AESTHETICS

Standard Conditions of Approval

SCA-AES-1: Landscape Maintenance

Ongoing

All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. All required irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

- ➤ Implementation Responsibility: Project Sponsor
- > Initial Approval Responsibility: Building Services Division, Zoning Inspection
- > Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-AES-2: Lighting Plan

Prior to issuance of an electrical or building permit

The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning and Zoning Division and the Electrical Services Division of Public Works Agency for review and approval. All lighting shall be architecturally integrated into the site.

- > Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; Electrical Services Division
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

AIR QUALITY

Standard Conditions of Approval

SCA-AIR-1: Dust Control

Construction-Related Air Pollution Controls (Dust and Equipment Emissions)

Ongoing throughout demolition, grading, and/or construction

During construction, the project applicant shall require the construction contractor to implement all of the following applicable measures recommended by the Bay Area Air Quality Management District (BAAQMD):

- a) Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d) Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- e) Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- f) Limit vehicle speeds on unpaved roads to 15 miles per hour.
- g) Idling times shall be minimized either by shutting equipment off when not is use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations. Clear signage to this effect shall be provided for construction workers at all access points.
- h) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and BAAQMD shall also be visible. This information may be posted on other required on-site signage.

The enhanced measures below apply to construction projects involving 1) land uses that exceed the BAAQMD construction screening criteria (e.g., 240 or more multi-family residential units); 2) a demolition permit; 3) simultaneous occurrence of more than two construction phases (e.g., grading and building construction occurring simultaneously); 4) extension site preparation (i.e., over four acres in size); or 5)

extensive soil transport (i.e., 10,000 or more cubic yards of soil import/export).

- a) All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- b) All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.
- c) Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- d) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
- e) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.
- f) Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind blown dust. Wind breaks must have a maximum 50 percent air porosity.
- g) Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- h) The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- i) All trucks and equipment, including tires, shall be washed off prior to leaving the site.
- j) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
- k) Minimize the idling time of diesel-powered construction equipment to two minutes.
- 1) The project applicant shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate matter (PM) reduction compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as they become available.
- m) Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).
- n) All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.
- o) Off-road heavy diesel engines shall meet the CARB's most recent certification standard.

- > Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Building Services Division, Zoning Inspection
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

BIOLOGICAL RESOURCES

Revised 1998 Mitigation Measures¹

- 13a) Ongoing as stipulated in the Habitat Enhancement Plan: The proposed Master Plan would include implementation of a Habitat Enhancement Plan that would enhance oak woodlands, native grasslands, coastal scrub and riparian woodland, and remove eucalyptus, French broom and other exotic plants from the California 1820 Exhibit area and Upper Knowland Park. The Habitat Enhancement Plan should include the following:
 - An annual assessment of the species and distribution of invasive nonnative weeds (examples of invasive species would include artichoke thistle, French broom, giant reed, German ivy, pampas grass, Algerian ivy, acacia and eucalyptus). The assessment would include a map and estimate of abundance of weeds.
 - A management element for the control of each weedy species. Methods used for each species should be based on current accepted best available practices, including hand-pulling, cutting followed by topical application of suitable herbicide, use of livestock, removal or burning of cut plant materials, and so on. The justification for the control methods used should be explained, and a tracking system maintained to document areas treated, methods used, and effectiveness of the results.
 - A revegetation element for areas where heavy infestations of weeds comprise a significant portion of the existing vegetation. The riparian zone of lower Arroyo Viejo Creek, for example, is so dominated by nonnative species that planting of indigenous tree and shrub species following the removal of weeds is needed to speed up the restoration process. This element would include a tracking system for areas treated, a record of the source and species of plant materials used, methods of installation and maintenance, and an assessment of the success of each effort.
 - > Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection
 - > Ongoing Monitoring Responsibility: Planning and Zoning Division; Building Services Division, **Zoning Inspection**
- 13b) **Prior to removal of a protected tree and ongoing as specified:** A Tree Protection and Revegetation Plan shall be prepared to protect, replace, and preserve trees on the project site. The Plan shall include

¹ The 1998 mitigation measures have been revised for the Master Plan amendment. For a discussion of these changes, see Section 3.3 Biological Resources of the Subsequent Mitigated Negative Declaration/Addendum (SMND/A). The revisions are also shown in underline and strike-out in Appendix C of the SMND/A.

the following:

- Native trees lost to development shall be replanted at a minimum ratio of 3:1. Non-native trees lost to development shall be replanted with native trees at a minimum ratio of 1:1.
- Every 10 years, prepare a census of trees qualifying for protection under the Oakland Tree Protection Ordinance within the project area. The census will document the condition of such trees, and recommend actions to extend the life and health of the trees. Recommended actions could include protective devices for reduction of vandalism, excessive treading by pedestrians or rubbing of bark, modification of drainage, erosion or sedimentation to protect trees, and modification of irrigation patterns to reduce pathogens. Recommendations and actions taken would be reported to the City of Oakland and the Department of Fish and Game.
- Protection of oaks in Upper Knowland Park outside of the developed areas of the Zoo will be
 addressed through the development of a management element for Upper Knowland Park.
 Management practices needed to achieve and maintain oak woodland and forest are: a minimum of
 grazing livestock, especially during the dry months; few fires; and slope stability. Maintenance of
 oak woodland would dovetail with weed control measures discussed under Mitigation Measure 13a
 and the need to provide adequate mitigation for the loss of grassland habitat as provided in the
 Habitat Enhancement Plan.
- The perimeter fence alignment and exhibit enclosure fencing shall be field-adjusted during installation to further reduce the need to remove protected trees and minimize disturbance in close proximity to the tree root systems. The final alignment of both the perimeter fencing and enclosure fencing shall be overseen by a certified arborist and adjustments made, where feasible, to minimize removal and damage to protected trees. Where tree removal is unavoidable, replacement plantings shall be provided consistent with the City's Standard Conditions of Approval.
 - Implementation Responsibility: Project Sponsor
 - Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection; Tree Services Division
 - Ongoing Monitoring Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection; Tree Services Division
- 13c) *Concurrent with the submittal of a building permit; ongoing as specified:* The service road shall be a maximum of 15 feet in width and designed to accommodate crossing by Alameda whipsnake and other wildlife, where necessary, to reduce potential impacts to the Alameda whipsnake.
 - ➤ Implementation Responsibility: Project Sponsor

- ➤ Initial Approval Responsibility: Planning and Zoning Division
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection
- 14c) Prior to issuance of construction-related permits in the affected area: Obtain appropriate authorizations from resource agencies to address possible incidental take and a Permit for Management of a rare or threatened species pursuant to Fish and Game Code Section 2081 and Section 7 of the Endangered Species Act, as called for under SCA-BIO-10. The project applicant shall provide compensatory mitigation for impacts to Alameda whipsnake habitat. Such mitigation shall be provided at a ratio of no less than 1:1 (at least one acre for every acre of impact), subject to any increase in this ratio that may be required by the resource agencies. There is adequate area within Knowland Park to achieve this mitigation ratio. Subject to the approval of the resources agencies, mitigation shall be achieved through habitat restoration and enhancement within the California Exhibit boundaries, the Ecological Recovery Zone, and other locations within Knowland Park, at another restoration location with an Alameda whipsnake habitat restoration plan area approved by the U.S. Fish and Wildlife Service and the California Department of Fish and Game, through the purchase of mitigation credits at a mitigation bank within the East Bay region, or some combination of these options. The project applicant shall retain a qualified biologist to prepare an Alameda whipsnake Mitigation and Monitoring Plan in connection with the application for an incidental take authorization and Management Permit. The Mitigation and Monitoring Plan will be subject to approval by the California Department of Fish and Game and the U.S. Fish and Wildlife Service. The Mitigation and Monitoring Plan shall include (a) a habitat restoration/creation performance standard of no net loss of habitat functions and values; (a) location of the mitigation site(s); (c) a detailed habitat restoration/creation plan for the mitigation site(s); (d) provisions for timing and methods for invasive species removal, controls on herbicide application, and worker training programs that, at a minimum and subject to the requirements of the resource agencies, meet the applicable requirements of the Invasive Species Control Element of the HEP; (f) provisions that include cover requirements, methods of installation and maintenance, a tracking system, a record of source and species of plant materials used in revegetation; and (h) success criteria to be used to evaluate whether the restoration/creation efforts have achieved the identified goals of the Mitigation and Monitoring Plan.

The proposed California Exhibit shall be modified to incorporate recommendations from the 2011 Status Report (Swaim Biological, Inc. 2011), which include removing the amphitheater from the stand of chamise-chaparral; restricting the California Interpretive Center ten feet to the east and limiting grading to within ten feet of the edge of the building; modifying and establishing controls to the bison/tule elk extension exhibit, and ensuring that the perimeter fence is permeable to allow for unrestricted movement of Alameda whipsnake through the area. Controls associated with the bison/tule elk exhibit shall include limiting the number of animals housed to 20 bison and 20 tule elk, maintaining protective cover by creating irrigated pasture outside woodland habitat, and placing rock outcrops and logs to serve as refugia for dispersing snakes. Fire fuel management activities required by the Oakland Fire Department to provide defensible space around buildings shall be done in a manner to limit the potential impact to Alameda whipsnake habitat and performed under the supervision of a qualified

biological monitor, including without limitation (a) shrub maintenance shall be done manually using chain saws and clippers; (b) no shrub stumps shall be removed; (c) shrub cuttings shall be removed from the area; (d) thinning shall not result in shrub cover of less than 25 percent; and (e) thinning shall not be performed more frequently than on an annual basis.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; California Department of Fish and Game; U.S. Fish and Wildlife Service
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection
- 14d) *Ongoing throughout construction in the affected area:* All removal of scrub or chaparral habitat shall be done by hand with axes or machetes. Chain saws could be used for larger shrubs.
 - > Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Building Services Division, Zoning Inspection
 - ➤ Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection
- 14e) *Ongoing throughout construction in the affected area:* A biologist qualified to handle Alameda whipsnakes shall monitor all scrub or chaparral removal and all construction activities which may impact the Alameda whipsnake.
 - ➤ Implementation Responsibility: Project Sponsor
 - > Initial Approval Responsibility: Building Services Division, Zoning Inspection
 - Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection
- 14f) *Prior to issuance of a construction-related permit in the affected area; ongoing:* Alameda whipsnake habitat shall be preserved in perpetuity on property owned by the East Bay Zoological Society and/or the City of Oakland and contiguous to the east of the California 1820 Exhibit area. Numerous large areas of scrub and/or chaparral habitat are present in the proposed mitigation area and these appear to provide an adequate amount of habitat to offset impacts within the project site. The amount of habitat preserved shall be in accordance with current requirements of the California Department of Fish and Game.
 - ➤ Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Planning and Zoning Division
 - Ongoing Monitoring Responsibility: Planning and Zoning Division

- 14g) *Included on the plans for improving the service road; ongoing:* To reduce the potential for mortality on the service road to a level less than significant, a maximum speed of ten miles per hour shall be required and all personnel driving will be instructed to watch for and yield to all wildlife. Specially designed "snake crossings" under the service road may also be required.
 - > Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Planning and Zoning Division
 - Ongoing Monitoring Responsibility: Building Services Division; Zoning Inspection
- 14h) *Implemented in conjunction with the Habitat Enhancement Plan:* Measures will be taken to prevent the spread of French broom on the site and to remove as much French broom from the site as possible in order to keep it from degrading higher quality whipsnake habitat.
 - ➤ Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection
 - Ongoing Monitoring Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection
- 15a) *Implemented in conjunction with the Habitat Enhancement Plan:* The operations and maintenance plan for the new exhibits shall include a weed management and control element. This should include monitoring the natural portions of Upper Knowland Park for infestations of non-native weeds, and implementation of control measures to prevent the weeds from degrading the natural vegetation.
 - ➤ Implementation Responsibility: Project Sponsor
 - Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection
 - Ongoing Monitoring Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection

Standard Conditions of Approval

SCA-BIO-1: Tree Removal During Breeding Season

Prior to issuance of a tree removal permit

To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of raptors shall not occur during the breeding season of March 15 and August 15. If tree removal must occur during the breeding season, all sites shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors

or other birds.

Pre-removal surveys shall be conducted within 15 days prior to start of work from March 15 through May 31, and within 30 days prior to the start of work from June 1 through August 15. The pre-removal surveys shall be submitted to the Planning and Zoning Division and the Tree Services Division of the Public Works Agency. If the survey indicates the potential presences of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the CDFG, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; Tree Services Division
- Ongoing Monitoring Responsibility: Planning and Zoning Division; Tree Services Division

SCA-BIO-2: Tree Removal Permit

Prior to issuance of a demolition, grading, or building permit

Prior to removal of any protected trees, per the Protected Tree Ordinance, located on the project site or in the public right-of-way adjacent to the project, the project applicant must secure a tree removal permit from the Tree Division of the Public Works Agency, and abide by the conditions of that permit.

- > Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Tree Services Division
- > Ongoing Monitoring Responsibility: Tree Services Division

SCA-BIO-3: Tree Replacement Plantings

Prior to issuance of a final inspection of the building permit

Replacement plantings shall be required for erosion control, groundwater replenishment, visual screening and wildlife habitat, and in order to prevent excessive loss of shade, in accordance with the following criteria:

- a) No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.
- b) Replacement tree species shall consist of *Sequoia sempervirens* (Coast Redwood), *Quercus agrifolia* (Coast Live Oak), *Arbutus menziesii* (Madrone), *Aesculus californica* (California Buckeye) or

Umbellularia californica (California Bay Laurel) or other tree species acceptable to the Tree Services Division.

- c) Replacement trees shall be at least of twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.
- d) Minimum planting areas must be available on site as follows:
 - i. For Sequoia sempervirens, three hundred fifteen square feet per tree;
 - ii. For all other species listed in #2 above, seven hundred (700) square feet per tree.
- e) In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee as determined by the master fee schedule of the city may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.
- f) Plantings shall be installed prior to the issuance of a final inspection of the building permit, subject to seasonal constraints, and shall be maintained by the project applicant until established. The Tree Reviewer of the Tree Division of the Public Works Agency may require a landscape plan showing the replacement planting and the method of irrigation. Any replacement planting which fails to become established within one year of planting shall be replanted at the project applicant's expense.
 - ➤ Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Tree Services Division
 - ➤ Ongoing Monitoring Responsibility: Tree Services Division

SCA-BIO-4: Tree Protection During Construction

Prior to issuance of a demolition, grading, or building permit

Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:

- a) Before the start of any clearing, excavation, construction or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the Consulting Arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.
- b) Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the Consulting Arborist from the base of any protected tree at any time. No burning

or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.

- c) No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the Consulting Arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the tree reviewer. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.
- d) Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.
- e) If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Agency of such damage. If, in the professional opinion of the Consulting Arborist, such tree cannot be preserved in a healthy state, the Consulting Arborist shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.
- f) All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.
 - > Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Tree Services Division
 - ➤ Ongoing Monitoring Responsibility: Tree Services Division

SCA-BIO-5: Whipsnake Habitat, Biological Monitor

Prior to issuance of a demolition, grading, or building permit and ongoing throughout demolition, grading, and/or construction

If the project is located within confirmed Alameda Whipsnake Habitat area, the project applicant shall hire an on-site biological site biological monitor shall instruct the project superintendent and the construction crews (primarily the clearing, demolition and foundation crews) of the potential presence, status and identification of Alameda Whipsnakes. The biological monitor shall also provide information to the Planning and Zoning Division on the steps to take if a whipsnake is seen on the project site, including who to contact, to ensure that whipsnakes are not harmed or killed, as regulation by the federal Endangered Species Act.

- > Implementation Responsibility: Project Sponsor
- > Initial Approval Responsibility: Building Services Division, Zoning Inspection
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-BIO-6: Whipsnake Habitat, Placement of Debris

Prior to issuance of a demolition, grading, or building permit and throughout construction

If the project is located within confirmed Alameda Whipsnake Habitat area, the project applicant shall ensure that the placement of construction debris is limited to the area immediate adjacent to the foundation of the proposed buildings or and to the area between the foundation and the street. Install flexible construction fencing at the limit of work line (approximately ten feet beyond the foundation of the proposed building other than in the direction of the street). Such construction fencing shall limit the placement of construction materials and construction debris to inside the fencing.

- ➤ Implementation Responsibility: Project Sponsor
- Initial Approval Responsibility: Building Services Division, Zoning Inspection
- > Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-BIO-7: Whipsnake Habitat, Barrier Fence

Prior to issuance of a demolition, grading, or building permit and throughout construction

If the project is located within confirmed Alameda Whipsnake Habitat area, the project applicant shall install a solid fence to prevent whipsnakes from entering the work site. The snake barrier shall be constructed as follows and shall remain in place throughout the entire construction period:

- a) Plywood sheets at least three feet in height above ground. Heavy duty geotextile fabric approved by U.S. Fish and Wildlife Service and California Department of Fish and Game may also be used for snake exclusion fences;
- b) Buried four to six inches into the ground;
- c) Soil back-filled against the plywood fence to create a solid barrier at the ground;
- d) Plywood sheets maintained in an upright position with wooden or masonry stakes;
- e) Ends of each plywood sheet overlapped to ensure a continuous barrier; and
- f) An exclusion fence shall completely enclose the work site or construction area or approved traps shall be installed at the ends of exclusion fence segments to allow capture and relocation of Alameda whipsnake away from the construction area by a qualified biologist.
 - > Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Planning and Zoning Division
 - > Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-BIO-8: Whipsnake Habitat, Downsloping Lots

Prior to issuance of a demolition, grading, or building permit and throughout construction

If the project is located within confirmed Alameda Whipsnake Habitat area, the project applicant shall install erosion control devices, such as hay bales, at the downhill limit of construction line to prevent rocks and soil from moving downhill. No erosion control materials with plastic or nylon monofilament netting shall be

used.

- > Implementation Responsibility: Project Sponsor
- Initial Approval Responsibility: Planning and Zoning Division
- Ongoing Monitoring Responsibility: Building Services Division, Construction Inspection

SCA-BIO-9: Creek Protection Plan

Prior to and ongoing throughout demolition, grading and/or construction activities

- a) The approved creek protection plan shall be included in the project drawings submitted for a building permit (or other construction-related permit). The project applicant shall implement the creek protection plan to minimize potential impacts to the creek during and after construction of the project. The plan shall fully describe in plan and written form all erosion, sediment, stormwater, and construction management measures to be implemented on-site.
- b) If the plan includes a stormwater system, all stormwater outfalls shall include energy dissipation that slows the velocity of the water at the point of outflow to maximize infiltration and minimize erosion. The project shall not result in a substantial increase in stormwater runoff volume or velocity to the creek or storm drains.
 - Implementation Responsibility: Project Sponsor
 - Initial Approval Responsibility: Planning and Zoning Division
 - > Ongoing Monitoring Responsibility: Building Services Division, Construction Inspection

SCA-BIO-10: Regulatory Permits and Authorization

Prior to issuance of a demolition, grading, or building permit within vicinity of the creek

The project applicant shall obtain all necessary regulatory permits and authorizations from the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), California Department of Fish and Game, and the City of Oakland, and shall comply with all conditions issued by applicable agencies. Required permit approvals and certifications may include, but not be limited to the following:

- a) U.S. Army Corps of Engineers (Corps): Section 404. Permit approval from the Corps shall be obtained for the placement of dredge or fill material in Waters of the U.S., if any, within the interior of the project site, pursuant to Section 404 of the federal Clean Water Act.
- b) Regional Water Quality Control Board (RWQCB): Section 401 Water Quality Certification. Certification that the project will not violate state water quality standards is required before the Corps can issue a 404 permit, above.
- c) California Department of Fish and Game (CDFG): Section 1602 Lake and Streambed Alteration Agreement. Work that will alter the bed or bank of a stream requires authorization from CDFG.

To implement SCA-BIO-10, the applicant shall submit any application for a regulatory permit for review and approval by the Planning Director prior to submitting the application to the regulatory agency. The applicant shall provide the Planning Director the opportunity to participate in any

communications/negotiations that take place during the permitting process. The City of Oakland reserves the right to, at any time, object to the applicant's application for a regulatory permit if the permit would be inconsistent with the amended Master Plan, as conditioned, and/or the purposes and intent of the approval of the amended Master Plan.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; RWQCB; Corps; CDFG
- Ongoing Monitoring Responsibility: RWQCB; Corps; CDFG

SCA-BIO-11: Creek Monitoring

Prior to issuance of a demolition, grading, or building permit within vicinity of the creek

A qualified geotechnical engineer and/or environmental consultant shall be retained and paid for by the project applicant to make site visits during all grading activities; and as a follow-up, submit to the Building Services Division a letter certifying that the erosion and sedimentation control measures set forth in the Creek Protection Permit submittal material have been instituted during the grading activities.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection
- > Ongoing Monitoring Responsibility: Building Services Division, Construction Inspection

SCA-BIO-12: Creek Landscaping Plan

Prior to issuance of a demolition, grading, or building permit within vicinity of the creek

The project applicant shall develop a final detailed landscaping and irrigation plan for review and approval by the Planning and Zoning Division prepared by a licensed landscape architect or other qualified person. Such a plan shall include a planting schedule, detailing plant types and locations, and a system for temporary irrigation of plantings.

- a) Plant and maintain only drought-tolerant plants on the site where appropriate as well as native and riparian plants in and adjacent to riparian corridors. Along the riparian corridor, native plants shall not be disturbed to the maximum extent feasible. Any areas disturbed along the riparian corridor shall be replanted with mature native riparian vegetation and be maintained to ensure survival.
- b) All landscaping indicated on the approved landscape plan shall be installed prior to the issuance of a Final inspection of the building permit, unless bonded pursuant to the provisions of Section 17.124.50 of the Oakland Planning Code.
- c) All landscaping areas shown on the approved plans shall be maintained in neat and safe conditions, and all plants shall be maintained in good growing condition and, whenever necessary replaced with new plant materials to ensure continued compliance with all applicable landscaping requirements. All paving

or impervious surfaces shall occur only on approved areas.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-BIO-13: Creek Dewatering and Aquatic Life

Prior to the start of and ongoing throughout any in-water construction activity

- a) If any dam or other artificial obstruction is constructed, maintained, or placed in operation within the stream channel, ensure that sufficient water is allowed to pass down channel at all times to maintain aquatic life (native fish, native amphibians, and western pond turtles) below the dam or other artificial obstruction.
- b) The project applicant shall hire a biologist, and obtain all necessary State and federal permits (e.g. CDFG Scientific Collecting Permit), to relocate all native fish/native amphibians/pond turtles within the work site, prior to dewatering. The applicant shall first obtain a project-specific authorization from the CDFG and/or the USFWS, as applicable to relocate these animals. Captured native fish/native amphibians/pond turtles shall be moved to the nearest appropriate site on the stream channel downstream. The biologist/contractor shall check daily for stranded aquatic life as the water level in the dewatering area drops. All reasonable efforts

shall be made to capture and move all stranded aquatic life observed in the dewatered areas. Capture methods may include fish landing nets, dip nets, buckets, and by hand. Captured aquatic life shall be released immediately in the nearest appropriate downstream site. This condition does not allow the take or disturbance of any state or federally listed species, nor state-listed species of special concern, unless the applicant obtains a project specific authorization from the CDFG and/or the USFWS, as applicable.

- > Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection; Regulatory Agency, as applicable
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection; Regulatory Agency, as applicable

SCA-BIO-14: Creek Dewatering and Diversion

Prior to the start of any in-water construction activities

If installing any dewatering or diversion device(s), the project applicant shall develop and implement a detailed dewatering and diversion plan for review and approval by the Building Services Division. All proposed dewatering and diversion practices shall be consistent with the requirements of the Streambed

Alteration Agreement issued by the California Department of Fish and Game.

- a) Ensure that construction and operation of the devices meet the standards in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Control Board (RWQCB).
- b) Construct coffer dams and/or water diversion system of a non-erodible material which will cause little or no siltation. Maintain coffer dams and the water diversion system in place and functional throughout the construction period. If the coffer dams or water diversion system fail, repair immediately based on the recommendations of a qualified environmental consultant. Remove devices only after construction is complete and the site stabilized.
- c) Pass pumped water through a sediment settling device before returning the water to the stream channel. Provide velocity dissipation measures at the outfall to prevent erosion.
 - > Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection; Regulatory Agency, as applicable
 - > Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection; Regulatory Agency, as applicable

SCA-BIO-15: Vegetation Management Plan on Creekside Properties

Prior to issuance of a demolition, grading, and/or construction and ongoing

The project applicant shall submit a vegetation management plan for review and approval by the Planning and Zoning Division, Fire Services Division, and Watershed Program of the Public Works Agency that includes, if deemed appropriate, the following measures:

- a) Identify and do not disturb a 20-foot creek buffer from the top of the creek bank. If the top of bank cannot be identified, leave a 50-foot buffer from the centerline of the creek or as wide a buffer as possible between the creek centerline and the proposed site development.
- b) Identify and leave" islands" of vegetation in order to prevent erosion and landslides and protect nesting habitat.
- c) Leave at least 6 inches of vegetation on the site.
- d) Trim tree branches from the ground up (limbing up) and leave tree canopy intact.
- e) Leave stumps and roots from cut down trees to prevent erosion.
- f) Plant fire-appropriate, drought-tolerant, preferably native vegetation.
- g) Err on the side of caution. If you don't know if a plant, tree or area is sensitive, ask for a second opinion before you cut.

- h) Provide erosion and sediment control protection if cutting vegetation on a steep slope.
- i) Leave tall shrubbery at least 3-feet high.
- j) Fence off sensitive plant habitats and creek areas to protect from goat grazing.
- k) Obtain a tree protection permit for a protected tree (includes all mature trees except eucalyptus and Monterey pine).
- 1) Contact the City Tree Department (615-5850) for dead trees.
- m) Do not clear-cut vegetation. This can lead to erosion and severe water quality problems and destroy important habitat.
- n) Do not remove vegetation within 20-feet of the top of bank. If the top of bank cannot be identified, do not cut within 50-feet of the centerline of the creek or as wide a buffer as possible between the creek centerline and the proposed site development.
- o) Do not trim/prune branches that are larger than 4 inches in diameter.
- p) Do not remove tree canopy.
- q) Do not dump cut vegetation in a creek.
- r) Do not cut tall shrubbery to less than 3-feet high.
- s) Do not cut of short vegetation (grasses, ground-cover) to less than 6-inches high.
 - > Implementation Responsibility: Project Sponsor
 - > Initial Approval Responsibility: Planning and Zoning Division; Fire Services Division; Environmental Watershed Program
 - Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

New 2011 Mitigation Measure

Mitigation Measure BIO-1 (Prior to construction activities in the California Exhibit area): The project applicant shall prepare a wetland delineation of the site which shall be verified by the U.S. Army Corps of Engineers to confirm the extent of jurisdictional waters on the site, including the reach of Arroyo Viejo Creek and the entire California Exhibit area. As required under SCA-BIO-10, the project applicant shall obtain all necessary regulatory permits and authorizations and shall comply with all conditions issued by applicable agencies. In the remote instance that the 950-square-foot potential seasonal wetland is considered a jurisdictional waters of the State by the Regional Water Quality Control Board, a mitigation program shall be developed and implemented by the project applicant. If required, the mitigation program shall provide for a minimum 1:1 on-site replacement for this potential seasonal wetland feature, the mitigation program shall be approved by the Regional Water Quality Control Board, and any created habitat shall be monitored for a minimum of three years or until all success criteria have been met.

➤ Implementation Responsibility: Project Sponsor

- ➤ Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection; Regulatory Agency, as applicable
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection; Regulatory Agency, as applicable

CULTURAL RESOURCES

SCA-CULT-1: Archaeological Resources

Ongoing throughout demolition, grading, and/or construction

- a) Pursuant to CEQA Guidelines section 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Oakland. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.
- b) In considering any suggested measure proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the project applicant shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while measure for historical resources or unique archaeological resources is carried out.
- c) Should an archaeological artifact or feature be discovered on-site during project construction, all activities within a 50-foot radius of the find would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. If the deposit is determined to be significant, the project applicant and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate measure, subject to approval by the City of Oakland, which shall assure implementation of appropriate measure measures recommended by the archaeologist. Should archaeologically-significant materials be recovered, the qualified archaeologist shall recommend appropriate analysis and treatment, and shall prepare a report on the findings for submittal to the Northwest Information Center.
 - ➤ Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Building Services Division, Zoning Inspection

> Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-CULT-2: Human Remains

Ongoing throughout demolition, grading, and/or construction

In the event that human skeletal remains are uncovered at the project site during construction or groundbreaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

- > Implementation Responsibility: Project Sponsor
- > Initial Approval Responsibility: Building Services Division, Zoning Inspection
- ➤ Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-CULT-3: Paleontological Resources

Ongoing throughout demolition, grading, and/or construction

In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995,1996)). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.

- > Implementation Responsibility: Project Sponsor
- > Initial Approval Responsibility: Building Services Division, Zoning Inspection
- > Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

GEOLOGY AND SOILS

Revised 1998 Mitigation Measures²

- 2a) *Prior to issuance of a grading permit and installation of drainage improvements:* Facilities and infrastructure improvements should be designed to control runoff so that it is not directed over unprotected slopes. Drainage improvements shall be designed to adequately collect surface water runoff and convey it to the proper storm drain system. A permanent storm drain shall be designed, installed, and maintained to catch water from the existing natural drainage pattern in Knowland Park above Stella Street. The water will be redirected to City storm drain system.
- 2c) Grading and construction activities shall be restricted to the dry season. Exposed surface areas shall be watered down, especially during construction, to reduce wind erosion.
 - ➤ Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Building Services Division, Plan-Check
 - Ongoing Monitoring Responsibility: Building Services Division, Construction Inspection
- 3a) Mitigation Measures 2a and 2c shall be implemented.
- 5c) *Prior to issuance of a building permit:* All proposed structures shall be designed and constructed in accordance with the Uniform Building Code and California Amendments. The interpretation of the applicability of the appropriate UBC standard for each proposed structure shall be determined by the Oakland Building and Engineering staff at the time of preliminary plan submittal.
 - ➤ Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Building Services Division, Plan-Check
 - > Ongoing Monitoring Responsibility: Building Services Division, Building Inspection
- 5d) *Prior to issuance of a building permit:* Proper earthquake-resistant techniques for securing indoor fixtures, machinery and furnishings within proposed structures shall be used during construction to minimize the risk of damage or injury from toppled objects.
 - Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Building Services Division, Plan-Check
 - Ongoing Monitoring Responsibility: Building Services Division, Building Inspection
- 5e) Prior to final inspection of a building permit for each phase: The Zoo's Emergency Preparedness and

² The 1998 mitigation measures have been revised for the Master Plan amendment. For a discussion of these changes, see Section 3.4 Geology and Soils of the SMND/A. The revisions are also shown in underline and strike-out in Appendix C of the SMND/A.

Response Plan and Animal Capture Plan shall be updated as proposed facilities are developed. The Zoo and Neighborhood (KPHA and SHRA) Associations will work together to educate the neighborhood about the Zoo's Emergency Preparedness and Response Plan and how it is implemented. This will be accomplished through written communication and a phone tree. The Zoo will provide a demonstration to the representatives of KPHA and SHRA of the safety of the animal enclosures in case of a natural disaster.

- > Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division
- Ongoing Monitoring Responsibility: Planning and Zoning Division

Standard Conditions of Approval

SCA-GEO-1: Soils Report

Prior to issuance of a building permit

A preliminary soils report for each construction site within the project area shall be required as part of this project and submitted for review and approval by the Building Services Division. The soils reports shall be based, at least in part, on information obtained from on-site testing. Specifically the minimum contents of the report should include:

- A. Logs of borings and/or profiles of test pits and trenches:
 - a) The minimum number of borings acceptable, when not used in combination with test pits or trenches, shall be two (2), when in the opinion of the Soils Engineer such borings shall be sufficient to establish a soils profile suitable for the design of all the footings, foundations, and retaining structures.
 - b) The depth of each boring shall be sufficient to provide adequate design criteria for all proposed structures.
 - c) All boring logs shall be included in the soils report.
- B. Test pits and trenches
 - a) Test pits and trenches shall be of sufficient length and depth to establish a suitable soils profile for the design of all proposed structures.
 - b) Soils profiles of all test pits and trenches shall be included in the soils report.
- C. A plat shall be included which shows the relationship of all the borings, test pits, and trenches to the exterior boundary of the site. The plat shall also show the location of all proposed site improvements. All proposed improvements shall be labeled.
- D. Copies of all data generated by the field and/or laboratory testing to determine allowable soil bearing pressures, sheer strength, active and passive pressures, maximum allowable slopes where applicable and any other information which may be required for the proper design of foundations, retaining walls, and other structures to be erected subsequent to or concurrent with work done under the grading permit.
- E. Soils Report. A written report shall be submitted which shall include, but is not limited to, the following:
 - a) Site description;
 - b) Local and site geology;

- c) Review of previous field and laboratory investigations for the site;
- d) Review of information on or in the vicinity of the site on file at the Information Counter, City of Oakland, Office of Planning and Building;
- e) Site stability shall be addressed with particular attention to existing conditions and proposed corrective attention to existing conditions and proposed corrective actions at locations where land stability problems exist;
- f) Conclusions and recommendations for foundations and retaining structures, resistance to lateral loading, slopes, and specifications, for fills, and pavement design as required;
- g) Conclusions and recommendations for temporary and permanent erosion control and drainage. If not provided in a separate report they shall be appended to the required soils report;
- h) All other items which a Soils Engineer deems necessary;
- i) The signature and registration number of the Civil Engineer preparing the report.
- F. The Director of Planning and Building may reject a report that she/he believes is not sufficient. The Director of Planning and Building may refuse to accept a soils report if the certification date of the responsible soils engineer on said document is more than three years old. In this instance, the Director may be require that the old soils report be recertified, that an addendum to the soils report be submitted, or that a new soils report be provided.
 - ➤ Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Building Services Division, Plan-Check
 - > Ongoing Monitoring Responsibility: Building Services Division, Building Inspection

SCA-GEO-2: Geotechnical Report

A site-specific, design level, landslide or liquefaction geotechnical investigation for each construction site within the project area shall be required as part of this project and submitted for review and approval by the Building Services Division. Specifically:

- i. Each investigation shall include an analysis of expected ground motions at the site from identified faults. The analyses shall be accordance with applicable City ordinances and polices, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.
- ii. The investigations shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).
- iii. The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, shall be included in the final design, as approved by the City of Oakland.
- iv. The geotechnical report shall include a map prepared by a land surveyor or civil engineer that shows all field work and location of the "No Build" zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge.

- v. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the projects design phase, shall be incorporated in the project.
- vi. Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.
- vii. A peer review is required for the geotechnical report. Personnel reviewing the geotechnical report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.

Implementation of SCA-GEO-2 shall include the following in the geotechnical investigation prepared for the proposed California Interpretive Center:

- The design-level geotechnical investigation shall identify methods for site preparation and grading to stabilize existing fill areas and prepare the site for foundation and retaining wall construction. Measures may include reworking of existing fill soils, removal of oversized concrete and debris from fill, and crushing of oversized materials.
- The design-level geotechnical investigation shall confirm and revise 2007 California Building Code seismic design parameters as presented in this SMND/Addendum.
- The geotechnical design investigation shall include design recommendations for retaining walls. foundations, concrete slabs, pavements, walkways, surface and subsurface drainage measures, and utility trench construction and backfill. The foundations are anticipated to be spread footings, thickened mat slabs, pier and grade beam and other conventional foundation types.
- The geotechnical investigation shall outline the details of geotechnical plan review. Recommendations of the project geotechnical engineer shall be included in the final construction drawings, as approved by the City of Oakland.
- The geotechnical investigation shall identify the geotechnical observation and testing services recommended during construction. During construction the geotechnical engineer shall perform observations and testing services and shall prepare a final report documenting results of his or her work.
- The City of Oakland shall provide peer review of the design-level geotechnical investigation and grading plan. The Oakland Zoo shall be responsible for the cost of the review. Revisions
 - to the report and the design of project facilities shall be made to satisfy review comments by the City of Oakland peer reviewer.
- During the construction phase, cut slopes, keyways, and grading for the building pad that expose bedrock shall be mapped by the project engineering geologist. An as-graded geologic map shall be prepared showing the details of observed features and conditions.
- The geotechnical investigation shall include a map prepared by a land surveyor or civil engineer that shows the locations and elevation of key features (e.g., keyways, subdrains and their cleanouts, cut slopes, and cut pads). The map shall include a statement that the locations and limitations of the features are accurate representations of said features as they exist on the ground; were placed on this map by the surveyor, the civil engineer or under their supervision; and are accurate to the best of their knowledge.
- Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.

- > Implementation Responsibility: Project Sponsor
- > Initial Approval Responsibility: Building Services Division, Plan-Check
- > Ongoing Monitoring Responsibility: Building Services Division, Building Inspection

HAZARDS AND HAZARDOUS MATERIALS

Standard Conditions of Approval

SCA-HAZ-1: Hazards Best Management Practices

Prior to commencement of demolition, grading, or construction

The project applicant and construction contractor shall ensure that construction Best Management Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

- a) Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction;
- b) Avoid overtopping construction equipment fuel gas tanks;
- c) During routine maintenance of construction equipment, properly contain and remove grease and oils;
- d) Properly dispose of discarded containers of fuels and other chemicals.
- e) Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.
- f) If soil, groundwater or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notification of regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.
 - > Implementation Responsibility: Project Sponsor
 - > Initial Approval Responsibility: Building Services Division, Zoning Inspection
 - > Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-HAZ-2: Hazardous Materials Business Plan

Prior to handling, storage or transporting hazardous materials

The project applicant shall submit a Hazardous Materials Business Plan for review and approval by Fire Prevention Bureau, Hazardous Materials Unit. Once approved this plan shall be kept on file with the City and will be updated as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle the materials and provides information to the Fire Services Division should emergency response be required. The Hazardous Materials Business Plan shall include the following:

- a) The types of hazardous materials or chemicals stored and/or used on site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.
- b) The location of such hazardous materials.
- c) An emergency response plan including employee training information
- d) A plan that describes the manner in which these materials are handled, transported and disposed.
 - ➤ Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Fire Prevention Bureau
 - Ongoing Monitoring Responsibility: Fire Prevention Bureau

HYDROLOGY AND WATER QUALITY

Revised 1998 Mitigation Measures³

10a) Mitigation Measures 2a and 2c shall be implemented. (See Geology and Soils)

Standard Conditions of Approval

SCA-HYDRO-1: Stormwater Pollution Prevention Plan (SWPPP)

Prior to and ongoing throughout grading and construction activities

The project applicant must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the State Water Resources Control Board (SWRCB). The project applicant must file a notice of intent (NOI) with the SWRCB. The project applicant will be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) and submit the plan for review and approval by the Building Services Division. At a minimum, the SWPPP shall include a description of construction materials, practices and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; Best Management Practices (BMPs); and an inspection and monitoring program. Prior to the issuance of any construction-related permits, the project applicant shall submit to the Building Services

³The 1998 mitigation measures have been revised for the Master Plan amendment. For a discussion of these changes, see Section 3.7 Hydrology and Water Quality of the Subsequent Mitigated Negative Declaration/Addendum (SMND/A). The revisions are also shown in underline and strike-out in Appendix C of the SMND/A.

Division a copy of the SWPPP as evidence of submittal of the NOI to the SWRCB. Implementation of the SWPPP shall start with the commencement of construction and continue through the completion of the project. After construction is completed, the project applicant shall submit a notice of termination to the SWRCB.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: SWRC; Building Services Division, Zoning Inspection
- Ongoing Monitoring Responsibility: SWRC

SCA-HYDRO-2: Drainage Plan for Projects on Slopes Greater Than 20 Percent

Prior to issuance of building (or other construction-related permit)

The project drawings for a building permit (or other construction-related permit) shall contain a drainage plan to be reviewed and approved by the Building Services Division. The drainage plan shall include measures to reduce the post-construction volume and velocity of stormwater runoff to the maximum extent practicable. Stormwater runoff shall not be augmented to adjacent properties or creeks.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Building Services Division, Plan-Check
- ➤ Ongoing Monitoring Responsibility: Building Services Division, Construction Inspection

SCA-HYDRO-3: Post-Construction Stormwater Management Plan

Prior to issuance of building permit (or other construction-related permit)

The applicant shall comply with the requirements of Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Alameda Countywide Clean Water Program. The applicant shall submit with the application for a building permit (or other construction-related permit) a completed Stormwater Supplemental Form for the Building Services Division. The project drawings submitted for the building permit (or other construction-related permit) shall contain a stormwater pollution management plan, for review and approval by the City, to limit the discharge of pollutants in stormwater after construction of the project to the maximum extent practicable.

- a) The post-construction stormwater pollution management plan shall include and identify the following:
 - i. All proposed impervious surface on the site;
 - ii. Anticipated directional flows of on-site stormwater runoff; and
 - iii. Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces; and
 - iv. Source control measures to limit the potential for stormwater pollution; and
 - v. Stormwater treatment measures to remove pollutants from stormwater runoff; and
 - vi. Hydromodification management measures so that post-project stormwater runoff does not exceed the flow and duration of pre-project runoff, if required under the NPDES permit.
- b) The following additional information shall be submitted with the post-construction stormwater pollution

management plan:

- i. Detailed hydraulic sizing calculations for each stormwater treatment measure proposed; and
- ii. Pollutant removal information demonstrating that any proposed manufactured/ mechanical (i.e., nonlandscape-based) stormwater treatment measure, when not used in combination with a landscape-based treatment measure, is capable or removing the range of pollutants typically removed by landscapebased treatment measures.

All proposed stormwater treatment measures shall incorporate appropriate planting materials for stormwater treatment (for landscape-based treatment measures) and shall be designed with considerations for vector/mosquito control. Proposed planting materials for all proposed landscape-based stormwater treatment measures shall be included on the landscape and irrigation plan for the project. The applicant is not required to include on-site stormwater treatment measures in the post-construction stormwater pollution management plan if he or she secures approval from Planning and Zoning of a proposal that demonstrates compliance with the requirements of the City's Alternative Compliance Program.

Prior to final permit inspection, the applicant shall implement the approved stormwater pollution management plan.

- > Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Plan-Check
- Ongoing Monitoring Responsibility: Building Services Division, Construction Inspection

SCA-HYDRO-4: Maintenance Agreement for Stormwater Treatment Measures

Prior to final zoning inspection

For projects incorporating stormwater treatment measures, the applicant shall enter into the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit, which provides, in part, for the following:

- i. The applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and
- ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The agreement shall be recorded at the County Recorder's Office at the applicant's expense.
 - > Implementation Responsibility: Project Sponsor
 - > Initial Approval Responsibility: Building Services Division, Zoning Inspection
 - Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-HYDRO-5: Erosion, Sedimentation and Debris Control Measures

Prior to issuance of demolition, grading, or construction-related permit

The project applicant shall submit an erosion and sedimentation control plan for review and approval by the Building Services Division. All work shall incorporate all applicable "Best Management Practices" (BMPs) for the construction industry, and as outlined in the Alameda

Countywide Clean Water Program pamphlets, including BMP's for dust, erosion and sedimentation abatement per Chapter Section 15.04 of the Oakland Municipal Code. The measures shall include, but are not limited to, the following:

- a) On sloped properties, the downhill end of the construction area must be protected with silt fencing (such as sandbags, filter fabric, silt curtains, etc.) and hay bales oriented parallel to the contours of the slope (at a constant elevation) to prevent erosion into the creek.
- b) In accordance with an approved erosion control plan, the project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable erosion control fabric shall be installed on all graded slopes to protect and stabilize the slopes during construction and before permanent vegetation gets established. All graded areas shall be temporarily protected from erosion by seeding with fast growing annual species. All bare slopes must be covered with staked tarps when rain is occurring or is expected.
- c) Minimize the removal of natural vegetation or ground cover from the site in order to minimize the potential for erosion and sedimentation problems. Maximize the replanting of the area with native vegetation as soon as possible.
- d) All work in or near creek channels must be performed with hand tools and by a minimum number of people. Immediately upon completion of this work, soil must be repacked and native vegetation planted.
- e) Install filter materials (such as sandbags, filter fabric, etc.) at the storm drain inlets nearest to the creek side of the project site prior to the start of the wet weather season (October 15); site dewatering activities; street washing activities; saw cutting asphalt or concrete; and in order to retain any debris flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding.
- f) Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.
- g) Direct and locate tool and equipment cleaning so that wash water does not discharge into the creek.
- h) Create a contained and covered area on the site for storage of bags of cement, paints, flammables, oils, fertilizers, pesticides, or any other materials used on the project site that have the potential for being discharged to the storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.
- i) Gather all construction debris on a regular basis and place them in a dumpster or other container which is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.
- j) Remove all dirt, gravel, refuse, and green waste from the sidewalk, street pavement, and storm drain system adjoining the project site. During wet weather, avoid driving vehicles off paved areas and other outdoor work.
- k) Broom sweep the street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall

be scraped from these areas before sweeping. At the end of each workday, the entire site must be cleaned and secured against potential erosion, dumping, or discharge to the creek.

- 1) All erosion and sedimentation control measures implemented during construction activities, as well as construction site and materials management shall be in strict accordance with the control standards listed in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Board (RWQB).
- m) Temporary fencing is required for sites without existing fencing between the creek and the construction site and shall be placed along the side adjacent to construction (or both sides of the creek if applicable) at the maximum practical distance from the creek centerline. This area shall not be disturbed during construction without prior approval of Planning and Zoning.
- n) All erosion and sedimentation control measures shall be monitored regularly by the project applicant. The City may require erosion and sedimentation control measures to be inspected by a qualified environmental consultant (paid for by the project applicant) during or after rain events. If measures are insufficient to control sedimentation and erosion then the project applicant shall develop and implement additional and more effective measures immediately.
- j) Remove all dirt, gravel, refuse, and green waste from the sidewalk, street pavement, and storm drain system adjoining the project site. During wet weather, avoid driving vehicles off paved areas and other outdoor work.
- k) Broom sweep the street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall be scraped from these areas before sweeping. At the end of each workday, the entire site must be cleaned and secured against potential erosion, dumping, or discharge to the creek.
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 - > Implementation Responsibility: Project Sponsor
 - > Initial Approval Responsibility: Building Services Division, Plan-Check
 - > Ongoing Monitoring Responsibility: Building Services Division, Construction Inspection

NOISE

Standard Conditions of Approval

SCA-NOISE-1: Days/Hours of Construction Operation

Ongoing throughout demolition, grading, and/or construction

The project applicant shall require construction contractors to limit standard construction activities as follows:

Construction activities are limited to between 7:00 AM and 7:00 PM Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 AM and 4:00 PM Monday through Friday.

Any construction activity proposed to occur outside of the standard hours of 7:00 AM to 7:00 PM Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.

Construction activity shall not occur on Saturdays, with the following possible exceptions:

- i. Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.
- ii. After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.

No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.

No construction activity shall take place on Sundays or Federal holidays.

Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

Applicant shall use temporary power poles instead of generators where feasible.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Building Services Division, Zoning Inspection
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-NOISE-2: Noise Control

Ongoing throughout demolition, grading, and/or construction

To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to the Planning and Zoning Division and the Building Services Division review and approval, which includes the following measures:

- a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- b) Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available and this
 - could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
- c) Stationary noise sources shall be located as far from adjacent sensitive noise receptors as possible and they shall be muffled and enclosed within temporary sheds, or incorporate insulation noise barriers, or <u>use</u> other measures as determined by the City to provide equivalent noise reduction.
- d) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

To implement SCA-NOISE-2, the project applicant shall have a qualified acoustical consultant prepare a noise reduction implementation plan for City review and approval. The goal of the plan is to reduce noise impacts during Phase 1 at Receptor 4 and Receptor 6. The project applicant shall implement the approved plan.

The approved noise reduction implementation plan shall incorporate one or more of the following sound reduction measures or equivalent sound reduction measures:

Phase 1 Veterinary Medical Hospital. During construction activities, a 15-foot-high temporary sound barrier of 230 feet in length shall be placed between the proposed Veterinary Medical Hospital site and the southern and eastern residences. The sound barrier shall be placed at the edge of the parking lot closest to the Veterinary Medical Hospital location as shown in Figure 3.9-1 of the SMND/A. The sound barrier shall require a ten-foot return on each end and be oriented 45 degrees into the construction activities. Due to edge diffraction, the construction activities shall not approach the end of the wall returns by 50 feet. Table 3.9-8 in Subsection 3.9.5.2 of the SMND/A describes the temporary sound barrier wall height and the duration of the wall placement.

Phase 1 Service Road. A 12-foot-high temporary sound barrier segment of 475 feet in length shall be placed along the edge of the service road segment where the road bends and is oriented

nearest the southern residences as shown in **Figure 3.9-2 of the SMND/A** while roadway construction occurs. The sound barrier shall require a ten-foot return on each end and be oriented 45 degrees into the construction activities. Due to edge diffraction, the construction activities shall not approach the end of the wall returns by 50 feet. **Table 3.9-8** in **Subsection 3.9.5.2 of the SMND/A** describes the temporary sound barrier wall height and the duration of the wall placement.

The temporary sound barrier shall be constructed of a sound blanket system hung on scaffolding to achieve the required height. This system is very effective in the reduction of construction noise and allows the ability to move or adjust the wall location. An alternative sound barrier design would consist of plywood installed atop a portable concrete K-Rail system. This alternative solution is effective in the reduction of noise and also allows the ability to move or adjust the wall location.

An alternative approach to the sound barrier would be to equip all of the heavy construction equipment used in the construction of the Veterinary Medical Hospital and the service road with acoustical silencers installed directly onto the construction equipment's exhaust system. This alternative mitigation solution would reduce the temporary construction noise impacts to below the City of Oakland's noise threshold limits.

- Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; Building Services Division, Zoning Inspection
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-NOISE-3: Noise Complaint Procedures

Ongoing throughout demolition, grading, and/or construction

Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- a) A procedure and phone numbers for notifying the Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours);
- b) A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);
- c) The designation of an on-site construction complaint and enforcement manager for the project;
- d) Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the type and estimated duration of the activity; and
- e) A preconstruction meeting shall be held with the job inspectors and the general contractor/ on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.
 - ➤ Implementation Responsibility: Project Sponsor

- ➤ Initial Approval Responsibility: Building Services Division, Zoning Inspection
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-NOISE-4: Operational Noise-General

Ongoing

Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Building Services Division, Zoning Inspection
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

PUBLIC SERVICES AND UTILITIES

Standard Conditions of Approval

SCA-SERVICES-1: Waste Reduction and Recycling

The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency.

Prior to issuance of demolition, grading, or building permit

Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3), and all demolition (including soft demo). The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at www.oaklandpw.com/Page39.aspx or in the Green Building Resource Center. After approval of the plan, the project applicant shall implement the plan.

Ongoing

The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be in implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Environmental Services Division of the Public Works Agency for review and approval. Any incentive

programs shall remain fully operational as long as residents and businesses exist at the project site.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Environmental Services Division
- Ongoing Monitoring Responsibility: Environmental Services Division

SCA-SERVICES-2: Fire Safety Phasing Plan

Prior to issuance of a demolition, grading, and/or construction and concurrent with any p-job submittal permit

The project applicant shall submit a separate fire safety phasing plan to the Planning and Zoning Division and Fire Services Division for their review and approval. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. Fire Services Division may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase.

- > Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division; Fire Services Division; Building Services Division, Plan-Check
- ➤ Ongoing Monitoring Responsibility: Fire Services Division

SCA-SERVICES-3: Fire Safety

Prior to and ongoing throughout demolition, grading, and/or construction

The project applicant and construction contractor will ensure that during project construction, all construction vehicles and equipment will be fitted with spark arrestors to minimize accidental ignition of dry construction debris and surrounding dry vegetation.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Fire Services Division
- ➤ Ongoing Monitoring Responsibility: Fire Services Division

SCA-SERVICES-4: Stormwater and Sewer

Prior to completing the final design for the project's sewer service

Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to

accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.

- > Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Building Services Division, Plan-Check; Stormwater Divison
- ➤ Ongoing Monitoring Responsibility: Stormwater Division

TRANSPORTATION AND CIRCULATION

1998 Mitigation Measures

26a) *During construction:* Construction traffic shall only use existing improved public roads.

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Building Services Division, Zoning Inspection
- > Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection
- 27a) *Ongoing:* To prevent heavy traffic from exiting the Zoo in one direction, traffic will be directed between Golf Links Road and 106th Avenue in order to balance the traffic flow. At no time will the Golf Links exit be closed to heavy traffic.
 - ➤ Implementation Responsibility: Project Sponsor
 - > Initial Approval Responsibility: Building Services Division, Zoning Inspection
 - > Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

Standard Conditions of Approval

SCA-TRANS-1: Construction Traffic and Parking

Prior to the issuance of a demolition, grading or building permit

The project applicant and construction contractor shall meet with appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction

management plan for review and approval by the Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan shall include at least the following items and requirements:

- a) A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.
- b) Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.
- c) Location of construction staging areas for materials, equipment, and vehicles at an approved location.
- d) A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. Planning and Zoning shall be informed who the Manager is prior to the issuance of the first permit issued by Building Services.
- e) Provision for accommodation of pedestrian flow.
- f) Provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on street spaces.
- g) Any damage to the street caused by heavy equipment, or as a result of this construction, shall be repaired, at the applicant's expense, within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to issuance of a final inspection of the building permit. All damage that is a threat to public health or safety shall be repaired immediately. The street shall be restored to its condition prior to the new construction as established by the City Building Inspector and/or photo documentation, at the applicant's expense, before the issuance of a Certificate of Occupancy.
- h) Any heavy equipment brought to the construction site shall be transported by truck, where feasible.
- i) No materials or equipment shall be stored on the traveled roadway at any time.
- j) Prior to construction, a portable toilet facility and a debris box shall be installed on the site, and properly maintained through project completion.
- k) All equipment shall be equipped with mufflers.
- l) Prior to the end of each work day during construction, the contractor or contractors shall pick up and properly dispose of all litter resulting from or related to the project, whether located on the property, within the public rights-of-way, or properties of adjacent or nearby neighbors.
 - > Implementation Responsibility: Project Sponsor
 - ➤ Initial Approval Responsibility: Planning and Zoning Division, the Building Services Division, and the Transportation Services Division
 - ➤ Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection

SCA-TRANS-2: Parking and Transportation Demand Management

Prior to issuance of a final inspection of the building permit

The applicant shall submit for review and approval by the Planning and Zoning Division a Transportation Demand Management (TDM) plan containing strategies to reduce on-site parking demand and single occupancy vehicle travel. The applicant shall implement the approved TDM plan. The TDM shall include strategies to increase bicycle, pedestrian, transit, and carpools/vanpool use. All four modes of travel shall be considered. Strategies to consider include the following:

- a) Inclusion of additional bicycle parking, shower, and locker facilities that exceed the requirement
- b) Construction of bike lanes per the Bicycle Master Plan; Priority Bikeway Projects
- c) Signage and striping onsite to encourage bike safety
- d) Installation of safety elements per the Pedestrian Master Plan (such as cross walk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient crossing at arterials
- e) Installation of amenities such as lighting, street trees, trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.
- f) Direct transit sales or subsidized transit passes
- g) Guaranteed ride home program
- h) Pre-tax commuter benefits (checks)
- i) On-site car-sharing program (such as City Car Share, Zip Car, etc.)
- j) On-site carpooling program
- k) Distribution of information concerning alternative transportation options
- 1) Parking spaces sold/leased separately
- m) Parking management strategies; including attendant/valet parking and shared parking spaces

The TDM plan shall also include strategies to reduce traffic congestion at the entrance to the Zoo on busy days when vehicle queues at the Zoo entrance kiosk extend into Golf Links Road, which may include formalizing the current Zoo practice of waving vehicles through the Parking Fee Gate without having to stop or be charged the regular Zoo parking fee. [Note: The preceding double-underlined language was added at the June 21, 2011, City Council meeting.]

- ➤ Implementation Responsibility: Project Sponsor
- ➤ Initial Approval Responsibility: Planning and Zoning Division
- Ongoing Monitoring Responsibility: Building Services Division, Zoning Inspection