultant shall submit a draft Archeological Resources Report (ARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological, historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken, and if applicable, discusses curation arrangements. Formal site recordation forms (CA DPR 523 series) shall be attached to the ARR as an appendix.	Archeological consultant at the direction of the ERO	Following completion and approval of ARR by ERO	Planning Department / project sponsor	Complete on certification to ERO that copies of the approved ARR have been distributed

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Once approved by the ERO, copies of the ARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the ARR to the NWIC. The environmental planning division of the planning department shall receive one (1) bound hardcopy of the ARR. Digital files that shall be submitted to the environmental division include an unlocked, searchable PDF version of the ARR, GIS shapefiles of the site and feature locations, any formal site recordation forms (CA DPR 523 series), and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. The PDF ARR, GIS files, recordation forms, and/or nomination documentation should be submitted via USB or other stable storage device. If a descendant group was consulted during archeological treatment, a PDF of the ARR shall be provided to the representative of the descendant group.				
Curation. Significant archeological collections and paleoenvironmental samples of future research value shall be permanently curated at an established curatorial facility. The facility shall be selected in consultation with the ERO. Upon submittal of the collection for curation the sponsor or archeologist shall provide a copy of the signed curatorial agreement to the ERO.	Project archeologist prepares collection for curation and project sponsor pays for curation costs	In the event a significant archeological resource is discovered and upon acceptance by the ERO of the ARR	Planning Department / project sponsor	Considered complete upon acceptance of the collection by the curatorial facility

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TRIBAL CULTURAL RESOURCES				
Mitigation Measure M-TCR-1: Tribal Cultural Resources Archeological Resource Program ***Preservation in Place.*** In the event of the discovery of an archeological resource of Native American origin, the Environmental Review Officer (ERO), the project sponsor, and the local Native American representative, shall consult to determine whether preservation in place would be feasible and effective. If it is determined that preservation-in-place of the tribal cultural resource would be both feasible and effective, then the archeological consultant shall prepare an archeological resource preservation plan (ARPP) in consultation with the local Native American representative, which shall be implemented by the project sponsor during construction. The consultant shall submit a draft ARPP to Planning for review and approval.	Project sponsor archeological consultant, and ERO, in consultation with the local Native American representatives	If significant archeological resource is present, during implementation of the project	Planning Department / project sponsor	Considered complete upon completion and approval of ARPP and project redesign.
Interpretive Program. If the ERO, in consultation with the local Native American representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, then archeological data recovery shall be implemented as required by the ERO and in consultation with affiliated Native American tribal representatives. If a tribal cultural resource is discovered, the project sponsor, in consultation and with the participation of local Native American representatives, shall prepare a Tribal Cultural Resources Interpretation Plan (TCRIP) to guide the interpretive program. The TCRIP may be prepared in tandem with the APIP as outlined M-CR-1 above. The TCRIP shall be submitted to ERO for review and approval prior to implementation of the program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, cultural displays, educational panels, or other interpretive elements agreed upon by participants displays. Upon approval of the TCRIP and prior to project occupancy, the interpretive program shall be implemented by the project sponsor. Local Native American representatives who are substantially involved in preparation or implementation of the interpretive program shall be appropriately compensated by the project sponsor.	Project sponsor in consultation with the local Native American representative	After determination that preservation in place is not feasible, and subsequent to archeological data recovery	Planning Department / project sponsor	Sponsor or archeological consultant shall submit the TCRIP to the ERO for review and approval. Complete upon sponsor verification to ERO that interpretive program was implemented.

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NOISE AND VIBRATION				
Mitigation Measure M-NO-1: Construction Noise Control Prior to issuance of any demolition or building permit, the project sponsor shall submit a project-specific construction noise control plan to the ERO or the ERO's designee for approval. The construction noise control plan shall be prepared by a qualified acoustical engineer, with input from the construction contractor, and include all feasible measures to reduce construction noise. The construction noise control plan shall identify noise control measures to meet a performance target of construction activities not resulting in a noise level greater than 90 dBA at noise-sensitive receptors and 10 dBA above the ambient noise level at noise-sensitive receptors (residences, hospitals, convalescent homes, schools, churches, hotels and motels, and sensitive wildlife habitat). The project sponsor shall ensure that requirements of the construction noise control plan are included in contract specifications. The plan shall also include measures for notifying the public of construction activities, complaint procedures, and a plan for monitoring construction noise levels before and during the beginning of each major phase of construction. The construction noise control plan shall include the following measures to the degree feasible, or other effective measures, to reduce construction noise levels: • Use construction equipment that is in good working order, and inspect mufflers for proper functionality; • Select "quiet" construction methods and equipment (e.g., improved mufflers, use of intake silencers, engine enclosures); • Use construction equipment with lower noise emission ratings whenever possible, particularly for air compressors.; • Prohibit the idling of inactive construction equipment for more than 5 minutes; • Locate stationary noise sources (such as compressors) as far from nearby noise-sensitive receptors as possible, muffle such noise sources, and construct barriers around such sources and/or the construction site; • Avoid placing stationary noise-generating equipment (e.g., generators, compressors) within noise-sensitive buffer areas (as determined by the acoustical engineer) immediately adjacent to neighbors;	Project sponsor, Project sponsor's qualified acoustical consultant and construction contractor	Prior to the issuance of building and construction permits	Planning Department	Considered complete after receipt of noise monitoring reports and completion of construction activities

Adopted Mitigation Measure	Monitoring and Reporting Program[a]			
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• Enclose or shield stationary noise sources from neighboring noise-sensitive properties with noise barriers to the extent feasible. To further reduce noise, locate stationary equipment in pit areas or excavated areas, if feasible; and • Install temporary barriers, barrier-backed sound curtains, and/or acoustical panels around working powered impact equipment and, if necessary, around the project site perimeter. When temporary barrier units are joined together, the mating surfaces shall be flush with each other. Gaps between barrier units, and between the bottom edge of the barrier panels and the ground, shall be closed with material that completely closes the gaps, and dense enough to attenuate noise. The construction noise control plan shall include the following measures for notifying the public of construction activities, complaint procedures, and monitoring of construction noise levels: • Designation of an on-site construction noise manager for the project; • Notification of neighboring noise sensitive receptors within 300 feet of the project construction area at least 30 days in advance of high-intensity noise-generating activities (e.g., pier drilling, pile driving, and other activities that may generate noise levels greater than 90 dBA at noise sensitive receptors) about the estimated duration of the activity; • A sign posted on site describing noise complaint procedures and a complaint hotline number that shall always be answered during construction; • A procedure for notifying the planning department of any noise complaints within one week of receiving a complaint; • A list of measures for responding to and tracking complaints pertaining to construction noise. Such measures may include the evaluation and implementation of additional noise controls at sensitive receptors; and • Conduct noise monitoring (measurements) at the beginning of major construction phases (e.g., demolition, grading, excavation) and during high-intensity construction activities to determine the effectiveness of noise attenuation measures and, if necessary, implement additional noise control measures.				

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The construction noise control plan shall include the following additional measures during pile-driving activities: • When pile driving is to occur within 600 feet of a noise-sensitive receptor, implement "quiet" pile-driving technology (such as pre-drilling of piles, sonic pile drivers, auger cast-in-place, or drilled-displacement, or the use of more than one pile driver to shorten the total pile-driving duration) where feasible, in consideration of geotechnical and structural requirements and conditions; • Where the use of driven impact piles cannot be avoided, properly fit impact pile driving equipment with an intake and exhaust muffler and a sound-attenuating shroud, as specified by the manufacturer; and • Conduct noise monitoring (measurements) before, during, and after the pile driving activity.				
Mitigation Measure M-NO-2: Protection of Utility Structures and Vibration Monitoring During Construction Prior to issuance of any demolition or building permit, the project sponsor shall submit a project-specific pre-construction survey and vibration management and monitoring plan to the ERO or the ERO's designee for approval. The plan shall identify all feasible means to avoid damage to the stormwater transport/storage box beneath Bancroft Street. The project sponsor shall ensure that the following requirements of the pre-construction survey and vibration management and monitoring plan are included in contract specifications, as necessary. **Pre-construction Survey.** Prior to the start of any ground-disturbing activity, the project sponsor shall engage a consultant to undertake a pre-construction survey of potentially affected utility structures. The project sponsor shall submit the survey to the ERO or the officer's designee for review and approval prior to the start of vibration-generating construction activity.	Project sponsor, construction contractor, civil engineer, collectively referred to as project sponsor team	Prior to the issuance of construction permits, project sponsor team to submit for review and approval a pre-construction survey and vibration management and monitoring plan. Project sponsor team monitor for utility damage during construction and submit damage reports as necessary.	Planning Department	Considered complete upon Planning Department approval of vibration monitoring results report

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Vibration Management and Monitoring Plan. The project sponsor shall undertake a monitoring plan to avoid or reduce proposed project-related construction vibration damage to utility structures and to ensure that any such damage is documented and repaired. Prior to issuance of any demolition or building permit, the project sponsor shall submit the plan to the ERO for review and approval. The vibration management and monitoring plan shall include, at a minimum, the following components, as applicable: • *Maximum Vibration Level.* Based on the anticipated construction and condition of the affected utility structures, a qualified acoustical/vibration consultant in coordination with a civil engineer (or professional with similar qualifications) shall establish a maximum vibration level that shall not be exceeded at the utility structures, based on existing conditions, character-defining features, soil conditions, and anticipated construction practices. • *Vibration-generating Equipment.* The plan shall identify all vibration-generating equipment to be used during construction (including but not limited to site preparation, clearing, demolition, excavation, shoring, foundation installation, and building construction). • *Alternative Construction Equipment and Techniques.* The plan shall identify potential alternative equipment and techniques that could be implemented if construction vibration levels are observed in excess of the established standard (e.g., drilled shafts [caissons] could be substituted for driven piles, if feasible, based on soil conditions, or smaller, lighter equipment could be used in some cases). • *Pile-Driving Requirements.*, The project sponsor shall incorporate into project construction specifications a requirement that the construction contractor(s) use all feasible means to avoid or reduce damage to potentially affected utility structures. Such methods may include one or more of the following: – Incorporate “quiet” pile-driving technologies into project construction (such as drilled shafts, using sonic pile drivers, auger cast-in-place, or drilled-displacement), as feasible; and/or – Ensure appropriate excavation shoring methods to prevent the movement of utility structures.				

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• *Buffer Distances.* The plan shall identify buffer distances to be maintained based on vibration levels and site constraints between the operation of vibration-generating construction equipment and the potentially affected utility structures to avoid damage to the extent possible. • *Vibration Monitoring.* The plan shall identify the method and equipment for vibration monitoring to ensure that construction vibration levels do not exceed the established standards identified in the plan. – Should construction vibration levels be observed in excess of the standards established in the plan, the contractor(s) shall halt construction and put alternative construction techniques identified in the plan into practice, to the extent feasible. – The qualified civil engineer shall inspect each affected utility structure (as allowed by property owners) in the event the construction activities exceed the vibration levels identified in the plan. – The civil structural engineer shall submit monthly reports to the ERO during vibration-inducing activity periods that identify and summarize any vibration level exceedances and describe the actions taken to reduce vibration. – If vibration has damaged utility structures, the civil engineer shall immediately notify the ERO and prepare a damage report documenting the features of the utility structure that has been damaged. – Following incorporation of the alternative construction techniques and/or planning department review of the damage report, vibration monitoring shall recommence to ensure that vibration levels at each utility structure are not exceeded.				

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• *Periodic Inspections.* The plan shall identify the intervals and parties responsible for periodic inspections. The qualified civil engineer shall conduct regular periodic inspections of each affected utility structure (as allowed by property owners) during vibration-generating construction activity on the project site. The plan will specify how often inspections would occur. – *Repair Damage.* The plan shall also identify provisions to be followed should damage to any utility structure occur due to construction-related vibration. The utility structures shall be remediated to their pre-construction condition (as allowed by property owners) at the conclusion of vibration-generating activity on the site. **Vibration Monitoring Results Report.** After construction is complete, the project sponsor shall submit to the ERO a final report from the qualified civil engineer. The report shall include, at a minimum, collected monitoring records, structure condition summaries, descriptions of all instances of vibration level exceedance, identification of damage incurred due to vibration, and corrective actions taken to restore damaged utility structures. The ERO shall review and approve the vibration monitoring results report.				
AIR QUALITY				
Mitigation Measure M-AQ-4: Design and Maintenance Standards for Exhaust Capture Control Systems for Live-Fire Training Operations Prior to approval of a building permit permitting construction to occur, the project sponsor shall submit a plan to the Environmental Review Officer (ERO) or the officer's designee demonstrating with reasonable certainty that the proposed live-fire prop structures include properly designed exhaust capture control systems (i.e., scrubber systems and exhaust stack attached in an outer structure) to reduce criteria air pollutants and toxic air contaminants emissions during project operations. The plan shall detail how the following requirements are met: • The following live-fire structures shall be equipped with an exhaust capture control system that consists of an outer structure to capture and direct smoke through the prop, remove air pollutants through a scrubber system, then exit to an exhaust stack: – Training tower	Project sponsor, structural engineer, collectively referred to as project sponsor team	Design and maintenance plan demonstrating the effectiveness of the exhaust capture control system to be submitted and approved prior to the issuance of building permits	Planning Department	Considered complete upon Planning Department approval of design and maintenance plan demonstrating the effectiveness of the exhaust capture control system. Operational and maintenance procedures to be ongoing at the facility.

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– Condominium/apartment – Commercial structure – Victorian house – Container structure • Scrubber systems shall be used in the live-fire training area and shall be designed to meet a minimum performance standard of removal efficiency of 90 percent of particulate matter. Sizing will be developed by design engineers with knowledge of exhaust capture control systems during the design phase of the proposed project. • Scrubber systems shall be ready for use during the preparation phase of the live-fire training evolution prior to smoke production to ensure these systems are at their normal operating condition when live-fire training starts. The preparation phase may entail establishing minimum air flow to have proper velocity in the scrubber and making sure the scrubber liquid system is operational for efficient particle removal. • Scrubber systems, including scrubbing solution and accessories, shall be properly maintained at the correct maintenance intervals (which will be listed in the plan), and following manufacturer's recommendations to ensure consistent contaminant removal efficiency throughout project perpetuity. • The project sponsor shall prepare and submit to the ERO the operational procedures for operation of each live-fire prop. • The project sponsor shall keep and maintain documentation on the installation and maintenance of the exhaust control systems, the amount of wood pallets and Excelsior wood fiber burned (in pounds) and the number of live fire training exercises conducted per year, and submit such documentation to the Planning Department within 60 days of request. Should documentation indicate that live fire exercises are not being conducted in accordance with the air quality analysis assumptions, additional air quality analysis may be required. If necessary, additional control measures shall be placed on the project to reduce air quality effects from live fires.				

Adopted Mitigation Measure	Monitoring and Reporting Program[a]			
	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
BIOLOGICAL RESOURCES				
Mitigation Measure M-BI-2a: Nesting Bird Protection Nesting birds and their nests in the adjacent sensitive habitat of Candlestick Point State Recreation Area shall be protected during construction by implementation of the following: • To the extent feasible, within 250 feet of the Candlestick Point State Recreation Area, the project sponsor shall conduct activities including, but not limited to, ground disturbance, site grading, and other construction activities that may compromise breeding birds or the success of their nests outside of the nesting season (January 15 through August 15). • If construction activities during the bird-nesting season cannot be fully avoided within 250 feet of the Candlestick Point State Recreation Area, a qualified wildlife biologist shall conduct pre-construction nesting surveys within 72 hours prior to the start of construction or demolition. Surveys shall be repeated in construction areas that have been inactive for more than two weeks during nesting season, if the qualified wildlife biologist determines that new nesting starts may have begun in previously surveyed areas. Typical experience requirements for a "qualified biologist" include a minimum of four years of academic training and professional experience in biological sciences and related resource management activities and a minimum of two years of experience in biological monitoring or surveying for nesting birds. Surveys of suitable habitat shall be performed in the Candlestick Point State Recreation Area within 100 feet of the project site in order to locate any active nests of passerine bird species and within 250 feet of the project site to locate any active raptor (birds of prey) nests. • If active nests are located during the pre-construction nesting bird surveys, a qualified biologist shall evaluate if the schedule of construction activities within 250 feet of the Candlestick Point State Recreation Area could affect the active nests; if so, the following measures shall apply, as determined by the biologist:	Project sponsor, qualified biologist, California Department of Fish and Wildlife (as necessary)	Avoid vegetation removal and construction activities during the nesting season or conduct pre-construction surveys during the bird nesting season within 72 hours prior to the start of construction. Implementation ongoing during construction if active nests are observed.	Qualified biologist and project sponsor in coordination with planning department staff if active nests are observed.	Ongoing during construction if active nests are observed. Qualified biologist to submit weekly reports if active nests are observed.

– If construction within 250 feet of the Candlestick Point State Recreation Area is not likely to affect the active nest, construction may proceed without restriction; however, a qualified biologist shall regularly monitor the nest at a frequency determined appropriate for the construction activity to confirm there is no adverse effect. Spot-check monitoring frequency would be determined on a nest-by-nest basis considering the particular construction activity, duration, proximity to the nest, and physical barriers that may screen activity from the nest. The qualified biologist may revise their determination at any time during the nesting season in coordination with the planning department. – If it is determined that construction within 250 feet of the Candlestick Point State Recreation Area may affect the active nest, the qualified biologist shall establish a no-disturbance buffer around the nest(s) and all project work shall halt within the buffer until a qualified biologist determines the nest is no longer in use. These buffer distances shall be equivalent to the survey distances (100 feet for passerines and 250 feet for raptors); however, the buffers may be adjusted if an obstruction, such as a building, is within line of sight between the nest and construction. – Modifying nest buffer distances, allowing certain construction activities within the buffer, and/or modifying construction methods in proximity to active nests shall be done at the discretion of the qualified biologist and in coordination with the planning department and the California Department of Fish and Wildlife, if necessary. Necessary actions to remove or relocate an active nest(s) shall be coordinated with the planning department and approved by California Department of Fish and Wildlife, if necessary. – Any work that must occur within established no-disturbance buffers around active nests shall be monitored by a qualified biologist. If adverse effects in response to project work within the buffer are observed and could compromise the nest, work within the no-disturbance buffer(s) shall halt until the nest occupants have fledged. – Any birds that begin nesting within the survey area amid construction activities are assumed to be habituated to construction-related or similar noise and disturbance levels, so no-disturbance buffer zones around nests may be reduced or eliminated in these cases as determined by the qualified biologist				

Adopted Mitigation Measure	Monitoring and Reporting Program[a]			
	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
in coordination with the planning department and California Department of Fish and Wildlife, if necessary. Work may proceed within 250 feet of those active nests as long as the nests and their occupants are not directly affected. • In the event inactive nests are observed within 250 feet of the project site at any time throughout the year, any removal or relocation of the inactive nests shall be at the discretion of the qualified biologist in coordination with the planning department and California Department of Fish and Wildlife, as appropriate. Work may proceed within 250 feet of these inactive nests.				
Mitigation Measure M-BI-2b: Wildlife Exclusion Wildlife exclusion fencing shall be installed around the proposed project footprint to isolate the active construction area from neighboring habitat and to prevent wildlife from entering the work area. The exclusion fencing shall be a minimum above-ground height of 34 inches to discourage wildlife from climbing over the fence. The fencing shall be keyed into a shallow trench 4 to 6 inches deep and backfilled with soil or gravel. If installed on pavement or hard surface, the lower edge can be weighted by a continuous row of sandbags or geotextile tubes. Installation shall be supervised by a qualified biologist. The biologist shall have the authority to direct the installation of the exclusion fencing to ensure the fence is installed in a manner that maximizes its intent and purpose to minimize impacts on wildlife. The exclusion fence shall be regularly inspected and fully maintained throughout the duration of the active construction phase. Repairs shall be made within 24 hours of discovery of breaches in the fence.	Project sponsor, qualified biologist	Installation prior to construction activities. Implementation ongoing during construction.	Qualified biologist and project sponsor	Ongoing during construction. Qualified biologist to submit weekly reports if fence is not repaired within 24 hours of observed breach.

NOTES:

[a] Definitions of MMRP Column Headings:
Adopted Mitigation and Improvements Measures: Full text of the mitigation measure(s) copied verbatim from the final CEQA document.
Implementation Responsibility: Entity who is responsible for implementing the mitigation measure. In most cases this is the project sponsor and/or project's sponsor's contractor/consultant and at times under the direction of the planning department.
Mitigation Schedule: Identifies milestones for when the actions in the mitigation measure need to be implemented.
Monitoring/Reporting Responsibility: Identifies who is responsible for monitoring compliance with the mitigation measure and any reporting responsibilities. In most cases it is the Planning Department who is responsible for monitoring compliance with the mitigation measure. If a department or agency other than the planning department is identified as responsible for monitoring, there should be an expressed agreement between the planning department and that other department/agency. In most cases the project sponsor, their contractor, or consultant are responsible for any reporting requirements.
Monitoring Actions/Completion Criteria: Identifies the milestone at which the mitigation measure is considered complete. This may also identify requirements for verifying compliance.

Adopted Improvement Measure	Monitoring and Reporting Program[b]			
	Implementation Responsibility	Mitigation Schedule	Monitoring/Reporting Responsibility	Monitoring Actions/ Completion Criteria
IMPROVEMENT MEASURES AGREED TO BY PROJECT SPONSOR				
TRIBAL CULTURAL RESOURCES				
Improvement Measure I-TCR-1: Local Native American Land Acknowledgment Program ***Land Acknowledgment Installation.*** The project sponsor should, in consultation with local Native American representatives, design and install a plaque or other land acknowledgement on the project site that acknowledges that the project is built on traditional Ohlone land. The display should be installed in a visible and, as feasible, publicly accessible area of the project site. Coordination for land acknowledgement should take place with local Native American representatives, including the Association of Ramaytush Ohlone and other interested Ohlone parties. The land acknowledgement may include artist installations, preferably by local Native American artists, planting of native plants, plaque with land acknowledgment text, or other physical or digital displays agreed upon by participants. The sponsor should submit a plan to the ERO for approval that provides information on the proposed land acknowledgement content, materials, location, and a long-term maintenance program. Upon approval by the ERO and prior to project occupancy, the land acknowledgment shall be implemented by the project sponsor. Local Native American representatives who are substantially involved in preparation or implementation of the land acknowledgment should be appropriately compensated by the project sponsor.	Project sponsor in collaboration with location Native American representatives	Installation prior to occupancy	Planning Department / Project sponsor	Considered completed upon installation of the land acknowledgment
Monthly Community Room Event. The conference rooms in the apparatus building would be available for use outside of SFFD working hours by SFFD's partners, committees, community groups, and for events organized by the local Native American community.	Project sponsor	Post completion	Project sponsor	Rooms are made publicly accessible.

NOTES:

[b] Definitions of Column Headings:

Adopted Improvement Measures: Full text of the improvement measure(s) copied verbatim from the final CEQA document.

Implementation Responsibility: Entity who is responsible for implementing the improvement measure. In most cases this is the project sponsor and/or project's sponsor's contractor/consultant and at times under the direction of the planning department.

Improvement Measure Schedule: Identifies milestones for when the actions in the improvement measure need to be implemented.

Monitoring/Reporting Responsibility: Identifies who is responsible for monitoring compliance with the improvement measure and any reporting responsibilities. In most cases it is the Planning Department who is responsible for monitoring compliance with the improvement measure. If a department or agency other than the planning department is identified as responsible for monitoring, there should be an expressed agreement between the planning department and that other department/agency. In most cases the project sponsor, their contractor, or consultant are responsible for any reporting requirements.

Monitoring Actions/Completion Criteria: Identifies the milestone at which the improvement measure is considered complete. This may also identify requirements for verifying compliance.