

EXHIBIT E.1: Environmental Protection Measures Handbook

Downtown Community Plan

CF 22-0617; CPC-2017-432-CPU; CPC-2014-1582-CA; ENV-2017-433-EIR

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ENVIRONMENTAL PROTECTION MEASURES HANDBOOK

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SECTION I. ADMINISTRATIVE PROVISIONS

A. Authority. These Environmental Protection Measures are adopted pursuant to Div. 4C.13 (Environmental Protection) of Chapter 1A of the LAMC.

B. Applicability.

An Environmental Protection Measure (EPM) applies to a Project that:

1. Is subject to the Environmental Protection Measures per Sec. 4A.1.2. (Development Standards Applicability) of Chapter 1A of the LAMC; and
2. Meets the applicability threshold for that specific EPM set forth in Section III of this Handbook.

C. Required Compliance with Environmental Protection Measures (EPM). Failure to comply with any applicable EPM as required in Subsection B, above, will be subject to all remedies available pursuant to Sec. 4C.13.1.D (Noncompliance) of Chapter 1A of the LAMC.

D. Additional Requirements. In addition to complying with any applicable EPM as required in Subsection B, above, an Applicant and Owner shall comply with all of the following:

1. Imprint all applicable EPMs, as determined by the Applicant and/or Owner, on all plans that are reviewed and approved by LADBS. More specifically, if an Applicant submits construction or operational plans as part of the Project description for a land use application, the Applicant shall imprint any applicable EPM, as required in Subsection B, on those plans. An Applicant may also include in the Project description and/or plans described above any best practices from Appendix A the Applicant intends to implement as part of the Project, as they deem them necessary and/or desirable to: (i) ensure compliance with applicable local, state, and federal laws; (ii) protect public health and safety; or (iii) meet other elective performance standards, such as LEED designation.
2. Sign and submit a Statement of Compliance to LADBS, at Plan Check prior to the issuance of any grading, excavation, or building permit, in which the Applicant and Owner acknowledge the applicable EPM standards and sign an affidavit of intent to comply. The Statement of Compliance shall substantially conform to the example provided in Appendix B attached to this EPM Handbook.
3. Notify any contractor hired by the Applicant or Owner who is doing work subject to one or more EPM standards of the requirement to comply with the applicable

EPM(s); and collect a signed acknowledgement of the notice from the contractor, consistent with the Contractor Acknowledgement in Appendix C attached to this EPM Handbook.

4. Maintain a copy of all applicable EPM(s) on the Project site at all times during construction.
5. Obtain a qualifications sheet or statement demonstrating proof of qualifications for any Qualified Expert, as defined below in Section I.G., who is required in the applicable EPMs and retained for purposes of preparing a survey, study or report; performing site monitoring activities; or otherwise ensuring compliance with the applicable EPM(s).
6. Maintain a copy of all records documenting compliance with the EPM Handbook for a minimum of five years after the Certificate of Occupancy is issued. Records of compliance include but are not limited to any reports, studies, certifications, or surveys required in any applicable EPM in Section III; the qualifications sheet or statement for any retained Qualified Expert; and any acknowledgment, notice, or Statement of Compliance required in Sections I or II of this EPM Handbook.
7. Upon request of a City inspector or officer, produce records of compliance, referenced in paragraph 6, above, for inspection as follows:
 - a. Immediately, while construction activities are on-going at the site.
 - b. At any other time, within 72 hours' notice.

E. Best Practices. Attached in Appendix A to this EPM Handbook is a set of best practices to avoid or reduce adverse impacts to certain environmental resources. The best practices in Appendix A are intended to be used as guidelines but are not mandated.

F. Acronyms. For purposes of this EPM Handbook, the following acronyms used herein are defined as follows:

CEQA. California Environmental Quality Act, Public Resources Code Sections 21000—21189.57, and California Code of Regulations, Title 14, Chapter 3, Sections 15000—15387 (CEQA Guidelines).

DTSC. Department of Toxic Substances Control.

LADBS. City of Los Angeles Department of Building and Safety.

LADPW. City of Los Angeles Department of Public Works.

LAFD. City of Los Angeles Fire Department.

SCAQMD. South Coast Air Quality Management District.

USEPA. United States Environmental Protection Agency.

G. Definitions. For purposes of this EPM Handbook, the following words and phrases used herein are defined as follows:

Active Nest: An Active Nest is one that contains viable eggs and/or chicks. A nest becomes active when the first egg is laid and remains active until fledged young are no longer dependent on the nest. Nests that are empty, contain nonviable eggs, or are being built but do not yet have an egg in them are considered inactive.

Applicant. The person or entity who files an application for a Project. Once an application has been approved, the Applicant includes any successor or assignee of the original Applicant.

Best Available Control Technology. As defined in the federal Clean Air Act Section 169(3), this refers to production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for the control of pollutants, that result in the maximum emission reduction that the permitting authority determines is achievable.

Ground Disturbance Activities. Any earthwork activity including, but not limited to, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, driving posts, augering, backfilling, blasting, stripping topsoil or a similar activity at a Project site.

Hazardous Materials. Any substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce.

Hazardous Waste. A solid waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment.

Heavy Construction Equipment. Equipment used during construction that has a minimum of 300 horsepower and operating weight of 80,000 pounds or more. Examples include a large bulldozer or excavator.

Hillside Area. Lots identified as being in a Hillside Area, as established in Chapter 1A of the LAMC, Sec.1B.2.6. (Hillside Area Map).

Historic Resources Survey. A document, officially recognized by a local, state, or federal agency, resulting from a process of systematically identifying and documenting buildings, structures, objects, cultural landscapes, natural features, and historic districts that reflect important themes in the city's growth and development or the historic or cultural significance of a given area. Historic resources surveys may identify these surveyed historic resources as potentially eligible for listing in the National Register of Historic Places, California Register of Historical Resources, or City of Los Angeles List of Historic-Cultural Monuments, including National and California Register Historic Districts or Los Angeles Historic Preservation Districts. In Historic Preservation Districts (See Sec. 8.2.6. Historic Preservation Districts (HPOZ) of Chapter 1A of the LAMC), historic resources surveys must be certified as to accuracy and completeness by the Cultural Heritage Commission (See Sec. 13.A.1.5. (Cultural Heritage Commission) of Chapter 1A of the LAMC).

Noise-Sensitive Uses. Any of the following uses: Dwelling; Mobile Home Park; Supportive Housing (including General, Medical Care, Non-Medical, and Transitional Shelter); Lodging; School (including K-12, Post-Secondary, and Preschool/Daycare); Religious Assembly; Medical (including Local and Regional); Entertainment Venue, Indoor, Regional; Amphitheater or Stadium (including Major and Minor); Recreation, Public; Open Space, Public (with the exception of privately-owned plazas); and Public Libraries, defined as any publicly-accessible facility, owned or operated by a governmental or community organization, that provides free access to books, periodicals, and other digital and physical media and may also provide community or instructional services. See Div. 5C.1. (Use Definitions) of Chapter 1A of the LAMC for definitions of these terms.

Owner. Any person, association, partnership, firm, corporation, or public entity, identified as the holder of title on any property as shown on the records of the City Engineer or on the last assessment roll of the County of Los Angeles, as applicable. For purposes of this Handbook, Owner also refers to an appointed representative of an association, partnership, firm, corporation, or public entity, which is a recorded Owner.

Petroleum Engineer. A professional engineer with at minimum a bachelor's degree in petroleum engineering, mechanical engineering, or chemical engineering and work experience in engineering, geology, and/or thermodynamics fields.

Project. Any project activity subject to Div. 4C.13 (Environmental Protection) of Chapter 1A of the LAMC per Sec. 4A.2.2B (Project Activities) of Chapter 1A of the LAMC .

Protected Tree or Shrub. Any protected tree or shrub as defined in Sec. 46.01 (Definitions) of Article 6 (Preservation of Protected Trees and Shrubs) of Chapter 4 (Public Welfare) of the LAMC.

Qualified Expert. A person with specified knowledge, skill, education, experience and/or training in a specialized field, including the following types of experts:

- **Archaeological Monitor.** An archaeologist who has a minimum of a bachelor's or equivalent degree in archaeology, anthropology, paleontology, or another closely related field and no less than one year of experience conducting archaeological monitoring and/or excavation in similar regional archaeological contexts.
- **Paleontological Monitor.** A paleontologist who has a minimum of a bachelor's or equivalent degree in geology or paleontology and no less than one year of experience performing paleontological monitoring and salvaging fossil materials in the relevant geologic province; or an equivalent degree in biology or pursuit of a degree in geology or paleontology and no less than two years of comparable experience.
- **Qualified Archaeologist.** A professional archaeologist who meets the Secretary of the Interior's Archeology and Historic Preservation Professional Qualification Standards and is eligible for listing on the Register of Professional Archaeologists or the Society for American Archaeology; holds a graduate degree in archaeology or a related field; and has a minimum of five years of experience completing and supervising field work in archaeological contexts similar to the Project site.
- **Qualified Biologist.** A biologist with the appropriate education, training and experience to conduct biological surveys, monitor Project activities that have the potential to affect biological resources, provide construction worker education programs related to the protection of biological resources, and supervise or perform other tasks related to biological resources; possesses a bachelor's or equivalent degree in biology, ecology, or a related environmental science; and has at least five years of professional experience that requires knowledge of natural history, habitat affinities, and identification of flora and fauna species, and relevant local, state and federal laws and regulations governing the protection of biological resources.
- **Qualified Environmental Professional.** An environmental professional who is credentialed through the Institute of Professional Environmental Practice (IPEP); holds a bachelor's or equivalent degree in

physical, earth or natural sciences, engineering, or mathematics; and has at least five years of professional environmental work experience, or eight years of professional environmental work experience with a degree in a discipline other than those listed above.

- **Qualified Historian.** A person with a graduate degree in architectural history or a closely related area of study, such as art history or historic preservation, and at least one year of experience in applying the methods and practices of architectural history in the historic preservation arena; or with a bachelor's or equivalent degree in one of the same areas of study and at least three years of related experience.
- **Qualified Noise Expert.** An acoustics professional who is a member of the Institute of Noise Control Engineering (INCE) or National Council of Acoustical Consultants (NCAC) and has a minimum of five years of experience conducting noise and vibration measurements, monitoring, modelling, and mitigation; analysis of such measurements; and related activities.
- **Qualified Paleontologist.** A paleontologist who meets the Society of Vertebrate Paleontology standards for a Principal Investigator or Project Paleontologist; has demonstrated competence in field techniques, preparation, identification, curation, and reporting and/or a graduate degree in paleontology or geology or a publication record in peer reviewed journals; at least two years professional experience with administration and project management experience; proficiency in recognizing fossils in the field and determining their significance; expertise in local geology, stratigraphy, and biostratigraphy; and experience collecting vertebrate fossils in the field.
- **Qualified Structural Engineer.** A civil engineer who holds licenses as both a Professional Engineer (PE) and a Structural Engineer (SE) from the State Board for Professional Engineers, Land Surveyors, and Geologists and who has at least three years of civil engineering experience.
- **Qualified Tribal Monitor.** A tribal representative who possesses the knowledge, skills, abilities and experience established by the Native American Heritage Commission's (NAHC) Guidelines for Native American Monitors/Consultants (2005), and as may be amended.

Sensitive Uses. Any of the following uses: any Residential use; Medical, Regional or Medical, Local; School (including Preschool/Daycare, K-12, and Post-secondary); Recreation, Public; or Open Space, Public.

Statement of Compliance. A written statement that acknowledges which EPM(s) apply to a Project and includes an affidavit of intent to comply with those applicable EPM(s), signed by the Applicant and Owner. A sample Statement of Compliance is provided in Appendix B attached to this EPM Handbook.

Surveyed Historic Resource. Any building, structure, landscaping, or natural feature identified through a historic resources survey as potentially eligible for listing in the National Register of Historic Places, California Register of Historical Resources, or City of Los Angeles List of Historic-Cultural Monuments, including National and California Register Historic Districts or Los Angeles Historic Preservation District.

To the Extent Available and Feasible. Employment of best efforts to implement or comply with a requirement, assuming any necessary technology, equipment, or other resources are readily available and costs or other constraints are not prohibitive.

H. While the Environmental Protection Measures and Notices may be considered in any environmental analysis for a Project, consistent with the California Environmental Quality Act and its Guidelines, nothing herein is intended to control any analysis or mitigation measure required by the City, acting as a lead or responsible agency.

SECTION II. REQUIRED NOTICES

In addition to any other requirement in this EPM Handbook, LADBS shall provide notices and collect acknowledgements of those notices from Applicants and Owners at Plan Check, as provided below.

- 1. Projects Requiring Grading or Excavation.** Prior to issuance of a permit for grading or excavation, LADBS shall issue the following notice(s) and obtain a signed acknowledgement that the notice(s) was received and read by the Applicant and Owner.

A. Archaeological, Paleontological, and Tribal Cultural Resources Notice: Several laws regulate the treatment of archaeological, paleontological, and tribal cultural resources and make it a criminal violation to destroy those resources. These regulations include, but are not limited to:

- California Penal Code Section 622.5 provides the following: “Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor.”
- Public Resources Code Section 5097.5(a) states: “A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.”
- California Code of Regulations, Title 14, Section 4307 states: “No person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value.” Section 1427 “recognizes that California’s archaeological resources are endangered by urban development and population growth and by natural forces...Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archaeological or historical interest or value, whether situated on private lands or within any public park of place, is guilty of a misdemeanor. It is a misdemeanor to alter any archaeological evidence found in any cave, or to remove any materials from a cave.”

Appendix A to this City of Los Angeles EPM Handbook includes suggested best practices to avoid damage to archaeological, paleontological, and tribal cultural resources.

2. **Projects Requiring Grading, Excavation, or Building.** Prior to issuance of a permit for grading, excavation, or building, LADBS shall issue all of the following notice(s) and obtain a signed acknowledgement that the notice(s) was received and read by the Applicant and Owner.
 - A. **Nesting Bird Notice.** Under the federal Migratory Bird Treaty Act, among other prohibitions, it is unlawful to destroy migratory birds or remove bird nests. Under California Fish and Game Code Section 3503, *et seq.*, among other prohibitions, it is unlawful to destroy nests and eggs of any bird. Appendix A to this City of Los Angeles EPM Handbook includes suggested best practices to avoid damage to Active Nests.
 - B. **Noise and Vibration Notice.** The Los Angeles Municipal Code (LAMC) regulates excessive noise, including from construction activities and uses of property, including but not limited to those regulations in LAMC Chapter XI,

‘Noise Regulation.’ Appendix A to this City of Los Angeles EPM Handbook includes suggested best practices to avoid excessive vibration.

SECTION III. ENVIRONMENTAL PROTECTION MEASURES

For each Environmental Protection Measure (EPM) provided in this Section there is an applicability threshold and a standard. Projects that meet all of the criteria in the applicability thresholds shall comply with the associated EPM standards, as provided in Section I.

Air Quality Standard (AQ1)—Operation of Construction Equipment

AQ1-1: Dust Control Compliance with SCAQMD Rule 403

a. Applicability Threshold

Any Project whose construction activities involve the use of construction equipment and require a permit from LADBS.

b. Standard

Consistent with SCAQMD Rule 403, best available dust control measures (see Appendix D) shall be implemented during Ground Disturbance Activities and active construction operations capable of generating dust.

AQ1-2: Equipment Maintenance

a. Applicability Threshold

Any Project whose construction activities involve the use of construction equipment and require a permit from LADBS.

b. Standard

Maintain construction equipment in good, properly tuned operating condition, as specified by the manufacturer, to minimize exhaust emissions. Documentation demonstrating that the equipment has been maintained in accordance with the manufacturer’s specifications shall be maintained per the proof of compliance requirements in Subsection I.D.6.

All construction equipment shall achieve emissions reductions that are no less than what could be achieved by a Tier 3 diesel emissions control strategy for a similarly sized engine as defined by California Air Resources Board regulations.

AQ1-3: Vehicle Idling Limit and Notification Signs

a. Applicability Threshold

Any Project whose construction activities involve the use of construction vehicles and require a permit from LADBS.

b. Standard

Vehicle idling during construction activities shall be limited to five minutes as set forth in the California Code of Regulations, Title 13, Section 2449. Signs shall be posted in areas where they will be seen by vehicle operators stating idling time limits.

AQ1-4: Non-Diesel Fueled Electrical Power

a. Applicability Threshold

Any Project whose construction activities involve the use of construction equipment and require a permit from LADBS.

b. Standard

Electricity from power poles rather than temporary gasoline or diesel-powered generators shall be used To the Extent Available and Feasible.

AQ1-5: Emissions Standards for Off-Road Construction Equipment Greater than 50 Horsepower

a. Applicability Threshold

Any Project whose construction activities involve the use of construction equipment, require a permit from LADBS, and involve at least 5,000 cubic yards of on-site cut/fill on any given day.

b. Standard

All off-road diesel-powered construction equipment equal to or greater than 50 horsepower shall meet the U.S. Environmental Protection Agency's (USEPA) Tier 4 emission standards during construction. Operators shall maintain records of all off-road equipment associated with Project construction to document that each piece of equipment used meets these emission standards per the proof of compliance requirement in Subsection I.D.6.

In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD's Air Quality Handbook may be provided by the Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD's regional and localized construction thresholds.

AQ1-6: Use of Low Polluting Fuels

a. Applicability Threshold

Any Project whose construction activities involve the use of construction equipment, require a permit from LADBS, and involve at least 5,000 cubic yards of on-site cut/fill on any given day.

b. Standard

Construction equipment less than 50 horsepower shall use low polluting fuels (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline).

In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD's Air Quality Handbook may be provided by the Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD's regional and localized construction thresholds.

AQ1-7: Emission Standards for On-Road Haul Trucks**a. Applicability Threshold**

Any Project whose construction activities involve the use of construction equipment, require a permit from LADBS, and involve more than 90 round-trip haul truck trips on any given day for demolition debris and import/export of soil.

b. Standard

Construction haul truck operators for demolition debris and import/export of soil shall use trucks that meet the California Air Resources Board's (CARB) 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of nitrogen oxides (NO_x) emissions. Operators shall maintain records of all trucks associated with Project construction to document that each truck used meets these emission standards per the proof of compliance requirements in Subsection I.D.6.

In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD's Air Quality Handbook may be provided by the Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD's regional and localized construction thresholds.

AQ1-8: Routes for On-Road Haul Trucks**a. Applicability Threshold**

Any Project whose construction activities involve the use of construction vehicles and require a permit from LADBS.

b. Standard

Construction contractors shall reroute construction trucks away from congested streets or Sensitive Uses, as feasible. The burden of proving that compliance is infeasible shall be upon the Applicant or Owner. Where avoiding Sensitive Uses and congested streets altogether is infeasible, routing away from Sensitive Uses shall be prioritized over routing away from congested streets.

Biological Resources Standards (BR1)—Protected Trees

Reserved.

Biological Resources Standards (BR2)—Special Status Species

Reserved.

Biological Resources Standards (BR3)—Nesting Native and Migratory Birds**BR3-1: Restriction of Ground Disturbance Activity****a. Applicability Threshold**

Any Project for which an active bird nest has been discovered on-site.

b. Standard

If any active bird nest is found during a pre-construction nesting bird survey or is discovered inadvertently during earthwork or construction-related activities, a Qualified Biologist shall be retained by the Applicant or Owner to determine an appropriate avoidance buffer which shall be no less than is necessary to protect the nest, eggs and/or fledglings, from damage or disturbance in consideration of the following factors: the bird species, the availability of suitable habitat within the immediate area, the proposed work activity, and existing disturbances associated with surrounding land uses. The buffer shall be demarcated using bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary of the buffer. All construction personnel shall be notified of the buffer zone and shall avoid entering the protected area. No Ground Disturbing Activities or vegetation removal shall occur within this buffer area until the Qualified Biologist has confirmed that breeding/nesting is complete and the young have fledged the nest and/or that the nest is no longer an Active Nest. The Qualified Biologist shall prepare a report prior to the issuance of any building permit detailing the results of the nesting bird survey and subsequent monitoring, which shall be maintained pursuant to the proof of compliance requirements in Subsection I.D.6.

Cultural Resources Standards (CR1)—Archaeological Resources**CR1-1: Inadvertent Discovery****a. Applicability Threshold**

Any Project that requires a permit for grading or excavation.

b. Standard

If a possible archaeological resource is uncovered during earthwork or construction, all work shall cease within a minimum distance of 50 feet from the find until a Qualified Archaeologist has been retained to evaluate the find in accordance with National Register of Historic Places and California Register of Historical Resources criteria. The Qualified Archaeologist may adjust this avoidance area, ensuring appropriate temporary protection measures of the find are taken while also considering ongoing construction needs in the surrounding area. Temporary staking and delineation of the avoidance area shall be installed around the find in order to avoid any disturbance from construction equipment. Ground Disturbance Activities may continue unimpeded on other portions of the site outside the specified radius.

Any potential archaeological resource or associated materials that are uncovered shall not be moved or collected by anyone other than an Archaeological Monitor or Qualified Archaeologist unless the materials have been determined to be non-unique archaeological resources, as defined in Public Resources Code Section 21083.1(h), by the Qualified Archaeologist. The Qualified Archaeologist shall determine if the resources are unique archeological resources as defined in Public Resources Code Section 21083.2(g).

Consistent with Public Resources Code Section 21083.2, the handling, treatment, preservation, and recordation of unique archaeological resources should occur as follows:

- The find should be preserved in place or left in an undisturbed state unless the Project would damage the resource.
- When preserving in place or leaving in an undisturbed state is not possible, excavation and recovery of the find for scientific study should occur unless testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, and this determination is documented by a Qualified Archaeologist.

Ground Disturbance Activities in the area where resource(s) were found may recommence once the identified resources are properly assessed and processed by a Qualified Archaeologist. A report that describes the resource(s) and its disposition, as well as the assessment methodology, shall be prepared by the Qualified Archaeologist according to current professional standards and maintained pursuant to the proof of compliance requirements in Subsection I.D.6. If appropriate, the report should also contain the Qualified Archaeologist's recommendations for the preservation, conservation, and curation of the resource at a suitable repository,

such as the Natural History Museum of Los Angeles County, with which the Applicant or Owner must comply.

Cultural Resources Standards (CR2)—Zanja Madre and the Zanja System

CR2-1: Zanja Madre HAER Documentation

a. Applicability Threshold

Any project that requires a permit for grading or excavation and that is located within one mile of the currently known and mapped segments of the Zanja system (see Appendix E).

b. Standard

Projects within 500 feet of the currently mapped known segments of the Zanja system (see Appendix E) have increased likelihood of encountering segments of the Zanja system during construction. The Zanja system includes the Zanja Madre and its outbranching secondary Zanja segments. If possible segments of the Zanja system are uncovered during earthwork or construction, all work shall cease within a minimum distance of 50 feet from the find until a Qualified Archaeologist has been retained to inspect and evaluate the find. The Qualified Archaeologist may adjust this avoidance area, ensuring appropriate temporary protection measures of the find are taken while also considering ongoing construction needs in the surrounding area. Temporary staking and delineation of the avoidance area shall be installed around the find in order to avoid any disturbance from construction equipment. Ground Disturbance Activities may continue unimpeded on other portions of the site outside the specified radius.

At a minimum, and even if avoided, should the find be determined to be related to the Zanja system, the Qualified Archaeologist shall prepare a memo and complete all relevant State of California Department of Parks and Recreation (DPR) DPR 523 forms documenting the find.

If the Qualified Archaeologist, having evaluated the find, determines that the find retains integrity, documentation consistent with the standards and guidelines established the Historic American Engineering Record (HAER) shall be undertaken and transmitted to the Library of Congress before any alteration, demolition, construction, or removal activity may occur within the determined avoidance area. Documentation shall include narrative records, measured drawings,

and photographs in conformance with HAER Guidelines. The found segments shall also be mapped using Geographic Information Systems (GIS) or 3D mapping technology in order to contribute to the existing record of the location and extent of the Zanja system as a whole. At minimum, GIS data shall include the geographic coordinates and depth of all portions of the find. All records, including geographic data, georeferenced photographs, and information about the depth of the find shall be submitted to City Planning. Report documentation and GIS files shall additionally be provided to the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton.

In addition to HAER documentation, if determined appropriate by the Qualified Archaeologist, one or more of the following specific treatments shall be developed and implemented based on potential California Register eligibility criteria or the significance of the find as a unique archaeological resource:

- Treatment Under Criterion 1: Treatment shall include interpretation of the Zanja system for the public. The interpretive materials may include, but not be limited to, interpretive displays of photographs and drawings produced during the HAER documentation, signage at the Zanja Madre alignment, relocating preserved segments in a publicly accessible display, or other visual representations of Zanja alignments through appropriate means such as a dedicated internet website other online-based materials. At a minimum, the interpretive materials shall include photographs and drawings produced during the HAER documentation and signage. These interpretive materials shall be employed as part of Project public outreach efforts that may include various forms of public exhibition and historic image reproduction. Additionally, the results of the historical and archaeological studies conducted for the Project shall be made available to the public through repositories such as the local main library branch or with identified non-profit historic groups interested in the subject matter. The interpretive materials shall be prepared at the expense of the Project applicant, by professionals meeting the Secretary of the Interior's Professional Qualifications Standards in history or historical archaeology. The development of the interpretive materials shall consider any such materials already available to the public so that the development of new materials would add to the existing body of work on the historical Los Angeles water system, and to this end, shall be coordinated, to the extent feasible and to the satisfaction of the Department of City Planning, in consultation

with the Office of Historic Resources. The interpretive materials shall include a consideration of the Zanja segment located on the Project Site in relation to the entire Zanja system. The details of the interpretive materials, including the content and format, and the timing of their preparation, shall be completed to the satisfaction and subject to the approval of the Department of City Planning, in consultation with the Office of Historic Resources.

- Treatment Under Criterion 2: No additional work; archival research about important persons directly associated with the construction and use of the Zanja system would be addressed as part of HAER documentation.
- Treatment Under Criterion 3: No additional work; HAER documentation is sufficient.
- Treatment Under Criterion 4: No additional work; archaeological data recovery and HAER documentation are sufficient.
- Treatment as a unique archaeological resource, as defined by PRC Section 21083.2(g): Same as Criterion 1 treatment.

Cultural Resources Standards (CR3)—Paleontological Resources

CR3-1: Inadvertent Discovery

a. Applicability Threshold

Any Project that requires a permit for grading or excavation.

b. Standard

If a probable paleontological resource is uncovered during earthwork or construction, all work shall cease within a minimum distance of 50 feet from the find until a Qualified Paleontologist has been retained to evaluate the find in accordance with the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Temporary flagging shall be installed around the find in order to avoid any disturbance from construction equipment. Any paleontological materials that are uncovered shall not be moved or collected by anyone other than a Qualified Paleontologist or his/her designated representative such as a Paleontological Monitor. If cleared by the Qualified Paleontologist, Ground Disturbance Activities may continue unimpeded on other portions of the site. The found deposit(s) shall be treated in accordance with the Society of Vertebrate Paleontology's Standard Procedures. Ground Disturbance Activities in the area where resource(s) were found may recommence once the identified resources are properly assessed and processed by Qualified Paleontologist. A report that describes the resource and its disposition, as well as the assessment methodology, shall be prepared

by the Qualified Paleontologist according to current professional standards and maintained pursuant to the proof of compliance requirements in Subsection I.D.6. If appropriate, the report should also contain the Qualified Paleontologist's recommendations for the preservation, conservation, and curation of the resource at a suitable repository, such as the Natural History Museum of Los Angeles County, with which the Applicant or Owner must comply.

Cultural Resources Standards (CR4)—Tribal Cultural Resources

CR4-1: Inadvertent Discovery

a. Applicability Threshold

Any Project that requires a permit for grading or excavation.

b. Standard

If a possible tribal cultural resource is uncovered during earthwork or construction, all work shall cease within a minimum distance of 50 feet from the find until a Qualified Tribal Monitor or Archaeological Monitor has been retained to evaluate the find.

Following discovery, the Applicant or Owner shall immediately contact all Native American tribes that have informed the City of Los Angeles they are traditionally and culturally affiliated with the geographic area of the Project, as well as the Department of City Planning, Office of Historic Resources (OHR). If a Qualified Tribal Monitor or Archaeological Monitor determines, pursuant to Public Resources Code Section 21074(a)(2), that the object or artifact appears to be a potential tribal cultural resource, in its discretion and supported by substantial evidence, the Applicant and Owner shall provide any affected tribe a reasonable period of time, not less than five business days, to conduct a site visit and make recommendations to the Applicant or Owner and OHR regarding the monitoring of future Ground Disturbance Activities and the treatment and disposition of any discovered tribal cultural resources. The Applicant or Owner shall implement the tribe's recommendations if the Qualified Tribal Monitor or Archaeological Monitor reasonably concludes such recommendations are reasonable and feasible.

Consistent with Public Resources Code Section 21083.2, the handling, treatment, preservation, and recordation of tribal cultural resources should occur as follows:

- The find should be preserved in place or left in an undisturbed state unless the Project would damage the resource.

- When preserving in place or leaving in an undisturbed state is not possible, excavation and recovery of the find for scientific study should occur unless testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, and this determination is documented by a Qualified Tribal Monitor or Qualified Archaeologist.

All collected artifacts and fieldwork notes, if not human remains or other mortuary objects, shall be curated at the Natural History Museum of Los Angeles County or another appropriate curatorial facility for educational purposes. If cleared by the Qualified Tribal Monitor or Archaeological Monitor, Ground Disturbance Activities may continue unimpeded on other portions of the site. Ground Disturbance Activities in the area where resource(s) were found may recommence once the identified resources are properly assessed and processed. A report that describes the resource and its disposition, as well as the assessment methodology shall be prepared by the Qualified Tribal Monitor or Archaeological Monitor, according to current professional standards and maintained pursuant to the proof of compliance requirements in Subsection I.D.6. A copy of the report shall be submitted to OHR, the South Central Coastal Information Center at California State University, Fullerton and to the Native American Heritage Commission for inclusion in its Sacred Lands File. If requested by the City, OHR may review and approve any monitoring or mitigation plan prior to implementation.

Hazardous Materials Standards (HM1)—Hazardous Materials Site

HM1-1: Unanticipated Hazards

a. Applicability Threshold

Any Project that requires a grading, excavation, or building permit from LADBS.

b. Standard

In the event that suspected Hazardous Materials, contamination, debris, or other features or materials that could present a threat to human health or the environment are discovered during earthwork or construction, such activities shall cease immediately until the affected area is evaluated by a Qualified Environmental Professional. If the Qualified Environmental Professional determines that a hazard exists, a remediation plan shall be developed by the Qualified Environmental Professional in consultation with the appropriate regulatory agency, and the remediation identified shall be completed. Work shall not resume in the affected area until appropriate actions have been

implemented in accordance with the remediation plan, to the satisfaction of the regulatory agency.

A report that describes the Hazardous Materials, contamination or debris and its disposition, shall be prepared by the Qualified Environmental Professional, according to current professional standards and maintained pursuant to the proof of compliance requirements in Subsection I.D.6.

HM1-2: Environmental Site Assessment(s)

a. Applicability Threshold

Any Project that requires a grading, excavation, or building permit from LADBS and which is:

- Located on or within 500 feet of a Hazardous Materials site listed in any of the following databases:
 - State Water Resources Control Board GeoTracker (refer to <https://geotracker.waterboards.ca.gov>);
 - DTSC EnviroStor (refer to <https://www.envirostor.dtsc.ca.gov/public>);
 - DTSC Hazardous Waste Tracking System (refer to <https://hwts.dtsc.ca.gov>);
 - LAFD Certified Unified Program Agency (refer to the active, inactive, and historical inventory lists at <https://www.lafd.org/fire-prevention/cupa/public-records>);
 - Los Angeles County Fire Department Health Hazardous Materials Division (refer to the active and inactive facilities, site mitigation, and California Accidental Release Prevention inventory lists at <https://fire.lacounty.gov/public-records-requests>);
 - SCAQMD Facility Information Detail (refer to <https://xapprod.aqmd.gov/find>); or
- Located on or within 500 feet of a Hazardous Materials site designated as a Resource Conservation and Recovery Act (RCRA) Small Quantity Generator or Large Quantity Generator (refer to the USEPA Envirofacts database at <https://enviro.epa.gov/index.html>); or
- Located in an Oil Drilling District (O) or located on or within 50 feet of a property identified as having an oil well or an oil field (active or inactive) by the California Geologic Energy Management Division (refer to <https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>); or

- Located on land currently or previously designated with an industrial use class or industrial zoning, in whole or in part; or
- Located on land currently or previously used for a gas station or dry cleaning facility.

Or:

- The Applicant or Owner are aware or have reason to be aware that the Project site was previously used for an industrial use, gas station or dry cleaner.

And:

- The site has not been previously remediated to the satisfaction of the relevant regulatory agency/agencies for any contamination associated with the above uses or site conditions.

b. Standard

A Phase I Environmental Site Assessment shall be prepared by a Qualified Environmental Professional in accordance with State standards/guidelines and current professional standards, including the American Society for Testing and Materials' (ASTM) Standard Practice for Environmental Site Assessments, to evaluate whether the site, or the surrounding area, is contaminated with hazardous substances from any past or current land uses, including contamination related to the storage, transport, generation, or disposal of toxic or Hazardous Waste or materials.

If the Phase I identifies a Recognized Environmental Condition (REC) and/or if recommended in the Phase I, a Phase II Environmental Site Assessment shall also be prepared by a Qualified Environmental Professional. The Phase I and/or Phase II Environmental Site Assessment(s) shall be maintained pursuant to the proof of compliance requirements in Section I.D.6 and made available for review and inclusion in the case file by the appropriate regulatory agency, such as the State Water Resources Control Board, the State Department of Toxic Substances Control, or the LAFD Hazard Mitigation Program. Any remediation plan recommended in the Phase II Environmental Site Assessment or by the appropriate regulatory agency shall be implemented and, if required, a No Further Action letter shall be issued by the appropriate regulatory agency prior to issuance of any permit from LADBS, unless the regulating agency determines that remedial action can be implemented in conjunction with excavation and/or grading. If oversight or approval by a regulatory agency is not required, the Qualified Environmental Professional shall provide written verification of compliance with and completion of the remediation plan, such that the site meets the

applicable standards for the proposed use, which shall be maintained pursuant to the proof of compliance requirements in Section I.D.6.

HM1-3: County Fire Department Oversight

a. Applicability Threshold

Any Project that generates or handles Hazardous Material(s) and/or Hazardous Waste of quantities at any one time during a year equal to or greater than a volume of 55 gallons, a total weight of 500 pounds, or a total of 200 cubic feet of a compressed gas.

b. Standard

Prior to the issuance of a building permit, the Applicant and Owner shall report the required operator, site, training, emergency response and contingency information in the California Environmental Reporting System (CERS), in coordination with the Los Angeles County Fire Department Health Hazardous Materials Division. Documentation of all CERS reporting shall be maintained pursuant to the proof of compliance requirements in Subsection I.D.6.

Hazardous Materials Standards (HM2)—Abandoned Oil Wells

Reserved.

Noise and Vibration Standards (NV1)—Construction Noise

NV1-1: Noise Shielding and Muffling

a. Applicability Threshold

Any Project whose earthwork or construction activities involve the use of construction equipment and require a permit from LADBS.

b. Standard

Power construction equipment (including combustion engines), fixed or mobile, shall be equipped with noise shielding and muffling devices consistent with manufacturers' standards or the Best Available Control Technology. All equipment shall be properly maintained, and the Applicant or Owner shall require any construction contractor to keep documentation on-site during any earthwork or construction activities demonstrating that the equipment has been maintained in accordance with manufacturer's specifications.

NV1-2: Use of Driven Pile Systems

a. Applicability Threshold

Any Project whose earthwork and construction activities involve the use of construction equipment and require a permit from LADBS.

b. Standard

Driven (impact) pile systems shall not be used, except in locations where the underlying geology renders drilled piles, sonic, or vibratory pile drivers infeasible, as determined by a soils or geotechnical engineer and documented in a soils report.

NV1-3: Enclosure or Screening of Outdoor Mechanical Equipment**a. Applicability Threshold**

Any Project whose earthwork or construction activities involve the use of construction equipment and require a permit from LADBS.

b. Standard

All outdoor mechanical equipment (e.g., generators, compressors) shall be enclosed or visually screened. The equipment enclosure or screen shall be impermeable (i.e., solid material with minimum weight of 2 pounds per square feet) and break the line of sight between the equipment and any off-site Noise-Sensitive Uses.

NV1-4: Location of Construction Staging Areas**a. Applicability Threshold**

Any Project whose earthwork or construction activities involve the use of construction equipment and require a permit from LADBS.

b. Standard

Construction staging areas shall be located as far from Noise-Sensitive Uses as reasonably possible and technically feasible in consideration of site boundaries, topography, intervening roads and uses, and operational constraints. The burden of proving what constitutes 'as far as possible' shall be upon the Applicant or Owner, in consideration of the above factors.

NV1-5: Temporary Walls**a. Applicability Threshold**

Any Project whose earthwork and construction activities involve the use of construction equipment and require a permit from LADBS; and whose construction activities are located within a line of sight to and within 500 feet of Noise-Sensitive Uses, with the exception of Projects limited to the construction of 2,000 square feet or less of floor area dedicated to residential uses.

b. Standard

Noise barriers, such as temporary walls (minimum ½-inch thick plywood) or sound blankets (minimum STC 25 rating),¹ that are a minimum of eight feet tall, shall be erected between construction activities and Noise-Sensitive Uses as reasonably possible and technically feasible in consideration of site boundaries, topography, intervening roads and uses, and operational constraints. The burden of proving that compliance is technically infeasible shall be upon the Applicant or Owner. Technical infeasibility shall mean that noise barriers cannot be located between construction activities and Noise-Sensitive Uses due to site boundaries, topography, intervening roads and uses, and/or operational constraints.

NV1-6: Noise Study

a. Applicability Threshold

Any Project whose earthwork or construction activities involve the use of construction equipment and require a permit from LADBS; are located within 500 feet of Noise-Sensitive Uses; and have one or more of the following characteristics:

- Two or more subterranean levels;
- 20,000 cubic yards or more of excavated material
- Simultaneous use of five or more pieces of construction equipment; or
- Construction duration (excluding architectural coatings) of 18 months or more.

Or any Project whose construction activities involve impact pile driving or the use of 300 horsepower equipment.

b. Standard

A Noise Study prepared by a Qualified Noise Expert shall be required and prepared prior to obtaining any permit by LADBS. The Noise Study shall characterize expected sources of earthwork and construction noise that may affect identified Noise-Sensitive Uses, quantify expected noise levels at these Noise-Sensitive Uses, and recommend measures to reduce noise exposure to the extent noise reduction measures are available and feasible, and to demonstrate compliance with any noise requirements in the LAMC. Specifically, the Noise Study shall identify noise reduction devices or techniques to reduce noise levels in accordance with accepted industry practices and in compliance with LAMC standards. Noise reduction devices or techniques shall include but not be limited to mufflers, shields, sound

¹ At a Sound Transmission Class (STC) rating of 25, soft speech can be heard and understood.

barriers, and time and place restrictions on equipment and activities. The Noise Study shall identify anticipated noise reductions at Noise-Sensitive Uses associated with the noise reduction measures. Applicants and Owners shall be required to implement and comply with all measures identified and recommended in the Noise Study. The Noise Study and copies of any contractor agreements shall be maintained pursuant to the proof of compliance requirements in Section I.D.6.

Noise and Vibration Standards (NV2)—Construction Vibration

NV2-1: Baseline Survey and Vibration Control Plan

a. Applicability Threshold

Any Project, with the exception of Projects limited to the construction of 2,000 square feet or less of floor area dedicated to residential uses, whose earthwork or construction activities: (1) involve the use of construction equipment, including Heavy Construction Equipment, that produces 0.12 PPV or more of vibration at a distance of 25 feet (see reference vibration levels in Appendix F); (2) require a permit from LADBS; and (3) which occur:

- Within 25 feet of any building extremely susceptible to vibration damage, including unreinforced masonry buildings, tilt-up concrete wall buildings, wood-frame multi-story buildings with soft, weak or open front walls, and non-ductile concrete buildings, or a building that is designated or determined to be a historic resource pursuant to local or state law or that is determined to be potentially eligible for historic designation in a Historic Resources Survey; or
- Within 15 feet of non-engineered timber and masonry buildings.

Or any Project whose construction activities involve the use of pile drivers within 135 feet of any building extremely susceptible to vibration damage, including existing unreinforced masonry buildings, existing tilt-up concrete wall buildings, existing wood-frame multi-story buildings with soft, weak or open front walls, and existing non-ductile concrete buildings, or a building that is designated or determined to be a historic resource pursuant to local or state law or that is determined to be potentially eligible for historic designation in a Historic Resources Survey.

b. Standard

Prior to demolition, grading/excavation, or construction, a Qualified Structural Engineer shall prepare a survey establishing baseline

structural conditions of potentially affected structures and a Vibration Control Plan, which shall include methods to minimize vibration, including, but not limited to:

- A visual inspection of the potentially affected structures to document (by video and/or photography) the apparent physical condition of the building (e.g., cracks, broken panes, etc.).
- A shoring design to protect the identified structures from potential damage;
- Use of drilled piles or a sonic vibratory pile driver rather than impact pile driving, when the use of vibrating equipment is unavoidable;
- Use of rubber-tired equipment rather than metal-tracked equipment; and
- Avoiding the use of vibrating equipment when allowed by best engineering practice.

NV2-2: Repair of Damage

a. Applicability Threshold

Any Project, with the exception of Projects limited to the construction of 2,000 square feet or less of floor area dedicated to residential uses, whose earthwork or construction activities: (1) involve the use of construction equipment, including Heavy Construction Equipment, that produces 0.12 PPV or more of vibration at a distance of 25 feet (see reference vibration levels in Appendix F); (2) require a permit from LADBS; and (3) which occur:

- Within 25 feet of any building extremely susceptible to vibration damage, including unreinforced masonry buildings, tilt-up concrete wall buildings, wood-frame multi-story buildings with soft, weak or open front walls, and non-ductile concrete buildings, or a building that is designated or determined to be a historic resource pursuant to local or state law or that is determined to be potentially eligible for historic designation in a Historic Resources Survey; or
- Within 15 feet of non-engineered timber and masonry buildings.

Or any Project whose construction activities involve the use of pile drivers within 135 feet of any building extremely susceptible to vibration damage, including existing unreinforced masonry buildings, existing tilt-up concrete wall buildings, existing wood-frame multi-story buildings with soft, weak or open front walls, and existing non-ductile concrete buildings, or a building that is designated or determined to be a historic resource pursuant to local or state law or that is determined

to be potentially eligible for historic designation in a Historic Resources Survey.

b. Standard

In the event of damage to any non-historic building due to construction vibration, as verified by the Qualified Structural Engineer, a letter describing the damage to the impacted building(s) and recommendations for repair shall be prepared by the Qualified Structural Engineer within 60 days of the time when damage occurred. Repairs shall be undertaken and completed, at the Owner's or Applicant's expense, in conformance with all applicable codes.

In the event of vibration damage to any building that is designated or determined to be a historic resource pursuant to local or state law or that is determined to be potentially eligible for historic designation in a Historic Resources Survey, a letter describing the damage to the impacted building(s) and recommendations for repair shall be prepared by the Qualified Historian within 60 days of the time when damage occurred. Repairs shall be undertaken and completed, at the Owner's or Applicant's expense, in conformance with the California Historical Building Code (Title 24, Part 8) as well as the [Secretary of the Interior's Standards for the Treatment of Historic Properties](#) and associated guidelines, as applicable and as determined by the Qualified Historian.

Pedestrian Safety Standards (PS1)—Safe and Accessible Walkways

Reserved.

APPENDIX A: BEST PRACTICES

Disclaimer: The following best practices were developed by the City in consultation with environmental consultants who specialize in preparing environmental impact reports (EIRs) to comply with the California Environmental Quality Act, Public Resources Code, Sections 21000, *et seq.* Best practices are professional procedures, methods, or techniques that are accepted or prescribed as industry standards and considered correct or most effective. Nothing provided in this Appendix is intended to be a mandate or to relieve an Applicant and an Owner from their responsibility to comply with any and all applicable laws. The City assumes no responsibility for any Applicant's or Owner's use or reliance upon the best practices provided herein and does not guarantee their adequacy for any purpose. Any use by any person of the best practices provided herein is solely at the discretion and responsibility of that person.

I. Archaeological Resources

The following best practices are recognized by archaeologists and environmental consultants to ensure archaeological resources are not damaged during grading, excavation, or other Ground Disturbance Activities:

- **Records Search.** A cultural resources records search should be requested from and conducted by the California Historical Resources Information System's (CHRIS) South Central Coastal Information Center (SCCIC) located at California State University, Fullerton to determine whether any cultural resources have been previously identified on or within a 0.5-mile radius of the Project site. The results of this records search shall be used as an indicator of the archaeological sensitivity of the Project site.
- A Qualified Archaeologist shall be retained and use all reasonable methods, consistent with professional standards and best practices, to determine the potential for archaeological resources to be present on the Project site.
- If the Qualified Archaeologist determines there is a medium to high potential that archaeological resources may be located on the Project site and it is possible that such resources will be impacted by the Project, the Qualified Archaeologist shall advise the Applicant and Owner to retain an Archaeological Monitor to observe all Ground Disturbance Activities within those areas identified as having a medium to high potential in order to identify any resources and avoid potential impacts to such resources.
- **Monitoring.** An Archaeological Monitor should monitor excavation and grading activities in soils that have not been previously disturbed in order to identify and record any potential archaeological finds and avoid potential impacts to such resources. In the event of a possible archaeological discovery, the

Archaeological Monitor shall notify a Qualified Archaeologist. The Archaeological Monitor has the authority to temporarily halt earthwork activities.

- Handling, Evaluation, and Preservation. Any archaeological resource materials or associated materials that are uncovered shall not be moved or collected by anyone other than an Archaeological Monitor or Qualified Archaeologist unless they have been determined to be nonunique archaeological resources, as defined in Public Resources Code Section 21083.1(h) by a Qualified Archaeologist. A Qualified Archaeologist shall determine if the resources are unique archeological resources as defined in Public Resources Code Section 21083.2(g).
- Consistent with Public Resources Code Section 21083.2, the handling, treatment, preservation, and recordation of unique archaeological resources should occur as follows:
 - The find should be preserved in place or left in an undisturbed state unless the Project would damage the resource.
 - When preserving in place or leaving in an undisturbed state is not possible, excavation and recovery of the find for scientific study should occur unless testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, and this determination is documented by a Qualified Archaeologist.

If recommended by the Qualified Archaeologist, the resource(s) shall be curated by a public, non-profit institution with a research interest in the material, such as the Natural History Museum of Los Angeles County or another appropriate curatorial facility for educational purposes.

Ground Disturbance Activities in the area where resource(s) were found may recommence once the identified resources are properly assessed and processed by a Qualified Archaeologist.

II. Biological Resources

The following best practices are recognized by biologists to ensure Active Nests are not damaged or disturbed during construction or Ground Disturbance Activities, which is a violation of the Federal Migratory Bird Treaty Act and the State Fish and Game Code:

- Pre-Construction Survey. If a Project proposes the demolition of a structure or removal of a tree or vegetation during bird nesting season (February 1 to August 31), a pre-construction nesting bird survey of all suitable habitat shall be conducted no more than 10 days prior to the initiation of demolition or tree or vegetation removal to determine if nesting birds are present. The

pre-construction nesting bird survey shall be conducted on foot within the Project site boundaries by a Qualified Biologist.

- **No Nests Found.** If the pre-construction survey indicates bird nests are not present or are inactive, or if potential habitat is unoccupied, no further avoidance is required.
- **Buffer for Active Nest.** If any active bird nest is found during a pre-construction nesting bird survey, a Qualified Biologist shall recommend an avoidance buffer which shall be no less than is necessary to protect the nest, eggs and/or fledglings, from damage or disturbance in consideration of the following factors: the bird species, the availability of suitable habitat within the immediate area, the proposed work activity, and existing disturbances associated with surrounding land uses. The buffer shall be demarcated using bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary of the buffer. All construction personnel shall be notified of the buffer zone and shall avoid entering the protected area. No Ground Disturbing Activities or vegetation removal shall occur within this buffer area until the Qualified Biologist has confirmed that breeding/nesting is complete and the young have fledged the nest and/or that the nest is no longer an Active Nest.

III. Paleontological Resources

The following best practices are recognized by paleontologists and environmental consultants to ensure paleontological resources are not damaged during construction or Ground Disturbance Activities:

- A paleontological resources records search shall be requested from and conducted by the Natural History Museum of Los Angeles County to determine whether any paleontological resources have been previously identified on or near the Project site. The results of this records search shall be used as an indicator of the paleontological sensitivity of the Project site.
- A Qualified Paleontologist shall be retained and use all reasonable methods, consistent with professional standards and best practices, to determine the potential for paleontological resources to be present on the Project site.
- If the Qualified Paleontologist determines there is a high potential that paleontological resources may be located on the Project site and it is possible that such resources will be impacted by the Project, the Qualified Paleontologist or his/her designated representative such as a Paleontological Monitor shall observe all Ground Disturbance Activities within those areas identified as having an undetermined or high potential in order to identify any resources and avoid potential impacts to such resources. In the event of a possible paleontological discovery, the Qualified Paleontologist or Paleontological Monitor shall have the authority to temporarily halt earthwork activities within an appropriate radius of

the find, as determined by the Qualified Paleontologist, necessary to protect the resource or other potential resources on or near the Project site. Temporary flagging shall be installed around the find in order to avoid any disturbance from construction equipment.

- Prior to the start of construction, the Qualified Paleontologist or his/her designee shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.
 - If paleontological resources are uncovered (in either a previously disturbed or undisturbed area), all work should cease in the area of the find until a Qualified Paleontologist has evaluated the find in accordance with federal, state, and local guidelines, including the [Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources](#) (SVP, 2010).
 - If fossils are discovered, a Qualified Paleontologist shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist has the authority to temporarily direct, divert or halt construction activity to ensure the fossil(s) can be removed in a safe and timely manner. Handling and disposition of fossils is done at the direction and guidance of a Qualified Paleontologist.
 - Personnel of the Project should not collect or move any paleontological materials or associated materials.
 - If cleared by the Qualified Paleontologist, construction activity may continue unimpeded on other portions of the Project site.
 - Construction activities in the area where resources were found may commence once the identified resources are properly assessed and processed by a Qualified Paleontologist, and the Qualified Paleontologist clears the site for construction activity.

IV. Tribal Cultural Resources

The following best practices are recognized by tribal monitors and environmental consultants to ensure that tribal cultural resources are not damaged during grading, excavation, or other Ground Disturbance Activities:

- A Sacred Lands File (SLF) records search shall be requested from and conducted by the California Native American Heritage Commission (NAHC) to determine whether cultural resources associated with any Native American

tribe(s) with traditional lands or cultural places located within or near the Project site have been previously identified or whether the Project area is considered sensitive for the presence of tribal cultural resources.

- All tribes listed on the NAHC's Native American Contact List included with the SLF records search shall be contacted, informed of the Project, and given an opportunity to provide input. If the tribe provides substantial evidence of a potential for discovery of tribal cultural resources within the Project site and requests monitoring of Project excavation, grading or other Ground Disturbance Activities, a Qualified Tribal Monitor or an Archaeological Monitor shall be retained.
- The Qualified Tribal Monitor or Archaeological Monitor shall observe all Ground Disturbance Activities within those areas identified in the records search as sensitive for the presence of tribal cultural resources in order to identify any resources and avoid potential impacts to such resources. In the event of a possible discovery of a tribal cultural resource, the Qualified Tribal Monitor or Archaeological Monitor shall have the authority to temporarily halt earthwork activities within an appropriate radius of the find, as determined by the Qualified Tribal Monitor or Qualified Archaeologist to ensure the find is not damaged or any other potential tribal cultural resources on or near the Project site.
- If tribal cultural resources are uncovered, all work should cease in the appropriate radius determined by the Qualified Tribal Monitor or Archaeological Monitor.
- Any find should be treated with appropriate dignity and protected and preserved as appropriate with the agreement of the Qualified Tribal Monitor and in accordance with federal, state, and local guidelines.
- The location of the tribal cultural resource find and the type and nature of the find should not be published beyond providing the information to public agencies with jurisdiction or responsibilities related to the resources and any affected tribal representatives.
- Personnel of the Project should not collect or move any tribal cultural resources or associated materials or publish the location of tribal cultural resources.
- Following discovery, the Applicant or Owner shall immediately contact all Native American tribes that have informed the City of Los Angeles they are traditionally and culturally affiliated with the geographic area of the Project, as well as the Department of City Planning, Office of Historic Resources (OHR).
- The Applicant and Owner shall provide any affected tribe a reasonable period of time, not less than five business days, to conduct a site visit and make recommendations to the Applicant or Owner regarding the monitoring of future

Ground Disturbance Activities and the treatment and disposition of any discovered tribal cultural resources.

- The Applicant or Owner shall implement the tribe's recommendations if the Qualified Tribal Monitor or Archaeological Monitor reasonably concludes such recommendations are reasonable and feasible and determined to be supported with substantial evidence.
- Consistent with Public Resources Code Section 21083.2, the handling, treatment, preservation, and recordation of tribal cultural resources shall occur as follows:
 - The find shall be preserved in place or left in an undisturbed state unless the Project would damage the resource.
 - When preserving in place or leaving in an undisturbed state is not possible, excavation and recovery of the find for scientific study shall occur unless testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, and this determination is documented by a Qualified Tribal Monitor or Qualified Archaeologist.
- All collected artifacts and fieldwork notes, if not human remains or other mortuary objects, shall be curated at the Natural History Museum of Los Angeles County or another appropriate curatorial facility.
- If cleared by the Qualified Tribal Monitor or Archaeological Monitor, Ground Disturbance Activities may continue unimpeded on other portions of the site. Ground Disturbance Activities in the area where resource(s) were found may recommence once the identified resources are properly assessed and processed.

V. Vibration

The following best practices are recognized by structural engineers and environmental consultants to reduce damage to vibration-sensitive uses:

- The use of impact pile drivers should be avoided to eliminate excessive vibration levels. Drilled piles or sonic vibratory pile drivers are alternatives that should be utilized where geological conditions permit their use.
- Construction activities should involve rubber-tired equipment rather than metal-tracked equipment.
- The construction contractor should schedule and phase construction activities, including demolition, earthmoving, and ground-impacting operations, so they do

not occur concurrently; use low-impact construction technologies; and avoid the use of vibrating equipment in accordance with best engineering practices.

APPENDIX B: STATEMENT OF COMPLIANCE

APPENDIX C: CONTRACTOR ACKNOWLEDGEMENT

APPENDIX D: SCAQMD RULE 403 BEST AVAILABLE CONTROL MEASURES

APPENDIX E: ZANJA MADRE AND ZANJA SYSTEM MAP

APPENDIX F: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

FTA 2006