10.0 INVENTORY OF MITIGATION MEASURES

This section provides a complete inventory of the mitigation measures developed in response to the findings of the impacts analysis in Section 4.0 (Existing Conditions, Impacts, Mitigation Measures and Level of Significance After Mitigation). These mitigation measures will form the basis for the Mitigation Reporting and Monitoring Program for the proposed project. The agency responsible for the implementation of these mitigation measures is the City of Santa Paula.

10.1 MITIGATION MEASURES FOR LAND USE AND PLANNING

- LU-1 Before approval of the East Area 1 Specific Plan (SP3), an amendment to the General Plan Land Use Element must be approved by the City Council and ratified by a majority of registered voters within the City of Santa Paula.
- LU-2 The General Plan must be amended to change the CURB boundaries (Figure LU-4a) in accordance with Section III(G) of the General Plan Land Use Element to include the 501 acres comprising the East Area 1 Specific Plan (SP3) project site.
- LU-3 The City must prepare and process a Sphere of Influence Amendment request with Ventura LAFCO.
- LU-4 To mitigate the impact from creating islands of unincorporated territory that would result from annexing the East Area 1 project site to the City, the City must submit an East Area 2 reorganization request to LAFCO to seek annexation of any remainder island parcels resulting from an East Area 1 annexation.

10.2 MITIGATION MEASURES FOR AGRICULTURAL RESOURCES

- A-1 The applicant must record a conservation covenant, in a form approved by the City of Santa Paula, on the 55 acres of land currently in agricultural production in the proposed agricultural preserve located along the northern portion of the East Area 1 site that restricts activities to agricultural operations. This covenant will also require use of modified farming cultural practices, such as the restriction of the use of agricultural chemicals and practices that would generate high levels of dust, noise and odors.
- A-2 The applicant must record an agricultural conservation covenant, in a form approved by the City of Santa Paula, on 34 acres of other agricultural land owned by the applicant and currently under agricultural production within the City of Santa Paula's Area of Interest.

10.3 MITIGATION MEASURES FOR MINERAL RESOURCES

No mitigations measures are required.

10.4 MITIGATION MEASURES FOR TRANSPORTATION AND CIRCULATION

T-1 <u>SR-126 and Hallock Drive (Intersection 1)</u> – The applicant must pay its pro rata costs to widen and reconfigure the intersection on all four approaches. The northbound approach on Hallock Drive may require additional right-of-way to accommodate the proposed lane configurations. SR-126 would be widened on both approaches to accommodate an additional through lane at the intersection. The southbound approach would provide two left-turn lanes, one through lane, one shared through/right-turn lane, and one right-turn lane. The westbound approach would provide one left-turn lane, three through lanes and one right-turn lane. The northbound approach would provide one left-turn lane, one through lane and one right-turn lane. The eastbound approach would provide two left-turn lanes, three through lanes and one right-turn lane. The eastbound approach would provide two left-turn lanes, three through lanes and one right-turn lane. These recommended mitigation measures would require coordination with and approval by Caltrans. The design and construction of Mitigation Measures T-1 and T-2 should be closely coordinated because of their proximity to one another.

- T-2 <u>Telegraph Road and Hallock Drive (Intersection 2)</u> The applicant must pay its pro rata cost to install a traffic signal and to reconfigure the intersection on all four approaches as follows: (1) the southbound approach must provide one left-turn lane, two through lanes and one right-turn lane; (2) the westbound approach must provide one left-turn lane and one shared through/right-turn lane; (3) the northbound approach must provide one left-turn lane, one through lane and one shared through/right-turn lane; and (4) the eastbound approach must provide one left-turn lane, one through lane and one right-turn lane. The design and construction of Mitigation Measures T-1 and T-2 should be closely coordinated because of their proximity to one another.
- T-3 <u>12th Street and Santa Paula Street (Intersection 4)</u> The applicant must pay its pro rata cost to install a traffic signal, to reconfigure the intersection on three approaches, and to widen the west leg. The westbound approach must provide one left-turn lane and one shared through/right-turn lane. The northbound approach must provide one shared through/left-turn lane and one right-turn lane. The eastbound approach must provide one left-turn lane, one through lane and one right-turn lane. The west leg of the intersection must be widened to provide 50 feet from curb to curb as recommended in the Circulation Element.
- T-4 <u>Ojai Road (SR-150) and Richmond Road (Intersection 9)</u> The applicant must pay its pro rata cost to restrict southbound on-street parking during the A.M. peak period and northbound on-street parking during the P.M. peak period, to restrict the westbound left-turn movement during both peak periods, and to widen Ojai Road. The parking restrictions must provide one additional southbound through lane during the A.M. peak period and one additional northbound through lane during the P.M. peak period. Ojai Road must be widened to provide 50 feet from curb to curb as recommended in the Circulation Element. These recommended mitigation measures would require coordination with and approval by Caltrans.
- T-5 <u>Ojai Road (SR-150) and Orchard Road (Intersection 10)</u> The applicant must pay its pro rata cost to install a traffic signal and to restrict southbound on-street parking during the A.M. peak period and northbound on-street parking during the P.M. peak period. The parking restrictions must provide one additional southbound through lane during the A.M. peak period and one additional northbound through lane during the P.M. peak period. These recommended mitigation measures require coordination with and approval by Caltrans.
- T-6 <u>Ojai Road (SR-150) and Saticoy Street (Intersection 11)</u> The applicant must pay its pro rata cost to restrict southbound on-street parking during the A.M. peak period and northbound on-street parking during the P.M. peak period and to restrict the westbound left-turn movements during both peak periods. The parking restrictions must provide one additional southbound through lane during the A.M. peak period and one additional northbound through lane during the P.M. peak period. These recommended mitigation measures require coordination with and approval by Caltrans.

- T-7 Ojai Road (SR-150)/10th Street and Santa Paula Street (Intersection 12) The applicant must pay its pro rata cost to restrict southbound on-street parking during the A.M. peak period and northbound on-street parking during the P.M. peak period, to reconfigure the intersection and to widen Ojai Road/10th Street. The parking restrictions must provide one additional southbound through lane during the A.M. peak period and one additional northbound through lane during the P.M. peak period. The five-legged intersections must be reconfigured to a typical four-legged intersection. The southbound and northbound approaches must provide one left-turn lane and one shared through/right-turn lane during the off-peak periods. The eastbound and westbound approaches must provide one left-turn lane, one through lane and one right-turn lane. The fifth leg of the intersection, 10th Street north of Santa Paula Street, must be restricted to right turn only to and from Ojai Road. Ojai Road must be widened to provide 50 feet from curb to curb as recommended in the Circulation Element. These recommended mitigation measures require coordination with and approval by Caltrans.
- T-8 <u>10th Street and Harvard Boulevard (Intersection 15)</u> The applicant must pay its pro rata cost to restrict the southbound on-street parking during both peak periods and to reconfigure the northbound approach. The parking restriction must provide one additional southbound lane during both peak hours. The northbound approach must provide one left-turn lane, one through lane and one right-turn lane.
- T-9 <u>8th Street and Santa Paula Street (Intersection 18)</u> The applicant must pay all costs to widen and reconfigure the northbound approach. The northbound approach must provide one shared through/left-turn lane and one right-turn lane.
- T-10 <u>Palm Avenue and Santa Paula Street (Intersection 22)</u> The applicant must pay all costs to reconfigure the northbound and westbound approaches. The northbound approach must provide one shared through/left-turn lane and one right-turn lane. The westbound approach must provide one left-turn lane and one shared through/right-turn lane.
- T-11 <u>Steckel Drive and Santa Paula Street (Intersection 28)</u> The applicant must pay all costs to reconfigure the westbound approach. The westbound approach must provide one left-turn lane and one shared through/right-turn lane.
- T-12 <u>Peck Road and Main Street and Harvard Boulevard (Intersection 32)</u> The applicant must pay its pro rata cost to reconfigure the northbound and southbound approaches to provide one additional through lane. The northbound approach must provide one left-turn lane, two through lanes and one right-turn lane. The southbound approach must provide one left-turn lane, one through lane and one shared through/right-turn lane.
- T-13 <u>Peck Road and SR-126 Eastbound Ramps (Intersection 34)</u> The applicant must pay its pro rata cost to install a traffic signal. This mitigation measure requires coordination with and approval by Caltrans.
- T-14 <u>Faulkner Road and SR-126 Westbound Ramps (Intersection 35)</u> The applicant must pay its pro rata cost to reconfigure the westbound approach by converting one through lane to one left-turn lane. The westbound approach must provide two left-turn lanes and one shared through/right-turn lane. This mitigation measure requires coordination with and approval by Caltrans.

- T-15 <u>SR-126 between Peck Road and Briggs Road</u> The applicant must pay its pro rata cost to widen SR-126 to provide three travel lanes in each direction for a total of six lanes. The freeway widening can be completed within the existing right-of-way. This mitigation measure requires coordination with and approval by Caltrans.
- T-16 <u>Restricted parking on Ojai Road/10th Street during the peak periods</u> The City must monitor the parking situation on Ojai Road from Richmond Road to Santa Paula Street and on 10th Street north of Harvard Boulevard during the A.M. and P.M. peak periods to determine if the implementation of the parking restrictions on Ojai Road and 10th Street will create an indirect significant adverse parking impact. If necessary, the City will construct additional parking and the applicant must pay its pro rata cost to provide additional parking spaces during the A.M. and P.M. peak periods near the vicinity of Ojai Road and 10th Street.
- T-17 <u>Emergency Access Impacts</u> The applicant must submit emergency access plans to the SPFD for review and approval. The applicant must comply with the recommendations provided by the SPFD.
- T-18 <u>Parking Impacts</u> The applicant will prepare a parking study if the proposed project does not provide parking spaces per the Santa Paula Municipal Code.

10.5 MITIGATION MEASURES FOR AIR QUALITY

- AQ-1 During clearing, grading, earth-moving, or excavation operations, excessive fugitive dust emissions must be controlled by regular watering or other dust-preventive measures using the following procedures, as specified by the VCAPCD (including, without limitation, to VCAPCD Rule 50 (Opacity) and Rule 51 (Nuisance):
 - On-site vehicle speed is not to exceed 15 miles per hour (the site will contain posted signs with the speed limit);
 - All on-site construction roads with vehicle traffic must be watered periodically;
 - Streets adjacent to the project reach must be swept as needed to remove silt that may have accumulated from construction activities so as to prevent excessive amounts of dust.
 - All material excavated or graded must be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day;
 - All clearing, grading, earth moving, or excavation activities must cease during periods of high winds (i.e., greater than 25 miles per hour averaged over one hour) so as to prevent excessive amounts of dust (contact the VCAPCD meteorologist for current information about average wind speeds);
 - All material transported off-site must be either sufficiently watered or securely covered to prevent excessive amounts of dust; and
 - The area disturbed by clearing, grading, earth moving, or excavation operations must be minimized so as to prevent excessive amounts of dust.
- AQ-2 Project grading plans must show that for the duration of construction, ozone precursor emissions from construction equipment vehicles must be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Compliance with this measure will be subject to periodic inspections of construction equipment vehicles by the Public Works Department.

- AQ-3 All trucks that will haul excavated or graded material on-site must comply with California Vehicle Code § 23114, with special attention to subsections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.
- AQ-4 A comprehensive Fugitive Dust Control Plan must be developed by the Applicant and approved by the VCAPCD before the applicant commences grading and excavation operations. The Plan must include all feasible, but environmentally safe, dust control methods. If a particular dust control method is determined or believed not to be feasible, or if it would conflict with other regulations, justification for not including the subject method must be provided at the time the Fugitive Dust Control Plan is submitted to the VCAPCD. The Plan must identify all fugitive dust sources, the means by which fugitive dust from each identified source will be minimized, and the schedule or frequency that each dust control method will be applied for each identified source.
- AQ-5 The construction contractor must adhere to VCAPCD Rule 74.2 (Architectural Coatings) for limiting volatile organic compounds from architectural coatings. This rule specifies architectural coatings storage, clean up and labeling requirements.
- AQ-6 Use low emission water heaters for residential, retail, and commercial water heating (Emissions reduction of 11% for ROC and 9.5% for NO_X).
- AQ-7 Construct pedestrian and transit friendly facilities such as wider sidewalks, bus stops with passenger benches and shelters, and bikeways and or lanes. Sidewalks and bikeways should be landscaped with trees (an approximately 4 percent emissions reduction).
- AQ-8 Provide shuttle/minibus service between Project residential and Project retail areas and the Santa Paula downtown area.
- AQ-9 Provide shuttle/minibus service between the Project commercial and industrial land uses and the Project retail land uses and the Santa Paula downtown area during the lunchtime period (11:00 A.M. to 2:00 P.M.).
- AQ-10 To the extent feasible, construction employees will be hired from local populations, since it is more likely that they have been previously exposed to the fungus and are therefore immune. An individual is quite likely to be affected by valley fever if he or she lives in an area where the fungus is prevalent. A person (or animal) with a positive skin test has had a valley fever infection and has developed immunity to the fungus and therefore will never contract valley fever again. (Valley Fever Vaccine Project of America, <u>http://www.valleyfever.com/primer.htm</u>, June 8, 2005.)
- AQ-11 During periods of high dust in the grading phase, crews must use respirators in accordance with California Division of Occupational Safety and Health regulations.
- AQ-12 The operator cab of area grading and construction equipment must be enclosed and airconditioned.
- AQ-13 The Applicant and/or its contractor must plant and maintain shade trees to reduce heat build-up on structures.
- AQ-14 The Applicant and/or its contractor must prepare a Transportation Demand Management Program (TDM) for review and approval by the City and VCAPCD, before the City issues building permits. The plan must incorporate reasonable and feasible measures to reduce project-related

traffic and vehicle miles traveled. At minimum, the TDM Program must include the following measures:

- Provision of connections to identified adjacent City or regional trails;
- Provision of adequate way-finding features to direct pedestrians and bicyclists to nearby project and City destinations, such as school, retail, and civic facilities;
- Provision of homeowner information packets prior to close of escrow, identifying local and regional non-vehicular transportation options, and providing homeowners with basic information regarding telecommuting options; and
- Providing adequate setbacks and design features such that the proposed future enhancement of commuter rail opportunities is not hindered by project design.
- Construct pedestrian and transit friendly facilities such as wider sidewalks, bus stops with passenger benches and shelters, bikeway or lanes. Sidewalks and bikeways should be landscaped with trees; and
- Perform a traffic light synchronization study on streets impacted by project development to reduce vehicle queuing time.

The project will be required to offset the increase in daily emission over the 25 pounds of reactive organic compounds and nitrogen oxides per day either through the purchase of emission offsets or through the in-lieu fees shall be paid to fund off-site Transportation Demand Management (TDM) facilities or services, if such a program has been established at that time. These fees can reduce emissions from non-project generated motor vehicle trips by funding programs to promote ridesharing, public transit and bicycling. The amount of this financial contribution should be calculated on a pro-rate basis as determined to be equitable by the APCD, and in accordance with the VCAPCD Guidelines. These fees should be paid prior to the issuance of building permits by the County. The applicant must demonstrate the availability of the offsets or contribution to fund off-site TDM services to the Ventura County APCD through a contract or other agreement with the offset source(s), which binds the reduction to the project, prior to finalizing the environmental review process.

AQ-15 The Applicant and/or its contractor are required to install EPA-certified wood-burning stoves or fireplace inserts. If this is not feasible, then the installation of a ceramic coating on the honeycomb inside a catalytic combustor must be utilized or the use of natural gas fireplaces may be used as a feasible alternative.

10.6 MITIGATION MEASURES FOR NOISE

- N-1 Stationary construction equipment, such as pumps, generators, or compressors, must be placed as far from noise sensitive uses as feasible during all phases of project construction.
- N-2 All construction equipment must be equipped with appropriate mufflers in good working condition.
- N-3 Before any site activity, the contractor will be required to submit a material haul route plan to the City of Santa Paula and Ventura County for review and approval. The contractor must ensure that the approved haul routes are used for all materials hauling, to minimize exposure of sensitive receivers to potential adverse noise levels from hauling operations.

- N-4 Notification must be provided to all occupied residences within 200 feet of an area where construction activities are anticipated to result in ground-borne vibration of more than 80 VdB at least 10 days in advance of such activities.
- N-5 During all site preparation, grading and construction, the construction contractor must ensure that all stockpiling and vehicle staging areas are located away from existing residences to the extent feasible.
- N-6 Where feasible and consistent with City standards, any paving or repaving of Santa Paula Street between 12th Street and 10th Street that must be conducted in conjunction with implementation of the proposed project should utilize asphalt rubber paving material consisting of 20 percent or more recycled rubber and 80 percent paving grade asphalt.
- N-7 Where feasible and consistent with City standards, speed limits on arterials experiencing significant noise impacts such as Santa Paula Street between 12th Street and 10th Street should be reduced. Each 5 mile per hour reduction in speed limits can decrease the CNEL level by about 1 dB(A)
- N-8 Noise sensitive work/live and residential units proposed within Specific Plan Planning Area E must be designed so that interior noise levels attributable to exterior sources exceeding 60 dB(A) CNEL do not exceed City interior noise standard (45 dB(A) CNEL). An acoustical analysis of the effectiveness of noise insulation of proposed construction must be required and documented during permit review, showing that the building materials and construction specifications are adequate to meet the interior noise standard (45 dB(A) CNEL). Examples of building materials and construction specifications that may be used to meet the interior noise standard include the following:
 - Exterior livable space, such as balconies, must be oriented northward;
 - South-facing windows and sliding glass doors must be double-paned, mounted in frames with low rates of air filtration (0.5 cubic foot per minute or less, per American National Standard Institute specifications) and a sound transmission coefficient rating of 30 or greater;
 - Solid-core exterior doors must be constructed with perimeter weather stripping and threshold seals; and
 - South-facing roof or attic vents must be baffled.
- N-9 Written disclosure of maximum exterior and interior noise levels expected at work/live and residential units and at light industrial, office, and retail uses within Planning Area E must be provided to those purchasing or leasing such uses.
- N-10 Work/live and residential units, light industrial, office, and retail uses within Planning Area E must be located a minimum of 66 feet from the railroad tracks.

10.7 MITIGATION MEASURES FOR BIOLOGICAL RESOURCES

BR-1a Before the City issues a grading permit for areas that require state or federal permits, the applicant and/or its contractor must coordinate with the CDFG to verify the impact to state-protected waters and associated vegetation on the project site. A Streambed Alteration Agreement (SAA) must be obtained and mitigation measures recommended by the CDFG as part

of the SAA must be implemented. The SAA must be provided to the City prior to issuance of a grading permit.

The applicant and/or its contractor must mitigate for temporary and permanent impacts to jurisdictional waters as administered by the CDFG jurisdiction by restoring habitats within those jurisdictions acceptable to the resource agency for permanent impacts and temporary impacts. The applicant must prepare a Conceptual Streambed Restoration Plan (CSRP) to document the mitigation program. Habitat must be mitigated on-site or within the same watershed, if feasible. The goal of the CSRP will be to recreate the functions and values of the habitat being affected. These mitigation requirements will be outlined in the CSRP prepared for this project, with monitoring requirements and specific criteria to measure the success of the restoration. Guidelines for the CSRP must include:

- The mitigation site(s) must have been evaluated and selected on the basis of their suitability for use as riparian mitigation areas.
- The mitigation area must provide procedures to prepare soils in the mitigation area, provide detailed seeding/planting mixtures, provide seeding/planting methods, and other procedures that will be used for successful re-vegetation.
- Impacts to jurisdictional waters must be avoided to the extent feasible in the design phase of the project.
- Maintenance and monitoring requirements must be established, including quarterly and annual monitoring reports to CDFG.
- BR-1b Where Southern Riparian Scrub, a sensitive natural community, will be impacted as part of project implementation, mitigation for acreage impacted must be implemented at a minimum of a one to one (1:1) ratio and/or as determined appropriate by the CDFG. Acceptable mitigation will replace or enhance the existing Southern Riparian Scrub vegetation. This will be a part of the mitigation resulting from impacts to jurisdictional resources and will be the responsibility of the project applicant and/or its contractor.
- BR-1c The project applicant and/or its contractor must mitigate for the loss of the on-site Southern Riparian Scrub plant community. This must include the removal and elimination of false bamboo (giant reed) (*Arundo donax*) from Haun Creek. False bamboo (giant reed) must be eradicated and controlled prior to the enhancement or replacement of the current vegetation, as in the implementation of Mitigation Measures B-1a, and B-1b.
- BR-1d Before the City issues a grading permit, for areas that require state or federal permits, the applicant and/or its contractor must coordinate with the ACOE to verify the impact to federally-regulated waters on the project site. A Section 7 Biological Consultation will be required, as Santa Paula Creek is designated critical steelhead habitat. A NWP must be obtained and mitigation measures recommended by the ACOE, and National Marine Fisheries, as part of the NWP must be implemented. The NWP must be provided to the City prior to initiating construction of the bridge crossing Santa Paula Creek.

Areas determined to be federally regulated by the ACOE will also fall under the jurisdiction of the RWQCB, and a Clean Water Act Section 401 Water Quality Certification (401 Certification) will be required from the RWQCB for impacts to those areas. A Biological Assessment to support a Section 7 Biological Consultation will be required, as the area is within designated steelhead habitat.

- BR-2a To avoid impacts to native nesting birds, the applicant and/or its contractors must retain a qualified biologist (with selection to be reviewed by the City) to conduct nest surveys in potential nesting habitat within the project site prior to construction or site preparation activities. Specifically, within 30 days of ground disturbance activities associated with construction or grading, a qualified biologist must conduct weekly surveys to determine if active nests of bird species protected by the Migratory Bird Treaty Act (MBTA) or the California Fish and Game Code are present in the construction zone or within 300 feet (500 feet for raptors) of the construction zone. Surveys for special-status bird species can be conducted concurrently with general nesting bird surveys. Because many birds known to use the project area (including Cooper's hawk and loggerhead shrike) nest during the late winter, breeding bird surveys must be carried out both during the typical nesting/breeding season (mid-March through September) and in January and February. The surveys must continue on a weekly basis, with the last survey being conducted no more than 3 days prior to initiation of clearance or construction work. If ground disturbance activities are delayed, then additional pre-construction surveys will be conducted such that no more than three days will have elapsed between the last survey and the commencement of ground disturbance activities. Surveys must include examination of trees, shrubs, and the ground within grassland for nesting birds, as several bird species known to occur in the area and the project site are shrub or ground nesters, including burrowing owl, California horned lark, and mourning dove.
- BR-2b If active nests are found, clearing and construction activities within 300 feet of the nest (500 feet for raptors) must be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the qualified biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest must be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel must be instructed on the sensitivity of nest areas. The biologist must serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur. The results of the survey, and any avoidance measures taken, must be submitted to the City of Santa Paula within 30 days of completion of the pre-construction surveys and construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.
- BR-3a Before the applicant commences construction of a bridge across Santa Paula Creek, all creek bed areas within 300 feet of the construction site and access road must be inspected by a qualified biologist for the presence of Southern California steelhead, Santa Ana sucker, and arroyo chub. The ACOE, USFWS, and the CDFG must be notified of the inspection and must have the option of attending. If any of the above agencies is not represented, the biologist must file a written report of the inspection with the agency not in attendance within 14 days of the survey and no sooner than 30 days before any construction work in the riverbed.

Construction work areas must be determined to be absent of Southern California steelhead, Santa Ana sucker, and arroyo chub immediately before the prescribed work is to be carried out, immediately before any equipment is moved into or through the stream or habitat areas, and immediately before diverting any stream water. The removal of such species must be conducted by a qualified biologist using procedures approved by the ACOE, USFWS, and CDFG, and with the appropriate collection and handling permits. Species must be relocated to nearby suitable habitat areas. A plan to relocate these species must be submitted to the ACOE, USFWS, and CDFG for review and approval no later than 30 days prior to construction. Under no circumstances must the Southern California steelhead be collected or relocated, unless USFWS personnel or their agents implement this measure.

A qualified biologist must be present when any stream/river diversion takes place, or when blocking nets and seines are used and must patrol the areas both within, upstream and downstream of the work area to rescue any species stranded by the diversion of the stream water or trapped by the nets/seines. Species that are collected must be relocated to suitable locations downstream of the work area. Under no circumstances must the Southern California steelhead be collected or relocated, unless USFWS personnel or their agents implement this measure.

Blocking nets, or fences with 0.125-inch-square mesh, 18 inches high and buried 6 inches, must be placed downstream of the work area to assure that none of the species move into the construction area.

Installation of the bridge structures must not impair movement of fish and aquatic life, and must occur during the time of year when the Southern California steelheads are not actively moving upstream (December 1 through March 30).

- BR-3b The applicant and/or its contractor must retain a qualified biologist to conduct pre-construction burrowing owl surveys (following CDFG protocols) within the fallow agricultural field located on-site prior to construction or site preparation activities occurring during the non-nesting season of burrowing owl (typically September 1 through January 31) or the nesting season (typically April 15 through July 15). The survey must be conducted no more than 20 days prior to commencement of construction activities and may be conducted concurrently with general nesting bird surveys. If burrowing owls are observed using burrows during these surveys, protective fencing must be constructed around any nest burrows (if during the breeding season) until the young have fledged. Once the young have fledged, or if grading will occur during the non-breeding season, owls must be excluded from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with CDFG protocols (CDFG 1995). Specifically, exclusion devices utilizing one-way doors must be installed in the entrances of all active burrows. The devices must be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows must then be excavated by hand and refilled to prevent reoccupation. Exclusion must continue until the owls have been successfully excluded from the Specific Plan area, as determined by a qualified biologist. Consultation with the City and CDFG may also need to occur to determine if mitigation is needed to offset the loss of active burrowing owl nest habitat.
- BR-3c To avoid impacts to the western red bat the applicant and/or its contractor must retain a qualified biologist (with selection to be reviewed by the City) to conduct roosting bat surveys within the Specific Plan area prior to construction or site preparation activities. Specifically, within 30 days of ground disturbance activities associated with construction or grading, a qualified biologist must conduct weekly surveys to determine if roosting western red bats are present in the construction zone or within 300 feet of the construction zone. Because the western red bat is known to migrate south to Arizona and Mexico in early fall and winter, roosting bat surveys must be carried out from March through September. Surveys for special-status bat species may be conducted concurrently with nesting bird surveys. The surveys must continue on a weekly basis, with the last survey being conducted no more than three (3) days prior to initiation of clearance or construction work. If ground disturbance activities are delayed, then additional pre-construction surveys will be conducted such that no more than three days will have elapsed between the last survey and the commencement of ground disturbance activities. Surveys must include examination of trees and large shrubs, particularly the lemon, cottonwood, and oak trees planned for removal, in which this species is known to roost. Any bats found outside of the breeding season (May through August) should be relocated by having a qualified biologist remove the bat from the roost. If roosting female bats are found with young during the breeding season (May

through August) clearing and construction activities within 300 feet of the roost must be postponed or halted until the roost is vacated and juveniles have been weaned, as determined by the biologist. Limits of construction to avoid an active roost site must be established in the field with flagging, fencing, or other appropriate barriers and construction personnel must be instructed on the sensitivity of nest areas. The biologist must serve as a construction monitor during those periods when construction activities will occur near active roost areas to ensure that no inadvertent impacts on these roosts will occur. The results of the survey, and any avoidance measures taken, must be submitted to the City of Santa Paula within 30 days of completion of the pre-construction surveys and construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of this bat species.

BR-3d The applicant and/or its contractor must retain a qualified biologist (approved by the City of Santa Paula) to survey the project site for the presence of the American badger no earlier than 1 day prior to any grading activity. In particular, the survey must include an examination of the fallow agricultural field in the eastern portion of the site that will be impacted during project implementation.

If American badger is located on-site, potential loss of individual animals must be mitigated through one of the following: (1) an on-site passive relocation program, through which badgers are excluded from occupied burrows by installation of a one-way door in burrow entrances, monitoring of the burrow for one week to confirm badger usage has been discontinued, and hand-excavation and collapse of the burrow to prevent reoccupation; or (2) active trapping and relocation of badgers to suitable off-site habitat by a qualified biologist and in coordination with the CDFG, as approved by the City and CDFG.

- BR-4 Before the applicant can remove on-site jurisdictional trees, the applicant must submit an current tree survey report consistent with SPMC regulations detailing the species, health, and condition of all protected trees within the development area. This report will also contain a site plan showing the locations of the trees on-site and their driplines. The report must contain enough information to evaluate the potential impact of any construction, and to assess whether replacement on-site is appropriate, or an in-lieu fee should be assessed. If it is determined that a protected tree will be impacted, the value of that tree will be assessed in order to provide accurate mitigation; mitigation in the form of replacement trees or an in-lieu fee is required for all impacted or removed trees. The applicant will coordinate specific mitigation with the City before any removal activities.
- BR-5 The landscaping plan must include the planting of trees along the eastern development (Haun Creek area)/open space (natural areas located to the north) interface, where practicable, to minimize nighttime lighting and glare. The landscaping plan must be prepared by a qualified landscape architect, must use native plant and tree species, and must be approved by the City.
- BR-6a A public awareness program must be developed to restrict public access in open space areas on the project site to designated trails and to prevent unleashed domestic animals from entering these areas. This program must include, among other things, posting signs identifying ecologically sensitive areas, using temporary fencing around sensitive areas that appear to be receiving a high level of disturbance, and promoting public education and awareness of the local biological resources and their sensitivity. The applicant and/or its contractor must be responsible for the initial development of the public awareness program and installation of interpretive signs and fencing. The homeowners association (HOA), or an acceptable land manager/agency, as approved by the City of Santa Paula, must be responsible for maintaining this program, including signs and fencing.

- BR-6b The project applicant or its contractor must install, throughout the project site, waste and recycling receptacles that discourage foraging by wildlife species that are adapted to more urban environments, such as raccoons and skunks.
- BR-6c All dogs must be required to be leashed while in the designated open space areas. The HOA, or an acceptable land manager/agency, as approved by the City of Santa Paula, must add a prohibition to the covenants, conditions, and restrictions (CC&Rs) for the community against unleashed dogs in open space areas. To limit impacts associated with domestic cats, the CC&Rs must require that bells hanging from collars must be placed on all cats owned by residents of the project.
- BR-6d The HOA, or an acceptable land manager/agency must supply educational information to future residents of the project site regarding the importance of not feeding wildlife, ensuring that trash (containing food) is not accessible to wildlife, keeping the ground free of fallen fruit from trees, and not leaving pets or pet food outside.
- BR-7 Certain ornamental plants are known to escape from planted areas and invade into native plant communities. In order to protect native plant communities established within the Specific Plan area and located in the adjacent Haun Creek, the plants listed below in Table 4.7-4 (Plant Species to be Avoided During Landscaping on the East Area 1 Project Site), must not be planted within the common landscaped areas of the proposed site plan. This list must also be distributed to new homeowners and included within the CC&Rs. The landscaping plans within common areas of the project must be reviewed by a qualified botanist who must recommend appropriate provisions to prevent other invasive plant species from colonizing remaining natural areas. These provisions may include the following: (a) review and screening of proposed plant palette and planting plans to identify and avoid the use of invasive species; (b) weed removal during the initial planting of landscaped areas; and (c) the monitoring for and removal of weeds and other invasive plant species as part of ongoing landscape maintenance activities. The frequency and method of monitoring for invasive species must be determined by a qualified botanist.

SCIENTIFIC NAME	COMMON NAME		
Acacia spp.	Acacia		
Ailanthus altissima	Tree of Heaven		
Arundo donax	Giant cane, false bamboo		
Bromus tectorum	Cheat grass		
Carpobrotus spp.	Ice plant		
Chrysanthemum coronarium	Annual chrysanthemum		
Cortaderia spp.	Pampas grass		
Cytisus spp.	Scotch, Spanish, and Portuguese Broom		
Eucalyptus spp.	Eucalyptus, Gum trees		
Foeniculum vulgare	Fennel		
Genista monspessulana	French broom		
Hedera helix	English ivy		
Lepidium latifolium	Perennial pepperweed		
Lobularia maritima	Sweet alyssum		
Myoporum laetum	Myoporum		
Pennisetum clandestinum	Kikuyu grass		
Pennisetum setaceum	Fountain grass		

PLANT SPECIES TO BE AVOIDED DURING LANDSCAPING ON THE EAST AREA 1 PROJECT SITE

PLANT SPECIES TO BE AVOIDED DURING LANDSCAPING ON THE EAST AREA 1			
PROJECT SITE			

SCIENTIFIC NAME	COMMON NAME
Phalaris aquatica	Harding grass
Rhus lancea	African sumac
Ricinus communis	Castor bean
Rubus discolor	Himalayan blackberry
Schinus spp.	Pepper tree
Senecio mikanioides (syn. Delairea odorata)	German-ivy
Taeniatherum caput-medusae	Medusa-head
<i>Tamarix</i> spp.	Tamarisk
Tropaeolum majus	Nasturtium
Vinca minor	Periwinkle

Source: California Native Plant Society. 1992. Non-Native Invasive Plants in the Santa Monica Mountains; Dudley, T. 1998. Exotic Plant Invasions in California Riparian Areas and Wetlands. Fremontia 26(4): 24-29; California Exotic Pest Plant Council. 1996. Lists of Exotic Pest Plants of Greatest Ecological Concern in California.

10.8 MITIGATION MEASURES FOR GEOLOGY AND SOILS

- G-1 Additional explorations must be performed at the tentative tract map and grading plan review stages of the development planning. The purpose of the explorations would be to establish required removal depths and delineate the transition from the finer-grained soils in the eastern portion of the project site deemed susceptible to seismically-induced settlement to the rocky soils of the western part where the soils are not deemed vulnerable to seismically-induced settlement.
- G-2 Additional explorations (deep bucket auger borings or continuous core drilling) of the slope and ridgelines above the planned Santa Paula Creek neighborhood (Unit A) should be performed at the tentative tract map stage in order to verify their susceptibility to landslides, mudflows, and seismically-induced instability.
- G-3 To the greatest extent possible, equipment that can penetrate very boulder-rich strata should be used for the exploratory drilling.
- G-4 To aid in planning and to provide data for use in analyses, water level monitoring wells should be installed at the project site. At least four monitoring wells, one well in each quadrant of the project site, should be installed. The wells should extend to at least 60 feet bgs and should be protected with vaults. The wells should be installed as soon as possible and monitored at least monthly until the basic water level patterns have been determined and at least quarterly thereafter for assessment of yearly trends.
- G-5 Within the northwest corner of the project site, below the slope that faces west toward Santa Paula Creek, habitable or essential service structures should not be planned within the "Preliminary Setback" zone depicted on Plate 1 of the Preliminary Geotechnical Investigation Report or the adjacent slopes. The setback line is based on the location of the toe of an imaginary slope composed of same materials as the existing slope and having a static factor of safety of at least 1.5 and a pseudo-static factor of safety of at least 1.1.
- G-6 Water should not be allowed to pond or accumulate anywhere on the project site except in designated detention or debris basins. Pad drainage should be designed to collect and direct surface water away from structures to approved drainage facilities.

- G-7 Detention basins or debris basins should be incorporated into the project design below canyon areas.
- G-8 Grading at the project site should consist of removal and replacement of the upper on-site soils and placement of compacted fill. Over excavation of the upper soils should be performed to provide support for foundations, floor slabs, and paving. Backfills will be required for utilities, walls, and foundations.
- G-9 Field investigations indicate that a significant amount of oversized material (boulders) would be encountered during grading. Oversize materials (generally greater than 8 inches; refer to "Material for Fill" below) can cause problems with utility trenching and foundations for structures. The presence of the oversize materials may make it prudent to over excavate areas where utilities and other subsurface construction will occur. The need for processing and special handling of oversized materials (i.e., screening, crushing, or disposal of) should be considered.
- G-10 Project site preparation should include the following:
 - Removal of existing vegetation and debris from the project site.
 - Over excavation of the upper soils to remove soils disturbed by past site uses and demolition activities.
 - Additional over excavation to allow placement of compacted fill beneath the proposed building foundations. For preliminary planning purposes, the over excavation should be expected to extend at least 5 feet below the existing grade or as required to allow placement of at least 3 feet of compacted fill beneath the proposed building foundations. The over excavation should extend beyond the building footings in plan view at least a distance equal to the thickness of the fill underlying the footings, but no less than 5 feet. Deeper removals should be made where obviously unsuitable materials are encountered.
 - Generally, to provide suitable soils for support of the proposed paving, at least the upper 2 feet of the soils in those areas should be excavated. The over excavation should extend at least 2 feet beyond the paved areas in plan. However, for roads under the jurisdiction of the California Department of Transportation (Caltrans), the over excavation should comply with the Caltrans requirements. Deeper removals should be made where obviously unsuitable materials are encountered.
 - To facilitate installation of utilities, including storm drains, the on-site materials should be over excavated to at least one-half of the diameter/width of the utility or I-foot, whichever is deeper, below the proposed invert of the utilities. The excavated materials should be replaced with soils containing materials less than 3 inches in size with no more than 25 percent larger than 1½ inches in size. The over excavation should extend in plan view 1 foot beyond the utility or one-half the depth of the over excavation, whichever is greater.
- G-11 Required fill soils should be placed in accordance with the following recommendations:
 - The fill soils should be placed in loose layers that do not exceed 8 inches in thickness per layer. Each layer should be spread evenly and thoroughly mixed during spreading to promote uniformity of the materials and moisture content.
 - The moisture content of the fill soils at the time of compaction should be brought to approximately 110 percent to 120 percent of optimum moisture content. The moisture content should be uniform throughout the soils.
 - Fill soils should be mechanically compacted to at least 90 percent of their maximum dry

density as determined by the ASTM Designation D1557 Method of Soil Compaction.

- Flooding should not be permitted. For Caltrans roads, the upper 2~ feet of the sub grade soils should be compacted to at least 95 percent.
- The placement and compaction of fill materials should be under the continuous observation of the Geotechnical Consultant.
- G-12 The on-site soils, less debris or organic matter, may be used in required fills and backfills. Soils with an expansion index of 30 or higher should not be used within 5 feet of the sub grade beneath floor slabs. The expansion index of the upper fill soils should be checked prior to and at the completion of grading. Some of the on-site clay soils are expansive and their placement in fills beneath buildings, flatwork, pools, and other structures should be avoided.
- G-13 Generally, rocks larger than 8 inches in greatest dimension should not be placed in fills. However, in deeper (approximately 15- foot deep) fills, rocks up to 12 inches in size may be placed in the deeper portions of the fills in accordance with specific recommendations. Rocks larger than 4 inches in greatest dimension should not be placed in utility backfills. Gravel and cobbles incorporated into fills should be thoroughly mixed into the soil, and should not be clumped or segregated in heaps. Observations of the materials at the project site indicate a significant amount of oversize material should be expected to require processing for use in compacted fills.
- G-14 Approximately 15 percent to 20 percent shrinkage of the upper, approximately 5 feet, soils should be expected when they are over excavated and replaced as compacted fill. Crushing of oversize materials will cause apparent bulking that is not considered in the quoted shrinkage value. Shrinkage value should be revised to accommodate the crushing of oversize material.
- G-15 Manufactured permanent slopes should be inclined at 2: 1 or flatter.
- G-16 The reworking of the upper soils and the compaction of all required fill and backfill should be observed and tested during placement by the Geotechnical Consultant of Record.
- G-17 The governmental agencies having jurisdiction over the project should be notified before commencement of grading so that the necessary grading permits can be obtained and arrangements made for the required inspection or inspections.
- G-18 Provided that the soils loosened by clearing of the project site, together with over excavation and recompacted of the upper soils, it is expected that low- to relatively light mid-rise buildings in the western portion of the project site may be supported on conventional shallow footings underlain by compacted fill. In the eastern portion of the project site, the low-rise buildings may be supported on post-tensioned slabs or mat-type foundations. More detailed recommendations should be developed at the completion of additional explorations and testing.
- G-19 It is expected that taller or relatively heavy buildings or structures in the western portion of the project site can be supported on conventional shallow footings. In the eastern portion of the project site, building specific investigations should be performed and project specific recommendations developed.
- G-20 As with foundations, provided that the soils loosened by clearing of the project site, together with over excavation and recompacted of the upper soils, it is expected that floor slabs in the western portions of the project site may be supported on-grade. If desired, post-tensioned floor slabs may

be used for these structures. Floor slabs beneath indoor living spaces, as opposed to garages or patios, in all areas of the project site should be underlain by a vapor retarder or barrier.

G-21 Under the Earthquake Design regulations of Chapter 16, Divisions IV and V of the 2001 edition of the California Building Code (CBC), the following coefficients and factors apply to lateral-force design for structures at the project site:

Seismic Zone, Z	0.4		
Soil Profile Type	S _C		
Near-Source Factor N _a	1.3		
Near-Source Factor N _v	1.6		
Seismic Coefficient C _a	0.57		
Seismic Coefficient C _v	1.02		
Period T _o *	0.14		
Period T _s *	0.72		

SEISMIC COEFFICIENTS

Source: Leighton & Associates, 2007.

*Use with Figure 16-3 of the CBC.

Fault Type	Nearest Fault	Distance (km)	Magnitude
А	San Andreas (1857 Rupture)	52	7.8
В	Oak Ridge	1.5	7.0

Source: Leighton & Associates, 2007.

10.9 MITIGATION MEASURES FOR HYDROLOGY AND WATER QUALITY

- H-1 Grading may occur during the rainy season from October 15th to April 15th, subject to approval by the City Engineer and installation of erosion control facilities. Erosion control measures must be in place and functional between October 15th and April 15th. In order to comply with the October 15 date, revised erosion control plans must be submitted to the City Engineer no later than September 15th of each year from the start of grading or clearing operations to the time of grading bond release.
- H-2 Temporary irrigation, hydroseeding, and erosion control/sedimentation control measures must be implemented on all temporary grading. Temporary grading is defined to be any grading partially completed and any disturbance of existing natural conditions due to construction activity. These measures will apply to temporary grading activity that remains or is anticipated to remain unfinished or undisturbed in its altered condition for a period of time greater than 30 days or until the beginning of the rainy season whichever comes first.
- H-3 During site preparation and construction, the Applicant and/or its contractor must minimize disturbance of natural groundcover on the project site until such activity is required for grading and construction purposes. During grading operations, the Applicant and/or its contractor must employ a full-time superintendent for NPDES compliance. If determined necessary by the City Engineer, the NPDES superintendent must be present on the project site not only during normal working hours, (e.g., Monday through Friday), but also on all other days when the probability of rain is 40 percent or higher, as well as before the start of and during all grading or clearing operations until the release of grading bonds.

The NPDES superintendent must perform site inspections before a forecast storm, during an extended storm, and after storms. The NPDES superintendent must have full authority to hire personnel, bind the Applicant and/or its contractor in contracts, rent equipment, and purchase

materials to the extent needed to effectuate BMPs. The NPDES superintendent must have certifications and training as per the Storm Water Practitioner requirements of the 2007 General Construction Permit, and must provide proof to the City Engineer of satisfactory completion of courses and certifications to meet permit requirements and any requirements imposed by the City. Proof of such attendance and completion must be provided to the City Engineer before employment of the NPDES superintendent. The project must follow requirements specified in the City of Santa Paula Municipal Code related to Stormwater Quality Management.

- H-4 Before the City issues an initial grading permit, the Applicant and/or its contractor must have prepared a Stormwater Quality Urban Impact Mitigation Plan (SQUIMP), including Non-Structural, Source Control, and Structural BMPs. A Certified Erosion and Sediment Control Professional or qualified Civil Engineer must prepare the SQUIMP. The SQUIMP must be reviewed and approved as per the requirements of Ventura County and/or the City Engineer. The development of the SQUIMP must conform to the Ventura County NPDES permit, the SQUIMP standards, and the Technical Guidance Manual for Storm Water Quality Control Measures.
- H-5 The SQUIMP must include structural and/or treatment BMPs. The structural BMPs must focus on meeting potential TMDL and pollutant standards for residential developments. The treatment BMPs must conform to the *Technical Guidance Manual for Storm Water Control Measures*. The SQUIMP guidelines contained in the *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements* for Ventura County.

10.10 MITIGATION MEASURES FOR HAZARDS AND HAZARDOUS MATERIALS

- HM-1 The project applicant and/or its contractor must ensure that material deliveries associated with construction of the proposed project do not contain hazardous materials that would be transported along Padre Lane or within one-quarter mile of a school.
- HM-2 The applicant and/or its contractor must coordinate in advance of construction with the Santa Paula Fire Department to ensure that road closures (temporary or permanent) are identified and that alternate access and evacuation routes are determined in the event of an emergency and/or natural disaster.
- HM-3 The applicant and/or its contractor must coordinate in advance of construction with the Santa Paula Fire Department to ensure that a Health Safety Plan or procedures are in place to address potential incidences of wildfires occurring on-site or originating off-site.
- HM-4 Procedures to minimize the generation of sparks, open flames, and other potential ignition sources, and the release of hazardous or flammable substances such as gasoline or diesel, must be instituted during operational and maintenance activities associated with the Agriculture Preserve and be contained within a Health and Safety Plan located on-site and provided to all employees working within this area. In addition, the Health and Safety Plan must be developed in advance of project approvals and in coordination with the Santa Paula Fire Department.
- HM-5 A Fire Protection Plan (FPP) must be prepared in advance of construction of all phases of development of the proposed project and submitted for review and approval by the Santa Paula Fire Department. The FPP at a minimum will be required to address the following:
 - Fuel Management Program incorporating fuel modification at the community edge and irrigated landscaping and maintenance of the community landscape

- Landscape palettes approved by the Santa Paula Fire Department in the fuel modification zones
- Design and building construction fire safety features including:
 - 1. Automatic fire sprinkler systems (per state requirements) in all enclosed, occupied structures, community wide
 - 2. Class A roofs community wide
 - 3. Additional building construction features, including boxed in eaves, on sides of structures adjacent to fuel modification zones
- HM-6 A Fuel Modification Plan (FMP) must be prepared in advance of construction of all phases of development of the proposed project and submitted for review and approval by the Santa Paula Fire Department. The following additional requirements must also be adhered to:
 - 1. Combustible fencing must not occur within 20' of the property line or immediately adjacent to fuel modification zones, to reduce the threat of fire spreading to the structure.
 - 2. Backyard restrictions
 - Homeowners must remove portions of trees which extend within 10 feet of the outlet of the chimney.
 - Homeowners must maintain trees adjacent to or overhanging a building free of deadwood.
 - Homeowners must maintain the roof of a structure free of leaves, needles or other dead vegetative growth.
 - 3. Off-site fuel modification must be required where 200' of fuel modification is not provided within the project boundary. The plan must identify the methods to provide a total of 200' band of fuel modification, or provide an alternative design with justification to the SPFD. The off-site fuel modification requirements must be coordinated with and approved by the SPFD.
 - 4. Provide a blending of the fuel modification areas and ornamental plantings where they are adjacent to each other to visually provide for a seamless transition of plantings. Those areas identified on the landscape plan as ornamental plantings will be treated as fuel modification where they are adjacent to open space.
 - 5. The plans must demonstrate how the irrigation will maintain moisture in the vegetation in the irrigated zones.
 - 6. A fuel modification plant palette must be submitted for review and approval by the SPFD. The plant palette can be developed by utilizing approved plant material from regionally approved plant lists, or by modifying the community plant palette.
 - 7. Trees may be grouped in clusters of 3-5 maximum with minimum separation of 35'.
 - 8. Maintain roadway clearance where fuel modification, natural or open space is adjacent to the roadway. Ten feet on each side of portions of roadways must be cleared of flammable vegetation and other vegetative growth.
 - 9. Interior slopes must be maintained and irrigated by the Home Owners Association (HOA). Plans must demonstrate the detail the proposed maintenance practices. These must include removal of dead and dying plant material.
 - 10. A 20' minimum structure setback must be required where lots are immediately adjacent to fuel modification zones, to reduce the threat of structure ignition from radiant and convective heat.

Submittal Criteria: Conceptual Fuel Modification Plans

Conceptual fuel modification plans must be submitted to and approved by the SPFD concurrent with review and approval of any tentative map. Three (3) sets of plans, prepared by a licensed landscape architect or other design professional with equivalent credentials must be submitted to the SPFD for review and approval.

The following must be included on the conceptual fuel modification plan:

- 1. Delineation of each fuel modification zone (irrigated, and thinning) with a general description of each zone's dimensions and character, i.e., 70' Zone 2, with existing vegetation removed, irrigated, and planted with drought-tolerant and fire-resistant plant material.
- 2. The removal of undesirable plant species as determined by the SPFD.
- 3. Existing vegetation impacted by the required fuel modification and, if available, proposed vegetation to be planted in the fuel modification area. The conceptual plans should be sensitive to rare and endangered species. The design professional must be prepared to address their disposition in the final plans.
- 4. The design of the proposed development, showing all property lines, contour lines, and the proposed location of all structures nearest to the fuel modification area, if available.
- 5. Photographs of the area which show the type of vegetation that currently exists, including height and density, and the topography of the site.
- 6. Description of the methods to be used for vegetation removal, if appropriate, i.e., mechanical or manual.
- 7. Location of emergency and maintenance access easements, to the satisfaction of SPFD, every 500' of the fuel modification area is suggested. The main and primary purpose is to provide maintenance access in to the fuel modification areas. Access easements must have a minimum 10' width and must be relatively flat and clear of obstructions to provide pedestrian and hand equipment access. If the access point is to be required on private homeowner lots, gates must be placed adjacent to the fuel modification areas.
- 8. Identification of what exists 300' beyond the development property lines in all directions, e.g., construction, natural vegetation, roads, parks.
- 9. Statement of who has ultimate maintenance responsibility.
- 10. Identification of all proposed off-site fuel modification areas and appropriate legal agreements with adjacent property owners.

Submittal Criteria: Final Fuel Modification

Final fuel modification plans must include all information required on conceptual fuel modification plans and the following additional information:

- 1. Location and detail of permanent zone markers.
- 2. Completed planting plans and specifications, including both the botanical and common names of existing vegetation within the fuel modification area and those plantings, which are proposed. The plants are to be installed in accordance with the spacing guidelines.
- 3. Irrigation plans and specifications.
- 4. Building footprints or statement that clearly indicates the limits of proposed development.
- 5. All applicable maintenance requirements and assignment of responsibility.
- 6. Tract or project conditions, covenants, conditions and restrictions (CC&R) and/or deed restrictions relative to fuel modifications.

Delineation

Fuel modification plans must depict fuel modification activities to scale. Minimal dimensional requirements for fuel modification necessitate evaluation by a SPFD representative in consultation with the appropriate jurisdictional authority. Exact delineation of the fuel modification zones with respect to topographical features and wildland exposure is required. All zone dimensions are measure on a horizontal plane; however, the actual dimensions of the zones on a slope will vary from the horizontal dimensions on the plans.

Fuel modification zones should be located within common lettered lots owned and maintained by association representing common ownership; e.g., homeowners' associations. The integrity and longevity of the fuel modification zones must be maintained with sufficient tract/project conditions and CC&Rs to specifically identify the restrictions within the fuel modification areas. If the fuel modification zones are located on private property, deed restrictions will be required to specifically identify the restrictions on any portion of the property subject to fuel modification.

Plant List

A plant palette must be submitted containing both the botanical and common names of all plant materials that are to be used. In the irrigated zone areas (which commonly serve as a screening buffer between development and open space/parkland), plants must be fire resistant and drought-tolerant. Plant materials used outside of the irrigated zones must be fire resistant. Plants prone to fire (as determined by the SPFD) must not be introduced into the fuel modification areas. All plants must be reviewed and approved by the SPFD.

Fuel Modification Zones

The following criteria apply to fuel modification zones:

Zone 1 – Irrigated Zone (30' wide)

This portion of fuel modification consists of irrigated landscaping. The plans must delineate that portion of the fuel modification area that will be permanently irrigated. Plant material selection, irrigation system design, and the landscape maintenance management plan must sensitively address water conservation practices and include methods of erosion control to protect against slope failure. This irrigated zone is a minimum of 30 feet in width and may be increased as conditions warrant. Zone 1 must be cleared of all undesirable plant species, irrigated, and planted with plants approved by the SPFD. Exceptions to save desirable species may be submitted for approval by the fire chief on a site-specific basis. Combustible construction is not allowed in Zone 1.

Zone 1 – Specific Requirements

- 1. Groundcover must be maintained at a height not to exceed 24 inches.
- 2. Native grasses, when used, must be cut after annual seeding. Heights must not exceed 12 inches.
- 3. Permanent irrigation must be designed to supplement native vegetation, and establish and maintain planted natives and ornamentals.
- 4. Any plants selected for planting in this zone must be selected from the approved plant list for the fuel modification plan.

- 5. Planting will be in accordance with planting guidelines and spacing standards established in this guideline.
- 6. In all Zones sensitive and/or protected plant species must be identified on the fuel modification plans and tagged in the field for further disposition.
- 7. Trees and large tree-form shrubs (e.g., oaks, sumac, toyon) which are being retained with the approval of the SPFD must be pruned to provide clearance of three times the height of the under story plant material or 10 feet, which ever is higher. Dead and excessively twiggy growth must also be removed.
- 8. Trees and tree-form shrubs may be grouped in clusters of 3-5 maximum with a minimum separation of 35'.
- 9. A distance of 20 feet must separate all existing plants or plant groupings, except cacti, succulents, trees, and tree-form shrubs.
- 10. All irrigation must be kept a minimum of 20 feet from the drip line of any existing native Quercus (oak) species.
- 11. Special consideration should be given for rare and endangered species, geological hazards, tree submitted for project approval, upon further review.
- 12. Removal of undesirable plant species (as determined by the SPFD).
- 13. Debris and trimmings produced by the removal process should be removed from the site, or left, must be converted into mulch by a chipping machine and evenly dispersed to a maximum depth of (6) inches.

Zone 2- Irrigated Zone (70' wide)

This portion of fuel modification consists of irrigated landscaping, a minimum of 70' in width. The fuel modification zone has the same requirements of Zone 1, however, the plantings selected from this zone include a higher percentage of low-growing, spreading plant material and fewer ornamental plants, which provides a visual transition to the grasslands, beyond, in the open space areas.

Zone 2- Specific Requirements

- 1. The irrigation plan must demonstrate the methods to ensure that the perennials and annuals are kept in a healthy, turgid state.
- 2. All specific requirements listed for Zone 1 must also apply to Zone 2.

Zone 3- Thinning Zones- Non-Irrigated

Zone 3 is 100 feet in width and requires the first 50' to include 50% removal of the existing vegetation, including removal of all dead and dying undesirable species. The next 50 feet in width requires 30% removal of existing vegetation, including all dead and dying growth and undesirable species. Remaining plant material will be selectively pruned to remove 30-40% of the plant mass.

Zone 3- Specific Requirements

- 1. Remove all dead and dying vegetation, all fine fuels reduced to a maximum of 12 inches in height.
- 2. Native grasses, when used, must be cut after annual seeding. Heights must not exceed 12 inches.
- 3. Any plants selected for plating in this zone will be chosen from the approved plant list for the fuel modification plan (as determined by the SPFD).

- 4. Special consideration will be given for rare and endangered species, geologic hazards, tree ordinances, or other conflicting restrictions.
- 5. Reduce fuel loading by reducing the fuel in each remaining shrub or tree without substantial decrease in the canopy cover or removal of tree holding root systems.
- 6. In Zones 1-3, sensitive and/or protected plant species must be identified in the fuel modification plans and tagged in the field for further disposition.
- 7. Trees and large tree-form shrubs (e.g., oaks, sumac, toyon) which are being retained with the approval of the SPFD must be pruned to provide clearance of three times the height of the under story plant material or 10 feet, whichever is higher. Dead and excessively twiggy growth must also be removed.
- 8. A distance of 20 feet must separate all existing plants or plant groupings except cacti, succulents, trees, and tree-form shrubs.
- 9. Maintain sufficient cover to prevent erosion without being requiring planting.
- 10. Debris and trimmings produced by the removal process must be removed from the site, or if left, must be converted into mulch by a chipping machine evenly dispersed to a maximum depth of (6) inches.

Permanent Identification of Fuel Modification Zones

To ensure long-term identification and maintenance each fuel modification zone must be identified by a permanent marker system meeting the approval of SPFD.

Maintenance and Enforcement

Provisions for continuous maintenance must be documented on the fuel modification plans, i.e., by the homeowner's associations, property owners, or other entities. Maintenance refers to anything needed to maintain the fuel modification area in a fire-safe condition as required by the SPFD, including the periodical removal of undesirable vegetation; replacement of dead/dying fire-resistant plantings; maintenance of the operational integrity and programming of the irrigation system; and preservation of identification markers. Written evidence indicating responsibility or maintenance must be submitted with both the preliminary and final fuel modification plans.

Ongoing maintenance must be in accordance with the original fuel modification plan.

Transfer of Maintenance Responsibility

Before the transfer of approved and installed fuel modification zones from the project applicant and/or developer to the homeowner's association or party(s) responsible for continuing maintenance, an inspection by the SPFD in company with the project applicant and/or developer, home-or property-owner's association representatives, and landscape maintenance contractor, must be made to determine if the fuel modification meets the standards and to provide fuel modification requirements to those responsible for continued maintenance. Once approved a built fuel modification plans and specifications, maintenance manuals, documents, and photographs of the completed, established fuel modification must be turned over to the party having responsibility for continuing maintenance.

Fuel Modification Implementation and Required Inspections

1. <u>Before Rough Grading Permit</u>: The project applicant and/or developer/builder must have approved/stamped <u>Conceptual</u> Fuel Modification Plan.

- 2. <u>Before Final Grading Permit</u>: The project applicant and/or developer/builder must have approved/stamped <u>Final</u> Fuel Modification Plan, with applicable note stating maintenance language will be provided in CC&Rs and reviewed before the City issues a certificate of occupancy for the first residential, commercial, light industrial or civic building.
- 3. <u>Before Building Permit</u>: The project applicant and/or developer/builder must implement those portions of the approved fuel modification plan determined by to be necessary by the SPFD before the introduction of any combustible materials into the area (removal of undesirable species may meet this requirement). This generally involves thinning of plant materials indicated on the approved plan. An inspection and/or release letter to the building department is required.
- 4. <u>Before certificates of occupancy</u>: The fuel modification zones adjacent to structures must be installed, irrigated, and inspected. This includes physical installation of features identified in the approved Final fuel modification plan (including, without limitation, plant establishment, thinning, irrigation, zone markers, access easements, etc). An SPFD Fire Inspector will provide written approval of completion at the time of this final inspection. The CC&R language for maintenance must also be provided and approved.
- 5. <u>Before Home Owner Association (HOA) Acceptance</u>: This activity must include the SPFD Fire Inspector and the following representatives:
 - Landscape design professional
 - Installing landscape contractor
 - HOA management representative
 - HOA landscape maintenance contractor

The fuel modification must be maintained as originally installed and approved. A copy of the approved plans must be provided to the HOA representatives at this time. Landscape professionals must convey ongoing maintenance requirements to HOA representatives.

<u>Annual Inspection and Maintenance</u>: The property owner is responsible for all maintenance of the fuel modification. All areas must be maintained in accordance with approved fuel modification plans. This generally includes a <u>minimum</u> of two growth reduction maintenance activities throughout the fuel modification areas each year (spring and fall). Other activities include maintenance of irrigation systems, replacement of dead or dying vegetation with approved materials, removal of dead plant material, and removal of undesirable species. The SPFD conducts regular inspections of established fuel modification areas. Ongoing maintenance must be conducted regardless of the date of these inspections.

- HM-7 If deemed necessary, the Santa Paula Fire Department may at its discretion require exclusionary fencing around the Agriculture Preserve and/or limit access to this area by local residents during high fire potential days (e.g., "Red Flag Days").
- HM-8 A 300 foot setback will be required for all residential and parkland uses located adjacent to the Agricultural Preserve.

10.11 MITIGATION MEASURES FOR AESTHETICS

A-1 Before the City issues grading permits, the applicant must prepare and submit a Lighting Plan to the City of Santa Paula, Planning Director for approval that identifies the types of shielding that will be used for outside lighting. Shielding will eliminate uplighting and ensure that light generated on the site does not spill over onto adjacent off-site properties.

10.12 MITIGATION MEASURES FOR CULTURAL AND HISTORIC RESOURCES

- C-1 Before the initiation of earthmoving activities associated with the development of the project site, the services of a qualified paleontologist approved by the City and LACM will be retained.
- C-2 Before the initiation of earthmoving activities associated with the development of the project site, the paleontologist or another mitigation program staff member will conduct a field survey of that portion of the project site underlain by older alluvium to locate and recover any larger fossil remains that might occur at currently unrecorded fossil sites, and to document the presence of strata suitable for containing larger fossil remains or for the collection and processing of sediment or rock samples to allow for the recovery of smaller fossil remains.
- C-3 The paleontologist will develop a formal agreement with a recognized museum repository, such as the LACM, regarding final disposition and permanent storage and maintenance of any fossil remains that might be recovered as a result of the mitigation program, the archiving of associated specimen data and corresponding geologic and geographic site data, and the level of treatment (preparation, identification, curation, cataloguing) of the remains that would be required before the entire mitigation program fossil collection would be accepted by the repository for storage.
- C-4 The paleontologist or another mitigation program staff member will coordinate with appropriate construction contractor personnel to provide information regarding City and County requirements concerning the protection of paleontologic resources. Contractor personnel, particularly heavy-equipment operators, also will be briefed on procedures to be followed in the event that fossil remains and a currently unrecorded fossil site are encountered by earthmoving activities, particularly when the monitor is not on-site. The briefing will be presented to new contractor personnel as necessary. Names and telephone numbers of the monitor and other appropriate mitigation program personnel will be provided to appropriate contractor personnel.
- C-5 Earthmoving activities will be monitored by the paleontologist only in those areas of the project site where these activities will disturb previously undisturbed strata. Monitoring will be conducted on a full-time basis in areas underlain by the Saugus Formation, on a half-time basis in areas underlain by older alluvium and, at depths greater than 5 feet below current grade, the younger alluvium. If fossil remains are encountered by earthmoving activities in an area underlain by older or younger alluvium and following approval from the City, monitoring will be increased to full time, at least in the vicinity of the fossil site. On the other hand, if no fossil remains are found once 50 percent of earthmoving activities have been completed in an area underlain by a particular rock unit, monitoring can be reduced to half time in the remainder of the area underlain by the Saugus Formation, and to quarter time in an area underlain by older or younger alluvium following approval from the City.
- C-6 If any paleontological resources are encountered during construction in this area, activities in the immediate area of the find will be halted and the discovery assessed. The paleontologist will recommend appropriate mitigation measures pursuant to guidelines developed by the Society of Vertebrate Paleontologists (SVP).
- C-7 All fossil specimens recovered from the project site as a result of the mitigation program, including those recovered as the result of processing fossilferous rock samples, will be treated (prepared, identified, curated, catalogued) in accordance with designated museum repository requirements. Rock or sediment samples from the older and younger alluvium will be submitted to commercial laboratories for microfossil, pollen, radiometric dating, or other analysis, as appropriate.

- C-8 The paleontologist will maintain daily monitoring logs that include the particular tasks accomplished, the earthmoving activity monitored, the location where monitoring was conducted, the rock unit encountered, the fossil specimens recovered, and associated specimen data and corresponding geologic and geographic site data. A final technical report of results and findings will be prepared by the paleontologist, in accordance with any City requirement.
- C-9 An archaeologist monitor must be present during topsoil grading of any of the historical archaeological sites L-2 through L-5.
- C-10 The following mitigation measures were developed to avoid or minimize the potential impacts of the proposed project related to historic resources.

Impact A:

Interpretative Plan. The applicant shall be required to produce an historical interpretation plan for the property. This plan shall include a permanent, on-site display within a public area which will provide historic information about the founding and history of the Teague-McKevett Ranch. Historic and/or contemporary photographs and other artifacts and materials should be included within the display. Other indoor or outdoor interpretive displays shall be produced, as appropriate. The precise content, format, and location and design shall be determined by a qualified historic preservation professional, and subject to the approval by the City of Santa Paula. The Teague-McKevett Ranch archives shall be used in the preparation of the exhibit and will include but not be limited to journals, annual reports, financial records, shipping records, ledgers, correspondence, maps, photographs, and architectural plans. In addition, interviews with former employees shall be undertaken by an historian qualified to document oral history.

Documentation. In consultation with a qualified historic preservation professional, the applicant shall produce a Documentation Report consisting of archival quality photographs and a measured site plan of the buildings, structures and landscape features to be demolished or relocated. As a part of the Documentation Report, the applicant shall compile a comprehensive inventory of historic features on the property, including but not limited to buildings, structures, objects, irrigation and drainage features, and landscape materials. Copies of the Documentation Report shall be submitted to appropriate local archives.

The Teague-McKevett Company archives shall be located and a comprehensive inventory completed by a qualified archivist. The archive shall be donated to an appropriate public library or museum repository. Possible repositories include the Ventura County Museum library and/or the Huntington Library.

Rehabilitation/Adaptive Reuse Plan. A rehabilitation and adaptive reuse plan for all eligible buildings, structures and objects which will be preserved shall be developed. The plan shall conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties and be prepared by a qualified historic preservation professional and be based to the greatest extent feasible on historical data. To the greatest extent feasible, the preservation and rehabilitation of historic features on the property shall be incorporated into the development plan.

Impact B:

Design. The new construction shall be screened from the historic district in such a manner as to minimize its visual impact upon the district. Screening methods may include historic landscape materials (e.g., citrus trees) planted along perimeter fences or walls, and/or tall skyline trees

planted within the site to simulate wind rows, or other such materials as may be effective and appropriate for the purposes of integrating the new construction into the agricultural landscape to the greatest extent feasible.

10.13 MITIGATION MEASURES FOR PUBLIC SERVICES

- PS-1 The project applicant and/or its contractor must dedicate one acre of land (at no cost to the City) within the proposed Santa Paula Creek Civic District or Railroad District, the location of which is to be determined in consultation with the SPFD. The facility must include office and living features necessary to serve assigned employees. The location must not be within a flood zone or seismic zone of concern, protected from wildfire, and have good road access unhindered from potential collapse threats such as bridges or power lines. In addition, the land must meet all facility standards within adopted code.
- PS-2 The project applicant and/or its contractor must provide a new type one fire apparatus (pumper) to meet fire suppression, medical emergency and response time requirements for the proposed project.
- PS-3 The project applicant and/or its contractor must contribute its fare share portion for the following:
 - Fire Personnel
 - > 12 full time fire personnel comprised of the following:
 - Three Battalion Chiefs
 - Three Captains
 - Three Engineers
 - Three Fire fighters
 - Civilian Staff
 - One Fire Prevention Officer
 - One Office Secretary
- PS-4 Automatic fire sprinkler systems must be installed in all new construction within the project site (as required by State law). The design and installation of this automatic fire sprinkler system must follow the applicable NFPA 13, 13-D, or 13-R requirements. Before installation, plans must be submitted for approval to the City of Santa Paula Fire Department. In addition, all underground and overhead portions of fire sprinkler systems and their water supplies must be inspected, tested, and accepted as witnessed by the SPFD before occupancy.
- PS-5 The project applicant and/or its contractor must dedicate office space totaling 2,142 square feet (at no cost to the City) within the proposed Civic District, the location of which is to be determined in consultation with the SPPD. The facility must include office and facilities necessary to serve sworn officers and civilian staff. The location must not be within a flood zone or seismic zone of concern, protected from wildfire, and have good road access unhindered from potential collapse threats such as bridges or power lines.

10.14 MITIGATION MEASURES FOR RECREATION

- R-1 As a project design feature, the applicant and/or its contractor must provide at least 26.4 acres of parkland within the Specific Plan project site, as identified within Section 3.0 (Project Description) (shown on Figure 3-5) and Table 4.14-3 of this EIR (see Section 4.14 (Recreation) of this EIR).
- R-2 As a project design feature, the applicant and/or its contractor must preserve at least 134.4 acres of Open Space (79.4 acres) and Agricultural Preserve (55 acres), as identified within Section 3.0 (Project Description) (shown on Figure 3-4).
- R-3 The applicant and/or its contractor must pay the impact fees to the City of Santa Paula. If agreed to by the City, the applicant's provision of the amenities described in mitigation measures R-1 and R-2 above can be in lieu of all or a portion of the development fees payable to the City. To ensure that the City of Santa Paula has adequate funds to finance park and recreation improvements, the applicant and/or its contractor must either pay the City's related impact fees or provide certain additional project amenities in lieu of all or a portion of such development fees, as negotiated with and agreed to by the City. If agreed to by the City, the amenities in mitigation measures R-1 and R-2 may satisfy the in-lieu-of-fees condition of this mitigation measure (i.e., R-3). The applicant will not be required to provide park or open space amenities and pay related impact fees, unless otherwise agreed to with the City.

10.15 MITIGATION MEASURES FOR UTILITIES AND SERVICES

- U-1 Prior to construction, the applicant shall be responsible for the preparation of an assessment of landfill capacities at Toland Road Sanitary Landfill and Chiquita Canyon Sanitary Landfill. The applicant shall coordinate with the both landfill operators to determine whether or not these landfills have adequate capacity to serve the proposed project.
- U-2 The applicant shall implement waste reduction and recycling programs to divert construction and operations solid waste from the area landfill. A construction recycling plan shall be submitted and approved by the Director of Public Works. A final report as to the amount recycled shall be provided to the Director of Public Works.
- U-3 Solid waste generated during construction and operation of the proposed project shall comply with all federal, state and local statutes and regulations to reduce and recycle solid waste.
- U-4 Prior to construction, the applicant shall coordinate with SCE to determine the electricity consumption related to the proposed project. The applicant shall provide detailed site plans which will assist SCE determine the load calculations and the location and amount of new equipment (electrical lines, conduits, transmission mains) needed. SCE will then make the determination of whether the proposed project's electricity consumption is within the parameters of SCE's projected load growth
- U-5 Prior to construction, the applicant shall coordinate with the cable and telephone/internet providers to determine the amount of new equipment and/or infrastructure and facilities needed to provide adequate service to customers within the project site.

10.16 MITIGATION MEASURES FOR POPULATION AND HOUSING

No mitigations measures are required.