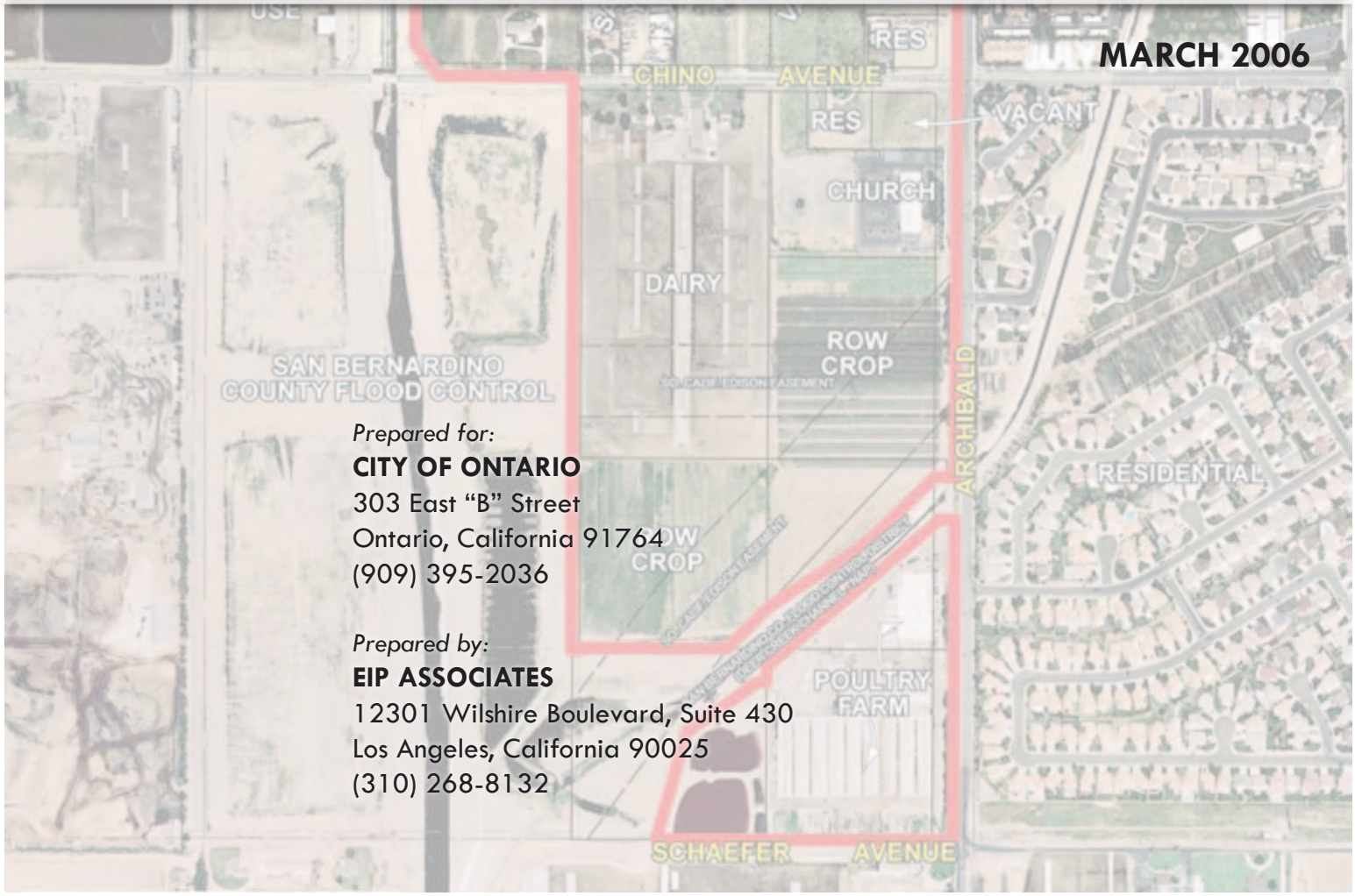
Volume I

COUNTRYSIDE SPECIFIC PLAN

Final Environmental Impact Report

FILE NO. PSP04-001 **STATE CLEARINGHOUSE NO. 2004071001**

MARCH 2006



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CONTENTS

Volume I—Final Environmental Impact Report

Volume II—Final Environmental Impact Report Appendices

Figures

Tables

SUMMARY OF POTENTIAL IMPACTS AND MITIGATION MEASURES

CLASSIFICATION OF ENVIRONMENTAL IMPACTS

Potential environmental impacts discussed in this EIR have been classified in the following categories:

- *Less Than Significant*—Results in no substantial adverse change to existing environmental conditions
- *Potentially Significant*—Constitutes a substantial adverse change to existing environmental conditions that can be mitigated to less-than-significant levels by implementation of feasible mitigation measures or by the selection of an environmentally superior project alternative
- *Significant and Unavoidable*—Constitutes a substantial adverse change to existing environmental conditions that cannot be fully mitigated by implementation of all feasible mitigation measures, or by the selection of an environmentally superior project alternative

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Pursuant to Section 15123(b)(1) of the state CEQA Guidelines, Table ES-1 contains a summary of less-than-significant, potentially significant, and significant and unavoidable environmental impacts associated with the proposed project, mitigation measures that would reduce or avoid those effects, and the level of significance of the impacts following the implementation of mitigation measures.

Refer to Chapter 4 (Alternatives to the Proposed Project) of this EIR for a description of suggested project alternatives and a comparison of the scale of the potential impacts of the alternatives in relation to the proposed project.

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
AGRICULTURAL RESOURCES		
Impact AG-1 The proposed project would result in the conversion of Prime Farmland to nonagricultural uses. This is considered a *significant and unavoidable* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No feasible mitigation measures apply.	Significant and Unavoidable
Impact AG-2 Implementation of the proposed project would result in conflicts with the *Williamson Act*. This is considered a *significant and unavoidable* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Significant and Unavoidable
Impact AG-3 The proposed project would involve other changes in the existing environment that would result in the conversion of Farmland to nonagricultural use. This is considered a *significant and unavoidable* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM AG-1-SP *Deed Disclosure*—In order to reduce conflicting issues between sensitive receptors and agricultural uses, all residential units in the Countryside Specific Plan area shall be provided with a deed disclosure or similar notice approved by the City Attorney regarding the proximity and nature of neighboring agricultural uses. This disclosure shall be applied at the tentative map stage to the affected properties, or otherwise prior to finalizing the sale or rental agreement of any property. The written disclosure shall be supplied to the property purchaser or renter by the vendor or vendor's agent. The content and text of the disclosure shall be approved by the City Attorney, and shall include language to inform new residents that existing agricultural uses may create nuisances such as flies, odors, dust, night light, and chemical spraying.	Significant and Unavoidable

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
AIR QUALITY		
Impact AQ-1 Peak construction activities associated with the proposed project would generate emissions that exceed SCAQMD thresholds. This is considered a *significant and unavoidable* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM AQ-1 Per SCAQMD Rule 403, the City shall enforce the following (regardless of whether the project is General Plan level or project specific): ■ During all construction activities, construction contractors shall use low emission mobile construction equipment where feasible to reduce the release of undesirable emissions. ■ During all construction activities, construction contractors shall encourage rideshare and transit programs for project construction personnel to reduce automobile emissions. ■ During all grading and site disturbance activities, construction contractors shall water active grading sites at least twice a day, and clean construction equipment in the morning and/or evening to reduce particulate emissions and fugitive dust. ■ During all construction activities, construction contractors shall, as necessary, wash truck tires leaving the site to reduce the amount of particulate matter transferred to paved streets as required by SCAQMD Rule 403. ■ During all construction activities, construction contractors shall sweep on and off site streets if silt is carried over to adjacent public thoroughfares, as determined by the City Engineer to reduce the amount of particulate matter on public streets. ■ During all construction activities, construction contractors shall limit traffic speeds on all unpaved road surfaces to 15 miles per hour or less to reduce fugitive dust. ■ During grading and all site disturbance activities, at the discretion of the City's Planning Director, construction contractors shall suspend all grading operations during first and second stage smog alerts to reduce fugitive dust. ■ During grading and all site disturbance activities, at the discretion of the City's Planning Director, construction contractors shall suspend all trading operations when wind speeds (including instantaneous gusts) exceed 25 miles per hour to reduce fugitive dust. ■ During all construction activities, the construction contractors shall maintain construction equipment engines by keeping them tuned. ■ During all construction activities, the construction contractors shall use low sulfur fuel for stationary equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions. ■ During all construction activities, the construction contractors shall use existing on-site electrical power sources to the maximum extent practicable. Where such power is not available, the Contractor shall use clean fuel generators during the early stages of construction to minimize or eliminate the use of portable generators and reduce the release of undesirable emissions. ■ During all construction activities, the construction contractors shall use low emission, on-site stationary equipment (e.g., clean fuels) to the maximum extent practicable to reduce emissions, as determined by the City Engineer. ■ During all construction activities, the construction contractors shall ensure that all trucks hauling dirt, sand, soil or other loose materials are covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of the California Vehicle code Section 23114 to reduce spilling of material on area roads. Project-Specific Mitigation Measures: MM AQ-1-SP Prior to all phases of project construction, the City shall ensure that construction contracts include the following specifications: ■ If feasible, arrange for intense earth-moving activities to occur outside the ozone season of May through October. ■ When feasible, schedule equipment usage to avoid simultaneous use of equipment.	Significant and Unavoidable

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
	■ Advise construction contractors not to idle construction equipment on site for more than 10 minutes. ■ Use low NOx diesel fuel to the extent that it is readily available and cost effective in San Bernardino County ■ Replace fossil-fueled equipment with electrically driven equivalents provided that they are not run via a portable generator set, to the extent available.	
Impact AQ-2 Daily operation of the project would generate emissions that exceed SCAQMD thresholds. This is considered a *significant and unavoidable* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM AQ-2-SP Prior to project construction, the project applicant and City shall consult with the SCAQMD to ensure all applicable and feasible mitigation measures are implemented to reduce emissions. These measures may include, but would not be limited to, the following or equally effective measures: ■ Outdoor electrical outlets shall be installed outside each residential building and each residential patio area to allow for the use of electric barbeques and landscaping equipment ■ Use solar or low emission water heaters ■ Increase wall and attic insulation in compliance with Title 24 requirements ■ Only natural gas inert fireplaces shall be installed in homes	Significant and Unavoidable
Impact AQ-3 Project implementation would not impair implementation of the Air Quality Management Plan. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact AQ-4 Project implementation would result in increased local traffic volumes, but would not expose sensitive receptors to substantial localized CO concentrations. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact AQ-5 Project implementation would not release significant amounts of toxic air contaminants. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM HM-1(f)-SP applies	Less Than Significant
BIOLOGICAL RESOURCES		
Impact BIO-1 Implementation of the project could, through habitat modifications, result in a potential reduction in nesting opportunities for resident and migratory avian Species of Special Concern, including raptors or the loss of an active avian nest. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-1(a)-SP To ensure that avian Species of Concern, protected migratory species (e.g., Migratory Bird Treat Act), or raptors species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures: ■ When feasible, all tree removal shall occur between August 30 and February 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the California Department of Fish and Game (CDFG); or if it is not feasible to remove trees outside this window then, prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15 and August 30, all trees and potential burrowing owl habitat within 250 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30 days prior to disturbance. If active raptor nests or burrows are found, and the site is within 250 feet of potential construction activity, a fence shall be erected around the tree or burrow(s) at a distance of up to 250 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City in consultation with CDFG. ■ No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones), unless directly related to the management or protection of the legally protected species. ■ In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s). ■ If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist. MM BIO-1(b)-SP The large trees identified as windrows that occur along Archibald Avenue in the vicinity of the current poultry operations shall be retained to the extent feasible. If removal is required, these trees shall be replaced within the Specific Plan Area at a 2:1 ratio by native trees that would be appropriate to the project area.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact BIO-2 Project implementation would remove state-mandated dairy manure water retention basins that serve as migratory waterfowl habitat. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-2(a)-SP Prior to any groundbreaking within the Specific Plan Area, mitigation fees shall be paid to a land conservancy selected to oversee habitat land acquisition in accordance with the settlement agreement between the City , Sierra Club and Endangered Habitat League. MM BIO-2(b)-SP The city shall work with the established land conservancy to design open water within the offsite mitigation lands. It shall be configured into numerous individual bodies of various size, depth, and configuration to maximize shoreline area and serve as habitat for the existing range of waterfowl that winter in the Specific Plan Area. Design considerations are available from the California Department of Fish and Game and private waterfowl conservation groups (e.g. Ducks Unlimited). MM BIO-2(c)-SP The city shall work with the established land conservancy to aid in designing portions of some of the offsite mitigation ponds to be vegetated with emergent wetland plant species, such as cattails (Typha *spp.*). Aquatic plants (e.g., algae, fully submerged species) shall be introduced into some ponds as forage for ducks. Typical native invertebrates (e.g. dragonflies, crustaceans) and small native fishes shall be introduced as food for predatory birds. Appropriate forage species for such introductions shall be determined through consultation with the California Department of Fish and Game. MM BIO-2(d)-SP The city shall work with the established land conservancy to aid in designing upland areas between offsite ponds to be left open as roosting areas for waterfowl and foraging habitat for raptors. The periphery of the mitigation areas shall be planted with tall trees (preferably native sycamores or cottonwoods) to provide roosts for raptors. MM BIO-2(e)-SP The City, with the input from the California Department of Fish and Game, shall develop a Mitigation Lands Management Plan for the offsite mitigation lands with the following components: ■ The offsite mitigation lands shall be operated by an appropriate conservation agency, whether public or private, and shall be overseen by an on-site manager with biological experience. ■ Prohibition of all consumptive uses, including hunting, off-road vehicles, dog training, dumping, etc. ■ The primary goal of the offsite mitigation areas shall be for conservation, and shall only be used for educational or scientific purposes, including school visits, Audubon Society Christmas Bird counts, scientific research, and promoting public awareness. ■ Control of trespass shall be on a case-by-case basis, with permission granted upon advanced notice and supervised by appropriate personnel. ■ The offsite mitigation areas shall be managed for waterfowl and raptor populations; nonnative predators shall be controlled as needed. MM BIO-2(f)-SP The City shall enter into consultation with appropriate California Department of Fish and Game personnel before and during the establishment of the offsite mitigation areas, whether land purchased by fee or under conservation easement.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact BIO-3 Implementation of the project would, through habitat modifications, result in the loss of raptor foraging habitat. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: The purchase of off-site mitigation areas and/or conservation easements within the El Prado Basin and retention of 160 acres of surface water within the El Prado Basin would result in an increase of waterfowl and migratory bird habitat within the project vicinity. Project-Specific Mitigation Measures: MM BIO-2(a-f)-SP apply.	Less Than Significant
Impact BIO-4 Construction and operation of the proposed project could have direct and indirect effects upon the hydrology and aquatic habitat quality of federally protected wetlands and "Other Waters" of the United States as defined by Section 404 of the *Clean Water Act*. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Securing a Streambed Alteration Agreement (SAA) from the California Department of Fish and Game (CDFG), and 404 and 401 permits under the Clean Water Act (CWA) would protect the hydrology and biology of the Deer Creek Channel, Cucamonga Creek Channel, and Cucamonga Basin, and would ensure that impacts to these areas would be less-than significant. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact BIO-5 Grading activities during project construction and the establishment of project landscaping could result in the introduction of undesirable invasive nonnative plant species to the project site and adjacent areas. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-3-SP Exotic invasive species shall be prohibited in all open space areas and within 0.5 mile of the radius of all open areas and adjacent natural areas such as the Cucamonga Basin. Landscaping in open space areas within the Specific Plan Area shall include drought tolerant native species. Landscaping use of exotic invasive plants listed in the most recent update of the Exotic Pest Plant of Greatest Ecological Concern in California (California Invasive Plant Council) shall be prohibited within the Specific Plan Area and the applicant shall provide informational brochures to future residents on native and noninvasive nonnative landscaping requirements.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact BIO-6 Implementation of the project could, through habitat modifications, result in the loss of western burrowing owl, a state and federal Species of Concern. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-4-SP The project applicant, in consultation with the California Department of Fish and Game (CDFG), shall conduct a pre-construction survey within the phases of the project site that are scheduled for construction activities. The survey shall be conducted by a qualified biologist to determine if western burrowing owls are occupying the project site. The survey shall be conducted no more than three weeks prior to grading of the project site. If the above survey does not identify burrowing owls on the project site, then no further mitigation would be required. However, should western burrowing owls be found on the project site, the following measures shall be required: The applicant shall avoid all potential western burrowing owl burrows that may be disturbed by project construction during the breeding season between February 15 and August 30 (the period when nest burrows are typically occupied by adults with eggs or young). Avoidance shall include the establishment of a 300-foot diameter non-disturbance buffer zone around any occupied burrows. The buffer zone shall be delineated by highly visible temporary construction fencing. Disturbance of any occupied burrows shall only occur outside of the breeding season (September 1 through February 14). Based on approval by the CDFG, preconstruction and non-breeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project-related disturbance (such as grading). Burrowing owls may be passively excluded from burrows in the construction area by placing one-way doors in the burrows according to current CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls, regardless of whether they exhibit signs of occupation, must be cleared. Burrows that have been cleared through the use of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow. The one-way doors shall not be used more than two weeks before construction to ensure that owls do not re-colonize the area of construction.	Less Than Significant
Impact BIO-7 Implementation of the project could result in a potential take of Delhi Sands Flower-loving Fly. This is considered *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-5-SP Prior to the issuance of grading permits within the project area, the project applicant and City, in consultation with the United States Fish and Wildlife Service (USFWS), shall conduct a survey in accordance with the conditions within the Interim General Survey Guidelines for the Delhi Sands Flower-loving Fly (DSFF). The survey shall be conducted during the appropriate season by a qualified biologist. If evidence of the presence of DSFF is found during the survey, the Specific Plan and/or development plan shall provide a plan and/or policies to protect this species. The plan and/or policies shall provide for avoidance of habitat that are found to support identified DSFF wherever feasible. If avoidance is not feasible, then the USFWS shall be consulted to approve appropriate relocation plans. Any subsequent avoidance, relocation, or other mitigation strategies required to reduce impacts to a less-than-significant level shall be implemented prior to issuance of a grading permit.	Less Than Significant

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Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact BIO-8 Implementation of the project would not result in impacts to special-status or sensitive plant species. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact BIO-9 Project implementation would impact areas of primarily denuded/developed ground, or ruderal vegetation that has limited nonavian wildlife movement function. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact BIO-10 Project impacts to nonsensitive wildlife species would be *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact BIO-11 Development of the proposed project would be in substantial conformance with local applicable policies protecting biological resources. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact BIO 12 Project impacts to the San Diego black-tailed jackrabbit, a California Species of Concern, would be less than significant.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact BIO-13 Cumulative development of the proposed project would have a *potentially significant* cumulatively considerable impact on special-status species within the Ontario SOI area and the Region.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-1(a-b)-SP, MM BIO-2(a-f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP apply.	Less Than Significant
Impact BIO-14 Cumulative development, in conjunction with the proposed project, could reduce raptor foraging habitat within the Ontario SOI area and the Region. This is considered a *significant and unavoidable* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No feasible mitigation measures apply.	Significant and Unavoidable
Impact BIO-15 Cumulative development of the proposed project could reduce open space and significantly interfere with migratory wildlife movement within the Ontario SOI area and the Region. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: The proposed project's contribution to cumulative impacts associated with loss of open space and wildlife movement would be *less than significant* and not be cumulatively considerable due to the relatively small amount of quality habitat that would be lost versus what would be retained and mitigated for via development fees (i.e., the mitigation and land acquisition terms of the 2001 settlement agreement), the lack of any considerable overland movement opportunities throughout the proposed project area due to location of the site within the Region (i.e. it is adjacent to existing development) and surrounding development. Implementation of applicable SOI GPA Policies such as Policies 18.1.2 through 18.1.11 that are designed to reduce impacts to wildlife habitat and retain contiguous areas, and the payment of mitigation fees that would be used to purchase conservation easements of land within the Region, would reduce cumulative habitat loss in the SOI GPA area. Project-Specific Mitigation Measures: MM BIO-1(a-b)-SP, MM BIO-2(a-f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP apply.	Less Than Significant
CULTURAL RESOURCES		
Impact CUL-1 The proposed project would result in the destruction of historical resources. This is considered a *less than significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

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Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact CUL-2 Earth-disturbing activities associated with implementation of the proposed project could potentially disturb or damage undocumented archaeological resources including human burials. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM C-1 In order to fulfill the requirements of CEQA and to preserve the cultural and historical resources of the area, the following mitigation measures are recommended: ■ For each proposed project that might impact cultural resources, any cultural resource in the project area should be identified in advance. A standard archaeological records check should be conducted through the San Bernardino County Museum Archaeological information Center in Redlands. For properties bordering the Riverside County boundary, additional research should be conducted through the University of California, Riverside, Archaeological Research Unit. ■ For each proposed project not previously surveyed within the past ten years, an intensive archaeological field survey should be completed under the supervision of a Society of Professional Archaeologists (SOPA) certified archaeologist. A technical report following format and content guidelines proposed by the Office of Historic Preservation must be completed. ■ For each proposed project with identified cultural resources, a formal evaluation of the resource(s) in accordance with the CEQA guidelines for significance (importance) must be completed. ■ For each project resulting in an adverse impact on a known significant resource, an appropriate planning approach must reduce the impact to a level of insignificance. ■ For each project where grading into previously undisturbed soils is planned, the retention of a qualified archaeologist should be required to monitor the grading in order to identify any cultural resources which may be exposed, complete a preliminary evaluation of the resource, and recommend appropriate resource management for the treatment of the resource. ■ For each future project, the City of Ontario should ensure the implementation of these recommendations through conditions of approval for any project. Project-Specific Mitigation Measures: MM CUL-2(a)-SP Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological resources. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of archaeological resources is prohibited. MM CUL-2(b)-SP Prior to site preparation and grading activities, the applicant shall retain a qualified (SOPA-certified) archaeologist to monitor earth-disturbing activities. The frequency of monitoring shall occur at the discretion of the archaeologist, based upon site condition or other relevant factors. The archaeologist shall also be available on-call to assess any potential resources that may be exposed or discovered when the archaeologist is not present. MM CUL-2(c)-SP For any potential archaeological resource uncovered during construction, a qualified archaeologist shall first determine whether it is a "unique archaeological resource" under Public Resources Code Section 21083.2(g). If the archaeological resource is determined to be a "unique archaeological resource," the archaeologist shall formulate a mitigation plan in consultation with the campus that satisfies the requirements of Section 21083.2 of CEQA. If the archaeologist determines that the archaeological resource is not a unique archaeological resource, the archaeologist may record the site and	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
	submit the recordation form to the California Historic Resources Information System South Central Coastal Information Center. The archaeologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the California Historic Resources Information System San Bernardino Archaeological Information Center.	
Impact CUL-3 Earth-disturbing activities associated with implementation of the proposed project could potentially disturb or damage undocumented paleontological resources. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM C-1 applies. Project-Specific Mitigation Measures: MM CUL-3(a)-SP Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering paleontological resources. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified paleontologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of paleontological resources is prohibited. MM CUL-3(b)-SP Prior to site preparation and grading activities, the applicant shall retain a qualified (member of the American Society of Vertebrate Paleontologists) paleontologist to monitor earth-disturbing activities. The frequency of monitoring shall occur at the discretion of the paleontologist, based upon site conditions, soil or rock types, or other relevant factors. The paleontologist shall also be available on-call to assess any potential resources that may be exposed or discovered when the paleontologist is not present. MM CUL-3(c)-SP For any potential paleontological resource uncovered during construction, a qualified paleontologist shall first determine whether it is a "unique resource". If the paleontological resource is determined to be a "unique resource," the paleontologist shall formulate a mitigation plan in consultation with the City that satisfies the requirements off the *Conformable Mitigation Guidelines* of the Society of Vertebrate Paleontology (News Bulletin Number 163, January 1995). If the paleontologist determines that the paleontological resource is not a unique resource, the paleontologist may record the site and submit the recordation form to the Natural History Museum of San Bernardino County. The paleontologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the City of Ontario and to the Natural History Museum of San Bernardino County.	Less Than Significant
Impact CUL-4 Earth-disturbing activities could result in the disturbance of human remains, including those interred outside of formal cemeteries. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM CUL-4-SP In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately, the area of the find shall be protected, and the University immediately shall notify the San Bernardino County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
GEOLOGY AND SOILS		
Impact GEO-1 Implementation of the proposed project could expose people or structures to seismic hazards. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM G-1 The City shall develop (pull together from existing materials) a Grading and Geotechnical Investigation Standards manual which will be available to developers and consultants in order to ensure the minimum proper soils engineering and engineering geologic study for all sites where grading will occur. Together these standards and policies should effectively mandate proper studies before development approval, in which grading, foundations, and slope stability would be analyzed and any potential hazards identified. Mitigation of the potential hazards would occur though the proper application of recommendations arising from these studies. Topics shall include but not necessarily be limited to soils engineering and foundations, slope stability, erosion, liquefaction/dynamic settlement, shallow groundwater, and fault location/activity. This manual shall be available at the permit stage prior to initial feasibility and design studies in order to enhance (streamline) the development review and environmental review processes. Project-Specific Mitigation Measures: MM GEO-1-SP A final design geotechnical report shall be prepared for the proposed development to provide structure-specific geotechnical recommendations. The final report shall address all issues initially covered in the Preliminary Geotechnical Report. Final recommendations on earthwork, spread footings with slabs-on-grade, reinforced mat foundations, post-tensioned mats, friction piles, cathedral retaining (basement) walls, and measures to address soil corrosion shall be identified. The final report shall specify foundation recommendations to ensure issues associated with underlying soils are addressed. Construction of the project shall comply with all recommendations in the final geotechnical report.	Less Than Significant
Impact GEO-2 The proposed project would alter site topography, which could affect the rate or extent of erosion. The impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM G-1 applies. Project-Specific Mitigation Measures: MM GEO-2(a)-SP Erosion control practices shall be employed and maintained on all vacant areas of the project site that have been graded. MM GEO-2(b)-SP The project applicant shall submit a Notice of Intent (NOI) to the State Water Resources Conservation Board (SWRCB) for coverage under the Statewide General Construction Activity Stormwater Permit and shall comply with all applicable requirements, including the preparation of a Stormwater Pollution Prevention Plan. A copy of the NOI shall be submitted to the City prior to issuance of a grading permit. MM GEO-2(b)-SP An erosion control plan shall be reviewed and approved by the City of Ontario prior to the issuance of grading permits.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact GEO-3 Project implementation would locate structures on soils that are considered potentially expansive, unstable, prone to settlement, and corrosive. This impact is considered *potentially significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM GEO-1-SP applies. MM GEO-3(a)-SP Additional sampling and analysis shall be conducted during the final stages of grading to provide a complete assessment of soil corrosivity. If necessary, appropriate mitigation measures should be provided by a qualified corrosion engineer and incorporated into final design plans. MM GEO-3(b)-SP Additional soil sampling and testing shall be conducted following rough grading of the site. If necessary, to reduce the potential for damage due to soil expansion, slabs-on-grade shall be provided with sufficient reinforcement, and the footings shall extend below the zone of seasonal moisture fluctuation. A registered civil engineer or certified engineering geologist shall determine if post-tensioned slabs-on-grade may be used as another viable alternative to effectively address effects associated with expansive soils.	Less Than Significant
HAZARDS AND HAZARDOUS MATERIALS		
Impact HM-1 Project construction could expose construction workers to health and safety risks through earthmoving and demolition activities in areas with potentially contaminated structures, soils, or groundwater. This impact is considered *potentially significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM HM-1 Prior to consideration of any future development proposal within the Sphere of Influence, project developers will be required by the City to submit a completed Phase I Environmental Site Assessment, which, at a minimum, meets with the requirements of the most current standards of investigation established by the American Society or Testing and Materials (ASTM Standard E 1527). MM HM-2 Prior to issuance of permits by the City of Ontario for major renovation of demolition of any pre-1979 structure within the Sphere of Influence, the project developer will be required to submit documentation to the City Building Department that asbestos and lead-based paint issues are not applicable to their property, or that appropriate actions will be taken to correct any asbestos or lead-based paint issues prior to development of the site. Project-Specific Mitigation Measures: MM HM-1(a)-SP Existing groundwater wells shall be closed in accordance with current regulations. MM HM-1(b)-SP If transformers are to be removed, the removal shall be completed and disposed of in accordance with current regulations by a licensed contractor of the utility company responsible for the transformer. MM HM-1(c)-SP Stained soil areas shall be excavated to five feet below ground and disposed of in accordance with current regulations. Confirmation sampling shall be conducted after removal to verify that the impacted soil has been adequately removed from the site. MM HM-1(d)-SP If evidence of soil contamination is encountered in previously unidentified locations in the project area, work shall cease until the area can be tested, and, if necessary, remediated. Remediation activities could include removal of contaminated soil and/or on-site treatment. As part of this process, the City shall ensure that any necessary investigation and/or remediation activities conducted in the project area are coordinated with the Ontario Fire Department, San Bernardino County Division of Environmental Health, and, if needed, other appropriate state and/or local agencies and completed prior to commencement of construction.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
	MM HM-1(e)-SP Prior to issuance of a building permit, the project sponsor shall prepare a Contingency Plan for the site. The Contingency Plan shall delineate the procedures to be undertaken during grading, excavation, and construction to recognize areas of previously unidentified contamination. Such procedures shall, at a minimum, include air monitoring for organic compounds and visual observations. The Contingency Plan shall delineate the management procedures for such soils (e.g., separation of the material from other excavated soils, methods of delineating the extent of the unknown contamination, sampling protocol, and disposal methods). The Contingency Plan can be part of the Health and Safety Plan to be prepared for the construction workers. The Contingency Plan shall be submitted to the City for review and approval. Any subsequent investigation and remediation activities that would involve potential disturbance or release of hazardous materials shall comply with applicable federal, state, and local hazardous materials laws and regulations. At any time during construction or occupancy, the project proponent and contractors will be responsible for knowledge of and complying with applicable hazardous materials management regulations. MM HM-1(f)-SP Prior to issuance of a grading or demolition permit for development of Neighborhood 3 of the Countryside Specific Plan area, a Phase I Environmental Site Assessment (ESA) report shall be prepared that documents any health risks at that site associated with the current salvage yard uses and, if contaminants are identified as present, includes a remedial action work plan that shall be implemented to prevent the release of any airborne or groundborne contaminants.	
Impact HM-2 Development of the proposed project could expose construction workers, occupants of new residential structures and recreational users of proposed park areas to methane hazards. This impact is considered *potentially significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM HM-2(a)-SP All stockpiled concentrations of animal manures shall be removed from the site and properly disposed or used as fertilizer or compost within existing local, state, and federal regulations for manure use. MM HM-2(b)-SP A report shall be prepared for all former CAFOs addressing potential methane generation. The report shall include areas of identified methane risks and describe a risk abatement plan that details how methane risks will be reduced to a level below 2 percent of soil content. The City of Ontario City Engineer shall review and approve the report prior to map recordation. MM HM-2(c)-SP A post-grading test program shall be implemented for any site designated as a potential area of high methane concentration. Testing shall demonstrate that sites contain no more than 2 percent methane prior to issuance of building permits.	Less Than Significant
Impact HM-3 Project implementation within a quarter mile of Ranch View School could result in possible safety hazards associated with hazardous emissions or hazardous material handling in proximity to a school. This impact is considered *potentially significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM HM-1(a-f)-SP and MM HM-2(a-c)-SP apply.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact HM-4 Project implementation would not result in construction on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would not create a significant hazard to the public or environment. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM HM-1(a-f)-SP and MM HM-2(a-c)-SP apply.	Less Than Significant
Impact HM-5 Project implementation could expose people or structures to a risk of loss, injury, or death involving wildland fires. This impact is considered *potentially significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM HM-5(a)-SP Landscaping around development areas adjacent to open space shall minimize dense vegetation immediately adjacent to structural development. Specifically, 12 to 18 inches of bare ground shall be kept between structures and grasses of other vegetation. MM HM-5(b)-SP In order to maintain a fire break between the undeveloped areas and structures, fuel management setbacks shall be 10 feet from each side of a road and 30 feet from structures. MM HM-5(c)-SP Grass and low-to-ground vegetation (e.g., weeds) in proximity to structures shall be kept no more than 6 inches high. MM HM-5(d)-SP Design of residential structures shall incorporate appropriate fire suppression systems into building design, which may include fire sprinkler systems, tempered or multiple pane windows, and fire-retardant materials for roofs, exterior walls, and siding.	Less Than Significant
Impact HM-6 Project implementation could impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact HM-7 Project implementation could result in the exposure of residents to potential EMFs. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
HYDROLOGY AND WATER QUALITY		
Impact HYD-1 Project implementation could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM HYD-1-SP All residences within the Specific Plan Area shall be provided with water conservation devices such as low flow showers and toilets. MM HYD-2-SP All public landscaped areas shall be required to use reclaimed water for irrigation purposes once the planned regional reclaimed water system becomes functional at the project site.	Less Than Significant
Impact HYD-2 Project implementation could substantially degrade water quality with conversion of agricultural lands to urban uses. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM WQ-5 Prior to moving construction equipment on a site within the Sphere of Influence, project developers shall provide evidence to the City Engineer that a National Pollutant Discharge Elimination System (NPDES) permit has been obtained from the State Water Resources Control Board (SWRCB). Once obtained, the NPDES permit shall be retained on the construction site throughout the construction period, and a copy shall be filed with the City Engineer. MM WQ-6 During construction of individual project, the City Engineer shall ensure compliance with all terms and conditions outlined in the NPDES permit, including the implementation of Best Management Practices (BMPs) consistent with the California Stormwater Quality Association's Construction Handbook. MM WQ-7 Prior to issuance of grading permits, project developers shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for individual proposed project. These plans shall be submitted to the City Engineer for review and comment prior to implementing any SWPPP provisions or starting any construction activity. A copy of the SWPPP shall be held by the construction contractor(s) on the construction site throughout development of each project. The City Engineer will monitor and enforce the provisions of the SWPPP. MM WQ-8 During operation of facilities within the Sphere of Influence, the individual project owners and operators shall ensure that all pest control, herbicide, insecticide and other similar substances used as part of maintenance of project features are handles, stored, applied, and disposed of by those conducting facility maintenance in a manner consistent with all applicable federal, state and local regulations. The City Engineer shall monitor and enforce this provision. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact HYD-3 Project implementation could violate water quality standards, waste discharge requirements, result in substantial sources of polluted runoff, or otherwise substantially degrade water quality. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM WQ-5, MM WQ-6, MM WQ-7, and MM WQ-8 apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact HYD-4 Project implementation would alter the drainage patterns of the site and in a manner that could create substantial flooding, erosion, or siltation on or off site. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM WQ-1 Prior to the issuance of grading permits, project developers shall submit a final drainage plan for each proposed project for review and approval by the City Engineer. MM WQ-2 Prior to the issuance of grading permits, project developers shall ensure that coordination between the City of Ontario and the San Bernardino County Flood Control District has been undertaken to demonstrate the ability of the project to meet County flood control requirements. MM WQ-5, MM WQ-6, and MM WQ-7 apply. Project-Specific Mitigation Measures: MM HYD-3-SP All new storm drain infrastructure on site shall be consistent with the City's Master Plan of Drainage, or otherwise formal amendments or deviations shall be made via coordination and approval from the City.	Less Than Significant
Impact HYD-5 Project implementation would alter the drainage patterns of the site and in a manner that could substantially increase the rate or amount of surface runoff on or off site. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM WQ-7 applies Project-Specific Mitigation Measures: MM HYD-3-SP applies.	Less Than Significant
Impact HYD-6 Project implementation would create or contribute runoff water that could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM WQ-3 Prior to the issuance of building permits, project developers shall submit to the City Engineer proof of payment of the City's drainage fees, as applicable. Project-Specific Mitigation Measures: MM HYD-3-SP applies.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
NOISE		
Impact NOI-1 Construction activities associated with the proposed Countryside Specific Plan could expose nearby sensitive uses to excessive groundborne vibration levels. This is considered a *significant and unavoidable* temporary impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM N-6 Construction on the Sphere of Influence site shall be limited to the hours of 7:00 A.M. to 7:00 P.M. Monday through Saturday, and shall be prohibited on Sundays and federal holidays. MM N-8 Stockpiling and/or vehicle staging areas shall be located as far as practical from existing residential units on and off the proposed project site. Project-Specific Mitigation Measures: No feasible mitigation measures apply.	Significant and Unavoidable
Impact NOI-2 Construction activities associated with the proposed Countryside Specific Plan could generate substantial temporary or periodic noise levels. This is considered a *significant and unavoidable* temporary impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM N-6 applies. MM N-7 All project construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. MM N-8 applies. MM N-9 Whenever feasible, the noisiest construction operations should be scheduled to occur together to avoid continuing periods of the greatest annoyance. Project-Specific Mitigation Measures: MM NOI-1-SP The project contractor(s) shall implement, but not be limited to, the following best management practices: ■ Outdoor construction work on the project shall be limited to the hours of 7:00 A.M. to 7:00 P.M. on weekdays and Saturdays. No construction activities shall occur on Sundays or federal holidays. ■ All construction equipment with a high noise generating potential, including all equipment powered by internal combustion engines, shall be muffled or controlled. ■ All stationary noise generating equipment, such as compressors, shall be located as far as possible from existing houses ■ Machinery, including motors, shall be turned off when not in use. ■ Mobile equipment shall not be allowed to run idle near existing residences. ■ Neighbors within 200 feet of major construction areas shall be notified of the construction schedule in writing, prior to construction; the project sponsor shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise; the coordinator (who may be an employee of the developer or general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented; a telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site. ■ Temporary noise barriers shall be installed where feasible and appropriate between the project construction areas and existing and future residences. Barriers shall be at least 10 feet in height.	Significant and Unavoidable

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact NOI-3 Implementation of the proposed project development could expose existing and proposed residential uses to noise in excess of City standards. This is considered a *potentially significant* impact.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM N-1 Prior to the issuance of building permits for the planning area in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Engineer by the project developer. The report shall describe the cumulative effect of road noise on surrounding land uses and recommend mitigation measures, if necessary, to attenuate that noise. If necessary, the City shall establish a noise attenuation fee program that requires developers in the Sphere of Influence area to make a fair share contribution to noise mitigation along some of roads surrounding the Sphere of Influence. The City of Ontario shall evaluate the need for such a fee program and establish participation guidelines prior to the issuance of grading permits. MM N-2 Prior to the issuance of building permits for the planning areas in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Building Official and Planning Director by the project developer. The Report shall describe in detail the interior and exterior noise levels for residential uses on the site and the specific design and mitigation features to ensure compliance with the City's noise criteria of 65 dBA CNEL for outdoor living areas and 45 dBA CNEL in habitable rooms. MM N-3 Prior to the issuance of building permits for planning areas in the Sphere of Influence area, the required location of noise barriers on the project site shall be detailed in the Acoustical Analysis Report. The Report shall specify the height, location, and types of barriers capable of achieving the desired mitigation affect. MM N-4 Prior to the issuance of building permits for the planning areas in the Sphere of Influence area, the Acoustical Analysis Report shall identify those residential lots that may require mechanical ventilation to achieve interior noise standards. When the operable doors and windows are open for homes facing roadways, interior 45 dBA CNEL interior noise limit for these units may be exceeded. Therefore, a "windows closed" condition may be required for these units. Any proposed mechanical ventilation must meet the requirements of the *Uniform Building Code* (UBC) standard. It should be noted that the windows facing some roadways may be openable windows, but the homeowners would have the option to close the windows and still obtain adequate ventilation through the use of a mechanical ventilation system. This mechanical ventilation system shall supply two air changes per hour to each habitable room, including 20 percent (one-fifth) fresh make-up air obtained directly from the outdoors. The fresh air inlet duct shall be of sound attenuating construction and shall consist of a minimum of 10 feet of straight or curved duct or 6 feet plus one sharp 90-degree bend. The City Building Official shall ensure that the Acoustical Analysis Report identifies any requirements for mechanical ventilation for individual onsite residential units. MM N-5 All prospective owners and occupants of residential units on the project site shall be formally notified prior to purchase, lease or rental, that certain units (without windows and doors closed), and outdoor areas could be subject to noise levels above City standards for residential uses. Such notification shall be in language approved by the City Planning Department, and shall be formalized in written Covenants, Conditions, and Restrictions (CC&Rs) recorded on the title of each residential lot in the project. In addition, each advertisement, solicitation and sales brochure or other literature regarding the project shall contain the approved notification language. <u>Project-Specific Mitigation Measures:</u> MM NOI-2-SP Once the precise location is known for future on-site residential units located adjacent to the segment of Archibald Avenue south of Chino Avenue, the applicant/developer shall conduct a focused study of future outdoor and indoor long-term traffic noise at these affected locations and submit the report for review and approval to the City. If it is determined that indoor noise levels at the future on-site residential units would exceed applicable City thresholds, the developer shall design and construct noise barriers and/or provide enhanced noise insulation at the affected on-site residential locations. The noise barriers or insulation shall be designed to ensure that indoor noise levels are below City indoor noise threshold criteria.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact NOI-4 The proposed project would generate increased local traffic volumes, which may result in a substantial permanent increase in off-site ambient noise levels. This is considered a *significant and unavoidable* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM N-1 through MM N-4 apply. Project-Specific Mitigation Measures: No feasible mitigation measures apply.	Significant and Unavoidable
Impact NOI-5 The proposed project site would be exposed to significant long-term cumulative traffic noise levels resulting from increased traffic from other specific plan areas to be developed within the New Model Colony area. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM N-1 through MM N-4 apply. Project-Specific Mitigation Measures: MM NOI-3-SP The Acoustical Analysis Report that will be submitted to the City Building Official and Planning Director by the project developer prior to the issuance of a grading permit, as required under the City of Ontario SOI GPA Policy 24.2.7 (SOI GPA EIR MM N-1 through MM N-4), shall consider the implementation of appropriate noise attenuation measures for the on-site residential uses to ensure that cumulative traffic noise levels generated from the adjacent off-site roadway would not exceed the City's indoor noise threshold criteria. The noise attenuation measures may include the construction of sound walls, dual-glazed windows, and additional wall insulation along the project site boundary adjacent to these off-site roadways. Locations where these noise attenuation measures to reduce cumulative traffic noise impacts should be considered include: ■ Roadway segment of Riverside Drive west of Archibald Avenue ■ Roadway segment of Archibald Avenue south of Riverside Drive ■ Roadway segment of Archibald Avenue south of Chino Avenue	Less Than Significant
PUBLIC SERVICES		
Impact PS-1 Development of additional residential units would result in an increase in the number of students within the school district serving the site, and increase demands upon school facilities. This impact is considered *potentially significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM PS-1-SP Consistent with current requirements, the developer shall pay statutory school fees in effect at the time of issuance of building permits to the MVD and CJUHSD for school facilities, thus ensuring that the new development would bear its fair share of the cost of housing additional students generated.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact PS-2 The proposed project would add residential uses to the area and would increase demands upon fire protection services. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact PS-3 The proposed project would add residential uses to the area and would increase demand upon police protection. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact PS-4 Development of the proposed project contributes to a shortage of parkland, which could result in the need for new or altered facilities. This impact is considered *less than significant*.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
TRANSPORTATION/TRAFFIC		
Impact TRAF-1 Implementation of the Countryside Specific Plan would result in additional vehicular trips during AM and PM peak hours, which would result in an increase in intersection levels of service beyond existing levels. This is considered a *significant and unavoidable* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM TRAF-1 Implementation of the Sphere of Influence General Plan EIR shall require the project proponent to cooperate with the provision of additional through-traffic lanes by widening to accommodate the ultimate number of lanes designated in the general plan, or modifying functional classification for arterials to accommodate additional traffic lanes. MM TRAF-2 The project proponent shall provide additional through traffic lanes by restriping using parking restrictions or other measures, where feasible. MM TRAF-3 The project proponent shall provide traffic operations and traffic systems management (TSM) improvements including signal coordination, automated traffic control, Smart Corridors, intelligent transportation systems, and other measures. Project-Specific Mitigation Measures: MM TRAF-1-SP Development impact fees shall be paid for improvements or improvements shall be constructed as required by the City Engineer, for: (a) Intersection #1 Vineyard Avenue/SR-60 WB Ramps ■ Provide NB left-turn only lane ■ Provide SB free-flow-right-turn only lane (b) Intersection #2 Vineyard Avenue/SR-60 EB Ramps	Significant and Unavoidable

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
	■ Provide NB right-turn only lane ■ Provide EB left-turn only lane ■ Restripe EB shared left-turn/through lane as shared left-turn/through/right-turn lane (c) Intersection #3 Vineyard Avenue/Walnut Avenue ■ Provide a signalized intersection with NB, SB & WB permissive phasing and EB protected phasing ■ Provide EB left-turn only lane (d) Intersection #4 Vineyard Avenue/Riverside Drive ■ Provide NB right-turn only lane ■ Provide SB right-turn only lane ■ Provide EB right-turn only lane (e) Intersection #5 Archibald Avenue/SR-60 WB Ramps ■ Provide WB left-turn only lane ■ Restripe WB shared left-turn/through lane as shared left-turn/through/right-turn lane (f) Intersection #6 Archibald Avenue/SR-60 EB Ramps ■ Provide EB left-turn only lane ■ Restripe EB shared left-turn/through lane as shared left-turn/through/right-turn lane (g) Intersection #7 Archibald Avenue/Riverside Drive ■ Provide SB through only lane ■ Provide EB right-turn only lane (h) Intersection #8 Archibald Avenue/Chino Avenue ■ Provide NB right-turn only lane ■ Provide SB through only lane ■ Provide two EB through only lanes ■ Provide EB right-turn only lane ■ Provide WB left-turn only lane ■ Provide WB shared through/right-turn only lane (i) Intersection #9 Archibald Avenue/Edison Avenue ■ Provide NB through only lane ■ Provide NB right-turn only lane ■ Provide SB through only lane	

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
	■ Provide SB right-turn only lane ■ Provide EB free-flow-right-turn only lane ■ Provide WB right-turn only lane (j) Intersection #11 Turner Avenue/Chino Avenue ■ Provide a signalized intersection with NB & SB permissive phasing and EB & WB protected phasing (k) Intersection #12 Haven Avenue/Riverside Drive ■ Provide NB free-flow-right-turn only lane	
Impact TRAF-2 The Countryside Specific Plan construction would result in the generation of construction-related vehicle trips, which could impact traffic conditions at individual intersections. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact TRAF-3 Implementation of the Countryside Specific Plan would not substantially increase hazards due to design features or incompatible uses. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
UTILITIES AND SERVICE SYSTEMS		
Impact UTIL-1 Implementation of the proposed project would require the construction of new or expanded wastewater conveyance systems, the construction of which could cause significant environmental effects. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM UTIL-1-SP In accordance with the NMC Sewer Master Plan, the Developer of the proposed project shall prepare a Subarea 5 Sewer Plan, which discusses how the project will be served, how the area will be connected to the City's backbone system, and the area's impact is on downstream facilities. The local subarea sewers should be required to meet the sewer design criteria provided in Subsection 4-5 of the NMC Sewer Master Plan and all other applicable construction standards set forth by the City. The Subarea 5 Sewer Plan Report shall include, but not be limited to, the following: ■ Map showing project boundaries and drainage areas ■ Detailed land use description and map ■ Average dry weather, peak dry weather, and peak wet weather flow calculations ■ Exhibit showing all proposed sewer facilities and connections to the backbone system ■ Phasing of development and wastewater flows ■ Hydraulic calculations meeting all sewer design criteria	Less Than Significant
Impact UTIL-2 The proposed project would compromise the City's ability to comply with federal, state, and local statutes and regulations related to solid waste. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM UTIL-2-SP Prior to issuance of building permits for the first project component, the Applicant shall submit a Solid Waste Management Plan to the City's Recycling Coordinator. This plan shall discuss how the project will implement source reduction and recycling methods in compliance with existing City programs. Additionally, this plan shall include how the project will address the construction and demolition-generated waste from the site. These methods shall include, but shall not be limited to, the following: ■ Provision of recycling bins for glass, aluminum, and plastic for visitors and employees of the proposed project ■ Provision of recycling bins for glass, aluminum, plastic, wood, steel, and concrete for construction workers during construction phases ■ Bins for cardboard recycling during construction ■ Scrap wood recycling during construction ■ Green waste recycling of landscape materials	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact UTIL-3 Implementation of the proposed project could exceed the El Sobrante landfill's permitted capacity in order to serve future development's solid waste needs. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM UTIL-2-SP applies.	Less Than Significant
Impact UTIL-4 Implementation of the proposed project would increase the demand for electricity and natural gas, but would not require or result in the construction of new energy production or transmission facilities, the construction of which could cause a significant environmental impact. This is considered a *potentially significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM UTIL-3-SP Project design and construction shall be coordinated with Southern California Edison and Southern California Gas Co., and improvements provided if necessary, in order to ensure that connections are adequate and capacity is available to accommodate estimated demand for gas and electric utilities.	Less Than Significant
Impact UTIL-5 Implementation of the proposed project would generate an additional demand for water; however, the increased demand would not require water supplies in excess of existing and planned entitlements and resources. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact UTIL-6 The proposed project would generate wastewater discharges that would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant

Table ES-1 Summary of Potential Impacts and Mitigation

(For Significant Unavoidable Impacts, decision makers must issue a "Statement of Overriding Considerations" under section 15093 of the CEQA Guidelines if the project is approved)

Impact Description	*Mitigation Measures*	*Significance After Mitigation*
Impact UTIL-7 Implementation of the proposed project would not require nor result in the construction of new or expanded water treatment facilities, the construction of which could cause significant environmental effects. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact UTIL-8 Implementation of the proposed project would not increase wastewater generation such that existing and planned treatment facilities would be inadequate to serve the project's projected demand in addition to the provider's existing commitments. This is considered a *less-than-significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less Than Significant

Chapter 1 INTRODUCTION

1.1 PROJECT OVERVIEW AND ENVIRONMENTAL SETTING

This document is an Environmental Impact Report (EIR) that has been prepared to analyze and disclose the potential environmental effects associated with the Countryside Specific Plan, located within the New Model Colony (NMC) of the City of Ontario (the City). The Specific Plan would be located on 178 acres and consist of eight neighborhoods of varying densities, totaling 819 units. For a detailed description of the proposed project, refer to Chapter 2 (Project Description) of this document.

The proposed Specific Plan site is located within the recently incorporated portion (generally south of SR-60) of the City of Ontario, referred to as the NMC. The NMC is an 8,200-acre area presently used for commercial dairy and agricultural operations that was annexed to the City of Ontario from the County of San Bernardino (the County) in November 1999. Unincorporated portions of Riverside County are located to the east, the cities of Rancho Cucamonga and Upland to the north, the cities of Montclair and Chino to the west, and the City of Chino and unincorporated portions of Riverside County to the south. Regional access to the City is provided by Interstate 10 (I-10), I-15, State Route 60 (SR-60, or Pomona Freeway), and SR-83 (Euclid Avenue).

The specific site proposed for the Countryside Specific Plan project is located in the northeast quadrant of the NMC. The proposed specific plan area is located entirely south of Riverside Drive, bounded by Archibald Avenue on the east, Riverside Drive on the north, Cucamonga Channel on the west, and Subarea 18 of the NMC on the south. Refer to Chapter 2 (Project Description) for project location figures.

1.2 PURPOSE OF THIS EIR

The proposed project requires adoption of a Specific Plan for development of Neighborhoods 1 through 8 of the Countryside Specific Plan area, as well as Tentative Tract Map approval for proposed Neighborhoods 1, 5, and 6, which require discretionary approval by the City Council of the City of Ontario. Therefore, it is subject to the requirements of the California Environmental Quality Act (CEQA). In accordance with Section 15121 of the CEQA Guidelines, the purpose of this EIR is to serve as an informational document that:

> …will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR has been prepared as a project-level EIR for development of proposed Neighborhoods 1 through 8 in the Countryside Specific Plan area, pursuant to Section 15161 of the CEQA Guidelines, as it analyzes impacts of the specific development proposed for the Countryside Specific Plan area. Due to the fact that

development of Neighborhoods 1, 5, and 6 is proposed as the first phase of development of the Countryside Specific Plan area, more detailed studies and analysis of these neighborhood areas have been conducted at this time. The future development of Neighborhoods 2, 3, 4, 7, and 8 of the Countryside Specific Plan area will require discretionary approval of Tentative Tract Maps by the City Council of the City of Ontario for those sites. Therefore, approval of the Tentative Tract Maps for proposed Neighborhoods 2, 3, 4, 7, and 8 will be subject to additional CEQA review and technical studies, such as biological surveys and environmental site assessments, in the future if it is determined at the time that the analysis presented in this EIR is outdated or insufficient due to lack of detailed design plans at this time for proposed Neighborhoods 2, 3, 4, 7, and 8. The City of Ontario will be responsible for making a determination at the time of impending development of proposed Neighborhoods 2, 3, 4, 7, and 8 as to whether or not additional CEQA review is required for approval of the Tentative Tract Maps for these Neighborhoods.

This EIR also serves as a Subsequent EIR, since development on the project site has been addressed on a programmatic level as part of the analysis included in a Program EIR prepared by the City of Ontario for the entire New Model Colony Area, referred to as the Sphere of Influence Final EIR. This document includes analysis that accounts for development at the project site. However, impacts particular to the project site require analysis that was not provided in previous documentation. Therefore, this EIR is considered a Subsequent EIR. CEQA mandates that projects which are consistent with the development density established in the existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site.

In addition, an EIR also identifies possible ways to minimize the significant impacts (referred to as mitigation) and evaluates reasonable alternatives to the project. The public agency with the authority to approve or deny the project—in this case, the City of Ontario—will consider the information in the EIR, along with other information, before making a decision on the project. The findings and conclusions of the EIR regarding environmental impacts do not control the agency's discretion to approve, deny, or modify the project, but instead are presented as information intended to aid in the decision-making process.

This report is to serve as an informational document for the public and City of Ontario decision-makers. The process will culminate with City Council hearings to consider certification of a Final EIR (FEIR) and a decision on whether or not to approve the proposed project.

1.3 SCOPE OF THE EIR

In accordance with Public Resources Code Section 21002.1, the purpose of this EIR is to address the potential environmental impacts resulting from the construction and operation of the proposed project, propose mitigation measures to reduce potentially significant environmental impacts, and identify and evaluate alternatives that could reduce or avoid the significant effects of the project. The EIR process provides an opportunity for the public to review and comment upon the potential environmental effects and further informs the environmental analysis. The City must respond to significant environmental issues identified during the public review process.

The City determined that an EIR should be prepared to analyze the potential impacts associated with approval and implementation of the proposed project. On June 30, 2004, the City distributed a Notice of Preparation (NOP) to local and regional responsible agencies and other interested parties. A copy of the NOP, and the responses received during the 30-day public review period, are contained in Appendix A of this document.

Comments received during the NOP scoping period have been considered in the preparation of this EIR. Based on the comments received and the findings of the Initial Study prepared for the project, this EIR evaluates the following environmental issues:

- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Public Services
- Transportation/Traffic
- Utilities and Service Systems

These environmental issues are addressed in Chapter 3 (Environmental Analysis) of this EIR.

1.4 THE EIR PROCESS

This EIR has been prepared to meet all of the substantive and procedural requirements of the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code [PRC] §21000 *et seq*.); California CEQA Guidelines (California Code of Regulations, Title 14, §15000 *et seq*., as amended through January 1, 2003); and the rules, regulations, and procedures for implementation of CEQA as adopted by the City of Ontario. As the Lead Agency for this project, the City of Ontario will take primary responsibility for conducting the environmental review and approving or denying the project.

As a first step in complying with the procedural requirements of CEQA, the City prepared an Initial Study (IS) to determine whether any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment and, if so, to narrow the focus (or scope) of the environmental analysis. For this project, the IS indicated that the EIR should focus on the environmental issues listed above in Section 1.3.

After completion of the IS, the City filed a Notice of Preparation (NOP) with the California Office of Planning and Research as an indication that an EIR would be prepared. In turn, the IS/NOP was distributed to involved public agencies and interested parties for a 30-day public review period, which began on June 30, 2004, and ended on July 30, 2004. The purpose of the public review period was to solicit comments on

the scope and content of the environmental analysis to be included in the EIR. The City received four comment letters on the IS/NOP, which are included in Appendix A of this EIR. Public comments received during the scoping meeting are also included in Appendix A.

During preparation of the EIR, agencies, organizations, and persons who the City believed might have an interest in this project were specifically contacted. Information, data, and observations from these contacts are included in the EIR. Agencies or interested persons who did not respond during the public review period of the IS/NOP will have an opportunity to comment during the public review period for the EIR, as well as at subsequent hearings on the project.

The Draft EIR (DEIR) was circulated for review and comment by the public and other interested parties, agencies, and organizations for a 45-day review period. During the review period, copies of the DEIR were available for review at the City of Ontario Planning Division. The documents referenced in this report were available for review during normal business hours at the City of Ontario City Hall:

Planning Division
303 East B Street
Ontario, CA 91764

After the close of the written public comment period, responses to written and recorded oral comments on the environmental effects of the project were prepared and published as part of this Final EIR (FEIR), which is comprised of the DEIR, comments on the DEIR, written responses to those comments, and the Mitigation Monitoring Program, which describes the process to ensure implementation of mitigation measures, will then be considered by the City in a public meeting.

The City will review and consider the FEIR prior to any decision to approve, revise, or reject the proposed project. Approval of the proposed project will be accompanied by written adoption of findings and, if necessary, a statement of overriding considerations for each significant unavoidable environmental effect identified in the FEIR. In addition, the City must also consider a Mitigation Monitoring Program, which will describe the process to ensure implementation of the mitigation measures that have been incorporated into the approved project to reduce or avoid significant effects on the environment. This monitoring or reporting program would ensure CEQA compliance during specific project implementation.

1.5 EIR ADEQUACY

The level of detail contained throughout this EIR is consistent with the CEQA Guidelines (Section 15151) and recent court decisions, which provide the standard of adequacy on which this document is based. The Guidelines state that:

> An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information, which enables them to make a decision, which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an

EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have lo2oked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.

1.6 INTENDED USE OF THE EIR

This EIR has been prepared to analyze potentially significant environmental impacts associated with the construction and operation of the proposed project, and also addresses appropriate and feasible mitigation measures or project alternatives that would minimize or eliminate these impacts. This document is intended to serve as an informational document, as discussed above. Additionally, this EIR will provide the primary source of environmental information for the lead agency to consider when exercising any permitting authority or approval power directly related to implementation of this project.

As previously mentioned, this EIR is intended to provide decision-makers and the public with information that enables them to intelligently consider the environmental consequences of the proposed action. This EIR identifies significant or potentially significant environmental effects, as well as ways in which those impacts can be reduced to less-than-significant levels, whether through the imposition of mitigation measures or through the implementation of specific alternatives to the project. In a practical sense, EIRs function as a technique for fact-finding, allowing an applicant, concerned citizens, and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure.

To gain the most value from this report, certain key points should be kept in mind:

- This report should be used as a tool to give the reader an overview of the possible ramifications of the proposed project.
- A specific environmental impact is not necessarily irreversible or permanent. Most impacts, particularly in urban, more developed areas, can be wholly or partially mitigated by incorporating conditions of approval and/or changes recommended in this report during the design and construction phases of project development.
- This report, while a summary of facts, reflects the professional judgment of the authors. The EIR was prepared by consultants retained by the City and by City staff, and was subject to the independent review and judgment of the City. The City independently reviewed and analyzed the EIR for the proposed project, and the EIR reflects the independent judgment of the City.

1.7 PROJECT SPONSORS AND CONTACT PERSONS

The City of Ontario is the lead agency for the preparation of this EIR. EIP Associates is the environmental consultant to the City and the principal preparer of this EIR. The Applicant for the proposed project is Meritage Homes. Key contact persons are as follows:

Lead Agency
City of Ontario Planning Division
303 East B Street
Ontario, CA 91764
(909) 395-2421
Attn: Richard Ayala

Project Applicant
Meritage Homes of California, Inc.
19600 Fairchild Road, Suite 270
Irvine, CA 92612-2510
(949) 250-6600
Attn: Bart Hayashi

EIR Consultant
EIP Associates
12301 Wilshire Boulevard, Suite 430
Los Angeles, CA 90025
(310) 268-8132
Attn: Amy Walston, Marianne Tanzer

1.8 DOCUMENT ORGANIZATION

This EIR has been organized for easy use and reference. To help the reader locate information of particular interest, a brief summary of the contents of each chapter of the EIR is provided. The following chapters are contained within the EIR:

- *Chapter 1—Introduction*. This chapter describes the purpose of the EIR, a summary of the environmental and public review process, availability of the EIR, and a brief outline of this document's organization.
- *Chapter 2—Project Description*. This chapter provides a detailed description of the proposed project, including location, background information, major objectives, and technical characteristics. In addition, a discussion of cumulative projects is also provided, including a list of projects that were identified as relevant to the cumulative analysis.
- *Chapter 3—Environmental Analysis*. This chapter describes and evaluates the environmental issue areas, including the existing environmental setting and background, applicable environmental thresholds, environmental impacts, mitigation measures capable of minimizing environmental harm, and a residual impact statement as to the effectiveness of mitigation measures. The introductory paragraph at the beginning of each section provides an overview of the scope of the impact analysis, including the identification of which issues were determined to be less than significant in the IS prepared for the proposed project.
- *Chapter 4—Alternatives to the Proposed Project*. This chapter provides description and analysis of feasible alternatives to the proposed project that could reduce or avoid potentially significant affects. A comparison of the impacts of the alternatives and the identification of the environmentally superior alternative is also discussed in this section.
- *Chapter 5—Other CEQA Considerations*. This chapter provides analysis, as required by CEQA, regarding impacts that would result from the proposed project, including growth-inducing impacts, cumulative impacts, significant irreversible changes to the environment, and significant and unavoidable adverse impacts.
- *Chapter 6—List of EIR Preparers*. This chapter identifies the individuals responsible for the preparation of this EIR.

- *Chapter 7—References*. This chapter identifies all references used and cited in the preparation of this report.

1.9 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

The listing of potential environmental effects and mitigation measures presented in Table ES-1 (Summary of Potential Impacts and Mitigation) in this document constitutes the required identification of issues to be resolved and areas of controversy, as required for compliance with Section 15123(b)(2) and 15123 (b)(3) of CEQA Guidelines.

Areas of controversy and issues to be resolved were raised by agencies or interested parties during the scoping process. Appendix A includes all scoping comments received and provides additional information on areas of concern or controversy. The primary issues identified during the scoping process related to the potential environmental impacts of the proposed project on the proposed project site and surrounding area, including impacts to air quality, unknown/undiscovered archaeological resources, hydrology and water quality, public services, and traffic. These issues are addressed in Chapter 3 (Environmental Analysis).

Chapter 2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The Countryside Specific Plan, located within the New Model Colony (NMC) of the City of Ontario (the City), proposes development of a new residential community. The Specific Plan would be located on approximately 178 acres and consist of eight neighborhoods of varying densities, totaling 819 units.

2.2 PROJECT LOCATION

The proposed project site is located within the City of Ontario, in San Bernardino County (the County). As shown in Figure 2-1 (Regional Location), Ontario is located in southwestern San Bernardino County, along the Interstate 10 corridor. The City is located approximately 40 miles east of downtown Los Angeles, 20 miles west of the city of San Bernardino, and 30 miles northeast of Orange County. The cities of Fontana and Riverside are located to the east, the cities of Rancho Cucamonga and Upland to the north, the cities of Montclair and Chino to the west, and unincorporated portions of San Bernardino and Riverside Counties to the south. Regional access to the City is provided by Interstate 10 (I-10), I-15, State Route 60 (SR-60, or Pomona Freeway), and SR-83 (Euclid Avenue).

The proposed Specific Plan site is located within the recently incorporated portion (generally south of SR-60) of the City of Ontario, referred to as the NMC. The NMC is an 8,200-acre area presently used for commercial dairy and agricultural operations that was annexed to the City of Ontario from the County of San Bernardino in November 1999. The framework for development in the NMC was established in the Ontario Sphere of Influence General Plan Amendment (SOI GPA), adopted in January 1998, which set forth the land use plan and designations for the area. To carry out the objectives of the SOI GPA, all NMC parcels have been pre-zoned as Specific Plan. The proposed Specific Plan is the sixth specific plan prepared in the NMC.

The specific site proposed for the Countryside Specific Plan project is located in the northeast quadrant of the NMC. As shown in Figure 2-2 (Local Vicinity), the proposed specific plan area is located entirely south of Riverside Drive, bounded by Archibald Avenue on the east, Riverside Drive on the north, Cucamonga Channel on the west, and Subarea 18 of the NMC on the south. It is currently zoned Specific Plan - Agricultural Preserve, and designated as Low Density Residential (RLD), which is 4.6 dwelling units per acre, in the City's General Plan.

2.3 PROJECT SITE CHARACTERISTICS

The Countryside Specific Plan is identified as Subarea Number 5 of the City of Ontario's NMC, as shown in Figure 2-3 (Specific Plan Subareas). The proposed site consists of approximately 178 acres and is owned by

eighteen landowners, as shown in Figure 2-4 (Existing Site Ownership). Existing on-site uses primarily include agricultural production, specifically current and former dairy farm uses, agricultural fields, and a nursery/greenhouse. Portions of the site contain empty fields, waiting for cultivation in the commonly used crop rotation method. A few residential uses are located sporadically on the site. In addition, a Southern California Edison (SCE) easement traverses the southern portion of the site, and contains high-voltage transmission lines. The existing on-site uses and their distribution are shown in Figure 2-5 (Existing On-Site and Surrounding Uses). The site consists of relatively flat topography. A summary of existing on-site characteristics is provided in Table 2-1.

Table 2-1 Summary of Existing Site Characteristics

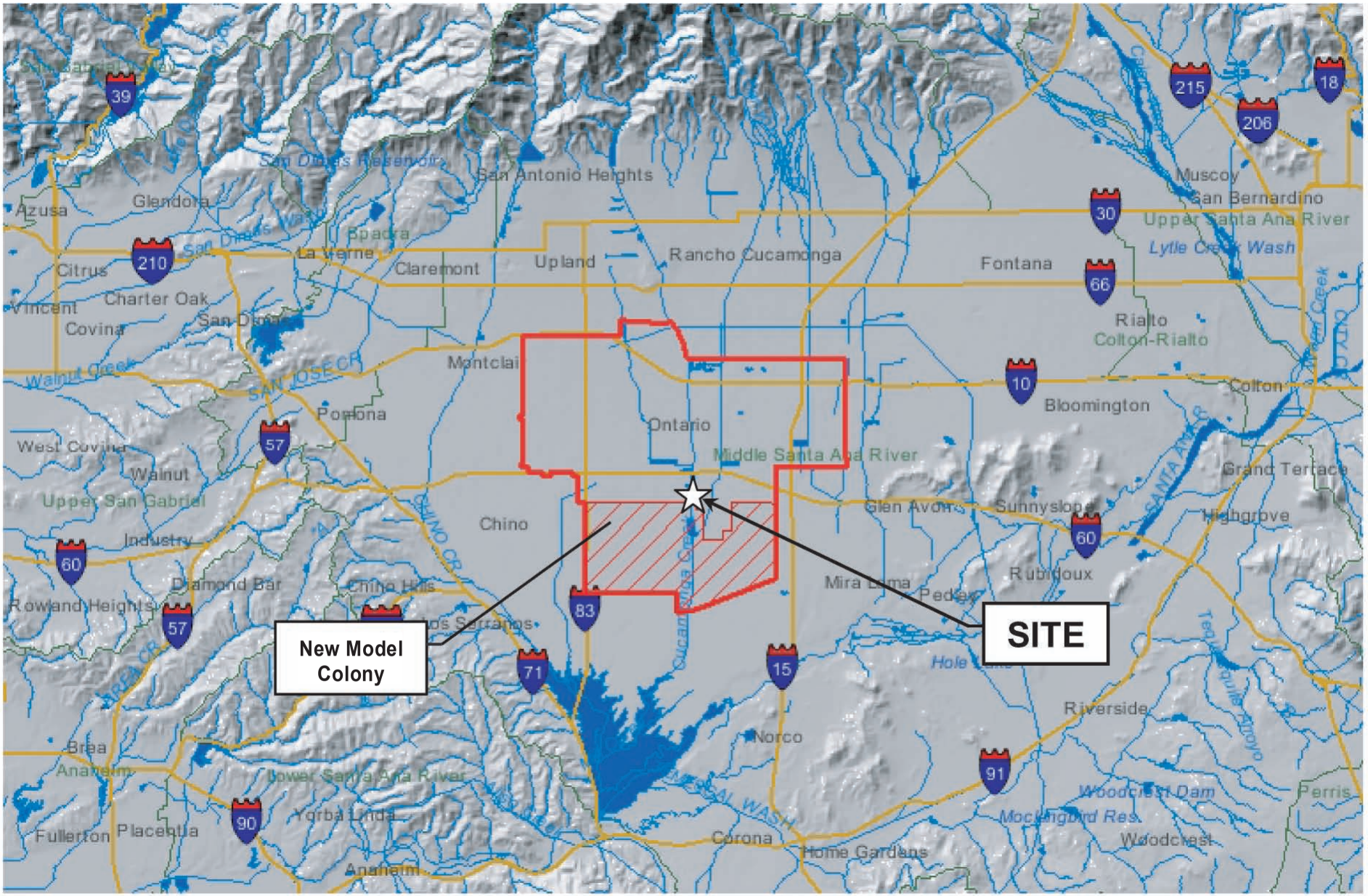
Component	*Relevant Information*
Address	Riverside Drive
Applicant	Meritage Homes of California, Inc. for Neighborhoods 1, 5, and 6; other future applicants for Neighborhoods 2, 3, 4, 7, and 8
Assessor's Parcel Number (APN)	218-111-29 through -31 218-111-52 through -57 218-111-60 and -61 218-131-11 and -12 218-131-22 and -27 218-131-32 through -37 218-131-39 through -41
Site Area	178 acres
Existing Land Use	Agricultural field, dairy farm, residential
Zoning Designation	SP (Specific Plan Ag Preserve)
General Plan Designation	Residential—Low Density (RLD), 4.6 dwelling units per acre

2.4 SURROUNDING LAND USES

The project site is bordered on the north and east sides by existing urban development, and on the south and west sides by regional drainage facilities and other undeveloped NMC subareas, as shown in Figure 2-5. Specific adjacent (offsite) uses include the following:

- **North**: Single-family residential and recreational uses, which include Westwind Park and Whispering Lakes Golf Course
- **East**: Residential uses, the Lower Deer Creek Channel to the east of (beyond) the residential uses, and a neighborhood commercial center at the intersection of Riverside Drive and Archibald Avenue
- **South**: Agricultural uses (Planning Subarea 18) and Lower Deer Creek Channel
- **West**: Cucamonga Basin, with the Cucamonga Creek Channel and agricultural uses (Planning Subareas 4 and 11) located beyond to the west

The Lower Deer Creek Channel passes through the southeast corner of the project site (it is not part of the project site) and extends to the east of the project site through adjacent residential areas. The concrete-lined channel conveys storm runoff from urban areas northeast of the project site and empties into the Cucamonga Basin. It is maintained by the San Bernardino Flood Control District.



N

10905-00

FIGURE **2-1**

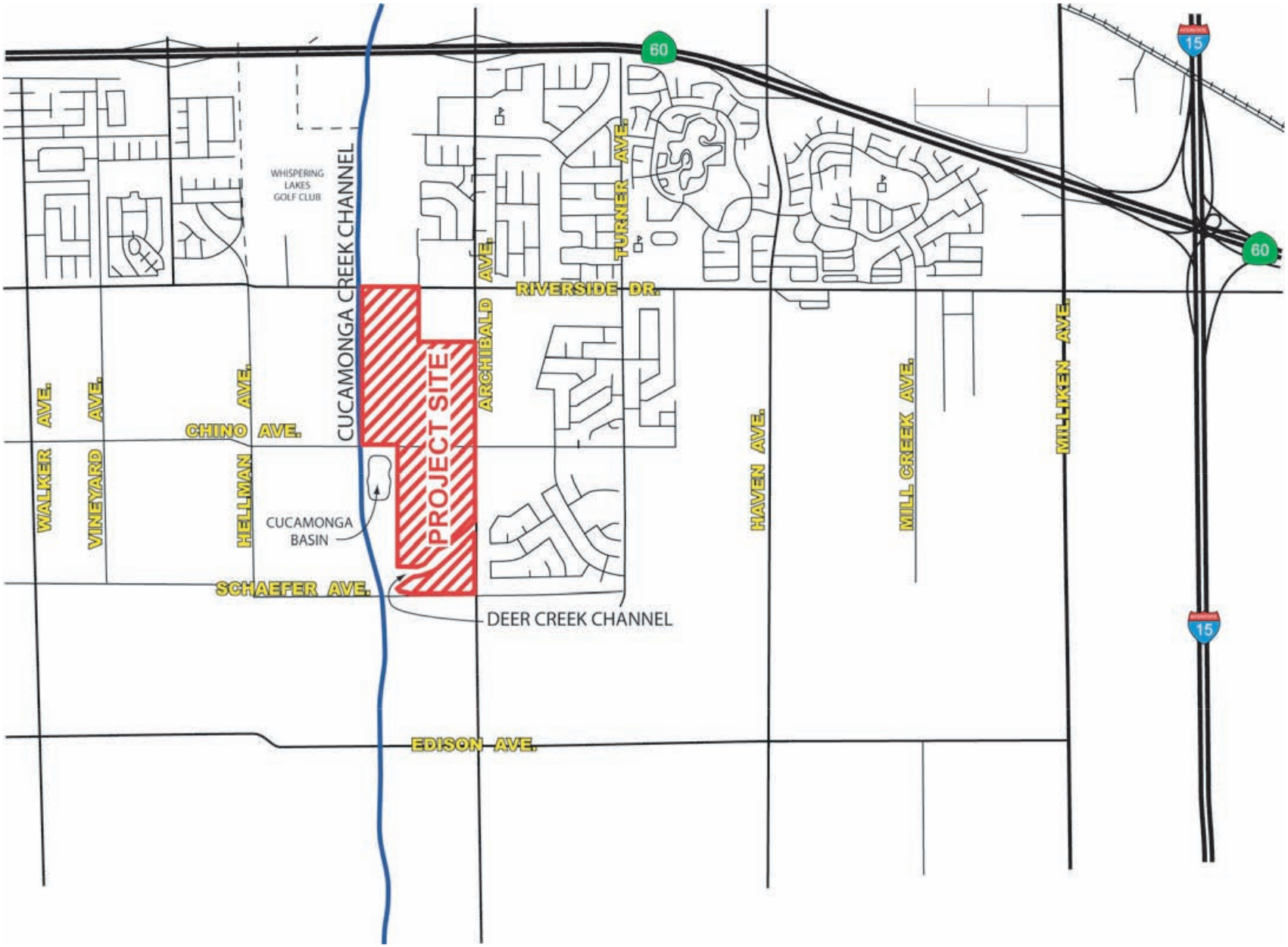
Regional Location

Source: City of Ontario, 2004

City of Ontario

Not to Scale

EIP ASSOCIATES



N

10905-00

FIGURE **2-2**

Local Vicinity

***Source*:** Meritage Homes, 2004

City of Ontario

Not to Scale

EIP ASSOCIATES

FIGURE **2-3**
Specific Plan Subareas

Source: City of Ontario, 2004

Not to Scale

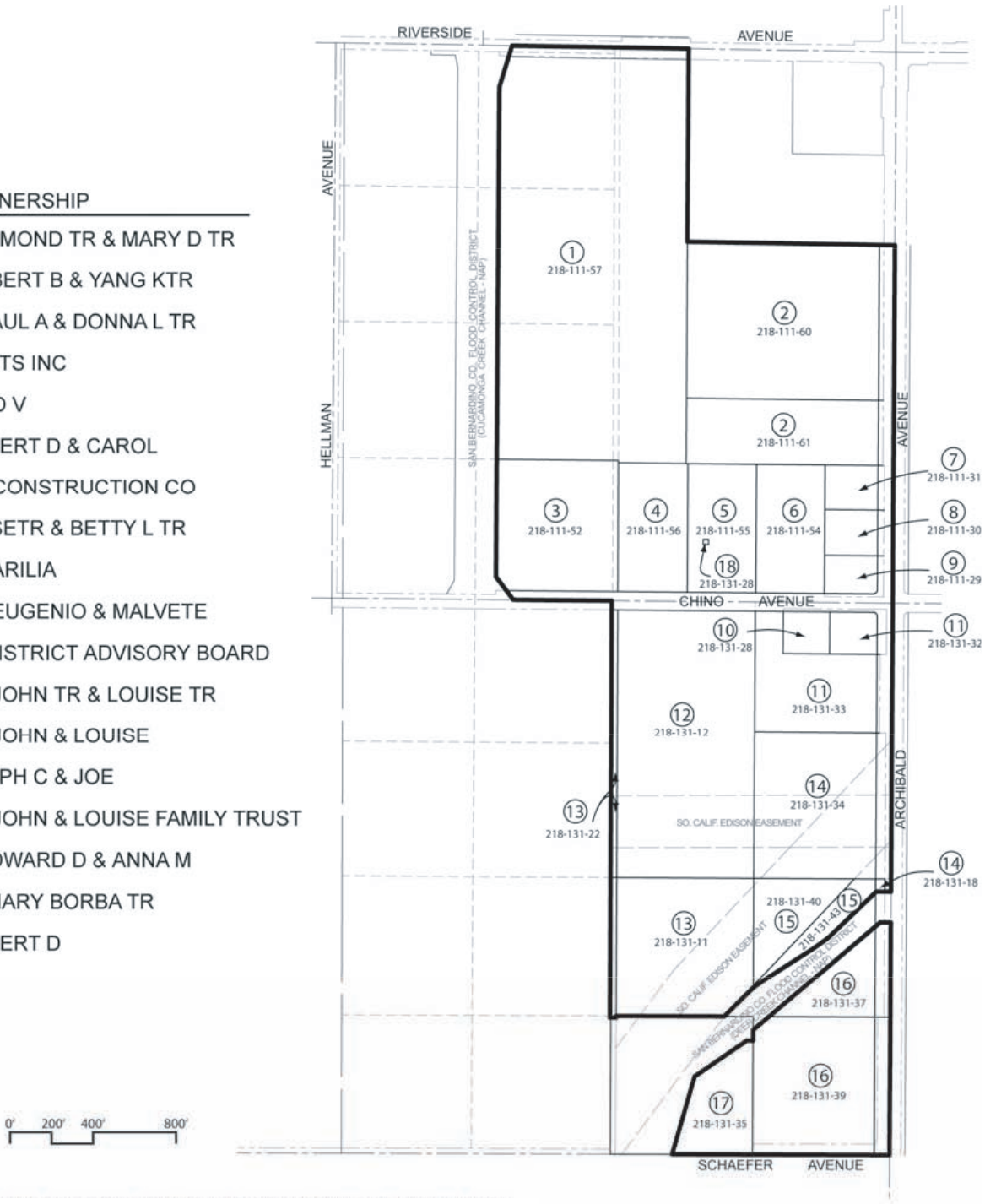
10905-00

City of Ontario

EIP ASSOCIATES

PROPERTY OWNERSHIP

1. ALGER RAYMOND TR & MARY D TR
2. BARTH ROBERT B & YANG KTR
3. HUGHES PAUL A & DONNA L TR
4. JLC MARKETS INC
5. CHEZ DAVID V
6. PETTY ROBERT D & CAROL
7. ROSSETTI CONSTRUCTION CO
8. ZWART CASETR & BETTY L TR
9. RIBEIRO MARILIA
10. PIMENTEL EUGENIO & MALVETE
11. ANAHEIM DISTRICT ADVISORY BOARD
12. VAN VEEN JOHN TR & LOUISE TR
13. VAN VEEN JOHN & LOUISE
14. CHEZ JOSEPH C & JOE
15. VAN VEEN JOHN & LOUISE FAMILY TRUST
16. FOSTER HOWARD D & ANNA M
17. PARENTE MARY BORBA TR
18. PETTY ROBERT D



NOTE: AT THIS TIME MERITAGE HOMES IS DEVELOPING THE ENTIRE SITE.

10905-00

FIGURE **2-4**

Existing Site Ownership

***Source*:** Meritage Homes, 2004

City of Ontario

EIP ASSOCIATES

FIGURE **2-5**

Existing On-Site and Surrounding Uses

10905-00

Source: Meritage Homes, 2004

City of Ontario

EIP ASSOCIATES

The Cucamonga Basin, located immediately adjacent to the west side of the project site, is a recently completed detention basin and groundwater recharge facility. Originally designated as the Lower Cucamonga Spreading Grounds, four individual basins have been improved to contain additional storm flows, thus protecting downstream properties. The basins serve as a major groundwater recharge facility for the area. The Cucamonga Basin is maintained by the San Bernardino County Flood Control District with assistance from the Chino Basin Water Conservation District.

The Cucamonga Creek Channel is located beyond the Cucamonga Basin to the west of the project site. The channel flows from north to south and is a rectangular concrete lined channel which carries regional drainage from developed areas north of the project site. The Cucamonga Creek Channel empties into the Cucamonga Basin, which ultimately drains into the Prado Flood Control Basin approximately five miles southwest of the site. The Cucamonga Creek Channel was constructed approximately 20 years ago by the Army Corps of Engineers to serve as a primary drainage facility for the City of Ontario.

The noted surrounding areas are all located within the boundaries of the City of Ontario.

2.5 PROPOSED PROJECT CHARACTERISTICS

2.5.1 Specific Plan

The Applicant, Meritage Homes, is proposing to develop approximately 55 percent of the site (proposed Neighborhoods 1, 5, and 6) within Planning Subarea 5 of the NMC Specific Plan, while the balance of the Specific Plan area (proposed Neighborhoods 2, 3, 4, 7, and 8) will be developed by others. A statistical summary of these neighborhoods is provided in Table 2-2. The Countryside Specific Plan would guide development of this subarea and proposes the following specific components:

- Eight residential neighborhoods
  - Three 5,000-square-foot (sf) lot neighborhoods
  - One 6,000 sf lot neighborhood—single family residential
  - Two 5,500 sf lot neighborhoods—single family residential
  - One >3,500 sf lot (Z-lot) neighborhood with irregular or "Z" type property lines
  - One "cluster court" type neighborhood with minimum lot size of 3,000 sf, with shared private drive access to multiple units
- 819 residential units total
- 5.75 acres of parkland in three key areas, plus private pocket parks in neighborhoods 5 and 6
- 4.36 acres of paseos (i.e., linear greenbelts)
- Bicycle trails throughout the neighborhoods
- Average density of 4.6 dwelling units per gross acre

These proposed project characteristics are summarized in Table 2-2, and Figure 2-6 (Proposed Land Use Plan) depicts the proposed project components. Table 2-3 provides a statistical summary of the proposed

neighborhoods of the Countryside Specific Plan. A summary description of the lot sizes and development associated with each neighborhood type is provided in Table 2-4.

The developers of the Specific Plan area will construct all required utility infrastructure, including storm drain improvements, necessary to serve the project site. The storm drain system will consist of minimum 24-inch pipes throughout the community, which will collect and discharge storm water via 72- and 48-inch pipes to the Cucamonga Creek Channel and the Deer Creek Channel. Areas north of the Deer Creek Channel will drain westerly to the Cucamonga Creek Channel. Areas south of the Deer Creek Channel will drain westerly to the Deer Creek Channel.

2.5.2 Tentative Tract Maps

Concurrent with the Specific Plan, three tentative tract maps are currently proposed. These are for neighborhoods 1, 5, and 6 as shown in Figure 2-6. Two tentative tract maps for neighborhoods 3 and 4 have also been proposed. Development of these two neighborhoods would begin in the fourth quarter of 2006, and continue for approximately 24 months. In the future, as development of proposed Neighborhoods 2, 7, and 8 becomes imminent, additional tentative tracts maps will be developed and approved by the City for these areas.

Table 2-2 Summary of Project Characteristics

Project Component	*Detail*
Proposed Land Use	Residential
Proposed Number of Units	819
Open Space	10.11 acres including parks and paseos
Building Density	Maximum overall average of 4.6 dwelling units per gross acre Designated as Residential Low Density by the SOI GPA
Building Height	1 to 2 stories, with maximum building height of 35'
Proposed Parking Spaces	Garage and on-street provided per code
Project Access	Vehicular and Pedestrian: Riverside Drive, Chino Ave, Archibald Ave, and new internal roadway

2.6 CONSTRUCTION SCHEDULE

Proposed residential uses within this specific project site will be developed in several phases. Staging and parking for construction activities will occur on site. Construction of each neighborhood is anticipated to require approximately 24 months. The total construction duration of the initial Neighborhoods 1, 5, and 6 would be approximately 60 months. Construction of Neighborhoods 1, 5, and 6 would begin in approximately the third quarter of 2006, and continue for a period of approximately five years. Completion of Neighborhoods 1, 5, and 6 is estimated for third quarter of 2011. Proposed development of Neighborhoods 3 and 4 is anticipated to begin in late 2006 and continue for approximately 24 months, however, specific details of the neighborhood plans and actual construction schedule are unknown at this time. Construction of the remaining Neighborhoods 2, 7, and 8 would occur over the long-term, with complete build-out of the Countryside Specific Plan area expected to occur by year 2015.

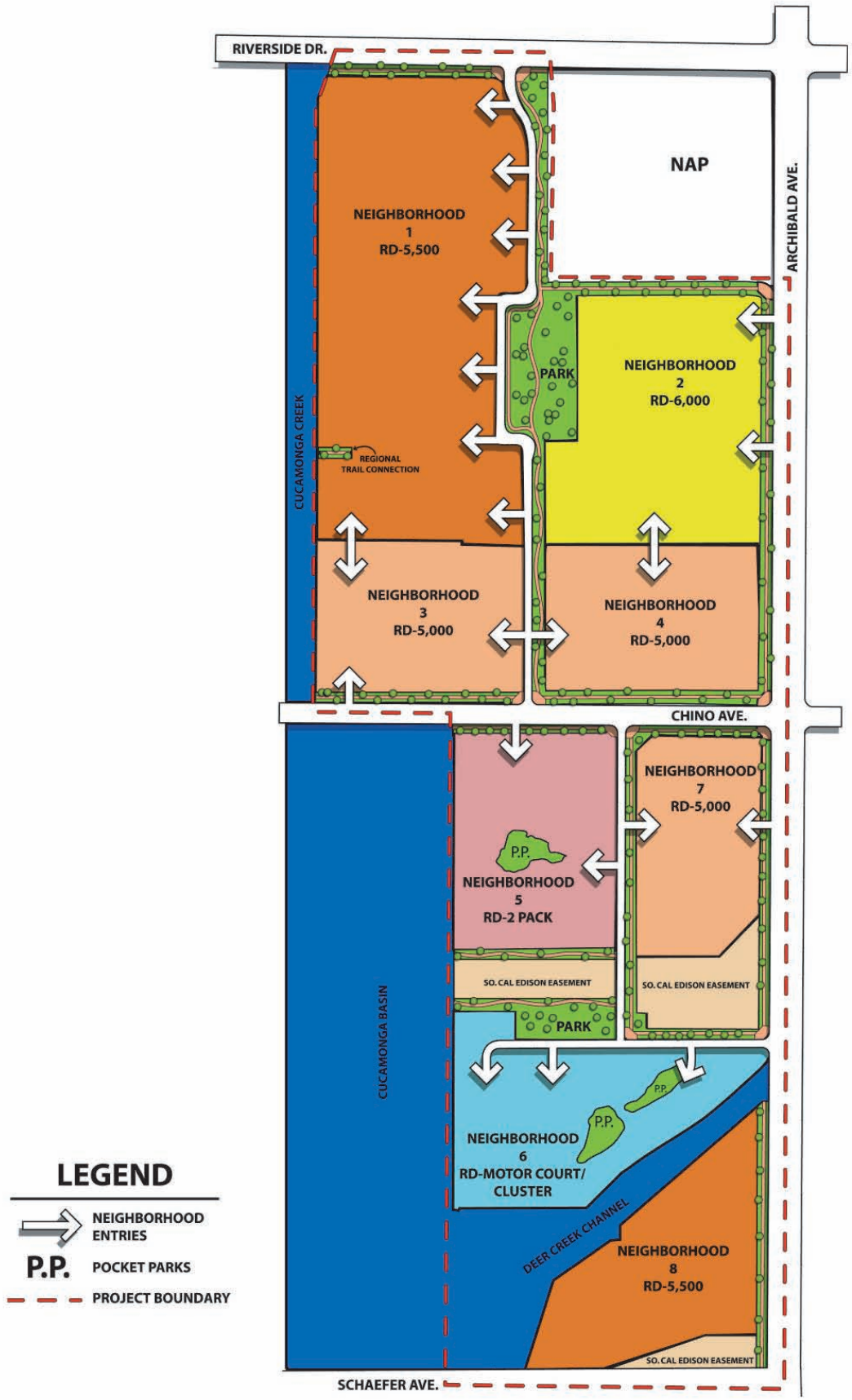


FIGURE **2-6**

Proposed Land Use Plan

***Source*:** Meritage Home, 2005

City of Ontario

Not to Scale

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Table 2-3 Countryside Specific Plan Statistical Summary

Residential	*Acres*	*DUs*	*Type*	*Net Density*
PLANNING AREA 1				
Neighborhood 1	34.20	187	RD 5,500	5.5/Acre
Neighborhood 2	20.26	106	RD 6,000	5.2/Acre
Neighborhood 3	11.61	71	RD 5,000	6.1/Acre
Neighborhood 4	12.93	75	RD 5,000	5.8/Acre
Subtotal Residential	*79*	*439*		*5.6/Acre*
PLANNING AREA 2				
Neighborhood 5	13.35	96	RD (2 Pack)	7.1/Acre
Neighborhood 6	14.03	140	RD (Cluster Court Homes)	10.0/Acre
Neighborhood 7	9.85	60	RD 5,000	6.0/Acre
Neighborhood 8	14.97	84	RD 5,500	5.6/Acre
Subtotal Residential	*52.2*	*380*		*7.3/Acre*
Total residential	*131.2*	*819*		*6.2/Acre*
OTHER LAND USES				
Park	5.75			
Paseo	4.36			
Neighborhood Buffers	1.21			
Streets	18.39			
SCE Easement	7.63			
Deer Creek Channel	9.40			
Subtotal Other	*46.74*			
Total	*177.94*	*819*		*4.6/Acre*

Table 2-4 Countryside Specific Plan Neighborhood Development Descriptions

Type	*Detail*
RD—5,000-square-foot Lots	The Specific Plan allows for the development of up to 207 dwelling units with minimum lot sizes of 5,000 square feet at a density of 6.0 dwelling units per acre. The 5,000 square foot lots will be developed in Neighborhoods 3, 4, and 7.
RD—5,500-square-foot Lots	The Specific Plan allows for the development of up to 271 dwelling units with minimum lot sizes of 5,500 square feet at a density of 5.2 dwelling units per acre. The 5,500 square foot lots will be constructed in Neighborhoods 1 and 8.
RD—6,000-square-foot Lots	The Specific Plan allows for the development of up to 106 dwelling units on minimum lot sizes of 6,000 square feet at a density of 5.2 dwelling units per acre. The 6,000 square foot lots will be developed in Neighborhood 2.
RD—2 Pack Residential	The Specific Plan allows for the development of up to 96 residential dwelling units in a 2 pack housing type on minimum lot sizes of 3,500 square feet at a density of 7.1 dwelling units per acre. This product type will be developed in Neighborhood 5. As part of the development of this neighborhood, a private recreational amenity will also be developed to serve the residents.
RD—Cluster Court Residential	The Specific Plan allows for the development of up to 140 single family detached motor court cluster style residential dwelling units on minimum lot sizes of 3,000 square feet at a density of 10.0 dwelling units per acre. This product type will be developed in Neighborhood 6. As part of the development of this neighborhood, a private recreational amenity will also be developed to serve the residents.

2.7 PROJECT OBJECTIVES

The applicant's project objectives are as follows:

- To provide neighborhoods which are identifiable from each other, with public and private amenities, linked by a network of pedestrian trails
- To create a community sense of place, walk-ability and livability
- Provide a mix of housing types in response to evolving market demands
- Short blocks that promote ease of access and neighborhood activity
- Use of variable setback, reduced garage emphasis, and "architecture forward"
- Curb separated landscaped parkways
- Establish clearly defined edges and entries that contribute to a district neighborhood identity
- Consider the use of alleyways to add flexibility to frontage designs and assist in the creation of more pedestrian oriented front areas
- Promote development of local street patterns that create and unify neighborhoods, rather than divide them
- Establish a pattern of blocks that promote access and neighborhood activity

2.8 INTENDED USES OF THIS EIR

The City of Ontario is the lead agency for the proposed project consistent with Section 15065(b) of the CEQA Guidelines. As such, the City will use this EIR to formulate its actions to either approve or deny the project.

The specific actions that would need to be approved by the City of Ontario to construct the proposed project are as follows:

- Adoption and approval of the Countryside Specific Plan.
- Tentative Tract Map (TTM) Approval for Neighborhood 1 (TTM 16045), Neighborhood 5 (TTM 17449), and Neighborhood 6 (TTM 17450).
- Future Approval of Tentative Tract Maps for Neighborhoods 2, 3, 4, 7, and 8.

  Approval of future Tentative Tract Maps for Neighborhoods 2, 3, 4, 7, and 8 may require supplemental project-level CEQA review as draft TTMs, specific project details, and design plans become available. Additional supporting technical studies will also be required for these neighborhoods to verify conditions and conclusions indicated in this EIR, including but not limited to:

  Delhi Sands Flower-loving Fly Focused Adult Protocol 2-year Surveys
  Pedestrian archaeological surveys
  Preliminary and detailed geotechnical investigation reports
  Phase I Environmental Site Assessments to survey for the presence of hazardous materials
- Approval of Development Agreement for Neighborhoods 1, 5, and 6.

- Immediate cancellation of *Williamson Act* Contract number 69-124 for the parcels that comprise Neighborhoods 5 and 6.

  Note: the cancellation of this contract is not a requirement for the approval of the Countryside Specific Plan, but it is a requirement for the construction of Neighborhoods 5 and 6.

Additionally, approvals from the following local, regional, or State agencies could include but are not limited to the following:

- California Department of Fish and Game (only if project storm drain outlets fall within CDFG jurisdictional areas in the Cucamonga Creek Channel, Deer Creek Channel, or Cucamonga Basin and require a Streambed Alteration Agreement)
- Santa Ana Regional Water Quality Control Board
- San Bernardino County Flood Control District
- Southern California Air Quality Management District
- United States Army Corps of Engineers (only if project storm drain outlets fall within ACOE jurisdictional areas in the Cucamonga Creek Channel, Deer Creek Channel, or Cucamonga Basin)

2.9 CUMULATIVE PROJECTS AND IMPACT ANALYSIS METHODOLOGY

Section 15355 of the CEQA Guidelines defines "cumulative impacts" as "two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts." In general, these impacts occur in conjunction with other related development that may have impacts that might compound or interrelate with those of the project under review.

In order to analyze the cumulative impacts of the project in combination with existing development and other expected future growth, the amount and location of growth expected to occur in addition to the proposed project must be considered. Section 15130(b) of the CEQA Guidelines allows either of the following two methods of prediction:

A. A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the agency.

B. A summary of projections contained in an adopted general plan or related planning document which is designed to evaluate regional or areawide conditions.

Due to the development potential in the immediate project area and regional vicinity, the cumulative analysis considers development within and beyond the Ontario New Model Colony (NMC) planning area that would occur by year 2015. The development potential by 2015 within the Ontario NMC planning area is shown in Table 2-5. Figure 2-7 identifies the location of the development projects within the Ontario NMC that is anticipated to occur in the near term (by year 2015).

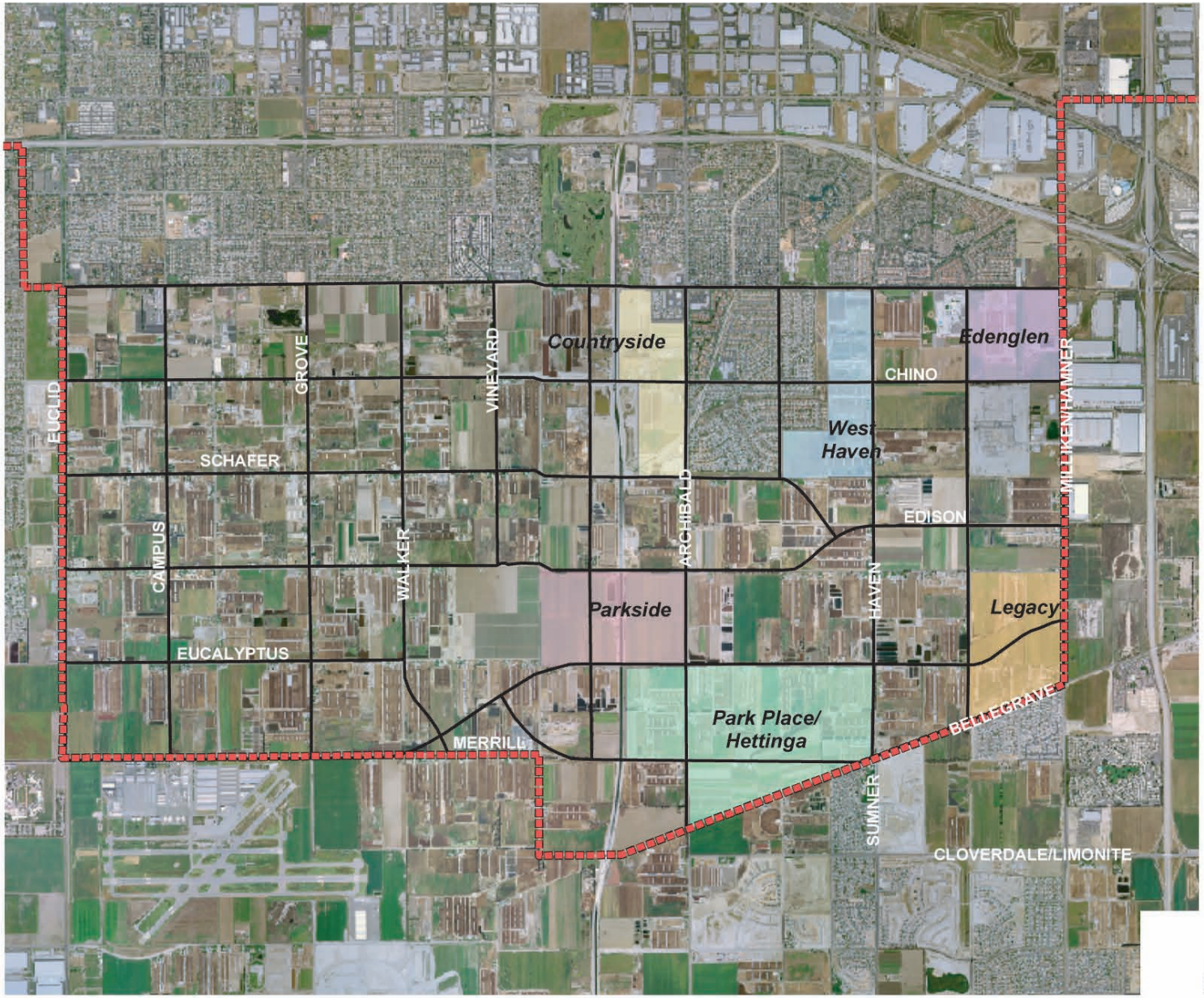
Table 2-5 Proposed Future Development within Other Specific Plan Areas of the Ontario New Model Colony

Subarea	Specific Plan (Project) Name	Uses	Status
7	Edenglen Specific Plan	160 Acres 309 Single-Family Residential 275 Multi-Family Residential 217,520 SF Commercial 550,000 SF Business Park	Proposed
25	Legacy Specific Plan	234 Acres 1,410 Single- and Multi-Family Residential	Proposed
29	Park Place/Hettinga Specific Plan	532 Acres 2,291 Single-Family Residential 87,000 SF Commercial	Proposed
22 & 23	Parkside Specific Plan	249 Acres 597 Single-Family Residential 1,409 Multi-Family Residential	Proposed
6 & 12	West Haven Specific Plan	199 Acres 732 Single-Family Residential 100,000 SF Commercial	Proposed

The cumulative development analysis methodology for this EIR is based primarily upon an analysis of the anticipated development by year 2015 of the noted specific plan areas within the Ontario NMC area. This is due to the fact that the large area covered by the Ontario NMC and noted specific plan areas constitutes an appropriately broad geographic area surrounding the Countryside Specific Plan site. However, cumulative impacts associated with regional cumulative traffic (and associated cumulative traffic-generated noise and air quality impacts) described in this EIR consider traffic from development of areas outside the City of Ontario.

The Ontario NMC traffic model used to conduct the traffic analysis for this EIR is based upon the City of Ontario's General Plan Travel Demand Model and, therefore, includes the entire Southern California Association of Governments' (SCAG) five-county regional traffic model's network, zonal structure and future growth assumptions for the year 2015 horizon year. This means that the traffic model used for this EIR includes projected year 2015 cumulative traffic generated from outside the Ontario NMC area, including all future growth and development in San Bernardino, Riverside, Los Angeles, Orange and Ventura Counties, as well as projected "through trips" (i.e., vehicles passing through the City of Ontario) for year 2015 with no origin or destination in the southern California region. In addition to the predicted regional cumulative traffic within the five-county southern California region, the Ontario NMC traffic model utilized for this EIR includes cumulative year 2015 traffic generated by other planned developments adjacent to the Ontario NMC area, including:

- The Eastvale Community Plan in Riverside County, located immediately south and southeast of the Ontario NMC area. This major planned development is expected to include over 17,000 residential units at buildout.



PROJECT DESCRIPTIONS (Formal Applications):

COUNTRYSIDE (Subarea 5)
STATUS: Preparing EIR RFP; no specific plan
Citation Builders - Bart Hayashi (949) 250-6600
178 acres
819 Single Family Residential

WEST HAVEN SPECIFIC PLAN (Subareas 6 & 12)
STATUS: Preparing EIR RFP; Specific Plan submitted 6/15/04.
Stratham Homes - Jeff Evans (949) 883-1554x225
Centex Homes - David Hutchins (949) 790-5943
JMS Homes - Jim Faus (949) 515-7416
Richland Communities - Jim Powers (626) 483-6837
199 Acres
732 Single Family Residential
100,000 S.F. Commercial

EDENGLEN SPECIFIC PLAN (Suabrea 7)
STATUS: EIR proposals being reviewed; Specific Plan submitted 5/04
Brookfield - Dave Bartlett (714) 200-1533
160 Acres
309 Single Family Residential
275 Multi-Family Residential
217, 520 S.F. Commercial
550,000 S.F. Business Park

LEGACY SPECIFIC PLAN (Subarea 25)
STATUS: Specific Plan submitted; EIR pending, waiting on water supply analysis
Empire Companies - Dennis Chiniaeff (909) 987-7788
185 acres
537 Single Family Residential
345 Multi-Family Residential

PARKSIDE SPECIFIC PLAN (Suabreas 22 & 23)
STATUS: EIR just beginning; Specific Plan submittal anticipated July '04
Lewis Operating Cos. - Darren McCleve (909) 949-6727
249 Acres
597 Single Family Residential
1409 Multi-Family Residential

PARK PLACE/HETTINGA SPECIFIC PLAN (Subarea 29)
STATUS: EIR just beginning; Specific Plan submittal anticipated July '04
Stratham Homes - Jeff Evans (949) 883-1554x225
Lewis Operating Cos. - Darren McCleve (909) 949-6727
532 Acres
2,291 Single Family Residential
87,000 S.F. Commercial

TOTALS:
Acreage - 1503 gross acres
Single Family Residential - 5,285 units
Multi-Family Residential - 2,029 units
Commercial - 404,520 s.f.
Industrial - 550,000 s.f.

0 2,000 4,000 6,000 8,000 Feet

10905-00

FIGURE **2-7**
Cumulative Projects

***Source*:** Ontario Planning Department, 2004

City of Ontario

Scale 1" = 2

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- "The Preserve" located in the City of Chino (San Bernadino County) to the south of the Ontario NMC area. This development is a 5,400 acre area with nearly 9,800 planned dwelling units
- A planned development located in the City of Chino (San Bernadino County) to the southwest of the Ontario NMC area. The development encompasses 710 acres of surplus state land and was approved by the Chino Planning Commission for 2,200 dwelling units and a college campus for 15,000 students at buildout.

In summary, the cumulative impacts associated with regional cumulative traffic (and associated cumulative traffic-generated noise and air quality impacts) described in this EIR consider traffic from development of areas within the Ontario NMC, as well as traffic from areas beyond City of Ontario. Cumulative impact analysis for other issue areas covered in this EIR (e.g., agricultural resources, biological resources) also consider cumulative development in areas beyond the City of Ontario.

Chapter 3 ENVIRONMENTAL ANALYSIS

3.0 INTRODUCTION TO ANALYSIS

This section provides an overview of the analysis that is provided in Chapter 3.

Existing Conditions

This subsection describes existing conditions that may be subject to change as a result of implementation of the proposed project. This subsection provides the context for assessing potential environmental impacts resulting from implementation of the proposed project.

Thresholds of Significance

Before potential impacts are evaluated for significance, the threshold that will serve as the basis for judging impact significance is presented. Thresholds of Significance used for the evaluation of impacts include those thresholds presented in Appendix G of the CEQA Guidelines. The City of Ontario (the City) relies on these thresholds as those that are appropriate for evaluating the significance of impacts in the City.

Regulatory Framework

The primary regulations governing development of the proposed project is the *City of Ontario General Plan*. In addition to the General Plan, there are regional and statewide regulations that govern development activities in order to ensure protection of resources, public and private property, and the local population. Examples of these regulations include the 1997 Air Quality Management Plan (AQMP), Uniform Building Code, and National Pollutant Discharge Elimination System (NPDES) permit system, among others. Area growth and housing allocations are coordinated by regulatory agencies. Regulations that are relevant to particular resources are discussed in the relevant resource sections in Chapter 3. This section is omitted where no relevant regulations beyond the General Plan exist.

Impacts

The project impacts discussion describes potential consequences to each resource that would result from project implementation. The applicant proposes to construct a housing development comprised of several neighborhoods, as well as associated parks and open space/recreational areas, as described in detail in Chapter 2. Environmental impacts could potentially occur from this action.

Potential environmental impacts have been classified in the following categories:

- *Less Than Significant*—Results in no substantial adverse change to existing environmental conditions

- *Potentially Significant*—Constitutes a substantial adverse change to existing environmental conditions that can be mitigated to less-than-significant levels by implementation of feasible mitigation measures or by the selection of an environmentally superior project alternative
- *Significant and Unavoidable*—Constitutes a substantial adverse change to existing environmental conditions that cannot be fully mitigated by implementation of all feasible mitigation measures, or by the selection of an environmentally superior project alternative

Cumulative Impacts

This discussion (contained within each environmental resource section of Chapter 3) describes potential impacts from the proposed project in combination with development of concurrent specific plan areas proposed within the City of Ontario New Model Colony area (refer to Chapter 2 for a description of the other specific plan areas considered in the cumulative impacts analysis).

Mitigation Measures and Residual Impacts

If potential project-related impacts are considered potentially significant, mitigation measures are proposed to reduce or avoid these impacts. This section also describes the level of significance of impacts following the implementation of mitigation measures. Impacts are defined as either significant but mitigable or significant and unavoidable. Significant but mitigable impacts are those impacts that could be reduced to a less-than-significant level with the incorporation of mitigation measures. Significant and unavoidable impacts are those impacts that would remain significant either due to the unavailability of feasible mitigation measures to reduce impacts or inability for mitigation measures to reduce impacts to a less-than-significant level.

3.1 AGRICULTURAL RESOURCES

3.1.1 Introduction

This section of the EIR examines the effects of the proposed project on agricultural resources and operations in the Countryside Specific Plan Area (Subarea 5 of the Ontario New Model Colony), specifically, the conversion of farmland to urban uses and potential conflicts with *Williamson Act* contracts, as identified in the Initial Study prepared for the proposed project (included as Appendix A to this EIR). The Initial Study identified the potential for project development to displace existing agricultural uses, convert prime farmland to a nonagricultural use, and conflict with acting *Williamson Act* contracts. No letters regarding agricultural resources have been received in response to the Notice of Preparation and Initial Study prepared for the proposed project and circulated for public comment.

Sources of information used to prepare this analysis include the Ontario Sphere of Influence Final Environmental Impact Report (1995), other environmental analysis prepared by the City of Ontario (the City), the California Department of Conservation Farmland Mapping and Monitoring Program, the County of San Bernardino Department of Agriculture/Weights and Measures, and various other sources. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

3.1.2 Existing Conditions

This section describes the farmland present within the project site, as shown in Figure 2-5 (Existing On-Site and Surrounding Uses).

San Bernardino County

San Bernardino County (the County) has a long history of agricultural production. Farming in the County continues to be a major contributor to the nation's food supply as well as a vital component of the rural lifestyle, which exists throughout much of the County. According to the *2003 Crop and Livestock Report* ("2003 Report") from the San Bernardino County Agricultural Commissioner, the total gross value for production in 2003 was $645,885,300, a slight increase from 2002's production value of $631,550,100. Sales of nursery stock were the primary reason behind the increase, although milk and egg sales also increased.

The 2003 Report also states that dairy continues to dominate the agricultural industry of the County, with milk production and the related animal production and forage. This industry accounts for over 76 percent of the total value of agriculture in the County. Despite fifteen dairies going out of production, dairy cow population increased by 3,000 head, from 155,000 to 158,000.

The overall mix of agricultural crops within the County has varied over the years, but the top three agricultural crops over the last several years have been milk, cattle and calves for meat, and replacement

heifers for dairy cows. Table 3.1-1 identifies the most recent available data on agricultural production in San Bernardino County. As shown, the estimated gross value for County agriculture for 2003 is about $645,690,400.

Table 3.1-1 Top Ten Agricultural Projects—County of San Bernardino (2003)

2003 Rank	*Produce*	*Value ($)*	*% of Total*	*2002 Rank*
1	Milk	377,853,000	58.5	1
2	Cattle and Calves (meat)	52,164,600	8.1	2
3	Replacement Heifers	40,200,700	6.2	3
4	Eggs	39,045,700	6.0	4
5	Indoor Decoratives	26,493,300	4.1	8
6	Trees/Shrubs	21,675,900	3.4	5
7	Oranges	15,538,100	2. 4	6
8	Alfalfa, All	9,710,900	1.5	7
9	Bok Choi	5,897,200	0.9	9
10	Chickens (Meat)	4,946,400	0.8	10
—	All Others	52,164,600	8.1	—
	Total	*645,690,400*	*100.0*	

SOURCE: County of San Bernardino, Department of Agriculture/Weights and Measures, 2003
Values are approximate and drawn by the County from various sources.

Project Site

The proposed Countryside Specific Plan project site (Subarea 5 of the New Model Colony area) is located on seventeen parcels encompassing 178 acres, the majority of which are used for agricultural production. Dairy, poultry, and row crops have been produced on the site since at least 1995, when the *Ontario Sphere of Influence General Plan Amendment EIR* (SOI GPA EIR) was prepared, and continue on the site. Some acreage remains fallow, and some land currently houses equestrian uses. Agricultural uses on the project site are generally described below, by proposed neighborhood area.

- **Neighborhood 1**—Row crops and dairy
- **Neighborhood 2**—Row crops and nursery, all under *Williamson Act* contract
- **Neighborhood 3**—No agricultural uses
- **Neighborhood 4**—No agricultural uses
- **Neighborhood 5**—Dairy
- **Neighborhood 6**—Row crops in the western two thirds
- **Neighborhood 7**—Row crops in the southern third
- **Neighborhood 8**—Poultry farm on the southeastern half

The average value of the crops and uses on the project site are estimated in Table 3.1-2 by multiplying countywide averages identified in the 2003 Report with the estimated sizes of the cultivated/used parcels.

This amount equates to 1.5 percent of the value of those crops countywide and about one tenth of one percent of the total County crop value in 2003.

Table 3.1-2 Value of Agricultural Uses on the Project Site

Use	Acreage	Value per Acre ($ in 2003)	Value of Production (Estimated $)	Value of Production in County ($)	% o f County Value
Dairy [a]	38	1,151	43,796	29,092,300	0.2
Poultry [b]	8	495	3,960	7,641,400	0.1
Row Crops [c]	34	11	374	17,010,400	<0.1
Nursery	14	51,870	705,446	55,813,500	1.3
Total	*94*	*53,528*	*753,756*	*109,557,600*	*1.5*

SOURCES: County of San Bernardino, Department of Agriculture/Weights and Measures, 2003
Sollenberger, L. E. n.d. General Guidelines for Managing Pastures for Dairy Cows. University of Florida Extension. http://edis.ifas.ufl.edu/BODY_AG162
http://www.nass.usda.gov/ms/vol99-13.htm

[a] Assumes 2 cows/acre at an average 14 hundredweight (cwt.)/cow at an average value of 41.1 cwt (County avg.)

[b] Assumes avg. of 300 chickens/acre (2x free range density) at an average value of $1.65 per chicken (County avg.)

[c] Row Crops are assumed to be field crops, rather than fruits and nuts

Farmland and Soil Classifications

Several scales have been developed to identify the quality and suitability of undeveloped farmlands. Farmland is generally grouped into five types:

- Prime Farmland
- Unique Farmland
- Farmland of Statewide Importance
- Farmland of Local Importance
- Grazing land

Two additional, nonfarmland categories are "urban and built-up land," which encompasses developed areas, including parks and open space, and "other land," which does not meet the criteria of any other category. As shown in Figure 3-1, the majority of the New Model Colony area consists of agricultural or related uses, although urban and built-up land and other land are growing as development occurs and the total acreage of agricultural land in the New Model Colony area (and the City of Ontario) has declined. Substantial quantities of agricultural land are likely to be converted to nonagricultural (mostly urban) uses.

Prime Farmland

Two accepted definitions of prime agricultural land exist: the definition used by the federal government (United States Department of Agriculture [USDA]) and the definition used by the state (as articulated in the *California Land Conservation Act of 1965*, or *Williamson Act*). Because the *Williamson Act* definition includes USDA prime soils, all prime farmland within the project site, shown in Figure 3.1-2 (Prime Farmland in the Specific Plan Area), meets the *Williamson Act* criteria, but not necessarily USDA criteria. Both definitions are summarized below.

USDA Criteria for Prime Farmland

The USDA Natural Resources Conservation Service (NCRS, formerly the Soil Conservation Service [SCS]) defines "prime farmland" as:

> …land that is best suited for producing food, feed, forage, fiber, and oilseed crops and also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land but not urban built-up land or water). It has the soil quality, length of growing season, and moisture supply needed to produce a sustained high yield of crops economically when treated and managed, including water management, according to modern farming methods.

On a finer level, the specific properties of a particular soil determine its class, with the lower numbers being more suitable for agriculture. Classes I and II are considered inherently prime, and Class III may sometimes be considered prime with proper irrigation and/or cultivation practices. Variations exist in the form of particular inherent moisture regimes, specific water capacities, temperature ranges, and pH levels. Prime soils also have neither water table problems, nor a water table at excessive depth to allow cultivation of crops common to the area. Other considerations include topsoil coarseness, permeability, erosion factors, flooding frequency, and rooting depth. The definitions have been slightly modified for California soils: rooting depth in particular is not a national criterion.

Williamson Act *Criteria for Prime Farmland*

The *Williamson Act* definition of prime agricultural land includes land designated as prime by the USDA, but also includes additional economic considerations, which captures a wider variety of soils. Prime farmland under the *Williamson Act* meets any of the following criteria:

1. All land that qualifies for rating as class I or class II in the Soil Conservation Service (SCS) land use capability classifications
2. Land that qualifies for rating 80–100 in the Storie Index Rating
3. Land that supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture (USDA)
4. Land planted with fruit- or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars ($200) per acre
5. Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars ($200) per acre for three of the last five years

Prime Farmland in the County

The California Department of Conservation inventoried 44,738 acres of important farmland of all categories in the County of San Bernardino in 2000, as shown in Table 3.1-3. Despite some acquisition of farmland, all categories of important farmland experienced net decreases between 2000 and 2002, and important

farmland as a whole declined almost 15 percent by 2002, to 38,080. As shown in the table, the net loss of Prime Farmland accounts for about half of this decline. As development pressure increases throughout the County (and particularly in the New Model Colony Area), important farmland will continue to decrease.

Table 3.1-3 Important Farmland in San Bernardino County (2002)

Farmland Category	Total Inventoried		2000–2002 Acreage Changes			
	2000	2002	Lost (–)	Gained (+)	Total Changed	Net Changed
Prime Farmland	24,928	21,648	4,695	1,415	6,110	-3,280
Farmland of Statewide Importance	11,318	9,708	2,670	1,060	3,730	-1,610
Unique Farmland	3,676	3,412	977	713	1,690	-264
Farmland of Local Importance	4,816	3,312	1,774	270	2,044	-1,504
Important Farmland Subtotal	*44,738*	*38,080*	*10,116*	*3,458*	*13,574*	*-6,658*

SOURCE: California Department of Conservation, Farmland Mapping and Monitoring Program, 2002

Prime Farmland in the Specific Plan Area

According to the California Department of Conservation, the Countryside Specific Plan Area contains about 33.5 acres of prime farmland. This land is concentrated in the eastern portions of Neighborhoods 2 and 4, adjacent to Archibald Avenue, with a small area in the north-central portion of Neighborhood 7. About 23.2 acres of this Prime Farmland is under *Williamson Act* contract: contracted property is further described below.

Williamson Act Properties in the Specific Plan Area

According to the California Department of Conservation, the Countryside Specific Plan Area contains two *Williamson Act* properties, consisting of two parcels each, that collectively encompass a total of 52.26 acres. The two parcels that comprise proposed Neighborhood 2 encompass 23.2 acres (contract no. 72-384, also designated as Prime Farmland), while the two parcels that comprise proposed Neighborhoods 5 and 6 encompass 29.06 acres (contract no. 69-124). The owners of the 29.06-acre property in proposed Neighborhoods 5 and 6 filed a Notice of Nonrenewal for contract number 69-124 in the year 2000, and the *Williamson Act* contract for that property will expire in 2010. No notice of nonrenewal has been filed for contract number 72-384, which comprises propsed Neighborhood 2.[1]

[1] California Department of Conservation, Farmland Mapping and Monitoring Program. 2002. *San Bernardino County Important Farmland*, Sheet 2 of 2.

3.1.3 Regulatory Framework

California Land Conservation Act of 1965 (*the* Williamson Act)

California adopted the *Williamson Act* to preserve both prime and nonprime agricultural land for continued production. Participation in the *Williamson Act* program is voluntary, wherein property owners enter a minimum 10-year rolling contract with the respective city or county, in which they agree to commit the land to agricultural and/or a compatible use, as defined in the subsections quoted below, in return for property tax assessment based upon agricultural productivity, rather than upon the parcel's assessed market value, as described above in the Agricultural Resources section.

At the end of each year, another year is automatically appended to the contract term, so that the minimum commitment remains ten years. Only under extraordinary circumstances may a contract be canceled outright. However, the owner may decline to renew the contract (as specified in provisions of the Act) at any year's end, resulting in its expiration ten years hence, during which time the property taxes increase until eventually the taxes equal the land's assessed value at the end of the contract's term. The program has proven successful and now encompasses approximately 15.9 million acres, or more than half of the state's total farmland and more than one-third of all privately held land, according to the January 1997 issue of *California Farmer*.

To approve cancellation, the City Council must find that the cancellation is either (1) consistent with the purposes of the *Williamson Act* or (2) in the public interest (Gov. Code, §51282, subd. (a)). To support a finding that the cancellation is consistent with the purposes of the Act, the City Council must make the following findings:

(b)(1) The owner of the land has already served a notice of nonrenewal of the contract

(b)(2) The cancellation is not likely to result in the removal of adjacent lands from agricultural use

(b)(3) The cancellation is for an alternative use which is consistent with the applicable provisions of the relevant General Plan

(b)(4) The cancellation will not result in discontiguous patterns of urban development

(b)(5) There is no proximate noncontracted land which is both available and suitable for the proposed alternative use of the land, or development of the land would provide more contiguous patterns of urban development (Gov. Code, §51282, subd. (b))

To support a finding that the cancellation is in the public interest, the City Council must find the following:

(c)(1) Other public concerns substantially outweigh the objectives of the *Williamson Act*

(c)(2) There is no proximate noncontracted land which is both available and suitable for the proposed alternative use, or development of the land would provide more contiguous patterns of urban development (Gov. Code, §51282, subd. (c))

California Code of Regulations (Title 3, Food and Agriculture)

California Code of Regulations (CCR) Title 3, Sections 6000 to 6920 regulate the registration, management, use, and application of pesticides on agricultural lands. These regulations are enforced by the San Bernardino County Agricultural Commissioner's Office. Generally, specific regulations vary for each pesticide, its method of application and use. However, Sections 6600 and 6614 have some general regulations relating to the application of pesticide uses. Section 6600 provides regulations regarding general standards of care in the application of pesticides, and Section 6614 includes regulations that are intended to protect people, animals, and property, and which limit the conditions under which pesticides may be applied.

Applicable General Plan Policies

Applicable General Plan policies designed to protect agricultural operations have also been incorporated into the Ontario SOI GPA to reduce potential impacts to agricultural operations and loss of farmland. These are listed below.

Applicable SOI GPA Policies

Policy 2.1.2 *Adopt and enforce the provisions of the Right-to-Farm Ordinance and the state nuisance law (California Code Subsection 3482). Such an ordinance would require nonagricultural residents be made aware of the local agricultural operations, their practices, and the potential agriculturally related impacts (noise, odor, etc.). See Appendix A for a "Right to Farm" Ordinance example.*

Policy 2.3.2 *Create a Transitional Roadway Plan that minimizes the farm product transport/farm equipment conflicts with urban use related transport. Such a plan would identify existing routes essential to the transportation of farm products through remaining agricultural areas and through nonagricultural areas as needed to access regional transportation routes; prioritize those roads that will be first to convert to primarily serving urban uses; and establish roadway signage and markings to inform drivers that farm transport vehicles and machinery may be using the roads.*

Policy 2.3.3 *Require nonagricultural developments to include measures that prevent urban runoff flooding and silting from impacting the agricultural operations.*

Policy 2.3.4 *Inform new residents and property owners that existing agricultural uses may create nuisances such as flies, odors, dust, noise, night light, and chemical spraying.*

Policy 2.3.5 *Protect agricultural lands from trespass, theft, vandalism, roaming dogs, and comparable impacts from urban uses.*

3.1.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on Agricultural Resources if it would result in any of the following:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.
- Conflict with existing zoning for agricultural uses, or a *Williamson Act* contract.
- Involve other changes in the existing environment that, due to their location or nature, could result in the conversion of Farmland to nonagricultural use.

3.1.5 Project Impacts

Significant

Impact AG-1 The proposed project would result in the conversion of Prime Farmland to nonagricultural uses. This is considered a *significant and unavoidable* impact.

Implementation of the proposed project would convert 33.5 acres of designated Prime Farmland from agricultural to urban uses. As shown in Table 3.1-3, recent data from the California Department of Conservation indicate that in 2002 the County contained a total of 38,080 acres of important farmland. Over half of this land—21,648 acres—is classified as prime farmland. The conversion of a substantial portion of the Countryside Specific Plan Area from agricultural to the proposed uses would represent a reduction of the total amount of 0.09 percent of important farmland within the County, and a reduction of 0.15 percent of the total Prime Farmland in the County. Although the proportion of the total loss is low, the California Department of Conservation considers any loss of important farmland to be significant. Further, this conversion of farmland to nonagricultural uses would occur within an area previously designated by the County as an agricultural preserve. This loss of available agricultural land within the preserve would hinder efforts to maintain an economically viable agricultural preserve as a means to mitigate the impacts of farmland conversion throughout the County, as less farmland would be available for purchase or placement into easements. Therefore, this potential impact is considered significant.

Conversion of the agricultural land in the Ontario New Model Colony Area, with the exception of properties managed by the Southern California Agricultural Land Foundation (SoCALF), has been anticipated by the City of Ontario. Sections 5.1 (Land Use) and 5.2 (Agricultural Resources) of the Ontario SOI GPA EIR concluded that urbanization of the New Model Colony (previously the Sphere of Influence), of which the proposed project is a subarea, was likely to occur and would result in the loss of agricultural land. Although the Ontario SOI GPA EIR also concluded that existing *Williamson Act* contracts could slow the rate of loss or reduce the amount of loss, the degree to which this could occur was speculative.

Policies of the Ontario General Plan and SOI GPA were designed to protect existing agricultural operations by emphasizing the following:

- Recognize the right of agricultural operations to continue
- Requiring a right-to-farm ordinance
- Preventing inappropriate regulations
- Assisting farmers and agricultural landowners understand regulations

These measures provide some measure of protection from forced conversions, as well as information to prevent regulatory breaches that could jeopardize operations. Although these measures, taken together, could reduce the rate of conversion of agricultural land, none specifically proscribes against the conversion of farmland.

The City has not established an area for off-site acquisition of agricultural land, has not established any ratio of acquired easements to lost land, has not adopted a formal mechanism for the collection of fees to do so, and does not anticipate the establishment of any of the foregoing in the foreseeable future. Further, no land has been reserved for this purpose, and the purchase of the quantity of land necessary to implement any such scheme is speculative, for both economic and policy reasons due to the lack of available contiguous parcels of high-quality agricultural land in the project region, as well as rising land costs and competition for use of land for commercial and residential uses. The development and establishment of such a mitigation plan is not considered likely to occur prior to implementation of the proposed project. Consequently, this impact would remain ***significant and unavoidable***.

Impact AG-2 Implementation of the proposed project would result in conflicts with the *Williamson Act*. This is considered a *significant and unavoidable* impact.

As described above, the Countryside Specific Plan Area contains two *Williamson Act* properties, which encompass a total of 52.26 acres. The owners of the 29.06-acre property in proposed Neighborhoods 5 and 6 filed a Notice of Nonrenewal for contract number 69-124 in 2000, and the *Williamson Act* contract for that property will expire in 2010. Further, the applicant has filed plans for immediate cancellation of the existing Williamson Act contracts on Neighborhoods 5 and 6, concurrent with processing of Tentative Tract Maps for these neighborhoods. Additionally, no notice of nonrenewal has yet been filed for the remaining contract number 72-384 which comprises Neighborhood 2, and it is possible that the property owner would elect to cancel the contract to allow development. Any cancellation would be performed in accordance with the requirements of Government Code, § 51282, subd. (a). Development of urban uses (primarily residential uses) on a property under a *Williamson Act* contract would conflict with the Act, as these uses are considered to be incompatible with agriculture. Consequently, a conflict between the proposed uses and the *Williamson Act* is anticipated to occur, and this impact would be ***significant***. Further, because no feasible mitigation, due to the lack of available contiguous parcels of high-quality agricultural land in the project region, as well as rising land costs and competition for use of land for commercial and residential uses, is available to reduce this impact, this impact would remain ***significant and unavoidable***.

Impact AG-3 The proposed project would involve other changes in the existing environment that would result in the conversion of Farmland to nonagricultural use. This is considered a *significant and unavoidable* impact.

The project would result in the conversion of agricultural uses to nonagricultural uses, as described above in Impact AG-1. This would be considered a potentially significant impact. Further, the development of the Countryside Specific Plan Area would occur as part of a wider pattern of development in the New Model Colony area, and other agricultural land would likely be converted to nonagricultural use as a part of the New Model Colony development (described further below in Section 3.1.6 [Cumulative Impacts]), the Countryside Specific Plan could promote such urban growth by contributing to the encirclement of other agricultural land with urban development. Although development proposals for substantial portions of the New Model Colony area are already pending, as described in Chapter 2 (Project Description), and the proposed project intends only to develop property within the Countryside Specific Plan Area (Subarea 5 of the New Model Colony), development under the /countryside Specific Plan could facilitate the conversion of farmland outside of the Specific Plan Area. Consequently, implementation of the proposed project could result in the conversion of farmland that is not located within the project boundaries to nonagricultural use.

Ontario SOI GPA Policy 2.1.2 and project-specific MM AG-1-SP (which is described below in Section 3.1.7 [Mitigation Measures and Residual Impacts]) require, respectively, the creation of a right-to-farm ordinance and the provision of deed disclosures to buyers of property near agricultural operations. The deed disclosures would ensure that new residents within the Countryside Specific Plan Area are aware of nearby agricultural operations and the effects of these operations, thereby reducing potential conflicts between agricultural and other uses. The right-to-farm ordinances also protect against the forced sale or conversion of agricultural lands within the Ontario Countryside Specific Plan Area, as well as the greater NMC area.

Despite this policy and mitigation measures, the proposed project would still increase economic and other pressures to convert agricultural uses to urban uses, which could indirectly result in the conversion of land outside the Countryside Specific Plan Area, and although adopted City mechanisms (right-to-farm ordinances) exist to substantially reduce potential pressure to convert agricultural land to other uses, and project-specific mitigation measure MM AG-1-SP would serve to minimize conflicts between agricultural and other uses within the project area, this impact would remain ***significant and unavoidable***.

3.1.6 Cumulative Impacts

Throughout the County of San Bernardino, pending development proposals exist that would result in the conversion of agricultural land to nonagricultural land; Section 2.9 (Cumulative Projects and Impact Analysis Methodology) lists five other specific plans have been proposed within the New Model Colony Area alone. Each of these proposals would result in the conversion of agricultural land to nonagricultural (primarily residential) uses. As shown in Table 3.1-3, important farmland in the County has declined by 15 percent from 2000 to 2002, and as described in Section 5.2 (Agriculture) of the SOI GPA EIR, almost all of the approximately 3,000 acres of prime agricultural land in the New Model Colony will eventually be developed. Therefore, this trend is likely to continue as development pressure throughout the City and

County increases. Further, because no feasible mitigation, due to the lack of available contiguous parcels of high-quality agricultural land in the project region, as well as rising land costs and competition for use of land for commercial and residential uses, is available to reduce this impact, cumulative impacts would be significant. The loss of this prime farmland and the indirect incentive provided by the project to cancel other *Williamson Act* contracts on adjacent agricultural land is considered to be a significant cumulative impact, and the contribution of the proposed project, although small as a percentage, would still constitute a cumulatively considerable contribution. Consequently, the cumulative impact of the proposed project on Prime Farmland and the conversion of agricultural uses would be significant.

3.1.7 Mitigation Measures and Residual Impacts

Ontario SOI GPA EIR Mitigation Measures

No SOI GPA EIR mitigation measures would apply.

Project-Specific Mitigation Measures

The following mitigation measure would be required of the proposed project.

MM AG-1-SP Deed Disclosure—*In order to reduce conflicting issues between sensitive receptors and agricultural uses, all residential units in the Countryside Specific Plan area shall be provided with a deed disclosure or similar notice approved by the City Attorney regarding the proximity and nature of neighboring agricultural uses. This disclosure shall be applied at the tentative map stage to the affected properties, or otherwise prior to finalizing the sale or rental agreement of any property. The written disclosure shall be supplied to the property purchaser or renter by the vendor or vendor's agent. The content and text of the disclosure shall be approved by the City Attorney, and shall include language to inform new residents that existing agricultural uses may create nuisances such as flies, odors, dust, night light, and chemical spraying.*

No additional project-specific mitigation is available to reduce Impacts AG-1 and AG-2 due to the lack of available contiguous parcels of high-quality agricultural land in the project region, as well as rising land costs and competition for use of land for commercial and residential uses. The City has no adopted mechanism for off-setting the loss of agricultural land or prime farmland, and any effort to do so through other agencies, such as the County of San Bernardino, would be outside of the jurisdiction of the City to require. Further, the Countryside Specific Plan Area—and the entire New Model Colony area—is located within the area designated by the County (prior to annexation by the City) as an agricultural preserve. The conversion of land within this preserve area would, therefore, also represent a loss of opportunity to mitigate potential agricultural land losses due to development, absent a superseding area or procedure established in the place of the preserve.

Section 15364 of the CEQA Guidelines defines "feasible" as, "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and

technological factors." Because the City cannot reasonably anticipate adoption of an agricultural mitigation program within any reasonable period of time, establishment of such a program is not considered feasible.

Further, as described above, in Impact AG-3, although MM AG-1-SP would reduce development pressure on agricultural lands adjacent to urban uses, the proposed project could, as described above, facilitate the conversion of farmland to urban uses by making such conversions more easy to justify, based on adjacency or encirclement by other urban uses (including the proposed project). This could increase the incentive—and, therefore, the economic pressure—to develop. Even though this effect is indirect, it remains a foreseeable consequence of the proposed project, and because no mitigation is available to reduce Impact AG-3 to a less-than-significant level, this impact would remain significant and unavoidable.

3.2 AIR QUALITY

3.2.1 Introduction

This section evaluates the potential impacts on air quality resulting from implementation of the proposed Countryside Specific Plan project. This includes the potential for the proposed project to conflict with or obstruct implementation of the applicable air quality plan, violate an air quality standard or contribute substantially to an existing or projected air quality violation, result in a cumulatively considerable net increase of any criteria pollutant for which the project region is not in attainment, or expose sensitive receptors to substantial pollutant concentrations. The potential impact associated with the creation of objectionable odors that would affect a substantial number of people resulting from implementation of the proposed project was scoped out in the Initial Study (Appendix A) because the proposed project does not propose and would not facilitate uses that would be significant sources of objectionable odors. As such, this issue will not be addressed in the EIR.

Data used to prepare this section were taken from various sources, including the South Coast Air Quality Management District (SCAQMD) *CEQA Air Quality Handbook* and the 2003 Air Quality Management Plan (AQMP), and the City of Ontario (the City) Natural Resources Element. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this EIR.

3.2.2 Existing Conditions

Climate

The City of Ontario is located within the South Coast Air Basin (Basin), named so because its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys or basins below. This area includes all of Orange County and the nondesert portions of Los Angeles, San Bernardino, and Riverside Counties. The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity.

The City of Ontario is located in southwestern San Bernardino County (the County). The City experiences a Mediterranean-like climate with moderate temperatures & low humidity year-round. The average median temperature in the City is 83 degrees Fahrenheit (°F) and the average annual rainfall is approximately 16.1 inches. The area also experiences a typical daily wind pattern that is a daytime onshore sea breeze (from the west) and a nighttime land breeze. This regime is broken only by occasional winter storms and infrequent strong northeasterly (from the northeast) Santa Ana winds from the mountains and deserts north of the Basin. On practically all spring and early summer days, the daily wind patterns flush much of the Basin of high levels of air pollutants. From late summer through the winter months, the flushing is less pronounced because of lighter wind speeds. The air quality within the Basin is primarily influenced by a

wide range of emissions sources—such as dense population centers, heavy vehicular traffic, and industry—and meteorology.

Air Quality Background

Air pollutant emissions within the Basin are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources are usually subject to a permit to operate from the SCAQMD, occur at specific identified locations, and are usually associated with manufacturing and industry. Examples of point sources are boilers or combustion equipment that produce electricity or generate heat, such as heating, ventilation, and air conditioning (HVAC) units. Area sources are widely distributed and produce many small emissions, and they do not require permits to operate from the SCAQMD. Examples of area sources include residential and commercial water heaters, painting operations, portable generators, lawn mowers, agricultural fields, landfills, and consumer products, such as barbeque lighter fluid and hairspray, the areawide use of which contributes to regional air pollution. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources are those that are legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and construction vehicles. Mobile sources account for the majority of the air pollutant emissions within the Basin. Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of specific pollutants, referred to as "criteria pollutants," in order to protect public health. The national and state ambient air quality standards have been set at concentration levels to protect the most sensitive persons from illness or discomfort with a margin of safety. Applicable ambient air quality standards are identified later in this EIR section. The SCAQMD is responsible for bringing air quality within the Basin into attainment with the national and state ambient air quality standards.

The criteria pollutants for which federal and state standards have been promulgated and that are most relevant to air quality planning and regulation in the Basin are ozone, carbon monoxide, fine suspended particulate matter, sulfur dioxide, and lead. In addition, toxic air contaminants are of concern in the Basin. Each of these is briefly described below.

- *Ozone* is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.
- *Carbon Monoxide (CO)* is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary

source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- *Respirable Particulate Matter (PM_{10})* and *Fine Particulate Matter ($PM_{2.5}$)* consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.
- *Nitrogen dioxide (NO_2)* is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered) as well as point sources, especially power plants. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitors.
- *Sulfur dioxide (SO_2)* is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO_4). Together, these pollutants are referred to as sulfur oxides (SO_x).
- *Lead (Pb)* occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles so the majority of such combustion emissions are associated with off-road vehicles such as race cars. Other sources of lead include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.
- *Toxic Air Contaminants* refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. They include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. Toxic air contaminants are different than "criteria" pollutants in that ambient air quality standards have not been established for them, largely because there are hundreds of air toxics and their effects on health tend to be local rather than regional.

Existing Regional Air Pollution Sources

Air pollution sources can be grouped into three categories: mobile sources, area-wide sources, and stationary sources. Mobile sources include all on-road vehicles as well as off-road mobile equipment, watercraft, and trains. Area-wide sources are stationary, but typically occur throughout developed areas. These sources include use of products such as fertilizers, paints, and sprays, and fuel combustion at residences. Additionally, area-wide sources also include processes such as farming operations, construction and demolition activities, and paved road dust sent airborne by traveling vehicles. Stationary sources include industrial sources and facilities. Additional emissions are also generated by natural sources such as wildfires. The inventory of emissions for each of the state's air basins is maintained by the California Air Resources Board (ARB) and the local air district (in the Basin, it is the SCAQMD). The emission inventory for San Bernardino County and the entire Basin is summarized in Table 3.2-1.

Table 3.2-1 Estimated Annual Average Emissions in Year 2004 (Tons Per Day—Annual Average)

	CO	NOx	VOC	SOx	PM_{10}	$PM_{2.5}$
San Bernardino County						
On-Road Motor Vehicle Emissions	404.44	90.38	38.62	0.65	2.50	1.70
Total Emissions (All Sources)	650.90	271.53	118.59	9.73	141.85	46.06
South Coast Air Basin						
On-Road Motor Vehicle Emissions	3,160.0	641.80	318.1	4.50	18.80	12.90
Total Emissions (All Sources)	4,447.0	1,044.8	804.30	62.9	290.40	105.60

SOURCES: ARB, Emissions Inventory Branch, Emissions by Category, 2003, 2004.
Notes: Emissions from natural vegetation are excluded for all source categories.

Within the Basin, exhaust emissions from on-road motor vehicles are the primary source of VOCs, NOx, and CO, while paved road dust sent airborne by traveling vehicles is the primary source of particulate matter. Area-wide and stationary sources make up the remainder of the emission inventory in the region.

Over the past few decades, air pollution levels in the State have improved significantly due to aggressive controls on vehicles and industry. However, despite this significant success in reducing overall pollution levels, air pollution continues to be an important public health problem. California's climate and geography are conducive to the formation and accumulation of air pollution (especially in Los Angeles and the Central Valley). These factors, combined with increasing population and economic growth, the dramatically increasing number of vehicle miles traveled, and other various factors render it difficult to reduce pollution levels.

The criteria pollutants that are most relevant in the Basin are linked to human health effects. As discussed previously, particulate matter is regulated in coarse and fine fractions, with $PM_{2.5}$ constituting the fine fraction and PM_{10} constituting the coarse fraction. The health effects from long-term exposure to high concentrations of particulate matter are increased risk of chronic respiratory disease like asthma and decreased lung function in children. Short-term exposure to high levels of particulate matter has been shown to increase the number of people seeking medical treatment for respiratory distress, and to increase mortality among those with severe respiratory problems. Particulate matter also results in reduced visibility. Ozone in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. Exposure to levels of ozone above the current ambient air quality standard leads to lung inflammation and lung tissue damage, and a reduction in the amount of air inhaled into the lungs. The health effects resulting from exposure to CO include chest pain, headaches, and reduced mental alertness, while exposure to NOx primarily results in lung damage. The health effects associated with each of the criteria air pollutants as well as toxic air contaminants in the Basin are shown in Table 3.2-2.

Table 3.2-2 Health Effects Summary of the Major Criteria Air Pollutants in the Basin

Air Pollutant	*Adverse Effects*
Ozone	Breathing difficulties
	Lung Tissue Damage
	Eye irritation
Carbon Monoxide	Reduced mental alertness
	Impairment of oxygen transport in the blood stream
	Aggravation of cardiovascular disease
	Impairment of central nervous system function
	Fatigue, headache, confusion, dizziness
	Fatal in the case of very high concentrations in enclosed places
Nitrogen Dioxide	Lung irritation and damage
	Risk of acute and chronic respiratory illness
Sulfur Dioxide	Increases lung disease and breathing problems for asthmatics
	Aggravation of chronic obstruction lung disease
	Increased risk of acute and chronic respiratory illness
Lead	Learning disabilities
	Brain and kidney damage
	Impairment of blood functions and nerve constriction
Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$)	Increased respiratory disease
	Lung damage
	Cancer
	Premature death
	Reduced visibility
Toxic Air Contaminants	Cancer
	Chronic eye, lung, or skin irritation
	Neurological and reproductive disorders

SOURCES: ARB: http://www.arb.ca.gov/research/health/fs/fs2/fs2.htm, accessed June 28, 2005; Bay Area Air Quality Management District (BAAQMD) 1999

Existing Regional Air Quality

Measurements of ambient concentrations of the criteria pollutants are used by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board to assess and classify the air quality of each air basin, county, or, in some cases, a specific urbanized area. The classification is determined by comparing actual monitoring data with national and state and federal standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in "attainment" in that area. If the pollutant exceeds the standard, the area is classified as a "non attainment" area. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

The entire Basin is designated as a national-level extreme nonattainment area for ozone, meaning that national ambient air quality standards are not expected to be met for more than seventeen years, and a nonattainment area for CO and PM_{10}. The Basin has recently improved from nonattainment to attainment status with respect to the national standard for nitrogen dioxide (NO_2), a pure form of NOx. The Basin is a state-level nonattainment area for ozone, CO (Los Angeles County only), and PM_{10}. It is in attainment of both the national and state ambient air quality standards for SO_2 and lead.

The SCAQMD divides the Basin into thirty-eight source receptor areas (SRAs) in which thirty-two monitoring stations operate to monitor the various concentrations of air pollutants in the region. The City of Ontario is located within SRA 33, which covers the southwest San Bernardino Valley area. The ARB also collects ambient air quality data through a network of air monitoring stations throughout the state. This data is summarized annually and is published in the ARB's California Air Quality Data Summaries. One of the monitoring stations, the Upland Station, provides the data most relevant to the project because it is located approximately 9 miles from the project site. This station currently monitors emission levels of ozone, CO, and NOx, but does not monitor the pollutant levels of PM_{10}, $PM_{2.5}$, and SOx. The air quality monitoring station closest to the project site that monitors the emission levels of PM_{10}, $PM_{2.5}$, and SOx is the Fontana station. Table 3.2-3 (Summary of Ambient Air Quality in the Project Vicinity) identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at these two air quality monitoring stations through the period of 2002 to 2004.

According to air quality data shown in Table 3.2-3, the state 1-hour ozone standard was exceeded a total of 115 days from year 2002 to 2004 within SRA 33, while the national 1-hour and 8-hour ozone standards were exceeded in 23 and 71 days, respectively. In addition, no national or state standards for CO or NO_2 have been exceeded over the last three years in SRA 33. According to data from the Fontana monitoring station, the national 24-hour PM_{10} standard has not been exceeded over the last three years, while the state PM_{10} standard has been exceeded in 90 days during this time. The national 24-hour $PM_{2.5}$ standard has been exceeded in 3 days over the last three years. Furthermore, no national or state standards for SO_2 have been exceeded over the last three years.

Existing Local Air Quality

The project site is located in Subarea 5 of the City of Ontario's New Model Colony (NMC). The NMC is an 8,200-acre area presently used for commercial dairy and agricultural operations that was annexed to the City from the County of San Bernardino in 1999. The project site consists of 178 acres, and the existing on-site uses primarily include agricultural production, specifically current and former dairy farm uses, agricultural fields, a nursery/greenhouse, and a poultry farm. Portions of the project site contain empty fields that are waiting for cultivation in the commonly used crop rotation method. A few residential uses are also located sporadically on the project site.

The project site is bordered on the north and east sides by existing urban development, and on the south and west sides by other undeveloped NMC subareas. Specifically, the project area is surrounded by single-family

residential and recreational uses (Westwind Park and Whispering Lakes Golf Course) to the north, residential uses and a neighborhood commercial center to the east (at the intersection of Riverside Drive and Archibald Avenue), the Cucamonga Channel and detention basins to the west, across which are agricultural uses (Subareas 4 and 11), and agricultural uses to the south (Subarea 18). These surrounding areas are all located within the boundaries of the City.

Table 3.2-3 Summary of Ambient Air Quality in the Project Vicinity

Air Pollutants Monitored Within SRA 33— Southwest San Bernardino Valley	*Year*		
	2002	*2003*	*2004*
Ozone (O_3)[1]			
Maximum 1-hour concentration measured	0.139 ppm [a]	0.155 ppm	0.138 ppm
Number of days exceeding national 0.12 ppm 1-hour standard	5	15	3
Number of days exceeding state 0.09 ppm 1-hour standard	36	48	31
Maximum 8-hour concentration measured	0.116 ppm	0.134 ppm	0.104 ppm
Number of days exceeding national 0.08 ppm 8-hour standard	19	34	18
Respirable Particulate Matter (PM_{10})[2]			
Maximum 24-hour concentration measured	102.0 µg/m^3[b]	101.0 µg/m^3	118.0 µg/m^3
Number of days exceeding national 150 µg/m^3 24-hour standard	0	0	0
Number of days exceeding state 50 µg/m^3 24-hour standard	31	27	32
Fine Particulate Matter ($PM_{2.5}$)[2]			
Maximum 24-hour concentration measured	66.6 µg/m^3	98.1 µg/m^3	71.4 µg/m^3
Number of days exceeding national 65.0 µg/m^3 24-hour standard	1	1	1
Carbon Monoxide (CO)[1]			
Maximum 8-hour concentration measured	1.71 ppm	2.71 ppm	2.20 ppm
Number of days exceeding national 9.5 ppm 8-hour standard	0	0	0
Number of days exceeding state 9.0 ppm 8-hour standard	0	0	0
Nitrogen Dioxide (NO_2)[1]			
Maximum 1-hour concentration measured	0.122 ppm	0.115 ppm	0.106 ppm
Number of days exceeding state 0.25 ppm 1-hour standard	0	0	0
Annual average	0.036 ppm	0.034 ppm	0.031 ppm
Does measured annual average exceed national 0.0534 ppm annual average standard?	No	No	No
Sulfur Dioxide (SO_2)[2]			
Maximum 24-hour concentration measured	0.005 ppm	0.004 ppm	0.003 ppm
Number of days exceeding national 0.14 ppm 24-hour standard	0	0	0
Number of days exceeding state 0.04 ppm 24-hour standard	0	0	0

SOURCES: ARB 2002, 2003, 2004

1. Data is taken from the Upland monitoring station.
2. Data is taken from the Fontana monitoring station.

[a] ppm = parts by volume per million of air.

[b] µg/m^3 = micrograms per cubic meter.

Air pollutant emissions are generated in the local vicinity by stationary sources, such as space and water heating, landscape maintenance from leaf blowers and lawn mowers, consumer products, commercial operations, and mobile sources, primarily automobile and truck traffic. In addition, odors associated with cattle and dairy operations are also generated in the local vicinity due to the presence of existing agricultural dairy farms in the general area. While significant amounts of methane gas may be generated by the dairy cow emissions, methane is not considered a criteria pollutant of concern by the federal and state governments. As such, motor vehicles are the primary source of criteria pollutants in the local vicinity.

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed national and/or state standards for CO are termed CO "hotspots." Section 9.l4 of the SCAQMD's CEQA Air Quality Handbook identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots. The SCAQMD defines typical sensitive receptors as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Schools, childcare centers, long-term health care facilities, convalescent centers, and retirement homes are considered to be sensitive receptors to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time, and thus could be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function.

The SCAQMD recommends the use of CALINE4, a dispersion model for predicting CO concentrations, as the preferred method of estimating pollutant concentrations at sensitive receptors near congested roadways and intersections. For each intersection analyzed, CALINE4 adds roadway-specific CO emissions calculated from peak hour turning volumes to ambient CO air concentrations. For this analysis, localized CO concentrations were calculated based on a simplified CALINE4 screening procedure developed by the Bay Area Air Quality Management District and utilized by the SCAQMD. The simplified model is intended as a screening analysis, which identifies a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations.

Maximum eight-hour CO concentrations were calculated for the intersections evaluated in the traffic report for the proposed project that have receptors in close proximity to the roadways. For the purpose of this analysis, receptors are any of the sensitive receptor types identified previously, as well as any location where people would be required (as in a work site) to be located for one to eight hours. The results of these calculations are presented in Table 3.2-4 (Existing Localized Carbon Monoxide Concentrations) for representative receptors located 25, 50, and 100 feet away from each roadway. These distances were selected because they represent locations where a person may be living or working for more than one or eight hours at a time. The national 1-hour standard is 35.0 parts per million (ppm), and the state 1-hour standard is 20.0 ppm. The 8-hour national and state standards are 9.5 ppm and 9.1 ppm, respectively.

As shown, under worst-case conditions, existing CO concentrations near these intersections do not exceed national or state ambient air quality standards. Therefore, CO hotspots do not exist near these intersections.

Table 3.2-4 Existing Localized Carbon Monoxide Concentrations

Intersection	8-Hour CO Concentrations in Parts per Million [a]		
	25 Feet away	50 Feet away	100 Feet away
Vineyard Avenue and SR-60 WB Ramps	2.8	2.6	2.5
Vineyard Avenue and SR-60 EB Ramps	2.7	2.6	2.5
Vineyard Avenue and Walnut Avenue	2.7	2.6	2.5
Vineyard Avenue and Riverside Drive	2.8	2.6	2.5
Archibald Avenue and SR-60 WB Ramps	2.8	2.7	2.6
Archibald Avenue and SR-60 EB Ramps	2.8	2.7	2.6
Archibald Avenue and Riverside Drive	2.8	2.7	2.6
Archibald Avenue and Chino Avenue	2.6	2.5	2.4
Archibald Avenue and Edison Avenue	2.6	2.5	2.5
Turner Avenue and Riverside Drive	2.9	2.8	2.6
Turner Avenue and Chino Avenue	2.3	2.3	2.3
Haven Avenue and Riverside Drive	2.7	2.6	2.5

SOURCE: EIP Associates 2004 (calculation sheets are provided in Appendix B)

[a] National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.

Existing Site Emissions

The proposed project site currently consists of 178 acres of land that is primarily used for agricultural production along with dairy farm uses. The existing on-site uses include agricultural production, specifically current and former dairy farm uses, agricultural fields, a nursery/greenhouse, and a poultry farm. As such, emissions may be generated at the project site by some space and water heating or landscape maintenance equipment. Motor vehicles are the primary source of air pollutant emissions associated with the project site.

3.2.3 Regulatory Framework

Air quality within the Basin is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality within the Basin are discussed below.

Federal

United States Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the National Ambient Air Quality Standards for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives.

As part of its enforcement responsibilities, the EPA requires each state with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the national standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP.

State

California Air Resources Board

The California Air Resources Board (ARB), a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the ARB conducts research, sets California Ambient Air Quality Standards, compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. The ARB establishes emissions standards for motor vehicles sold in California, consumer products (e.g., hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

Regional

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), County transportation commissions, and local governments and cooperates actively with all federal and state government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of air quality management plans (AQMPs). The most recent of these was adopted by the Governing Board of the SCAQMD on August 1, 2003, which updates and revises the previous 1997 AQMP. This AQMP, referred to as the 2003

AQMP, was prepared to comply with the federal and state *Clean Air Acts* and amendments, to accommodate growth, to reduce the high pollutant levels in the Basin, to meet federal and state ambient air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy. The purpose of the 2003 AQMP for the Basin is to set forth a comprehensive program that will lead this area into compliance with all federal and state air quality planning requirements. Compared with the 1997 AQMP, the 2003 AQMP utilizes revised emissions inventory projections that use 1997 as the base year, the ARB on-road motor vehicle emissions model EMFAC2002, and SCAG 2001 Regional Transportation Plan (RTP) forecast assumptions; updates the attainment demonstration for the federal standards for ozone and PM_{10}; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal NO_2 standard that the Basin has met since 1992. In terms of working towards ozone attainment, the 2003 AQMP builds upon the 1997 AQMP and 1999 Amendments to the Ozone SIP. In terms of PM_{10}attainment, the PM_{10}control strategy in the 1997 AQMP has been augmented by a number of additional PM_{10}control measures.

The 2003 AQMP also addresses several federal and state planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. Specifically, the 2003 AQMP is designed to satisfy the *California Clean Air Act* (CCAA) tri-annual update requirements and fulfill the District's commitment to update transportation emission budgets based on the latest approved motor vehicle emissions model and planning assumptions.

The 2003 AQMP control measures consist of (1) the District's Stationary and Mobile Source Control Measures, (2) State Control Measures proposed by the ARB, and (3) Transportation Control Measures provided by SCAG. Overall, there are twenty-eight stationary and twenty-one mobile source measures that are defined under the 2003 AQMP. These measures primarily rely on the traditional command-and-control approach facilitated by market incentive programs as well as advanced technologies expected to be implemented by 2010. The proposed control measures in the 2003 AQMP are based on implementation of all feasible control measures through the application of available technologies and management practices as well as advanced technologies and control methods. The basic principles used in designing the District's control strategy were to (1) meet at least the same overall remaining emissions target committed to in the 1997/1999 SIP; (2) replace long-term measures with more specific near-term measures, where feasible, and (3) develop new short-term control measures and long-term strategies to achieve the needed reductions for attainment demonstration. Principle control measures of the 2003 AQMP focus on adoption of new regulations or enhancement of existing 1997 AQMP regulations for stationary sources and implementation/facilitation of advanced transportation technologies (i.e., zero emission and alternative-fueled vehicles and infrastructure, fuel cell vehicles, heavy-duty electric and hybrid-electric vehicles, and both capital and noncapital transportation improvements). Capital improvements consist of high-occupancy vehicle (HOV) lanes; transit improvements; traffic flow improvements; park-and-ride and intermodal facilities; and urban freeway, bicycle, and pedestrian facilities. Noncapital improvements consist of rideshare matching and transportation demand management activities derived from the congestion management program.

Programs set forth in the 2003 AQMP require the cooperation of all levels of government: local, regional, state, and federal. Each level is represented in the Plan by the appropriate agency or jurisdiction that has the authority over specific emissions sources. Accordingly, each agency or jurisdiction is associated with specific planning and implementation responsibilities.

Local

City of Ontario

Local jurisdictions, such as the City of Ontario, have the authority and responsibility to reduce air pollution through police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City of Ontario is also responsible for the implementation of transportation control measures as outlined in the applicable AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

City of Ontario General Plan

The City of Ontario General Plan Natural Resources Element contains a goal along with policies applicable to the area of air quality relative to the proposed project, as follows:

Goal 2.0 *Support and reinforce regional air quality plans and programs.*

Policy 2.7 *Promote other transit forms (bikeways, walking) as an alternative to automobiles.*

Policy 2.11 *Encourage landscaping that most effectively aids in reducing air pollutants.*

City of Ontario Municipal Code

Article 33 (Environmental Performance Standards) in Chapter 1 (Zoning and Land Use Requirements) of the City of Ontario Municipal Code serves to ensure that residential neighborhoods and the business community in the City would be free from the environmental hazards of noise, vibration, dust, glare and other negative influences, and that the City would contribute to regional efforts to protect and enhance the environmental quality of life. Relevant requirements that are applicable to the proposed project include the following:

- **Sec. 9-1.3315: Dust and paint**
  All uses, including grading, construction and operational phases, shall be conducted in a manner so as to prevent dust emissions and paint overspray from creating hazardous or potentially hazardous conditions within the site and surrounding area.

Parcels located within the Soil Erosion Control Area (reference Figure HA-3 of the General Plan) are required to obtain Dust Control Permits from the Building Department prior to commencement of grading operations.

- **Sec. 9-1.3320: Smoke**
  Smoke emission shall be controlled in accordance with the standards of the South Coast Air Quality Management District.
- **Sec. 9-1.3345: Odors and gasses**
  The emission of obnoxious odors of any kind shall not be permitted.
  No gas shall be emitted which is injurious to the public health, safety or general welfare.

Applicable Ontario SOI GPA Policies

Policy 11.3.3 *Actively support the County of San Bernardino's Congestion Management Plan.*

Policy 11.4.3 *Require that development within the Sphere of Influence be consistent with the provisions of the Countywide Congestion Management Program.*

Policy 11.5.2 *Integrate the Transportation Mobility Plan with the Congestion Management Planning process to identify and develop necessary transportation services, and assist land use and urban design decision making.*

Policy 25.1.1 *Continue to enforce the following:*

- *During all construction activities, construction contractors shall use low emission mobile construction equipment where feasible to reduce the release of undesirable emissions.*
- *During all construction activities, construction contractors shall encourage rideshare and transit programs for project construction personnel to reduce automobile emission.*
- *During all grading and site disturbance activities, construction contractors shall water active sites at least twice a day, and clean construction equipment in the morning and/or evening to reduce particulate emissions and fugitive dust.*
- *During all construction activities, construction contractors shall, as necessary, wash truck tires leaving the site to reduce the amount of particulate matter transferred to paved streets as required by SCAQMD Rule 403.*
- *During all construction activities, construction contractors shall sweep on and offsite streets if silt is carried to adjacent public thoroughfares, as determined by the City Engineer to reduce the amount of particulate matter on public streets.*
- *During all construction activities, construction contractors shall limit traffic speeds on all unpaved road surfaces to 15 miles per hour or less to reduce fugitive dust.*
- *During grading and all site disturbance activities, at the discretion of the City Planner, construction contractors shall suspend grading operations during first and second stage smog alerts to reduce fugitive dust.*
- *During grading and all site disturbance activities, at the discretion of the City Planner, construction contractors shall suspend all grading operations when wind speeds (including instantaneous gusts) exceed 25 miles per*

hour to reduce fugitive dust. 8 Air Quality policies are included in this General Plan. In order to maintain consistency with the Draft General Plan's numbering sequence, Air Quality Policy numbers are out of sequence.

- *During all construction activities, the construction contractors shall maintain construction equipment engines by keeping them tuned.*
- *During all construction activities, the construction contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.*
- *During all construction activities, the construction contractors shall use existing onsite electrical power sources to the maximum extent practicable. Where such power is not available, the Contractor shall use clean fuel generators during the early stages of construction to minimize or eliminate the use of portable generators and reduce the release of undesirable emissions.*
- *During all construction activities, the construction contractors shall use low emission, on site stationary equipment (e.g., clean fuels) to the maximum extent practicable to reduce emissions, as determined by the City Engineer.*
- *During all construction activities, the construction contractors, in conjunction with the City Engineer, shall locate construction parking to minimize traffic interference on local roads.*
- *During all construction activities, the construction contractors shall ensure that all trucks hauling dirt, sand, soil, or other loose materials are covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of the California Vehicle Code Section 23114 to reduce spilling of material on area roads.*

3.2.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on air quality if it would result in any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)
- Expose sensitive receptors to substantial pollutant concentrations

As the agency principally responsible for comprehensive air pollution control in the Basin, the SCAQMD recommends that projects should be evaluated in terms of air pollution control thresholds established by the SCAQMD and published in the *CEQA Air Quality Handbook*. These thresholds were developed by the SCAQMD to provide quantifiable levels that projects can be compared to. The City utilizes the SCAQMD's thresholds that are recommended at the time that development projects are proposed to assess the

significance of quantifiable impacts. The following quantifiable thresholds are currently recommended by the SCAQMD and are used to determine the significance of air quality impacts associated with the proposed project.

Construction Emissions Thresholds

The SCAQMD currently recommends that projects with construction-related emissions that exceed any of the following emissions thresholds should be considered significant:

- 550 pounds per day of CO
- 75 pounds per day of VOC
- 100 pounds per day of NOx
- 150 pounds per day of SOx
- 150 pounds per day of PM_{10}

Operational Emissions Thresholds

The SCAQMD currently recommends that projects with operational emissions that exceed any of the following emissions thresholds should be considered significant. These thresholds apply to individual development projects only; they do not apply to cumulative development.

- 550 pounds per day of CO
- 55 pounds per day of VOC
- 55 pounds per day of NOx
- 150 pounds per day of SOx
- 150 pounds per day of PM_{10}

In order to assess cumulative impacts, the SCAQMD recommends that projects be evaluated to determine whether they would be consistent with AQMP performance standards and emission reduction targets. In the case of the proposed project, air pollutant emissions would be considered to be cumulatively considerable if the new sources of emissions exceeded approved emission targets.

3.2.5 Project Impacts

Potentially Significant

Impact AQ-1 Peak construction activities associated with the proposed project would generate emissions that exceed SCAQMD thresholds. This is considered a *significant and unavoidable* impact.

Construction activities associated with the proposed project are expected to occur over a period of years. Four basic types of activities would be expected to occur and generate air pollutant emissions during construction. First, some existing structures within the project site would be demolished and existing surface features cleared. Following demolition, the development sites would be excavated and/or graded to

accommodate the new residential structures and surface improvements. The new residential structures would then be constructed and readied for use. Finally, new landscaping would be planted around and within the project site. These activities would occur in several phases throughout the development period of the project.

Because of the programmatic nature of the Countryside Specific Plan, the planned construction time frame, and the normal day-to-day variability in construction activities, it is difficult, if not impossible, to accurately quantify the daily emissions associated with the proposed construction activities. Nonetheless, in an effort to provide a quantifiable analysis of construction emissions associated with the proposed project, the daily emissions have been estimated for the longest construction phase associated with the proposed project. As discussed in Chapter 2 (Project Description), the different residential neighborhoods proposed by the Countryside Specific Plan would be constructed in separate phases (one phase for each residential neighborhood), with no overlap in construction periods for each phase. As such, construction emission levels have been projected based upon the longest individual construction phase that is projected for the Countryside Specific Plan area. The construction emissions associated with the longest construction phase would represent the peak construction emission levels (i.e., the "worst case" scenario) that will result from the proposed project.

Since Neighborhood 1 encompasses the largest acreage within the Specific Plan area (34.20 acres) and proposes the most residential development (187 dwelling units), the construction emissions for this neighborhood have been estimated to determine the maximum air quality impacts associated with each phase of project construction. While the exact construction schedule has not been set at this time, for the purpose of analysis, a construction period of 18 months is assumed with year 2006 as the start date for construction.

Table 3.2-5 identifies daily emissions that are estimated to occur on peak construction days for Neighborhood 1, such as when the project site is being graded and commercial construction is occurring simultaneously. These calculations assume that appropriate dust control measures would be implemented during each phase of development as required by SCAQMD Rule 403—Fugitive Dust, which are also required by Ontario SOI GPA Policy 25.1.1. These dust control measures include, but are not limited to, the following:

- Application of soil stabilizers to inactive areas
- Quick replacement of ground cover in disturbed areas
- Watering of exposed surfaces twice daily
- Covering of all stock piles in the construction area with tarps
- Watering of all haul roads twice daily
- Reducing speed on unpaved roads to 15 mph or less

In addition, as the project site is located within the Soil Erosion Control Area identified in the City of Ontario General Plan, a Dust Control Permit must be obtained from the Building Department prior to commencement of grading operations.

Although the area designated for Neighborhood 1 is currently occupied by an open air structure that serves as a cow barn and a few enclosed structures that would need to be demolished prior to grading activities, the total volume of these structures is relatively small and the operation involved for demolition would be rather simple. As such, the emissions associated with demolition of these existing structures would not be significant and are not quantified for analysis.

Table 3.2-5 Estimated Peak Daily Construction Emissions

Construction Phase	Peak Day Emissions in Pounds per Day				
	CO	VOC	NO_x	SOx	PM_{10}
2006 Construction Activities					
Site Grading	159.84	19.43	130.59	0.00	23.77
SCAQMD Thresholds	550.0	75.0	100.0	150.0	150.0
Significant Impact?	No	No	Yes	No	No
Building Construction	193.74	26.05	196.34	0.00	9.01
SCAQMD Thresholds	550.0	75.0	100.0	150.0	150.0
Significant Impact?	No	No	Yes	No	No
2007 Construction Activities					
Building Construction	288.57	487.30	251.44	0.01	10.69
SCAQMD Thresholds	550.0	75.0	100.0	150.0	150.0
Significant Impact?	No	Yes	Yes	No	No

SOURCE: EIP Associates 2004 (calculation sheets are provided in Appendix B)

As shown in Table 3.2-5, construction related daily emissions would exceed SCAQMD significance thresholds for VOC and NOx during the building construction phase for Neighborhood 1. According to Table 3.2-2, the health effects associated with NOx include lung irritation and damage as well as acute and chronic respiratory illness. In addition, the general health effects associated with ozone, which is formed by photochemical reactions between VOCs and NOx, include breathing difficulties, lung tissue damage, and eye irritation. Because the SCAQMD significance thresholds for VOC and NOx would be exceeded, this impact would be significant.

The exceedance of the SCAQMD significance thresholds for VOC during the building construction phase is largely due to the emissions associated with the application of architectural coatings. However, it should be noted that the air quality model used to estimate the VOC emission level assumes that architectural coatings for all the residential units in Neighborhood 1 would occur in the span of one month. This is often not the case, as the application of architectural coatings often occurs in different phases where newly constructed housing may begin receiving coatings while other residential buildings are being constructed within the Neighborhood 1 area. As such, the emission levels of VOC shown in Table 3.2-5 are likely higher than the emissions that would occur during the actual building construction phase.

Implementation of SOI GPA Policy 25.1.1 would reduce the amount of VOC and NOx generated during construction activities by requiring the following actions:

- During all construction activities, the construction contractors shall maintain construction equipment engines by keeping them tuned.
- During all construction activities, the construction contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.
- During all construction activities, the construction contractors shall use existing onsite electrical power sources to the maximum extent practicable. Where such power is not available, the Contractor shall use clean fuel generators during the early stages of construction to minimize or eliminate the use of portable generators and reduce the release of undesirable emissions.
- During all construction activities, the construction contractors shall use low emission, on-site stationary equipment (e.g., clean fuels) to the maximum extent practicable to reduce emissions, as determined by the City Engineer.

Ontario SOI GPA EIR mitigation measure MM AQ-1 would ensure that construction-generated emissions would be reduced through practices recommended by SCAQMD Rule 403. In addition, implementation of project-specific mitigation measure MM AQ-1-SP would further require the employment of construction activity management techniques to avoid having intense earth-moving activities occur during the ozone season of May through October, to the extent feasible, the scheduling of equipment usage to avoid simultaneous use of equipment, the limiting of idling equipment to 10 minutes, and the replacement of fossil-fueled equipment with electrically driven equivalents provided that they are not run via a portable generator set. In addition, MM AQ-1 from the SOI GPA requires compliance with SCAQMD Rule 403 to minimize dust generation. However, while implementation of SOI GPA Policy 25.1.1, Ontario SOI GPA EIR MM AQ-1 and project-specific MM AQ-1-SP would reduce the emission levels, they would not reduce VOC and NO_X emissions to a level below SCAQMD thresholds. Therefore, this impact would remain ***significant and unavoidable***.

Impact AQ-2 Daily operation of the project would generate emissions that exceed SCAQMD thresholds. This is considered a *significant and unavoidable* impact.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the project site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, and the operation of landscape maintenance equipment. Mobile emissions would be generated by the motor vehicles traveling to and from the project site.

The analysis of daily operational emissions from the proposed project has been prepared utilizing the URBEMIS 2002 computer model recommended by the SCAQMD. In terms of operational emissions, the proposed project has incorporated certain features in its design, as standard City conditions of approval, that would help reduce the operational emissions that would otherwise be generated by the proposed project. In particular, these design features that would be incorporated into the proposed project correspond to measures available for input into the URBEMIS 2002 computer model. These design features include the following:

- Provide street lighting to provide safety near public transit stops
- Provide route signs and displays at transit stops
- Provide wide sidewalks and/or pedestrian paths, and pedestrian facilities such as benches and attractive settings
- Provide direct pedestrian connections
- Provide a safe pedestrian and bicycling environment
- Provide street lighting to provide safety along pedestrian and bicycle paths
- Provide shade trees to shade sidewalks to encourage pedestrian activity on hot days
- Provide pedestrian signalization and safety at street and driveway crossings
- Provide bicycle lanes/paths that connect to an existing bikeway system

These design features, by encouraging pedestrian or other non-vehicular means of transportation, would help to reduce the operational emissions that would otherwise be generated by the proposed project. Furthermore, the URBEMIS 2002 computer model also accounts for the existing environmental characteristics of the project site and vicinity that may help to further encourage non-motor vehicle transportation by future residents and employees of the proposed project. These environmental characteristics, which corresponded to characteristics available for input into the model, include the following:

- Availability of a few destinations with sidewalks and walking paths through the surrounding area
- Availability of street trees that provide some coverage of the sidewalks and pedestrian paths
- Availability of some destinations within the vicinity that are accessible by pedestrians
- Availability of some number and variety of visually interesting uses that encourage pedestrian activity
- Availability of some streets that have enhanced safety for pedestrians (e.g., separations between streets and pedestrian paths
- A moderate degree of pedestrian safety from crime
- Availability of visually interesting walking paths at a minor level
- Availability of existing transit service within walking distance of the project site
- Low coverage of the area with interconnected bikeways
- Availability of a few bicycle routes have paved shoulders to provide increased safety
- Availability of some visually interesting uses that encourage bicycle activity

The results of the URBEMIS 2002 calculations for the daily operational emissions of the proposed project are presented in Table 3.2-6, which takes into consideration the design features of the proposed project discussed above.

As shown, the annual operational emissions would exceed the thresholds of significance recommended by the SCQAMD for CO and VOC. According to Table 3.2-2, some of the health effects associated with CO include headaches, fatigue, reduced mental alertness, aggravation of cardiovascular disease, and impairment of central nervous system function. In addition, VOCs could react with NOx to form ozone. The general health effects associated with ozone include breathing difficulties, lung tissue damage, and eye irritation. The emissions source that will contribute most to this exceedance for CO and VOC is motor vehicles.

Therefore, the operational activities associated with the proposed project would contribute substantially to an existing air quality violation and this impact would be considered significant.

Table 3.2-6 Project Daily Operational Emissions

Emissions Source	Emissions in Pounds per Day				
	CO	VOC	NOx	SOx	PM_{10}
Water and Space Heating	4.37	0.79	10.26	—	0.02
Landscape Maintenance	10.57	1.24	0.14	0.31	0.02
Consumer Products	—	40.07	—	—	—
Motor Vehicles	571.61	51.02	37.77	0.40	63.70
Total Emissions	*586.55*	*93.12*	*48.17*	*0.71*	*63.74*
Thresholds (lb/day)	550.00	55.00	55.00	150.00	150.00
Significant Impact	Yes	Yes	No	No	No

SOURCE: EIP Associates 2004 (calculation sheets are provided in Appendix B)

Implementation project-specific MM AQ-2-SP would require consultation between the project applicant and the City with SCAQMD to ensure that all applicable and feasible mitigation measures are implemented to reduce emissions associated with operation of the proposed project. These measures may include the installation of electrical outlets outside of each residential building to allow for the use of electric equipment outdoors rather than fuel-burning equipment, use of solar or low emission water heathers, increasing wall and attic insulation in the residential buildings, or the installation of only natural gas fireplaces. Implementation of this mitigation measure would reduce the operational emissions at the project site. However, it is unlikely this measure would reduce the emissions to a level that is below the SCAQMD thresholds, as most of the CO emissions would result from motor vehicle emissions and not stationary sources. Therefore, this impact would remain ***significant and unavoidable***.

Less Than Significant

Impact AQ-3 Project implementation would not impair implementation of the Air Quality Management Plan. This is considered a *less-than-significant* impact.

The 2003 AQMP, discussed previously, was prepared to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, and to return clean air to the region. Projects that are considered to be consistent with the AQMP would not interfere with attainment, because this growth is included in the projections used to formulate the AQMP. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds. As indicated by the 1998 City of Ontario Sphere of Influence (SOI) Environmental Impact Report (EIR), the forecast emissions from the NMC, including the project site, were not evaluated in the 1997 AQMP, which was the most current plan at the time of the SOI General Plan Amendment. However, with the adoption of the 2003 AQMP, the emissions associated with

future growth within the NMC area, including the proposed project, have now been accounted for in the current AQMP.

Projects that are consistent with the projections of employment and population forecasts identified in the Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) are considered consistent with the AQMP growth projections. This is because the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP. Although the project proposes development of residential uses that represent growth, this growth was planned for and anticipated as part of the overall development of the NMC area. The NMC area is a unified development vision for the approximately 8,200 acres annexed by the City of Ontario. The City of Ontario SOI GPA EIR provides guidelines for the preparation of future Specific Plans within the area encompassed by the NMC that include residential development uses. Development of the Countryside Specific Plan is consistent with the anticipated growth planned for in the NMC. According to the Ontario SOI GPA EIR, the projected total population under the SOI General Plan Amendment for the NMC is below the SCAG population projection for the NMC. As such, the proposed project does not result in population and housing growth that would cause growth in Ontario to exceed the SCAG forecast. Consequently, implementation of the proposed project would be consistent with AQMP attainment forecasts. Based on this information, the proposed project would not impair implementation of the AQMP, and this impact would be ***less than significant***. No mitigation is required.

Impact AQ-4 Project implementation would result in increased local traffic volumes, but would not expose sensitive receptors to substantial localized CO concentrations. This is considered a *less-than-significant* impact.

As was done to assess existing localized CO concentrations, the simplified CALINE4 screening procedure was used to predict future CO concentrations at the study area intersections in year 2015, which is the horizon year identified in the Countryside Specific Plan traffic study (Appendix H). This CO analysis is based on the projected future traffic volumes from the study intersections contained in the traffic study, and takes into account emissions from the proposed project and related projects in the project area. The results of these calculations are presented in Table 3.2-7.

As shown, future CO concentrations near these intersections would not exceed national or state ambient air quality standards. Therefore, CO hotspots would not occur near these intersections in the future, and the contribution of project traffic-related CO at these intersections would be ***less than significant***. No mitigation is required.

Table 3.2-7 Future (2015) With Project Localized Carbon Monoxide Concentrations

Intersection	8-Hour CO Concentrations in Parts per Million		
	25 Feet away	50 Feet away	100 Feet away
Vineyard Avenue and SR-60 WB Ramps	3.1	3.0	2.8
Vineyard Avenue and SR-60 EB Ramps	3.1	3.0	2.7
Vineyard Avenue and Walnut Avenue	3.2	3.0	2.8
Vineyard Avenue and Riverside Drive	3.0	2.8	2.7
Archibald Avenue and SR-60 WB Ramps	2.8	2.7	2.5
Archibald Avenue and SR-60 EB Ramps	2.7	2.6	2.5
Archibald Avenue and Riverside Drive	2.9	2.7	2.6
Archibald Avenue and Chino Avenue	3.2	3.0	2.8
Archibald Avenue and Edison Avenue	3.9	3.6	3.3
Turner Avenue and Riverside Drive	2.6	2.5	2.4
Turner Avenue and Chino Avenue	2.8	2.7	2.6
Haven Avenue and Riverside Drive	3.1	3.0	2.8

SOURCE: EIP Associates 2004 (calculation sheets are provided in Appendix B)

[a] National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.

Impact AQ-5 Project implementation would not release significant amounts of toxic air contaminants. This is considered a *less-than-significant* impact.

Toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the proposed land uses within the project site. During construction, incidental amounts of toxic substances such as oils, solvents, and paints would be used. These substances would comply with all applicable SCAQMD rules for their manufacture and use. As a salvage yard currently exists in proposed Neighborhood 3, there is a possibility that removal of the stored materials from this site during construction could result in the potential release of toxic or carcinogenic air pollutants. However, as indicated in Section 3.6 (Hazards and Hazardous Materials) of this EIR, MM HM-1(f)-SP would require that, prior to any grading or demolition permit being issued for Neighborhood 3, a Phase I Environmental Site Assessment (ESA) report must be prepared to document any health risks at that site associated with the current salvage yard uses. The measure ensures that the risk of release of any potential toxic or carcinogenic air pollutants would be documented and, if contaminants are identified as present, require a remedial action work plan to prevent the release of any airborne or groundborne contaminants. When completed and operational, only common forms of hazardous or toxic substances typically used, stored, or sold in conjunction with residential uses would be present in small quantities. Most uses of such substances would occur indoors and would not constitute substantial emissions. Based on the common uses expected on the project site and anticipated construction operations, potential impacts associated with the release of toxic air contaminants would be ***less than significant***. No mitigation is required.

3.2.6 Cumulative Impacts

The geographic context for the air quality cumulative impacts is SRA 33 of the Basin, which covers the southwest San Bernardino Valley area. The analysis accounts for all anticipated cumulative growth within this geographic area, including ambient growth along with development of the other specific plans within the Ontario New Model Colony specific plan area provided in Table 2-3 (Proposed Future Development within Other Specific Plans of the Ontario New Model Colony) in Chapter 2 (Project Description) of this EIR. In determining the cumulative significance of land use projects, the SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions nor provides methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project specific impacts. Therefore, this analysis assumes that individual development projects that generate construction or operational emissions that exceed the SCAQMD recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

Cumulative development is not expected to result in a significant impact in terms of conflicting with, or obstructing implementation of, the 2003 AQMP. As discussed in Impact AQ-3, growth considered to be consistent with the AQMP would not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Consequently, as long as growth in the Basin is within the projections for growth identified in the Growth Management Chapter of the RCPG, implementation of the AQMP will not be obstructed by such growth. As growth in the Basin has not exceeded these projections, this is considered to be a less-than-significant cumulative impact. Additionally, as discussed under Impact AQ-3, implementation of the proposed project would be consistent with AQMP attainment forecasts. Therefore, the cumulative impact of the proposed project regarding potential conflicts with the AQMP would be less than significant.

With regard to cumulative construction emissions, because the Basin is currently in nonattainment for ozone, CO, and PM_{10}, cumulative development could violate an air quality standard or contribute to an existing or projected air quality violation. Therefore, this is considered to be a significant cumulative impact. With regard to determining the significance of the proposed project contribution, the SCAQMD neither recommends quantified analyses of cumulative construction emissions nor provides methodologies or thresholds of significance to be used to assess cumulative construction impacts. According to the SCAQMD, individual construction projects that exceed the SCAQMD recommended daily thresholds for project-specific impacts would be considered to cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment. As discussed previously under Impact AQ-1, construction of the proposed project would cause a net increase in daily construction related emissions of VOC and NOx that exceed the thresholds of significance recommended by the SCAQMD during peak construction scenarios. While the Basin is currently in attainment for NO_2 levels (NO_2 is a pure form of NOx), because NOx is a precursor of ozone, for which the Basin is in nonattainment, construction under the proposed project would make a cumulatively considerable contribution to this significant impact. Thus,

the project's contribution to cumulative construction emissions is considered a significant and unavoidable impact.

With regard to daily operational emissions and the cumulative net increase of any criteria pollutant for which the region is in nonattainment, there is a cumulatively considerable impact, due to nonattainment of ozone, CO, and PM_{10} standards in the Basin. With respect to operational emissions, the SCAQMD has indicated that if an individual project results in project emissions of criteria pollutants (CO, VOC, NOx, SOx, and PM_{10}) that contributes substantially to an existing or projected air quality violation, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. Since daily operation emissions associated with the proposed project would exceed the thresholds of significance recommended by SCAQMD for CO and VOC, the contribution of daily operational emissions by the project would also be considered to be cumulatively considerable.

Cumulative development is not expected to expose sensitive receptors to substantial pollutant concentrations. As discussed in Impact AQ-4, the future CO concentrations at the study intersections in 2015 are based on the projected future traffic volumes from the study intersections contained in the traffic study, which takes into account emissions from the proposed project and concurrent specific plan projects in the NMC area. As shown in Table 3.2-7, future CO concentrations near the study intersections would not exceed national or state ambient air quality standards. Therefore, CO hotspots would not occur near these intersections in the future, and the contribution of project traffic-related CO at these intersections would be less than significant. No significant cumulative impact would occur. It is also unlikely that future projects will result in long-term future exposure of sensitive receptors to substantial pollutant concentrations, because CO levels are projected to be lower in the future due to improvements in vehicle emission rates predicted by the ARB. Therefore, this is considered to be a less-than-significant impact.

With regard to impacts relating to the exposure of sensitive receptors to substantial toxic air pollutant concentrations, the geographic context for this analysis will be the City of Ontario, due to the limited localized nature of these pollutant concentrations. Future cumulative development expected in the Ontario area includes commercial, office, and residential uses, which are uses that are not considered to be associated with the release of toxic emissions at levels that can be considered substantial. As such, cumulative impacts associated with toxic air pollutants resulting from future operations in the Ontario area would be less than significant. As discussed in Impact AQ-5, the proposed project would only contain small quantities of common forms of hazardous or toxic substances, such as cleaning agents, which are typically used and stored in minimal amounts within residential uses. In addition, most uses of these substances would occur indoors. As such, the proposed project would result in a less-than-significant contribution to this cumulative impact.

3.2.7 Mitigation Measures and Residual Impacts

Ontario SOI GPA EIR Mitigation Measures

MM AQ-1 *Per SCAQMD Rule 403, the City shall enforce the following (regardless of whether the project is General Plan level or project specific):*

- *During all construction activities, construction contractors shall use low emission mobile construction equipment where feasible to reduce the release of undesirable emissions.*
- *During all construction activities, construction contractors shall encourage rideshare and transit programs for project construction personnel to reduce automobile emissions.*
- *During all grading and site disturbance activities, construction contractors shall water active grading sites at least twice a day, and clean construction equipment in the morning and/or evening to reduce particulate emissions and fugitive dust.*
- *During all construction activities, construction contractors shall, as necessary, wash truck tires leaving the site to reduce the amount of particulate matter transferred to paved streets as required by SCAQMD Rule 403.*
- *During all construction activities, construction contractors shall sweep on and off site streets if silt is carried over to adjacent public thoroughfares, as determined by the City Engineer to reduce the amount of particulate matter on public streets.*
- *During all construction activities, construction contractors shall limit traffic speeds on all unpaved road surfaces to 15 miles per hour or less to reduce fugitive dust.*
- *During grading and all site disturbance activities, at the discretion of the City's Planning Director, construction contractors shall suspend all grading operations during first and second stage smog alerts to reduce fugitive dust.*
- *During grading and all site disturbance activities, at the discretion of the City's Planning Director, construction contractors shall suspend all trading operations when wind speeds (including instantaneous gusts) exceed 25 miles per hour to reduce fugitive dust.*
- *During all construction activities, the construction contractors shall maintain construction equipment engines by keeping them tuned.*
- *During all construction activities, the construction contractors shall use low sulfur fuel for stationary equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.*
- *During all construction activities, the construction contractors shall use existing on-site electrical power sources to the maximum extent practicable. Where such power is not available, the Contractor shall use clean fuel generators during the early stages of construction to minimize or eliminate the use of portable generators and reduce the release of undesirable emissions.*
- *During all construction activities, the construction contractors shall use low emission, on-site stationary equipment (e.g., clean fuels) to the maximum extent practicable to reduce emissions, as determined by the City Engineer.*

- *During all construction activities, the construction contractors shall ensure that all trucks hauling dirt, sand, soil or other loose materials are covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of the California Vehicle code Section 23114 to reduce spilling of material on area roads.*

Project-Specific Mitigation Measures

MM AQ-1-SP *Prior to all phases of project construction, the City shall ensure that construction contracts include the following specifications:*

- *If feasible, arrange for intense earth-moving activities to occur outside the ozone season of May through October.*
- *When feasible, schedule equipment usage to avoid simultaneous use of equipment.*
- *Advise construction contractors not to idle construction equipment on site for more than 10 minutes.*
- *Use low NOx diesel fuel to the extent that it is readily available and cost effective in San Bernardino County*
- *Replace fossil-fueled equipment with electrically driven equivalents provided that they are not run via a portable generator set, to the extent available.*

MM AQ-2-SP *Prior to project construction, the project applicant and City shall consult with the SCAQMD to ensure all applicable and feasible mitigation measures are implemented to reduce emissions. These measures may include, but would not be limited to, the following or equally effective measures:*

- *Outdoor electrical outlets shall be installed outside each residential building and each residential patio area to allow for the use of electric barbeques and landscaping equipment*
- *Use solar or low emission water heaters*
- *Increase wall and attic insulation in compliance with Title 24 requirements*
- *Only natural gas inert fireplaces shall be installed in homes*

Implementation of MM AQ-1-SP would reduce the creation of construction emissions while implementation of MM AQ-2-SP would reduce the creation of operational emissions at the project site. However, these measures would not reduce the emissions to a level that is below the SCAQMD thresholds. Therefore, impacts associated with VOC and NOx emissions during construction (Impact AQ-1), and CO and ROG emissions during project operation (Impact AQ-2), would remain significant and unavoidable.

3.3 BIOLOGICAL RESOURCES

3.3.1 Introduction

This section has been prepared using information from EIP field surveys, existing biological resource assessments of the Van Veen Property (APNs 218-131-11, 218-131-12, 218-131-22, 218-131-040, and 218-131-043) and Tentative Tract 16045 (Chambers Group, 2004), the *City of Ontario Sphere of Influence Final Environmental Impact Report* (EIR) SCN 987-061035 (Envicom Corporation 1997), and other published federal, state, and local documents. This section discusses the known biological resources that occur on the proposed project site that could be affected by the project, evaluates potential project impacts on these resources at a programmatic level, and provides mitigation measures to avoid or reduce those impacts. The Initial Study determined that no habitat or other conservation plan exists for the project site. Therefore, there is no conflict with and local policy or ordinance, and further analysis of this issue is not required in the EIR.

3.3.2 Existing Conditions

Regional Setting

The project site is located generally south of State Route 60 (SR-60), and west of Interstate 15 (I-15) in the City of Ontario (the City) (Figure 2-2) This area is dominated by semi-arid vegetation, which, in many cases, has been historically used as pastureland.

Site Characteristics

As shown in Figure 2-2 (Local Vicinity), the proposed Specific Plan Area consists of 178 acres and is located on the U.S. Geological Survey (USGS) Guasti 7.5-minute topographic quadrangle in Section 10 of Township 2S, Range 7W. The majority of the 178-acre project site consists primarily of developed/denuded areas, in addition to ruderal areas throughout the site. The site has been highly disturbed by ongoing land use activities primarily associated with the active livestock facility. Most of the site has been denuded of vegetation and converted to cattle holding pens and other dairy facilities. The sight is relatively flat. Elevation of the site is ranges form approximately 760 feet above mean sea level (msl) at its lowest point to 780 feet above msl at its highest. Deer Creek Channel, a channelized floodway, runs through the southern potion of the Specific Plan Area and empties into the Cucamonga Basin.

Soils were determined by referencing the USDA Soil Survey of San Bernardino County Southwestern Part, California, Sheet No. 6 of 12 (1980) and field verification. The one soil series found on the project site Delhi fine sand (Db), the project site also contains layers of manure on top of native soils. Manure has been deposited over much of the active cattle facility.

Adjacent and Existing Land Use

Figure 2-5 is an aerial photograph of the project site and the surrounding area that illustrates the area's topography, existing development, and surrounding land uses. Existing on-site uses primarily include agricultural production, specifically current and former dairy farm uses, agricultural fields, and a nursery/greenhouse. Portions of the site also contain empty fields, waiting for cultivation in the commonly used crop rotation method, residences, and a church. The project site is bordered on the north and east sides by existing urban development, on the south by agricultural uses, and on the west sides by the Cucamonga Channel and agricultural uses.

3.3.3 Study Methodology

Literature Survey

Information on occurrences of special-status species in the vicinity of the project site was obtained from searching databases and lists of California Department of Fish and Game's (CDFG) Natural Diversity Data Base (CNDDB 2004, January) and California Native Plant Society's (CNPS) Electronic Inventory (January 2004) for the U. S. Geological Survey's (USGS) 7.5-minute Data were compiled for the quadrangles containing and surrounding the project site (i.e., Guasti, Devore, Fontana, Riverside West, Corona North, Prado Dam, Ontario, Mt. Baldy, and Cucamonga Peak USGS 7.5 minute quadrangles). These databases contain records of reported occurrences of federal- or state-listed endangered or threatened or proposed endangered or threatened species, former federal Species of Concern (FSC), California Species of Special Concern (CSC), or otherwise sensitive species or habitat that may occur within or in the immediate vicinity of the project site. Lists from the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) were also reviewed, and lists of sensitive wildlife and plant species potentially occurring within the project site were developed. This search range encompasses a sufficient distance to accommodate for regional habitat diversity and to overcome the limitations of the CNDDB. The CNDDB is based on reports of actual occurrences and does not constitute an exhaustive inventory of every resource.

Additionally, background information on biological resources was derived from biological technical reports for the Van Veen Property (Chambers Inc. 2003) and Tentative Tract 16045 (Chambers Inc. 2004) as well as a USFWS Protocol Survey report for the Deli Sand's Flower-loving Fly (Chambers Inc. 2004) Additional information came from the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), the List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base (CDFG 2004, January), and The Jepson Manual of Higher Plants of California (J.C. Hickman, Ed., 1993), and *A Manual of California Vegetation* (Sawyer and Keler-Wolf 1995). Based upon the results of the literature review, record searches, and focused special-status surveys, a list of special-status plant and animal species and habitats with the potential to occur within the project site was developed for analysis.

Field Surveys

Plant Surveys

A general botanical survey of the proposed project area was conducted on July 16, 2004, to verify recent vegetation surveys of portions of the Specific Plan Area and assess the potential for unsurveyed areas to contain special-status plant species and habitats. The recent surveys, performed in the April 22, 2004, and November 12, 2003, by Chambers Group biologists, described the vegetation within and adjacent to the Proposed Project site, as well as assessing the potential occurrence of sensitive plant species and habitats; including wetlands. The existing survey included an assessment of vegetation types, plant communities occurring within the project site. The verification survey evaluated the current conditions of the proposed Specific Plan Area, and the potential of the on-site habitats to support special-status plant species identified in Table 3.3-1. Additional plant species that were observed during a USFWS Protocol Survey report for the Deli Sand's Flower-loving Fly (Chambers Inc. 2004) are listed in Appendix C5, and are hereby incorporated by reference.

Plant species were identified in the field or collected for future identification. Plants were identified using keys in Hickman (1993), Munz (1974), and Abrams (1923). Taxonomy follows Hickman (1993) for scientific and common names. Vegetation was characterized and mapped to identify, quantify, and illustrate habitats capable of supporting special-status plant species on the site.

The plant survey was conducted at a time of year when any potentially sensitive species are both evident and identifiable and the survey for these species was performed in appropriate habitat(s). Blooming periods were taken from the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California (information dated 2004).

Wildlife Surveys

A general wildlife survey was performed by EIP Associates on July 16, 2004, from 7:00 A.M. until 3:00 P.M., when opportunities for detecting wildlife species are greatest. Although the majority of the project area is developed or landscaped, surveys included active searches for mammals, reptiles, and amphibians that involved lifting, overturning, and carefully replacing rocks and debris and observing reptile or mammal activity on dirt areas. Birds were identified by standard visual and auditory recognition, and the presence of nests or other evidence of breeding activity was noted. Surveys for mammals included searching for and identifying diagnostic sign, including scat, footprints, scratch-outs, dusting bowls, burrows, and trails. Wildlife species (including designated special-status species) observed on the project site and within adjacent areas are summarized in Table 3.3-2. Additional wildlife species that were observed during a USFWS Protocol Survey report for the Deli Sand's Flower-loving Fly (Chambers Inc. 2004) are listed in Appendix C5, and are hereby incorporated by reference.

Botanical Resources

This section describes the plant species and vegetation types that occur on the proposed project site, as shown in Figure 3.3-1. In addition, Table 3.3-1 lists the plant species encountered within the Specific Plan Area during the field investigation conducted for this EIR. A total of thirty plant species were encountered within the Specific Plan Area. Of these, none were special-status species.

Vegetation Communities

Denuded/Developed

The majority of the site has been denuded of vegetation and converted to cattle holding pens and other dairy facilities. This is characteristic of the intensive disturbance evident on the site, resulting from a variety of land uses including active livestock facilities, equestrian activities, row crops, poultry farming, residential, and commercial activities and roads. These areas are unable to support vegetation due the continuous presence of domesticated animals (e.g., cattle, horses, and chickens) and other farming or human activities. Vegetation growth is precluded in these areas via direct physical disturbance by these same actions as well as direct consumption by domesticated animals, or the development and maintenance of structures associated with the facilities on site (e.g., calf enclosures, troughs, salvage yard, and small barns). The area designated as denuded/developed comprises approximately 122.24 acres of the project site.

Ruderal

Though not a true habitat community as defined by Holland (1986), ruderal areas are typically dominated by pioneering herbaceous plants that readily colonize disturbed ground. The vegetation in these areas is adapted to living in compact soils where water does not readily penetrate the soil. Characteristic ruderal species identified in the project area include black mustard *(Brassica naigra)*, lambs quarters *(Chenopodium album)*, Russian thistle *(Salsola tragus)*, and puncture vine *(Tribulus terrestris)* dominate this habitat type. Areas of large trees, primarily blue gum (Eucalyptus) are also found adjacent to residences and structures. These trees represent the tallest vegetation within the Specific Plan Area and are important perching, roosting, and potential nesting locations for raptors within and around the Specific Plan Area. The area designated as ruderal comprises approximately 49.07 acres of the project site.

Ponds

Five ponded areas were evident during the site visit (refer to Figure 3.3-1.) These areas are state-mandated dairy manure water retention basins that serve as runoff collection/water treatment ponds for the dairy and poultry operations. The ponds were surrounded by ruderal plant species growing several feet from the existing water level and were almost completely void of emergent wetland vegetation. One pond had a limited amount of limited native vegetation present including mule fat *(Baccharis salicifo)*. No wildlife was observed within any of the ponds. However they have been identified as waterfowl habitat. Two of the ponds contained water that was deep red in color. At the time of the survey, the ponds comprised a total area of approximately 4.52 acres of the total project site.

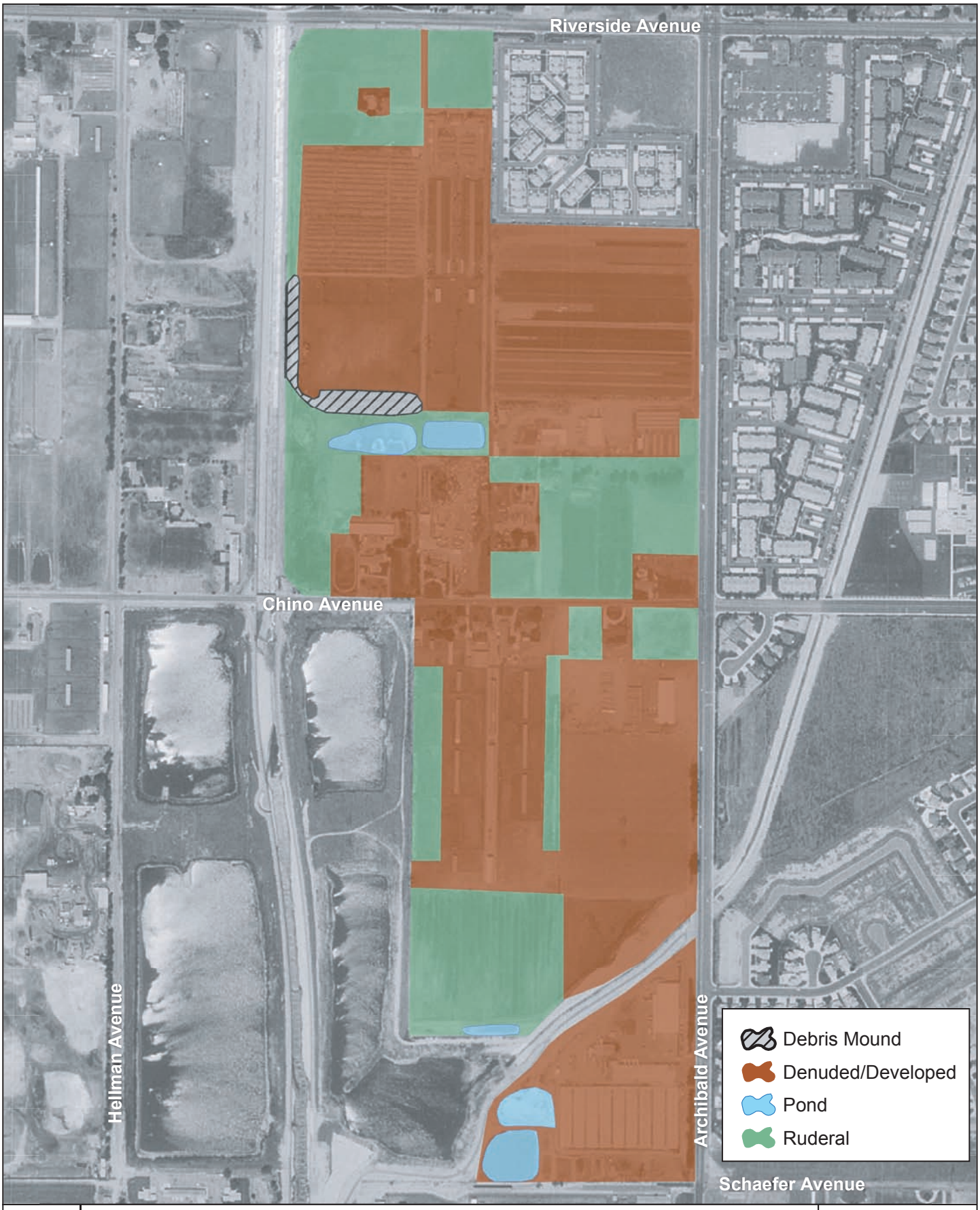

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FIGURE **3.3-1**

Site Vegetation and Land Cover

Scale: 1'=300"

Source: USGS DOQQ, Guasti SW, 1998; EIP Associates 2004

City of Ontario

EIP ASSOCIATES

Table 3.3-1 Plant Species Observed within the Project Site

Scientific Name	*Common Name*
ANGIOSPERMAE: MONOCOTYLEDONAE	MONOCOT FLOWERING PLANTS
POACEAE	GRASS FAMILY
Avena barbata	Slender wild oats
Bromus hordeaceous	Soft chess
Bromus madritensis spp. *Rubens*	Foxtail chess/cress or red brome
Cyndon dactylon	Bermuda grass
Digitaria sp.	Crabgrass
Hordeum sp.	barley
ARECACEAE	PALM FAMILY
Phoenix canariesis	Canary Island date palm
Washingtonia robusta	Mexican fan palm
Washingtonia filifera	California fan palm
ANGIOSPERMAE: DICOTYLEDONAE	DICOT FLOWERING PLANTS
STERACEAE	SUNFLOWER FAMILY
Ambrosia acanthicarpa	annual bur-sage
Baccharis salicifolia	mulefat
Helianthus annuus	common sunflower
Taraxacun officinale	common dandelion
BRASSICACEAE	MUSTARD FAMILY
Brassica nigra	Black mustard
CHENOPODIACEAE	SALTBUSH FAMILY
Artiplex argentea	Silverscale
Chenopodium album	lambs quarters
Salsola tragus	Russian thistle
SOLANACEAE	NIGHTSHADE FAMILY
Nicotiana glauca	tree tobacco
Datura sp.	jimson weed
APIACEAE	CARROT FAMILY
Foeniculum vulgare	fennel
MAGNOLIACEAE	MAGNOLIA FAMILY
Magnolia hypoleuca	southern magnolia
FABACEAE (LEGUMINOSAE)	LEGUME/PEA FAMILY
Acacia sp.	acacia
Medicago polymorpha	bur clover
SIMAROUBACEAE	AILANTHUS FAMILY
Ailanthus altissima	tree-of-heaven
ANACARDIACEAE	SUMAC FAMILY
Schinus terebinthifolius	Brazilian pepper tree
ZYGOPHYLLACEAE	CALTROP FAMILY
Tribulus terrestris	puncture vine
ROSACEAE	ROSE FAMILY
Rosa spp.	rose
EUPHORBIACEAE	SPURGE FAMILY
Ricinus communis	Castor Bean
GYMNOSPERMAE	
PINACEAE	PINE FAMILY
Pinus sp.	pine

Table 3.3-1 Plant Species Observed within the Project Site

Scientific Name	Common Name
CUPRESSACEAE	CYPRESS FAMILY
Juniperus californica	California juniper

SOURCES: EIP field survey performed July 17, 2004, biological resource assessments of the Van Veen Property and Tentative Tract 16045 (Chambers Group, 2004),and Habitat Suitability Evaluation for Delhi Sands Flower-loving Fly May 16, 2004 Chambers Group.

Debris Mounds

Collections of debris and other refuse material were situated in piles throughout the site. Mounds of manure were found along the southern boundary of the large cattle-grazing pen, located in the southwest portion of the site. At the time of the survey, the debris mounds comprised a random assortment of refuse, mostly wood, and were located in the extreme west corner of the northern portion of the site. Piles of discarded wood material also lined the western boundary of the same dairy area. At the time of the survey, debris mounds constituted approximately 2.13 acres of the project site.

Wildlife Resources

The following discussion describes the wildlife species observed or that have potential to occur within the proposed Specific Plan Area. A total of 38 wildlife species were recorded on the project site (i.e., through direct observation, detection of vocalizations, or observation of sign) and are listed in Table 3.3-2.

Table 3.3-2 Wildlife Species Observed within the Project Site

Scientific Name	Common Name
CLASS INSECTA	INSECTS
LYCAEENIDAE	BLUES
Brephidium exilis	pigmy blue
NYMPHALIDAE	BRUSH-FOOTED BUTTERFLIES
Vanessa cardui	painted lady
PIERIDAE	WHITES AND SULPHURS
Artogeia rapae	Cabbage white
FOMICIDAE	ANTS
Pogonomyrmex californicus	California Harvester Ant
APIDAE	HONEY BEES AND BUMBLE BEES
Apis Mellifera	honey bee
MUSCIDAE	FLIES
Musca domestica	house fly
Tabanus sp.	horse fly
CLASS REPTILIA	REPTILES
IGUANIDAE	
Sceloporus occidentalis	Western fence lizard
CLASS AVES	BIRDS
ANATIDAE	
Anas platyrhynchos	mallard

Table 3.3-2 Wildlife Species Observed within the Project Site

Scientific Name	*Common Name*
ACCIPITRIDAE	
Buteo jamaicensis	red-tailed hawk
Accipiter cooperii	Cooper's Hawk *
CHARADRIIDAE	
Charadrius vociferous	killdeer
ARDEIDAE	
Bulbulcus ibis	cattle egret
CATHARTIDAE	
Cathartes aura	turkey vulture
TYRANNIDAE	
Sayornis nigricans	black phoebe
Tyrannus verticalis	western kingbird
HIRUNDINIDAE	
Stelgidopteryx serripennis	Northern rough-winged swallow
COLUMBIDAE	
Columba livia	rock cove
Zenaida macroura	mourning dove
ICTERIDAE	
Agelaius phoeniceus	red-winged blackbird
Euphagus cyanocephalus	Brewer's blackbird
CORVIDAE	
Corvus corvax	common raven
Corvus brachyrhynchos	American crow
MIMIDAE	
Mimus polyglottos	Northern mockingbird
EMBERIZIDAE	
Melospiza melodia	song sparrow
Zonotrichia leucophrys	white-crowned sparrow
FRINGILLIDAE	
Carpodacus mexicanus	house finch
PLOCEIDAE	
Passer domesticus	house sparrow
STURNIDAE	
Sturnus vulgaris	European starling
RECURVIROSTRIDAE	
Himantopus mexicanus	black-necked stilt
PHASIANIDAE	
Gallus domesticus	domestic chicken
PARULIDAE	
Dendroica coronata	yellow-rumped warbler
CLASS MAMMALIA	MAMMALS
CANIDAE	
Canis familiaris	domestic dog
EQUIDAE	
Equus caballus	horse
FELIDAE	
Felis catus	domestic cat

Table 3.3-2 Wildlife Species Observed within the Project Site

Scientific Name	*Common Name*
SCIURIDAE *Spermophilus beecheyi beecheyi*	California ground squirrel
BOVIDAE *Bos tauruss*	domestic cattle
MARSUPIALIA *Didelphis virginiana*	Virginia opossum

SOURCES: EIP field survey performed July 17, 2004, biological resource assessments of the Van Veen Property (APNs 218-131-11, 218-131-12, 218-131-22, 218-131-040, and 218-131-043) and Tentative Tract 16045 (Chambers Group, 2004), Habitat Suitability Evaluation for Delhi Sands Flower-loving Fly May 16, 2004 Chambers Group.

1. Taxonomy and nomenclature follows American Ornithologists' Union (1983) and supplements for birds and Laundenslayer *et al*. (1991) for amphibians, reptiles, and mammals.
2. This is not intended to be an exhaustive list of all bird species that may occur at one time or another on the project site during their migration.

* Designates a sensitive species

Amphibians

Amphibians require moisture for at least a portion of their life cycle and many require standing or flowing water for reproduction. Although much of the site is dry for most of the year, a number of amphibian species occur or potentially occur in the drier habitats and within the riparian area. These species are able to survive in the dry season by remaining beneath the soil in burrows or under logs or leaf litter, emerging only when temperatures are low and humidity is high. Many of these species occur in association with water, and many emerge to breed after the rainy season begins. In addition, moisture in soil can remain high depending on the amount of vegetation cover, elevation, slope, and aspect.

Although, no amphibians were detected during the field surveys, there are areas of ponding within the project site and there is a large flood control basin adjacent to the southwestern project boundary. Although the nature of the inflow into the on-site ponds would make it highly unfavorable habitat for amphibians, irrigation associated with the landscaped areas and ponded areas could provide suitable habitat for the, black-belied slender salamander *(Batrachoseps nigriventris)*, California toad *(Bufo boreas halophilus)*, and Pacific tree frog *(Hylla regilla)*.

Reptiles

Reptilian diversity and abundance typically varies with vegetation type and character. Many species prefer only one or two vegetation communities; however, most will forage in a variety of habitat types. Most species occurring in open areas use rodent burrows and various objects lying on the ground for cover, protection from predators, and extreme weather conditions.

One reptile, the western fence lizard *(Sceloporus occidentalis)*, was observed during the field surveys. Given the large areas denude of vegetation and numerous disturbed areas, habitat for reptiles within the Specific Plan Area is limited. Still, in addition to the observed species listed in Table 3.3-2, several other reptilian

species could potentially occur within the site, based on habitat suitability. These include the southern alligator lizard *(Gerrhonotus multicarinatus)*, and gopher snake *(Pituophis melanoleucus)*.

Birds

With a total of twenty-four species recorded at the proposed site, birds were the most widely observed vertebrate taxon. A variety of bird species are expected to occur on the proposed project site as either migrants, winter visitors, summer visitors, or year-round residents. Common species observed on the proposed project site include the Northern rough-winged swallow *(Stelgidopteryx serripennis)*, mourning dove *(Zenaida macroura)*, European starling *(Sturnus vulgaris)*, black phoebe *(Sayornis nigricans)*, and American crow *(Corvus brachyrhynchos)*. A red tailed hawk *(Buteo jamaicensis)*, turkey vulture *(Cathartes aura)* and Cooper's Hawk *(Accipiter cooperii)* were also observed foraging over and within the project site and adjacent areas. Although not restricted to this habitat, raptor species such as white-tailed kites *(Elanus leucurus)* and American kestrel *(Falco sparverius)* may also forage within the ruderal grassland habitats within the Specific Plan Area.

In addition to these species, water fowl, wading birds, and shorebirds would be expected to be associated with the state mandated dairy manure water retention basins. Some of the basins would be important to migratory and/or overwintering birds for food, cover, and shelter (Envicom 1997). This diversity of species that use the area is illustrated by the annual Santa Ana Valley Christmas Bird Count, which encompasses the area south of the Specific Plan Area, but still would represent an accurate assessment of the type of individuals that could utilize the area. The 1994 Count reported 130 species and 52,075 individuals, while the 2004 Count reported 133 species and 37,214 individuals (Audubon Society 1994 and 2004). Examination of these lists indicates that the majority of these species would be considered migratory or overwintering. The diversity of waterfowl, wading birds, and shorebirds observed in the Santa Ana River Count Circle, and observed or likely to occur in the Specific Plan Area substantiates the importance of the site to migratory species.

Mammals

A total of six mammalian species were observed or detected within the project site, all but two were domesticated. In addition to those species listed within Table 3.3-2, the proposed project site provides suitable habitat for a few common species that are adapted to highly disturb urban environments but were not detected during any of the surveys. These species include small mammals such as the California desert cottontail *(Sylvilagus audubonii)*, and black rat *(Rattus rattus)* could occur on the proposed project site.

Based on habitat suitability, the deer mouse *(Peromyscus maniculatus)*, western harvest mouse *(Reithrodontomys megalotis)*, house mouse *(Mus musculus)*, and raccoon *(Procyon lotor)* would also be expected to occur within the site.

Insects

Seven insect species were encountered during the surveys. The most common were the horse fly *(Tabanus* sp.*)* but several butterflies were also observed.

Special-Status Biological Resources

The following section addresses special-status biological resources observed, reported, or having the potential to occur on the site. Table 1A and 1B of Appendix C4 (Special-Status Species Potentially Occurring within the Project Site) lists special-status plants and animals known to occur within the region of the project along with their federal and state listing and their potential for occurrence on the site. In addition, special-status biological resources include vegetation types and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, state, and local government conservation programs.

Plant and wildlife species are considered "sensitive" if they are classified as rare, threatened, or endangered; proposed for listing as endangered or threatened; or they are candidate species for listing by federal and/or state resource agencies. In addition, other plants identified as sensitive by the CNPS, and wildlife considered species of special concern, special animals, or fully protected in California are also considered "sensitive." Certain habitat types are also classified as "sensitive" by the CDFG in the California Natural Diversity Data Base (CNDDB).

For the purposes of this EIR, the term "special-status species" includes species federally listed and proposed for listing as Threatened or Endangered, Candidate, and Species of Concern. Special-status species are plant, wildlife, and fish species that are protected by the following regulations and policies:

- Listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) (50 CFR 17.11 [listed animals], 50 CFR 17.12 [listed plants], and various notices in the Federal Register for proposed species)
- Candidates for possible future listing as threatened or endangered under the federal ESA (58 CFR 188: 51144-51190, September 30, 1993)
- CDFG list of state threatened or endangered species under the California ESA

Other special-status species are species that have "special-status" designations other than state or federal status as threatened, endangered, or candidates for listing as endangered or threatened. Special-status designations indicate species rarity, population declines, or threats to populations that may warrant special consideration or protection, which include federal Species of Concern (former federal C2 candidates).

In late February 1996, the USFWS published an updated list of plant and animal taxa that it regards as candidates for possible addition to the List of Endangered and Threatened Wildlife and Plants under the Endangered Species Act of 1973, as amended (USFWS 1996). These candidate species are those for which USFWS has on file sufficient information on biological vulnerability and threats to support a proposed rule to list, but issuance of such a proposed rule is precluded. In general, the currently designated "candidate"

species correspond with the "Category 1" candidate species previously designated by USFWS. The USFWS no longer includes the former "Category 2" species as candidates, but does acknowledge these previously designated species as "Species of Concern." In addition, it has been the policy of the CDFG to consider the previously designated Category 2 candidates as either California Species of Special Concern or as Special Animals.

In addition to the other sources listed in this section, the following sources were used to determine the special status of biological resources:

- **Plants**—CNPS 2004. Electronic Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, California. California Natural Diversity Data Base (CNDDB), 2004. Various Federal Register notices from the USFWS regarding listing status of plant species.
- **Wildlife**—California Natural Diversity Data Base (CNDDB), 2004. Federal Register notices from the USFWS regarding listing status of wildlife species.
- **Habitats**—California Natural Diversity Data Base (CNDDB), 2004

For plants or wildlife, the "potential for occurrence" ranking listed in Appendix C4 is based on the following criteria:

- **Absent**: Species was not observed during focused surveys conducted at an appropriate time for identification of the species or the species is restricted to habitats that do not occur within the project site
- **Low Potential for Occurrence**: No present or historical records cite the species' occurrence in or near the survey (project) area, and the on-site habitat(s) needed to support the species are of poor quality.
- **Moderate Potential for Occurrence**: Either an historical record exists within the immediate vicinity of the project site (approximately 5 miles) or the habitat requirements associated with the species occur within the project site and are of sufficient size and quality as to support the species.
- **High Potential for Occurrence**: A historical record cites the species in or near the survey (project) area, and the habitats strongly associated with that species occur within the survey area or in its immediate vicinity.
- **Species Present**: The species was observed within the survey (project) area at the time of the survey.

Special-Status Plants

The CNDDB and CNPSEI literature review resulted in a list of thirty-one sensitive plant species that have the potential to occur on or within the vicinity of the project site: However none have a greater than low probability of occurrence within the Specific Plan Area. Six of the thirty-one sensitive plant species are federal- and/or state-listed endangered, threatened, or candidate species. The sensitive plant species, their current status, and their habitat requirements are summarized in Table 1A of Appendix C4.

Sensitive Plant Species Descriptions

This section provides a brief description of the biology of the six sensitive plant species that are federal- and/or state-listed endangered, threatened, or candidate species.

Marsh sandwort *(Arenaria paludicola)* is a perennial herb that is federally and state-listed as endangered. It occurs in freshwater swampy areas and boggy meadows from San Bernardino, Los Angeles, and Santa Barbara County, etc., to Washington. It can be found at elevations from 10 to 560 feet. This species is nearly extinct, with extant populations in the Nipomo Mesa area in San Luis Obispo County, and in the Santa Ana River area in Los Angeles and San Bernardino Counties. This species flowers from May to August. The project site is located outside the typical elevation limits characteristic of this species. Suitable habitat for this species does not occur on the project site; therefore, this species has a low potential for occurrence.

San Diego ambrosia *(Ambrosia pumila)* is a perennial herb that is federal-listed as endangered. It occurs in scattered populations from western Riverside County and western San Diego County south to the west coast of Baja California. It is threatened by competition with nonnative plant species, and habitat loss associated with development and recreational activities. San Diego ambrosia is a rhizomatous herb flowering from May through September. It occurs in chaparral, coastal scrub, valley and foothill grassland, and vernal pools. It is often found in disturbed locations, such as roadsides, in sandy or clay soils and often on alkaline soils, at elevations up to 1,400 feet. Suitable habitat for this species does not occur on the project site; therefore, this species has a low potential for occurrence.

Nevin's barberry *(Berberis nevinii)* is an evergreen shrub that is federally and state-listed as endangered. This species occurs in chaparral, coastal and riparian scrub communities, and cismontane woodland, in gravelly soils. It is associated with steep slopes and low-grade sandy washes within Los Angeles County in the San Fernando Valley as well as in the Arroyo Seco, San Timeteo Canyon and Redlands areas. This species flowers from March to April and can be found at elevations from 950 to 5,200 feet. The project site is located outside the typical elevation limits characteristic of this species. Suitable habitat for this species does not occur on the project site; therefore, this species has a low potential for occurrence.

Salt marsh bird's beak *(Cordylanthus maritimus* ssp. *maritimus)* is a hemiparasitic annual herb that is federally and state-listed as endangered. This species occurs in coastal dunes and coastal salt marshes and swamps along coastal California south to Baja. It flowers from May to October and can be found at elevations up to 100 feet. The project site is located outside the typical elevation limits characteristic of this species. Suitable habitat for this species does not occur on the project site; therefore, this species has a low potential for occurrence.

Slender-horned spineflower *(Dodecahema leptoceras)* is an annual herb that is federally and state-listed as endangered. It occurs in coastal scrub (alluvial fans), chaparral, and cismontane woodlands on sandy soils from the San Fernando Valley to the San Bernardino Valley. It also occurs in the Elsinore area. This species flowers from April to June and can be found at elevations from 650 to 2,500 feet. Suitable habitat for this species does not occur on the project site; therefore, this species has a low potential for occurrence.

Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum)* is a perennial herb that is federally and state-listed as endangered. It occurs in coastal scrub and chaparral on sandy soils, usually on river floodplains or terraced fluvial deposits in the Santa Ana River area as well as San Bernardino & Riverside Counties. This species flowers from June to September and can be found at elevations from 490 to 2,000 feet. Suitable habitat for this species does not occur on the project site; therefore, this species has a low potential for occurrence.

Special-Status Wildlife

After the literature review and assessment of the various habitat types within the project site, it was determined that 45 sensitive wildlife species have the potential to occur within the project site. Nine of these species are listed as federal- and/or state-endangered or threatened or proposed endangered, threatened, or candidate species. Of the 45 sensitive wildlife species evaluated for their potential occurrence on the Specific Plan Area, three species were present during surveys, nine species have a moderate potential to occur within the area, and the remaining 33 species have a low potential to occur. Table 1B of Appendix C4 provides a list of the federal- and state-listed endangered, threatened, candidate, and sensitive wildlife species that either occur or have the potential to occur within the project site. A brief description of the sensitive wildlife species follows.

Sensitive Wildlife Species Descriptions

This section provides a brief description of the biology of the sensitive wildlife species that have the potential to occur on the project site.

The Delhi Sands flower-loving fly (FE) is found only in areas of the Delhi sands formation in southwestern San Bernardino and northwestern Riverside counties. This species requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation. This species has been recorded in the Guasti and Fontana USGS quadrangles (CNDDB). The project site has been heavily disturbed due historical and ongoing agricultural and cattle-raising activities; thus, no dune habitat occurs on the site. It is possible that native alluvial soils occur near the surface within the site; however, the overall habitat quality for this species is low.

To assess the potential for this species to occur within the site, in 2004 Gilbert Goodlett, a biologist permitted by the U.S. Fish and Wildlife Service (Section 10(a)(1)(A) permit number TE005535-1) to survey for the federally endangered Delhi sands flower-loving fly (DSFF; *Rhaphiomidas terminatus abdominalis*) conducted a habitat suitability evaluation of two parcels within the Specific Plan Area, Tentative Track Map 16045 and the Van Veen site, totaling 77 acres (refer to Appendix C1). The findings of the report indicated that in consideration of all habitat factors evaluated, it was unlikely that the area would support DSFF because although the sites do contain Delhi series soils necessary for DSFF habitation, they lack other characteristics typical of occupied DSFF sites. These include the following:

- **Vegetative component**—The site ranges from denuded dairy farm with heavily disturbed soils to pasture land dominated by ruderal annual vegetation and lacks plant species typical of DSFF occupied sites like California buckwheat *(Eriogonum fasciculatum)* and telegraph weed *(Heterotheca grandiflora)*.
- **Vegetation height**—The vegetation was mostly weedy annual species that were less than 0.5 meter tall. Most are likely to be dead during DSFF flight season and will not provide shade for female DSFF oviposition.
- **Geomorphology**—There was no dune-type formation on or near the site that is typical of DSFF occupation. Further, the majority of the soils on the site are heavily disturbed.
- **Adjacent survey results**—DSFF were not found during two consecutive years of surveys in 2000 and 2001 at a site immediately west and adjacent to the southernmost site.
- **Other invertebrates**—Very few invertebrates of any species were observed.

Given this habitat data, the two previous surveys of the adjacent areas described above, the condition of the minimal amount of low-quality habitat in the Specific Plan Area, and the fact that the species was not observed during the protocol surveys, this species has a low potential to occur within the project site.

The **San Gabriel Mountains elfin butterfly** is found in southern mixed evergreen forests within the San Gabriel and San Bernardino Mountains. It occurs between 3,000 and 5,000 feet in elevation. The site does not support the required vegetation community and is outside the elevation limits of this species. Therefore, this species has a low potential to occur.

The **Santa Ana sucker** (FT, CSC) is endemic to the Los Angeles basin and southern coastal streams. This species is usually found in fresh water with sand-rubble or boulder bottoms. The site does not provide suitable aquatic habitat, and the channel that parallels the site is concrete lined. Therefore, this species has a low potential to occur.

The **arroyo chub** (CSC) is associated with slow water streams with mud or sand bottoms and feeds heavily on aquatic vegetation and associated invertebrates. The site does not provide suitable aquatic habitat, and the channel that parallels the site is concrete lined. Therefore, this species has a low potential to occur.

The **Santa Ana speckled dace** (CSC) is found only in permanent flowing streams with summer water temperatures of 17–20° C. It usually inhabits shallow cobble and gravel riffles. The site does not provide suitable aquatic habitat, and the channel that parallels the site is concrete lined. Therefore, this species has a low potential to occur.

The **San Gabriel slender salamander** is found under rocks, wood, fern fronds and on soil at the base of talus slopes within the San Gabriel Mountains. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **coast range newt** (CSC) occurs in the Coast Ranges from central Mendocino County south to northern San Diego County. This species is found primarily in valley-foothill hardwood, coastal scrub and mixed chaparral. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **Mountain yellow-legged frog** (FE, CSC) is found in streams that flow through southern sycamore alder riparian woodlands. This species is always encountered within a few feet of water. Tadpoles may require up to two years to complete their aquatic development. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **southwestern pond turtle** ([FSC], CSC) occurs in a variety of habitats including woodland, grassland, and open forest. This species is thoroughly aquatic, existing in good quality ponds, marshes, rivers, streams and irrigation ditches that have rocky or muddy bottoms. The southwestern pond turtle requires basking sites such as partially submerged logs, vegetation mats, or open mud banks. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **San Diego horned lizard** (CSC) is associated with arid coastal sage scrub and chaparral communities. The species is often found in open sandy areas with an abundant ant population. The San Diego horned lizard is also associated with areas supporting abundant termite and harvester ant colonies. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **orange-throated whiptail** (CSC) is associated with a variety of habitats but is most likely found in areas of open coastal sage scrub and along the fringes of riparian corridors. The species is often found near washes and other sandy areas with patches of brush and rocks. The orange-throated whiptail is also associated with areas supporting abundant termite and harvester colonies. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **northern red-diamond back rattlesnake** (CSC) is associated with a variety of habitats including chaparral, woodland, grassland, and desert communities of San Diego County. This species is often found near rocky areas and dense vegetation. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **golden eagle** (CSC) is an uncommon, permanent resident and migrant throughout California, except in the center of the Central Valley. The golden eagle typically occurs in rolling foothills, mountain areas, sage-juniper flats and desert habitats. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **Cooper's hawk** (CSC) prefers open grasslands and woodland margins with riparian vegetation and trees for nesting. Two hawks were observed during the field survey along the southern portion of the property. Suitable nesting habitat is extremely limited within the site; however, adjacent parcels support more suitable nesting habitat. This species has a low potential to utilize the site for nesting but has been observed foraging in the site.

The **burrowing owl** ([FSC], CSC) occurs in open, dry annual or perennial grasslands, characterized by low-growing vegetation. This species is dependent upon burrowing mammals, most notably, the California ground squirrel. Suitable nesting habitat for this species occurs within the Specific Plan Area. This species

was cited as "known to occur" in the project vicinity in 1996 by biologists for Envicom Corporation and has been observed on the proposed project site.

The **sharp-shinned hawk** (CSC) is fairly common migrant and winter resident throughout California and prefers, but is not restricted to, riparian habitats. This species usually nests in dense, pole, and small-tree stands of conifers, which are cool, moist, well shaded, with little ground-cover, near water. The sharp-shinned hawk was cited as "known to occur" in the project vicinity in 1996 by biologists for Envicom Corporation and based on habitat suitability has a moderate potential to forage within the Specific Plan Area.

The **ferruginous hawk** (FSC, CSC) are birds of open country. They occur in semiarid grasslands with scattered trees, rocky mounds or outcrops, and shallow canyons that overlook open valleys. They may occur along streams or in agricultural areas in migration. Suitable nesting habitat for this species occurs within the Specific Plan Area. This species was cited as "known to occur" in the project vicinity in 1996 by biologists for Envicom Corporation and based on habitat suitability has a moderate potential to forage within the Specific Plan Area.

The **white-tailed kite** (SA) has a restricted distribution in the United States and occurs only in California, western Oregon, and along the Texas coast (American Ornithologists' Union, 1983). Grasslands and marshes are the primary foraging habitats in the project area. Diurnally active rodents (e.g., meadow vole and harvest mouse) are the principal dietary components. Roost and nest sites are generally occupied from one year to the next so that "traditional" local territories have been maintained for several years. This species was observed in the project vicinity in 1996 by biologists for Envicom Corporation and based on habitat suitability has a moderate potential to forage within the Specific Plan Area.

The **loggerhead shrike** (FSC, CSC) is a common resident and winter visitor in lowlands and foothills throughout California. This species prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Sometimes uses edges of denser habitats. This species was observed in the project vicinity in 1996 by biologists for Envicom Corporation and in 2004 by Chambers Group biologists.

The **merlin** (CSC) is an uncommon winter migrant from September to May that frequents coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, and early successional stages. Frequents shorelines in winter and catches shorebirds. This species was cited as "known to occur" in the project vicinity in 1996 by biologists for Envicom Corporation and based on habitat suitability has a moderate potential to forage within the Specific Plan Area.

The **long-eared owl** (CSC) occurs in deciduous and evergreen forests; wooded parks, orchards and farm woodlands. This species of owl favors habitats that include dense trees for nesting and roosting adjacent to open country for hunting. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **southwestern willow flycatcher** (FE, SE) nests in moist thickets of dense, structurally diverse riparian habitat within southern California. The site does not provide suitable habitat, there is no riparian habitat on site to support the species. Therefore, this species has a low potential to occur.

The **tricolor blackbird** ([FSC], CSC) is highly colonial. This species is most numerous in central valley, largely endemic to California. It requires open water, a protected nesting substrate, and foraging areas with insect prey within a few kilometers of the colony. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **California gnatcatcher** (FT, CSC) is an obligate resident of southern California coastal sage scrub communities. This species is found near arid hillsides, mesas, and washes. The site does not provide suitable habitat, there is no coastal sage scrub habitat located on the site. Therefore, this species has a low potential to occur.

The **western yellow-billed cuckoo** (FC, SE) is a riparian forest nester. It occurs along the broad, lower flood-bottoms of larger river systems. This species also prefers thickets of willow mixed with cottonwood. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **double-crested cormorant** (CSC, rookery) is a yearlong resident along the entire coast of California and on inland lakes, in fresh, salt, and estuarine waters. August to May, fairly common to locally very common along the coast and in estuaries and salt ponds; uncommon in marine subtidal habitats from San Luis Obispo County south, and very rare to the north. It feeds mainly on fish but also will take crustaceans and amphibians. The double-crested cormorant requires undisturbed nest-sites beside water, on islands or mainland. It uses wide rock ledges on cliffs, rugged slopes, and live or dead trees, especially tall ones. This species was observed in the project vicinity in 1996 by biologists for Envicom Corporation; however, the Specific Plan Area would not support nesting colonies, nor would it have prey capable of supporting this species. It would therefore have a low to occur within the Specific Plan Area.

The **white-faced ibis** (CSC) is an uncommon summer resident in sections of southern California, a rare visitor in the Central Valley, and is more widespread in migration. It prefers to feed in fresh emergent wetland, shallow lacustrine waters, and muddy ground of wet meadows and irrigated, or flooded, pastures and croplands. It nests in dense, fresh emergent wetlands. Suitable nesting habitat for this species does not occur within the Specific Plan Area. This species was observed in the project vicinity in 1996 by biologists for Envicom Corporation it would therefore have a moderate potential to forage within the Specific Plan Area.

The **long-billed curlew** (FSC, CSC) has a preferred winter habitat that includes large coastal estuaries, upland herbaceous areas, and croplands. Upland short-grass prairies and wet meadows are used for nesting; coastal estuaries, open grasslands, and croplands are used in winter. This species was observed in the project vicinity in 1996 by biologists for Envicom Corporation it would therefore have a moderate potential to forage within the Specific Plan Area.

The **California gull** (CSC) is a fairly common nester at alkali and freshwater lacustrine habitats east of the Sierra Nevada and Cascades, and an abundant visitor to coastal and interior lowlands in nonbreeding season. This species was observed in the project vicinity in 1996 by biologists for Envicom Corporation it would therefore have a moderate potential to forage within the Specific Plan Area.

The **mountain plover** is a winter resident from September through March that is found on short grasslands and plowed fields. It frequents open plains with low, herbaceous or scattered shrub vegetation, and it winters below 1000 m (3200 ft). It does not nest in California. This species was cited as "known to occur" in the project vicinity in 1996 by biologists for Envicom Corporation and based on habitat suitability has a moderate potential to forage within the Specific Plan Area.

The **least Bell's vireo** (FE, SE) occurs in moist thickets and riparian areas that are predominantly composed of willow and mule fat. The site does not support willow and mule fat habitat and is thus void of suitable habitat. Therefore, this species has a low potential to occur.

The **black swift** (FSC, CSC) breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea bluffs. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **yellow-breasted chat** (CSC) occurs in woodland edges, neglected pastures, thick shrubbery, briar thickets, willow thickets, and shrubby wet meadows. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **yellow warbler** (CSC) inhabits ruderal, riparian, and other terrestrial habitats. This species favors wet habitats, especially alders, open woodlands, and gardens. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **Bell's sage sparrow** (FSC, CSC) frequents low, fairly dense stands of shrubs within coastal sage scrub or chaparral habitat. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **Southern California rufous-crowned sparrow** (CSC) is associated with coastal sage scrub and sparse mixed chaparral habitat. This species frequents relatively steep, often rocky hillsides with grass and forb patches. The site does not provide suitable habitat; therefore, this species has a low potential to occur.

The **Western mastiff bat** (FSC, CSC) inhabits many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral communities. This bat roosts in crevices in cliff faces, high buildings, trees, and tunnels. No suitable roosting habitat for this species occurs on the project site. Additionally, the site does not provide likely foraging opportunities for this species. Therefore, this species has a low potential to occur.

The **Los Angeles pocket mouse** (CSC) occurs in lower elevation grasslands and coastal sage scrub communities in the Los Angeles Basin. This species prefers open ground with fine sandy soils. The project

site has been heavily disturbed due to historical and ongoing agricultural and cattle-raising activities. Therefore, the site supports extremely limited habitat for this species. This species has a low potential to occur.

The **San Bernardino kangaroo rat** (FE, CSC) occurs in alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. This species needs early to intermediate seral stages. The project site has been heavily disturbed due to historical and ongoing agricultural and cattle-raising activities. Therefore, the site supports extremely limited to no habitat for this species. This species has a low potential to occur.

The **Stephens' kangaroo rat** (FE, ST) is associated with nonnative grasslands and areas with sparse coastal sage scrub habitat. This species requires areas with well-drained, gravelly or sandy soil for digging their burrows. The project site has been heavily disturbed due to historical and ongoing agricultural and cattle-raising activities. Therefore, the site supports extremely limited to no habitat for this species. This species has a low potential to occur.

The **San Diego desert woodrat** (CSC) occurs in moderate to dense canopies, especially in rock outcrops, rocky cliffs, and slopes within Southern California from San Diego County to San Luis Obispo County. The project site has been heavily disturbed due to historical and ongoing agricultural and cattle-raising activities. Therefore, the site supports extremely limited to no habitat for this species. This species has a low potential to occur.

The **San Diego black-tailed jackrabbit** (CSC) is found in areas with intermediate canopy stages of shrub habitats and open shrub/herbaceous edges. The project site has been heavily disturbed due to historical and ongoing agricultural and cattle-raising activities. Jackrabbits are common in grasslands that are overgrazed by cattle and they are well adapted to using low-intensity agricultural habitats. In fact, to a point, drought and overgrazing may create better habitat for black-tailed-jackrabbits. This species was observed within the proposed project site

The **Nelson's bighorn sheep** occur in open, rocky steep areas with available water and herbaceous forage from the White Mountains in Mono County to the Chocolate Mountains in Imperial County. The project site has been heavily disturbed due to historical and ongoing agricultural and cattle-raising activities. Therefore, the site supports no habitat for this species. This species has a low potential to occur.

3.3.4 Regulatory Framework

The following regulations would be applicable to the proposed project.

Federal

Endangered Species Act of 1973. The federal ESA and implementing regulations, Title 16 United States Code (USC) §1531 *et seq*. (16 USC 1531 *et seq*.), Title 50 Code of Federal Regulations (CFR) §17.1 *et seq*.

(50 CFR §17.1 *et seq*.), includes provisions for the protection and management of federally listed threatened or endangered plants and animals and their designated critical habitats. Section 7 of the ESA requires a permit to take threatened or endangered species during lawful project activities. The administering agency for the above authority is the USFWS for terrestrial, avian, and most aquatic species. The National Marine Fisheries Service is responsible for administering the federal ESA as it applies to marine species and anadromous fish.

National Environmental Policy Act (NEPA); 42 USC §4321 *et seq*. This Act requires analysis of the environmental effects of federal actions. The administering agency for the above authority for the University's proposed project is expected to be the ACOE associated with permitting under Section 404 of the *Clean Water Act* (CWA).

Fish and Wildlife Coordination Act. Section 7 of Fish and Wildlife Coordination Act, 16 USC 742 et seq., 16 USC 1531 *et seq*., and 50 CFR 17 requires consultation if any project facilities could jeopardize the continued existence of an endangered species. Applicability depends on federal jurisdiction over some aspect of the project. The administering agency for these authorities is expected to be the ACOE in coordination with the USFWS.

Migratory Bird Treaty Act (MBTA). The MBTA (16 USC §§703–711) includes provisions for protection of migratory birds, including the nonpermitted take of migratory birds, under the authority of the USFWS and CDFG. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species.

Clean Water Act of 1977, Section 404. This section of the Act (33 USC 1251 *et seq*., 33 CFR §§320 and 323 gives the ACOE authority to regulate discharges of dredge or fill material into waters of the U.S., including wetlands.

Clean Water Act of 1977, Section 401. This section of the Act requires a state-issued Water Quality Certification for all projects regulated under Section 404. In California, the RWQCB issues Water Quality Certifications with jurisdiction over the project area. The RWQCB—Santa Ana Region, issues Section 401 Water Quality Certifications for San Bernadino County.

State

California Endangered Species Act (CESA) of 1984. The CESA and implementing regulations in the Fish and Game Code, §2050 through §2089, includes provisions for the protection and management of plant and animals species listed as endangered or threatened, or designated as candidates for such listing. Incidental take of an endangered species is permitted by CDFG only under certain conditions and provided that the proper federal permits have been obtained and notifications made to the CDFG as described in Fish and Game Code §2080.1. Plants of California declared to be endangered, threatened, or rare are listed at 14 CCR §670.2. Animals of California declared to be endangered or threatened are listed at 14 CCR

§670.5.14 CCR §15000 et seq. describes the types and extent of information required to evaluate the effects of a proposed project on biological resources of a project site.

Fish and Game Code of California. The Fish and Game Code provides specific protection and listing for several types of biological resources.

Section 1580 of the Fish and Game Code presents the process and definition for Designated Ecological Reserves. Designated Ecological Reserves are significant wildlife habitats to be preserved in natural condition for the general public to observe and study.

Section 1600 of the Fish and Game Code requires a Streambed Alteration Agreement for any activity that may alter the bed and/or bank of a stream, river, or channel. Typical activities that require a Streambed Alteration Agreement include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement

Section 2081(b) and (c) of the CESA allows CDFG to issue an incidental take permit for a state listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a) and (b). No Section 2081(b) permit may authorize the take of "fully protected" species and "specified birds." If a project is planned in area where a species or specified bird occurs, an applicant must design the project to avoid all take; the CDFG cannot provide take authorization under CESA.

Native Plant Protection Act of 1977. Native Plant Protection Act of 1977 and implementing regulations in Section 1900 et seq. of the Fish and Game Code designates rare and endangered plants, and provides specific protection measures for identified populations. It is administered by the CDFG.

Wetlands Resources Policy. This policy provides for the protection, preservation, restoration, enhancement, and expansion of wetland habitats in California. The administering agencies for this authority are the CDFG, the California Environmental Protection Agency (Cal-EPA), and the RWQCB (Regional Water Quality Control Board)—Santa Ana Region.

Applicable Ontario SOI GPA Goals and Policies

Goal

Goal 18A ***Protection and preservation of waterfowl and raptor habitat.***

Policies

Policy 18.1.1 *Work with and encourage the Army Corps of Engineers, Chino Basin SAPA, and County Flood Control to retain a minimum of 160 acres of surface water in the El Prado Basin. This water shall serve as the habitat mitigation for waterfowl to offset the discontinued use of state-mandated dairy manure water retention basins. (I-36 and I-47)*

Policy 18.1.2 *Ensure that development projects proposed for areas that support and retain waterfowl and raptor habitat:*

- *incorporate fences, walls, vegetative cover, or other measures to buffer waterfowl areas from the built environment;*
- *locate and design roads and utilities in such a manner that they will not conflict or impact habitat areas; and*
- *permit only the following uses:*

  educational and research facilities (excluding buildings);

  passive (non-motorized, non-consumptive) recreation;

  trails on public land(s) if located outside of a undeveloped buffer zone;

  fish and wildlife management activities; and

  flood control projects where no other viable methods are available to protect the public safety. (I-7 and I-10)

Policy 18.1.4 *Periodically update the Biological Habitat Map (Figure 6-5) and data base to maintain current information regarding waterfowl and raptor habitat. (I-6 and I-41)*

Policy 18.1.5 *Require that subarea Specific Plans include sufficient technical data to enable an adequate assessment of the potential for impacts on biological resources. Such technical data shall include species lists, habitat use, acreage of habitat, and descriptions of any vegetation. (I-7 and I-10)*

Policy 18.1.6 *Review that Specific Plans and development projects proposed within the Sphere of Influence assess their impacts on local biological resources and recommend appropriate mitigation measures, if necessary to account for specific development characteristics or site conditions that are not adequately addressed by the Sphere of Influence General Plan Environmental Impact Report. (I-7 and I-10)*

Policy 18.1.7 *Encourage that development plans take all reasonable measures to avoid creating significant impacts. (I-7 and I-10)*

Policy 18.1.8 *Encourage that development plans take all reasonable measures to avoid altering the biological integrity. Reasonable measures may include but are not limited to vegetative restoration, control of alien plants and animals, and use of landscaping buffers. (I-7 and I-10)*

Policy 18.1.9 *Consider enhancing the ponded areas adjacent to the flood control channel (i.e., planting native trees to serve as buffers). (I-36)*

Policy 18.1.10 *Require dedicated open space easements as a condition of approval for development projects proposed adjacent to waterfowl and raptor habitat areas that are voluntarily retained in the Sphere of Influence. These open space easements shall assure that the biological habitats are buffered and protected from degradation and shall be used only for passive recreational/educational purposes. (I-7 and I-10)*

Policy 18.1.11 *Ensure that development projects located adjacent to waterfowl or raptor habitat areas that are voluntarily retained in the Sphere of Influence:*

- *maintain a 100-foot buffer (minimum) from the edge of the habitat on the subject property;*
- *maintain connection to other preserved habitats, where they exist; and*

- *dedicate open space easements to the City, homeowner associations, or other responsible party. (I-7 and I-10)*

Goal 18B Recovery of the Delhi sands flower-loving fly.

Policy 18.2.1 Monitor the efforts of the Department of Fish and Wildlife [Sic. U.S. Fish and Wildlife Service} to study the recovery of the federally listed Delhi sands flower-loving fly. Assess the impacts of recovery recommendations for development in the Sphere of Influence. (I-5 and I-47)

Policy 18.2.2 The City shall cooperate with the U.S. Fish and Wildlife Service in the following ways to mitigate potential impact to the DSFLF:

- *cooperate with USFWS to ensure, through the Specific Plan Process, that potential recovery areas are appropriately mitigated;*
- *establish a standard for buffers for protecting DSFLF restoration areas, in cooperation with USFWS; and*
- *work with rights-of-way owners and USFWS to explore the possibility of creating DSFLF habitat within these undeveloped strips. (I-5 and I-47)*

Goal 18C Increased public's awareness of local biological resources.

Policy 18.3.1 Sponsor or co-sponsor "balanced" educational programs that:

- *promote awareness of local biological resources;*
- *inform about protection and preservation programs;*
- *foster community attitudes and behaviors that help protect local plants and wildlife; and*
- *encourage community involvement in protection programs. (I-50)*

3.3.5 Thresholds of Significance

The criteria for determining significant impacts on biological resources were developed in accordance with state CEQA Guidelines. Section 15065(a) of the CEQA Guidelines states that a project may have a significant effect on the environment if "the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species." An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse, but not significant, because they would result in an adverse alteration of existing conditions, but they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on Biological Resources if it would result in any of the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

3.3.6 Project Impacts

Impact BIO-1 Implementation of the project could, through habitat modifications, result in a potential reduction in nesting opportunities for resident and migratory avian Species of Special Concern, including raptors or the loss of an active avian nest. This is considered a *potentially significant* impact.

As described above in Environmental Setting, no threatened or endangered species have been reported to occur within the project site or within Deer Creek Channel; however, some sensitive species such as the loggerhead shrike *(Lanius ludovicianus)* as well as migratory avian species and raptors, which may use portions of the site and adjacent areas during breeding season, are protected under the Migratory Bird Treaty Act (MBTA). Specific areas of concern would be those portions of the Specific Plan Area that contain large landscaping trees (windrows) or other suitable vegetation such as medium size woody vegetation along the perimeter of the ponded areas or fields that could also be used for nesting by such species as the ferruginous hawk. Additionally, project implementation and construction-related activities including, but not limited to, grading, materials laydown, facilities construction, and construction vehicle traffic may result in the disturbance of nesting and/or wintering special-status species such as Cooper's hawk and white-faced ibis, which have either been observed within the Specific Plan Area boundaries or have a moderate probability of occurring within the Specific Plan Area (refer to Table 1B of Appendix C4 for a full list). The loss of a special-status avian species, an occupied nest, or substantial interference with roosting and foraging opportunities for migratory Species of Special Concern or raptors as a result of construction or demolition activities, would constitute a potentially significant impact. However, this impact would be reduced to a less-than-significant level with the implementation of MM BIO-1(a-b)-SP.

Impact BIO-2 Project implementation would remove state-mandated dairy manure water retention basins that serve as migratory waterfowl habitat. This is considered a *potentially significant* impact.

Open water areas and associated shoreline vegetation within the Specific Plan Area have the potential to attract numerous wintering and/or migrating waterfowl, shorebirds, and other avian species closely associated with aquatic habitats. The proposed project would remove approximately 4.5 acres of this habitat; the loss of which would remove the overwintering/migratory habitat used by observed and expected-to-occur avian species protected by the Migratory Bird Treaty Act (MBTA) and thus inhibit the movement of a migratory wildlife species through the area. This would be a significant impact, as the unmitigated loss of this habitat would conflict with the MBTA and with the established thresholds of significance identified above.

To reduce these potential impacts, the Ontario SOI GPA EIR proposed the creation of a Waterfowl and Raptor Conservation Area (WRCA) that would act as a mitigation bank for the loss of habitat within the Ontario New Model Colony (NMC) area. In total the SOI GPA EIR included provisions that provide for the establishment of 305 acres of waterfowl and raptor habitat. The SOI GPA EIR specified that the City would work with the U.S. Army Corps of Engineers (USACE) and other agencies to retain 160 acres of waterfowl habitat in the El Prado Basin and also create an on-site WRCA (within the SOI area) adjacent to the flood control detention basins located on the south side of Chino Avenue, west of Archibald Avenue. However, following the City's approval of the SOI GPA EIR, a lawsuit was filed by The Endangered Habitat's League and the Sierra Club ("the Petitioners") challenging the adequacy of the EIR and the effectiveness of this mitigation measure.

According to information provided by City of Ontario Senior Planner Richard Ayala (Ayala 2004), after numerous meetings to discuss various alternatives, an agreement was reached between the City and the Petitioners wherein all or part of the WRCA, previously proposed to be located within the Ontario NMC area, could be relocated to an area outside of the NMC area within the El Prado Basin. The El Prado Basin was defined in the settlement agreement as that area generally bounded on the north by Riverside Drive; on the south by SR-91; on the east by Interstate 15; and on the west by SR-71; Kimball Avenue, and Euclid Avenue. Therefore, to mitigate the potential impacts to wildlife within the NMC area, particularly waterfowl and raptors, the City Council approved an amendment to the SOI GPA EIR (File no. GPA02-003) to provide for the relocation of the WRCA to off-site locations within the Chino/El Prado Basin area.

This new amendment was specifically adopted to (1) allow for the acquisition of all NMC area habitat/open space mitigation property off site so that larger, more "biologically beneficial blocks of habitat" can be purchased; (2) permit the hiring of establishment of a land trust to spearhead the acquisition process; (3) give the land trust maximum flexibility to determine the type and amounts of land that should be purchased within the El Prado Basin; (4) provide that the development impact fees be collected in amounts sufficient to offset biological impacts to species now existing in the SOI area and the loss of open space; (5) ensure, given the conclusions of the SOI GPA EIR and the underlying biological studies that raptors, waterfowl, and other bird species will bear a "substantial burden and be unduly displaced by development"

of the SOI area, that the bulk of mitigation feed may be used to offset impacts to such species; (6) provide up to $500 per acre of mitigation fees may be used by the City to benefit the Delhi Sands flower-loving fly; and (7) provide that $22.7 million is the appropriate and justifiable amount that will be raised though development fees to offset these impacts.

Surveys undertaken in 2001 and 2002 by City staff concluded that the price of purchasing suitable mitigation land within the Chino Basin in fee was between $75,000 and $100,000 per acre, and that the cost to purchase conservation easements in the Chino Basin ranges from approximately $30,000 to $60,000 per acre.[2] Although the City notes that although acquisition prices vary widely by location and also change over time, the survey costs provide a suitable range for purposes of developing financing mechanisms needed to acquire mitigation lands. Using these numbers, a conservative estimate of the area that could be purchased in fee would be approximately 227 acres (using $100,000/acre as acquisition cost). The amount of land acquired would vary with not only purchase price but also with the type of acquisition. If mitigation lands were a 50-50 mix of conservation easements and land purchases, using the more conservative numbers of those listed above, the amount area slated as mitigation lands could be as much as 303 acres (113.5 of purchased land and 189.5 under conservation easements.)

The purchase of off-site mitigation areas and/or conservation easements within the El Prado Basin and retention of 160 acres of surface water within the El Prado Basin as discussed above would result in an increase of waterfowl and migratory bird habitat within the project vicinity. This combined with MM BIO-2(a–f)-SP would reduce this impact to less-than significant levels.

Impact BIO-3 Implementation of the project would, through habitat modifications, result in the loss of raptor foraging habitat. This is considered a *potentially significant* impact.

Implementation of the proposed project would result in the conversion loss of an estimated 49 acres of ruderal vegetation to various urban land uses. The ruderal fields located throughout the Specific Plan Area are known to be an important habitat type for a number of avian species, particularly raptors that use them to forage for rodent or bird prey. The value of these fields for foraging is enhanced by the availability of numerous large trees, fence lines, or power transmission structures that raptors perch on while searching for prey in the fields. As historic raptor foraging areas have been reduced via development and conversion of agricultural lands to urbanized environments, the loss of 49 acres of foraging habitat would be considered a potentially significant impact. As discussed in Impact BIO-2, the purchase of off-site mitigation areas and/or conservation easements within the El Prado Basin and the retention of a minimum of 160 acres of surface water within the El Prado Basin, as mandated by the amended SOI GPA EIR, would be greater that the amount of foraging habitat removed by the proposed project. This area would be preserved in perpetuity and, combined with MM BIO-2(a–f)-SP, would reduce impacts to less-than-significant levels.

Impact BIO-4 Construction and operation of the proposed project could have direct and indirect effects upon the hydrology and aquatic habitat quality of federally

[2] City of Ontario Development Impact Fee Calculation Report (rev 5/12/03) Chapter 15, pp. 198–205.

protected wetlands and "Other Waters" of the United States as defined by Section 404 of the *Clean Water Act*. This is considered a *potentially significant* impact.

As discussed in the Regulatory Setting section above, for an area to be considered a jurisdictional wetland under Section 404 of the CWA it must meet a series of specific criteria. Specifically, the United States Army Corps of Engineers' (USACE; the Corps) definition (Environmental Laboratory 1987) states:

> The following definition, diagnostic environmental characteristics, and technical approach comprise a guideline for the identification and delineation of wetlands.
>
> (a) Definition: The Corps (Federal Register, Section 328.3(b), 1991) and the EPA (Federal Register, Section 230.4(t), 1991) jointly define wetlands as: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
>
> (b) Diagnostic environmental characteristics: Wetlands have the following general diagnostic environmental characteristics:
>
> 1. Vegetation: The prevalent vegetation consists of macrophytes that are typically adapted to areas having hydrologic and soil conditions described in (a) above. Hydrophytic species, due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions.
> 2. Soil: Soils are present and have been classified as hydric, or they possess characteristics that are associated with reducing soil conditions.
> 3. Hydrology: The area is inundated either permanently, or periodically at mean water depths < 6.6 ft. (~ 2 m), or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation. The period of inundation or soil saturation varies according to the hydrologic/soil moisture regime and occurs in both tidal and non-tidal situations.
>
> (c) Technical approach for the identification and delineation of wetlands: Except in certain situations defined in this manual, evidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland determination.

The Corps also reserves the right, on a case-by-case basis and as supported by applicable laws and regulations, to determine whether or not potential jurisdictional areas lie within their regulatory boundaries.

In addition to the above criteria, recent court rulings have limited the federal government's CWA jurisdiction by redefining "waters of the United States." In the 2001 case of the *Solid Waste Agency of Northern Cook County (SWANCC) v. the U.S. Army Corps of Engineers*, the U.S. Supreme Court ruled that hydrologically isolated waters and wetlands lacking a "significant nexus" to navigable waters could not be included as "waters of the United States" solely because they are used as habitat by migratory birds. In addition, in light of the Headwaters, *Inc. v. Talent Irrigation District*, 243 F.3d 526 (9th Cir. 2001) decision, the U.S. Army Corps of Engineers, Northwestern Division issued the following statement for the regions in the geographic jurisdiction of the U.S. Court of Appeals for the Ninth Circuit:

> We view Headwaters, Inc. v. Talent Irrigation District, 243 F.3d 526 (9th Cir. 2001) as binding on the U.S. Army Corps of Engineers, Northwestern Division, in the geographic jurisdiction of the U.S. Court of Appeals

> for the Ninth Circuit. In that case, the court held that irrigation canals that receive water from natural streams and lakes, and divert water to streams and creeks, are connected as "tributaries" to those other waters. The Ninth Circuit further held that a "stream which contributes its flow to a larger stream or other body of water is a tributary. . . . As tributaries, the canals are 'waters of the United States,' and are subject to the CWA and its permit requirement." Headwaters, 243 F.3d at 533. Moreover, the court held that, "Even tributaries that flow intermittently are 'waters of the United States.'" Id. at 534. Corps of Engineers regulations at 33 C.F.R. § 328.3(a)(5) assert CWA jurisdiction over all tributaries to other jurisdictional waters of the United States. In factual situations where the Headwaters precedent applies, it would supercede any contrary conclusion that might be drawn from previous Corps of Engineers policy statements regarding ditches.

State-mandated dairy manure water retention basins that serve as runoff collection/water treatment ponds for the dairy and poultry operations are found within the Specific Plan Area. As the ponds are clearly isolated artificial closed systems, whose purpose is to collect and prevent polluted runoff from reaching jurisdictional waters and thus are not "intermediate tributaries" of jurisdictional waters, they would likely be considered isolated waters, and would not be subject to ACOE jurisdiction under Section 404 of the CWA nor meet the criteria of federally protected wetlands as defined by Section 404 of the CWA.

Construction and operation of the proposed project could have direct and indirect effects upon the hydrology and aquatic habitat quality of the Deer Creek Channel and/or Cucamonga Creek Channel which contain areas of wetlands and are considered a jurisdictional waters (e.g., “other waters”) of the United States and therefore subject to regulation under Section 404 of the CWA (33 CFR Part 238). In addition, grading for construction of the project has the potential to increase erosion and subsequent deposition of soil particles into the Deer Creek Channel and/or Cucamonga Creek Channel and associated Cucamonga Basin. In addition, the Specific Plan would also involve the construction of two stormwater outflows into two concrete-lined channels within the project area: one into the Cucamonga Creek Channel located west of the Specific Plan area, and one into the Deer Creek Channel that runs through the southeast quadrant of the area. These actions could potentially result in physical alterations to “other waters” of the United States, which would be a potentially significant impact.

The stormwater outflow into Deer Creek Channel, Cucamonga Creek Channel, and Cucamonga Basin could also contain excess fertilizers from the operation of the proposed project and could alter the water quality of the Cucamonga Basin by altering the nutrient regime. Toxics contained in herbicides, insecticides, and fungicides used to maintain landscaping could also result in direct kill of aquatic and riparian plants and animals within the Cucamonga Basin. These would also be potentially significant impacts.

If the proposed alteration of the storm channels does occur within jurisdictional areas, it would be subject to Section 404 and 401 of CWA and Section 1600 of the Fish and Game Code of California. This would require the Applicant to apply for and receive Section 404 and 401 permits and a Section 1600 Streambed Alteration Agreement prior to performing any work within jurisdictional Waters of the U.S. or State of California.

Section 404 of the CWA enables the USACE to grant permits for certain activities within jurisdictional waterways and wetlands. Construction projects affecting jurisdictional waterways and wetlands in any state

cannot proceed until a 404 permit has been issued. In deciding whether to grant or deny a permit, the USACE must follow certain guidelines, which are discussed below.

Section 401 of the CWA gives the U.S. Environmental Protection Agency (EPA) the authority to prohibit an activity, including a construction project, if it can impact water quality or have other unacceptable environmental consequences. For most states, EPA has delegated this authority to state environmental agencies, within California, this regulatory function falls to the State Water Quality Control Board. Section 401 Certifications are required whenever a Section 404 permit is required, i.e., when a project results in dredging or placement of fill within jurisdictional waters of the U.S, including wetlands.

These two regulatory activities are usually conducted cooperatively through use of a joint application form. The USACE reviews permit applications to determine if practical alternatives to the project exist. They also impose mitigation requirements on the applicant and perform a public interest review. The USACE also determines if other environmental laws must be addressed, including the National Environmental Policy Act, Endangered Species Act, and the National Historic Preservation Act. If the USACE's review reveals that the project should not proceed, they have the authority to either deny or condition the project. Then, using their 401 authority, state agencies review the permit application, looking closely at potential water quality impacts. When warranted, the states grant "401 certification," which is needed before a 404 permit can be issued by the USACE. The issuance of a 401 Certification represents a determination by the State Water Quality Control Board that discharges of waste to waters of the U.S. that are associated with the referenced project will comply with the applicable provisions of Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. In order for such a determination to be meaningful, projects subject to Certification are evaluated for their direct, indirect, and cumulative impacts to waters of the U.S., with respect to water quality objectives and beneficial uses. Such impacts must be mitigated to receive a Certification.

Under Section 1600 of the Fish and Game Code of California a Streambed Alteration Agreement (SAA) is issued when actions taken by any person, state or local governmental agency, or public utility could substantially adversely affect an existing fish and wildlife resource. Unlike 404 and 401 permits that can be approved or denied, a CDFG agreement cannot be "denied," as it is a negotiated instrument between the Applicant and the CDFG. The SAA includes individual project mitigation measures to address specific significant impacts to drainage channels, streams, and creeks, as well as any riparian vegetation within the surrounding riparian zone. These measures could include, but are not necessarily limited to, in-kind replacement of riparian vegetation (either on- or off-site), as well as structural and nonstructural measures designed to protect the water quality of receiving waters. Additionally, runoff produced during and after construction is subject to National Pollution Discharge Elimination System regulations, as well as local water quality and runoff standards

Therefore, if necessary, any discharges into Waters of the United States from the proposed project must be in conformance with CWA via Section 404 and 401 certification and permitting prior to any grading or

construction that may impact jurisdictional area, as applicable. Any modifications to the stream channels must be in conformance with Section 404 of the CWA and Section 1600 California Fish and Game Code. Additionally, runoff produced during and after construction is subject to National Pollution Discharge Elimination System (NPDES) Regulations, as well as local water quality and runoff standards. Therefore, securing a SAA from the CDFG, and 404 and 401 permits under the CWA would protect the hydrology and biology of the Deer Creek Channel, Cucamonga Creek Channel, and Cucamonga Basin, and would ensure that impacts to these areas would be less-than significant.

Impact BIO-5 Grading activities during project construction and the establishment of project landscaping could result in the introduction of undesirable invasive nonnative plant species to the project site and adjacent areas. This is considered a *potentially significant* impact.

Soil disturbance could result in the spontaneous growth of "opportunist" or weedy species that spread aggressively into naturalized areas such as the Cucamonga Basin. Certain nonnative plant species commonly used in landscaping discourage regeneration or growth of desirable native vegetation and could colonize the adjacent Cucamonga Creek Channel, altering the current plant and/or wildlife diversity of the area. This would be a potentially significant impact as nonnative plant species generally do not provide foraging habitat that is as valuable for resident wildlife species as that provided by native plant species. Implementation of MM BIO-3-SP would reduce this impact to a less-than-significant level.

Impact BIO-6 Implementation of the project could, through habitat modifications, result in the loss of western burrowing owl, a state and federal Species of Concern. This is considered a *potentially significant* impact.

The loss of an individual western burrowing owl, an occupied nest, or substantial interference with roosting and foraging opportunities as a result of construction or demolition activities would constitute a significant impact. Implementation of MM BIO-4-SP would reduce potential impacts to western burrowing owls to a less-than-significant level.

Impact BIO-7 Implementation of the project could result in a potential take of Delhi sands Flower-loving Fly. This is considered *potentially significant* impact.

Potential habitat for the federally listed Delhi sands Flower-loving Fly (DSFF) is present in the Specific Plan Area. Although a habitat suitability analysis performed by a Gilbert Goodlett, a permitted DSFF biologist, found that there is a low possibility of the DSFF occurring on site, the project site does contain Delhi series soils and the site is located within the range of the animal. An un-permitted take of this species would be considered a significant impact.

SOI General Plan Amendment Policies 18.2.1 and 18.2.2, as well as project-specific MM BIO-5-SP, are designed to reduce potential impacts to the DSFF. The City can also use up to $500 per acre retained from the mitigation fee of $4,321 per developable acres to carry out the requirements set by the GPA Policies, the USFWS, and relevant CEQA documents such as the acquisition and restoration of DSFF habitat. These

existing policies and mitigation measures, in combination with MM BIO-5-SP and the required compliance with the Federal Endangered Species Act, would reduce impacts associated with the loss of federally listed DSFF and its habitat by requiring: 1) protocol level surveys of the site for the DSFF, and 2) if the proposed project would result in the take of any federally listed threatened or endangered species, authorization from the USFWS would need to be obtained in advance. As such, residual impacts to DSFF would be less-than-significant.

Less Than Significant

Impact BIO-8 Implementation of the project would not result in impacts to special-status or sensitive plant species. This is considered a *less-than-significant* impact.

The CNDDB and CNPSEI literature review resulted in a list of thirty-one sensitive plant species that have been recorded to occur in the vicinity of the project site. However, based on past land uses, habitat suitability assessments, and four biological resource surveys of parcels within the Specific Plan Area, none of these species has a greater than "low" probability to occur within the proposed project area (refer to Table 1A of Appendix C4). Based on the highly disturbed condition and the lack of quality native habitats within the Specific Plan Area, no sensitive plant species are expected to occur within the proposed project area and impacts would be less than significant.

Impact BIO-9 Project implementation would impact areas of primarily denuded/developed ground, or ruderal vegetation that has limited nonavian wildlife movement function. This impact is considered *less than significant*.

As described in the Initial Study and in section 3.4-3 above, the existing conditions of the proposed project area provide very limited habitat value due to extensive past and present human and agricultural activities which have resulted in significant alterations to the topography, vegetation, species assemblages and habitat quality of the Specific Plan Area. For ground-dwelling vertebrates, habitats in the proposed project area are more or less isolated from large expanses of similar habitats to the west. The Deer Creek Channel and the Cucamonga Creek Channel are the last remaining physical linkages between the project area and relatively undisturbed and unfragmented habitats to the north. However, these linkages are tenuous at best and may be open, semi-permeable, or impermeable movement corridors for ground-dwelling vertebrates, depending on the species, its body size, dispersal ability, and tolerance for habitat disturbance. The project area is likely large enough to allow populations of common species, such as the western fence lizard and deer mouse to persist. In general, populations of small vertebrates in the project area, such as amphibians, reptiles, and small mammals, may experience dramatic seasonal and annual fluctuations, but persist with little or no influx of individuals from extralimital areas. Populations of medium -size carnivores, such as the Virginia opossum *(Didelphis virginianus)* are small and probably could persist in the project area without dispersal from outside areas. These species have relatively high reproductive rates and can survive in urbanized or otherwise disturbed environments. However, movement of these species between the foothill and montane regions to the north and the project area via the narrow and fragmented habitat linkages provided by Deer

Creek Channel and the Cucamonga Creek Channel may occur only infrequently because there are many intervening barriers to dispersal, such as transportation corridors and associated culverted under crossings and residential development. Given these constraints to movement, the nature of the surrounding areas, and the fact that the proposed project areas does not connect two natural habitats, impacts of the proposed project to overland wildlife movement through the site would be less than significant.

Impact BIO-10 Project impacts to nonsensitive wildlife species would be *less than significant*.

As the majority of the proposed project site is denuded/developed ground, or ruderal vegetation, the amount of habitat for wildlife that would be affected by implementation of the proposed project quite small. Although the site does not act as a wildlife corridor, some of the wildlife species that do occur on site are highly mobile and will be able to relocate from the relatively small area impact to the adjoining larger areas of vacant land to the north and west. Other, less mobile individuals in the impact areas will be lost during project implementation. However, the project impacts to nonsensitive wildlife species would be less than significant, as the loss of these species would not result in the following:

- Cause a substantial reduction of the habitat of a wildlife species
- Produce a drop in a wildlife population below self-sustaining levels
- Eliminate a plant or animal community
- Cause a reduction or restriction of the number or range of a rare or endangered plant or animal
- Have a substantial affect on a rare or endangered species of animal or plant or the habitat of the species
- Substantially interference with the movement of any resident or migratory wildlife species

As discussed in the previous impact, due to surrounding development and roadways, the area does not serve as a regional wildlife corridor, and the proposed project will not contribute to habitat fragmentation in this area. For these reasons, impacts to nonsensitive wildlife species would be less than significant.

Impact BIO-11 Development of the proposed project would be in substantial conformance with local applicable policies protecting biological resources. This impact is considered *less than significant*.

The City of Ontario General Plan was amended via the SOI GPA to permit residential development within the proposed Specific Plan Area. Implementation of the proposed Specific Plan, in accordance with the mitigation measures contained within this document, would ensure that the proposed project is in substantial conformance with local applicable policies protecting biological resources. As such, impacts from the proposed project upon local applicable policies protecting biological resources would be less than significant.

Impact BIO-12 Project impacts to the San Diego black-tailed jackrabbit, a California Species of Concern, would be *less than significant*.

Although the San Diego black-tailed jackrabbit does occupy the site, impacts to this species would be less than significant given this species' ability to occupy and forage in a wide range of adjacent habitats and its ability to rapidly relocate to unimpacted areas within or adjacent to the project site.

3.3.7 Cumulative Impacts

Geographic Context of Analysis

Due to the development potential in the immediate area, the cumulative analysis takes into account potential impacts that would occur by year 2015 as a result of development of additional specific plan areas within the Ontario SOI area. The cumulative specific plan development potential by year 2015 is described in Section 2.9 (Cumulative Projects and Impact Analysis Methodology) of this EIR. The cumulative geographic context for the evaluation of impacts on biological resources is regional development, particularly in the SOI area and other areas of the El Prado Basin proper (the Region), which contains habitat very similar to the SOI area.

Methodology of Cumulative Impact Assessment

Within the SOI area, cumulative impacts will be qualitatively based on assessments of the areas of potential buildout. Estimates indicate that the actual net area to be developed within the SOI area, excluding only publicly dedicated property, is approximately 5,259 acres (City of Ontario 2001). Mitigation for project-level and impacts have been established after extensive negotiations with interested parties, including (as discussed in Impact BIO-2) a settlement agreement between the City, the Endangered Habitat's League, and the Sierra Club, that set aside 22.7 million dollars (development fees) to provide offsite habitat for conservation of sensitive species habitats within the Region, and the agreement to work with the appropriate agencies to retain a minimum of 160 acres of surface water within the El Prado Basin for migratory waterfowl.

The cumulative impact assessment for the Region, defined in the settlement agreement as that area generally bounded on the north by Riverside Drive, on the south by SR-91, on the east by Interstate 15, and on the west by SR-71, Kimball Avenue, and Euclid Avenue, is qualitatively based. The cumulative impact analysis includes the likely future development within the Region but, as the types and scale of future potential development within the Region area are unknown and largely outside of the City of Ontario's jurisdictional authority, they are outside of this scope of this EIR and would be included in future environmental documentation unrelated to this project, as necessary. Furthermore, the City of Ontario does not have the jurisdictional authority to mitigate for offsite impacts in areas that are not under its control.

The primary effects of the proposed project, when considered with other projects in the Region (as defined above), would be the cumulative direct loss of open space, vegetation associations important to raptors,

habitat of sensitive or special-status wildlife species, and regional movement corridors that support migratory avian species. Specifically, present and probable future projects in the vicinity of the proposed project are anticipated to permanently remove plant and wildlife resources within development areas. Although habitat offered within agricultural and cultivated areas is of significantly reduced quality than that which is found in natural areas, it still provides open spaces for foraging, refuge, and areas of limited disturbance that can be utilized for reproduction.

Impact BIO-13 Cumulative development of the proposed project would have a *potentially significant* cumulatively considerable impact on special-status species within the Ontario SOI area and the Region.

Implementing the proposed Specific Plan in combination with the surrounding and proposed development within the SOI area and El Prado Basin could lead to increased disturbance to, or habitat loss of sensitive and/or special-status wildlife species within in the Specific Plan Area and adjacent areas of the Region. Increase disturbance to special-status wildlife species such burrowing owls and nesting/foraging raptors could result from increased human and pet activity, the direct loss of a special-status species, or the direct removal of habitat that is known to support special-status species. Although much of the habitat within the SOI area is highly disturbed it does represents potential areas of colonization for species that are currently limited in number and distribution and known to occur within the area.

Potential direct cumulative impacts to special-status wildlife species could include, for example, nest abandonment by adult western burrowing owls and/or direct mortality to owl chicks from increased human and pet presence within the area or from direct habitat removal; raptor nest abandonment as a result of increased pedestrian traffic or nesting site removal; disruption of raptor foraging patterns caused by increased human presence and loss of foraging habitat; loss of Delhi Sands Flower-loving Fly habitat; erosion of wildlife species diversity through time form chronic human presence and noise; increased wildlife mortality from feral cat and dog predation; disturbance of wildlife foraging patterns due to feral cat and dog predation on their prey base; or direct removal of habitat. Cumulative indirect impacts to plants and wildlife would include any form of habitat degradation resulting from human-caused disturbances. This could include the proliferation of exotic invasive species or fouling of surface water runoff.

Together with the other proposed specific plan developments described in Section 2.9 (Cumulative Projects and Impact Analysis Methodology) of this EIR, the proposed project would result in ***potentially significant*** cumulative effects upon biological resources.

To offset potentially significant cumulative impacts, the proposed project would adhere to the terms of the 2001 settlement agreement that were designed to mitigate for potential impacts to sensitive species and habitats within the SOI area. The terms were specifically designed to "*cover potential environmental impacts in [the SOI Amendment Area] to the burrowing owl, the Delhi sands flower-loving fly, raptor foraging and wildlife habitat, loss of open space, and actual and potential habitat and agricultural lands*." The proposed project would also implement mitigation measures MM BIO-1(a-b)-SP, MM BIO-2(a-f)-SP, MM BIO-3-SP, MM BIO-4-SP,

and MM BIO-5-SP, which would further reduce cumulative impacts of the proposed project within the SOI area to ***less than significant*** levels.

Cumulative development within the Region would result in the loss of sensitive species habitats, and impacts to special-status plant and animal species. These regional impacts are considered ***significant and unavoidable***. However, the project's contribution to these impacts would not be cumulatively considerable because the loss ruderal grasslands, migratory wildlife habitat, sensitive species' habitats, sensitive habitats such as wetlands and ponds, and sensitive species are substantially lessened through the implementation of mitigation measures MM BIO-1(a-b)-SP, MM BIO-2(a-f)-SP, MM BIO-3-SP, MM BIO-4-SP, MM BIO-5-SP, and applicable SOI GPA Policies. Specifically, the implementation of mitigation measures MM BIO-1(a-b)-SP would reduce the project's cumulative impact contribution to avian Species of Concern, protected migratory species (e.g., Migratory Bird Treaty Act), and raptors species to less than significant levels by avoiding impacts to occupied nests, implementing construction buffers around active nests and replacing lost "windrow" tree species with suitable replacement habitat. Implementation of MM BIO-2(a-f)-SP would reduce the project's cumulative impact contribution to overwintering/migratory birds and movement of migratory wildlife species by requiring open water mitigation areas, the preservation of off-site habitats, and the preparation of a Mitigation Lands Management Plan that would be used to manage, conserve and maintain the areas designated as mitigation habitat to ensure that open water habitat is available for migrating species. Implementation of MM BIO-4-SP would reduce the project's cumulative impact contribution to nesting western burrowing owls to less than significant levels by identifying occupied western burrowing owl burrows and avoiding these areas through the inclusion of buffer zones around the burrows during the breeding season. Implementation of MM BIO-5-SP would reduce the project's cumulative impact contribution to the Delhi Sands Flower-loving Fly (DSFF) to less than significant levels by avoidance of occupied habitat, consultation with the USFWS, and if the species is present, the implementation of an appropriate relocation plan that is consistent with the Endangered Species Act. Implementation of applicable SOI GPA Policies such as Policies 18.1.2 through 18.1.11 and the mitigation and land acquisition terms of the 2001 settlement agreement would reduce potential impacts of the proposed project to special-status species and habitats, wetlands, and migratory waterfowl. In addition mandatory policies such as the federal "no let loss of wetlands" policy, Sections 404 and 401 of the Clean Water Act, and Section 1600 of the Fish and Game Code of California require compensatory mitigation for loss of aquatic and/or riparian habitats. Lastly, regulations such as the state and federal Endangered Species Acts require impacts to recognized species to be reduced to levels permitted by these statutes. Therefore, given the amount of project-level mitigation, statute requirements, and SOI GPA policies, cumulative impacts of the proposed project to sensitive species and habitats are considered ***less than significant***.

Impact BIO-14 Cumulative development, in conjunction with proposed project, could reduce raptor foraging habitat within the Ontario SOI area and the Region. This is considered a *significant and unavoidable* impact.

The project will result in the loss of approximately 49 acres of raptor foraging habitat in the Ontario SOI area and the Region. The cumulative loss of native and nonnative grasslands and ruderal habitat suitable for raptor foraging in Southern California in general, and particularly in the Region, has substantially reduced

opportunities for foraging raptors. Both agricultural and urban development within the SOI area and the Region has or will eliminate a large portion of the historic raptor nesting and roosting sites, generally has increased the distance that must be traveled by raptors moving between these nesting and roosting sites, and has reduced the overall number of raptors that the area can support. Further reductions to raptor foraging habitat are considered ***potentially significant*** both at within the SOI area and the Region.

As noted in Impact BIO-2 and Impact BIO-3, the proposed project, in combination with other comprehensive planning efforts within the SOI area, would allow for the preservation and enhancement of purchased off-site mitigation areas and/or conservation easements within the Region (e.g., El Prado Basin) and retention of 160 acres of surface water within the El Prado Basin. These mitigation areas would be removed from future development plans, and would be permanently available for use as foraging areas for raptors and migratory waterfowl. The restoration and preservation of these areas, in combination with other preservation and restoration activities within the Region, would increase the quality of foraging grounds that raptor species depend upon. The improved quality of habitat would be expected to increase the number of prey species within these areas and would result in increased foraging opportunities.

However, when compared to the approximately 3,500 acres of potential foraging habitat (cultivated crops and fallow land) currently available to raptor species within the SOI area that will be removed as part of future development of the SOI area, the amount of habitat within the SOI area and Region that could be purchased as off-site mitigation areas or preserved via a conservation easement would not be sufficient to mitigate for the loss of so much potential foraging habitat. Specifically, the expenditure of $22.7 million dollars of development fees on mitigation lands within the Region (e.g., the El Prado Basin) would, given the cost estimates detailed in Impact BIO-2, result in a conservative estimate of approximately 227 acres of land that could be purchased to mitigate for lost land within the SOI area (using $100,000/acre as acquisition cost). If mitigation lands were a 50-50 mix of conservation easements and land purchases, using the more conservative numbers of those listed in Impact BIO-2, the amount area slated as mitigation lands could be as much as 303 acres (113.5 acres of purchased land at $100,000 per acre, and 189.5 acres under conservation easements at $60,000 per acre). Thus, in addition to the unknown amount of habitat loss within the Region resulting form future development and land conversion, the development of the SOI area would result in a net deficit of between 3,273 and 3,197 acres of raptor foraging habitat within the Region. These regional impacts would be considered ***significant and unavoidable*** and the project's contribution to cumulative impacts associated with loss of raptor foraging impacts would be cumulatively considerable and ***significant and unavoidable***.

Impact BIO-15 Cumulative development of the proposed project could reduce open space and significantly interfere with migratory wildlife movement within the Ontario SOI area and the Region. This is considered a *potentially significant* impact.

Historically, habitats within the Region, including the SOI area, coastal plain, foothills, and montane regions of the San Gabriel Mountains were contiguous. Development and agriculture has disrupted that contiguity, fragmenting habitats and creating habitat "islands." Upland movement corridors include open lands that are

physically connected to other open lands, have minimal barriers to movement, or are in close proximity to other open lands such that wildlife can easily move between them. As the patchwork of open lands in the Region continues to disappear under development, connections between the foothills and the coastal plain, including the project area, become more tenuous, and force wildlife to either expend more energy or expose themselves to increased mortality by moving greater distances between noncontiguous habitat patches or to abandon some patches entirely. The removal of 4.5 acres of waterfowl habitat and 49 acres of cultivated crops and fallow land suitable for wildlife movement from the Specific Plan Area would result in the loss of approximately 53.5 acres of habitat marginally suitable for wildlife movement within the SOI area. Connectivity within the SOI area, and particularly within the Specific Plan Area, would be reduced and there would be a net loss of nonurbanized area that could potentially provide habitat and movement opportunities for wildlife. Thus, within the SOI area the loss of open space, ponds for migratory waterfowl use, and connectivity is considered a ***potentially significant*** impact.

From a qualitative level, if past trends continue, the amount of open space and habitat suitable for use by migratory species within the Region would be expected to decrease. Urbanization of formerly vacant or agricultural lands would result in habitat fragmentation, increased anthropogenic disturbance, and an overall reduction in current wildlife movement opportunities within the Region. As such the Regional loss of contiguous areas of undeveloped land and open waters that are currently utilized as local movement corridors or regional flyways would be considered cumulatively significant as mitigation potential ratios for the overall loss would most-likely not be at a 1:1 ratio and would thus not be sufficient to replace the habitat and connectivity that is lost. This cumulative loss of open space and wildlife movement opportunities within the Region is considered a ***potentially significant*** impact. The loss of habitat within the SOI area would also incrementally contribute to the loss of remaining open space in the Region and is considered a ***potentially significant*** impact.

As discussed in Impact BIO-14, the comprehensive planning and subsequent 2001 settlement agreement associated with the SOI GPA (governing the proposed project area) would concurrently result in preservation and enhancement of purchased off-site mitigation areas and/or conservation easements within the Region and the retention of 160 acres of surface water within the El Prado Basin. These actions would regionally consolidate mitigation efforts for lost habitat within the SOI area. This consolidation would preserve and potentially enhance connectivity within and around the mitigation lands and fully mitigate for the loss of potential wildlife movement through the proposed project. Thus, although the regional loss would remain ***significant and unavoidable*** without future efforts to regionally consolidate mitigation areas to maintain local and regional movement corridors, the proposed project's contribution to cumulative impacts associated with loss of open space and wildlife movement would be ***less than significant*** and not be cumulatively considerable due to the relatively small amount of quality habitat that would be lost at the project site versus what would be retained and mitigated for via development fees (i.e., the mitigation and land acquisition terms of the 2001 settlement agreement). Other factors that minimize the project's contribution to cumulative impacts include the lack of any considerable overland movement opportunities throughout the proposed project area due to location of the site within the Region (i.e. it is adjacent to existing development) and surrounding development, implementation of applicable SOI GPA Policies

18.1.2 through 18.1.11 that are designed to reduce impacts to wildlife habitat and retain contiguous areas, the payment of mitigation fees that would be used to purchase conservation easements of land within the Region, and implementation of project-specific mitigation measures MM BIO-1(a-b)-SP, MM BIO-2(a-f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP, which would further reduce cumulative impacts of the proposed project within the Region.

3.3.8 Mitigation Measures and Residual Impacts

The following mitigation measures are proposed to reduce the potentially significant impacts identified above. With the incorporation of the mitigation measures, all potential project-specific impacts would be reduced to less than significant levels. However, even with the proposed mitigation measures, cumulative impacts described in Impact BIO-14 would remain significant and unavoidable.

Ontario SOI GPA Mitigation Measures

None currently applicable.

Project-Specific Mitigation Measures

MM BIO-1(a)-SP *To ensure that avian Species of Concern, protected migratory species (e.g., Migratory Bird Treaty Act), or raptors species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures:*

- *When feasible, all tree removal shall occur between August 30 and February 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the California Department of Fish and Game (CDFG); or if it is not feasible to remove trees outside this window then, prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15 and August 30, all trees and potential burrowing owl habitat within 250 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30 days prior to disturbance. If active raptor nests or burrows are found, and the site is within 250 feet of potential construction activity, a fence shall be erected around the tree or burrow(s) at a distance of up to 250 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City in consultation with CDFG.*
- *No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones), unless directly related to the management or protection of the legally protected species.*
- *In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).*

- *If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.*

MM BIO-1(b)-SP *The large trees identified as windrows that occur along Archibald Avenue in the vicinity of the current poultry operations shall be retained to the extent feasible If removal is required, these trees shall be replaced within the Specific Plan Area at a 2:1 ratio by native trees that would be appropriate to the project area.*

Implementation of MM BIO-1(a)-SP and MM BIO-1(b)-SP would reduce potentially significant project-level impacts described in Impact BIO-1 and potentially significant cumulative impacts described in Impact BIO-13 and Impact BIO-15 to avian Species of Concern, protected migratory species (e.g., MBTA), and raptor species to less than significant levels by avoiding impacts to occupied nests, implementing construction buffers around active nests and replacing lost "windrow" tree species with suitable replacement habitat.

The following measures are proposed to reduce Impact BIO-2, Impact BIO-3, Impact BIO-13, and Impact Bio-15 to less-than-significant levels:

MM BIO-2(a)-SP *Prior to any groundbreaking within the Specific Plan Area, mitigation fees shall be paid to a land conservancy selected to oversee habitat land acquisition in accordance with the settlement agreement between the City , Sierra Club and Endangered Habitat League.*

MM BIO-2(b)-SP *The city shall work with the established land conservancy to design open water within the offsite mitigation lands. It shall be configured into numerous individual bodies of various size, depth, and configuration to maximize shoreline area and serve as habitat for the existing range of waterfowl that winter in the Specific Plan Area. Design considerations are available from the California Department of Fish and Game and private waterfowl conservation groups (e.g. Ducks Unlimited).*

MM BIO-2(c)-SP *The city shall work with the established land conservancy to aid in designing portions of some of the offsite mitigation ponds to be vegetated with emergent wetland plant species, such as cattails (Typha* spp.*). Aquatic plants (e.g., algae, fully submerged species) shall be introduced into some ponds as forage for ducks. Typical native invertebrates (e.g. dragonflies, crustaceans) and small native fishes shall be introduced as food for predatory birds. Appropriate forage species for such introductions shall be determined through consultation with the California Department of Fish and Game.*

MM BIO-2(d)-SP *The city shall work with the established land conservancy to aid in designing upland areas between offsite ponds to be left open as roosting areas for waterfowl and foraging habitat for raptors. The periphery of the mitigation areas shall be planted with tall trees (preferably native sycamores or cottonwoods) to provide roosts for raptors.*

MM BIO-2(e)-SP *The City, with the input from the California Department of Fish and Game, shall develop a Mitigation Lands Management Plan for the offsite mitigation lands with the following components:*

- *The offsite mitigation lands shall be operated by an appropriate conservation agency, whether public or private, and shall be overseen by an on-site manager with biological experience.*
- *Prohibition of all consumptive uses, including hunting, off-road vehicles, dog training, dumping, etc.*
- *The primary goal of the offsite mitigation areas shall be for conservation, and shall only be used for educational or scientific purposes, including school visits, Audubon Society Christmas Bird counts, scientific research, and promoting public awareness.*
- *Control of trespass shall be on a case-by-case basis, with permission granted upon advanced notice and supervised by appropriate personnel.*
- *The offsite mitigation areas shall be managed for waterfowl and raptor populations; nonnative predators shall be controlled as needed.*

MM BIO-2(f)-SP *The City shall enter into consultation with appropriate California Department of Fish and Game personnel before and during the establishment of the offsite mitigation areas, whether land purchased by fee or under conservation easement.*

Implementation of MM BIO-2(a-f)-SP would further reduce potentially significant impacts to overwintering/migratory birds, movement of migratory wildlife species, and raptor foraging habitat by requiring open water mitigation areas, the preservation of off-site habitats, and the preparation of a Mitigation Lands Management Plan that would be used to manage, conserve and maintain the areas designated as mitigation habitat to ensure that open water habitat and foraging habitat is available.

The following measure is proposed to further reduce Impact BIO-5, Impact BIO-13, and Impact BIO-15 to less-than-significant levels:

MM BIO-3-SP *Exotic invasive species shall be prohibited in all open space areas and within 0.5 mile of the radius of all open areas and adjacent natural areas such as the Cucamonga Basin. Landscaping in open space areas within the Specific Plan Area shall include drought tolerant native species. Landscaping use of exotic invasive plants listed in the most recent update of the Exotic Pest Plant of Greatest Ecological Concern in California (California Invasive Plant Council) shall be prohibited within the Specific Plan Area and the applicant shall provide informational brochures to future residents on native and noninvasive nonnative landscaping requirements.*

Implementation of MM BIO-3-SP would reduce potentially significant impacts to adjacent natural areas to less than significant levels by limiting the types of vegetation that can be used within the project area to those species that are know to be non-invasive, and thus would be species that would not likely exclude existing vegetation from adjacent natural areas.

The following measure is proposed to reduce Impact BIO-6, Impact BIO-13, and Impact BIO-15 to less-than-significant levels:

MM BIO-4-SP *The project applicant, in consultation with the California Department of Fish and Game (CDFG), shall conduct a pre-construction survey within the phases of the project site that are scheduled for construction activities. The survey shall be conducted by a qualified biologist to determine if western burrowing owls are occupying the project site. The survey shall be conducted no more than three weeks prior to grading of the project site.*

If the above survey does not identify burrowing owls on the project site, then no further mitigation would be required. However, should western burrowing owls be found on the project site, the following measures shall be required:

The applicant shall avoid all potential western burrowing owl burrows that may be disturbed by project construction during the breeding season between February 15 and August 30 (the period when nest burrows are typically occupied by adults with eggs or young). Avoidance shall include the establishment of a 300-foot diameter non-disturbance buffer zone around any occupied burrows. The buffer zone shall be delineated by highly visible temporary construction fencing. Disturbance of any occupied burrows shall only occur outside of the breeding season (September 1 through February 14).

Based on approval by the CDFG, preconstruction and non-breeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project-related disturbance (such as grading). Burrowing owls may be passively excluded from burrows in the construction area by placing one-way doors in the burrows according to current CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls, regardless of whether they exhibit signs of occupation, must be cleared. Burrows that have been cleared through the use of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow. The one-way doors shall not be used more than two weeks before construction to ensure that owls do not re-colonize the area of construction.

Implementation of MM BIO-4-SP would reduce potentially significant impacts to nesting western burrowing owls to less than significant levels by identifying occupied burrowing owl burrows and avoiding these areas through the inclusion of buffer zones around the burrows during the breeding season.

The following measure is proposed to reduce Impact BIO-7, Impact BIO-13, and Impact BIO-15 to less-than-significant levels:

MM BIO-5-SP *Prior to the issuance of grading permits within the project area, the project applicant and City, in consultation with the United States Fish and Wildlife Service (USFWS), shall conduct a survey in accordance with the conditions within the Interim General Survey Guidelines for the Delhi Sands Flower-loving Fly (DSFF). The survey shall be conducted during the appropriate season by a qualified biologist. If evidence of the presence of DSFF is found during the survey, the Specific Plan and/or development plan shall provide a plan and/or policies to protect this species. The plan and/or policies shall provide for avoidance of habitat that are found to support*

identified DSFF wherever feasible. If avoidance is not feasible, then the USFWS shall be consulted to approve appropriate relocation plans. Any subsequent avoidance, relocation, or other mitigation strategies required to reduce impacts to a less-than-significant level shall be implemented prior to issuance of a grading permit.

Implementation of MM BIO-5-SP would reduce potentially significant impacts to the Delhi Sands Flower-loving Fly (DSFF) to less than significant levels by identifying occupied habitat on site, avoidance of occupied habitat, consultation with the USFWS, and if the species is present, the implementation of an appropriate relocation plan that is consistent with the Endangered Species Act.

3.4 CULTURAL RESOURCES

3.4.1 Introduction

This section describes the historical and archaeological resources present or potentially present within the Countryside Specific Plan Area and evaluates the potential effects of development proposed by the Specific Plan on those resources. Potential resources on the project site include structures that may be eligible for the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR).

Data used for preparation of this section include a historical and archaeological resources records check, literature survey, a cultural resources report prepared in 2004 by Chambers Group (included as Appendix D-1 of this EIR), the *City of Ontario's Historic Context for the New Model Colony Area* report (included as Appendix D-2 of this EIR), California Department of Parks and Recreation Forms 523A and 523B prepared for the property at 9581 E. Chino Avenue and residence at 9541 Chino Avenue (included as Appendix D-3 of this EIR), previous environmental documentation prepared for the City of Ontario (the City), and other data sources. Full bibliographic entries for all reference materials are provided in Chapter 7 (References).

No comment letters regarding cultural resources were received in response to the Initial Study and Notice of Preparation circulated for this EIR.

3.4.2 Existing Conditions

Prehistoric and Historical Setting

Prehistoric (Pre-Contact) Period

It is generally believed that human occupation of southern California dates back to at least 10,000 years before present (BP). Ethnographic accounts of Native Americans indicate that the Tongva (or Gabrielino) once occupied the region that encompasses the project area. At the time of contact with Europeans, the Tongva were the main occupants of the southern Channel Islands, the Los Angeles basin, much of Orange County, and extended as far east as the western San Bernardino Valley. The term "Gabrielino" came from the group's association with Mission San Gabriel Arcangel, established in 1771. Today the group prefers to be known by their ancestral name, Tongva. The Tongva are believed to have been one of the most populous and wealthy Native American tribes in southern California prior to European contact, second only to the Chumash (Bean and Smith 1978; McCawley 1996; Moratto 1984).

The Tongva occupied numerous villages with populations ranging from 50 to 200 inhabitants. Residential structures within the villages were domed, circular, and made from thatched tule or other available wood. Tongva society was organized by kinship groups, with each group composed of several related families who together owned hunting and gathering territories. Settlement patterns varied according to the availability of floral and faunal resources (Bean and Smith 1978; McCawley 1996; Miller 1991).

Vegetal staples in the Tongva diet consisted of acorns, chia, seeds, piñon nuts, sage, cacti, roots, and bulbs. Animals hunted included deer, antelope, coyote, rabbits, squirrels, rodents, birds, and snakes. The Tongva also fished (Bean and Smith 1978; McCawley 1996; Miller 1991).

By the late 18th century, the Tongva population had significantly dwindled due to introduced diseases and dietary deficiencies. Tongva communities near the missions disintegrated as individuals succumbed to Spanish control, fled the region, or died. Later, many of the Tongva fell into indentured servitude to Anglo-Americans. By the early 1900s, few Tongva people had survived and much of their culture had been lost (Bean and Smith 1978; McCawley 1996; Miller 1991). However, in the 1970s, a revival of the Tongva culture began which continues today with growing interest and support.

Historical Period

The first significant European settlement of California began during the Spanish Period (1769 to 1821) when twenty-one missions and four presidios were established between San Diego and Sonoma. Although located primarily along the coast, the missions dominated economic and political life over the majority of the California region during this period. The purpose of the missions was primarily Native American control, along with economic support to the presidios, forced assimilation of the Native Americans to Hispanic society, and conversion of the native population to Spanish Catholicism (Castillo 1978; Cleland 1941). During this period, the current project area was part of the San Gabriel Mission which was used for grazing mission horses and cattle.

The Mexican Period (1821 to 1848) began with the success of the Mexican Revolution in 1821, but changes to the mission system were slow to follow. When secularization of the missions occurred in the 1830s, the vast land holdings of the missions in California were divided into large land grants called ranchos. The Mexican government granted ranchos throughout California to Spanish and Hispanic soldiers and settlers (Castillo 1978). The City of Ontario is located on a portion of the land known during this time as Rancho Santa Ana del Chino (Saint Anne of the Fair Hair), which was acquired from the Mexican government by Don Antonio Maria Lugo in 1841.

In 1848, the Treaty of Guadalupe Hidalgo ended the Mexican-American War and marked the beginning of the American Period (1848 to present). The discovery of gold the same year initiated the 1849 California Gold Rush, bringing thousands of miners and settlers to California, most of whom settled in the north. For those settlers who chose to come to southern California, much of their economic prosperity was fueled by cattle ranching rather than by gold. This prosperity, however, came to a halt in the 1860s as a result of severe floods and droughts, which put many ranchos into bankruptcy (Castillo 1978; Cleland 1941).

Prior to 1850, dairying in southern California was almost nonexistent. This changed with the arrival of the American Period, as the American use of cattle differed substantially from that of the Spanish/Mexican land-holders. American Period ranchers were more interested in milk products and, as the Anglo populations grew in Southern California, the demands for such products increased. Between 1850 and 1860, the number of milk cows in Southern California increased dramatically. The 1860 census of San Bernardino County (the

County) identified as many as eighty people producing milk-related products, generally concentrated around the community of San Bernardino.

Dairymen in the 1870s were increasingly active in national markets, resulting in a shift from individual use and local commerce to wide-ranging interactions. Improvements in transportation (i.e., railroads) and increased populations provided the incentive for large-scale dairy industry participation, and larger tracts of land were needed to consolidate the dairy farms. This trend has continued to the present day—large tracts are still held and dairy operations continue—and these activities represent one of the oldest industries in the County.

In 1882, the City of Ontario was founded by George and William Chaffey who named the town for their native Ontario, Canada. Ontario was created by the Chaffey brothers to be a "Model Colony" for others migrating to the region. This involved the laying out of streets, the creation of a mutual water company, and the establishment of the first commercially successful hydroelectric plant in the country (Chambers Group 2004).

Cultural Resources on the Project Site

Definition of Historical Resources

The National Historic Preservation Act established the NRHP to recognize resources associated with the country's history and heritage. Structures and features must usually be at least 50 years old to be considered for listing on the NRHP, barring exceptional circumstances. Criteria for listing on the NRHP [set forth in Title 26, Part 63 of the Code of Federal Regulations (36 CFR Part 63)] include: significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association; and that are (A) associated with events that have made a significant contribution to the broad patterns of our history; (B) associated with the lives of persons significant in our past; (C) embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values, represent a significant and distinguishable entity whose components may lack individual distinction; or (D) have yielded, or may be likely to yield, information important in prehistory or history. Criterion D is usually reserved for archaeological and paleontological resources.

The CRHR was created to identify resources deemed worthy of preservation on a State level in California and was modeled closely after the NRHP. The criteria used to determine eligibility for inclusion on the CRHR are nearly identical to those of the NRHP but focus upon resources of statewide, rather than national, significance. The CRHR automatically includes resources listed on the NRHP.

Records Check and Literature Survey Results

Archaeologists from the Chambers Groups conducted a cultural resources records search at the San Bernardino Archaeological Information Center (SBAIC), included as Appendix D-1 of this EIR. The records

search included the entire 178-acre Countryside Specific Plan Area. Researchers also conducted a review of archival and literature sources for the Specific Plan Area and performed a foot survey of portions of the Specific Plan Area.

The records and literature search showed seven cultural resources investigations completed within ½ mile of the Countryside Specific Plan Area, two of which encompassed the entire area of Neighborhood 6. These studies (Martz 1976 and Villalobos 2001) were completed in support of U.S. Army Corps of Engineers projects concerning Cucamonga Creek and its tributaries. Neither study identified the presence of any cultural resources within or in proximity to the Specific Plan Area (Chambers Group 2004).

Also, the records and literature search identified no prehistoric archaeological sites or isolates, historic cultural resources, or California Landmarks within ½ mile of the Countryside Specific Plan Area, nor any resources listed on the NRHP or CRHR. However, one California Point of Historical Interest (CPHI) is recorded as crossing proposed Neighborhoods 1 and 2, about 300 feet south of Riverside Drive, running east-west. This resource, the Anza Trail, is described as the first European-built road in San Bernardino County. It was used by Juan Bautista de Anza between 1774 and 1775.

Existing On-site Buildings

A structure must be 50 years of age or older in order to be considered "historically aged" and therefore potentially eligible for inclusion on the NRHP or CRHR. State and national guidelines require that all structures 45 years of age or older be evaluated for potential historical significance prior to demolition or significant alteration.

A few residential uses and farm buildings (e.g., storage sheds, barns) are located sporadically within the Countryside Specific Plan project area. According to the *City of Ontario New Model Colony Historic Context Report* (NMC Historic Context Report) prepared for the City (2004, Galvin & Associates), included as Appendix D-2 of this EIR, there is one residence in the Countryside Specific Plan Area that is at least 50 years old. The remaining buildings in the Specific Plan Area were built circa 1965 or later and are not old enough to be considered historically aged, nor do they possess unique architectural features that would render them significant cultural resources. As such, all buildings within the project area except for the residence described below are not potentially eligible for listing on the NRHP or CRHR.

According to the NMC Historic Context Report, one single family residence located on a parcel of land at 9581 E. Chino Avenue (Assessor's Parcel Number 218-131-12) within the project area was constructed in 1925. There are several buildings on this land parcel that constitute a dairy farm, however, all were built circa 1965 with the exception of the one noted residence. The residence or potentially historic resource is located on the northern portion of the parcel and has a unique street address of 9541 Chino Ave (although the overall parcel address is 9581 E. Chino Avenue). The single family residence was evaluated for historic significance via an intensive survey by an architectural historian and recorded on State of California Department of Parks and Recreation (DPR) Forms 523A and 523B (attached as Appendix D-3). Based on the results of the historic resources study that was performed and summarized in Appendix D-3, the original

Spanish Bungalow style of architecture was significantly altered in 1972 when three additions were constructed in a Ranch style of architecture. As a result, the architectural integrity of the building has been significantly compromised and no longer represents a Spanish Bungalow style of architecture. As a result, the residence does not meet California Register Criterion 3. Further evaluation against the California Register Criterion concluded that the residence did not meet Criterion 1, 2, and 4 as well.

The NMC Historic Context Report identifies six distinct historical contexts that were used for identifying and evaluating resources within the NMC area. The remainder of the dairy farm and associated properties located within the Countryside Specific Plan Area at 9521-9581 E. Chino Avenue were identified within the NMC Historic Context Report as being an associated property type for "Post 1950s Scientific-Large Capacity Dairies" and demonstrates a level of moderate integrity according to the guidelines provided in the NMC Historic Context Report. Properties associated with this historical context constituted the third phase of dairy farming in the Chino Valley, occurring between 1950 and 1969. The dairy farm and associated properties were constructed less than 50 years ago and therefore do not meet the California Register Criterion nor is it of exceptional importance to the Community, State, or Nation.

Archaeological Field Survey Results

Two archaeologists conducted an intensive pedestrian field survey of proposed Neighborhoods 1, 5, and 6 in August 2004. The report detailing this survey is included as Appendix D-1 of this EIR. The archaeologists observed no prehistoric archaeological sites or isolated finds within the study area during the field survey. The parcels within the field survey study area have been used for agricultural or dairy or poultry farming purposes since at least the late-1800s, and most recently as feed lots for dairy cattle. These historic and current uses have caused extensive ground disturbance that has nearly destroyed the potential for intact archaeological resources to be found. Also, prior to the channelization of Cucamonga Creek, this area would have been swept by floods on a regular basis, as evidenced by the pervasive loose sandy soil within the project locations (Chambers Group 2004; Sander 2004b).

During the survey, archaeologists also attempted to confirm the presence of the Anza Trail remnant. However, the construction of Riverside Drive, as well as other development, has erased all traces of this resource within the Countryside Specific Plan Area (Chambers Group 2004; Sander 2004a, b).

Potential for the Presence of Archaeological Resources

Despite the current lack of documented resources in the vicinity of the Countryside Specific Plan Area, the possibility of discovering archaeological remains during excavation for future projects within the Specific Plan Area cannot be completely discounted: As described in the Aesthetic, Cultural, Open Space, and Recreational Resources Chapter of the Ontario SOI GPA, the lack of identified resources within in the 8,200-acre New Model Colony area may be a result of the fact that few systematic surveys had been completed by 1998, and although some studies appear to have been completed in the intervening years, few proposed developments in the New Model Colony Area have yet progressed to the point that surveys would

have been completed over a substantial portion of the area. Consequently, a high potential exists for the presence of additional, currently unknown archaeological resources (Envicom et al. 1998).

Paleontological Resources

Fossils—nonrenewable paleontological resources—are important for dating sedimentary rocks, and thus determining the time of movement of faults against which those sediments lie. All vertebrate fossils are considered to be significant, while other kinds of paleontologic resources must be evaluated individually for significance depending upon their potential scientific value. Geologic units containing fossils are present in many locations throughout the County. Due to the fact that many paleontological resources have been found outside of the Countryside Specific Plan Area, and are relatively common, the Specific Plan Area could contain significant resources. However, surface examination often cannot reveal whether paleontological resources are present at a specific project location, particularly when, as in the case of the Specific Plan Area, the ground surface is under agricultural, dairy, or poultry cultivation.

Most of the rock units containing fossils in southern California are sedimentary rocks associated with seas that covered most of California during the Mesozoic and early Paleozoic (about 75 to 290 million years ago [mya]). Riverside and San Bernardino Counties contain an extensive record of fossil life, ranging from diverse marine mollusks in the Jurassic period (about 150 mya) to the oldest known Tertiary (about 60 mya) flora in Southern California, to a wide range of large, ice age mammals in the Pleistocene epoch (2.5 mya–10,000 years ago). These remains chronicle marine advances, beach and lake formation, and climate change. Fossils from the Miocene epoch (24–4.5 mya) are known to be present in Western Riverside and San Bernardino Counties, which has fossiliferous sediments that occur in sediments lying on the surface of crystalline bedrock, or are deposited in or between the major fault zones. Fossils recovered in these areas include saber-toothed cat, deer, horse, and mammoth bones, as well as large juniper logs. Consequently, although no fossils are known to have been recovered in the Countryside Specific Plan Area, the area could be characterized as having a moderate to high paleontological sensitivity.

3.4.3 Regulatory Framework

Federal

The National Historic Preservation Act of 1966

The National Historic Preservation Act of 1966 established the NRHP as the official federal list of cultural resources that have been nominated by State Offices for their historical significance at the local, State, or national level. Properties listed in the NRHP, or "determined eligible" for listing, must meet certain criteria for historical significance and possess integrity of form, location, and setting. Significance is determined by four aspects of American history or prehistory recognized by the NRHP Criteria, which are listed above under the heading "Definitions of Historical Resources." Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties

and conveys its historical character, the degree to which the original fabric has been retained, and the reversibility of changes to the property.

State

The California Register of Historic Resources

State law also protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. These criteria are nearly identical to those for the NRHP, which are listed above under the heading "Definitions of Historical Resources."

The State Historic Preservation Office (SHPO) maintains the CRHR. Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the CRHR, as are State Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Senate Bill 297

This bill addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Native American Heritage Commission to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the State CEQA Guidelines.

Local

City of Ontario General Plan

The City of Ontario General Plan Aesthetic, Cultural, Open Space, and Recreational Resources Element (1992; "Element") recognizes the value of cultural resources associated with the history of the City. The Element and its goals and policies emphasize established neighborhoods and focus upon historical structures. The following goal and policy specified in Section 6.4, Historic/Cultural Resources, of the Element would apply to the Countryside Specific Plan Area:

Goal 6.0: *Conserve Ontario's historic buildings and districts.*

Policy 6.2: *Complete nominations to the National Register of Historic Places for eligible sites.*

Applicable SOI GPA Policies

The City of Ontario's Sphere of Influence (SOI), now known as the New Model Colony General Plan Amendment (GPA), in Chapter 5.0 (Aesthetic, Cultural, Open Space, and Recreational Resources),

identifies historic and cultural resources among the planning issues confronting development in the New Model Colony. The following policies adopted in the General Plan Amendment would apply to the proposed project:

Policy 15.1.2 *Require all development projects, including infrastructure construction, to conduct Phase I surveys and resource investigations in accordance with CEQA requirements to determine if additional cultural, historic, or archaeological resources are located within their area. If the development project involves the use of federal funds, conduct the study in accordance with federal requirements. File all site records, survey reports, etc. with the San Bernardino County Museum Archaeological Information Center. (I-10)*

Policy 15.1.3 *Require all development projects to conduct Phase II evaluation studies (for archaeological resources and standing structures in accordance with CEQA requirements) if necessitated by the Phase I studies' findings. If the development project will involve the use of federal funds, conduct the study in accordance with federal requirements. File all site records, survey reports, etc. with the San Bernardino County Museum Archaeological Information Center. (I-10).*

Policy 15.1.4 *Require development projects to propose avoidance or preservation plans for any archaeological or historic site, as necessary. (I-10)*

Policy 15.1.6 *Conduct an intensive archaeological field survey under the supervision of a Society of Professional Archaeologists (S.O.P.A.) certified archaeologist for each proposed project not previously surveyed within the past ten years. A technical report following format and content guidelines proposed by the Office of Historic Preservation must be completed. (I-10).*

Policy 15.1.7 *Require that each project resulting in an adverse impact on a known significant resource prepare an appropriate planning approach to reduce the impact to a level of insignificance. (I-10).*

Policy 15.1.8 *Require that a qualified archaeologist be retained in order to monitor the grading, identify any cultural resources that may be exposed, complete a preliminary evaluation of the resource, and recommend appropriate resource management for the treatment of the resource. (I-10)*

3.4.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on cultural resources if it would result in any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- Disturb any human remains, including those interred outside of formal cemeteries.

3.4.5 Project Impacts

Less than Significant

Impact CUL-1 The proposed project would not result in the destruction of historical resources. This is considered a *less than significant* impact.

As described above under Existing Conditions, the historical resource identified in the Countryside Specific Plan Area by the records search was the remnant of the historic Anza Trail, a California Point of Historical Interest. However, subsequent surveys indicated that the trail and any remnants have been destroyed by roadway improvements and other development activity in the vicinity of Riverside Drive. Consequently, the proposed project would not further deteriorate or otherwise affect this resource, this impact would be less than significant, and no mitigation would be required.

In addition, the majority of the dairy farm and associated properties located within the Countryside Specific Plan Area at 9521-9581 E. Chino Avenue were identified within the NMC Historic Context Report as being an associated property type for "Post 1950s Scientific-Large Capacity Dairies" and demonstrates a level of moderate integrity according to the guidelines provided in the NMC Historic Context Report. As mentioned previously, the majority of the dairy farm and associated properties were not evaluated against the California Register Criterion due to the less than 50 years old criteria. However, the home located at 9541 E. Chino Avenue was constructed in 1925. Due to its potential historical significance, the single family residence was evaluated for historic significance via an intensive survey by an architectural historian and recorded on State of California Department of Parks and Recreation (DPR) Forms 523A and 523B (attached as Appendix D-3).

Based on the results of the historic resources study that was performed and summarized in Appendix D-3, the original Spanish Bungalow style of architecture was significantly altered in 1972 when three additions were constructed in a Ranch style of architecture. As a result, the architectural integrity of the building has been significantly compromised and no longer represents a Spanish Bungalow style of architecture. As a result, the residence does not meet California Register Criterion 3. Further evaluation against the California Register Criterion concluded that the residence did not meet Criterion 1, 2, and 4 as well. Therefore, demolition of the residence and garage at 9541 Chino Avenue would not eliminate an example of the "pre-1930 rural or dairy property" historical context defined in the NMC Historic Context Report. Therefore, this impact would be ***less-than-significant***.

Potentially Significant

Impact CUL-2 Earth-disturbing activities associated with implementation of the proposed project could potentially disturb or damage undocumented archaeological resources including human burials. This is considered a *potentially significant* impact.

Although only a small portion of the Countryside Specific Plan Area has been subjected to a systematic pedestrian archaeological survey, extensive excavation associated with past development has occurred and will continue to occur as a result of the proposed project.

Excavation activities that would occur with implementation of the Countryside Specific Plan would occur on parcels that have been subject to substantial disturbance over lengthy periods of time, as a result of livestock movement, livestock waste collection and disposal, agriculture, and other development. As described above, no archaeological sites are known in the Countryside Specific Plan Area, and recent archaeological site surveys of proposed Countryside Specific Plan Neighborhoods 1, 5, and 6 areas detected no sites or surface indicators of sites. However, according to the Ontario SOI GPA, recorded sites are known in the general New Model Colony Area, and much of the land has not been subject to a systematic pedestrian survey. Consequently, the likelihood exists of previously unknown and unrecorded archaeological resources and human burials in the vicinity of the Countryside Specific Plan Area. Consequently, damage or destruction of archaeological resources, including human burials, as a result of the project could occur. This impact would be considered potentially significant.

Mitigation measure MM C-1 in the Ontario SOI GPA EIR would reduce the impact of proposed development under the Countryside Specific Plan in areas outside of Neighborhoods 1, 5, and 6. Studies required by MM C-1 have already been implemented in Neighborhoods 1, 5, and 6 pursuant to this EIR. However, no provisions exist for the recovery of previously unknown archaeological resources as a result of ground-disturbing activities associated with site preparation and construction within the Countryside Specific Plan Area. Consequently, this impact would remain potentially significant and project-specific mitigation measures MM CUL-2(a)-SP, MM CUL-2(b)-SP, and MM CUL-2(c)-SP are proposed further to further reduce Impact CUL-2 to a ***less-than-significant*** level.

Impact CUL-3 Earth-disturbing activities associated with implementation of the proposed project could potentially disturb or damage undocumented paleontological resources. This is considered a *potentially significant* impact.

No unique paleontological feature is known to exist in the Countryside Specific Plan Area and no fossils have been documented on the site. The topography of the area has been substantially altered by agriculture and urban development. However, as described above in Section 3.4.2 (Existing Conditions, Paleontological Resources), nearby area rock units similar to those that underlie the project area have yielded significant paleontological specimens that contributed to scientific understanding of the distant past. Therefore, fossils from these units could be considered unique resources due to the potential to yield information important in history or prehistory (Criteria 4 of the NRHP and Criteria D of the CRHR). Accordingly, the rock units

underlying the project area could be considered potentially paleontologically sensitive, and the potential exists for the rock units underlying the area to yield fossils. Therefore, any construction-related earth-disturbing activities resulting from implementation of the Countryside Specific Plan could damage or destroy fossils in these rock units. This would be considered a potentially significant impact. Mitigation measure MM C-1 in the SOI GPA EIR would serve to reduce potential impacts to undocumented paleontological resources in the Countryside Specific Plan Area. In addition, mitigation measures MM CUL-3(a)-SP, MM CUL-3(b)-SP, and MM CUL-3(c)-SP have been included to reduce this impact to a ***less-than-significant*** level.

Impact CUL-4 Earth-disturbing activities could result in the disturbance of human remains, including those interred outside of formal cemeteries. This is considered a *potentially significant* impact.

No formal cemeteries are known to have occupied the Countryside Specific Plan Area, so any human remains encountered would likely come from archaeological or historical archaeological contexts. As described above in Section 3.4.2 (Existing Conditions), no archaeological materials, including human burials, have been discovered in the Countryside Specific Plan Area. However, as described above in Impact CUL-2, archaeological contexts are known in the general New Model Colony area, and the potential still exists for such resources to be present in the Countryside Specific Plan Area. Excavation during project-related construction activities would have the potential to disturb unknown/undiscovered human remains.

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in Section 5097 of the California Public Resources Code. Disturbing human remains could violate the health code, as well as destroy the resource, which would result in a potentially significant impact. As such, mitigation measure MM CUL-4-SP is proposed to reduce Impact CUL-4 to a ***less-than-significant*** level.

3.4.6 Cumulative Impacts

The geographic context for the analysis of cumulative cultural resources impacts includes all cumulative growth within five subareas of the City of Ontario New Model Colony. Pending development proposals exist for the five specific plans in the NMC area that would result in the disturbance of large areas of land. Section 2.9 (Cumulative Projects and Impact Analysis Methodology) lists five other specific plans have been proposed within the New Model Colony Area alone. Such development would require grading and excavation that could potentially affect archaeological or paleontological resources or human remains. The cumulative effect of these projects would contribute to the continued loss of subsurface cultural resources, if these resources are not protected upon discovery.

Further, the Ontario SOI GPA EIR recognized the potential for the loss of cultural resources as a result of development in the New Model Colony. Such impacts to cultural resources was and continues to be considered to be a significant impact, as these resources are nonrenewable and have the potential, unless specifically determined otherwise, to provide important scientific information regarding history or

prehistory. However, CEQA requirements for protecting archaeological and paleontological resources and human remains are applicable to development in the City of Ontario, as are local cultural resource protection ordinances. However no such provisions protect resources that are discovered accidentally, which is a frequent occurrence and a result of the common lack of visibility of such resources from above ground. Consequently, the cumulative impact to those resources would be ***potentially significant***.

However, as indicated above, additional mitigation measures, discussed below in Section 3.4.7 (Mitigation Measures and Residual Impacts), will be imposed upon the proposed project and enforced throughout construction. The mitigation measures will ensure that important scientific information provided by these resources regarding history or prehistory would not be lost. Consequently, the contribution of potential impacts from the proposed project to the cumulative destruction of subsurface cultural resources throughout the City would be ***less than significant***.

Significant and unavoidable cumulative impacts to historic resources would occur if implementation of the proposed project results in the demolition of existing historically-aged structures in conjunction with development of cumulative projects within the Ontario NMC area. However, as stated above under Impact CUL-1, implementation of the proposed project would not require the demolition or removal of any historic resources. Therefore, the proposed project's contribution to impacts on historic resources would not be cumulatively considerable, and impacts would be ***less than significant***. Subsequently, the proposed project's overall contribution to cumulative impacts would be ***less than significant***.

3.4.7 Mitigation Measures and Residual Impacts

Ontario SOI GPA EIR Mitigation Measure

MM C-1 *In order to fulfill the requirements of CEQA and to preserve the cultural and historical resources of the area, the following mitigation measures are recommended:*

- *For each proposed project that might impact cultural resources, any cultural resource in the project area should be identified in advance. A standard archaeological records check should be conducted through the San Bernardino County Museum Archaeological information Center in Redlands. For properties bordering the Riverside County boundary, additional research should be conducted through the University of California, Riverside, Archaeological Research Unit.*
- *For each proposed project not previously surveyed within the past ten years, an intensive archaeological field survey should be completed under the supervision of a Society of Professional Archaeologists (SOPA) certified archaeologist. A technical report following format and content guidelines proposed by the Office of Historic Preservation must be completed.*
- *For each proposed project with identified cultural resources, a formal evaluation of the resource(s) in accordance with the CEQA guidelines for significance (importance) must be completed.*

- *For each project resulting in an adverse impact on a known significant resource, an appropriate planning approach must reduce the impact to a level of insignificance.*
- *For each project where grading into previously undisturbed soils is planned, the retention of a qualified archaeologist should be required to monitor the grading in order to identify any cultural resources which may be exposed, complete a preliminary evaluation of the resource, and recommend appropriate resource management for the treatment of the resource.*
- *For each future project, the City of Ontario should ensure the implementation of these recommendations through conditions of approval for any project.*

Ontario SOI GPA EIR MM C-1 would reduce the impact of proposed development under the Countryside Specific Plan in areas outside of Neighborhoods 1, 5, and 6. Studies required by this measure have already been implemented in Neighborhoods 1, 5, and 6 pursuant to this measure. However, no provisions exist for the recovery of previously unknown archaeological resources as a result of ground-disturbing activities associated with site preparation and construction. Consequently, project-specific mitigation measures MM CUL-2(a)-SP, MM CUL-2(b)-SP, and MM CUL-2(c)-SP are proposed below to further reduce impacts to archaeological resources to a less-than-significant level.

Project-Specific Mitigation Measures

In addition to the SOI GPA EIR mitigation measures discussed above, the following measures are proposed to further reduce Impact CUL-2 to a less-than-significant level:

MM CUL-2(a)-SP *Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological resources. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of archaeological resources is prohibited.*

MM CUL-2(b)-SP *Prior to site preparation and grading activities, the applicant shall retain a qualified (SOPA-certified) archaeologist to monitor earth-disturbing activities. The frequency of monitoring shall occur at the discretion of the archaeologist, based upon site condition or other relevant factors. The archaeologist shall also be available on-call to assess any potential resources that may be exposed or discovered when the archaeologist is not present.*

MM CUL-2(c)-SP *For any potential archaeological resource uncovered during construction, a qualified archaeologist shall first determine whether it is a "unique archaeological resource" under Public Resources Code Section 21083.2(g). If the archaeological resource is determined to be a "unique archaeological resource," the archaeologist shall formulate a mitigation plan in consultation with the campus that satisfies the requirements of Section 21083.2 of CEQA.*

If the archaeologist determines that the archaeological resource is not a unique archaeological resource, the archaeologist may record the site and submit the recordation form to the California Historic Resources Information System South Central Coastal Information Center.

The archaeologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the California Historic Resources Information System San Bernardino Archaeological Information Center.

Implementation of measures MM CUL-2(a-c)-SP would further reduce potentially significant impacts on archaeological resources by requiring an instructional program to assist construction personnel in identifying archaeological resources, monitoring by and availability of a qualified archaeologist, and requiring the scientific recovery and evaluation of any archaeological resources that could be encountered, which would ensure that important scientific information that could be provided by these resources regarding history or prehistory is not lost.

In addition, the following measures are proposed to further reduce Impact CUL-3 to a less-than-significant level:

MM CUL-3(a)-SP *Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering paleontological resources. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified paleontologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of paleontological resources is prohibited.*

MM CUL-3(b)-SP *Prior to site preparation and grading activities, the applicant shall retain a qualified (member of the American Society of Vertebrate Paleontologists) paleontologist to monitor earth-disturbing activities. The frequency of monitoring shall occur at the discretion of the paleontologist, based upon site conditions, soil or rock types, or other relevant factors. The paleontologist shall also be available on-call to assess any potential resources that may be exposed or discovered when the paleontologist is not present.*

MM CUL-3(c)-SP *For any potential paleontological resource uncovered during construction, a qualified paleontologist shall first determine whether it is a "unique resource". If the paleontological resource is determined to be a "unique resource," the paleontologist shall formulate a mitigation plan in consultation with the City that satisfies the requirements off the* Conformable Mitigation Guidelines *of the Society of Vertebrate Paleontology (News Bulletin Number 163, January 1995).*

If the paleontologist determines that the paleontological resource is not a unique resource, the paleontologist may record the site and submit the recordation form to the Natural History Museum of San Bernardino County.

The paleontologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the City of Ontario and to the Natural History Museum of San Bernardino County.

Implementation of measures MM CUL-3(a-c)-SP would reduce potentially significant impacts on paleontological resources to a less-than-significant level by requiring an instructional program to assist construction personnel in identifying paleontological resources, requiring monitoring by a qualified paleontologist, and requiring the scientific recovery and evaluation of any paleontological resources or unique geologic features that could be encountered, which would ensure that important scientific information that could be provided by these resources regarding history or prehistory is not lost.

In addition, the following measure, consistent with the applicable provisions of the California Health Code, is proposed to further reduce Impact CUL-4 to a less-than-significant level:

MM CUL-4-SP *In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately, the area of the find shall be protected, and the University immediately shall notify the San Bernardino County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.*

Implementation of MM CUL-4-SP would reduce Impact CUL-4 to a less-than-significant level by ensuring appropriate examination, treatment, and protection of human remains.

3.5 GEOLOGY AND SOILS

3.5.1 Introduction

This section discusses geologic characteristics of the Countryside Specific Plan Area and evaluates the extent to which implementation of the proposed project could be affected by seismic hazards, soil characteristics, and soil erosion and loss of topsoil. Although many development projects have little to no effect on geology, any project involving construction will have some effect on soils, and all may be affected by certain geologic events, such as earthquakes.

The Initial Study prepared for the proposed project (refer to Appendix A) identified the potential for the project site to expose people or structures to risks from seismic effects (such as fault rupture, groundshaking, and liquefaction), soil erosion and loss of topsoil, geologically unstable soils, and geologically expansive soils. The project site is located in an area of generally level terrain and no use of septic tanks or alternative waste disposal systems is proposed. Therefore, issues related to landslides or the use of alternative waste disposal systems are not included in the detailed analysis presented in this EIR.

Data used to prepare this section were taken from various sources including but not limited to the *City of Ontario General Plan*, the *City of Ontario Sphere of Influence General Plan Amendment EIR* (SOI GPA EIR), the *January 2004 Preliminary Geotechnical Investigation* prepared by Petra Geotechnical, Inc. (Petra 2004b) for Tentative Tract 16045 (40-acre portion of the site located southwest of the intersection of Riverside Drive and Archibald Avenue), and the *June 2004 Preliminary Geotechnical Investigation*, also prepared by Petra Geotechnical, Inc. (Petra 2004c) for Tentative Tracts 17449 and 17450. Appendix E-1 includes the preliminary geotechnical investigation report for Tract 16045. Appendix E-2 includes the preliminary geotechnical investigation report for Tracts 17449 and 17450. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

No letters regarding Geological Resources were received in response to the Notice of Preparation and Initial Study prepared for the proposed project and circulated for public comment.

3.5.2 Existing Conditions

Physiographic Setting

The proposed project site is located in the southern portion of the City of Ontario (the City), within the New Model Colony (NMC) area. The general Ontario area, including the project site, lies within the northern/northwestern portion of the Peninsular Geomorphic Province of Southern California, which is characterized by northwest-southwest trending faults, folds, and mountain ranges. During the time from the Pliocene period to the Pleistocene period (the past 2 to 3 million years), regional tectonic effects (such as uplift), climatic forces, and changes in sea level, have resulted in the formation of the underlying basement

materials and structure that underlay and support the project site. The forces that have created the geomorphology of the project site and vicinity are still active today.

The proposed project site is located on gently sloping undeveloped terrain with a relatively uniform slope from the northwest to southwest. The existing ground on the northern half of the project site slopes to the south away from Riverside Drive at an approximate 2 percent grade. The southern half of the project site slopes to the south away from Chino Avenue at an approximate 1 percent grade.

Geologic Setting

Geologic Formations

The project area lies within the central portion of the Los Angeles basin. In general, the Los Angeles basin is underlain by deposits of Quaternary and upper Pleistocene age sediments deposited during Pliocene and early Pleistocene time. The area was subsequently infilled with alluvial material originating from the surrounding mountain ranges.

The hills bordering this area of the Los Angeles Basin are characterized by a complex sequence of Cretaceous to Pleistocene age marine and nonmarine sedimentary rocks. Localized igneous intrusive rocks attest to the complex geologic history of the area. Erosion of the nearby San Gabriel and San Bernardino mountains is the source for the broad alluvial deposits covering much of this portion of the Los Angeles Basin.

Seismicity and Related Hazards

The entire Southern California region is considered to be seismically active. The region is crisscrossed by a network of major regional faults and minor local faults. However, the faulting and seismicity of Southern California is dominated by the San Andreas Fault zone. The San Andreas Fault zone separates two of the major tectonic plates that comprise the earth's crust. The Pacific Plate lies west of the San Andreas Fault zone. This plate is moving in a northwesterly direction relative to the North American Plate, which lies east of the San Andreas Fault zone. This relative movement between the two plates is the driving force of fault ruptures in western California. The San Andreas Fault generally trends northwest/southeast; however, north of the Transverse Ranges Province, the fault trends more in an east/west direction, causing a north/south compression between the two plates. North/south compression in Southern California has been estimated from five to 20 millimeters/year. This compression has produced rapid uplift of many of the mountain ranges in Southern California.

In addition to the San Andreas, there are numerous faults in Southern California that are categorized as active, potentially active, and inactive. A fault is classified as active if it has either moved during the Holocene epoch (during the last 11,000 years) or is included in an Alquist-Priolo Earthquake Fault zone (as established by the California Division of Mines and Geology). A fault is classified as potentially active if it has experienced movement within the Quaternary period (during the last 1.8 million years). Faults that have not moved in the last 1.8 million years are generally considered inactive. Surface displacement can be

recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts.

The severity of an earthquake is generally expressed in two ways: magnitude and intensity. The energy released, measured on the Richter scale, and represents the magnitude of an earthquake. The intensity of an earthquake is measured by the Modified Mercalli Intensity scale, which emphasizes the current seismic environment at a subject site and measures groundshaking severity according to damage done to structures, changes in the earth surface, and personal accounts. Table 3.5-1 compares the Mercalli scale to the Richter magnitude scale.

Table 3.5-1 Relationship between Greatest Measure Intensity and Magnitude

Richter Magnitude (M)	*Modified Mercalli Intensity Scale*	*Description*
3	I	Detected by only sensitive instruments
	II	Felt by a few people at rest
	III	Felt noticeably indoors, but not always recognized as a quake; vibration like a passing truck
4	IV	Felt indoors by many and outdoors by few
	V	Felt by most people. Some breakage of windows, dishes, and plaster
5	VI	Felt by all; falling plaster and chimneys; damage small
	VII	Damage to buildings varies; depends on quality of construction
6	VIII	Walls, monuments, chimneys fall; panel walls thrown out of frames
	IX	Buildings shift off foundations; foundations crack; ground cracks; underground pipes break
7	X	Most masonry and frame structures destroyed; ground cracks; landslides
8	XI	Ground fissures; pipes break; landslides; rails bent; new structures remain standing
	XII	Damage total; waves seen on ground surface; objects thrown into the air

SOURCE: *California Department of Mines and Geology*

In 1997 the state incorporated revisions into the California Building Code (CBC) based on recommendations identified by the Seismology Committee of the Structural Engineers Association of California, which require that the moment magnitude (Mw, identified on Table 3.5-2) of the "characteristic earthquake" be used in geotechnical calculations for design purposes. The new criterion for describing the energy release (i.e., the "size" of the earthquake along a particular fault segment) was determined by the Seismology Committee to represent a more reliable descriptor of future fault activity than previously used standards.

Regional Seismic Conditions

Major regional and local faults are shown in Figure 3.5-1. No active or potentially active faults are known to extend through the City of Ontario (including the proposed project site). Additionally, no area of the City lies within an earthquake fault zone as designated by the state of California *Alquist-Priolo Earthquake Fault Zoning Act*. However, several active and potentially active faults beyond the Ontario city limits do lie within

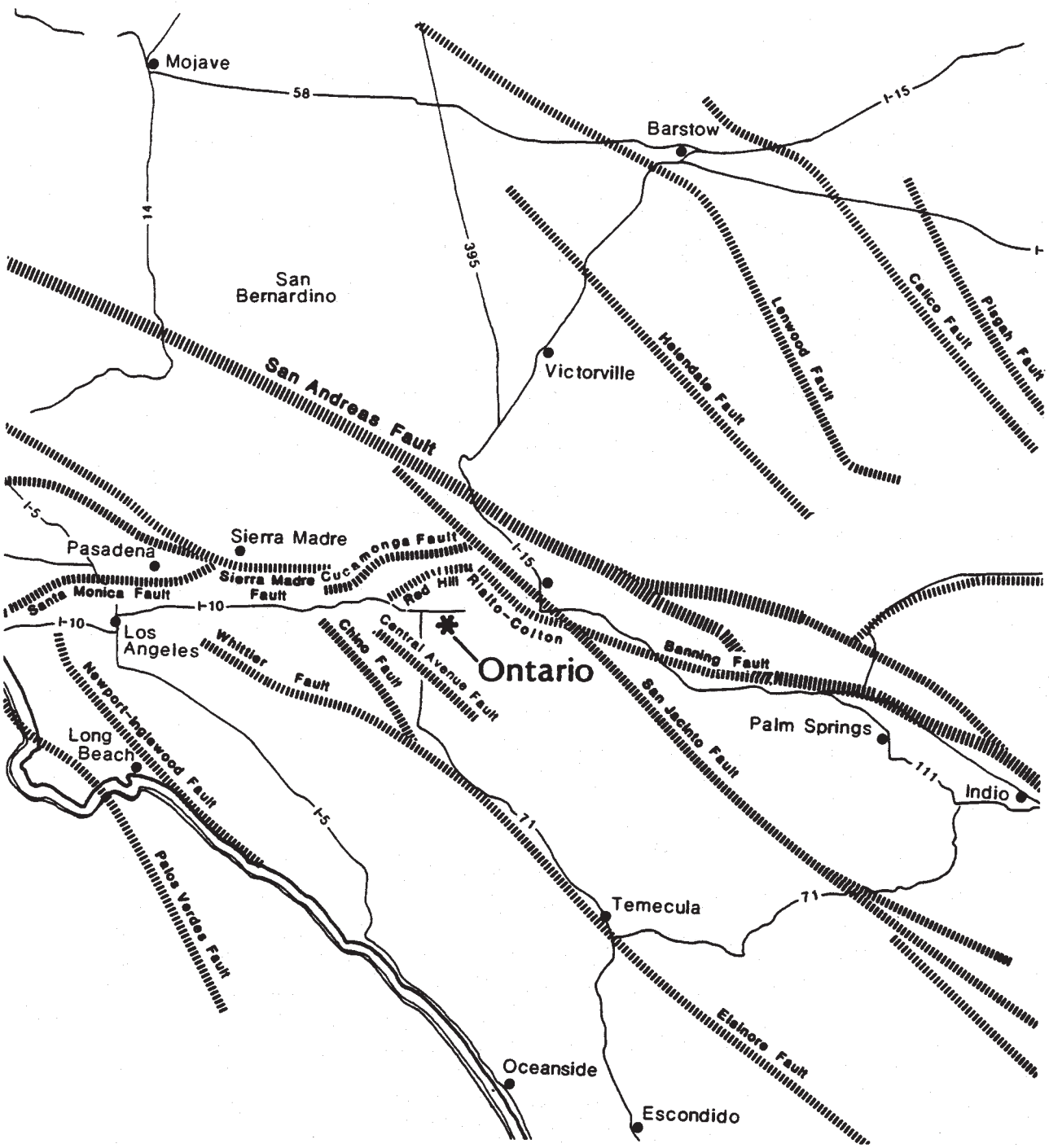

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FIGURE **3.5-1**

City of Ontario
Local and Regional Faults

Sources: California Department of Mines and Geology — City of Ontario

Not to Scale

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relatively close proximity to the proposed project area, as indicated in Table 3.5-2. Specifically, the project area lies approximately 6.2 miles northeast of the Chino-Central Avenue Fault (part of the Elsinore Fault system), 8.4 miles east of the San Jose Fault, 9.9 miles south of the Cucamonga Fault, 10.9 miles southeast of the Sierra Madre Fault, 14.5 miles southwest of the San Jacinto Fault and 19.4 miles south of the San Andreas Fault. Despite the proximity of these faults, the subject project area is not considered to be at a particularly greater level of seismic risk as compared to other areas in the southern California region.

Table 3.5-2 Nearest Regional Faults Affecting the Proposed New Model Colony in the City of Ontario

Fault Name	*Approximate Distance from Site (miles)*	*Maximum Event (Moment Magnitude) Mw*
Chino-Central Ave. (Elsinore)	6.2	6.7
San Jose	8.4	6.5
Cucamonga	9.9	7.0
Sierra Madre	10.9	7.0
San Jacinto	14.4	6.8
San Andreas (Southern)	19.4	7.8

SOURCE: Petra Consultants 2004

Groundshaking

As discussed, numerous earthquake faults lie within a 50-mile radius from the proposed project site. For the "maximum probably earthquake" (MPE), defined as the 100-year event normally considered in the design of non-critical structures, the values range from about 0.13 to 0.20 g (i.e., the unit force of gravity). In the design of certain critical or important facilities such as hospitals and dams, the "maximum credible earthquake" (MCE) event is considered. For the Chino, Whittier, and Cucamonga Faults, the MCE should yield an estimated peak horizontal acceleration in the range of 0.33 to 0.52 g.

A zone of concentrated, relatively low-magnitude seismicity extends to the southwest from the San Jacinto Fault zone *(Rialto-Colton branch)* along what is referred to an "inferred fault near Fontana." Where the inferred fault *(Fontana trend)* stops, this zone of micro-seismicity continues to the southwest and west, terminating in the Ontario NMC area. It is expected that MPE for this fault structure could produce horizontal acceleration in the range of 0.3 to 0.5 g. more distant faults are capable of larger earthquakes with a higher probability of occurrence. The San Andreas Fault is expected to generate a MCE event every 150 to 200 years, yielding a peak horizontal ground acceleration of approximately 0.21 to 0.26 g.

Liquefaction

The City of Ontario is situated on an alluvial fan composed of loosely compacted soils, which can cause magnification of ground shaking. The potential for liquefaction, a phenomenon in which soil takes on the properties of a liquid due to saturation by groundwater, exists within the Ontario area. Liquefaction risk is

greatest in areas where groundwater lies less than 50 feet below ground (fbg). In the City of Ontario, groundwater is generally at a depth of 300 fbg. However, several studies (as indicated in the City of Ontario General Plan, 1992) have indicated that there are small but numerous areas of shallow perched groundwater at depths of 5 to 20 feet. These areas may present a liquefaction hazard in the event of a major earthquake, particularly in the extreme southern portions of the City. However, the risk of liquefaction in the immediate project area is low due to a depth to groundwater of greater than 100 fbg.

Ground Rupture/Lateral Spreading

As mentioned, the proposed project site is not on or directly adjacent to known faults. Although ground rupture may occur along undetected traces of known faults, the potential for this to occur at the project site is considered low in relation to other areas in the region. Although the probability of surface rupture is considered to be low within the project site, the potential for strong shaking hazards caused by earthquakes along regional active faults does exist.

Lateral spreading is a horizontal ground movement that can occur in saturated soft soils as a response to severe groundshaking or rapid loading. Because saturated soils have a high water content, there normally is little or no lateral support to prevent them from bulging out from under a heavy load during seismic vibration or rapid filling. This phenomenon is particularly likely to occur where there is a "free" face, such as an unsupported channel wall in the soft soils. Due to the presence of moist soils (see "Subsurface Soils and Groundwater Conditions" below) at the proposed project site, the potential for lateral spreading does exist.

Differential Compaction/Seismic Settlement

Fine-grained soil and clay are subject to seismic settlement and differential compaction. The extent of settlement or compaction may range from a few inches to several feet. The potential for differential compaction is highest during large earthquakes. The general nature of the soils at the site is relatively dense alluvium and the depth down to historically high groundwater is greater than 100 feet below the surface. The potential for strong groundshaking during an earthquake exists at the site. Considering the nature of the soils present, the risk of compaction and settlement would be considered low at the site.

Other Geotechnical Considerations

Subsidence

Land subsidence is the condition where the elevation of a land surface decreases due to the withdrawal of fluid. Subsidence danger is greatest where poorly consolidated alluvial deposits overlie areas where large volumes of water have been removed. Groundwater pumping has lowered the water table over the past 75 years, reducing the liquefaction hazard but introducing a risk of subsidence. However, this risk has been reduced by recent aquifer recharge efforts in the area (City of Ontario 1992).

Slope Instability

Slope instability, overall, is not expected to pose constraints on development because the proposed project site is relatively flat. Similarly, there are no major slopes that would be subject to erosion.

Subsurface Soils and Groundwater Conditions

Figure 3.5-2 displays the general soil types that occur throughout the Ontario SOI area, which includes the project site. In general the Ontario SOI area is underlain by Pleistocene age (older than 12,000 years) and Holocene age (less than 12,000 years old) alluvial deposits. The youngest surficial deposit is eolian sands (QHS), comprising wind-blown sands having fine to medium-sized grains. These loose sands form sheets and low-dune deposits that have been stabilized by vegetation. These deposits are exposed in the eastern portion of the NMC area and extend westward to an area defined generally by a diagonal line expending from Harrison Avenue on the south to Vineyard Avenue on the north.

Areas in and around the Ontario SOI area contain Delhi series soils, as mapped by the U.S. Department of Agriculture, Soil Conservation Service in 1971 and 1980. Delhi series soils have been used for agriculture, primarily for grapes and citrus, since the 1800s.

The *January 2004 Preliminary Geotechnical Investigation* for Tract 16045 referenced above (Petra 2004b) included the review of available data, field exploration, laboratory testing, and geotechnical analyses of collected data. This report is included as Appendix E-1 of this EIR. The area identified as proposed Neighborhood 1 in the Countryside Specific Plan was investigated in the geotechnical report and determined to be underlain by local deposits of artificial fill, which are, in turn, underlain by native alluvial deposits. These materials range up to approximately 17 feet of thickness and consist of alternating zones of sand, silty sand, gravelly sand, and sandy silt. In general, these materials are dry to moist, loose to very dense, or firm to stiff and contain varying amounts of predominantly fine gravel. The upper 2 to 3 feet of these materials are generally loose to medium dense, dry to moist, and locally porous and are not considered suitable for the support of additional fill, residential structures, and/or improvements. Additionally, the uppermost several includes of some of the alluvial soils are rich in organics consisting of vegetative matter and manure as a result of plowing in the grazing areas and periodic manure removal operations.

Within Tract 16045, older alluvial deposits exist at the site at ranges of 14 to 17 feet below the surface. These older alluvial materials generally consist of silty sand and sand which are dense to very dense, damp to very moist, fine- to coarse-grained, and mottled with various shades of red, gray, orange, and brown. These materials are also slightly porous, and have some pedogenic parting surface development and contain some gravel and caliche. Deposits of manure exist within the cattle pens, several manure stockpiles, and within localized areas of the open grazing fields. The deposits within the cattle pens and grazing fields generally range in depth from approximately 2 to 10 inches. The large manure stockpile near the south end of proposed Neighborhood 1 ranges from approximately 1 to 10 feet in height.

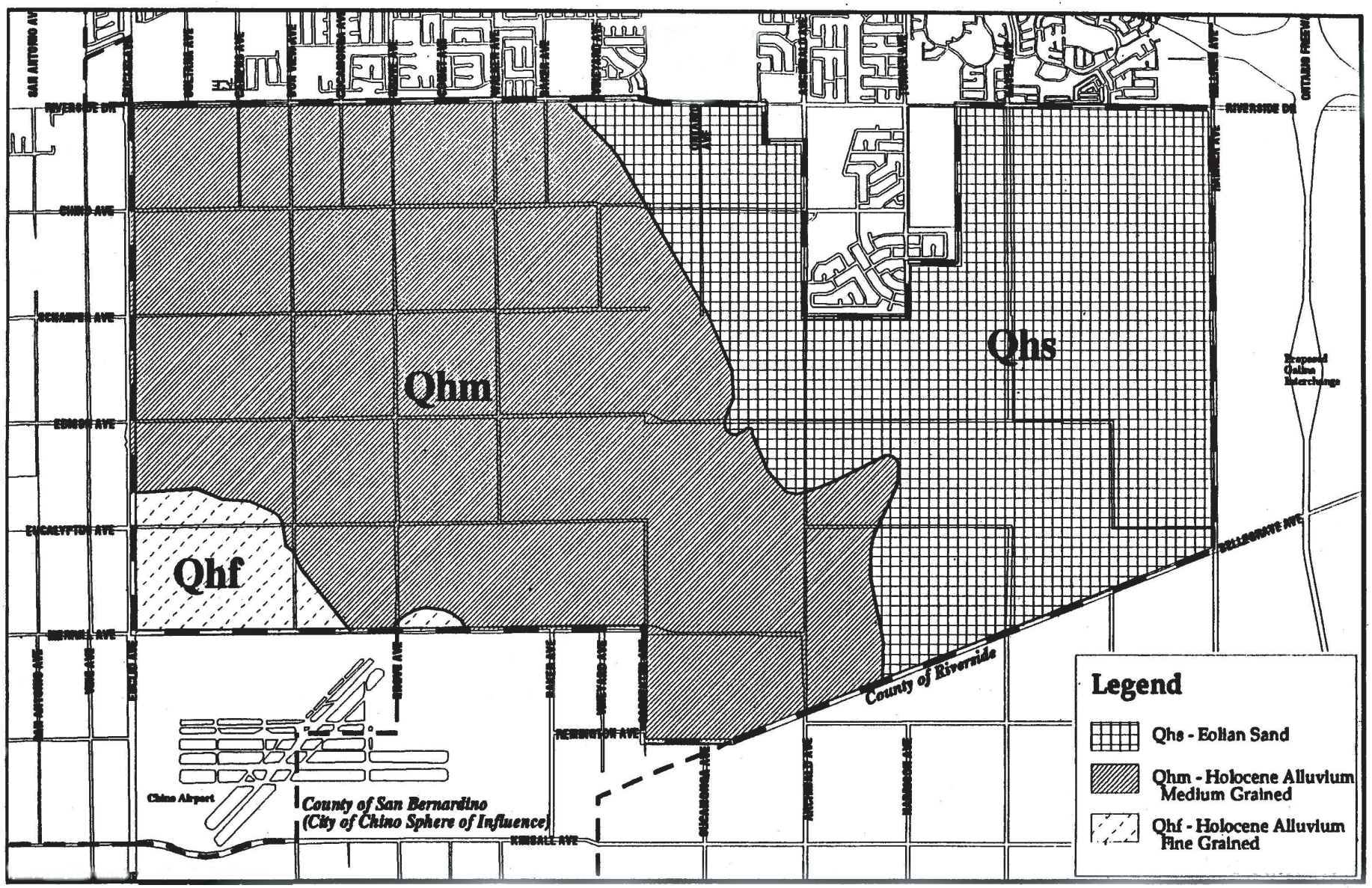

FIGURE **3.5-2**

City of Ontario
Soil Types in the Sphere of Influence

Source: City of Ontario Sphere of Influence Final Impact Report

City of Ontario

1" = 3,500'

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Within Tract 16045, groundwater was not encountered during site investigations that tested borings of a maximum depth of 51.5 fbg. According to 1997 Chino Basin Watermaster Data [as cited in the *Preliminary Geotechnical Investigation* (Petra 2004b)], the recently measured depth to groundwater in the vicinity of the site is in excess of 185 fbg. The historical high groundwater elevation beneath the site is in excess of approximately 100 fbg. Because of this, as mentioned previously, liquefaction potential is low.

The *June 2004 Preliminary Geotechnical Investigation* for Tracts 17449 and 17450 referenced above (Petra 2004c) included the review of the available data, field exploration, laboratory testing, and geotechnical analyses of collected data. This report is included as Appendix E-2 of this EIR. The area identified as proposed Neighborhoods 5 and 6 in the Countryside Specific Plan was investigated in the geotechnical report and determined to be underlain by Quaternary alluvial deposits to the maximum depth explored (51.5 feet below the surface). A thin layer of artificial fill (ranging from 1 to 4 feet in localized areas) mantles the native alluvial soils where the natural ground surfaces have been altered by previous agricultural activities. Localized pockets of organic-rich soils mixed with grasses and roots were also observed in the agricultural fields.

Within Tracts 17449 and 17450 (proposed Neighborhoods 5 and 6), the combined upper 3 to 6 feet of existing fill and alluvial materials are generally lower in density, relatively drier and locally more porous as compared to the deeper alluvial materials, and are considered unsuitable for support of additional fill and residential structures and/or improvements. Below a depth of approximately 3 to 6 feet, the native alluvial materials become medium dense with only occasional porosity. Manure was observed inside the existing cattle pens and varied from about 6 to 12 inches thick, with local manure stockpiles a few feet in thickness. Groundwater was not encountered during site investigations that tested borings of a maximum depth of 19 to 52 feet.

3.5.3 Regulatory Framework

Federal

Uniform Building Code

The Uniform Building Code (UBC) defines different regions of the United States and ranks them according to their seismic hazard potential. There are four types of these regions, which include Seismic Zones 1 through 4, with Zone 1 having the least seismic potential and Zone 4 having the highest seismic potential. The project site is located in Seismic Zone 4. Accordingly, any future development would be required to comply with all design standards applicable to Seismic Zone 4.

State

California Building Code

The state of California provides a minimum standard for building design through the *California Building Code* (CBC). The CBC is based on the UBC, with amendments for California conditions.

Chapter 23 of the CBC contains specific requirements for seismic safety. Chapter 29 of the CBC regulates excavation, foundations, and retaining walls. Chapter 33 of the CBC contains specific requirements pertaining to site demolition, excavation, and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials. Chapter 70 of the CBC regulates grading activities, including drainage and erosion control. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in Cal-OSHA regulations (Title 8 of the California Code of Regulations [CCR], as discussed below) and in Section A33 of the CBC.

Seismic Hazards Mapping Act

California Division of Mines and Geology (CDMG) also provides guidance with regard to seismic hazards. Under the *Seismic Hazards Mapping Act*, seismic hazard zones are to be identified and mapped to assist local governments in land use planning. The intent of this publication is to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. In addition, CDMG's Special Publications 117, "Guidelines for Evaluating and Mitigating Seismic Hazards in California," provides guidance for the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations.

NPDES General Permit

The State Water Resources Control Board (SWRCB) has adopted a statewide General Permit (WQ Order 99-08-DWQ) for stormwater discharges associated with construction activity, which includes site grading. These regulations prohibit the discharge of stormwater from construction projects that include 5 acres or more of soil disturbance, unless the discharge is in compliance with the National Pollutant Discharge Elimination System (NPDES) Phase 1 General Permit (please refer to Section 3.7 for further discussion of NPDES). Construction activities subject to this permit include clearing, grading, and other disturbance to the ground, such as stockpiling, or excavation that results in soil disturbance of at least 5 acres of total land area. In addition, as required by NPDES, because construction on the project site would occur over an area greater than 1 acre, the developer would be required to submit a Notice of Intent (NOI) to the SWRCB for coverage under the permit and would be required to comply with all its requirements.

The NPDES General Permit requires all dischargers to (1) develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs); (2) eliminate or reduce nonstormwater discharge to storm sewer systems; and (3) develop and implement a monitoring program of all BMPs specified. The two major objectives of the SWPPP are to (1) help identify the sources of sediment

and other pollutants that affect the water quality of stormwater discharges and (2) to describe and insure the implementation of BMPs to reduce or eliminate sediment in stormwater as well as nonstormwater discharges.

NPDES MS4 Permit

The Santa Ana Regional Water Quality Control Board (SARWQCB) has issued a countywide NPDES municipal storm water permit (Order No. R8-2002-0012, NPDES Permit No. CAS618036) to San Bernardino County, which includes the City of Ontario, to prevent degradation of water quality through stormwater runoff, which could be affected by site grading during construction. For compliance with this permit, the permittees developed the San Bernardino County Water Quality Management Plan (WQMP). This WQMP requires new and redevelopment projects within permitted areas to prepare project Storm Water Quality Management Plans that assure the following Best Management Practices (BMPs) are implemented:

2.5.1 Site Design BMPs

All projects shall implement Site Design BMPs to minimize any adverse stormwater-related impacts. Projects for which hydrologic conditions of concern have been identified shall control post-development peak stormwater runoff discharge rates and velocities to protect stream habitat and to prevent downstream erosion and sedimentation. Projects can address these objectives by the incorporation of appropriate Site Design BMPs intended to create a project that mimics the predevelopment hydrologic regime. Mimicking a site's predevelopment hydrologic regime may be achieved in all or part by:

- *Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the municipal storm drain system, and minimizing clearing and grading.*
- *Providing runoff storage measures dispersed strategically throughout a site, often accomplished by incorporating a variety of detention and retention facilities into the site's landscaped areas.*
- *Implementing on-site hydrological functional landscape design and management practices.*

2.5.2 Source Control BMPs

Source Control BMPs (routine non-structural BMPs, routine structural BMPs, alternate materials, and BMPs for individual project categories/project features) (Table 2-2) are required for all projects unless they are not applicable to the project due to project characteristics. If any of the following Source Control BMPs are not included in the project, a justification must be provided in the project WQMP:

- *Routine Non-Structural BMPS:*

  Education for Property Owners, Tenants, and Occupants
  Activity Restrictions
  Spill Contingency Plan
  Employee Training/Education Program
  Street Sweeping Private Streets and Parking Lots
  Common Area Catch Basin Inspection

- *Routine Structural BMPs:*

  Landscape Planning
  Hillside Landscaping
  Roof Runoff Controls
  Efficient Irrigation
  Protect Slopes and Channels (OC 2003)

Local

Southern California Association of Governments

SCAG's Regional Comprehensive Plan and Guide (RCPG) and Regional Housing Needs Assessment (RHNA) are tools for coordinating regional planning and development strategies in Southern California. Policies contained in the RCPG identified by SCAG as relevant to the proposed project are as follows:

Policy 3.22 *Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.*

Policy 3.23 *Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.*

City of Ontario Municipal Code—Building Code

Site development in the City of Ontario is required to comply with the *California Building Code* (CBC) and all state requirements pertaining to these hazards. As such, the CBC has been incorporated and adopted in its entirety into the City of Ontario Building Code. The CBC, discussed above under state regulations, is adopted by the City as Title 8, Chapter 1, Section 8, Building Code, of the City of Ontario's Municipal Code.

Applicable SOI GPA Policies

The following SOI GPA policies are relevant to Geological Resources:

Policy 21.2.1 *Monitor construction for adherence to Soil Erosion Control Area or City-mandated dust control plans and programs.*

Policy 22.1.3 *Require proposed development projects to determine if the project would be located in or near areas with significant erosion potential or soil engineering problems. Require proposed project applications to include a detailed discussion regarding the types of soil and locations, erosion potential or soil engineering problems, and erosion control plans. Mitigation plans must address methods to be used during all phases of project development, implementation, and operation.*

Policy 22.1.6 *Create (pull together from existing materials) a Grading and Geotechnical Investigation Standards manual that will be available to developers and consultants in order to ensure the minimum proper soils engineering and*

engineering geologic study for all sites where grading will occur. Together these standards and policies should effectively mandate proper studies before development approval, in which grading, foundations, and slope stability would be analyzed and any potential hazards identified. Mitigation of the potential hazards would occur through the proper application of recommendations arising from these studies. Topics shall include but not necessarily be limited to soils engineering and foundations, slope stability, erosion, liquefaction/dynamic settlement, shallow groundwater, and fault location/activity. This manual shall be available at the permit stage prior to initial feasibility and design studies in order to enhance (streamline) the development review and environmental review processes.

Policy 7.2.10 *Ensure compliance with all the terms and conditions outlined in the National Pollutant Discharge Elimination System (NPDES) permit, including the implementation of Best Management Practices (BMPs).*

Policy 7.2.11 *Require developers to prepare a Storm Water Pollution Prevention Plan (SWPPP) for individual proposed projects prior to the issuance of grading permits. These plans shall be submitted to the City Engineer for review and comment prior to implementing any SWPPP provisions or starting any construction activity. A copy of the SWPPP shall be held by the construction contractor(s) on the construction site throughout development of each project. The City Engineer will monitor and enforce the provisions of the SWPPP.*

Applicable General Plan Policies

The following Ontario General Plan Policies are relevant to Geological Resources:

Policy 1.5 *Adopt and maintain high standards for seismic performance of new buildings, through prompt adoption and careful enforcement of the Uniform Building Code.*

Policy 4.1 *Require new development to demonstrate permits from the Agricultural Commissioner's Office and comply with their provisions before issuing permits for new construction within the Soil Erosion control Area.*

3.5.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on geological resources if it would result in any of the following:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving

  Rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issues by the State Geologist for the area or based on other substantial evidence of a known fault

  Strong seismic groundshaking

  Seismic-related ground failure, including liquefaction

- Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property

3.5.5 Project Impacts

Less Than Significant

Impact GEO-1 Implementation of the proposed project could expose people or structures to seismic hazards. This impact is considered *less than significant*.

The proposed project would increase the number of people and structures that could be exposed to seismic hazards. The primary effect at the project site would be groundshaking with local peak accelerations ranging from approximately 0.33 to 0.52 g. Although these estimated values are not substantial, earthquake induced groundshaking could result in loss of life or damage to property caused by demand to, or failure of, structural and non-structural building components. In addition to structural damage caused by groundshaking, project features could be damaged as a result of liquefaction or settlement. Utility service could be disrupted, resulting in unsanitary or unhealthful conditions (e.g., broken water supply or sewer lines), or possible fires or explosions from damaged natural gas lines.

In general, groundshaking or related secondary effects such as liquefaction or settlement could affect any part of the project site. Because of the variety of soil types at the site, including areas containing unengineered fill from previous development, the extent of damage, if any, would depend on the specific physical characteristics of the underlying soils and/or fill, the depth down to groundwater during the earthquake, and the duration and intensity of shaking. The Preliminary Geotechnical Investigation prepared for Tract 16045 (proposed Neighborhood 1) indicates that soils in this area are not subject to liquefaction or settlement. The *June 2004 Preliminary Geotechnical Investigation* prepared for Tracts 17449 and 17450 (proposed Neighborhoods 5 and 6) indicates that the potential for liquefaction and lateral spreading is considered negligible considering the consistency and density of the alluvial deposits and that the depth of groundwater is greater than 100 feet.

The project site is located outside the Fault Rupture Hazard Zone (formerly Alquist-Priolo zone) and is approximately 6 miles from the nearest fault line (Chino–Central Avenue Fault). The proposed project site is, however, in a seismically active region. Therefore, the type and magnitude of seismic hazards that may affect the site are dependent on both the distance to causative faults and the intensity and duration of any seismic event. Although the probability of liquefaction, settlement, and primary surface rupture are considered to be low at the proposed project site, strong ground shaking hazards caused by earthquakes along regional active faults do exist. The seismic hazards must be taken into account in the design and

construction of the residential structures proposed and these hazards should be evaluated considering the entire 178-acre Specific Plan Area.

There does not appear to be any significant constraints to development related to groundshaking or secondary seismic hazards such as liquefaction or dynamic settlement that cannot be mitigated through implementation of SOI GPA Policies, SOI GPA EIR mitigation measures, applicable regulations and codes and standard engineering practices. Implementation of California Building Code and local building code and permitting requirements applicable to the project site would reduce the potential for adverse effects on people and property caused by seismic activity.

The proposed Countryside Specific Plan would be sited in accordance with state law and SOI GPA Policy 22.1.6 (SOI GPA EIR MM G-1), through preparation of site-specific geotechnical and soil studies performed to determine the proper building foundation design and to address any potential seismic hazards. The proposed Countryside Specific Plan would also be consistent with SOI GPA Policy 22.1.3 requiring proposed development to investigate whether the project would be located in or near areas with significant erosion potential or soil engineering problems. In addition, project-specific mitigation measure MM GEO-1-SP has been included to ensure that site-specific soil and structural issues are identified and adequately addressed during all phases of project development, implementation, and operation.

The proposed Specific Plan is consistent with SOI GPA policies designed to reduce potentially substantial adverse effects resulting from seismic surface rupture, ground shaking, and ground failure. With the incorporation of SOI GPA EIR MM G-1 and project-specific MM GEO-1-SP, impacts of the project regarding exposure to seismic hazards would be ***less than significant***.

Impact GEO-2 The proposed project would alter site topography, which could affect the rate or extent of erosion. The impact is considered *less than significant*.

Natural forces, both chemical and physical, are continually at work breaking down soils. Erosion poses two hazards: (1) it removes soils, thereby undermining roads and buildings and producing unstable slopes, and (2) it deposits eroded soil in reservoirs, lakes, drainage structures, and on roads as mudslides. Natural erosion is frequently accelerated by human activities such as site preparation for construction and alteration of topographic features. The following analysis focuses on the potential geotechnical effects of erosion related to project development. For a discussion of potential effects on water quality due to erosion and sedimentation caused by construction activities or urban runoff, please see Section 3.7 (Hydrology and Water Quality).

Development of the proposed project would permanently alter the topography of the proposed project site through site preparation (e.g., grading and trenching) and the construction of project features, which would add new impervious surfaces over previously uncovered soils. The alteration of topographic features can lead to increased erosion by creating unstable rock or soil surfaces, by changing the permeability or runoff characteristics of the soil, or by modifying or creating new pathways for drainage.

Specific erosion impacts would depend largely on the areas affected and the length of time soils are subject to conditions that would be affected by erosion processes. Currently, much of the project site is undeveloped or sparsely developed and many areas consist primarily of exposed and disturbed vegetation. Proposed development would require the removal and recompaction of on-site soils and grading, followed by construction of buildings and landscaping of open spaces. Trenching, grading, and compacting associated with construction of structures, modification/construction/relocation of underground utility lines, and landscape/hardscape installation could expose on-site soils to erosion by wind or water during these construction processes. Because much of the site currently consists of open space and unpaved surfaces, it is already exposed to the potential for erosion. The proposed addition of paved and landscaped areas would, over the long term, decrease the potential for erosion because fewer exposed soils would exist on site.

The project site does not contain steep slopes. As discussed in Section 3.5.2 (Existing Conditions), a slope of an approximate 2 percent grade occurs in the northern half of the project site as it slopes to the south away from Riverside Drive; whereas in southern half of the project site, an approximate 1 percent grade slopes south away from Chino Avenue. Thus, the potential for erosion by water through surface drainage at the project site during construction is low. Earth-disturbing activities associated with demolition existing on-site structures and construction of the proposed new residential structures would be temporary and would not result in a permanent or significant alteration of significant natural topographic features to an extent that erosion would be further exacerbated.

Nonetheless, all construction activities would comply with Chapter 29 of the CBC, which regulates excavation activities and construction of foundations and retaining walls, as well as Chapter 70 of the CBC, which regulates grading activities, including drainage and erosion control. Compliance with City permit and CBC requirements would minimize effects from erosion. The proposed Countryside Specific Plan would also be implemented in accordance with SOI GPA Policies 21.2.1, 22.1.3 and 22.1.6 (SOI GPA EIR MM G-1). The noted policies and MM G-1 both address erosion impacts through investigation, monitoring, and mitigation, and are designed to reduce potentially substantial adverse effects resulting from soil erosion during all phases of project development, implementation, and operation. In addition, project-specific measures MM GEO-2(a)-SP, MM GEO-2(b)-SP, and MM GEO-2(c)-SP have been included to ensure that specific construction-related erosion risks are further reduced. Thus, impacts related to soil erosion would be ***less than significant***.

Potentially Significant

Impact GEO-3 Project implementation would locate structures on soils that are considered potentially expansive, unstable, prone to settlement, and corrosive. This impact is considered *potentially significant*.

As discussed in Section 3.5.2 (Existing Conditions), much of the proposed project site has been previously disturbed. The geologic units that underlay the project site consist of native soils and engineered fill materials that vary from dry to moist, loose to very dense, or firm to still and contain varying amounts of predominately fine gravel. According to the *January 2004 Preliminary Geotechnical Investigation* (Petra 2004b)

prepared for Tract 16045 (proposed Neighborhood 1), on-site soils exhibit a very low expansion potential as classified in accordance with UBC Table No. 18-1-B. The *June 2004 Preliminary Geotechnical Investigation* prepared for Tracts 17449 and 17450 (proposed Neighborhoods 5 and 6) indicates that on-site earth materials exhibit very low expansion potentials as classified in accordance with CBC Table No. 18-I-B. However, the final evaluation of expansion potential should be performed based on sampling and testing after completion of rough grading.

Likewise, slope instability, overall, is not expected to pose constraints on development because the proposed project site is relatively flat. It is not anticipated that the grading design will include slopes greater than approximately 5 feet in height due to the flat terrain. Temporary slopes in excavations for foundations would be required to be shored and stabilized in accordance with adopted regulations and standards.

The *January 2004 Preliminary Geotechnical Investigation* (Petra 2004b) prepared for Tract 16045 (proposed Neighborhood 1) indicates that proposed concrete structures placed in contact with on-site soils are likely to experience exposure to water soluble sulfates, exposure to which would have a corrosive effect and potentially necessitate the need for sulfate-resistant concrete. However, the Report concludes that the exposure would be negligible and sulfate-resistant concrete would not be necessary. On the other hand, the chloride, the pH level, and the minimum resistivity present in the soils indicate that ferrous metals may experience moderate corrosion.

The *June 2004 Preliminary Geotechnical Investigation* prepared for Tracts 17449 and 17450 (proposed Neighborhoods 5 and 6) indicates that a negligible exposure to sulfate can be expected and no special cement sulfate-resistant cement will be necessary for concrete placed in contact with the on-site soils. The report further indicates that on-site soils may be moderately corrosive to ferrous metals and copper. As such, it is recommended that additional sampling and analysis be conducted during the final stages of site grading to provide a complete assessment of soil corrosivity.

The proposed project would comply with SOI GPA Policy 22.1.3 in that any existing soil engineering problems would be identified and appropriate mitigation undertaken as part of the project's design. In addition, project-specific mitigation measures MM GEO-1-SP, MM GEO-3(a)-SP, and MM GEO-3(b)-SP would be implemented to address soil impacts related to corrosivity and expansiveness. As such, adverse effects resulting from soils that are considered potentially expansive, unstable, prone to settlement, and corrosive would be ***less than significant***.

3.5.6 Cumulative Impacts

This cumulative impact analysis considers the development of the proposed project, in conjunction with development of additional specific plan areas within the Ontario SOI area (refer to Section 2.9 of this EIR for a description of the cumulative projects considered). Risks associated with geologic hazards are largely site specific and limited to each project site. As such, the potential for cumulative impacts to occur is limited.

The proposed project and cumulative projects would be exposed to potential geologic hazards related to soil and other conditions and individual building sites, and groundshaking from seismic events on known and unknown faults in the region. These effects would be site specific, and impacts would not be compounded by additional development. Buildings and facilities within the City of Ontario would be sited and designed in accordance with appropriate geotechnical and seismic guidelines and recommendations consistent with the CBC and UBC. The adherence to all relevant plans, codes, and regulations with respect to project design and construction would reduce impacts to the extent feasible, and impacts would not be cumulatively considerable. The project would have a less-than-significant contribution to cumulative effects.

Implementation of the proposed project would result in the modification of site conditions to accommodate site development and to provide for the stable and safe long-term operation of the project. The modification of the project site during the construction phase could expose areas of soil to erosion by wind or water. Development of other cumulative projects in the vicinity of the project site will cumulatively expose and engineer soil surfaces, and this will further alter soil conditions and subject soils to erosional processes during construction. To minimize the potential for cumulative impacts that could cause erosion, the proposed project and cumulative projects in the Ontario SOI area expected to be developed in conformance with the provisions of Ontario General Plan policies, Ontario SOI GPA Policies, SOI GPA EIR MM G-1, and applicable federal, state, county and City laws. It is also anticipated that adequate mitigation will be incorporated into individual projects as a result of current legal requirements for control of erosion storm water discharges. Furthermore, project sites more than one acre in size would be required to comply with the provisions of the NPDES permit system, which would minimize the potential for erosion during construction and operation of facilities. Compliance with the NPDES permit process, in addition to the legal requirements related to erosional control practices, would minimize cumulative effects from erosion. Therefore, impacts on erosion would not cumulatively considerable, and the proposed Countryside Specific Plan would have a less-than-significant contribution to cumulative effects.

3.5.7 Mitigation Measures and Residual Impacts

Impact GEO-1 (regarding exposure to seismic hazards) would be less than significant with the incorporation of SOI GPA EIR MM G-1 and project-specific MM GEO-1-SP.

Impact GEO-2 (erosion impacts) would be less than significant with adherence to SOI GPA EIR MM G-1 and project-specific measures MM GEO-2(a)-SP and MM GEO-2(b)-SP.

Impact GEO-3 (soil hazards) would be reduced to a less-than-significant level by implementation of project-specific measures MM GEO-1-SP, MM GEO-3(a)-SP and MM GEO-3(b)-SP, ensuring the incorporation of recommendations from a qualified engineer into the design and construction of the proposed project.

Ontario SOI GPA EIR Mitigation Measure

MM G-1 *The City shall develop (pull together from existing materials) a Grading and Geotechnical Investigation Standards manual which will be available to developers and consultants in order to*

ensure the minimum proper soils engineering and engineering geologic study for all sites where grading will occur. Together these standards and policies should effectively mandate proper studies before development approval, in which grading, foundations, and slope stability would be analyzed and any potential hazards identified. Mitigation of the potential hazards would occur though the proper application of recommendations arising from these studies. Topics shall include but not necessarily be limited to soils engineering and foundations, slope stability, erosion, liquefaction/dynamic settlement, shallow groundwater, and fault location/activity. This manual shall be available at the permit stage prior to initial feasibility and design studies in order to enhance (streamline) the development review and environmental review processes.

Project-Specific Mitigation Measures

MM GEO-1-SP *A final design geotechnical report shall be prepared for the proposed development to provide structure-specific geotechnical recommendations. The final report shall address all issues initially covered in the Preliminary Geotechnical Report. Final recommendations on earthwork, spread footings with slabs-on-grade, reinforced mat foundations, post-tensioned mats, friction piles, cathedral retaining (basement) walls, and measures to address soil corrosion shall be identified. The final report shall specify foundation recommendations to ensure issues associated with underlying soils are addressed. Construction of the project shall comply with all recommendations in the final geotechnical report.*

Implementation of MM G-1 and MM GEO-1-SP would further reduce impacts related to exposure of people or structures to seismic hazards (Impact GEO-1). Although the probability of liquefaction, settlement, and primary surface rupture are considered to be low at the proposed project site, strong ground shaking hazards caused by earthquakes along regional active faults do exist. Implementation of these mitigation measures further ensures that seismic hazards are be taken into account in the design and construction of the residential structures proposed and these hazards should be evaluated considering the entire 178-acre site. Impact GEO-1 remains less than significant.

MM GEO-2(a)-SP *Erosion control shall be employed and maintained on all vacant areas of the project site that have been graded.*

MM GEO-2(b)-SP *The project applicant shall submit a Notice of Intent (NOI) to the State Water Resources Conservation Board (SWRCB) for coverage under the Statewide General Construction Activity Stormwater Permit and shall comply with all applicable requirements, including the preparation of a Stormwater Pollution Prevention Plan. A copy of the NOI shall be submitted to the City prior to issuance of a grading permit.*

MM GEO-2(c)-SP *An erosion control plan shall be reviewed and approved by the City of Ontario prior to the issuance of grading permits.*

Implementation of MM GEO-2(a)-SP, MM GEO-2(b)-SP, and MM GEO-2(c)-SP address erosion impacts (Impact GEO-2) through investigation, monitoring, and mitigation, and are designed to further reduce substantial impacts from soil erosion during all phases of project development, implementation, and

operation. These measures would ensure that construction-related erosion risks noted in Impact GEO-2 are further reduced and remain less than significant.

MM GEO-3(a)-SP *Additional sampling and analysis shall be conducted during the final stages of grading to provide a complete assessment of soil corrosivity. If necessary, appropriate mitigation measures should be provided by a qualified corrosion engineer and incorporated into final design plans.*

MM GEO-3(b)-SP *Additional soil sampling and testing shall be conducted following rough grading of the site. If necessary, to reduce the potential for damage due to soil expansion, slabs-on-grade shall be provided with sufficient reinforcement, and the footings shall extend below the zone of seasonal moisture fluctuation. A registered civil engineer or certified engineering geologist shall determine if post-tensioned slabs-on-grade may be used as another viable alternative to effectively address effects associated with expansive soils.*

Implementation of MM GEO-1-SP, MM GEO-3(a)-SP, and MM GEO-3(b)-SP address soil impacts related to corrosivity and expansiveness described in Impact GEO-3. These measures, through additional sampling and analysis, ensure that adverse effects resulting from soils that are considered potentially expansive, unstable, prone to settlement, and corrosive would be reduced to less than significant levels.

3.6 HAZARDS AND HAZARDOUS MATERIALS

3.6.1 Introduction

This EIR section analyzes the potential for adverse impacts on human health and the environment from exposure to hazardous materials located on site due to previous land uses. A hazardous material is defined as any material that due to its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the work place or environment. Hazardous materials include, but are not necessarily limited to, inorganic and organic chemicals, solvents, mercury, lead, asbestos, paints, cleansers, manure, fertilizers, or pesticides that were used in previous activities at the site as well as activities on neighboring sites. Specifically, previous activities at the project site include the operation of former and current dairy farms, agricultural fields, and a nursery.

The Initial Study (Appendix A) identified that the potential for impacts from hazardous materials would include those associated with former uses on site, particularly whether the proposed project would be located on a site that has the potential for the release of methane gas or is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The Initial Study also identified the potential for impacts as a result of upset and accident conditions involving the release of hazardous materials into the environment; possible safety hazards due to hazardous materials in proximity to a school; impairment of emergency response or emergency evacuation plan implementation; and risks associated with wildland fires. Issues scoped out from detailed analysis in the EIR include creation of a significant hazard through the transport, use, or disposal of hazardous materials, and safety hazards due to proximity to an airport. No letters regarding hazards or hazardous materials have been received in response to the Notice of Preparation and Initial Study prepared for the proposed project and circulated for public comment.

Data used to prepare this section were taken from various sources, including but not limited to documentation from the 2004 Phase I ESA prepared for Parcels 1, 2, 3, and 4 located southeast of Chino Avenue and the Cucamonga Creek Channel; the 2003 Phase I Environmental Site Assessment (ESA) and Limited Phase II Investigation prepared for the Alger Property (a 40-acre cattle ranch located at 9675 Riverside Drive); the 2003 Report of Site History Relative to the Potential for Methane Generation on the Alger Property; and the 2004 Analysis of Conditions and Impacts Relative to Animal Wastes. These hazardous materials reports are included as Appendix F1, Appendix F2, Appendix F3, Appendix F4, respectively. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

It should be noted that areas of proposed Neighborhoods 2, 3, 4, 7, and 8 of the Countryside Specific Plan area have not been subject to detailed hazardous materials investigations at this time, as these locations are not part of the initial proposed phase of development planned for Neighborhoods 1, 5, and 6 and therefore detailed site plans have not yet been developed. As such, this EIR section presents general conclusions regarding the potential for the presence of hazardous materials within proposed Neighborhoods 2, 3, 4, 7, and 8, (as well as Neighborhoods 1, 5, and 6) and includes recommendations and mitigation measures to

ensure that future studies of previously unexamined sites occur in order to identify and verify the potential presence of hazardous materials on these sites and remediate or remove contaminants as necessary to avoid public health risks.

3.6.2 Existing Conditions

On-Site Uses by Proposed Neighborhoods

Neighborhood 1

Alger Cattle Ranch. This existing calf ranch is located in the northwest corner of the project site. It is approximately 40 acres in size with approximately 25 acres directly used for calf ranch operations. According to the Regional Water Quality Control Board, this facility has not been in operation since 1999.

Neighborhood 2

Agriculture. The Barth property is located in the northeast corner of the project site. It consists of predominantly agricultural uses, including row crops and a nursery. The field for the row crops lay fallow as of EIP Associates site visit in July 2004.

Neighborhood 3

Horse Ranch and Salvage Yard. A horse ranch is located on approximately 10 acres along the north side of Chino Avenue at the west boundary of the project area. In addition, a salvage yard, consisting of inoperable automotive and farming equipment and other stockpiled items, also exists just east of the horse ranch along the north side of Chino Avenue and may contain leaking storage tanks, spilled oil, mercury and other heavy metals, etc.

Neighborhood 4

Miscellaneous Uses. Miscellaneous land uses include rural residential and vacant properties along the north side of Chino Avenue.

Neighborhoods 5 and 6

John Van Veen Dairy. The John Van Veen Dairy is located south of Chino Avenue immediately east of the Cucamonga Creek recharge basins. The dairy covers approximately 34 acres. Of this total, approximately 28.5 acres was directly used for dairy operations. During active dairy operations in 2003, the dairy housed up to 750 head of livestock. Approximately 11 acres of the site was used for corrals. Manure-contaminated washwater (wastewater) produced by milk house operations was applied to fields and pastures in the south half of the property. Excess washwater and stormwater is contained in a 1 acre basin along the

south property line. The site has been continuously used as a dairy since the mid-1960s. The current Southern California Edison Easement traverses the southern portion of this property.

Neighborhood 7

Joe Chez Ranch. A church, rural residence, and vacant property is located near the southwest corner of Chino Avenue and Archibald Avenue. The Joe Chez Ranch, located immediately south of these miscellaneous land uses, consists of land used for row crops. The current Southern California Edison Easement traverses the southern portion of this property.

Neighborhood 8

Poultry Ranch. A 10-acre poultry ranch is located at the southeast corner of the project area, south of the Deer Creek Channel.

Adjacent Uses

Within the general vicinity of the project site, neighboring land uses primarily include single-family homes to the north and east, undeveloped NMC Subareas 4 and 11 to the west, and unincorporated County areas to the south. Specific adjacent uses include the following:

- **North**—Riverside Drive, beyond which are single-family residential and recreational uses
- **South**—Schaefer Avenue, beyond which are agricultural-related uses
- **East**—Archibald Avenue, beyond which are commercial and residential uses
- **West**—Cucamonga Channel and associated recharge basins, beyond which are vacant lots, sporadic residential uses, and agricultural uses

Historical Review of Project Site Uses

Petra Environmental Division (Petra) prepared Phase I ESAs in 2003 and 2004 that primarily covered the western portions of the project site identified as proposed Neighborhoods 1, 5, and 6 in the Countryside Specific Plan (refer to Figure 3.6-1) and included site reconnaissance, review of pertinent literature and government agency records, and interviews with persons familiar with the site. These reports discussed past uses of the project site, as described in Table 3.6-1, and contamination potential associated with the current site, as described in detail under the "Contamination at the Project Site" section below.

Table 3.6-1 Historical On-Site Uses

Dates	On-Site Uses
1940s	Vineyards on the northwest portion of the site.
At least 1949 to late 1960s	Agriculture as well as two structures (possibly a residence and a barn) on the southwest portion of the site.
1950s to early 1970s	Vacant land on the northwest portion of the site.
At least 1970 to present	Dairy and four residences and structures associated with the operating dairy (milk house and cattle pens) on the southwest portion of the site.
1974 to present	Calf nursery, ranch, and pasture land on northwest portion of the site.

Database Searches

In 2003, Environmental Data Resources, Inc. completed a search of federal, state, and local regulatory databases to determine if any known contaminated sites were located on the property. The project site was identified in the California Water Resources Control Board, Waste Discharge System (CA WDS) database for the John Van Veen Dairy, an agricultural facility that treats or disposes of nonhazardous wastewater. No releases of hazardous materials or violations are recorded for this site. Based on this information, it is unlikely that this listing is a recognized environmental condition with regard to the project site. Rather, the disposal of fertilizer and manure waste as a result of former and current dairy operation at the project site warranted its inclusion in this database. The project site was also identified in the San Bernardino County Fire Department Hazardous Materials Division (DEHS Permit System) permit list for the Ag-Joe Chez Ranch.

Contaminants on Adjacent Properties

No recognized environmental conditions adjacent to the project site that are considered likely to pose a significant impact to soils or groundwater beneath the project site were observed by Petra, but six releases of either diesel fuel, petroleum, or oil within one-half mile of the project site have been recorded. However, due to the one-time nature of these releases, the passage of time since these releases occurred, and/or the distance of these release sites from the project site, it is unlikely that these release sites present a recognized environmental condition to the project site.

Contamination at the Project Site

Environmental concerns at the project site are typical of that of current and former dairy farm and agricultural properties and primarily include methane (natural gas) emissions and pesticide/herbicide-impacted soil. The Phase I ESAs prepared by Petra in 2003 and 2004 for the western portions of the project site identified other items that may warrant consideration in conjunction with any planned development activities but are not considered to represent a significant environmental risk with respect to the project site. These items include at least one septic tank, possible asbestos-containing materials and lead-based paints

LEGEND

Specific Plan Boundary

Phase I Study Areas

NORTH
1" = 400'

10905-00

FIGURE **3.6-1**

Phase I Study Areas

Scale: 1'=400"

Source: City of Ontario, 2004

City of Ontario

EIP ASSOCIATES

associated with various on-site structures, pipes, and debris, and possible polychlorinated biphenyl (PCB)-containing transformers at the project site as well as the presence of chlorinated solvent plume in the groundwater beneath the site. The Phase I Investigation prepared in 2004 for the southwestern portion of the project site also identified heavily stained soils around a diesel above-ground storage tank (AST) and some open buckets of oil. In addition, the limited Phase II Investigation conducted in 2003 for the northwest portion of the project site evaluated site soils by drilling borings and sampling soils in the vicinity of surface staining at another fuel AST and dispenser.

Methane

The project site primarily contains dairies, poultry ranches, and agricultural areas, which are all classified as Concentrated Animal Feed Operations (CAFOs). CAFOs typically result in the generation and consolidation of animal manures. Manures have historically been applied to local croplands as fertilizer or stockpiled on site prior to transport for off-site application or other uses. In addition, dairies generate manure-contaminated wastewater from animal washing activities associated with milking, milk house wash downs, and manure-contaminated stormwater runoff. The sustained application of manure and manure-contaminated water results in a high content or organics in the top soil layers due to the deposit of high volumes of animal manures. As the organics are broken down, they produce a high level of methane, which can readily move to the surface and into the atmosphere. If trapped in confined spaces such as utility lines or structures, it can become an air quality health hazard. Further, methane in a concentration of 6 to 15 percent with air is an explosive mixture.

Alger Cattle Ranch. Petra prepared a report in 2003 of potential methane issues associated with the previous calf ranch operations. The report concluded that certain areas of the property may produce significant concentrations of methane due to the historic presence of high volume of manure. Included are these areas:

- Calf pens located in the southern and eastern portions of the property
- The run off collection pond located in the southeast portion of the site and a formed detention basin located in the central portion of the property
- The manure stockpile area located in the southern portion of the property
- Calf stall (crates) located in the center portion of the property

Petra recommended that these areas be tested for methane concentrations following completion of grading operations for any proposed residential development. Remaining areas formerly used for pasture and croplands were not considered as potential methane generation areas and did not require additional testing.

In January 2004, Petra performed a preliminary geotechnical investigation of this property. One of the primary issues involved the testing of soils to determine the depth of manure below existing grade and the organic content of the soil. The field tests indicated that subsurface manure depth ranged from one foot below grade in the central calf stall area to 0.2 feet along the northern perimeter. Organic tests were performed at 20 sites throughout the property to depths of up to 5 feet. Results indicated organic contents

ranging from 0.3 percent to 8.5 percent by weight. Seven samples exceeded 1.0 percent and 3 exceeded 2.0 percent. Standard engineering practices allow for a maximum organic content in engineered fills of no more than 2.0 percent.

John Van Veen Dairy. The John Van Veen Dairy directed milk house washwater (wastewater) to a series of alfalfa valves along the north half of the properties pasture area. All stormwater draining from the corral areas also drained into the pasture. Excess washwater and stormwater was contained in the southern basin. As a result, all three areas (corrals, pasture, and basin) received significant volumes of manure over the life of the dairy.

Based upon a review of the dairy's Engineered Waste Management Plan (EWMP), it may be assumed that the following areas may produce significant concentrations of methane due to the presence of high volumes of manure:

- Corrals areas located in the north half of the site
- Wastewater detention basin located along the south property line

Although not included in the current draft protocol of the City of Ontario, the southern pasture areas were historically used for the evaporation and infiltration of manure contaminated washwater and stormwater. There is therefore a potential that some or all of these areas may possess high concentrations of subsurface manures resulting in potential methane generation.

Other CAFOs. Little information is available regarding the horse ranch and poultry ranch located within the Specific Plan Area. However, since these are considered to be CAFOs, large volumes of could be located within the corrals and pens.

Asbestos/Lead

Due to the age of the various dairy and residential structures on the project site, it is possible that asbestos-containing materials and lead-based paint are present in structures on site. Asbestos-containing materials and lead-based paints had been previously identified in the milk house on site. Additionally, Petra observed concrete stand pipes and concrete irrigation pipes associated with four electric-powered water wells on site. Thus, it is possible that subsurface asbestos-containing transite irrigation piping is present. Further, debris and miscellaneous items on the project site include wood, plastic, metal, polyvinyl chloride (PVC) pipes, furniture, appliances, and two 55-gallon drums of acid cleaner. Due to the depth of the debris piles, it is unknown if any materials containing asbestos or lead-based paint are present within the debris.

Pesticides/Herbicides

The project site was used for agriculture, including possibly vineyards and row crops, since at least the 1930s. It is possible that pesticides and herbicides have been used on the project site in the past. Soil samples indicate that, while concentrations of dichlorodiphenyltrichloroethane (DDT) and dichlorodiphenyl-

dichloroethylene (DDE) were detected, the concentrations are below the respective U.S. Environmental Protection Agency Preliminary Remediation Goals (EPA PRGs) for residential soils.

Chlorinated Solvent Plume

The project site and vicinity overlay groundwater that has been impacted by contaminants from the "South Ontario" chlorinated solvent plume. The "South Ontario" chlorinated solvent plume appears to have originated from unknown sources located up gradient from the project site. According to Santa Ana Regional Water Quality Control Board (SARWQCB) information, historical land use in the vicinity of the project site has resulted in the groundwater contaminant plume with such groundwater contamination recorded in groundwater wells both on and off the project site.

Polychlorinated Biphenyls (PCBs)

Eight pole-mounted transformers were observed within the western portions of the project site. No staining was observed on the transformers or underlying soil. Based on the estimated age of these transformers, they may contain PCBs. Light tubes in the light ballasts located within the milk house structure may also contain PCBs and trace amounts of mercury.

Petroleum Hydrocarbons

Soil with substantial staining was observed by Petra in the vicinity of an approximately 800-gallon diesel fuel AST and dispenser in the northwestern portion of the project site. Petra drilled three borings to approximately 25 feet below ground (fbg) in the vicinity of the fuel AST and dispenser and collected soil samples for petroleum hydrocarbon (TPH) analysis. In addition, Petra observed another diesel AST and heavily stained soil surrounding some of the nine 5-gallon buckets of oil that were open in the southwestern portion of the project site.

Electromagnetic Fields

Southern California Edison (SCE) provides electrical services to the City and the surrounding areas. Several SCE transmission lines are located in the project area and one SCE easement traverses the project site. Electric fields are produced in electrical lines as a result of voltage applied to wiring, and are measured in volts per meter (V/m) or kilovolts per meter (Kv/m). Electric field strengths greatly diminish with distance from the source and many structures including trees and houses shield these fields. Most exposure to residential electric fields is the result of internal household appliance use. Magnetic fields are the result of the movement (current) of electricity. These fields are measured in Gauss, however this measure is extremely large, and fields from electrical lines are generally referred to in milligaus (mg). As with electric fields, magnetic field strengths decrease dramatically with distance from the source; however, structures such as trees or houses, unlike electrical fields, do not shield magnetic fields.

Exposure to EMFs from power lines or electrical substations is typically in the extremely low frequency (ELF) range of the electromagnetic spectrum. Within the project site, possible concern with EMFs resides with the major SCE power line corridor that bisects the site and the types of uses planned within or directly adjacent to the corridor. No U.S. federal agency has yet set ELF EMF standards. Presently, neither the State nor the County of San Bernardino has provisions or codes regulating development near major transmission lines or substations. The SOI GPA EIR identifies setback requirements for educational facilities from high-voltage lines.

Emergency Response

The Office of Emergency Services (OES) is a functional division of the San Bernardino County Fire Department and is responsible for disaster planning and emergency services coordination throughout the County. The office serves a County population of over 1,709,434 million and expands its services over 20,160 square miles. While OES does not directly manage field operations, as does an Incident Command Post (ICP), it ensures coordination of disaster response and recovery efforts through its day-to-day program management and during an incident/disaster. The Division staff also manages and operates the Emergency Operations Center (EOC), which serves as the primary coordination point for disasters and major emergencies.

In the event of a disaster or an incident requiring complex coordination, pre-selected and trained individuals (responders) report to the San Bernardino County Operational Area (OA) EOC. The 100-plus responders have been trained to perform specific functions designated under the Standardized Emergency Management System (SEMS) to coordinate emergency management of disasters. These 100 EOC responders are available 24 hours a day, 7 days a week. OES conducts annual exercises in the EOC to test the readiness of various types of disasters and large-scale emergencies.

The office is also responsible for the countywide Emergency Management Plan (EMP), which is currently under revision. The plan, slated for update the end of March 2003, identifies hazards and response, roles and responsibilities, and other key activities of government during a disaster. The office also maintains copies of the EMPs for the twenty-four cities/towns in the OA.

A high priority for OES staff is to assist County unincorporated communities and residents with local region preparedness. OES assists these areas by assigning them an OES Officer to assist in meeting their local planning goals and needs. These mostly isolated unincorporated areas of the County may have the need for special considerations in a disaster.

3.6.3 Regulatory Framework

The management of hazardous materials and hazardous wastes is subject to numerous laws and regulations at all levels of government. These laws and regulations apply to operational and disposal activities on the project site. Summaries of federal and state laws and regulations related to hazardous materials management are presented below. California state law allows for certain hazardous materials regulatory programs,

including those pertaining to oil wells, hazardous materials storage, and hazardous materials management, to be delegated to local agencies.

Federal and state laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment.

Federal

Primary federal agencies with responsibility for hazardous materials management include the Environmental Protection Agency (EPA), Department of Labor (federal Occupational Health and Safety Administration [OSHA]), Department of Transportation (DOT), and Nuclear Regulatory Commission (NRC). Major federal laws and issue areas include the following statutes (and regulations promulgated there under):

- *Resources Conservation and Recovery Act* (RCRA)—hazardous waste management
- *Hazardous and Solid Waste Amendments Act* (HSWA)—hazardous waste management
- *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA)—cleanup of contamination
- *Superfund Amendments and Reauthorization Act* (SARA)—cleanup of contamination
- Emergency Planning and Community Right-to-Know (SARA Title III)—business inventories and emergency response planning

State

Primary state agencies with jurisdiction over hazardous chemical materials management are the California Environmental Protection Agency (Cal/EPA), the Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Board (RWQCB). Other state agencies involved in hazardous materials management are the Department of Industrial Relations (state OSHA implementation [Cal/OSHA]), state Office of Emergency Services (OES—California Accidental Release Prevention implementation), California Air Resources Board (CARB), California Highway Patrol (CHP), state Office of Environmental Health Hazard Assessment (OEHHA—Proposition 65 implementation), and California Integrated Waste Management Board (CIWMB).

Hazardous chemical and biohazardous materials management laws in California include the following statutes (and regulations promulgated there under):

- *Hazardous Materials Management Act*—business plan reporting
- *Hazardous Waste Control Act*—hazardous waste management
- *Safe Drinking Water and Toxic Enforcement Act of 1986* ("Proposition 65")—releases of and exposure to carcinogenic chemicals
- *Hazardous Substances Act*—cleanup of contamination
- Hazardous Waste Management Planning and Facility Siting ("*Tanner Act*")
- Hazardous Materials Storage and Emergency Response (including response to hazardous materials incidents)

- *California Medical Waste Management Act*—medical and biohazardous wastes

Local

The primary local agency, known as the Certified Unified Program Agency (CUPA), with responsibility for implementing federal and state laws and regulations pertaining to hazardous materials management is San Bernardino County Fire Department, Hazardous Materials Division. The Unified Program is the consolidation of six state environmental regulatory programs into one program under the authority of a CUPA. A CUPA is a local agency that has been certified by Cal/EPA to implement the six state environmental programs within the local agency's jurisdiction. This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. The six consolidated programs are as follows:

- Hazardous Materials Release Response Plans and Inventory (Business Plan)
- California Accidental Release Program (CalARP)
- Underground Storage Tanks (UST)
- Aboveground Petroleum Storage Spill Prevention Control and Countermeasures (SPCC)
- Hazardous Waste Generation and On-Site Treatment
- Hazardous Materials Management Plans and Inventory Statements under Uniform Fire Code Article 80 (includes Hazardous Materials Management Program [HMMP] and Hazardous Materials Information System [HMIS])

As the CUPA for the County of San Bernardino, San Bernardino County Fire Department, Hazardous Materials Division maintains the records regarding location and status of hazardous materials sites in the County and administers programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. By designating a CUPA, San Bernardino County has accurate and adequate information to pre-plan for emergencies and/or disasters and to plan for public and firefighter safety.

Applicable SOI GPA Policies

The following SOI GPA policies are relevant to Hazards and Hazardous Materials.

Policy 2.3.4 *Inform new residents and property owners that existing agricultural uses may create nuisances such as flies, odors, dust, noise, night light, and chemical spraying.*

Policy 7.2.12 *Require that the individual project owners and operators handle, store, apply, and dispose all pest control, herbicide, insecticide, and other similar substances in a manner consistent with all applicable federal, state, and local regulations.*

Policy 22.1.5 *Require development applicants to certify that all deleterious materials, particularly organic residue from dairy, farming, or agricultural activity, have been removed, properly disposed, and will not impact the development during the project's life.*

Policy 23.1.3 *Required all projects to comply with policies set forth in the City of Ontario General Plan regarding the handling, transporting, treating, generating, and storage of hazardous materials.*

Policy 23.1.1 *Require Phase I Environmental Assessments for the presence of hazardous materials prior to the demolition of any buildings or the construction of new development on any properties within the Sphere of Influence. If hazardous materials are found, implement measures for their safe removal or containment, meeting applicable regulatory standards, prior to demolition of affected structures and/or construction on the affected areas.*

Applicable General Plan Policies

The following General Plan policies are relevant to Hazards and Hazardous Materials.

Hazards Element

Policy 3.9 *Continue to require a minimum of 26 feet of clear drive space and an outside turning radius of 55 feet (38 foot inside turning radius) to facilitate emergency vehicle access.*

Policy 5.4 *Prohibit construction of new residential development near businesses producing, using, or storing hazardous materials.*

Policy 5.10 *Discourage the transport of hazardous materials and substances through residential areas, routes with dense immobile populations such as hospitals and schools, as well as environmentally sensitive areas.*

3.6.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact associated with hazards and hazardous materials if it would result in any of the following:

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Creation of a significant hazard to the public or the environment through the presence or release of methane gas
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and as a result, create a significant hazard to the public or environment
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

As previously referenced, the SOI GPA EIR referenced distance setbacks for educational facilities from high-voltage transmission lines, which were developed by the State Department of Education. Although these requirements apply only to educational facilities, the SOI GPA EIR referenced that they could be optionally applied to residential development. These setback distances are as follows: 100 feet from a 50-133 Kv line; 150 feet from a 220-230 Kv line; and 350 feet from a 500-550 Kv line. The State Department of Education revised this policy in 2003 that would allow school districts to encroach within these setbacks based upon findings made in an EMF Management Plan.

3.6.5 Project Impacts

Potentially Significant

Impact HM-1 Project construction could expose construction workers to health and safety risks through earthmoving and demolition activities in areas with potentially contaminated structures, soils, or groundwater. This impact is considered *potentially significant*.

Given the current and historic uses of the site, including extensive dairy and agricultural operations, the potential exists for hazardous materials to be encountered over the entirety of the site. Specific Plan implementation would result in grading of approximately 178 acres of land on the project site, as well as demolition of existing structures. Disturbance of soils and demolition of structures could result in the exposure of construction workers, residential occupants, or parkland/paseo users to health or safety risks if contaminated structures, soils, and/or groundwater are encountered during construction or maintenance activities. Exposure to contaminated structures, soil, or groundwater could occur from any of the following:

- Possible asbestos-containing materials and lead-based paints associated with various on-site structures, pipes, and debris
- Presence of pesticides/herbicides in the soil at the project site
- Presence of chlorinated solvent plume in the groundwater beneath the site
- Potential soil contamination from PCB in areas currently containing transformers
- TPH-contaminated areas of soil adjacent to ASTs on the site
- Unknown contaminants that have not previously been identified

Exposure to hazardous materials during construction activities could occur through any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

Asbestos contamination at the project site has been determined to exist in the milk house and could also exist in the other existing dairy and residential structures and areas where concrete stand pipes, concrete irrigation pipes associated with four electric-powered water wells, transite irrigation piping, and piles of debris were located. Lead contamination could also exist in on-site structures. However, MM HM-2 from

the SOI GPA EIR required that, prior to issuance of permits by the City of Ontario for major renovation of demolition of any pre-1979 structure within the Sphere of Influence, the Applicant will submit documentation to the City Building Department that either asbestos and lead-based paint issues are not applicable to their property or that appropriate actions will be taken to correct any asbestos or lead-based paint issues prior to development of the site in conformance with the regulations of the South Coast Air Quality Management District and the State of California, Division of Occupational Health and Safety. This would ensure that impacts during construction associated with structural or soil contamination from asbestos and lead would be less than significant.

The presence of low concentrations of pesticides (DDT and DDE) in the soil at the project site is not considered an environmental concern, as the concentrations of these chemicals are below the respective U.S. EPA PRGs. It should be noted that Areas 2 and 7 of the project site were not surveyed for pesticides. and the number of pesticides and concentrations of the project site, as a whole, is based on the survey results for the remaining areas of the project site. Furthermore, grading activities during construction would mix the upper layers of site soils and, thereby, reduce the concentration of any pesticide and/or herbicide residues that may be present in the upper six inches of site soils. Therefore, pesticide and herbicide residues are not considered to be a recognized environmental condition with regard to the project site.

Historical land use in the vicinity of the project site has resulted in the groundwater contaminant plume with such groundwater contamination recorded in groundwater wells both on and off the project site. However, based on the depth to groundwater of greater than 100 fbg, the concentrations are reportedly sufficiently low as to not present a health risk to future residences. In addition, implementation of mitigation measure MM HM-1(a)-SP would ensure proper closure of existing groundwater wells. As such, impacts during construction associated with soil and groundwater contamination from pesticides, herbicides, and solvent plume with respect to the areas on site where these contaminants have been identified below regulatory limits, are considered to be less than significant.

Exposure of construction personnel and the public to hazardous substances could occur at the project site in relation to potential soil contamination from PCBs associated with electrical transformers and light tubes. As previously discussed, eight pole-mounted transformers mounted on the western portion of the project site and light tubes in the milk house were observed on site. However, it has not been determined if these transformers or light tubes could result in PCB contamination. Further, TPH concentrations in stained soils associated with two ASTs on the project site have been determined. As such, the risk exists for residual contamination of the soil resulting from PCB and TPH leakage would be potentially significant. In order to address the potential for encountering PCB or TPH contamination, MM HM-1(b)-SP and MM HM-1(c)-SP would be implemented.

The possibility would remain for unidentified soil contamination to be encountered during grading, excavation, or ground disturbance associated with the proposed project. Mitigation measure MM HM-1 from the SOI GPA EIR requires completion of Phase I ESAs for all areas on-site to screen the site for further contamination potential. If any unidentified sources of contamination are encountered during grading or excavation, the removal activities required could pose health and safety risks, such as the exposure of

workers, materials handling personnel, and the pubic to hazardous materials or vapors. Such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances. In addition, exposure to contamination could occur if these contaminants migrated from the contaminated zone to surrounding areas either before or after the surrounding areas were developed, or if contaminated zones were disturbed by future development at the contaminated location. The potential exposure of construction personnel or the public to remnant hazardous substances from former on-site uses and facilities at the project site exists. If exposed to hazardous substances, this would result in a significant hazard to the public. In order to address the potential for encountering unidentified contamination, MM HM-1(d)-SP, MM HM-1(e)-SP, and MM HM-1(f)-SP would be implemented.

The standard conditions of approval for the City of Ontario include compliance with all applicable federal, State, and local regulations pertaining to the handling, storing, applying, and disposing of all pest control, herbicide, insecticide, and other similar substances (SOI GPA Policy 7.2.12) as well as compliance by the Applicant to certify that all deleterious materials, particularly organic residue from dairy, farming, or agricultural activity, have been removed, properly disposed of, and will not impact the development during the project's life (SOI GPA Policy 22.1.5). Further, in the event of a disaster or an incident requiring complex coordination, pre-selected and trained hazardous materials personnel, in conjunction with City and County firefighters, would respond to any hazardous materials incident or illegal hazardous waste disposal complaint. Finally, implementation of MM HM-1(a)-SP, MM HM-1(b)-SP, MM HM-1(c)-SP, MM HM-1(d)-SP, and MM HM-1(e)-SP would reduce this impact to a ***less-than-significant*** level.

Impact HM-2 Development of the proposed project could expose construction workers, occupants of new residential structures and recreational users of proposed park areas to methane hazards. This impact is considered *potentially significant*.

Environmental concerns at the project site primarily stem from previous and current dairy farm activities. As is typical of dairy farm properties, the risk exists of construction and operational activities exposing workers and/or residents to hazards associated with the potential presence of methane, which is commonly associated with manure stockpiles. Methane emission and migration can result from the development of properties previously used for CAFOs with a high volume of manure. Petra concluded that through the mixing of on-site soils during grading operations, the average engineered fill on the Alger Cattle Ranch would have a maximum organic content of 2.0 percent or less, which does not exceed the maximum allowance for organic content in engineered fills per standard engineering practice. However, the southern pasture areas of the John Van Veen Dairy were historically used for the evaporation and infiltration of manure contaminated washwater and stormwater. There is, therefore, a potential that some or all of this property as well as the other CAFOs on the project site may possess high concentrations of subsurface manures resulting in potential methane generation.

Dairy activity could also generate manure-contaminated wastewater from animal washing activities associated with milking, milk house wash downs, and manure-contaminated stormwater runoff. In 1999, the SARWQCB issued Order No. 99-11, which prohibited the release of manure contaminated waters into

the regional surface drainage system. It required existing and proposed dairy operations within the Santa Ana Basin to confine manure-contaminated waters, both washwater and stormwater runoff, on site through a series of berms and containment basins. The John Van Veen Dairy and the Alger Cattle Ranch were both subject to these regulations and were required to prepare an Engineered Waste Management Plan (EWMP) for review and acceptance by the SARWQCB.

The standard conditions of approval for the City of Ontario include compliance by the Applicant to certify that all deleterious materials, particularly organic residue from dairy, farming, or agricultural activity, have been removed, properly disposed, and will not impact the development during the project's life (SOI GPA Policy 22.1.5). The Applicant must also comply with all applicable federal, state, and local regulations pertaining to the handling, storing, applying, and disposing of all pest control, herbicide, insecticide, and other similar substances (SOI GPA Policy 7.2.12). Further, in the event of a disaster or an incident requiring complex coordination, pre-selected and trained hazardous materials personnel, in conjunction with City and County firefighters, would respond to any hazardous materials incident or illegal hazardous waste disposal complaint. However, potential methane exposure remains due to the unknown location and extent of this contamination. As such, the risk for potential methane exposure resulting from disturbance of manure stockpiles during construction or the presence of methane in topsoil during operation would be potentially significant. In order to address the potential for methane release and migration, mitigation measures MM HM-2(a)-SP, MM HM-2(b)-SP, and MM HM-2(c)-SP would be implemented and reduce this impact to ***less than significant***.

Impact HM-3 Project implementation within a quarter mile of Ranch View School could result in possible safety hazards associated with hazardous emissions or hazardous material handling in proximity to a school. This impact is considered *potentially significant*.

The proposed project site is located within one-quarter mile of Ranch View Elementary School, which is located directly east of the project site at 3300 Old Archibald Ranch Road. Construction and operation of the proposed project would develop residential units in a planned community and would not include the processing or storage any acutely hazardous materials. However, if soils are contaminated with pesticides, herbicides, asbestos, lead, TPH, or PCBs, disturbance of the soil during construction activities could result in potential hazardous emissions. In addition, excavation and removal of manure stockpiles associated with dairy activities on the project site could result in potential hazardous releases of methane during the project construction phase. In order to address the potential for hazardous emissions, MM HM-1(a-f)-SP and MM HM-2(a-c)-SP would be implemented. The implementation of these mitigation measures and any recommendations of the Phase I for the project site regarding the handling/removal of any potentially contaminated soils or otherwise hazardous materials would occur prior to grading and construction. As such, these measures would reduce effects on the adjacent school and reduce this impact to less than significant.

In addition, the proposed residential (long-term operational) uses on the project site would not result in the routine handling, use, or disposal of hazardous materials, with the limited exception of standard household

cleaning products inside residences, chlorine and filters used in pools, and the limited application of pesticides associated with residential landscaping and maintenance practices. Therefore, no significant long-term operational emissions hazard to the public, including any nearby school, or the environment is anticipated through the routine transport, use, or disposal of hazardous materials associated with the operation of residential development. Thus, with implementation of MM HM-1(a-f)-SP and MM HM-2(a-c)-SP, this impact would be ***less than significant***.

Impact HM-4 Project implementation would not result in construction on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would not create a significant hazard to the public or environment. This impact is considered *less than significant*.

Based upon review of federal, state, and County hazardous waste lists and databases pursuant to Government Code Section 65962.5, two known hazardous materials sites (the John Van Veen Dairy and the Joe Chez Ranch) exist on the project site. The lists and databases include, but are not limited to, federal ASTM standard known as the Resource Conservation and Recovery Act database (RCRIS-SQG list), federal ASTM supplemental known as the Facility Index System (FINDS list), and state ASTM standards known as the Department of Toxic Substances Control Hazardous Waste and Substances Site List (Cortese List) and the California Hazardous Material Incident Report System (CHMIRS list). These lists and databases contain information regarding asbestos waste, underground storage tanks, photoprocessing chemicals, PCBs, unspecified solvent and organic mixture wastes, unspecified aqueous solution, metal sludge, other hazardous materials monitored by statute or regulation, known releases of hazardous substances, locations where radioactive or other hazardous materials are stored or second-hand, facility information, and "pointers" to other sources of information that contain more detail.

No portion of the project site was identified on the Cortese or CHMIRS lists; however, the John Van Veen Dairy property was identified on the California Water Resources Control Board, Waste Discharge System (CA WDS) database list, and the Joe Chez Ranch property was identified on the San Bernardino County Fire Department Hazardous Materials Division (DEHS Permit System) permit list; however, no releases of hazardous materials or violations are recorded for these sites (EDR 2003). Based on this information, it is unlikely that these listings are recognized environmental conditions with regard to the project site. The disposal of fertilizer and manure waste as a result of former and current dairy operation at the project site warranted its inclusion in these databases. Thus, the proposed project would involve construction on sites that are included on hazardous materials sites compiled pursuant to Government Code Section 65962.5, but a ***less-than-significant*** impact is anticipated with implementation of MM HM-1(a-f)-SP and MM HM-2(a-c)-SP.

Impact HM-5 Project implementation could expose people or structures to a risk of loss, injury, or death involving wildland fires. This impact is considered *potentially significant*.

Additional development of the proposed project could increase exposure of people and structures to a risk of loss, injury, or death involving wildland fires due to its proximity to undeveloped land. Most of the area under consideration for development is generally considered a light fuel area with row crops and annual grasses, and as such is less vulnerable to large conflagrations. However, eucalyptus trees adjacent to the project site are a source of fuel for wildland fires, and fuel management of these eucalyptus stands has been limited due to lack of urban development in the area. The proposed project could place additional residential units in close proximity to the eucalyptus stands, a known fire hazard. If a wildland fire were to occur, the proposed project would increase the number of persons and residences threatened by such an event. However, the adjacent Cucamonga Creek Channel could serve as a fire brake. In addition, the expansion of the access and circulation within the proposed project to include paseos and paved roads would also serve as fire brakes while improving the ability of the City to respond to a fire and reduce the potential hazard of wildland fires to people or structures.

The project site would be subject to fuel modification guidelines presented in the California Fire Code, which would substantially minimize the potential for both on- and off-site fires to impact the project site. The combination of vegetation removal, setbacks, and introduction of paseos and paved surfaces where none currently exist (improving access and creating fire breaks) would greatly reduce the movement of a potential fire from or to the project site. However, human-influenced ignition sources at the project site (i.e., discarded cigarettes, arson, fireworks, etc.) are common in any urbanized area. The permanent introductions of these ignition sources, as well as additional residents, into an undeveloped area would represent an increase in risk associated with wildland fires, which would constitute a potentially significant impact. Mitigation measures MM HM-5(a-d)-SP would be required to address potential wildland fire risks and reduce this impact to ***less than significant***.

Less Than Significant

Impact HM-6 Project implementation could impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan. This impact is considered *less than significant*.

Construction and operation activities associated with development of the proposed project could potentially affect emergency response or evacuation plans due to temporary construction barricades or other obstructions that could impede emergency access to the site. During a response, the primary emergency access points to the project site are Riverside Drive as well as Archibald Avenue. Evacuation traffic can flow west/east along Riverside Drive and north/south along Archibald Avenue. Emergency access to the project site could also be achieved via Chino Avenue and Schaefer Avenue. Fire crews would utilize paved roads and paseos internal to the site to reach fires and to provide emergency response, including the provision of water for fire suppression if necessary, as there may be no water hookups in the adjacent undeveloped NMC

Specific Plan areas. Further, the Ontario Fire Department shall continue to implement the Emergency Management Plan (EMP) to ensure that multiple emergency access or evacuation routes are provided to ensure that in the event one roadway or travel land is temporarily blocked, another may be utilized. Therefore, a ***less-than-significant*** impact with respect to the proposed project's effect on emergency response and evacuation would result and no mitigation is required.

Impact HM-7 Project implementation could result in the exposure of residents to potential EMFs. This impact is considered *less than significant*.

Within the boundaries of the proposed project, potential EMFs may be generated by the high-voltage SCE transmission lines that traverse the project site. The SOI GPA EIR identifies setbacks for educational facilities from such high-voltage lines and indicated they could be optionally applied to residential development. However, no U.S. federal agency has yet set Extremely Low Frequency EMF standards. Nor has any state, county, or City approved provisions or codes regulating development near major transmission lines or substations. In addition, SCE does not have published standards regulating development adjacent to high-voltage transmission line rights-of-way.

The proposed land use plan has located residential adjacent to the high-voltage line right-of-way that bisects the southern portion of the project site. Because the setback standards previously identified apply to educational facilities and are not required to be applied to residential development, and because no definitive standards have been established by a federal agency, and because the City and SCE has not established setback requirements, potential impacts resulting from the proximity to the high-voltage transmission lines are considered ***less than significant***.

3.6.6 Cumulative Impacts

This cumulative impact analysis considers development of the proposed project, in conjunction with other development within the vicinity of the project in the City of Ontario NMC area. Risks associated with hazardous materials are largely site specific and localized and are, thus, limited to the project site. Additionally, site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers to hazardous substances. As such, the potential for cumulative impacts to occur is limited.

The related development projects in the City of Ontario NMC include uses similar to the proposed project and surrounding uses, such as residential, recreational, commercial/retail, and business park space. Related development in the city and the adjacent communities would result in development on land previously used for dairy and agricultural production activities, and/or the demolition of existing structures, which may contain hazardous materials. Adherence to applicable regulations and guidelines, in addition to SOI GPA mitigation measures pertaining to abatement of, and protection from, exposure to methane, pesticide, herbicides, asbestos, lead, and other hazardous materials would address site specific impacts and would ensure that impacts from those activities would not be cumulatively considerable.

Development of cumulative projects could expose construction workers and the general public to potentially hazardous substances. For example, if demolition of existing buildings or utility structures is required, short-term increases in hazardous materials generation, due to the presence of lead-based paints and asbestos-containing materials in existing facilities could occur. However, projects would be required to comply with applicable federal, state, and local regulations. All demolition activities that would involve asbestos or lead based paint would comply with SCAQMD Rule 1403 and OSHA Construction Safety Orders that would ensure hazardous materials impacts would be less than significant. Site-specific investigations would be conducted at sites where contaminated soils could occur to minimize the exposure of workers to hazardous substances. Adherence to these requirements would ensure that impacts from exposure to substances in the soil or released into the air from the soil or demolition of on-site structures would not be cumulatively considerable.

Construction and operation associated with the related projects and other future development in the City of Ontario could result in activities that could interfere with adopted emergency response or evacuation plans, primarily by temporary construction barricades or other obstructions that could impede emergency access. It is anticipated that future development projects will undergo CEQA review of potential impacts on adopted emergency response or evacuation plans and will be required to implement measures necessary to mitigate potential impacts. As a result, impacts relating to inference with adopted emergency response or evacuation plans would not be cumulatively considerable, and the project would have a less than significant contribution to this effect.

Related projects in the NMC could include development in areas susceptible to wildland fires. Similar to the proposed Specific Plan, these projects would could increase human activity in areas prone to wildland fires and thus increase the potential for these fires to occur. New development would undergo project-specific review to ensure that individual project design measures address risks to wildland fires to minimize cumulative risks. Therefore, the project contribution to this impact would not be cumulatively considerable.

3.6.7 Mitigation Measures and Residual Impacts

Ontario SOI GPA EIR Mitigation Measures

MM HM-1 *Prior to consideration of any future development proposal within the Sphere of Influence, project developers will be required by the City to submit a completed Phase I Environmental Site Assessment, which, at a minimum, meets with the requirements of the most current standards of investigation established by the American Society for Testing and Materials (ASTM Standard E 1527).*

MM HM-2 *Prior to issuance of permits by the City of Ontario for major renovation or demolition of any pre-1979 structure within the Sphere of Influence, the project developer will be required to submit documentation to the City Building Department that asbestos and lead-based paint issues are not applicable to their property, or that appropriate actions will be taken to correct any asbestos or lead-based paint issues prior to development of the site.*

MM HM-3 *In order to minimize risks to life and property associated with the handling, transporting, treating, generating, and storage of hazardous materials, projects within the Sphere of Influence will be required to comply with policies set forth in the City of Ontario General Plan.*

Project-Specific Mitigation Measures

Mitigation measures would be required to address project impacts. The following mitigation measures would be required to address potentially significant impacts associated with exposure of construction personnel and the public to contaminated groundwater or soil, as described under Impact HM-1. The overall intent of these mitigation measures is to ensure remediation of contaminated soils prior to proposed development.

MM HM-1(a)-SP *Existing groundwater wells shall be closed in accordance with current regulations.*

MM HM-1(b)-SP *If transformers are to be removed, the removal shall be completed and disposed of in accordance with current regulations by a licensed contractor of the utility company responsible for the transformer.*

MM HM-1(c)-SP *Stained soil areas shall be excavated to five feet below ground and disposed of in accordance with current regulations. Confirmation sampling shall be conducted after removal to verify that the impacted soil has been adequately removed from the site.*

MM HM-1(d)-SP *If evidence of soil contamination is encountered in previously unidentified locations in the project area, work shall cease until the area can be tested, and, if necessary, remediated. Remediation activities could include removal of contaminated soil and/or on-site treatment. As part of this process, the City shall ensure that any necessary investigation and/or remediation activities conducted in the project area are coordinated with the Ontario Fire Department, San Bernardino County Division of Environmental Health, and, if needed, other appropriate state and/or local agencies and completed prior to commencement of construction.*

MM HM-1(e)-SP *Prior to issuance of a building permit, the project sponsor shall prepare a Contingency Plan for the site. The Contingency Plan shall delineate the procedures to be undertaken during grading, excavation, and construction to recognize areas of previously unidentified contamination. Such procedures shall, at a minimum, include air monitoring for organic compounds and visual observations. The Contingency Plan shall delineate the management procedures for such soils (e.g., separation of the material from other excavated soils, methods of delineating the extent of the unknown contamination, sampling protocol, and disposal methods). The Contingency Plan can be part of the Health and Safety Plan to be prepared for the construction workers. The Contingency Plan shall be submitted to the City for review and approval. Any subsequent investigation and remediation activities that would involve potential disturbance or release of hazardous materials shall comply with applicable federal, state, and local hazardous materials laws and regulations. At any time during construction or occupancy, the project proponent and contractors will be responsible for knowledge of and complying with applicable hazardous materials management regulations.*

MM HM-1(f)-SP *Prior to issuance of a grading or demolition permit for development of Neighborhood 3 of the Countryside Specific Plan area, a Phase I Environmental Site Assessment (ESA) report shall be prepared that documents any health risks at that site associated with the current salvage yard uses and, if contaminants are identified as present, includes a remedial action work plan that shall be implemented to prevent the release of any airborne or groundborne contaminants.*

The following mitigation measures would be required to address potentially significant impacts associated with potential for methane emission at the project site, as described under Impact HM-2.

MM HM-2(a)-SP *All stockpiled concentrations of animal manures shall be removed from the site and properly disposed or used as fertilizer or compost within existing local, state, and federal regulations for manure use.*

MM HM-2(b)-SP *A report shall be prepared for all former CAFOs addressing potential methane generation. The report shall include areas of identified methane risks and describe a risk abatement plan that details how methane risks will be reduced to a level below 2 percent of soil content. The City of Ontario City Engineer shall review and approve the report prior to map recordation.*

MM HM-2(c)-SP *A post-grading test program shall be implemented for any site designated as a potential area of high methane concentration. Testing shall demonstrate that sites contain no more than 2 percent methane prior to issuance of building permits.*

The following mitigation measures would be required to address potentially significant impacts associated with potential for wildland fires at the project site, as described under Impact HM-5.

MM HM-5(a)-SP *Landscaping around development areas adjacent to open space shall minimize dense vegetation immediately adjacent to structural development. Specifically, 12 to 18 inches of bare ground shall be kept between structures and grasses or other vegetation.*

MM HM-5(b)-SP *In order to maintain a fire break between the undeveloped areas and structures, fuel management setbacks shall be 10 feet from each side of a road and 30 feet from structures.*

MM HM-5(c)-SP *Grass and low-to-ground vegetation (e.g., weeds) in proximity to structures shall be kept no more than 6 inches high.*

MM HM-5(d)-SP *Design of residential structures shall incorporate appropriate fire suppression systems into building design, which may include fire sprinkler systems, tempered or multiple pane windows, and fire-retardant materials for roofs, exterior walls, and siding.*

Implementation of the above mitigation measures would address risks during construction and operation due to previous uses of the project site and the potential danger associated with wildland fires in the area. With the incorporation of the mitigation measures, all potential impacts associated with hazards and hazardous materials would be reduced to less-than-significant levels.

3.7 HYDROLOGY AND WATER QUALITY

3.7.1 Introduction

This EIR section analyzes the potential for adverse impacts on hydrology or water quality resulting from implementation of the proposed project. The Initial Study (Appendix A) identified the potential for impacts associated with violation of water quality standards or waste discharge requirements, degradation of water quality, depletion of groundwater supplies or interference with groundwater recharge, and the alteration of existing drainage patterns in a manner that would cause substantial erosion, siltation, or runoff that would lead to flooding, exceeding capacity of stormwater drainage systems, or additional sources of polluted runoff. Issues scoped out from detailed analysis in the EIR include inundation and exposure of people or structures to a significant risk involving flooding. In addition, the proposed project would not place housing or structures within a 100-year flood hazard area.

Data used to prepare this section were taken from the City of Ontario's (the City) General Plan and the Master Plan of Drainage for the New Model Colony (NMC). Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document. One comment letter on the IS/NOP pertaining to hydrology and water quality was received from the Santa Ana Regional Water Quality Control Board.

3.7.2 Existing Conditions

Regional Hydrology

The City of Ontario is located within the Santa Ana River Basin (SARB), a 2,700-square-mile area in the Coastal Range Province of Southern California located roughly between Los Angeles and San Diego (Figure 3.7-1). The Santa Ana River is the largest stream system in Southern California, beginning in the San Bernardino and San Gabriel Mountains (which reach altitudes exceeding 10,000 feet) and flowing more than 100 miles to the Pacific Ocean. The SARB is a group of connected inland basins and open coastal basins drained by surface streams flowing generally southwestward to the Pacific Ocean. The SARB can be divided into an upper basin and a lower basin. Upper Basin drainage in southwestern San Bernardino County (the County) consists mainly of snowmelt and storm runoff from the San Gabriel Mountains, which feeds into the Cucamonga Creek, a major drainage that flows through the City of Ontario. Cucamonga Creek flows southwesterly to the El Prado control dam in the Chino Valley Basin on the borders of Orange County and Los Angeles County. Waters continue to the Pacific Ocean via the lower Santa Ana River.

The City is located in the SARB and within the Santa Ana Watershed District, which includes multiple tributary areas that contribute urban runoff along existing drainage channels. The Santa Ana River watershed is located in Southern California, south and east of the city of Los Angeles. The watershed includes much of Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County. The Santa Ana Watershed is approximately 2,800

square miles in area. Several major tributaries drain the upper portion of this watershed. On the western side, the Chino Creek and Cucamonga Creek Channels drain through the El Prado Basin before emptying into the lower Santa Ana River and ultimately the Pacific Ocean.

Areawide Drainage Facilities

Flood control functions are handled through the San Bernardino County Flood Control District (SBCFCD) under state legislation enacted in 1939. The District has developed a very extensive system of facilities, including dams, conservation basins, channels, and storm drains. The purpose of these facilities is to intercept and convey flood flows through and away from the major developed areas of the County. The principle functions include flood protection on major streams, water conservation, and storm drain construction. The San Bernardino County Department of Public Works, Flood Control District is responsible for providing flood control and related services throughout the County, including the city-incorporated areas such as Ontario.

The District maintains the storm drainage channels and the sediment basins that discharge into these channels in the City of Ontario. The Cucamonga Creek Channel and associated sediment basins are located below the ground surface elevation (below-grade). Below-grade channels decrease flooding potential because a greater amount of water may be pumped into a below-grade channel than an at-grade (at ground surface elevation) channel. The existing Cucamonga Creek Channel is considered to be of sufficient capacity to convey flood flows (100 year, 24-hour storm event) for the Ontario Sphere of Influence and upstream drainages (Master Plan of Drainage for the New Model Colony, 2000).

Surface Drainage on Site

The project site is located in the north central areas of the Ontario NMC Master Plan. The project site is currently developed as agricultural uses including dairies, equestrian training facilities, and row crops.

Existing regional drainage facilities are located within the project site. Cucamonga Creek Channel passes along the west side of the site, flowing from north to south. It is an existing major rectangular concrete lined channel carrying regional drainage from developed areas north of the site. Lack of sufficient laterals within the project site area impedes project site drainage to the channel resulting in periodic flooding. The channel empties into the Cucamonga Basin, a groundwater recharge facility, located along the southwest corner of the project site. The channel ultimately drains into the Prado Flood Control Basin approximately five miles southwest of the site. The Cucamonga Creek Channel was constructed approximately 20 years ago by the Corps of Engineers to serve as a primary drainage facility for the City of Ontario. The channel was originally designed to accept emergency flows from the Day Creek Channel. Subsequent improvements to other regional drainage facilities have eliminated this need. Therefore, excess capacity is available within the existing improvement. The channel is maintained by the San Bernardino County Flood Control District.

The Lower Deer Creek Channel conveys storm runoff from urban areas northeast of the project site. This channel passes through the southeast corner of the project site emptying into the Cucamonga Basin. It is a concrete lined channel that is maintained by the San Bernardino Flood Control District.

Cucamonga Basin is a recently complete detention basin and groundwater recharge facility. Originally designated as the Lower Cucamonga Spreading Grounds, the four basins have been improved to contain additional storm flows, thus protecting downstream properties. The basins serve as a major groundwater recharge facility for the basin. The facility is maintained by the San Bernardino County Flood Control District with assistance from the Chino Basin Water Conservation District.

Riverside Drive intercepts storm flows from developed properties to the adjacent north. An existing 54-inch storm drain in Riverside Drive discharges storm flows into the Cucamonga Creek Channel. An existing storm drain in Archibald Avenue collects storm water runoff from developed parcels northeast of the Project Site and discharges it easterly into the Lower Deer Creek Channel.

Project site drainage naturally flows in generally northeast to southwest, where it is intercepted by Chino Avenue and the Cucamonga Creek Channel. During storms that create larger amounts of runoff, storm water may flow over Chino Avenue into the Cucamonga Basin. Remaining streets within the project area are not improved to their ultimate design standard; many lack concrete curbs and gutters. Surface drainage from these streets is handled through earthen swales adjacent to the paved section.

Existing drainage improvements within the project site are minimal. The area is characterized by low intensity uses including dairies, equestrian facilities, and crop land. The majority of the area is somewhat permeable surfaces that allow significant percolation during storm events. Dairies within the project area are required by Regional Water Quality Control Board regulations to prepare and implement Engineered Waste Management Plans designed to contain all surface drainage from manured areas within the dairy. Containment of these flows is primarily handled through the construction of on-site berms and containment basins.

Groundwater

Groundwater, within and surrounding the project site, contains high concentrations of salt attributable to historic agricultural activities. The primary contributor to this high concentration is the predominant presence of dairies throughout the area for much of the twentieth century. The high organic content of on-site soils has contributed incrementally to the degradation of surface and groundwater quality over several decades.

Efforts are currently under way to clean up historic groundwater problems. The dairy industry is gradually leaving the basin, thus limiting the amount of new contaminants entering the groundwater. A coalition of local agencies has constructed and operates a desalter system to remove contaminants from existing groundwater supplies.

Removal of the organic materials which constitute by-products of those dairy operations and compliance with National Pollution Discharge Elimination System (NPDES) and other stormwater permit requirements will beneficially impact regional water quality.

Depth to the groundwater basin is generally greater than 100 feet (City of Ontario Sphere of Influence EIR, 1997); however, localized areas of perched groundwater may exist close to the ground surface (See Section 3.5.2, Geology and Soils, Existing Conditions).

Water Quality

Stormwater pollutants include a wide array of environmental, chemical, and biological compounds from both point and nonpoint sources. In the urban environment, stormwater characteristics depend on site conditions (e.g., land use, perviousness, pollution prevention), rain events (duration or intensity), soil type and particle size, multiple chemical conditions, the amount of vehicular traffic, and atmospheric deposition. The EPA estimates that short-term runoff from construction sites, without adequate erosion and runoff control measures, can contribute more sediment to receiving waters than that deposited by natural processes over a period of several decades.

Stormwater quality in the City of Ontario is typical of most urban areas in that it includes a variety of common contaminants. These pollutants consist primarily of suspended sediments, fertilizers and pesticides, animal waste, and contaminants that are commonly associated with automobiles (e.g., petroleum compounds such as oil, grease, and hydrocarbons). In addition, urban stormwater often contains high levels of soluble and particulate heavy metals generated from traffic, industrial facilities, and occasionally, residential sources. These metals are frequently found in concentrations that are harmful to aquatic life and other biota dependent on aquatic life as a food source. Two of the most common metals found in both the water column and sediments are zinc and copper. Zinc tends to exhibit toxicity effects in the fresh water environment; copper exhibits toxicity characteristics in the marine environment.

San Bernardino County Flood Control District has a Stormwater Program that is working to help clean up the local waterways. The program's primary method of stormwater pollution prevention involves educating the public and businesses regarding Best Management Practices (BMPs) that they can implement to reduce pollutants reaching the storm drains and, thus, the local and regional waterways.

In addition, The City is currently evaluating the construction of a regional stormwater runoff treatment facility for the sub-watershed area where the project site is located. If this facility is constructed, it could replace the need for onsite stormwater quality treatment. At this time, the size and location of the regional treatment facility are unknown. However, the City is presuming that the facility will be located in close proximity to Mill Creek Channel out-fall area. This facility would serve the eastern portion of the SOI. Other treatment facilities could be developed in the western portion of the SOI. These facilities would be designed for expansion as development occurs.

3.7.3 Regulatory Framework

The following subsection is brief summary of the regulatory context under which surface and groundwater resources are managed at the federal, state, and local level.

Federal and State

Clean Water Act

The 1972 amendments to the Clean Water Act (CWA) prohibit the discharge of pollutants to navigable waters from a point source (a discharge from a single conveyance such as a pipe) unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, in recognition that diffuse, or nonpoint, sources were significantly impairing surface water quality, Congress amended the CWA to address nonpoint source stormwater runoff pollution in a phased program requiring NPDES permits for operators of municipal separate storm sewer systems (MS4s), construction projects, and industrial facilities. The purpose of the NPDES program is to establish a comprehensive stormwater quality program to manage urban stormwater and minimize pollution of the environment to the maximum extent practicable (MEP). The NPDES program consists of (1) characterizing receiving water quality, (2) identifying harmful constituents, (3) targeting potential sources of pollutants, and (4) implementing a Comprehensive Stormwater Management Program (CSWMP).

The State Water Resources Control Board (SWRCB) has adopted a statewide General Permit (WQ Order 99-08-DWQ) for stormwater discharges associated with construction activity. These regulations prohibit the discharge of stormwater from construction projects that include 5 acres or more of soil disturbance, unless the discharge is in compliance with the NPDES Phase 1 General Permit. Construction activities subject to this permit include clearing, grading, and other disturbance to the ground, such as stockpiling, or excavation that results in soil disturbance of at least 5 acres of total land area. In addition, as required by NPDES, because construction on the project site would occur over an area greater than 1 acre, the developer would be required to submit a Notice of Intent (NOI) to the SWRCB for coverage under the permit and would be required to comply with all its requirements.

The NPDES General Permit requires all dischargers to (1) develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs); (2) eliminate or reduce nonstormwater discharge to storm sewer systems; and (3) develop and implement a monitoring program of all BMPs specified. The two major objectives of the SWPPP are to (1) help identify the sources of sediment and other pollutants that affect the water quality of stormwater discharges and (2) to describe and insure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as nonstormwater discharges.

Local

Basin Plan

Existing water quality issues have been identified in the watershed planning process and are incorporated in the Water Quality Control Plan (WCQP) for the Santa Ana River Basin (Basin Plan). The Basin Plan designates beneficial uses of the waters of the region and specifies water quality objectives intended to protect those uses. The Basin Plan also specifies an implementation plan describing actions that are necessary to achieve and maintain water quality standards, and regulates waste discharges to minimize and control their effects. Dischargers must comply with the water quality standards contained in the Basin Plan.

Beneficial uses listed for Cucamonga Creek (Valley Reach 1) are groundwater recharge, water contact recreation (where access is not prohibited), non-contact water recreation, and wildlife habitat. It is currently listed as impaired (2002 303(d) list) by unknown non-point sources due to high coliform counts. Designated beneficial uses for Santa Ana River (Reach 3) are agriculture supply, groundwater recharge, water contact and non-contact water recreation, wildlife habitat, and rare, threatened, and endangered species support. This section of the Santa Ana River is listed (2002 303(d)) as impaired by pathogens from dairies. Numeric water quality objectives are listed in Table 3.7-1.

Table 3.7-1 Numeric Water Quality Objectives

Constituent	*Units*	*Santa Ana River Reach 3*	*Cucamonga Creek Valley Reach 1*
TDS	mg/L	700	NS
Hardness	mg/L	350	NS
Sodium	mg/L	110	NS
Chloride	mg/L	140	NS
Total Inorganic Nitrogen	mg/L	10	NS
Sulfate	mg/L	150	NS
Chemical Oxygen Demand	mg/L	30	NS
Cadmium	mg/L	$0.85[e^{[0.7852*\ln(\text{Total Hardness})-3.490]}]$	NS
Copper	mg/L	$0.85[e^{[0.8545*\ln(\text{Total Hardness})-1.465]}]$	NS
Lead	mg/L	$0.25[e^{[1.273*\ln(\text{Total Hardness})-3.958]}]$	NS
Boron	mg/L	0.75	NS
Unionized Ammonia	mg/L	0.098 as nitrogen, 4-day average	NS
pH	S.U.	6.5-8.5	NS
Dissolved Oxygen	mg/L	>5.0	NS
Fecal Coliforms	MPN/100 mL	200 monthly geometric mean 400 maximum	NS †

SOURCE: Basin Plan and Amendments

† Not specified

The underlying groundwater basin in the project area is the Chino North Groundwater Basin, Chino 2. Designated beneficial uses of the Chino North Groundwater Basin include municipal, agriculture, industrial,

and process water supply. Amendments to the Basin Plan (Resolution No. R8-2004-0001) set specific water quality objectives of 250 mg/L for total dissolved solids (TDS), 2.9 mg/L for nitrate nitrogen, 185 mg/L for hardness, 18 mg/L for sodium, 18 mg/L for chloride, and 20 mg/L for sulfate.

NPDES MS4 Permit

The Santa Ana Regional Water Quality Control Board (SARWQCB) has issued a countywide NPDES municipal storm water permit (Order No. R8-2002-0012, NPDES Permit No. CAS618036) to San Bernardino County, which includes the City of Ontario, to prevent degradation of water quality through stormwater runoff. For compliance with this permit, the permittees developed the San Bernardino County Water Quality Management Plan (WQMP). This WQMP requires new and redevelopment projects within permitted areas to prepare project Storm Water Quality Management Plans that assure the following Best Management Practices (BMPs) are implemented:

2.5.1 Site Design BMPs

All projects shall implement Site Design BMPs to minimize any adverse stormwater-related impacts. Projects for which hydrologic conditions of concern have been identified shall control post-development peak stormwater runoff discharge rates and velocities to protect stream habitat and to prevent downstream erosion and sedimentation. Projects can address these objectives by the incorporation of appropriate Site Design BMPs intended to create a project that mimics the predevelopment hydrologic regime. Mimicking a site's predevelopment hydrologic regime may be achieved in all or part by:

- *Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the municipal storm drain system, and minimizing clearing and grading.*
- *Providing runoff storage measures dispersed strategically throughout a site, often accomplished by incorporating a variety of detention and retention facilities into the site's landscaped areas.*
- *Implementing on-site hydrological functional landscape design and management practices.*

2.5.2 Source Control BMPs

Source Control BMPs (routine non-structural BMPs, routine structural BMPs, alternate materials, and BMPs for individual project categories/project features) (Table 2-2) are required for all projects unless they are not applicable to the project due to project characteristics. If any of the following Source Control BMPs are not included in the project, a justification must be provided in the project WQMP:

- *Routine Non-Structural BMPS:*

  Education for Property Owners, Tenants, and Occupants

  Activity Restrictions

  Spill Contingency Plan

  Employee Training/Education Program

  Street Sweeping Private Streets and Parking Lots

  Common Area Catch Basin Inspection

- *Routine Structural BMPs:*
  - *Landscape Planning*
  - *Hillside Landscaping*
  - *Roof Runoff Controls*
  - *Efficient Irrigation*
  - *Protect Slopes and Channels (OC 2003)*

2.5.3 Treatment Control BMPs

Minimizing a development's adverse effects on water quality can be most effectively achieved using a combination of Site Design, Source Control and/or Treatment Control BMPs. Where projects have been designed to eliminate or reduce the introduction of expected pollutants of concern into runoff from the project site through the implementation of Site Design and Source Control BMPs, the development may still have the potential for pollutants of concern to enter the MS4 or receiving waters. If all pollutants of concern are not adequately addressed by Site Design and Source Control BMPs, Treatment Control BMPs are required. Project WQMPs must be designed to minimize or eliminate pollutants in discharges from the project to achieve the appropriate standard, as specified in the Permit.

Where required, Treatment Control BMPs must be implemented unless equivalent treatment is provided as specified in Section 2.5.4 of the WQMP. Treatment Control BMPs must be selected to address the identified pollutants and hydrologic conditions of concern. Treatment control BMPs must be designed to treat the stormwater quality flow or the stormwater quality volume from a development, and must be located to treat the required runoff volume or flow prior to discharging to any receiving water. Treatment control BMPs may also be provided offsite or through a regional-based BMP.

Where approved regional or watershed management programs are available within the downstream watershed to address the pollutants of concern from new development and significant redevelopment, a project may participate in a regional- or watershed-based program. At this time, no regional- or watershed-based management programs are being proposed as part of the Model WQMP for Regional Board staff approval. Local implementation plans may include proposals for sub-regional programs for Regional Board staff approval (see Section 3, below). The regional or sub-regional plans are subject to public review and comments and may be presented to the Regional Board for consideration.

City of Ontario Municipal Code

In order to ensure that construction sites implement the appropriate pollution control measures, the City of Ontario municipal code identifies generally permitted activities under the statewide General Permit (WQ Order 99-08-DWQ). Discharges of non-stormwater from construction activities are generally prohibited except for those discharges listed in § 6-6.207 of this chapter or any discharges authorized by the City Engineer or the Regional Water Quality Control Board (RWQCB). The City and the RWQCB will allow the discharge of certain non-stormwater discharges from construction sites provided that they are in compliance with the discharge limitations specified in the current General Waste Discharge Requirements for De Minimus Discharges issued by the Regional Water Quality Control Board, Santa Ana Region.

The following discharges are authorized provided they are in compliance with the permit:

(1) Construction dewatering wastes;

(2) Wastes associated with well installation, development, test pumping and purging;

(3) Aquifer testing wastes;

(4) Dewatering wastes from subterranean seepage, except for discharges from utility company vaults;

(5) Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;

(6) Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;

(7) Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;

(8) Discharges from potable water supply systems resulting from system failures, pressure releases, etc.;

(9) Discharges from fire hydrant testing or flushing.

Authorized non-stormwater discharges under §6-6.503 shall be reported to the City Engineer at least five (5) days prior to a planned discharge. Unplanned discharges of non-stormwater into the City's storm drainage system shall be reported as soon as possible and before any discharge is initiated. The City's Engineering Department, Environmental Section will provide a "Non-Stormwater Discharge Notification Form" for any developer that is proposing to discharge any non-stormwater from a construction site. The Non-Stormwater Discharge Notification Form must be submitted to the Engineering Department, Environmental Section, for these discharges, at least five (5) days prior to any planned discharge or as soon as possible for any unplanned discharge. Monitoring may also be required for these discharges. If the City provided form is not utilized, a report shall be submitted prior to discharge which includes the following information:

(1) Type of proposed discharge;

(2) Estimated average and maximum daily flow rate;

(3) Frequency and duration of discharge;

(4) A description of the proposed treatment system (if appropriate);

(5) A description of the path from the point of discharge to the nearest storm drain inlet. All discharges shall be monitored daily for flow volume and shall be recorded in a daily log by the person responsible for the discharge. Discharges shall also be sampled during the first thirty (30) minutes of each discharge and weekly thereafter for continuous discharges for chlorine and total suspended solids. Monitoring data for flow, chlorine and suspended solids and any other required constituents shall be reported to the City's Engineering Department, Environmental section on a weekly basis.

The municipal code also stipulates penalties for violating the requirements of the General Permit including monetary fines and other measures, as deemed necessary by the City Engineer.

New Model Colony Master Plan of Drainage

To further ensure that construction sites implement the appropriate pollution control measures in the project area, the City of Ontario New Model Colony Master Plan of Drainage (MPD) details recommended BMPs to be applied to new development in the NMC area. These regulatory requirements ensure that stormwater quality management is considered during a project's planning phase, implemented during construction, and maintained for the life of the project. Routine structural BMPs may function either to minimize the introduction of pollutants into the drainage system or to remove pollutants from the drainage system. Applicable structural and nonstructural BMPs implemented on the site for source control and pollution prevention to minimize the introduction of pollutants into the drainage system would depend on the ultimate configuration of the proposed land use.

Applicable SOI GPA Policies

The following Ontario SOI GPA policies are relevant to Hydrology and Water Quality:

Policy 2.3.3 *Require nonagricultural developments to include measures that prevent urban runoff flooding and silting from impacting the agricultural operations.*

Policy 7.1.2 *Require Specific Plan and development projects to prepare a storm drainage planning study for the affected drainage area.*

Policy 7.1.5 *Require that the refined backbone infrastructure plan will be used in the development process to ensure that each project will construct adequate drainage facilities. A detailed drainage master plan must be in place and must have San Bernardino County Flood Control District's concurrence prior to any major development approval.*

Policy 7.1.7 *Specific development plans are to be consistent with and implement the Master Plan of Drainage for the area as finally adopted.*

Policy 7.2.1 *Require new development to control surface run-off through onsite measures.*

Policy 7.2.2 *Require new development to construct and dedicate flood control and storm drain facilities.*

Policy 7.2.6 *Require developers of each proposed project to submit a final drainage plan for the City Engineer's review and approval.*

Policy 7.2.7 *Require developers to demonstrate the project's ability to meet San Bernardino County Flood Control District's requirements.*

Policy 7.2.8 *Require developers to recommend measures which ensure that all structures located within the boundaries of the Sphere of Influence, subject to flooding from 100-year storm events, are constructed on a pad of earth elevated at least one foot above 100-year flood elevations. The recommended measures must be approved, monitored, and enforced by the City Engineer. (I-10)*

Policy 7.2.9 *Require developer to provide evidence to the City Engineer that a National Pollutant Discharge Elimination System (NPDES) permit has been obtained from the State Water Resources Control Board (SWRCB) prior to moving construction equipment onto a Sphere of Influence site. Once obtained, the*

NPDES permit shall be retained on the construction site throughout the construction period, and a copy shall be filed with the City Engineer.

Policy 7.2.10 *Ensure compliance with all the terms and conditions outlined in the National Pollutant Discharge Elimination System (NPDES) permit, including the implementation of Best Management Practices (BMPs).*

Policy 7.2.11 *Require developers to prepare a Storm Water Pollution Prevention Plan (SWPPP) for individual proposed projects prior to the issuance of grading permits. These plans shall be submitted to the City Engineer for review and comment prior to implementing any SWPPP provisions or starting any construction activity. A copy of the SWPPP shall be held by the construction contractor(s) on the construction site throughout development of each project. The City Engineer will monitor and enforce the provisions of the SWPPP.*

Policy 7.3.1 *Require improvements to the existing storm drain and flood control facilities necessitated by new development be borne by the new development's benefiting from the improvements; either through the payment of fees, or by the actual construction of the improvements.*

Policy 7.3.2 *Require developers to submit proof of payment of the City's drainage fees to the City Engineer, as applicable.*

Policy 7.4.1 *Expand the use of storm waters to be used as groundwater recharge.*

Policy 7.4.2 *Improve any existing environmental degradation or minimize potential degradation from current or planned storm drain runoff and flood control facilities in sensitive environments.*

Applicable General Plan Policies

The following City of Ontario General Plan policies are relevant to Hydrology and Water Quality:

Policy 2.2 *Coordinate flood control efforts with jurisdictions to the north and south. Encourage drainage improvements there which reduce sheet flow in Ontario.*

Policy 2.5 *Require local drainage-related improvements as part of new development approvals.*

3.7.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on hydrology and water quality if it would result in any of the following:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate of amount of surface runoff in a manner that would result in flooding on or off site.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.

3.7.5 Project Impacts

Potentially Significant

Impact HYD-1 Project implementation could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. This is considered a *potentially significant* impact.

Implementation of the proposed project would result in an increase in local water usage. Construction of approximately 819 residences within the Countryside Specific Plan Area will require an increase in water usage for domestic and irrigation purposes. This would place additional demand on the existing domestic water supply and might create a condition whereby the groundwater supply may be inadequate to support existing and/or planned land uses, since 79 percent of the City of Ontario's water supply comes from groundwater supplies. Since there will be an increase in domestic water demand for residential uses, this is considered a potentially significant impact. The proposed project in conjunction with the development of the entire New Model Colony area represents a demand of about 38 percent of Ontario's available water supply. However, implementation of the proposed project-specific mitigation measures MM HYD-1-SP and MM HYD-2-SP would significantly reduce the demand for additional groundwater by requiring use of water conservation devices in all development and reclaimed water to irrigate public landscaped areas including proposed local parks, paseos, and buffer areas. This would assist in the reducing the demand for domestic water that would otherwise to be used for public irrigation purposes. In addition, the Water Supply Assessment prepared for the proposed project area concluded that the City of Ontario has sufficient water supply to provide water to the proposed project during normal, single dry, and multiple dry years during a 20 year projection, in addition to meeting the City's existing and planned future uses. With the incorporation of the noted mitigation measures, project impacts to groundwater demand would be ***less than significant***.

Groundwater recharge may be slightly reduced at the project site with implementation of the proposed project. The proposed development would increase impervious surfaces on the project site, which would increase runoff and thereby reduce the amount of infiltrating rainwater on the site. With an annual average rainfall of about 17 inches per year (WRCDC, 2005) in the project area, runoff under current conditions

would be approximately 93 acre-feet per year with approximately 159 acre-feet percolating to groundwater.[3] Following development of the proposed project, increased area of impervious surfaces would result in approximately 20 acre-feet per year more runoff.[4] This would reduce on-site percolation by about 13 percent. However, because the runoff from the project site would be directed through the storm drainage system via the Cucamonga Creek Channel and Deer Creek Channel to the adjacent Cucamonga Basin (a groundwater recharge facility), the reduction in on-site groundwater recharge would not impact recharge of the local groundwater basin. Additionally, potentially greater amounts of infiltrating irrigation water used for landscaping and lawns could offset and potential losses due to greater runoff. Therefore, there would be ***no impact*** to groundwater recharge as a result of the project.

Impact HYD-2 Project implementation could substantially degrade water quality with conversion of agricultural lands to urban uses. This is considered a *potentially significant* impact.

During both the construction and post-construction phases, the proposed project may contribute additional sources of pollutants and sediment in stormwater runoff due to changes in land use and runoff quantities. Urban contaminants in runoff from the proposed project area could lower the quality of stormwater runoff both during and after construction. However, compliance with permit requirements and existing ordinances would reduce potential impacts to less than significant levels.

Erosion and sedimentation are major visible water quality impacts attributable to construction activities. Sediment directly impacts water quality through interference with photosynthesis, oxygen exchange, and respiration, growth, and reproduction or aquatic species. Additionally, other pollutants such as nutrients, trace metals, and hydrocarbons can attach to sediment and be transported with the particulate fraction. The proposed project would include construction activities, such as excavation and trenching for foundations and utilities, grubbing and clearing, soil compaction and moving, cut and fill activities, and grading that would disturb soil and decrease permeability. Unprotected disturbed soil is susceptible to high rates of erosion from wind and rain, resulting in sediment transport from the site. Increased runoff from the site resulting from decreased permeability, both during and after construction, would further exacerbate the amount of sediment transport. Sediment-laden runoff from construction and post-construction operations at the site could enter receiving waters such as Cucamonga Creek Channel, Deer Creek Channel, and ultimately the Santa Ana River, and contribute to degradation of water quality.

Delivery, handling, and storage of construction materials and wastes, as well as use of construction equipment onsite during the construction phase of the project also introduce a risk for stormwater contamination that could impact water quality. Spills or leaks from heavy equipment and machinery can result in oil and grease contamination of stormwater. Some hydrocarbon compound pollution associated with oil and grease can be toxic to aquatic organisms at low concentrations. Staging areas or building sites can be the source of pollution due to paints, solvents, cleaning agents, and metals contained in the surface of

[3] Simple Method: annual runoff = 0.9*annual precipitation*area*runoff coefficient (Center for Watershed Protection, 2004). Estimated existing runoff coefficient of 0.41

[4] Runoff coefficient estimated as approximately 0.50

equipment and materials. The impacts associated with metals in stormwater include toxicity to aquatic organisms, bioaccumulation of metals in aquatic animals, and potential contamination of drinking supplies. Pesticide use (including herbicides, fungicides, and rodenticides) associated with site preparation work is another potential source of stormwater contamination. Pesticide impact to water quality includes toxicity to aquatic species and bioaccumulation in larger species through the food chain. Gross pollutants such as trash, debris, and organic matter are additional potential pollutants associated with the construction phase of the project. Impacts include health hazards and aquatic ecosystem damage associated with bacteria, viruses, and vectors which can be harbored by gross pollutants.

In the post-construction phase of the project, the major source of pollution to runoff and infiltrating groundwater would be contaminants that have accumulated on the land surface over which storm water passes. For the proposed project, onsite drainage gutters are connected directly to a drainage system that channels stormwater runoff into larger regional storm drains. Between rainstorms, material would be deposited on the streets, paved areas, roof tops, and other surfaces from debris dropped or scattered by individuals, wastes and dirt from construction and renovation or demolition, fecal droppings from animals, oil and various residues contributed by vehicular traffic, and fallout of air-borne particles.

Pollutants associated with the post-construction phase of the project include nutrients, oil and grease, metals, organics, pesticides, and gross pollutants. Nutrients in post-construction stormwater may include nitrogen and phosphorous from fertilizers applied to landscaping and atmospheric deposition. Excess nutrients can impact water quality by promoting excessive and/or rapid growth of aquatic vegetation; reducing water clarity, and resulting in oxygen depletion. Pesticides also may enter into stormwater after application on landscaped areas of the proposed project. Pesticides are toxic to aquatic organisms and can bioaccumulate in larger species such as birds and fish. Oil and grease may end up in stormwater during the post-construction phase of the project from vehicle leaks, traffic, and maintenance activities. Metals may enter stormwater in the post-construction phase of the project as surfaces corrode, decay, or leach. Potential gross pollutants associated with the post-construction phase include clippings from landscape maintenance, street litter, and animal excrement. Impacts due to oil and grease, metal contamination, and gross pollutants are discussed as part of construction phase impacts below.

During rainfall, a film of water builds up on impermeable surfaces. Once this film is of sufficient depth (about 0.1 inch), the water collecting on the impermeable surface begins to flow. The initial flow of each storm often contains the highest concentrations of pollutants, but this is not always the case because the phenomenon is dependent on the duration of the preceding dry weather period, rainfall patterns, rainfall intensity, the chemistry of individual pollutants, and other site-specific conditions.

If uncontrolled, the accumulation of urban pollutants could have a detrimental cumulative effect during both the construction and post-construction phases of the project because overland flow from paved surfaces and landscaped areas transport many of the above-mentioned constituents, thereby contributing to the deterioration of the quality of stormwater runoff and infiltrating groundwater.

However, under current conditions, existing land uses (e.g., dairy, row-cropped agriculture, salvage yard, and others) also contribute to surface and groundwater quality degradation. The Cucamonga Creek Channel and Santa Ana River are already impaired by pathogens due to either dairies or unknown sources. Past and current groundwater quality in the project area has been degraded by agricultural operations within the Basin over the past 50+ years. Removal of the existing non-point sources of pollution through implementation of the proposed project could offset its potential for water quality degradation. Table 3.7-2 lists some stormwater constituent concentrations for various land uses existing and proposed on the project site.

Table 3.7-2 Land Use Effects on Stormwater Quality

Pollutant Type	*Unit of Measurement*	*Agriculture* †	*Residential*	*Mixed Industrial*	*Open Space*
Total Nitrogen	mg/L	4.4	2.0	1.57	1.29
Total Kjeldahl Nitrogen	mg/L	1.7	1.4	1	1.12
Nitrate+Nitrite	mg/L	1.6	0.6	0.57	0.7
Total Phosphorous	mg/L	1.3	0.3	0.2	0.27
Dissolved Phosphorous	mg/L	NA	0.17	0.08	0.09
Suspended Solids	mg/L	107	49	82	48.5
Dissolved Solids	mg/L	1225	72	80	125
Total Lead	ug/L	1.5	12	20	10
Total Copper	ug/L	1.5	12	18	10
Total Zinc	ug/L	16	73	160	40
Total Cadmium	ug/L	1	0.5	1.6	0.38
Total Chromium	ug/L	10	4.6	8	5.4
Total Nickel	ug/L	NA	5.4	9	NA
BOD	mg/L	4	9	7.2	5.4
COD	mg/L	NA	55	40.4	42.1
Oil and Grease	mg/L	NA	3.9	4.75	1.3
Fecal Coliforms	MPN/100 mL	10,575 ‡	8345	3033	2600

SOURCES: † Baird and Jennings 1996; ‡ Tate et al. 2005; National Stormwater Quality Database (NSQD version 1.1) Pitt et al. 2004
NA = Not Available

Implementation of the proposed project would result in the conversion of agricultural lands to urban uses. This could contribute to the volume of contaminants, such as heavy metals and hydrocarbons that might be introduced to surface drainage flows or percolate into the groundwater supply. This is considered a potentially significant impact. Table 3.7-3 shows the estimate potential effect of the proposed project on pollutant load to receiving waters. The North Drainage is the development area above Chino Road, and the South Drainage is development area below Chino Road. Loads were estimated using the Simple Method (refer to Appendix I of this EIR for the methodology of Simple Method pollutant load estimates).

Runoff coefficients were determined based on an area weighted average of C-Factors from the Caltrans Table 819.2B (Caltrans Storm Water Quality Handbooks).

Table 3.7-3 Estimated Proposed Project Impacts On Pollutant Load to Receiving Waters

Constituent of Concern	North Drainage			South Drainage			Overall		
	Proposed Project (lbs/year)	Existing Conditions (lbs/year)	Increase or Decrease with Project † (%)	Proposed Project (lbs/year)	Existing Conditions (lbs/year)	Increase or Decrease with Project † (%)	Proposed Project (lbs/year)	Existing Conditions (lbs/year)	Increase or Decrease with Project † (%)
Total Nitrogen	303	5386	(94)	569	564	0.8	872	5951	(92)
Total Kjeldahl Nitrogen	211	2283	(91)	399	227	30	610	2510	(87)
Nitrate+Nitrite	95.6	1961	(95)	178	208	(14)	274	2169	(93)
Total Phosphorous	44.9	1463	(97)	85.6	165	(48)	131	1628	(96)
Suspended Solids	8786	151912	(94)	15405	13944	9	24191	165856	(92)
Dissolved Solids	12020	1322906	(99)	16074	153720	(90)	28093	1476626	(99)
Total Lead	2.14	11.27	(81)	3.75	0.33	48	5.88	11.60	(72)
Total Copper	1.99	10.33	(81)	3.69	0.32	48	5.68	10.65	(70)
Total Zinc	13.43	93.53	(86)	23.6	2.50	47	36.99	96.02	(79)
Total Cadmium	0.107	1.81	(94)	0.177	0.12	23	0.28	1.94	(92)
Total Chromium	0.801	14.37	(94)	1.47	1.25	13	2.27	15.62	(92)
BOD	1369	7760	(82)	2565	578	44	3934	8338	(73)
COD	7865	20262	(61)	15699	596	49	23564	20858	(29)
Oil and Grease	603	2301	(74)	1143	23	49	1746	2324	(57)
Fecal Coliforms	4.2E+06	5.7E+07	(93)	1.0E+07	5.3E+06	32	1.4E+07	6.2E+07	(88)

SOURCE: EIP Associates 2005

† Number in brackets denotes negative value, or a decrease in pollutant load

The results presented in Table 3.7-3 demonstrate that the proposed project would likely result in an overall reduction in pollutant loads to receiving waters in the project area. However, the South Drainage will likely contribute more pollutants to receiving waters than existing conditions, for most constituents. Most of this increase was found to be from Neighborhood 6. This analysis did not include BMPs associated with the proposed project WQMP. Implementation of BMPs identified in both the Water Quality Management Plan (WQMP) and Storm Water Pollution Prevention Plan (SWPPP) and in accordance with the NPDES permit will provide facilities and programs designed to control contaminants in urban run off from entering the local and regional surface drainage systems and contributing to water quality degradation.

Conjunctive use of Parks, Paseos, and Neighborhood Buffers offer the opportunity to implement on-site BMPs, such as swales, biofilters, or filterstrips, to reduce the potential pollutants to be transported off site.

As noted in the regulatory requirements, all developments must consider site design BMPs. Pertinent site design BMPs for the proposed project include the following:

- Reduced Directly Connected Impervious Area: implementation of the Parks, Paseos, and Neighborhood Buffers within the site plan reduces the direct connection of impervious surfaces within each neighborhood to adjacent neighborhoods and can potentially provide for filtration of stormwater.

Additionally, as part of the required SWMP, the proposed project could incorporate other BMPs as described and recommended by the California Stormwater Quality Association. These include the following:

- Potential Site Design BMPs:

  Conjunctive use of Parks, Paseos, and Neighborhood Buffers for filtration and detention of stormwater prior to discharge into the storm drainage system. These facilities could incorporate swales, biofilters, and filterstrips that would reduce the amount of stormwater runoff and the concentration of pollutants in stormwater.

  Reduced Directly Connected Impervious Area
  - Disconnected roof drains
  - Pervious pavement in low traffic areas (e.g., driveways)
  - Reduced perviousness through reduced street widths, reduced driveway paving (narrow, tracks)
  - Landscaping elements to break up large areas of connected imperviousness

- Potential Routine Non-Structural Source Control BMPs:

  Education for property owners, tenants, and occupants on good water quality management practices such as fertilization, pesticide, and lawn maintenance practices.

  Activity restrictions to prevent harmful activities such as direct discharge of hazardous wastes into the channel, dumping of waste oil and other wastes into storm drains, pesticide applications, and others.

  Street sweeping private streets and parking lots to reduce build up of debris. A vigorous street sweeping program can reduce 50-70 percent of urban pollutants.

  Common area catch basin inspection maintains effective functioning of structural BMPs.

  Covered storage areas to prevent direct precipitation on stored metal, preserved wood, chemicals, and other household items that might leach chemicals in stormwater.

- Potential Routine Structural Source Control BMPs:

  Landscape planning to incorporate rain gardens, filters, biofilters, swales or other such BMPs and selective use of plants requiring minimal chemical and water applications.

  Roof runoff controls such as disconnected roof drains, drainage to rain gardens, downspout filters or detention devices. In some urban areas, up to 40 percent of urban pollutants, such as heavy metals, can be attributed to roof top runoff. Allowing runoff to pass over lawns or other filtration processes can significantly reduce urban stormwater pollution.

  Alternative building material to select for materials less likely to leach urban contaminants such as heavy metal, use of previous pavement where possible (e.g., non-bare metal roofs).

  Efficient irrigation to prevent runoff and leaching of chemicals to groundwater.

  Storm drain signage

Inlet trash racks
Trash storage areas and litter control
Pet waste stations

- Potential Treatment Control BMPs:
  Flow-Based Treatment Control BMPs
  - Vegetated buffer strips, swales, other biofilters and bioretention
  - Hydrodynamic separators
  - Other proprietary devices

  Volume-Based Treatment Control BMPs
  - Wet ponds and extended detention basins
  - Constructed wetlands
  - Water quality inlet devices
  - Media filters (e.g., proprietary or sand filters)
  - Retention/irrigation
  - Infiltration devices (e.g., dry basin, infiltration basin, infiltration trenches)—these must be designed to be certain that infiltrating stormwater does not bypass the treatment capacity of the soil material. In areas where groundwater is near the surface or susceptible to pollution, these devices should not be used in order to prevent groundwater contamination or further degradation.
  - Other proprietary devices

Formulas for determining the flow- and volume- based treatment capacity of BMPS are listed in the WQMP. These formulas make use of the runoff area, the runoff coefficient for each area (C- Factor) and local precipitation rates. For flow based BMPs in the proposed project area, the 85th percentile rainfall intensity is 0.14 inch per hour. This intensity is multiplied by the design criteria safety factor (usually 2) to obtain the design rainfall intensity (0.28 inch per hour) using the Rational Method:

$Q = CiA$, where:

Q = BMP Design Flow (ft3/s)
i = Rainfall Intensity (in/hr)
A = BMP Drainage Area (Acres)
C = C-Factor (runoff coefficient)

For volume-based BMPs, BMPs are designed to capture 80 percent of the runoff and will draw down or empty in 48 hours. Example calculations and tabled values can be found in the WQMP.

Implementation of BMPs as part of the proposed project design, construction, and operation, in accordance with the WQMP, would reduce potential proposed project pollutant loads to the Deer Creek Channel and Cucamonga Creek Channel. Anticipated site design BMPs include, but are not limited to, swales and detention areas in landscape strips and setback areas, roof drainage into porous subgrade, and depressing the park areas for stormwater detention and infiltration. Source control BMPs may include, but are not limited to, limited storm drain signage, catch basin trash racks, efficient irrigation, and public education. If necessary, implementation of either flow-based or volume-based treatment BMPs, such as catch basin

filters, water quality inlets, or vegetated swale could further reduce the potential higher loads from Neighborhood 6.

With the adherence to the NPDES permit WQMP, City Codes and Ordinances, and Ontario SOI GPA EIR mitigation measures MM WQ-5, MM WQ-6, MM WQ-7, and MM WQ-8, development of the proposed project impacts on water quality would be reduced to a less than significant level. Therefore, impacts would be mitigated to ***less than significant***.

Less-Than-Significant

Impact HYD-3 Project implementation could violate water quality standards, waste discharge requirements, result in substantial sources of polluted runoff, or otherwise substantially degrade water quality. This is considered a *less-than-significant* impact.

Implementation of the proposed project would contribute additional runoff to the local drainage area due to an increase in impermeable surfaces through the construction of residences and roadways. This untreated runoff could contain urban contaminants such as pesticides and hydrocarbons as well as silt and organic matter. The effects of proposed project on post-construction runoff discharges are discussed in Impact HYD-2.

Construction Discharges

Erosion and sedimentation are major sources of water quality impairment attributable to construction activities. Sediment directly impacts water quality through interference with photosynthesis, oxygen exchange, and respiration, growth, and reproduction or aquatic species. Additionally, other pollutants such as nutrients, trace metals, and hydrocarbons can attach to sediment and be transported with the particulate fraction. Deposited sediment transported off-site can cause filling detention basins and drainage systems contributing to reduced conveyance capacity. The proposed project would include construction activities, such as excavation and trenching for foundations and utilities, grubbing and clearing, soil compaction and moving, cut and fill activities, and grading that would disturb soil and decrease permeability. Unprotected disturbed soil is susceptible to high rates of erosion from wind and rain, resulting in sediment transport from the site. Increased runoff from the site resulting from decreased permeability would further exacerbate the amount of sediment transport.

The proposed project would disturb an area greater than one acre in size and, thus, is subject to the provisions of the General Construction Activity Stormwater Permit adopted by the State Water Resources Control Board (SWRCB). Preparation of a Storm Water Pollution Prevention Plan (SWPPP) is required for compliance with the NPDES General Construction Stormwater Activity Permit. Compliance with the permit would involve filing a Notice of Intent with the RWB and preparing, at minimum, a SWPPP prior to construction activities. The SWPPP would be required to identify the sources of sediment and other pollutants on the project area, and to ensure the reduction of sediment and other pollutants in stormwater

discharged from the project area. A monitoring program is required to aid the implementation of, and assure compliance with, the SWPPP. The RWB permit requirements would have to be satisfied prior to construction.

As part of the SWPPP, an Erosion and Sedimentation Control Plan must be prepared for the project prior to grading. An erosion control professional, or landscape architect or civil engineer specializing in erosion control would be required to design the Erosion and Sediment Transport Control Plan. A few of the most critical techniques to be considered include, but are not limited to, the following types of erosion control methods:

- Whenever feasible, confine grading and activities related to grading (excavation, construction, preparation and use of equipment and material storage) to the dry season (April through September).
- Discharge grading and construction runoff into small drainages at frequent intervals to avoid the buildup of large, potentially erosive flows.
- Stabilize disturbed areas as quickly as possible, either by vegetative or mechanical methods.
- Trap sediment before it leaves the site with such techniques as check dams, sediment ponds, or siltation fences.
- Control landscaping activities carefully with regard to the application of fertilizers, herbicides, pesticides, or other hazardous substances. Provide proper instruction to all landscaping personnel on the construction team.

During the installation of the erosion and sediment transport control structures, an erosion control professional would be required to be on site to supervise the implementation of the designs and the maintenance of facilities throughout the site clearing, grading, and construction period.

The SWPPP would be reviewed and approved by the City of Ontario and should include the following applicable measures:

- Diversion of off-site runoff away from the construction site
- Prompt revegetation of proposed landscaped/grassed swale areas
- Perimeter straw wattles to prevent off-site transport of sediment
- Drop inlet protection (filters and sand bags or straw wattles), with sandbag check dams within paved roadways
- Regular sprinkling of exposed soils to control dust during construction
- Specifications for construction waste handling and disposal
- Contained equipment wash-out and vehicle maintenance areas
- Erosion control measures maintained throughout the construction period
- Construction of stabilized construction entrances to avoid trucks from imprinting debris on City roadways
- Construction timing to minimize soil exposure to storm events
- Training of subcontractors on general site housekeeping

The SWPPP is a "live" document and shall be kept current by amending it as necessary by the person responsible for its implementation.

As part of the SWPPP process, the project sponsor would be required to demonstrate to the RWB that the proposed project would comply with the water quality standards established in the Basin Plan and the San Bernardino County Water Quality Management Plan, and would not result in a degradation of the quality of receiving waters (e.g., Cucamonga Creek Channel, Deer Creek Channel, and the Santa Ana River). The project sponsor would also be required to demonstrate the use of "best practicable treatment or control" for all site discharges and would also be required, as well as compliance with monitoring, corrective action, and cleanup regulations promulgated by the RWB.

In addition, all construction activities would comply with San Bernardino County guidelines for excavation and grading, the City's Grading Manual, and the Ontario Municipal Code. These guidelines include specifications designed to minimize effects from erosion during construction. For instance, the Municipal Code identifies, defines, and provides regulation for erosion control systems that are part of construction projects in order to ensure maximum effectiveness. Therefore, compliance with the Statewide General Construction Activity Stormwater Permit requirements, Ontario SOI GPA EIR mitigation measures MM WQ-5, MM WQ-6, and MM WQ-7, and other applicable requirements with respect to excavation and grading would ensure that project impacts related to construction stormwater discharge would be less than significant.

Operational Discharges

The proposed project is required by the City to develop and implement a Water Quality Management Plan (WQMP) that, upon approval, would serve as the manual to maintain water quality in conformance with the NPDES Permit and NMC MPD. The WQMP would be specific to the expected pollutants that would be present in the stormwater flow from the site after completion of construction. For example, if additional treatment of hydrocarbons, pesticides, and/or organic materials in runoff is required, specialized filtration inserts could be installed to reduce these pollutants. The WQMP would also detail the specific operation and maintenance of each structural and nonstructural BMP. Some of the BMPs may be as simple as street-sweeping on a monthly basis, while other BMPs may include programs to educate the public on the proper disposal of hazardous/toxic wastes, pickup and disposal of animal feces, regulatory approaches, and detection and elimination of illicit and illegal dumping. The WQMP would outline the types of BMPs being used and outline a routine maintenance schedule for each BMP, in compliance with the NMC MPD and local regulations. The WQMP is established from industry and agency historical data and the best available information or initial concept and design.

Thus, as part of the comprehensive stormwater treatment plan, the proposed project would incorporate the requirements of NMC MPD, including all feasible recommended BMPs. Plans for grading, drainage, and erosion control would be reviewed by the City Engineer prior to issuance of grading permits. The City Engineer shall monitor and enforce this provision. In addition, the developer would ensure that all pest control, herbicide, insecticide and other similar substances used as part of maintenance of project features are handled, stored, applied, and disposed of by those conducting facility maintenance in a manner consistent with all applicable federal, state and local regulations (MM WQ-8 of the Ontario SOI GPA EIR).

Additionally, as noted in Impact HYD-2, above, the proposed project would not likely contribute additional pollutants to receiving waters compared to existing conditions. However, if deemed necessary, additional BMPs can be implemented at either a regional or site-specific level. Site-specific BMPs, such as grassy swales, proprietary filter systems, increased street sweeping frequency, or other BMPs can be used to reduce pollutant loads on a targeted basis by neighborhood (e.g., Neighborhood 6, the neighborhood with highest potential water quality impact), land use, or infrastructure configuration to maximize efficacy. Some non-structural BMPs could be implemented on a regional basis, such as educational programs, street sweeping, BMPs maintenance programs and others. Therefore, with the incorporation of the noted mitigation measures and compliance with applicable permit requirements, all impacts related to water quality would be reduced to the maximum extent practicable and would be considered ***less than significant***.

Impact HYD-4 Project implementation would alter the drainage patterns of the site and in a manner that could create substantial flooding, erosion, or siltation on or off site. This is considered a *less-than-significant* impact.

Implementation of the proposed project will require re-grading of the existing site. The construction of impervious surfaces such as streets and houses will increase runoff and decrease on-site percolation. No significant streams or river will be altered by on-site grading. However, increased runoff will result from the introduction of impermeable surfaces associated with urban development.

Implementation of the proposed project would not result in exacerbation of localized flooding due to construction of proposed storm drain improvements necessary to serve the site and adherence to the requirements of the NPDES permit and the WQMP. The proposed onsite storm drain improvements for the project site would consist of 24-inch pipes, minimum, which would collect and discharge storm water via 48-inch and 72-inch pipes to the Cucamonga Creek Channel and Deer Creek Channel. Both channels drain into the Cucamonga Basin, which is a recently completed detention basin and groundwater recharge facility designed to accommodate stormwater flows from the region, including the project site. Specifically, areas north of Deer Creek Channel would drain westerly to the Cucamonga Creek Channel and ultimately flow to the Cucamonga Basin, while areas south of Deer Creek Channel would drain into Deer Creek Channel.

In order to ensure adequate drainage improvements, all features of the proposed system would be designed and constructed in accordance with the standards set by the City of Ontario and the San Bernardino County Flood Control District. In addition, plans for grading, drainage, and erosion control would be reviewed by the City Engineer prior to issuance of grading permits (Ontario SOI GPA EIR mitigation measure MM WQ-1). In addition, Ontario SOI GPA EIR mitigation measure MM WQ-2 would ensure that coordination between the City and San Bernardino County Flood Control District occurs to ensure the project meets the County flood control requirements. Therefore, with inclusion of the project features designed to minimize drainage, this impact would be less than significant.

On-site drainage patterns would be altered due to grading activities and changes in land use. Assessment of all potential increases in stormwater run off and identification of improvements required to handle increased run off and reduce peak flows under a project Final Drainage Plan will assure that adequate facilities will be constructed to mitigate potential impacts from increases in site run off. Implementation of NPDES and SWPPP requirements through Best Management Practices (Ontario SOI GPA EIR mitigation measures MM WQ-5, MM WQ-6, and MM WQ-7), submittal of a final drainage plan for review and approval to the City Engineer (Ontario SOI GPA EIR mitigation measure MM WQ-1), coordination with San Bernardino County Flood Control District (Ontario SOI GPA EIR mitigation measure MM WQ-2), and consistency with the City's Master Plan of Drainage (project-specific mitigation measure MM HYD-3-SP) would provide adequate mitigation for the control of urban contaminants in stormwater run off. Therefore, this impact would be ***less than significant***.

Impact HYD-5 Project implementation would alter the drainage patterns of the site in a manner that could substantially increase the rate or amount of surface runoff on or off site. This is considered a *less-than-significant* impact.

Implementation of the proposed project would require re-grading of the existing site. The construction of impervious surfaces such as streets and houses will increase runoff and decrease on-site percolation. This will increase runoff volume at proposed project discharge points. Assessment of potential drainage impacts through the preparation of a Final Drainage plan will identify all improvements required to mitigate the potential for on-site and/or off-site flooding. The regional drainage system, with the Lower Cucamonga Channel and Cucamonga Basin constructed to their ultimate design standard, provides adequate mitigation of regional flood hazards. The construction of on-site improvements within the project site in compliance with stormwater standards and guidelines of the City of Ontario and the San Bernardino County Flood Control District would significantly reduce the potential for on-site flooding or the flooding of adjacent properties. In addition, Ontario SOI GPA EIR mitigation measure MM WQ-7 would ensure that the SWPPP for the proposed project area will be submitted to the City Engineer for review, monitoring, and enforcement, and project-specific mitigation measure MM HYD-3-SP would ensure consistency with the City's Master Plan of Drainage. Thus, impacts would be ***less than significant***.

Impact HYD-6 Project implementation would create or contribute runoff water that could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This is considered a *less-than-significant* impact.

Implementation of the proposed project would increase the volume of runoff into the existing local stormwater drainage system through the construction of impermeable surfaces such as streets and houses. The additional runoff might exceed the capacity of the existing or planned system. All drainage enters the existing, adjacent flood control channels and basin system. The Cucamonga Creek Channel and Deer Creek Channel are fully improved below-grade, flood control facilities designed to accommodate ultimate flood from upstream development. Cucamonga Basin has recently been improved to its ultimate design providing adequate detention capacity for upstream development including the proposed project.

The developer will construct all required onsite storm drain improvements necessary to serve the project site. The onsite storm drain system will consist of minimum 24-inch pipes, which will collect and discharge storm water via 48-inch and 72-inch pipes to the Cucamonga Creek Channel and Deer Creek Channel. The proposed project would be required to construct local drainage improvements including surface drainage within street rights-of-way and the construction of storm drains where necessary during the project's construction period. In addition, the developer must submit to the City Engineer proof of payment of the City's drainage fees, as applicable, prior to the issuance of building permits (MM WQ-3 of the Ontario SOI GPA EIR). Because regional and project-site flood control facilities are available to accommodate the project's increased runoff and project-specific mitigation measure MM HYD-3-SP would ensure consistency with the City's Master Plan of Drainage, this is considered a ***less-than-significant*** impact.

3.7.6 Cumulative Impacts

The cumulative impact analysis considers development of the proposed project in conjunction with implementation of concurrent specific plan areas within the City of Ontario NMC area (refer to Section 2.9 of this EIR for a description of the cumulative specific plans considered). As all development is required to comply with applicable federal, state, and local regulations, cumulative development should not violate water quality standards or waste discharge requirements, and therefore would not result in significant cumulative impacts. Cumulative development within the City of Ontario NMC area would generate hydrology and water quality impacts similar to those of the proposed project. Each of the Ontario NMC specific plan areas would be subject to the basic requirements and mitigation measures specified in the Ontario SOI GPA EIR to address hydrology and water quality issues. Projects involving construction on sites greater than one acre would be required to obtain NPDES permits and construction and operation activities would occur in compliance with the Master Plan of Drainage for the City of Ontario NMC.

As the City of Ontario NMC area is not within a fully developed urban setting, it is expected that full implementation of the City of Ontario Sphere of Influence General Plan Amendment would result in the conversion of large amounts of open space and agricultural and dairy uses to urban uses. Therefore, it is expected that there would be a significant increase in runoff in the Ontario NMC area as a whole. However, the proposed specific plans in the NMC area were considered under the Master Plan of Drainage for the NMC and, with the planned improvements to the City's storm drain system and project infrastructure, adequate drainage infrastructure would be available. Additionally, future development would be required to comply with stormwater discharge laws and to obtain the proper permits. Consequently, cumulative impacts would be less than significant with regard to this potential impact. The contribution of the proposed project to cumulative impacts on hydrology and water quality is less than significant, because increased stormwater flows are anticipated to be adequately handled by planned drainage infrastructure that will be constructed within the NMC area.

Cumulative development would not substantially alter the existing drainage pattern of the area, including the alteration of the course of a stream or river, in such a manner that would result in substantial erosion or siltation, flooding, or the exceedance of existing or planned stormwater drainage systems. Implementation

of NPDES Phase I and II requirements are designed to ensure that cumulative development does not result in higher-than-allowed concentrations of pollutants in stormwater discharges, and appropriate stormwater treatment would ensure that discharges into the Cucamonga Creek Channel and deer Creek Channel would not violate water quality standards. Therefore, it is not expected that such impacts would be cumulatively considerable, and the project would have a less-than-significant cumulative contribution to polluted runoff.

Cumulative development is not expected to otherwise substantially degrade water quality. Substantial increases in runoff are not expected to occur, and compliance with NPDES requirements and CEQA mitigation would ensure that water quality in the watershed is not degraded by future development. Additionally, project compliance with NPDES requirements and the small amount of runoff would ensure that the project contribution to cumulative impacts is also less than significant. Cumulative impacts would, therefore, be less than significant.

3.7.7 Mitigation Measures and Residual Impacts

Ontario SOI GPA EIR Mitigation Measures

The following mitigation measures would be followed to ensure that potential impacts described in Impact HYD-2, Impact HYD-3, Impact HYD-4, Impact HYD-5, and Impact HYD-6 would be reduced to less than significant levels.

MM WQ-1 *Prior to the issuance of grading permits, project developers shall submit a final drainage plan for each proposed project for review and approval by the City Engineer.*

MM WQ-2 *Prior to the issuance of grading permits, project developers shall ensure that coordination between the City of Ontario and the San Bernardino County Flood Control District has been undertaken to demonstrate the ability of the project to meet County flood control requirements.*

MM WQ-3 *Prior to the issuance of building permits, project developers shall submit to the City Engineer proof of payment of the City's drainage fees, as applicable.*

MM WQ-5 *Prior to moving construction equipment on a site within the Sphere of Influence, project developers shall provide evidence to the City Engineer that a National Pollutant Discharge Elimination System (NPDES) permit has been obtained from the State Water Resources Control Board (SWRCB). Once obtained, the NPDES permit shall be retained on the construction site throughout the construction period, and a copy shall be filed with the City Engineer.*

MM WQ-6 *During construction of individual project, the City Engineer shall ensure compliance with all terms and conditions outlined in the NPDES permit, including the implementation of Best Management Practices (BMPs) consistent with the California Stormwater Quality Association's Construction Handbook.*

MM WQ-7 *Prior to issuance of grading permits, project developers shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for individual proposed projects. These plans shall be submitted to the*

City Engineer for review and comment prior to implementing any SWPPP provisions or starting any construction activity. A copy of the SWPPP shall be held by the construction contractor(s) on the construction site throughout development of each project. The City Engineer will monitor and enforce the provisions of the SWPPP.

MM WQ-8 *During operation of facilities within the Sphere of Influence, the individual project owners and operators shall ensure that all pest control, herbicide, insecticide and other similar substances used as part of maintenance of project features are handles, stored, applied, and disposed of by those conducting facility maintenance in a manner consistent with all applicable federal, state and local regulations. The City Engineer shall monitor and enforce this provision.*

Project-Specific Mitigation Measures

Mitigation measures would be required to address project impacts. The following mitigation measures MM HYD-1-SP and MM HYD-2-SP would reduce potentially significant impacts associated with depletion of local groundwater supplies described under Impact HYD-1 to less-than-significant levels. Project drainage and runoff impacts described in Impact HYD-4, Impact HYD-5, and Impact HYD-6 would be reduced to less-than-significant levels with incorporation of mitigation measure MM HYD-3-SP.

MM HYD-1-SP *All residences within the Specific Plan Area shall be provided with water conservation devices such as low flow showers and toilets.*

MM HYD-2-SP *All public landscaped areas shall be required to use reclaimed water for irrigation purposes once the planned regional reclaimed water system becomes functional at the project site.*

MM HYD-3-SP *All new storm drain infrastructure on site shall be consistent with the City's Master Plan of Drainage, or otherwise formal amendments or deviations shall be made via coordination and approval from the City.*

Implementation of the above mitigation measures would ensure water conservation as well as consistency with the City's Master Plan of Drainage during operation of the proposed project. All project impacts associated with hydrology and water quality would be reduced to a less-than-significant level.

3.8 NOISE

3.8.1 Introduction

This section of the EIR evaluates the potential for noise and groundborne vibration impacts resulting from implementation of the proposed Countryside Specific Plan. The IS/NOP (Appendix A) identified the potential for impacts associated with a substantial temporary and/or permanent increase in ambient noise levels in the vicinity the project area; exposure of people to excessive noise levels, groundborne vibration, or groundborne noise levels; and whether this exposure is in excess of standards established in the City of Ontario's (the City) General Plan or noise ordinance. The Countryside Specific Plan Area is not located within the study-area noise contours of any airport or airstrip. Therefore, the issue of aircraft noise is not addressed in this analysis. Finally, mitigation measures intended to reduce impacts to noise are proposed, where appropriate.

Data used to prepare this analysis were obtained by measuring and modeling existing and future noise levels at the project site and in the surrounding land uses. Traffic information contained in the traffic study prepared for the proposed project was used to prepare the noise modeling and contour distribution for vehicular sources. Full bibliographic references are noted in Chapter 7 (References).

Fundamentals of Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady "background" noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from traffic on a major highway. Table 3.8-1 lists representative noise levels for the environment.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL is a measure of community noise. Those that are applicable to this analysis are as follows:

Table 3.8-1 Representative Environmental Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

SOURCE: California Department of Transportation 1998

- L_{eq}, the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L_{dn}, the Day-Night Average Level, is a 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- L_{min}, the minimum instantaneous noise level experienced during a given period of time.
- L_{max}, the maximum instantaneous noise level experienced during a given period of time.
- *CNEL*, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 10 dBA "penalty" added to noise during the hours of 10:00 P.M. to 7:00 A.M., and an additional 5 dBA penalty during the hours of 7:00 P.M. to 10:00 P.M. to account for noise sensitivity in the evening and nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low daytime levels are isolated natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA).

When evaluating changes in hourly or 24-hour community noise levels, a difference of 3 dBA is a barely-perceptible increase to most people. A 5 dBA increase is readily noticeable, while a difference of 10 dBA would be perceived as a doubling of loudness.

Noise levels from a particular source generally decline as distance to the receptor increases. Other factors such as the weather and reflecting or shielding also intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically "hard" locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., the area between the source and receptor is normal earth or has vegetation, including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels may also be reduced by intervening structures—generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer homes is generally 30 dBA or more.

Fundamentals of Environmental Groundborne Vibration

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and, in the U.S., is referenced as vibration decibels (VdB).

The background vibration velocity level in residential and educational areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of

interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

The general human response to different levels of groundborne vibration velocity levels is described in Table 3.8-2.

Table 3.8-2 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	*Human Reaction*
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

SOURCE: Federal Railroad Administration 1998

3.8.2 Existing Conditions

Existing Ambient Daytime Noise Levels in Planning Area

The Countryside Specific Plan Area (project site) is located in Subarea Number 5 of the northeast quadrant of the City of Ontario's New Model Colony (NMC). The NMC consists of 8,200 acres of land that had been annexed into the City in 1998. The project site is approximately 187 acres and is primarily used for agricultural production, specifically dairy farm uses. Agricultural fields, a nursery/greenhouse, and dairy farms are operated year-round at the project site. Portions of the project site contain empty fields that are waiting for cultivation in the commonly used crop rotation method. A few residential uses are also located sporadically on the project site. The project site is bordered on the north and east sides by existing urban development, and on the south and west sides by other undeveloped NMC subareas. Specifically, the project area is surrounded by residential and recreational uses (Westwind Park and Whispering Lakes Golf Course) to the north, residential uses and a neighborhood commercial center at the intersection of Riverside Drive and Archibald Avenue to the east, and agricultural uses to the west (NMC subareas 4 and 11) and south (NMC subarea 18). A commercial center is located in the northeast corner of the project site at the intersection of Riverside Drive and Archibald Avenue.

According to the Noise Section of the Hazards Element in the City of Ontario General Plan, noise in Ontario comes primarily from aircraft noise associated with the Ontario International Airport and transportation related noise sources such as motor vehicles and trains. The Ontario International Airport and the closest Metrolink rail line are located approximately 2 miles north of the project site and do not generate substantial noise levels at the project site. State Route 60 (SR-60, or the Pomona Freeway) is approximately ¾-mile north of the project site. The major access routes to the project site consist of Riverside Drive and Archibald Avenue. The traffic volumes that travel along these major arterial roadways, in addition to those on Chino Avenue and Schaefer Avenue, are a dominant source of traffic noise at and around the project site.

Existing daytime noise levels were monitored at five locations in and around the project site in order to identify representative noise levels at various areas. The monitoring locations are identified in Figure 3.8-1. The noise levels were measured using a Larson-Davis Model 814 precision sound level meter, which satisfies the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation. The average noise levels and sources of noise measured at each location are identified in Table 3.8-3.

Table 3.8-3 Existing Daytime Noise Levels at Selected Planning Area Locations

Noise Measurement Location	*Primary Noise Sources*	*Noise Level Statistics*		
		L_{eq}	L_{min}	L_{max}
Multi-family residential units	Vehicle noise within the apartment homes complex	49.3	42.2	61.6
Multi-family residential units	Vehicle noise within the apartment homes complex and traffic on Archibald Avenue	58.1	46.8	75.6
Single-family homes	Traffic on Archibald Avenue	71.3	49.0	85.9
Dairy farm	Cattle activity and occasional overhead helicopter noise	55.3	46.4	71.4
Poultry farm	Dairy operations and cattle activity on the south side of Schaefer Avenue	49.7	43.1	61.2

SOURCE: EIP Associates 2004 (calculation data and results are provided in Appendix G)

Existing Roadway Noise Levels on Site

The primary source of noise in and around the project site is vehicular traffic. Due to the lack of buildings or other obstructions, the noise generated by traffic is able to travel large distances and can be heard throughout the project site.

Existing roadway noise levels were calculated for the roadway link bisecting the project site and the other roadway links surrounding the project site to identify on-site noise levels due to traffic. This task was accomplished using the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108) and traffic volumes from the project traffic analysis (included as Appendix G). The noise model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for the state of California by Caltrans. The Caltrans data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The calculated average daily 24-hour noise levels are presented in Table 3.8-4.

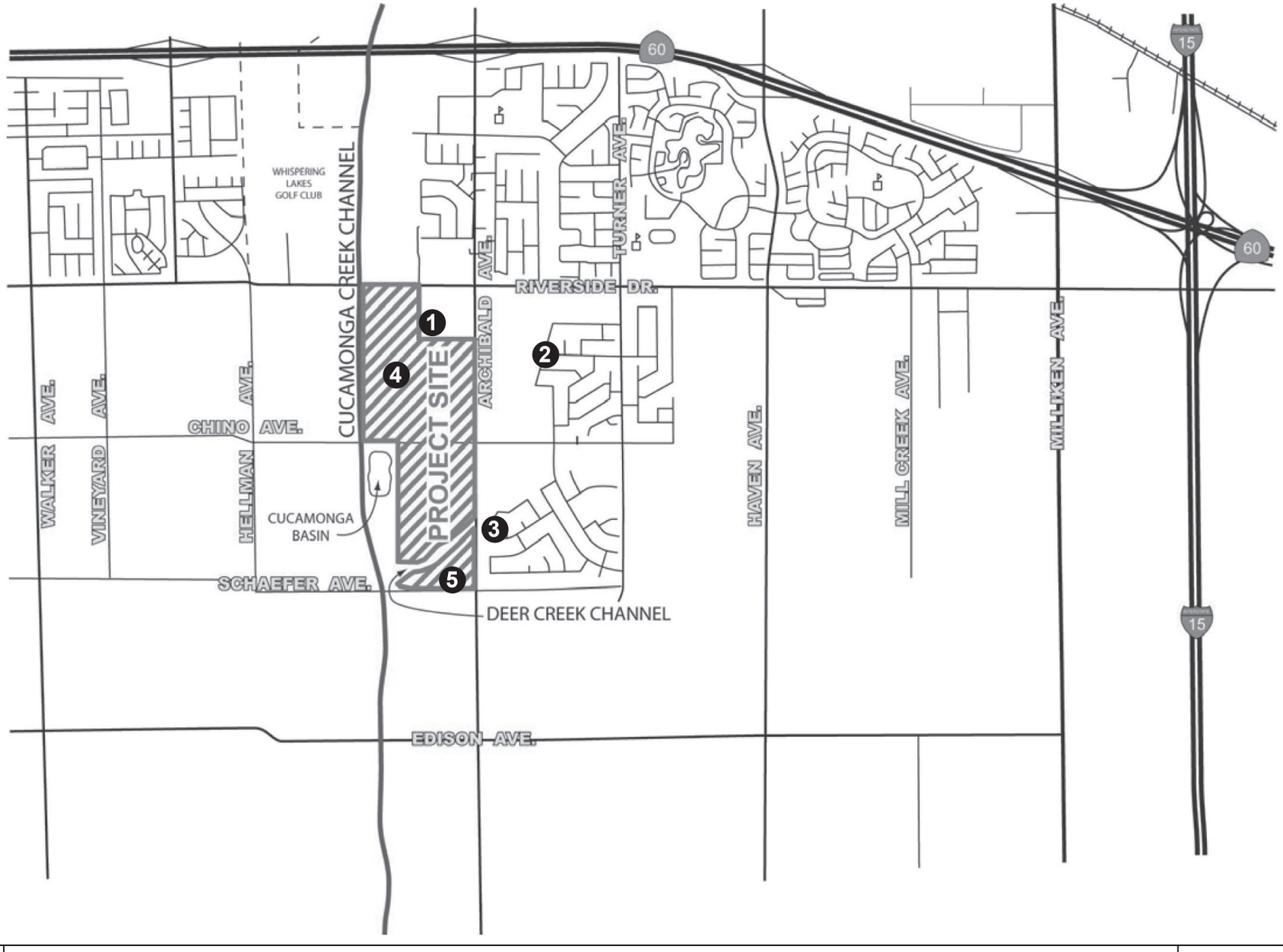

FIGURE **3.8-1**

Noise Monitoring Locations

Not to Scale

10905-00

Sources: Meritage Homes, 2004; EIP Associates, 2004

City of Ontario

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Table 3.8-4 Existing Roadway Noise Levels on Site

Roadway	Roadway Segment	Reference CNEL at 100 feet [a]	Distance to Noise Contour		
			65 CNEL	60 CNEL	55 CNEL
Riverside Drive	West of Archibald Avenue	61.7	66	143	308
Archibald Avenue	South of Riverside Drive	59.3	45	97	210
Archibald Avenue	South of Chino Avenue	58.9	43	93	200
Chino Avenue	West of Archibald Avenue	54.2	—	45	97

SOURCE: EIP Associates 2004 (calculation data and results are provided in Appendix G)

— = noise contour is located within the roadway lanes

[a] Distances are in feet from roadway centerline. The identified noise level at 100 feet from the roadway centerline is for reference purposes only as a point from which to calculate the noise contour distances. It does not reflect an actual building location or potential impact location.

Existing Roadway Noise Levels off Site

Existing roadway noise levels were calculated for the roadway links in the project vicinity that have noise-sensitive uses fronting the roadways. As with the on-site levels, this was accomplished using the FHWA Highway Noise Prediction Model and traffic volumes from the project traffic analysis. The average daily noise levels along these roadway segments are presented in Table 3.8-5. These noise measurements shown represent the noise levels experienced at approximately 50 feet from the roadway centerline.

Table 3.8-5 Existing Roadway Noise Levels off Site

Roadway	Roadway Segment	Noise Sensitive Uses	dBA CNEL
Vineyard Avenue	North of Walnut Avenue	Residential	68.0
Vineyard Avenue	South of Walnut Avenue	Residential	65.5
Riverside Drive	West of Archibald Avenue	Residential	67.9
Riverside Drive	East of Archibald Avenue	Residential	67.6
Riverside Drive	East of Turner Avenue	Residential	67.0
Riverside Drive	East of Haven Avenue	Residential	65.9
Archibald Avenue	North of Riverside Drive	Residential	70.6
Archibald Avenue	South of Riverside Drive	Residential	67.7
Archibald Avenue	South of Chino Avenue	Residential	66.9
Turner Avenue	North of Riverside Drive	Residential	58.5
Turner Avenue	South of Riverside Drive	Residential	58.5
Turner Avenue	South of Chino Avenue	Residential	56.9
Haven Avenue	North of Riverside Drive	Residential	65.2
Haven Avenue	South of Riverside Drive	Residential	58.9
Chino Avenue	East of Archibald Avenue	Residential	58.3
Chino Avenue	East of Turner Avenue	Residential	46.2

SOURCE: EIP Associates 2004 (calculation data and results are provided in Appendix G)

Existing Groundborne Vibration Levels

Aside from seismic events, the greatest regular source of groundborne vibration at the proposed project site and immediate vicinity is roadway truck traffic. Heavy-duty trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB. These levels could reach 72 VdB where trucks pass over bumps in the road.

3.8.3 Regulatory Framework

Federal

Federal agencies that have developed noise standards include the Federal Highway Administration (FHWA), the Department of Housing and Urban Development (HUD), the Federal Interagency Committee on Urban Noise (FICUN), and the Federal Aviation Administration (FAA). However, no noise standards adopted by federal agencies are applicable to the development in the project area under the proposed Countryside Specific Plan.

State

California Code of Regulations

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements, which establishes uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA L_{dn} in any habitable room of new dwellings. Dwellings are to be designed so that interior noise levels will meet this standard for at least ten years from the time of the building permit application. This standard applies to all new multi-family housing uses to be developed in the project area.

Local

City of Ontario General Plan Hazards Element—Noise Section

The California Government Code requires that a noise element be included in the general plan of each county and city in the state. The Noise Section in the Hazards Element of the City of Ontario General Plan is intended to identify sources of noise and provide objectives and policies that ensure that noise from various sources does not create an unacceptable noise environment. It is a tool that City planners use to achieve and maintain compatible land uses with environmental noise levels. The following goals and policies from the Noise Section/Hazards Element of the City of Ontario General Plan are applicable to the proposed project:

Goal 8.0 ***Provide for the reduction of noise where the noise environment is unacceptable.***

Policy 8.2 *Require the use of walls and berms or other noise mitigation measures in the design of residential or other noise sensitive land uses that are adjacent to major roads or railroads and include mitigation measures in the design of roadway improvement projects within the City.*

Goal 9.0 ***Provide sufficient information concerning the community noise levels so that noise can be objectively considered in land use planning. Protect and maintain those areas having acceptable noise environments.***

Policy 9.2 *Incorporate noise reduction features during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses. Figures HA-7, HA-8, and the aircraft noise contours in the Airport Environs Element can be used to identify locations of potential conflict. New developments will be permitted only if appropriate mitigation measures (including site planning and architectural design) are included such that the standards contained in this Element are met in accordance with Table HA-2.*

Figure 3.8-2 shows the City of Ontario's Land Use Compatibility Guidelines for noise.

Figure 3.8-3 shows the established interior and exterior noise standards that represent the City policies related to land uses and acceptable noise levels.

City of Ontario Municipal Code

The City of Ontario has also adopted noise regulations (Section 9-1.3305 of Article 33 of the City's Municipal Code), which establish noise standards for both exterior and interior noise levels that may not be exceeded for various land uses in the City during different times of the day. According to Section 9-1.3305, the maximum permissible exterior sound levels by receiving land uses are as follows:

1. Noise standards for the various categories of land uses set forth in Table 3.8-6 shall, unless otherwise specified, apply to each property or portion of property in the community. Where two or more dissimilar land uses occur on a single property, the more restrictive noise standard shall apply.
2. In the event of a dispute over the identification of a receiving land use, interpretation is to be made by the Zoning Administrator.
3. No person shall operate or cause to be operated any source of sound or noise at any location within the City, or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level to exceed the levels indicated on Table 3.8-6.

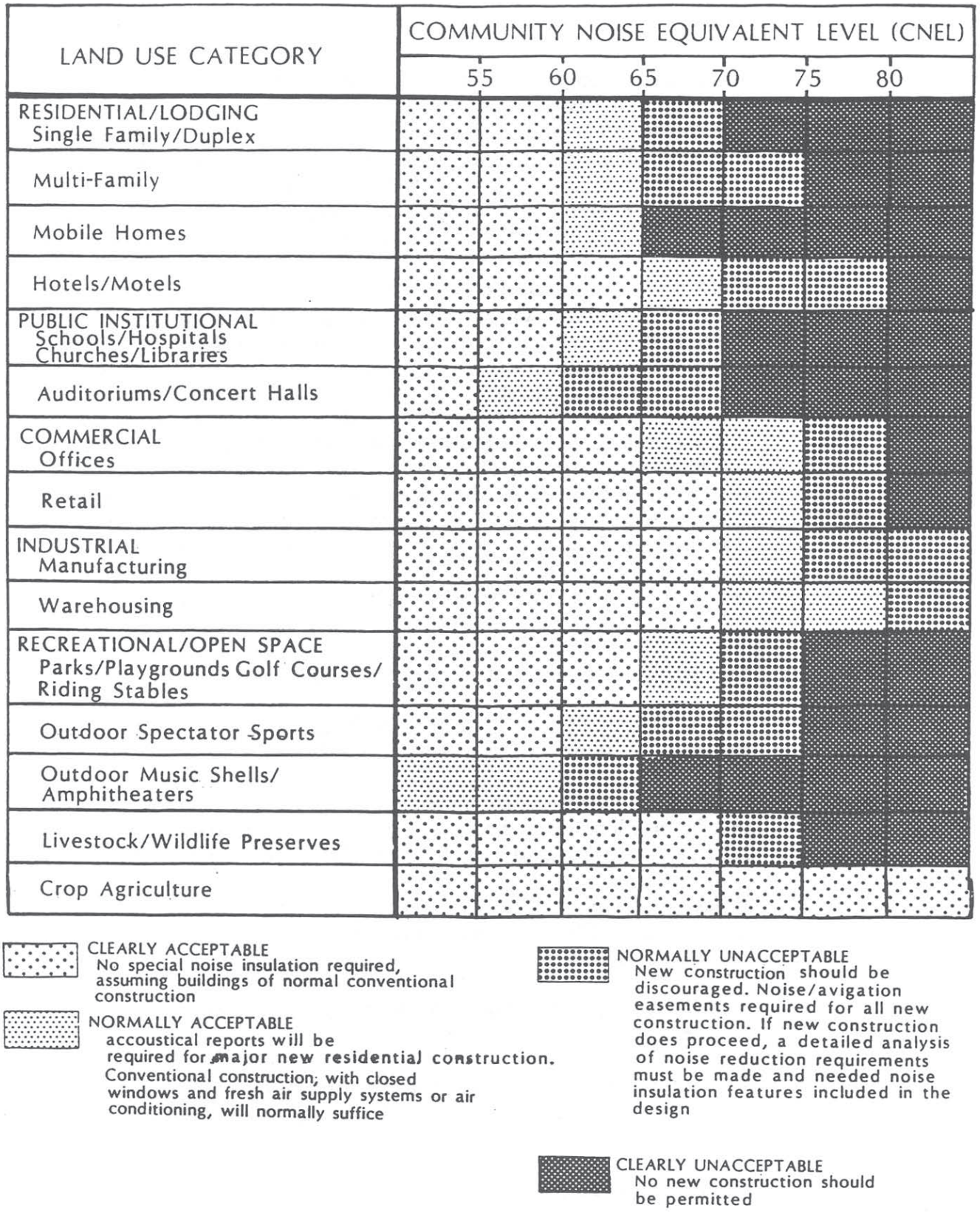

FIGURE **3.8-2**

City of Ontario Land Use Compatibility Guidelines for Noise Impacts

***Source*:** Ontario General Plan, 1992

City of Ontario

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LAND USE CATEGORIES		ENERGY AVERAGE CNEL	
CATEGORIES	USES	INTERIOR [1]	EXTERIOR [2]
RESIDENTIAL	Single Family, Duplex, Multiple Family	45 [3]	65
	Mobile Home	na	65 [4]
COMMERCIAL INDUSTRIAL INSTITUTIONAL	Hotel, Motel, Transient Lodging	45	65 [5]
	Commercial Retail, Bank Restaurant	55	na
	Office Building, Research and Development, Professional Offices, City Office Building	50	na
	Amphitheatre, Concert Hall Auditorium, Meeting Hall	45	na
	Gymnasium (Multipurpose)	50	na
	Sports Club	55	na
	Manufacturing, Warehousing, Wholesale, Utilities	65	na
	Movie Theatres	45	na
INSTITUTIONAL	Hospital, Schools' classroom	45	65
	Church, Library	45	na
OPEN SPACE	Parks	na	65

INTERPRETATION

1. Indoor environment excluding: Bathrooms, toilets, closets, corridors.
2. Outdoor environment limited to:
   - Private yard of single family
   - Multi-family private patio or balcony which is served by a means of exit from inside.
   - Mobile home Park
   - Hospital patio
   - Park's picnic area
   - School's playground
   - Hotel and motel recreation area
3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
4. Exterior noise level should be such that interior noise level will not exceed 45 CNEL.
5. Except those areas affected by aircraft noise.

FIGURE **3.8-3**

City of Ontario Interior and Exterior Noise Standards

10905-00

Source: Mestre Greve Associates City of Ontario

EIP ASSOCIATES

Table 3.8-6 Maximum Exterior Noise Levels, Ontario Municipal Code

Receiving Land Use Category	Noise Level (dBA)	
	10 P.M. to 7 A.M.	7 A.M. to 10 P.M.
Residential (except multi-family)	45	65
Multi-family residential and mobile home parks	50	65
Commercial (all C Zones, including AP)	60	65
Light Industrial (M1, M2)	70	70
Heavy Industrial (M3)	70	70

SOURCE City of Ontario 2003a, Table 33-1

The maximum permissible interior noise levels by receiving land uses are as follows:

1. No person shall operate or cause to operate any source of sound within a residential dwelling unit or allow the creation of noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level, when measured inside a neighboring receiving dwelling unit, to exceed the environmental and/or nuisance interpretation of the applicable limits shown on Table 3.8-7.

Table 3.8-7 Interior Noise Standards, Ontario Municipal Code

Land Use Type	Time Interval	Maximum Noise Level (dBA)		
		Any time	1 min./1 hr.	5 min./1 hr.
Multi-family residential	10 P.M. to 7 A.M.	35	40	35
Multi-family residential	7 A.M. to 10 P.M.	45	50	45

SOURCE City of Ontario 2003a, Table 33-2

2. If the ambient noise level inside a receiving dwelling unit exceeds permissible limits, the allowable noise exposure standard in that category shall be the measured ambient noise for a cumulative period of 5 minutes in any 1 hour, ambient plus 5 dBA for 1 minute within any 1 hour, and shall not exceed the ambient plus 10 dBA at any time.

In addition, the Municipal Code also prohibits the following:

- No person shall unnecessarily make, continue, or cause to make or continue any noise disturbances;
- Sounding or permitting the sounding of any electrically operated or electronically amplified signal from any stationary bell, chime, siren, whistle, or similar device intended for non-emergency purposes, from any place, for more than 120 seconds continually, in a 1-hour period, or intermittent sounding over a 5-minute period in 1 hour;
- Creating or causing the creation of any sound within a noise-sensitive area, so as to exceed the maximum exterior noise levels set forth within Table 3.8-6.

Sources of noise that are exempt from the City's Municipal Code noise standards include warning devices necessary for the protection of public safety, including but not limited to, police, fire, ambulance sirens, train horns. These noise sources are exempted from the provisions of the noise ordinance.

Applicable SOI GPA Policies

Policy 1.2.8 *Site and design development to minimize potential impacts of environmental hazards including flooding, and noise (refer to "Hazards" chapter's policies). Consider the use of electrical transmission corridors, flood channels, and similar elements to form "edges" for residential neighborhoods and centers and/or accommodate public greenways/ corridors. (I-7 and I-10)*

Policy 11.1.5 *Establish safe and efficient truck routes that minimize exposure to noise sensitive land uses and reduce other adverse impacts to adjacent land uses, Figure 4-18. (I-2) [Note to City: what is the status of this?]*

Policy 24.2.1 *Site housing, health care facilities, schools, libraries, religious facilities, and other "noise sensitive" land uses in areas where existing or future noise levels are below an L_{dn} of 60 dB(A) exterior and an L_{dn} of 45 dB(A) interior limits. (I-7 and I-10)*

Policy 24.2.7 *Require that, prior to the issuance of grading permits, an Acoustical Analysis Report be submitted to the City Engineer by the project developer. The report shall:*

- *Describe the cumulative effect of road noise on surrounding land uses and recommend mitigation measures, if necessary, to attenuate that noise. If necessary, the City shall establish a noise attenuation fee program that requires developers in the Sphere of Influence area to make a fair share contribution to noise mitigation along some of the roads surrounding the Sphere of Influence. The City of Ontario shall evaluate the need for such a fee program and establish participation guidelines prior to the issuance of grading permits*
- *Describe in detail the interior and exterior noise levels for residential uses on the site and the specific design and mitigation features to ensure compliance with the City's noise criteria of 65 dB(A) CNEL for outdoor living areas and 45dB(A) CNEL in habitable rooms*
- *Specify the noise barriers' height, location, and types capable of achieving the desired mitigation affect*
- *Identify those residential lots that may require mechanical ventilation to achieve interior noise standards. When the operable doors and windows are open for homes facing these roadways, the interior 45 dB(A) CNEL interior noise limit for these units may be exceeded. Therefore, a "windows closed" condition may be required for these units. Any proposed mechanical ventilation must meet the requirements of the Uniform Building Code (UBC) standard. It should be noted that the windows facing some roadways may be openable windows, but the homeowners would have the option to close the windows and still obtain adequate ventilation through the use of a mechanical ventilation system. This mechanical ventilation system shall supply two air changes per hour to each habitable room, including 20 percent (one-fifth) fresh make-up air obtained directly form the outdoors. The fresh air inlet duct shall be of sound attenuating construction and shall consist of a minimum of 10 feet of straight or curved duct or 6 feet plus one sharp 90 degree bend. The City Engineer shall ensure that the Acoustical Analysis Report identifies any requirements for mechanical ventilation for individual onsite residential units. (I-7 and I-10).*

Policy 24.2.8 *Require that all prospective owners and occupants of residential units be formally notified prior to purchase, lease, or rental, that certain units (without windows and doors closed), and outdoor areas could be subject to noise levels above City standards for residential uses. Such notification shall be in language approved by the City Planning Department, and shall be formalized in written Covenants, Conditions, and Restrictions (CC&Rs) recorded on the title of each residential lot in the project. In addition, each advertisement, solicitation, and sales brochure or other literature regarding the project shall contain the approved notification language. (I-7 and I-10)*

Policy 24.2.9 *Limit construction in the Sphere of Influence to the hours of 7:00 A.M. to 7:00 P.M. Monday through Saturday, and prohibited on Sundays and Federal holidays. (I-7 and I-10)*

Policy 24.2.10 *Require all project construction vehicles or equipment, fixed or mobile, be equipped with properly operating and maintained mufflers. (I-7 and I-10)*

Policy 24.2.11 *Require that stockpiling and/or vehicle staging areas be located as far as practical from existing residential units on and off the project site. (I-7 and I-10)*

Policy 24.2.12 *Whenever feasible, schedule the noisiest construction operations to occur together to avoid continuing periods of the greatest annoyance. (I-7 and I-10)*

3.8.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on noise if it would result in any of the following:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels
- Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

The CEQA Guidelines do not define the levels at which temporary and permanent increases in ambient noise are considered "substantial." As discussed previously in this section, a noise level increase of 3 dBA is barely perceptible to most people, a 5 dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. Based on this information, the following thresholds would apply to the operational characteristics of the proposed project:

- Less than 3 dBA: not discernable: not significant
- Between 3 dBA and 5 dBA: noticeable, but not significant, if noise levels remain below City's 65 dBA CNEL noise level standard at sensitive land uses
- 3 dBA or greater: significant, if the noise increase would meet or exceed the City's 65 dBA CNEL noise level standard at sensitive land uses

- 5 dBA or greater: significant

The CEQA Guidelines also do not define the levels at which groundborne vibration or groundborne noise is considered "excessive." For the purpose of this analysis, groundborne vibration impacts associated with human annoyance would be significant if the proposed project exceeds 85 VdB, which is the vibration level that is considered by the Federal Transit Administration to be acceptable only if there are an infrequent number of events per day (as described in Table 3.8-2 [Human Response to Different Levels of Groundborne Vibration]). In terms of groundborne vibration impacts on structures, this analysis will use the Federal Transit Administration's vibration damage threshold of approximately 100 VdB for fragile buildings and approximately 95 VdB for extremely fragile historic buildings (HMMH, 1995).

3.8.5 Project Impacts

Potentially Significant

Impact NOI-1 Construction activities associated with the proposed Countryside Specific Plan could expose nearby sensitive uses to excessive groundborne vibration levels. This is considered a *significant and unavoidable* temporary impact.

Construction activities that would occur as a result of the proposed project have the potential to generate low levels of groundborne vibration. Table 3.8-8 identifies various vibration velocity levels for the types of construction equipment that would operate at the project site during construction.

Table 3.8-8 Vibration Source Levels for Construction Equipment

Construction Equipment	Approximate VdB				
	25 feet	50 feet	60 feet	75 feet	100 feet
Large Bulldozer	87	81	79	77	75
Loaded Trucks	86	80	78	76	74
Jackhammer	79	73	71	69	67
Small Bulldozer	58	52	50	48	46

SOURCE: Federal Railroad Administration 1998; EIP Associates 2004

Construction activities would have the potential to primarily impact existing residences in close proximity to the project site. Existing sensitive vibration receptors in the project vicinity include residences located to the north of the project site, residences located immediately east of the project site at the intersection of Riverside Drive and Archibald Avenue, and residences located east of the entire project site across Archibald Avenue. Among this group of existing offsite residences, the residences located closest to the proposed project site (at approximately 60 feet distance from the project site) are those located immediately east of the project site at the intersection of Riverside Drive and Archibald Avenue. Based on the information presented in Table 3.8-8, vibration levels from onsite construction could reach up to 79 VdB at these nearest offsite residential properties (located 60 feet away). This would not exceed the Federal Transit

Administrations vibration impact threshold of 85 VdB for human annoyance. As such, construction activities would not exceed this threshold at these nearby existing residences.

Heavy trucks would transport materials to and from the project site when construction activities occur. These trucks typically generate groundborne vibration velocity levels of around 63 VdB. These levels could reach 72 VdB where trucks pass over bumps in the road.

In both instances, the resulting groundborne vibration velocity levels would be less than the Federal Transit Administration's 85 VdB vibration impact threshold for human annoyance. Therefore, construction during the implementation of the proposed Specific Plan would not expose existing sensitive vibration receptors to excessive groundborne vibration or groundborne noise levels, and this impact would be less than significant. No mitigation is required.

The proposed Countryside Specific Plan would be constructed in several phases, over the course of several years, so not all of the neighborhoods would be under construction at one time. As such, the completion and occupation of a particular residential neighborhood could occur before the commencement of construction of another residential neighborhood. With the addition of sensitive receptors (new housing units) within close proximity to active construction of the proposed project site, the potential for exposure to excessive vibration levels would increase with the completion of each construction phase. As such, the construction activities may exceed the Federal Transit Administration 85 VdB threshold at certain locations where new residential dwelling units are located within the project site. SOI GPA Policy 24.2.9 (SOI GPA EIR MM N-6) would limit construction to the hours of 7:00 A.M. to 7:00 P.M. Monday through Saturday, while construction would be prohibited on Sundays and federal holidays, thereby minimizing vibration impacts to nighttime sleepers housed in nearby onsite residences. Furthermore, SOI GPA Policy 24.2.11 (SOI GPA EIR MM N-8) would require that stockpiling and/or vehicle staging areas be located as far as practical from existing residential units on and off the project site, which would also minimize the frequency and proximity of large trucks (which generate groundborne vibration) traveling close to onsite residences. However, there are no feasible mitigation measures to avoid or reduce the actual physical groundborne vibration generated during construction. Because sensitive onsite vibration receptors (future residential units) may be in close proximity to active construction, there is a possibility that they would be exposed to groundborne vibration levels that exceed 85 VdB. As such, this is considered a ***significant and unavoidable*** construction-related (temporary) impact.

Impact NOI-2 Construction activities associated with the proposed Countryside Specific Plan could generate substantial temporary or periodic noise levels. This is considered a *significant and unavoidable* temporary impact.

Implementation of the proposed Countryside Specific Plan would result in development on 178 acres of primarily existing dairy farm, agricultural, and vacant land. The overall development would result in eight residential neighborhoods totaling 819 residential units, 5.75 acres of parkland, 4.36 acres of paseos (i.e., linear greenbelts), and bicycle trails throughout the neighborhoods. During project development, the use of heavy equipment would be required for site grading and excavation, installation of utilities, paving, and

building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The U.S. EPA has compiled data regarding the noise generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Table 3.8-9 and Table 3.8-10, respectively. These noise levels from the construction equipment and activities would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA L_{eq} measured at 50 feet from the noise source to the receptor would reduce to 78 dBA L_{eq} at 100 feet from the source to the receptor, and reduce by another 6 dBA to 72 dBA L_{eq} at 200 feet from the source to the receptor.

Table 3.8-9 Noise Ranges of Typical Construction Equipment

Construction Equipment	*Noise Levels in dBA L_{eq} at 50 feet* [a]
Front Loader	73–86
Trucks	82–95
Cranes (moveable)	75–88
Cranes (derrick)	86–89
Vibrator	68–82
Saws	72–82
Pneumatic Impact Equipment	83–88
Jackhammers	81–98
Pumps	68–72
Generators	71–83
Compressors	75–87
Concrete Mixers	75–88
Concrete Pumps	81–85
Back Hoe	73–95
Pile Driving (peaks)	95–107
Tractor	77–98
Scraper/Grader	80–93
Paver	85–88

SOURCE: U.S. EPA 1971

[a] Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.

During construction phases of the Countryside Specific Plan, two basic types of activities would be expected to occur and generate noise. First, the development sites would be prepared, excavated, and graded to accommodate building foundations. Secondly, the residential buildings would be constructed and readied for use in phases. The proposed residential uses within the Countryside Specific Plan project site would be

developed in several phases. Construction is anticipated to begin in approximately 2006 and continue through approximately 2011. As such, increased noise levels associated with construction activities within the project site would occur for approximately four years during the time that the overall project is developed.

Existing sensitive receptors that would be subject to construction-related noise impacts associated with the proposed project include the existing park, golf course, residences located to the north of the project site, residences located immediately east of the project site at the intersection of Riverside Drive and Archibald Avenue, and residences located east of the entire project site across Archibald Avenue. Among this group of existing offsite residences, the residences located closest to the proposed project site (at approximately 60 feet distance from the project site) are those located immediately east of the project site at the intersection of Riverside Drive and Archibald Avenue. According to Table 3.8-10, noise levels at these residences may reach a maximum of 84 dBA L_{eq} during site grading, excavation, and finishing. However, an approximately six foot sound wall surrounds these existing residential units and separates them from the project site, which would help reduce the noise levels to lower than 84 dBA L_{eq}.

Table 3.8-10 Typical Outdoor Construction Noise Levels

Construction Phase	*Noise Levels at 50 feet with Mufflers (dBA L_{eq})*	*Noise Levels at 60 feet with Mufflers (dBA L_{eq})*	*Noise Levels at 100 feet with Mufflers (dBA L_{eq})*
Ground Clearing	82	80	76
Excavation, Grading	86	84	80
Foundations	77	75	71
Structural	83	81	77
External Finishing	86	84	80

SOURCE: U.S. EPA 1971; EIP Associates 2002

In addition, construction activities would be guided by a range of policies adopted under the SOI GPA and mitigation measures (MMs) adopted by the SOI GPA EIR that would minimize construction noise impacts. Policy 24.2.9 (SOI GPA EIR MM N-6) would require the hours of construction to be limited to the hours of 7:00 A.M. to 7:00 P.M. Monday through Saturday, while construction would be prohibited on Sundays and federal holidays. Policy 24.2.10 (SOI GPA EIR MM N-7) would require all construction vehicles and equipment to be equipped with properly operating and maintained mufflers. Policy 24.2.11 (SOI GPA EIR MM N-8) would locate stockpiling and/or vehicle staging areas as far as practical from existing residential units. Finally, Policy 24.2.12 (SOI GPA EIR MM N-9) would schedule, whenever feasible, the noisiest construction operations to occur together to avoid continuing periods of the greatest noise annoyance.

Nonetheless, as discussed in Section 3.8.4 under Thresholds of Significance, this EIR assumes that an increase of 5.0 dBA or greater over ambient noise levels is substantial and significant. As shown in Table 3.8-3 (Existing Daytime Noise Levels at Selected Planning Area Locations), the existing ambient daytime noise level measured at these nearest residences is 49.3 dBA CNEL. As such, the noise levels generated from construction activities under the proposed Countryside Specific Plan would result in a temporary

increase in ambient noise levels of over 5 dBA at the existing noise-sensitive uses adjacent to the proposed project site. Furthermore, these existing sensitive receptors would be exposed to these noise levels for a prolonged period of time, as the proposed project construction would be completed in phases. Thus, the sensitive noise receptors located immediately east of the project site at the intersection of Riverside Avenue and Archibald Avenue would be in close proximity to active construction for a prolonged period of time and would be exposed to noise levels that are more than 5 dBA CNEL above ambient conditions without project construction. This is considered a potentially significant impact.

Implementation of the existing SOI GPA policies and mitigation measures from the SOI GPA EIR associated with construction activities would not necessarily ensure that construction noise levels would increase by less than 10 dBA at noise sensitive uses located in close proximity to construction areas within the project site. In order to ensure that appropriate construction noise mitigation is identified and carried forward in this project-specific EIR, MM NOI-1-SP is included. MM NOI-1-SP would reduce construction noise impacts within and immediately adjacent to the Countryside Specific Plan Area. However, even with the incorporation of MM NOI-1-SP, the proposed project would result in a substantial and significant periodic increase in ambient noise levels (resulting from construction activities) in the project vicinity above existing levels. This impact would be ***significant and unavoidable***.

Impact NOI-3 Implementation of the proposed project development could expose existing and proposed residential uses to noise in excess of City standards. This is considered a *potentially significant* impact.

Upon completion of the proposed project, noise levels within the project site would be dominated by vehicular traffic on the surrounding roadways. As the exact placement of new residential units within the proposed residential neighborhoods has not been finalized yet, the nearest point of residential development within the project site to the surrounding roadway segments cannot be determined at this point. However, as a conservative estimate, it is assumed that the nearest residential development would occur approximately 50 feet away from the roadway centerline of the adjacent segments. Table 3.8-11 presents the average daily exterior and interior noise levels at potentially new residential locations in the project site associated with vehicular traffic during the horizon year with the project (2015), as identified in the traffic study.

As shown, future exterior noise levels experienced at approximately 50 feet away from the surrounding roadway centerlines at the project site would exceed the City's 65 dBA CNEL standard for outdoor activity areas. In the case of the proposed residential uses, these noise levels would apply to the actual outdoor activity areas (i.e., private yards and balconies) of each residential unit that faces these roadways. In addition, as previously discussed, exterior-to-interior reduction of newer residential units is generally 30 dBA or more.

With this assumption, Table 3.8-11 indicates that future noise levels associated with the surrounding roadways would exceed the City's 45 dBA CNEL interior noise standard for new onsite residential uses potentially located adjacent to the segment of Archibald Avenue south of Chino Avenue. The City of

Ontario SOI GPA and SOI GPA EIR include policies and a mitigation measure that would serve to reduce noise impacts to these future residences. SOI GPA Policy 1.2.8 requires that developments be designed and sited to minimize potential noise impacts, including consideration of the use of electrical transmission corridors, flood channels, and similar elements to form "edges" for residential neighborhoods. SOI GPA Policy 24.2.8 (SOI GPA EIR MM N-5) requires that all prospective owners and occupants of residential units be formally notified prior to purchase, lease, or rental, that certain units (without windows and doors closed), and outdoor areas could be subject to noise levels above City standards for residential uses. If buffer zones consistent with SOI GPA Policy 1.2.8 cannot be created to minimize long-term traffic noise impacts to future onsite residences located adjacent to the segment of Archibald Avenue south of Chino Avenue, MM NOI-2-SP has been included to minimize long-term noise impacts to these on-site locations.

Table 3.8-11 Predicted Future Roadway Noise Levels On Site

Roadway Segment	Proposed/Existing Land Use	Noise Levels in dBA CNEL				
		Future [a] Exterior Noise Levels [b]	City Exterior Noise Standards	Assumed Exterior to Interior Noise Reduction	Future Interior Noise Levels	City Interior Noise Standard
Riverside Drive, west of Archibald Avenue	Residential	71.6	65.0	30	41.6	45.0
Archibald Avenue, south of Riverside Drive	Residential	73.4	65.0	30	43.4	45.0
Archibald Avenue, south of Chino Avenue	Residential	75.8	65.0	30	45.8	45.0
Chino Avenue, west of Archibald Avenue	Residential	69.6	65.0	30	39.6	45.0

SOURCE: EIP Associates 2004 (calculation data and results are provided in Appendix G)

[a] Future traffic condition is the existing plus approved projects plus proposed project traffic volumes identified in the Traffic Impact Analysis Report.

[b] Noise levels are calculated at approximately 50 feet from the roadway centerline.

Heating, ventilation, and air conditioning (HVAC) systems would be installed for the new residential buildings located within the project site. Residential HVAC systems result in noise levels that average between 40 and 50 dBA L_{eq} at 50 feet from the equipment. These noise levels would be considered normally acceptable under City noise standards.

Aside from the new residential neighborhoods of the proposed project, the increase in traffic resulting from the proposed project would also increase the noise levels experienced by the existing residential uses in the project vicinity. Table 3.8-12 presents the average daily exterior and interior noise levels associated with vehicular traffic at the existing offsite residential locations in the project site vicinity during the buildout horizon year associated with the project (2015). These noise measurements shown also represent the noise levels experienced at approximately 50 feet from the roadway centerline by all the existing offsite residential locations in the project vicinity.

As shown in Table 3.8-12, future exterior noise levels at the residential units planned along the surrounding roadways of the project site would exceed the City's 65 dBA CNEL standard for outdoor activity areas at thirteen roadway segments. In terms of future interior noise levels, Table 3.8-12 indicates that future noise

levels associated with the surrounding roadways would not exceed the City's 45 dBA CNEL interior noise standard for residential uses.

Table 3.8-12 Predicted Future Roadway Noise Levels Off Site

Roadway Segment	Existing/Offsite Land Use	Noise Levels in dBA CNEL				
		Future [a] Exterior Noise Levels [b]	City Exterior Noise Standards	Assumed Exterior to Interior Noise Reduction	Future Interior Noise Levels	City Interior Noise Standard
Vineyard Avenue, north of Walnut Avenue	Residential	73.5	65.0	30	43.5	45.0
Vineyard Avenue, south of Walnut Avenue	Residential	72.9	65.0	30	42.9	45.0
Riverside Drive, west of Archibald Avenue	Residential	71.6	65.0	30	41.6	45.0
Riverside Drive, east of Archibald Avenue	Residential	71.6	65.0	30	41.6	45.0
Riverside Drive, east of Turner Avenue	Residential	71.5	65.0	30	41.5	45.0
Riverside Drive, east of Haven Avenue	Residential	73.0	65.0	30	43.0	45.0
Archibald Avenue, north of Riverside Drive	Residential	73.3	65.0	30	43.3	45.0
Archibald Avenue, south of Riverside Drive	Residential	73.4	65.0	30	43.4	45.0
Archibald Avenue, south of Chino Avenue	Residential	75.8	65.0	30	45.8	45.0
Turner Avenue, south of Riverside Drive	Residential	59.6	65.0	30	29.6	45.0
Turner Avenue, south of Chino Avenue	Residential	59.1	65.0	30	29.1	45.0
Turner Avenue, north of Riverside Drive	Residential	56.4	65.0	30	26.4	45.0
Haven Avenue, north of Riverside Drive	Residential	68.5	65.0	30	38.5	45.0
Haven Avenue, south of Riverside Drive	Residential	69.6	65.0	30	39.6	45.0
Chino Avenue, east of Archibald Avenue	Residential	70.6	65.0	30	40.6	45.0
Chino Avenue, east of Turner Avenue	Residential	70.6	65.0	30	40.6	45.0

SOURCE: EIP Associates 2004 (calculation data and results are provided in Appendix G)

[a] Future traffic condition is the existing plus approved projects plus proposed project traffic volumes identified in the Traffic Impact Analysis Report.

[b] Noise levels are calculated at approximately 50 feet from the roadway centerline.

Based on this information for both future traffic-generated noise levels on- and off-site, noise impacts associated with noise generated as a result of additional traffic generated by the proposed project's operation are considered to be a potentially significant impact. However, implementation of SOI GPA Policy 24.2.7 (SOI GPA EIR MM N-1 through MM N-4) would require an acoustical analysis report to be submitted to

the City Engineer by the project developer prior to the issuance of a grading permit. The report must describe the cumulative effect of road noise on the surrounding land uses and, if necessary, recommend mitigation measures to attenuate that noise. In particular, the report must include specific design and mitigation features to ensure that the development would comply with the City's exterior and interior noise criteria. As such, implementation of SOI GPA Policy 24.2.7 (SOI GPA EIR MM N-1 through MM N-4) would reduce the magnitude of this impact to a ***less-than-significant*** level.

Impact NOI-4 The proposed project would generate increased local traffic volumes, which may result in a substantial permanent increase in off-site ambient noise levels. This is considered a *significant and unavoidable* impact.

Off-site locations in the project vicinity would experience increased noise caused by traffic generated by the proposed project as well as cumulative traffic generated by the six additional specific plan areas currently being developed (refer to Section 2.9, Cumulative Projects and Impact Analysis Methodology). The increases in noise levels at noise-sensitive locations along the study area roadway segments are identified in Table 3.8-12. These noise measurements shown represent the noise levels experienced at approximately 50 feet from the roadway centerline. As discussed previously, a difference of 3 dBA between 24-hour noise levels is a barely-perceptible increase to most people. A 5 dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. Thus, as discussed in Section 3.8.4 under Thresholds of Significance, this EIR assumes that an increase of 5.0 dBA or greater over ambient noise levels is substantial and significant. Furthermore, this EIR also assumes that an increase in noise level of 3.0 dBA or greater over ambient noise levels is substantial and significant if the noise increase would meet or exceed the City's 65 dBA CNEL noise level standard at sensitive land uses, while any increase in noise level below 3.0 dBA is not considered perceptible and thus not significant.

As shown in Table 3.8-13, the increase in noise levels along all but one of the selected roadway segments (Chino Avenue east of Turner Avenue) would be less than the significance thresholds assumed in this EIR for ambient noise and, therefore, would not be significant.

The proposed project development would increase local noise levels by a maximum of 8.9 dBA CNEL at the roadway segment of Chino Avenue east of Turner Avenue, which is close to doubling the loudness currently experienced at this roadway segment. Since the noise level at this roadway segment would be increased by more than 5.0 dBA CNEL, this is considered a significant impact. Implementation of SOI GPA Policy 24.2.7 (SOI GPA EIR MM N-1 through MM N-4) would require an acoustical analysis report to be submitted to the City Engineer by the project developer prior to the issuance of a grading permit. The report must describe the cumulative effect of road noise on the surrounding land uses and, if necessary, recommend mitigation measures to attenuate that noise. In particular, the report must include specific design and mitigation features to ensure that the development would comply with the City's exterior and interior noise criteria. However, it is possible that due to the extreme increase in future traffic noise projected along Chino Avenue east of Turner Avenue, the future potential noise attenuation measures that may be developed for this location would not be successful in reducing ambient noise levels to the extent necessary to ensure a net increase of less than 5 dBA CNEL (the applicable significance threshold). As such,

long-term noise impacts to offsite locations adjacent to the roadway segment of Chino Avenue east of Turner Avenue are considered ***significant and unavoidable***.

Table 3.8-13 Future Off-Site Roadway Noise Levels

Roadway Segment	Noise Sensitive Uses	Noise Levels in dBA CNEL			
		Existing	Existing Plus Project	Increase	Significance Threshold
Vineyard Avenue, north of Walnut Avenue	Residential	68.0	68.3	0.3	3.0
Vineyard Avenue, south of Walnut Avenue	Residential	65.5	66.0	0.5	3.0
Riverside Drive, west of Archibald Avenue	Residential	67.9	68.2	0.3	3.0
Riverside Drive, east of Archibald Avenue	Residential	67.6	67.8	0.2	3.0
Riverside Drive, east of Turner Avenue	Residential	67.0	67.3	0.3	3.0
Riverside Drive, east of Haven Avenue	Residential	65.9	66.2	0.3	3.0
Archibald Avenue, north of Riverside Drive	Residential	70.6	71.0	0.4	3.0
Archibald Avenue, south of Riverside Drive	Residential	67.7	68.3	0.6	3.0
Archibald Avenue, south of Chino Avenue	Residential	66.9	67.4	0.5	3.0
Turner Avenue, south of Riverside Drive	Residential	58.5	58.6	0.1	5.0
Turner Avenue, south of Chino Avenue	Residential	58.5	58.5	0.0	5.0
Turner Avenue, north of Riverside Drive	Residential	56.9	56.9	0.0	5.0
Haven Avenue, north of Riverside Drive	Residential	65.2	65.3	0.1	3.0
Haven Avenue, south of Riverside Drive	Residential	58.9	58.9	0.0	5.0
Chino Avenue, east of Archibald Avenue	Residential	58.3	59.8	1.5	5.0
Chino Avenue, east of Turner Avenue	Residential	46.2	55.1	8.9	5.0

SOURCE: EIP Associates 2004 (calculation data and results are provided in Appendix G)

3.8.6 Cumulative Impacts

The geographic context for the analysis of cumulative noise impacts is the New Model Colony specific plan area in the City of Ontario. The analysis accounts for all anticipated cumulative growth within this geographic area, which includes development of the proposed project along with the other specific plans provided in Table 2-3 (Proposed Future Development within Other Specific Plans of the Ontario New Model Colony) in Chapter 2 (Project Description) of this EIR. Noise by definition is a localized phenomenon, and drastically reduces in magnitude as distance from the source increases. Consequently, only projects and growth due to occur in the New Model Colony area would be likely to contribute to cumulative noise impacts.

Construction noise in the City of Ontario would create an intermittent impact on the noise environment that would be short-term occurring only through the duration of the construction phases. Because construction noise is of a temporary nature, the City of Ontario does not require noise mitigation to specific levels (City of Ontario 1997). Due to the fact that the duration of the construction noise impact would be limited to the duration of the construction phases, cumulative impacts related to temporary construction

noise would be considered less than significant. Therefore, the cumulative construction noise impact of the proposed project would also be less than significant.

Cumulative development in the Ontario area should not result in the exposure of people to or the generation of excessive groundborne vibration, due to the localized nature of vibration impacts and the fact that all new construction in the City would not occur at the same time and at the same location. No other projects in the City are proposed in close enough proximity to affect the same receptors as the proposed project. Only receptors located in close proximity to each construction site would be potentially impacted by each development. Therefore, it is assumed for the purposes of this analysis that future development would result in a less-than-significant cumulative impact upon groundborne vibration. Therefore, the cumulative impact of the proposed project upon groundborne vibration would also be less than significant.

Impact NOI-5 The proposed project site would be exposed to significant long-term cumulative traffic noise levels resulting from increased traffic from other specific plan areas to be developed within the New Model Colony area. This is considered a *potentially significant* impact.

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to the long-term operation of the proposed project and other specific plan areas to be developed within the Ontario New Model Colony study area. Therefore, cumulative traffic-generated noise impacts have been assessed based on the contribution of the proposed project to the future cumulative base traffic volumes in the project vicinity. The noise levels associated with existing traffic volumes, cumulative base traffic volumes without the project, and cumulative base traffic volumes with the project are identified in Table 3.8-14, along with the contribution of traffic noise generated by the proposed project. As discussed in Section 3.8.4, under Thresholds of Significance, this EIR assumes that an increase of 5.0 dBA or greater over ambient noise levels is substantial and significant. Furthermore, this EIR also assumes that an increase in noise level of 3.0 dBA or greater over ambient noise levels is substantial and significant if the noise increase would meet or exceed the City's 65 dBA CNEL noise level standard at sensitive land uses. Any increase in noise level below 3.0 dBA is not considered perceptible and thus not significant.

As shown in Table 3.8-14, cumulative development along with the proposed project would result in noise level increases of 0.0 to 24.4 dBA CNEL along selected roadways in the project vicinity. Since the noise level at twelve off-site roadway segments would exceed the ambient noise significance thresholds assumed in this EIR (either 3.0 or 5.0 dBA CNEL, depending on the whether the City's 65 dBA CNEL noise level is met or exceeded), this is considered a significant cumulative impact. The increase in noise levels along the remaining four selected roadways would be less than the 3.0 or 5.0 dBA CNEL ambient noise significance thresholds, and therefore, would be less than significant.

Table 3.8-14 Cumulative Project Roadway Traffic Noise Impacts

Roadway Segment	Noise Levels in dBA CNEL						
	Existing Traffic Volumes	Cumulative Base Traffic [a]	Cumulative + Project Traffic	Cumulative Increase [b]	Project Contribution [c]	Significance Threshold	Significant Cumulative Impact?
Vineyard Avenue, north of Walnut Avenue	68.0	73.5	73.5	5.5	0.0	3.0	Yes
Vineyard Avenue, south of Walnut Avenue	65.5	72.8	72.9	7.4	0.1	3.0	Yes
Riverside Drive, west of Archibald Avenue	67.9	71.5	71.6	3.7	0.1	3.0	Yes
Riverside Drive, east of Archibald Avenue	67.6	71.5	71.6	4.0	0.1	3.0	Yes
Riverside Drive, east of Turner Avenue	67.0	71.4	71.5	4.5	0.1	3.0	Yes
Riverside Drive, east of Haven Avenue	65.9	72.9	73.0	7.1	0.1	3.0	Yes
Archibald Avenue, north of Riverside Drive	70.6	73.2	73.3	2.7	0.1	3.0	No
Archibald Avenue, south of Riverside Drive	67.7	73.2	73.4	5.7	0.2	3.0	Yes
Archibald Avenue, south of Chino Avenue	66.9	75.7	75.8	8.9	0.1	3.0	Yes
Turner Avenue, north of Riverside Drive	58.5	59.6	59.6	1.1	0.0	5.0	No
Turner Avenue, south of Riverside Drive	58.5	59.1	59.1	0.6	0.0	5.0	No
Turner Avenue, south of Chino Drive	56.9	56.4	56.4	(0.5)	0.0	5.0	No
Haven Avenue, north of Riverside Drive	65.2	68.4	68.5	3.3	0.1	3.0	Yes
Haven Avenue, south of Riverside Drive	58.9	69.6	69.6	10.7	0.0	5.0	Yes
Chino Avenue, east of Archibald Avenue	58.3	70.4	70.6	12.3	0.2	5.0	Yes
Chino Avenue, east of Turner Avenue	46.2	70.4	70.6	24.4	0.2	5.0	Yes

SOURCE: EIP Associates 2004 (calculation data and results are provided in Appendix G)

[a] Cumulative traffic generated by the following Ontario New Model Colony Specific Plans: West Haven, Edenglen, Legacy, Parkside, Park Place/Hettinga.

[b] Difference between Existing Traffic Volumes and Cumulative + Project Traffic Volumes.

[c] Difference between Cumulative Base Traffic and Cumulative + Project Traffic Volumes.

The project contribution to the cumulative traffic noise impacts are also shown in Table 3.8-14. As shown, the proposed project development would contribute from 0.0 to 0.2 dBA CNEL to future ambient noise levels. Based on this analysis, the 0.0 to 0.2 dBA CNEL contribution of the proposed project development to future roadway noise levels would not exceed the identified thresholds of significance and, therefore, would not be cumulatively considerable.

While significant cumulative noise impacts would result at twelve off-site roadway segments (as shown in Table 3.8-14) in the project vicinity, only three of these twelve off-site roadway segments are located adjacent to the proposed project. These three off-site roadway segments are shown in Figure 3.8-4. The proposed project's contribution to the cumulative traffic noise impacts at these three off-site roadway segments would not exceed the identified thresholds of significance for the project's contribution to cumulative noise impacts; therefore, the project's contribution to cumulative noise impacts is considered less than significant.

Nonetheless, the proposed project site would be subject to the cumulative noise impacts at the three roadway segments identified on Figure 3.8-4, resulting from increased traffic from other specific plan areas

to be developed within the New Model Colony area. Implementation of SOI GPA Policy 24.2.7 (SOI GPA EIR MM N-1 through MM N-4) would require an acoustical analysis report to be submitted to the City Engineer by the project developer prior to the issuance of a grading permit. The report must describe the cumulative effect of road noise on land uses at and surrounding the project site and, if necessary, recommend mitigation measures to attenuate that noise. In particular, the report must include specific design and mitigation features to ensure that the development would comply with the City's exterior and interior noise criteria. In order to further ensure that appropriate noise mitigation for the cumulative traffic noise impacts along the three off-site roadway segments adjacent to the project site is identified and carried forward in this project-specific EIR, MM NOI-3-SP is included to complement SOI GPA Policy 24.2.7 (SOI GPA EIR MM N-1 through MM N-4). MM NOI-3-SP would require the implementation of appropriate noise attenuation measures to be considered on the project site along the three off-site roadway segments adjacent to the project site, such that the interior noise levels of the residential uses at the project site would be maintained at or below City standards. With the incorporation of the noted mitigation measures, cumulative traffic impacts upon the project site would be reduced to a less than significant level.

3.8.7 Mitigation Measures and Residual Impacts

No feasible mitigation measures are available to fully mitigate the impacts associated with Impact NOI-1, although SOI GPA EIR MM N-6 and MM N-8 would serve to reduce impacts in some locations. Even so, impacts related to the exposure of sensitive uses within the project site to excessive groundborne vibration levels would remain significant and unavoidable.

Temporary construction impacts described in Impact NOI-2 would be reduced with the implementation of SOI GPA EIR MM N-6, MM N-7, MM N-8, and MM N-9, as well as project specific MM NOI-1-SP. However, even with the incorporation of the noted mitigation measures, impacts related to the exposure of sensitive on-site noise receptors to the generation of substantial temporary or periodic noise levels (resulting from construction activities) would remain significant and unavoidable.

As described in Impact NOI-3, impacts related to the exposure of on- and off-site sensitive noise receptors to a substantial permanent increase in off-site ambient noise levels would be less than significant with the incorporation of SOI GPA EIR MM N-1, MM N-2, MM N-3, MM N-4, and MM N-5, as well as project-specific MM NOI-2-SP (to minimize traffic noise impacts upon future on-site uses).

As described in Impact NOI-4, long-term noise impacts to off-site locations adjacent to the roadway segment of Chino Avenue east of Turner Avenue would be reduced to some degree by implementation of SOI GPA EIR MM N-1, MM N-2, MM N-3, and MM N-4. Even with the mitigation measures, impacts would remain significant and unavoidable due to the assumption that it may not be possible to fully mitigate the extremely elevated future ambient noise levels projected for this location.

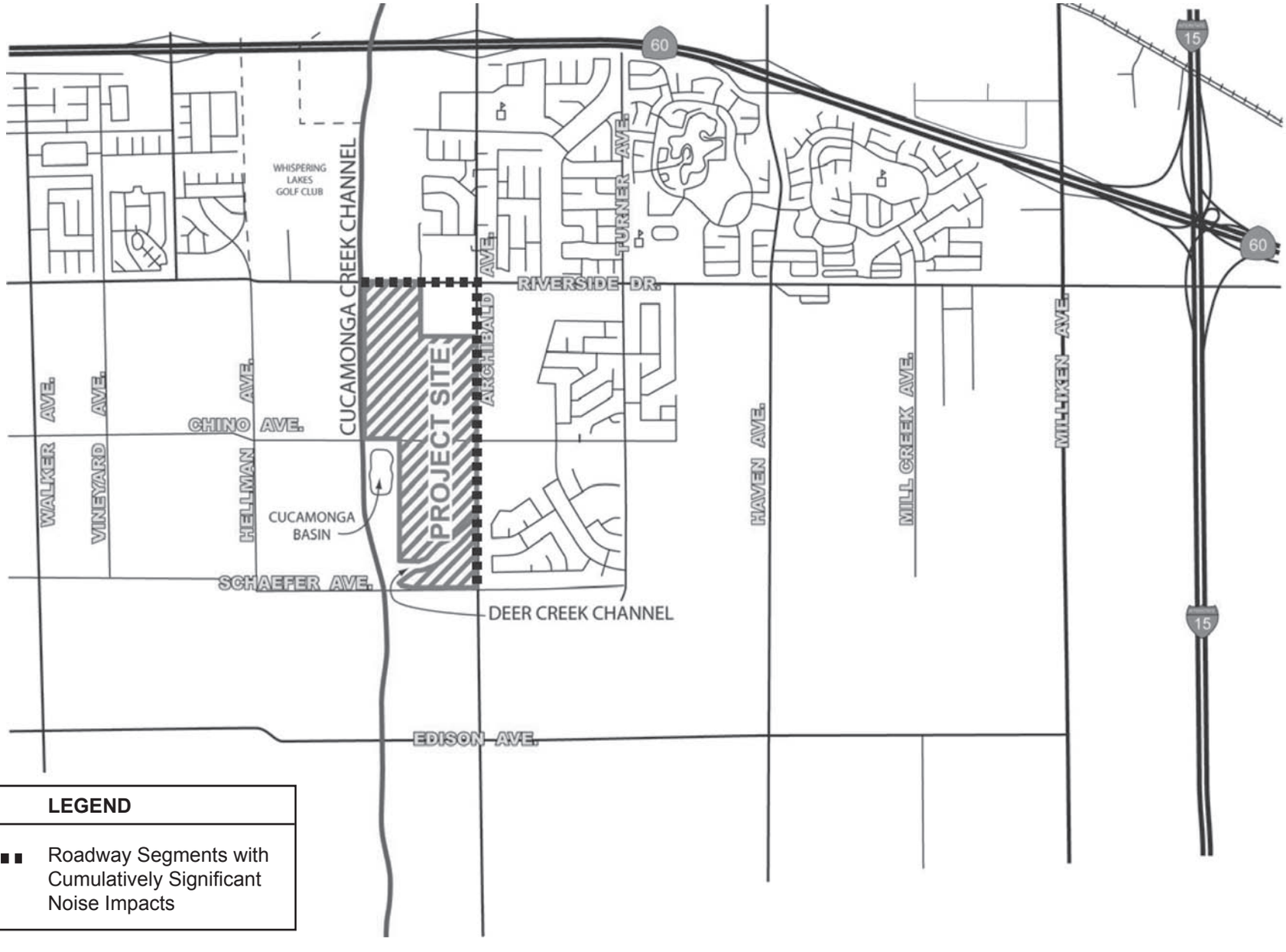


FIGURE **3.8-4**

Roadway Segments Adjacent to Proposed Project with Cumulatively Significant Noise Impacts

Not to Scale

10905-00

***Sources*:** Meritage Homes, 2004; EIP Associates, 2004

City of Ontario

EIP ASSOCIATES

As described in Impact NOI-5, long-term cumulative traffic noise levels affecting the project site, resulting from increased traffic from other specific plan areas to be developed within the New Model Colony area, would be less than significant at the project site with the incorporation of SOI GPA EIR MM N-1 through MM N-4, as well as project-specific MM NOI-3-SP.

Ontario SOI GPA EIR Mitigation Measures

MM N-1 *Prior to the issuance of building permits for the planning area in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Engineer by the project developer. The report shall describe the cumulative effect of road noise on surrounding land uses and recommend mitigation measures, if necessary, to attenuate that noise. If necessary, the City shall establish a noise attenuation fee program that requires developers in the Sphere of Influence area to make a fair share contribution to noise mitigation along some of roads surrounding the Sphere of Influence. The City of Ontario shall evaluate the need for such a fee program and establish participation guidelines prior to the issuance of grading permits.*

MM N-2 *Prior to the issuance of building permits for the planning areas in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Building Official and Planning Director by the project developer. The Report shall describe in detail the interior and exterior noise levels for residential uses on the site and the specific design and mitigation features to ensure compliance with the City's noise criteria of 65 dBA CNEL for outdoor living areas and 45 dBA CNEL in habitable rooms.*

MM N-3 *Prior to the issuance of building permits for planning areas in the Sphere of Influence area, the required location of noise barriers on the project site shall be detailed in the Acoustical Analysis Report. The Report shall specify the height, location, and types of barriers capable of achieving the desired mitigation affect.*

MM N-4 *Prior to the issuance of building permits for the planning areas in the Sphere of Influence area, the Acoustical Analysis Report shall identify those residential lots that may require mechanical ventilation to achieve interior noise standards. When the operable doors and windows are open for homes facing roadways, interior 45 dBA CNEL interior noise limit for these units may be exceeded. Therefore, a "windows closed" condition may be required for these units. Any proposed mechanical ventilation must meet the requirements of the* Uniform Building Code *(UBC) standard. It should be noted that the windows facing some roadways may be openable windows, but the homeowners would have the option to close the windows and still obtain adequate ventilation through the use of a mechanical ventilation system. This mechanical ventilation system shall supply two air changes per hour to each habitable room, including 20 percent (one-fifth) fresh make-up air obtained directly from the outdoors. The fresh air inlet duct shall be of sound attenuating construction and shall consist of a minimum of 10 feet of straight or curved duct or 6 feet plus one sharp 90-degree bend. The City Building Official shall ensure that the Acoustical Analysis Report identifies any requirements for mechanical ventilation for individual onsite residential units.*

MM N-5 *All prospective owners and occupants of residential units on the project site shall be formally notified prior to purchase, lease or rental, that certain units (without windows and doors closed), and outdoor areas could be subject to noise levels above City standards for residential uses. Such notification shall be in language approved by the City Planning Department, and shall be formalized in written Covenants, Conditions, and Restrictions (CC&Rs) recorded on the title of each residential lot in the project. In addition, each advertisement, solicitation and sales brochure or other literature regarding the project shall contain the approved notification language.*

MM N-6 *Construction on the Sphere of Influence site shall be limited to the hours of 7:00 A.M. to 7:00 P.M. Monday through Saturday, and shall be prohibited on Sundays and federal holidays.*

MM N-7 *All project construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.*

MM N-8 *Stockpiling and/or vehicle staging areas shall be located as far as practical from existing residential units on and off the proposed project site.*

MM N-9 *Whenever feasible, the noisiest construction operations should be scheduled to occur together to avoid continuing periods of the greatest annoyance.*

Project-Specific Mitigation Measures

MM NOI-1-SP *The project contractor(s) shall implement, but not be limited to, the following best management practices:*

- *Outdoor construction work on the project shall be limited to the hours of 7:00 A.M. to 7:00 P.M. on weekdays and Saturdays. No construction activities shall occur on Sundays or federal holidays.*
- *All construction equipment with a high noise generating potential, including all equipment powered by internal combustion engines, shall be muffled or controlled.*
- *All stationary noise generating equipment, such as compressors, shall be located as far as possible from existing houses.*
- *Machinery, including motors, shall be turned off when not in use.*
- *Mobile equipment shall not be allowed to run idle near existing residences.*
- *Neighbors within 200 feet of major construction areas shall be notified of the construction schedule in writing, prior to construction; the project sponsor shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise; the coordinator (who may be an employee of the developer or general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented; a telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site.*

- *Temporary noise barriers shall be installed where feasible and appropriate between the project construction areas and existing and future residences. Barriers shall be at least 10 feet in height.*

MM NOI-2-SP *Once the precise location is known for future on-site residential units located adjacent to the segment of Archibald Avenue south of Chino Avenue, the applicant/developer shall conduct a focused study of future outdoor and indoor long-term traffic noise at these affected onsite locations and submit the report for review and approval to the City. If it is determined that indoor noise levels at the future on-site residential units would exceed applicable City thresholds, the developer shall design and construct noise barriers and/or provide enhanced noise insulation at the affected on-site residential locations. The noise barriers or insulation shall be designed to ensure that indoor noise levels are below City indoor noise threshold criteria.*

MM NOI-3-SP *The Acoustical Analysis Report that will be submitted to the City Building Official and Planning Director by the project developer prior to the issuance of a grading permit, as required under the City of Ontario SOI GPA Policy 24.2.7 (SOI GPA EIR MM N-1 through MM N-4), shall consider the implementation of appropriate noise attenuation measures for the on-site residential uses to ensure that cumulative traffic noise levels generated from the adjacent off-site roadway would not exceed the City's indoor noise threshold criteria. The noise attenuation measures may include the construction of sound walls, dual-glazed windows, and additional wall insulation along the project site boundary adjacent to these off-site roadways. Locations where these noise attenuation measures to reduce cumulative traffic noise impacts should be considered include:*

- *Roadway segment of Riverside Drive west of Archibald Avenue*
- *Roadway segment of Archibald Avenue south of Riverside Drive*
- *Roadway segment of Archibald Avenue south of Chino Avenue*

3.9 PUBLIC SERVICES

This section describes the existing conditions of public services in the proposed Specific Plan Area and analyzes the potential for implementation of the proposed project to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools or parks. The Initial Study (Appendix A) determined that impacts on other public facilities such as libraries and museums to be less than significant and scoped out further analysis in the EIR. No letters regarding public services have been received in response to the Notice of Preparation and Initial Study prepared for the proposed project and circulated for public comment.

Information from this section is based on the *City of Ontario General Plan*, the *City of Ontario Sphere of Influence General Plan Amendment*, and the *City the of Ontario Municipal Code*. In addition, agencies providing these public services were contacted to obtain information regarding available service levels and current or anticipated constraints to serving the proposed development. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

3.9.1 Existing Conditions

Fire Protection Services

The proposed project site would be served by the City of Ontario Fire Department (OFD; the Department). The Department currently consists of eight stations. Table 3.9-1 (City of Ontario Fire Protection Services) presents the station number, locations, equipment, and current 24-hour staffing of the OFD. Station 136, located at 2931 Philadelphia Street, is north of the proposed project site. The Department has a goal to achieve an average response time to all emergency calls within eight minutes. To be consistent with the City's General Plan, fire protection services planned for the Ontario Sphere of Influence (SOI) planning area would be subject to the goal of an average response time of eight minutes.

The Department serves an area of 50 square miles and provides Emergency Medical Dispatch (EMD), Basic Life Support/AED (EMT-1), and Advanced Life Support (EMT-P). The Department maintains a mutual-aid agreement with the Operation Area and State of California and receives first alarm automatic-aid from the following fire departments:

- Chino Valley Fire Department District—Fire Stations 63 and 65
- Montclair Fire Department—Fire Stations 151 and 152
- Ontario Airport Fire Department
- Rancho Cucamonga Fire Department—Fire Stations 172 and 174
- San Bernardino County Fire Department—Central Valley Battalion Fire Stations 74 and 72
- Upland Fire Department—Fire Station 161

Table 3.9-1 City of Ontario Fire Protection Services

Station	Location	Equipment/Unit Type	Staffing	EMT-P	EMT-1	24 Hours
131	425 E. "B" Street	Medic Engine (ME)-131	4	2	2	Yes
		Truck Company (T)-131	4	—	4	Yes
		Battalion Supervisor (B)-1815	1	—	—	Yes
		Investigator (1)-1850	1	—	—	Yes
		Explosive Ordinance Device (EOD)-131	(2)*	—	—	Yes
		Utility (U)-131	(1)*	—	—	Yes
132	544 W. Francis Street	ME-132	4	2	2	Yes
		Office of Emergency Services (OES)-229	(4)*	—	—	Yes
133	1408 E. Francis Street	ME-133	4	2	2	Yes
		Water Tender (WT)-133	(2)*	—	—	Yes
		T-133R	(4)	—	—	Training
		Engine (E) Reserve Unit-133R	(4)	—	—	Reserve
134	1004 N. Mountain Avenue	ME-134	4	2	2	Yes
		134-R	(4)	—	—	Reserve
135	1530 E. 4th Street	ME-135	4	2	2	Yes
		135-R	(4)	—	—	Reserve
136	2931 Philadelphia Street	ME-136	4	2	2	Yes
		B-1825	1	—	—	Yes
		Brush Engine (BE)-136	(4)*	—	—	Yes
		E-136	(4)	—	—	Reserve
137	5400 E. Jurupa Street	ME-137	4	2	2	Yes
138	31429 E. Shelby Avenue	ME-138	4	2	2	Yes
		T-138	4	—	4	Yes
		HR-138	(2)*	—	—	Yes
		U-138	(1)*	—	—	Yes
		HM (HazMat Unit)-501	(2)*	—	—	Yes

SOURCE: City of Ontario Fire Department 2004

* cross-staffed with on-duty personnel

( ) = indicates unit personnel capacity

With regard to water supply infrastructure available to fight fires, the Department of Public Works has undergone major changes over the past five years. There has been a significant addition of water lines and water storage capacity. Specifically, the water system capacity has been increased by nine million gallons (mg) (Clark 2004).

Police Protection

The NMC is currently served by the Ontario Police Department (OPD). The OPD operates its main station and police headquarters at 2500 South Archibald Avenue. The headquarters are located less than two miles from the proposed Specific Plan Area and would serve the project area. Three additional satellite stations also serve the City.

The OPD consists of three separate bureaus. The Uniform Bureau includes all uniformed activities. There are four patrol "watches," each of which is under the direct command of a police lieutenant. The Community Policing (COPS) Division, the Traffic Division, the Mills Sub-station, and the Special Weapons and Tactics (SWAT) Team are all under the Uniform Bureau. The Investigations Bureau is divided into four separate sections: Crimes Against Persons, which includes Sex Crimes, Robbery, Homicide, Assaults, and Domestic Violence; and Crimes Against Property, which includes Burglary, Fraud, and Auto-Theft; Narcotics; and Forensics. The Services Bureau provides support for all other divisions and consists of the Communications Division, Records Division, Personnel Division, Training Division, DARE Unit, and a Crime Prevention Unit.

Currently, the OPD is staffed with 223 officers. At a population of over 167,000 residents, the City maintains a personnel-to-population ratio of approximately 1.37 officers and per thousand residents. The OPD considers the personnel-to-population ratio as well as the equipment level acceptable (Bartlett 2004).

The OPD is in the process of conducting a workload study to assist in projecting the staffing needs for the Old Model Colony. The staffing requirement for the NMC has been established at 1.37 officers per thousand residents. As currently staffed, the OPD cannot adequately provide police protection for this project site without an increase in staffing (Bartlett 2005).

Officers are dispatched to calls for response from their beat; therefore, response times vary depending on the responding officers' distance to the call when it comes in. Statistics for 2003 show response times for Priority 1 calls (highest priority response request) five minutes 54 seconds. The OPD's response goal during this time was five minutes 35 seconds. The OPD considers this response time acceptable (Bartlett 2004).

The OPD divides crimes into two major categories: Part I and Part II crimes. Part I crimes consist of the most serious crimes including murder, manslaughter, forced rape, robbery, aggravated assault, burglary, grand theft, auto theft, and arson. Part II crimes include events such as malicious mischief, suicide attempts, accidental injuries, accidental deaths, missing persons, and other events. Table 3.9-2 presents the 2001 through 2003 data for Part I Crimes reported to the OPD. According to this data, Part I crimes decreased slightly from 2001 to 2002 but increased again in 2003.

Table 3.9-2 Crime Statistics—Ontario Police Department

Part I Crime	*2001*	*2002*	*2003*
Homicide	11	7	9
Rape	68	48	41
Robbery	395	355	300
Felony Assault	530	454	427
Burglary	1,460	1,240	2,123
Vehicle Theft	1,862	1,780	2,123
Arson	95	112	113
Total	*4,421*	*3,996*	*5,136*

SOURCE: Ontario Police Department. 2004

Schools

Three different public school districts consisting of 31 schools provide service to the City of Ontario. The Mountain View School District (MVSD) and the Ontario Montclair School District (OMSD) serve the K-8 needs of the City and Chaffey Joint Union High School District (CJUHSD) serves the 9–12 school needs. The OMSD would not serve the proposed project area but will continue to serve the K–8 educational needs for the remainder of the City. Table 3.9-3 provides information on the schools serving the proposed project area and their capacity.

CJUHSD is a system of nine regional high schools, four of which are in the City of Ontario. Colony High School of the CJUHSD would provide 9–12 service to the proposed Specific Plan Area. As Table 3.9-1 indicates, current enrollment is 2,416, and the school has a design capacity for 2,500 students.

The Mountain View Elementary School and the Grace Yokley Middle School of the MVSD would provide K–5 and 6–8 educational facilities, respectively. The MVSD consists of four K–8 schools and serves the southeast portion of the City of Ontario. Expansion of Grace Yokley Middle School is currently underway. Upon completion, the district will have 12 additional science classrooms and a gymnasium that will serve to accommodate performances and other activities of the students (Mountain View School District 2004). Both schools are above design capacity and are currently accommodating students in re-locatable classrooms. The Mountain View Elementary School site has capacity for approximately 100 additional students and Grace Yokley has capacity for approximately 80 additional students (Newby 2004).

Table 3.9-3 Schools Serving the City of Ontario

Mountain View School District				
School Name	*Address*	*Grade Levels*	*Current Enrollment*	*Remaining Capacity*
Mountain View Elementary School	2825 Walnut Street (Ontario)	K–5	632	100
Grace Yokley Middle School	2947 South Turner Avenue (Ontario)	6–8	1,228	80
		Total District Enrollment/Capacity	*3,482*	
Chaffey Joint Union High School District				
Colony High School	3850 E. Riverside Drive (Ontario)	9–12	2,416	84
		Total District Enrollment/Capacity	*23,341*	

SOURCE: California Department of Education 2004

Parks

The City of Ontario Public Works department oversees the operation and maintenance of parks, open space, and recreational facilities in the City. The City currently has 201 acres of developed parks and playgrounds within its jurisdiction (Chase 2004). In addition, the City maintains over 110 acres of public open space, including the Euclid Avenue Parkway and the grounds surrounding the Ontario Civic Center. City parks and recreation opportunities are supplemented by school district recreation areas and a local recreation park provided by the City (City of Ontario 1992).

The City recommends compliance with National Recreation and Park Association (NRPA) standards which requires at least 5 acres of parkland per 1,000 residents of "local or close to home open space". "Local or close to home open space" refers to mini-parks, neighborhood parks/playgrounds, and community parks. Currently the City's 21 parks total 201 acres. With the current population of 168,268, the City maintains 1.2 acres of parkland per 1,000 residents (Chase 2004). The current inventory is low and does not meet the City's service goal. However, the City has a stated goal to increase the ratio unless acreage requirements change due to modifications to City Standards (City of Ontario 1998).

3.9.2 Regulatory Framework

Federal

There are no federal regulations related to public services that apply to the proposed project.

State

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use,

provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and premises. The Code contains specialized technical regulations related to fire and life safety.

Applicable SOI GPA Policies

Policy 3.2.1 *Require the provision of infrastructure needed to support anticipated residential development and ensure the proper integration of all services.*

Policy 10.1.1 *Ensure that fire facilities and personnel are expanded to serve the needs of the estimated 101,845 Sphere of Influence residents and to maintain the City's existing standard for a 5 minute response time. Provision of fire protection and emergency medical service may vary from this standard, based on future modifications created by the City of Ontario.*

Policy 1.16.9 *Design public greenways and open spaces to ensure public safety through the avoidance of physically and visually isolated spaces, maintenance of visibility and accessibility, use of lighting, and other "defensible" space concepts.*

Policy 9.2.1 *Working with the Police Department, require Specific Plans to incorporate defensible space designs. These designs should help ensure maximum visibility and security for entrances, pathways, and corridors, as well as open space (both public and private) and parking lots/structures.*

Policy 9.1.1 *Increase Police Department force by an estimated 163 sworn police officers and 102 non-sworn civilian personnel in order to accommodate the estimated 101,845 Sphere of Influence residents based on the City's existing standard of 1.6 sworn officers per thousand residents and 1.0 non-sworn civilian support personnel per thousand residents. The number of sworn officers and non-sworn personnel may vary based on future modifications of the City of Ontario's service standard.*

Policy 9.1.2 *Periodically evaluate population growth, development characteristics, level of service (response time and staffing), and incidence of crime in the Sphere of Influence to ensure that an adequate level of police protection is maintained.*

Policy 8.1.1 *Work with the school districts to ensure that school facilities and programs are expanded to commensurate with the Sphere of Influence's population growth and development.*

Policy 8.1.10 *Work with the school districts to ensure that the full cost of school facilities and services unique to the Sphere of Influence are funded through development mitigation fees, to the extent permitted by state law, bonding, grants, and other available resources.*

Policy 8.1.2 *Consider using creative methods for financing community facilities to facilitate the establishment of the schools.*

Applicable General Plan Policies

Hazards Element

Policy 3.1 *Develop fire facilities to ensure levels of service consistent with City policies.*

Policy 3.5 *Maintain a Citywide response time of five minutes or less for existing and new development.*

Policy 3.6 *Continue Fire Department review of proposed new development must be consistent with the fire and life safety objectives of the City.*

Policy 3.7 *Development shall be consistent with City fire flow requirements.*

Infrastructure Element

Policy 7.1 *At the earliest possible stage of development, coordinate the planning and siting of school facilities, recreational facilities, childcare centers, libraries, and other related public facilities so that they are adequate to serve the projected future residents of the area.*

Policy 8.1 *Work with the public facility providers to ensure that, where feasible, public facilities are sited in locations most suitable to serve the present and the projected future residents of the City.*

Policy 8.2 *Use General Plan amendments to identify the general location of proposed schools and other complementary facilities.*

Policy 8.3 *Encourage local agencies, school districts, and jurisdictions of the region to coordinate standards, policies, and criteria for the funding and siting of school facilities.*

Policy 9.1 *Establish a joint task force comprised of City staff, representatives of the School Districts serving the City, and the building industry to (a) explore and define the extent of a potential partnership between the City and the School Districts as it related to the provision of adequate school facilities; (b) explore means of developing and funding new school construction, and upgrading existing facilities.*

Policy 9.2 *Actively support efforts to increase funding and new school construction and improvements at inadequate existing facilities.*

Policy 10.2 *Provide an adequate site for new police facilities, as outlined in the department's 10-year plan, whether or not it is to be combined with new fire department facilities..*

Policy 10.3 *The Police Department will continue to enforce the Ontario Building Security Code (Ontario Municipal Code 4-11.01).*

Policy 10.4 *The City shall add new personnel, equipment, and facilities as needed to protect additional population.*

Policy 10.5 *Continue Police Department Review of purposed new development.*

Aesthetic, Cultural, Recreational, and Open Space Element

Policy 1.1 *Utilize City taxing authority to ensure that new residential development is provided with public open space/recreational amenities.*

Policy 1.2 *Within context of the Park Master Plan, explore all available funding sources and alternatives for acquisition, development and in particular maintenance of parks and open space, lands including user fees, benefit/assessment districts, and support by local businesses and industry.*

Policy 1.4 *Maintain a mix of passive open space and improved recreational areas in City parks and recreational facilities.*

Policy 1.7 *Encourage the provision of active and passive open spaces by developers within industrial areas such as parks, gold courses, and outdoor picnic areas.*

Policy 1.9 *Update the City's Master Plan for Parks and Bike Trails.*

Policy 2.1 *Provide a neighborhood park within convenience walking distance for all residents.*

Policy 2.2 *Maintain a system of community parks so that each residential neighborhood is within a community park area.*

Policy 3.1 *In areas of potential annexation, identify and acquire future park sites early in the planning process.*

Policy 3.3 *Avoid division of a park service area by natural barriers, such as major streets or freeways, railroads, utility easements, flood control channels or community or industrial areas.*

Policy 3.4 *Ensure safe pedestrian and bicycle access by provision of bike paths and sidewalks leading to parks.*

Policy 3.5 *Where feasible, allow for linkage of new park sites into existing trail systems.*

Policy 4.2 *Include new pedestrian and equestrian trails and bikeways in new development under development code and specific plan procedures.*

3.9.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on Public Services if it would result in any of the following:

- The provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
  - Fire protection
  - Police Protection
  - Schools
  - Parks

3.9.4 Project Impacts

Potentially Significant

Impact PS-1 **Development of additional residential units would result in an increase in the number of students within the school district serving the site, and**

increase demands upon school facilities. This impact is considered *potentially significant*.

Implementation of the proposed Specific Plan would increase demands on the high school district and elementary/junior high school districts serving the project site. As shown in Table 3.9-4, development of the proposed 819 single family residential units would result in the addition of a total of 730 students to the CJUHSD and MVSD.

Table 3.9-4 Students from Project Buildout

School Level	*Generation Factor (residential units)*	*Number of Additional Residential Units*	*Number of Additional Students*
Mountain View School District	0.63 students/housing unit	819	533
Chaffey Joint Union High School District	0.24 students/ housing unit	819	197
Total Students	—	—	*730*

SOURCES: Mountain View School District 2004; Chaffey Joint Union High School District 2004

As discussed in Section 3.9.1 (Existing Conditions), enrollment at Chaffey Joint Union HSD is currently operating at near capacity. Thus, at CJUHSD would exceed capacity by 113 students upon project implementation. There are currently no plans for new school construction (Tiberi 2004). The School district has indicated, however, that it can accommodate this increase in demand through purchase or lease of portable classrooms (Tiberi 2004).

Development of the proposed project would increase enrollment at MVSD schools to a level that could result in overcrowding. As mentioned in Section 3.9.1 (Existing Conditions) Grace Yorkley Junior High School is currently undergoing an expansion. This additional space may serve to accommodate a portion of additional enrollment. Further, development of a new school facility in the MVSD would relieve the increases in enrollment expected from project implementation (Tiberi 2004). The MVSD employs a Facility Needs Analysis which considers the proposed project site size, existing classroom capacity and the support programs needed to support a population (Tiberi 2004). Thus, it is anticipated that the Mountain View School District and the City of Ontario would coordinate the expansion or siting of additional facilities that would adequately serve the project area.

SOI GPA Policy 8.1.1 states that the City must work with the school districts to ensure that school facilities are expanded to accommodate growth in the NMC areas. As described in Chapter 2 (Project Description), construction of the proposed project is expected to begin in 2006. While it is anticipated that the Mountain View SD and the City would coordinate to expand facilities, school construction is not yet scheduled to begin. As such, it is anticipated that school facilities would not be available immediately for new residents of the proposed project area. Impacts are, therefore, potentially significant. Implementation of MM PS-1, however, would reduce this impact to a ***less-than-significant*** level.

Less-than-Significant Impacts

Impact PS-2 The proposed project would add residential uses to the area and would increase demands upon fire protection services. This impact is considered *less than significant*.

Implementation of the proposed project would add 819 new housing units. As discussed, the proposed project would be served by Station 136, which is located north of the project site. The OFD has indicated that it is currently undergoing the planning for expansion of facilities, staff, and equipment to accommodate the increased population from the proposed development (Clark 2004). As discussed in Section 3.9.1, the OFD has an established response time goal of eight minutes. The OFD does not permit service levels to fall below establish standards (Clark 2004). The City of Ontario Fire Department has a goal to achieve an average response time to all emergency calls within eight minutes. To be consistent with the City's General Plan, fire protection services planned for the SOI planning area would be subject to the goal of an average response time of eight minutes. It is, therefore, not anticipated that the increase in residential units would result in a decrease in service response time.

The proposed project would be consistent with SOI GPA Policy 10.1.1 through a planned expansion of existing fire services to be coordinated by the OFD and the applicant and which may include the payment of development mitigation fees. This policy ensures that additional fire protection facilities will be provided as development in the Sphere of Influence occurs. In addition, SOI GPA Policy 10.1.1 as well as General Plan Policy 3.5 state that future expansions of fire facilities must adhere to the City's established response time standards unless the City makes future modifications to established response time goals.

As mentioned previously, the proposed project area currently lacks water supply infrastructure for fire protection. It is anticipated, however, that the OFD will connect to planned infrastructure provided by the Ontario Department of Public Works in the proposed project area. It is also anticipated that infrastructure for fire protection services would coincide with the construction of housing and will, thus, be in place upon occupation of the proposed project site. The quantity of water required for fire protection (i.e., fire flows) varies and is dependent upon factors that are specific to each particular building, such as the floor area, type of construction, expected occupancy, type of activities conducted within the building and the distance to adjacent buildings. General Plan policy 3.6 ensures that the Ontario Fire Department reviews and approves all individual plans prior to construction to ensure that adequate fire flows would be established (including localized pipe upgrades or connections that might be required to connect new buildings to the system), and adequate number of fire hydrants would be provided in the appropriate locations, and circulation and design features would allow adequate emergency vehicle access in compliance with the Ontario Municipal Code. In addition, the proposed project would continue to comply with all regulations of California Health and Safety Code Sections 1300 et seq. pertaining to fire protection services, including provision of state-mandated smoke alarms, fire extinguishers, appropriate building access, and emergency response notification systems. The Fire Department would also comply with General Policy 3.5 and SOI GPA Policy 3.7, which ensure development complies with City-established fire flow requirements. Impacts would, thus, be ***less than significant*** and no mitigation is required.

Impact PS-3 The proposed project would add residential uses to the area and would increase demand upon police protection. This impact is considered *less than significant*.

As discussed in Section 3.9.1, the existing service standard is 1.37 sworn officers per 1,000 residents. In addition, the equipment that is required to maintain an adequate existing level of service is considered acceptable. In the absence of additional police facilities, the proposed project would increase the area served by the current staff of the OPD and increase service demands. The OPD has indicated that, upon project implementation, it is its policy to maintain an adequate level of service throughout the City. The proposed project would increase the local population by 2,949 persons. This would decrease the service ratio of officers to population served. The OPD is preparing a workload study in order to project future department needs, and NMC development, including the proposed project, is included in this study (Bartlett 2004).

The proposed project would be consistent with SOI GPA Policies 9.1.1 and 9.1.2 which address the necessary increase in Police Department Service to accommodate growth in the NMC area. The proposed project's consistency with the aforementioned policies may be maintained through the payment of development mitigation fees. Both Policy 9.1.1 and 9.1.2 outline the importance of maintaining established service levels. Generally, the OPD would consider impacts to occur if the ratio sworn officers to population or the response times decreased substantially. As mentioned in Section 3.9.1, the OPD has maintained what it considers an acceptable response time. Impacts would be ***less than significant***.

Impact PS-4 Development of the proposed project contributes to a shortage of parkland, which could result in the need for new or altered facilities. This impact is considered *less than significant*.

Implementation of the proposed project would include the development of 819 residential units in a previously non-residential area. The proposed Specific Plan Area includes the development of a total of approximately 5.75 acres of parkland in three key areas within the proposed project site. These parks would be informal play areas and passive recreational opportunities for residents and would be served by the landscaped paseos.

The proposed Specific Plan Area would also include a series of enhanced parkways. These parkways will be developed adjacent to the right of way of all arterial streets adjacent to the proposed project area, and include, for instance, pedestrian/bike trains within the parkways.

Approximately 4.36 acres within the project area would be developed as a landscaped neighborhood paseos, providing connectivity within the community and a unifying element linking Planning Area 1 and Planning Area 2. Multi-use pathways will traverse these areas and provide bicycle and pedestrian access to both local parks within the community Westwind Park and Whispering Lakes Golf Course to the north and northwest, commercial uses to the east, and public school facilities to the southeast. The parkway and paseo areas would not be included in the City's parkland to population ratio but would contribute to the City's open space area.

The current park acreage to population ratio in the City of Ontario is 1.2 acres per 1,000 residents. With a total of 5.75 acres of parkland included in the project site and 2,949 new residents associated with the project, there would be 1.9 acres of parkland per 1,000 residents on the project site. The project would therefore increase the overall supply of parkland in the City and slightly improve the ratio of parkland to population. Impacts are considered ***less than significant***.

3.9.5 Cumulative Impacts

The geographic context for the analysis of public services is the City of Ontario, as represented by the City of Ontario General Plan and Sphere of Influence General Plan Amendment, and all approved or potential projects identified in Section 2.9 (Cumulative Projects and Impact Analysis Methodology).

Police and Fire Protection

As additional development occurs in the NMC area, there may be an overall increase in the demand for law enforcement and fire protection services, including personnel equipment, and/or facilities. However, increased in demand are routinely assessed by these agencies as dictated by SOI GPA policies 10.1.1 (fire) and 9.1.1 (police) as well as part of an annual monitoring and budgeting process. The law enforcement and fire protection services in the City are anticipated to be adequate to serve existing development. These service providers have anticipated development in the NMC and considered the project, in conjunction with other Specific Plans in the area, in their planning processes. The cumulative impact, therefore, on police and fire services in the City and the NMC area would be ***less than significant***. The proposed project's contribution to this cumulative impact is also ***less than significant***, since the NMC area can be served within the established response times and distances for the OFD, while providing adequate fire flows. This is not considered a cumulatively considerable impact due to planned expansion of fire facilities within the NMC area.

Schools

Implementation of the proposed project combined with other residential development in the NMC area would result in substantial additional demand on local school districts. The students that could be generated from the proposed project would contribute to an increase in students in the district that would likely require additional facilities in order to accommodate demand. The proposed project, along with other foreseeable development, would be required to bear its fair share of the cost of providing additional school services. This would be accomplished through payment of statutory school fees. Per Government Code Sec. 65996, developer impact fees are the exclusive method for mitigating impacts on school facilities. Therefore, cumulative impacts would be ***less than significant***, and the project would have a ***less than significant*** contribution to this effect.

Parkland

Implementation of the proposed project combined with other residential development in the NMC area would result in additional demands on parkland. Each project would include parkland within its Specific Plan in order to accommodate increased demands. Further, the SOI GPA includes the framework for creation of parkland to serve the area. As such, upon ultimate buildout of the area, a network of parks would be created that would improve the quantity and type of City parkland. Cumulative impacts would be ***less than significant***, and the project would have a ***less than significant*** contribution to this effect.

3.9.6 Mitigation Measures and Residual Impacts

Ontario SOI GPA EIR Mitigation Measures

No SOI GPA EIR mitigation measures would apply.

Project-Specific Mitigation Measures

MM PS-1-SP *Consistent with current requirements, the developer shall pay statutory school fees in effect at the time of issuance of building permits to the MVD and CJUHSD for school facilities, thus ensuring that the new development would bear its fair share of the cost of housing additional students generated.*

Implementation of MM PS-1-SP would ensure payment of school impact fees to address impacts associated with student overcrowding on the relevant school districts as described in Impact PS-1. Per Government Code Sec. 65996, developer impact fees are the exclusive method for mitigating impacts on school facilities. Therefore, impacts on schools as described under Impact PS-1 would be reduced to less than significant.

3.10 TRANSPORTATION/TRAFFIC

3.10.1 Introduction

This EIR section analyzes the potential for adverse impacts on existing transportation and traffic conditions resulting from implementation of the proposed Countryside Specific Plan. The Initial Study (Appendix A) identified the potential for impacts associated with increased number of vehicle trips and traffic congestion, exceeding established levels of service of the San Bernardino County (the County) congestion management agency, and increased hazards due to design features. Issues scoped out from detailed analysis in the EIR include changes in air traffic patterns, inadequate emergency access, inadequate parking capacity, as well as conflict with adopted policies, plans, or programs supporting alternative transportation as a result of the proposed project. Data used to prepare this section were taken from the City of Ontario's (the City) General Plan Transportation Element and the Traffic Impact Analysis Report prepared for the project site (Appendix H). Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

3.10.2 Existing Conditions

This section provides an assessment of existing conditions in the project study area, including a description of the street and highway system, traffic volumes on these facilities, and operating conditions of the selected intersections.

Street Network

Figure 3.10-1 (Project Vicinity) illustrates the location of the proposed project site in relation to the surrounding street network. The project is located on the north by Riverside Drive and on the south by Schaefer Avenue. The project site is bounded on the west by the Cucamonga Creek Channel and on the east by Archibald Avenue.

Site Access and Circulation

Figure 3.10-2 (Project Site Access and Internal Circulation) illustrates the proposed internal circulation and principal points of vehicular access to the surrounding street network. Principal vehicular access to the project site would be provided via Archibald Avenue, Riverside Drive, Chino Avenue, and Schaefer Avenue.

Street "A" is a north/south local collector street located in Neighborhood 1. It connects to Riverside Drive and Chino Avenue forming two T-intersections. The Street "A" approaches represents traffic exiting the northern portion of the project site, while turning movement from Riverside Drive and Chino Avenue represent traffic entering the project site.

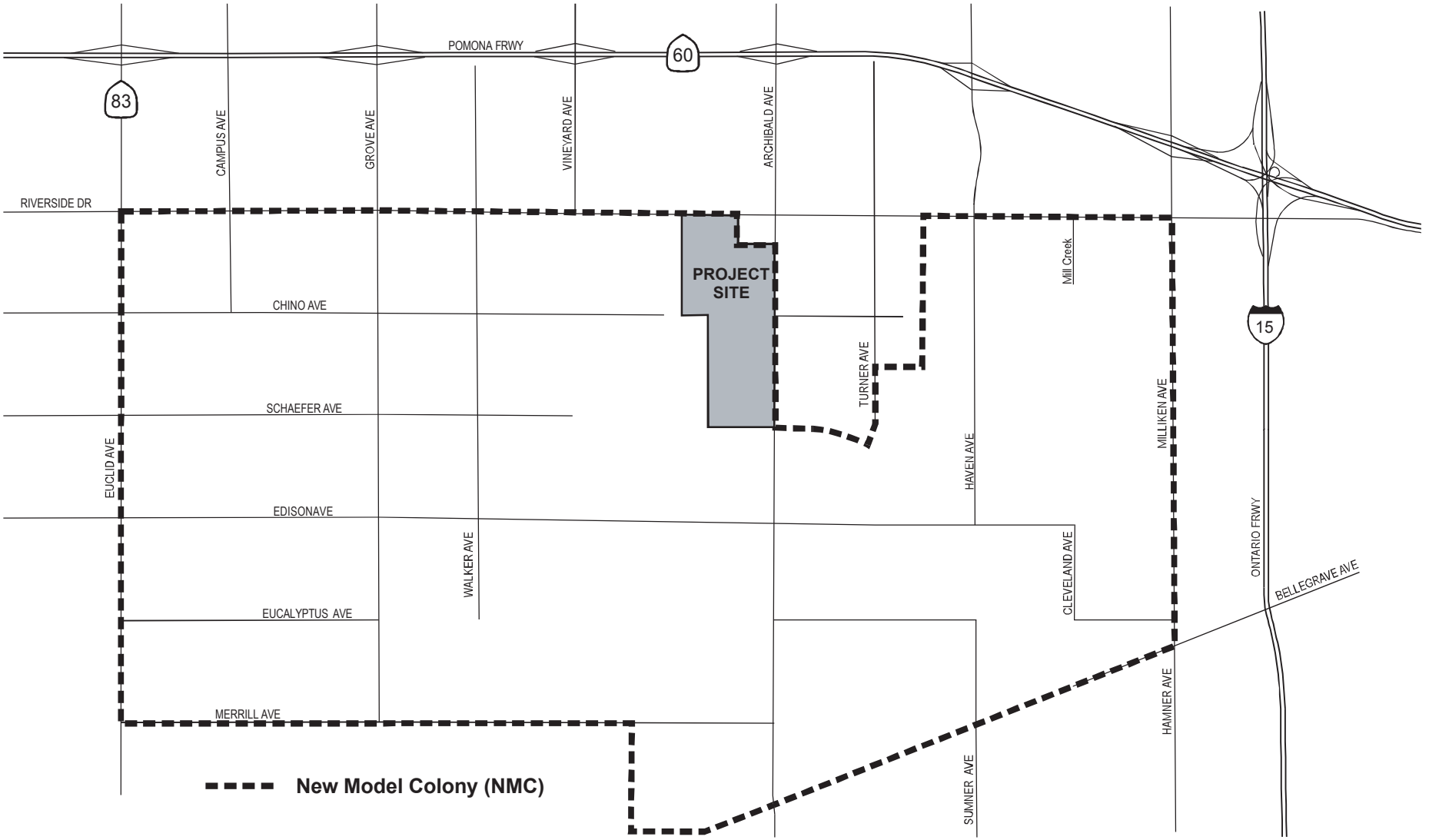


FIGURE **3.10-1**

Project Vicinity

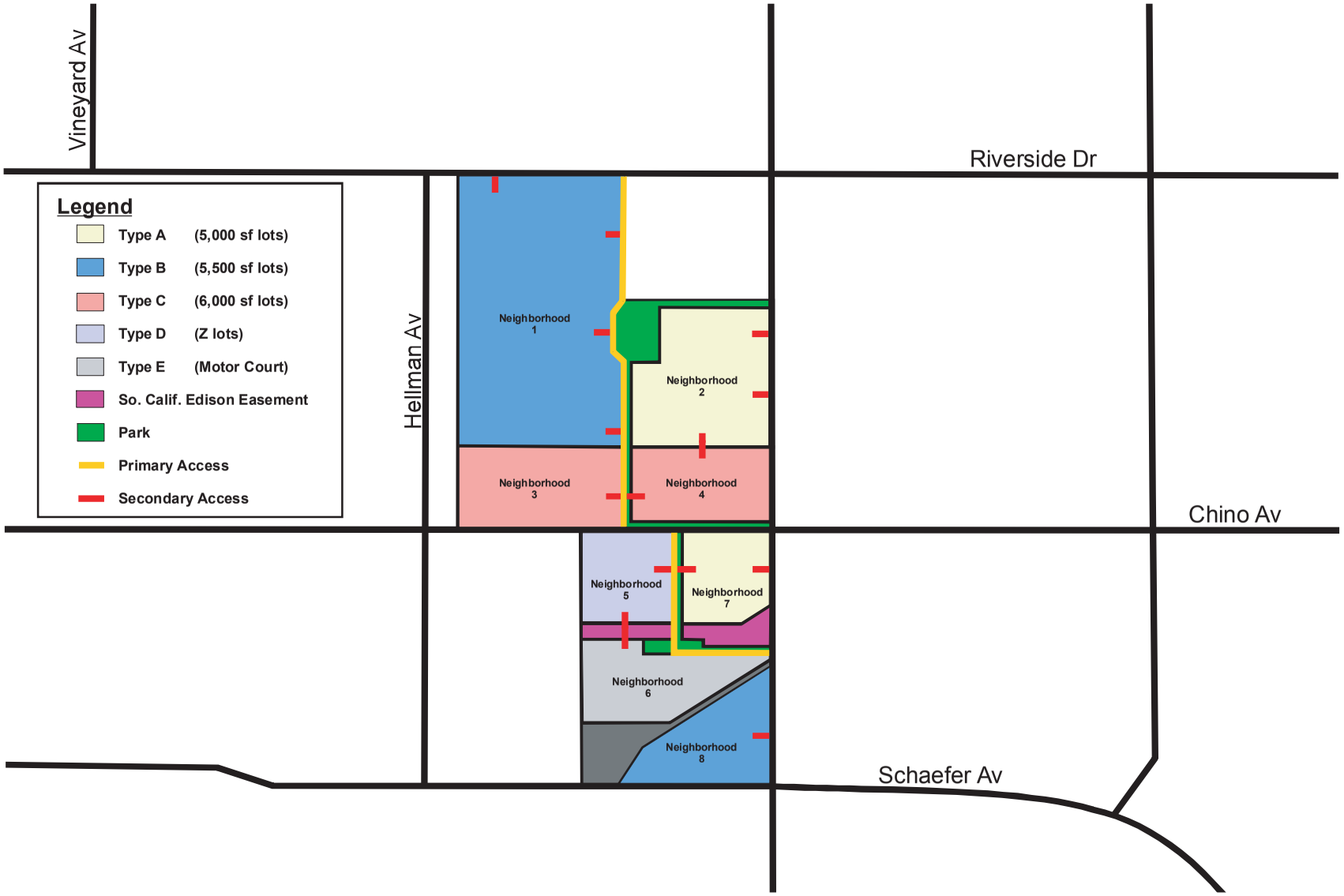
10905-00

Source: Meyer, Mohhades Associates

City of Ontario

Not to Scale

EIP ASSOCIATES



10905-00

FIGURE **3.10-2**

Project Site Access and Internal Circulation

Source: Meyer, Mohhades Associates

City of Ontario

Not to Scale

EIP ASSOCIATES

Street "B" is an "L-shaped" local collector street located in Neighborhood 2. Street "B" is a north/south roadway as it connects to Chino Avenue and an east/west roadway connecting to Archibald Avenue, T-intersections are formed at both locations.

Intersections

A total of twelve intersections were selected in conjunction with City staff for the level of service (LOS) analysis. The twelve intersections were selected because they represent the locations that may potentially be significantly impacted by traffic due to the proposed project.

Table 3.10-1 presents the list of study intersections and the type of traffic control for each location.

Table 3.10-1 Existing Study Intersections

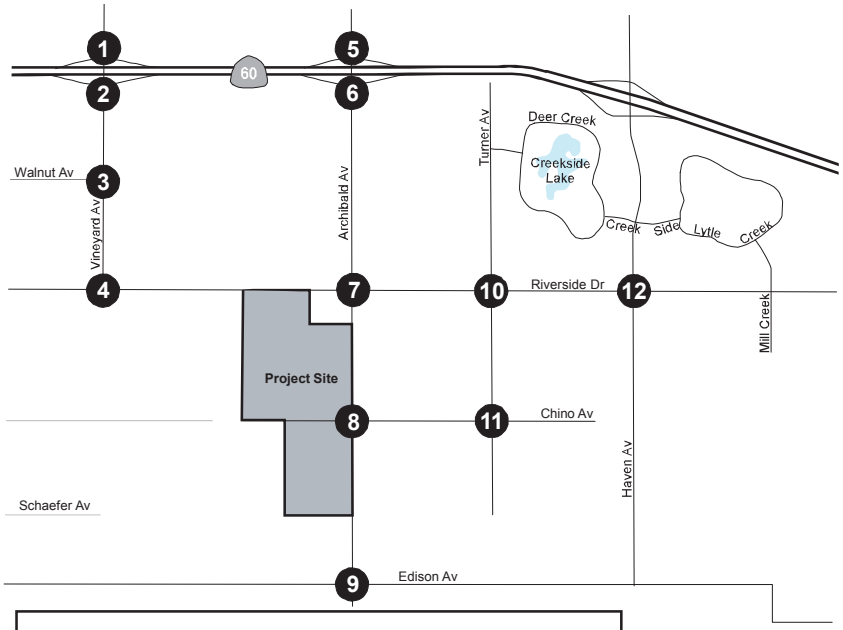
	Intersection	*CMP Intersection*	*Signalized Intersection*
1	Vineyard Avenue and SR-60 WB Ramps	✓	✓
2	Vineyard Avenue and SR-60 EB Ramps	✓	✓
3	Vineyard Avenue and Walnut Avenue	—	—
4	Vineyard Avenue and Riverside Drive	—	✓
5	Archibald Avenue and SR-60 WB Ramps	✓	✓
6	Archibald Avenue and SR-60 EB Ramps	✓	✓
7	Archibald Avenue and Riverside Drive	✓	✓
8	Archibald Avenue and Chino Avenue	—	✓
9	Archibald Avenue and Edison Avenue	—	✓
10	Turner Avenue and Riverside Drive	—	✓
11	Turner Avenue and Chino Avenue	—	—
12	Haven Avenue and Riverside Drive	—	✓

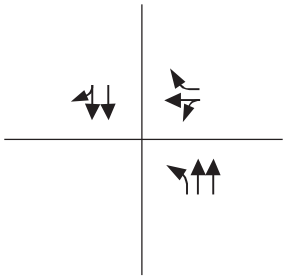
SOURCE: MMA 2005

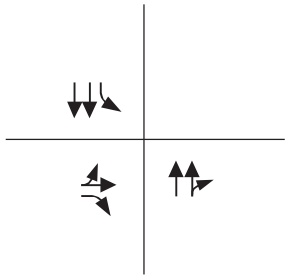
Figure 3.10-3 (Existing Lane Configurations) illustrates the existing intersection lane configurations for the twelve existing analyzed intersections. A brief description of each study intersection follows.

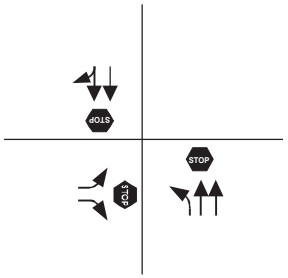
Vineyard Avenue and SR-60 WB Ramps

Vineyard Avenue and SR-60 WB Ramps is controlled by a three phase traffic signal with protected left-turn phasing for Vineyard Avenue (northbound). The northbound approach is striped as a left-turn-only lane and two through-only lanes. The southbound approach is striped as a through-only lane and a shared through/right turn lane. The westbound approach (off-ramp) is stripped as a shared left-turn/through lane and a right-turn-only lane.

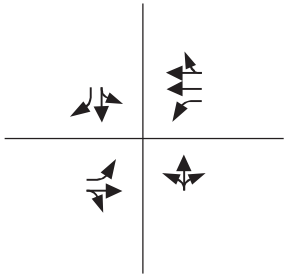


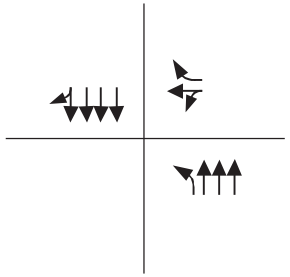

1. Vineyard Av/SR-60 WB Ramps

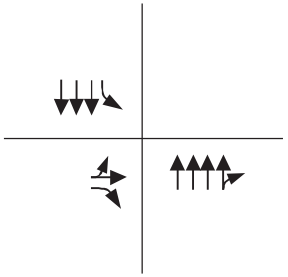

2. Vineyard Av/SR-60 EB Ramps

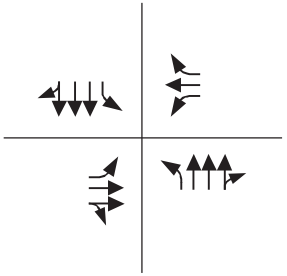


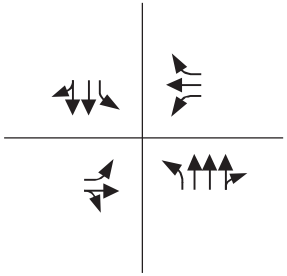
3. Vineyard Av/Walnut Ave

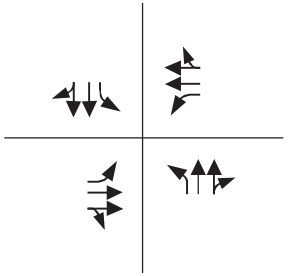

4. Vineyard Av/Riverside Dr

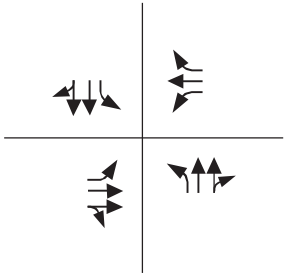

5. Archibald Av/SR-60 WB Ramps

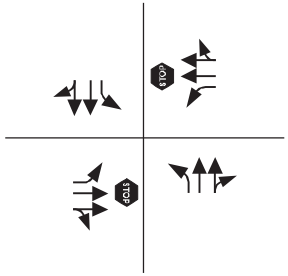

6. Archibald Av/SR-60 EB Ramps


7. Archibald Av/Riverside Dr

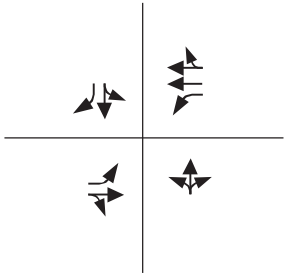

8. Archibald Av/Chino Av


9. Archibald Av/Edison Av


10. Turner Av/Riverside Dr



11. Turner Av/Chino Av


12. Haven Av/Riverside Dr

10905-00

FIGURE **3.10-3**

Existing Lane Configurations

***Source*:** Meyer, Mohhades Associates

City of Ontario

Not to Scale

EIP ASSOCIATES

Vineyard Avenue and SR-60 EB Ramps

Vineyard Avenue and SR-60 EB Ramps is controlled by a three phase traffic signal with protected left-turn phasing for Vineyard Avenue (southbound). The northbound approach is striped as a through-only lane and a shared through/right turn lane. The southbound approach is striped as a left-turn-only lane and two through-only lanes. The eastbound approach (off-ramp) is stripped as a shared left-turn/through lane and a right-turn-only lane.

Vineyard Avenue and Walnut Avenue

Vineyard Avenue and Walnut Avenue is a T-intersection and is stop-controlled in all approaches. The northbound approach is striped as a left-turn-only lane and two through-only lanes. The southbound approach is striped as a through-only lane and a shared through/right turn lane. The eastbound approach is striped as a left-turn-only lane and a right-turn-only lane.

Vineyard Avenue and Riverside Drive

Vineyard Avenue and Riverside Drive is controlled by a three-phase traffic signal with protected left-turn phasing for Riverside Avenue. The northbound approach is striped as a shared left-turn/through/right-turn lane. The southbound approach is striped as a shared left-turn/through lane and a right-turn-only lane. The eastbound approach is striped as a left-turn-only lane and a shared through/right-turn lane. The westbound approach is striped as a left-turn-only lane, a through-only lane, and a shared through/right-turn lane.

Archibald Avenue and SR-60 WB Ramps

Archibald Avenue and SR-60 westbound ramps are controlled by a three phase traffic signal with protected left-turn phasing for Archibald Avenue (northbound). The northbound approach is striped as a left-turn-only lane and three through-only lanes. The southbound approach is striped as three through-only lanes and a shared through/right turn lane. The westbound approach (off-ramp) is stripped as a shared left-turn/through lane and a right-turn-only lane.

Archibald Avenue and SR-60 EB Ramps

Archibald Avenue and SR-60 eastbound ramps are controlled by a three phase traffic signal with protected left-turn phasing for Archibald Avenue (southbound). The northbound approach is striped as three through-only lanes and a shared through/right turn lane. The southbound approach is striped as a left-turn-only lane and three through-only lanes. The eastbound approach (off-ramp) is stripped as a shared left-turn/through lane and a right-turn-only lane.

Archibald Avenue and Riverside Drive

Archibald Avenue and Riverside Drive is a controlled by a four-phase traffic signal with protected left-turn phasing in all directions. The northbound and southbound approaches are striped as a left-turn-only lane, two through-only lanes, and a shared through/right-turn lane. The eastbound approach is striped as a left-turn-only lane, a through only lane, and a shared through/right-turn lane. The westbound approach is striped as a left-turn-only lane, a through-only lane, and a right-turn-only lane.

Archibald Avenue and Chino Avenue

Archibald Avenue and Chino Avenue is a controlled by a three-phase traffic signal with protected left-turn phasing for Archibald Avenue. The northbound approach is striped as a left-turn-only lane, two through only lanes, and a shared through/right-turn lane. The southbound approach is striped as a left-turn-only lane, a through only lane, and a shared through/right-turn lane. The eastbound approach is striped as a left-turn-only lane and a shared through/right-turn lane. The westbound approach is striped as a left-turn-only lane, a through-only lane, and a right-turn-only lane.

Archibald Avenue and Edison Avenue

Archibald Avenue and Edison Avenue is a controlled by a four-phase traffic signal with protected left-turn phasing in all directions. The northbound approach is striped as a left-turn-only lane, a through only lane, and a shared through/right-turn lane. The southbound approach is striped as a left-turn-only lane, a through only lane, and a shared through/right-turn lane. The eastbound approach is striped as a left-turn-only lane and a shared through/right-turn lane. The westbound approach is striped as a left-turn-only lane, a through-only lane, and a right-turn-only lane.

Turner Avenue and Riverside Drive

Turner Avenue and Riverside Drive is a controlled by a three-phase traffic signal with protected left-turn phasing for Riverside Avenue. The northbound and southbound approaches are striped as a left-turn-only lane, a through-only lane, and a shared through/right-turn lane. The eastbound approach is striped as a left-turn-only lane, a through-only lane, and a shared through/right-turn lane. The westbound approach is striped as a left-turn-only lane, a through-only lane, and a right-turn-only lane.

Turner Avenue and Chino Avenue

Turner Avenue and Chino Avenue is stop-controlled in the east/west direction. The northbound and southbound approaches are striped as a left-turn-only lane, a through-only lane, and a shared through/right-turn lane. The eastbound approach is striped as a left-turn-only lane, a through-only lane, and a shared through/right-turn lane. The westbound approach is striped as a left-turn-only lane, a through-only lane, and a shared through/right-turn lane.

Haven Avenue and Riverside Drive

Haven Avenue and Riverside Drive is controlled by a three-phase traffic signal with protected left-turn phasing for Riverside Avenue. The northbound approach is striped as a shared left-turn/through/right-turn lane. The southbound approach is striped as a shared left-turn/through lane and a right-turn-only lane. The eastbound approach is striped as a left-turn-only lane and a shared through/right-turn lane. The westbound approach is striped as a left-turn-only lane, a through-only lane, and a shared through/right-turn lane.

Traffic Volumes

The morning and evening peak period turning movement traffic counts for the study intersections were collected on September 16, 2004, specifically for the Countryside Traffic Impact Analysis. The traffic impact analysis is based on the highest single hour of traffic during each time period at each location. Figure 3.10-4 (2004 Existing Peak Hour Traffic Volumes) illustrates the existing AM and PM peak hour turning movement volumes at the existing study intersections.

The following describes existing conditions at the major roadways within the study area.

Vineyard Avenue

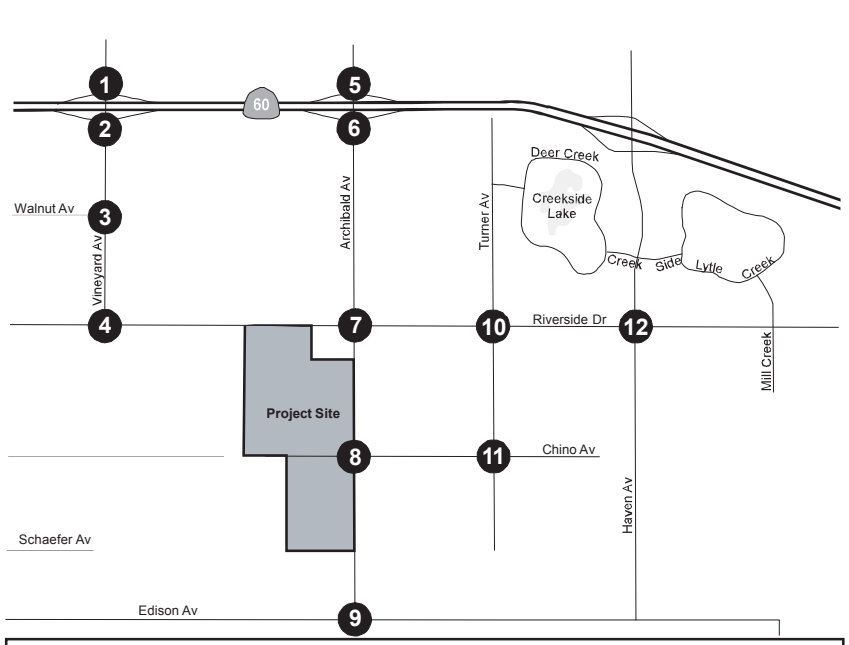
Vineyard Avenue is a north/south arterial located west of the project site. It has a curb-to-curb width of approximately 60 feet and a posted speed limit of 40 miles per hour (mph). Vineyard Avenue has four travel lanes in each direction between SR-60 and Riverside Drive. Curbside parking is not allowed along the northbound and southbound side of the street. Vineyard Avenue carries approximately 14,000 vehicles per day.

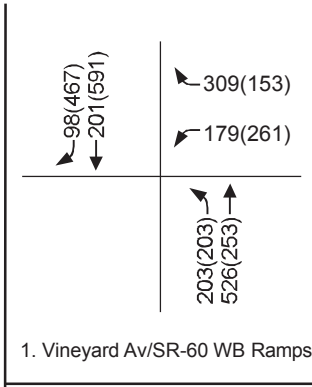
Archibald Avenue

Archibald Avenue is a north/south arterial located east of the project site. It has a curb-to-curb width of approximately 100 feet and a posted speed limit of 45 mph. Archibald Avenue has four travel lanes in the northbound direction and three travel lanes in the southbound direction between SR-60 and Riverside Drive. It has four lanes of travel between Riverside Drive and Chino Avenue. The segment between Chino Avenue and the proposed future alignment of Schaefer Avenue has two travel lanes in the northbound direction and one travel lane in the southbound direction. Archibald Avenue has two travel lanes south of Schaeffer Avenue to the San Bernardino–Riverside County Line. It carries an average of 15,000 vehicles per day through the New Model Colony (NMC).

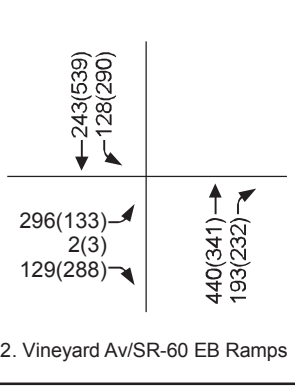
Turner Avenue

Turner Avenue is a north/south arterial located east of the project site. It has a curb-to-curb width of approximately 60 feet and a posted speed limit of 45 mph. Turner Avenue has four travel lanes between SR-60 to Schaefer Avenue. Turner Avenue carries approximately 3,200 vehicles per day.

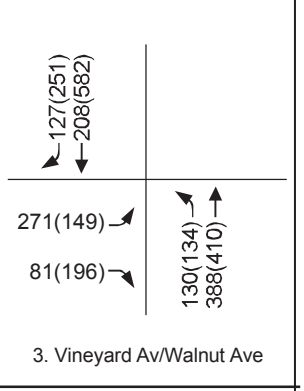




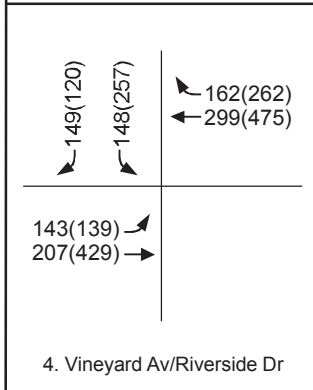
1. Vineyard Av/SR-60 WB Ramps



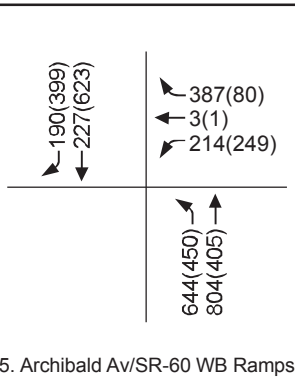
2. Vineyard Av/SR-60 EB Ramps



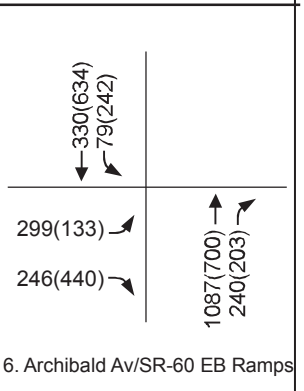
3. Vineyard Av/Walnut Ave



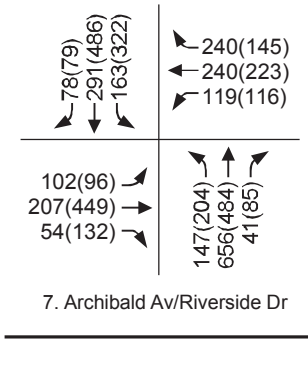
4. Vineyard Av/Riverside Dr



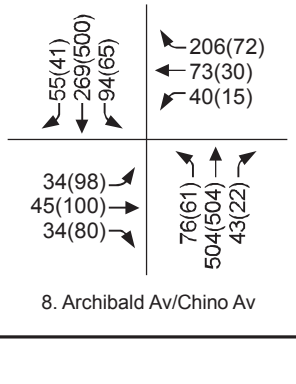
5. Archibald Av/SR-60 WB Ramps



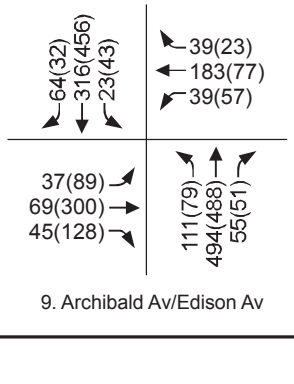
6. Archibald Av/SR-60 EB Ramps



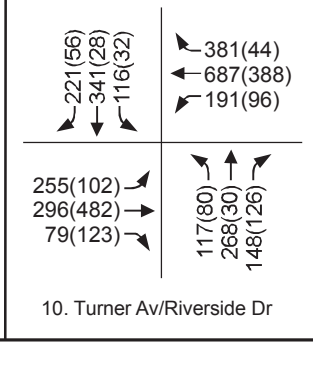
7. Archibald Av/Riverside Dr



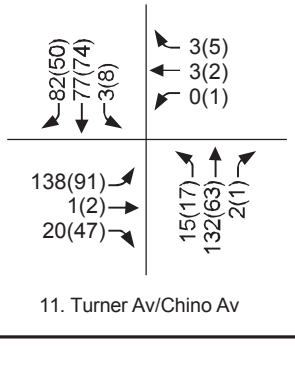
8. Archibald Av/Chino Av



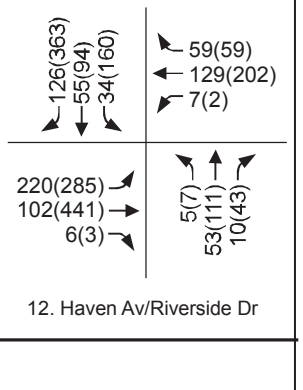
9. Archibald Av/Edison Av



10. Turner Av/Riverside Dr



11. Turner Av/Chino Av



12. Haven Av/Riverside Dr

10905-00

FIGURE **3.10-4**

2004 Existing Peak Hour Traffic Volumes

***Source*:** Meyer, Mohhades Associates

City of Ontario

Not to Scale

EIP ASSOCIATES

Haven Avenue

Haven Avenue is a north/south arterial located east of the project site. It has varying curb-to-curb widths of approximately 132, 78, and 65 feet between SR-60 and Creek Side, Creek Side and Riverside Drive, and Riverside Drive and Chino Avenue, respectively. Haven Avenue has three travel lanes in the northbound direction and two lanes in the southbound direction between SR-60 and Creek Side. It has two travel lanes in the northbound direction and one travel lane in the southbound direction between Creek Side and Riverside Drive with one travel lane in each direction south of Riverside Drive through the study area. Haven Avenue has a posted speed limit of 40 mph north of Creek Side and 50 mph south of Creek Side to Chino Avenue. It carries approximately 11,000 vehicles per day north of Riverside Drive and 3,000 vehicles per day south of Riverside Drive.

Riverside Drive

Riverside Drive is an east/west arterial located north of the project site. It has varying curb-to-curb widths throughout the study area. Riverside has two through lanes in the westbound direction and one through lane in the eastbound direction through the NMC. Riverside Drive carries approximately 12,000 vehicles per day.

Chino Avenue

Chino Avenue is an east/west arterial that divides the project site into north and south sections. It serves as the physical divide between the project planning areas. Chino Avenue has two travel lanes throughout the study area and carries approximately 3,500 vehicles per day.

Edison Avenue

Edison Avenue is an east/west arterial located south of the project site. Edison Avenue has two travel lanes throughout the study area and carries approximately 4,000 vehicles per day.

Transit Services

Omnitrans, the public agency serving San Bernardino Valley, operates one line through the study area. Route 70 travels mainly along Campus Avenue, Walnut Avenue, Riverside Drive, and Milliken Avenue. This route provides service between Montclair, Ontario, and Rancho Cucamonga. Popular destinations along this route include the Ontario Civic Center and the Ontario Mills Mall. Transfers to other Omnitrans routes and public transit can be made at the Ontario Civic Center and Ontario Mills Mall (Routes 60, 61, 71, 75, and 90). This route operates seven days a week. On weekday, it operates with 60-minute headways from 7 A.M. to 9 P.M. On Saturdays and Sundays, it operates every 60 minutes from 7:30 A.M. to 6:30 P.M.

Traffic Operations

Traffic operations in the project vicinity were analyzed, as directed by the City of Ontario staff, using the Highway Capacity Manual (HCM) methodology, as described in the Highway Capacity Manual, HCM 2000 (Transportation Research Board, Washington, D.C., 2000.).

The efficiency of traffic operations at a location is measured in terms of level of service (LOS). Level of service is a description of traffic performance at intersections. The level of service concept is a measure of the average operating conditions at an intersection during an hour. It is based on vehicle-delay and is defined by a range of grades from A to F. LOS A represents free-flow conditions where little or no delay is experienced at the intersection. LOS F characterizes extremely unstable flow conditions and severe congestion with volumes at or near the designed capacity. At LOS F, vehicles are likely to experience major delays crossing an intersection. Minor incidents may lead to forced-flow conditions (LOS F) with operating traffic flows substantially below capacity, which may result in long queues backing up from all approaches to intersections. This analysis incorporates the effects of the lane geometry and signal phasing (i.e. protected or permitted left turns) to produce the results described by the level of service scale indicated by delay and LOS. Table 3.10-2 describes the level of service concept and the operating conditions expected under each level of service for signalized and unsignalized intersections.

Table 3.10-2 Level of Service Interpretation

Level of Service	*Description*	*Signalized Intersection Delay (seconds per vehicle)*	*Stop-Controlled Intersection Delay (seconds per vehicle)*
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and ≤ 20	>10 and ≤ 15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and ≤ 35	>15 and ≤ 25
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 and ≤ 55	>25 and ≤ 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and ≤ 80	>35 and ≤ 50
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80	> 50

SOURCE: Transportation Research Board 2000

The morning and evening peak hour level of service analyses for the proposed project were conducted at the four existing study intersections based on the existing traffic volume counts and the methodologies

described previously. The level of service analysis was performed using TRAFFIX software for both the signalized and unsignalized intersections using the HCM methodology.

Table 3.10-3 summarizes the level of service calculations for the study intersections under existing conditions during the AM and PM peak hours. An examination of the data in Table 3.10-3 indicates that all twelve intersections operate acceptably in the AM peak hour with nine intersections that operate as LOS C and three intersections that operate at LOS B. In the PM peak hour, all twelve intersections operate acceptably. The intersection of Turner Avenue and Chino Avenue operates at LOS A with only 10 seconds of delay. Two intersections operate at LOS B, and nine operate at LOS C.

Table 3.10-3 Existing Level of Service

Intersection	*Existing Conditions—Year 2004*					
	AM Peak Hour			*PM Peak Hour*		
	LOS	*Delay (Sec.)*	*V/C*	*LOS*	*Delay (Sec.)*	*V/C*
1. Vineyard Avenue & SR-60 WB Ramps	C	20.7	0.420	C	23.1	0.670
2. Vineyard Avenue & SR-60 EB Ramps	C	21.0	0.479	C	21.6	0.546
3. Vineyard Avenue & Walnut Avenue	B	13.0	0.545	C	19.3	0.746
4. Vineyard Avenue & Riverside Drive	C	20.5	0.349	C	20.3	0.523
5. Archibald Avenue & SR-60 WB Ramps	C	23.8	0.776	C	24.2	0.710
6. Archibald Avenue & SR-60 EB Ramps	B	18.2	0.442	C	24.6	0.580
7. Archibald Avenue & Riverside Drive	C	29.9	0.464	C	31.6	0.565
8. Archibald Avenue & Chino Avenue	C	22.3	0.306	B	18.6	0.305
9. Archibald Avenue & Edison Avenue	C	20.6	0.272	C	23.8	0.359
10. Turner Avenue & Riverside Drive	C	28.1	0.741	B	19.2	0.326
11. Turner Avenue & Chino Avenue*	B	11.0	N/A	A	9.9	N/A
12. Haven Avenue & Riverside Drive	C	22.5	0.276	C	21.6	0.493

SOURCE: MMA 2005; Transportation Research Board 2000
HCM 2000 Operations Methodology
LOS = Level of Service; Delay = Average Vehicle Delay (Seconds); V/C = Volume-to-Capacity Ratio
BOLD values indicate unacceptable operating conditions.
*Unsignalized intersection, worse case level of service based on most constrained movement(s)

3.10.3 Regulatory Framework

Regional

Southern California Association of Governments (SCAG) Regional Comprehensive Plan and Guide

SCAG's Regional Comprehensive Plan and Guide (RCPG) and RHNA are tools for coordinating regional planning and development strategies in southern California. Policies contained in the RCPG identified by SCAG as relevant to the proposed project are identified as the following:

Policy 4.01 *Transportation investments shall be based on SCAG's adopted Regional Performance Indicators.*

Policy 4.02 *Transportation investments shall mitigate environmental impacts to an acceptable level.*

Policy 4.03 *Transportation Control Measures shall be a priority.*

Policy 4.16 *Maintaining and operating the existing transportation system will be a priority over expanding capacity.*

San Bernardino County Congestion Management Plan

The San Bernardino County Congestion Management Plan (CMP), 2001 Update defines a network of state highways and arterials, level of service (LOS) standards and related procedures, and provides technical justification for the approach. The CMP level of service standards apply to AM and PM weekday peak-hours. For the CMP roadway system, the LOS standard shall be E for all segments and intersections except those designated LOS F, as listed in Table 2-1 of the CMP. The procedures in the 2000 Highway Capacity Manual adopted by the Transportation Research Board serve as the LOS calculation procedures for the San Bernardino County CMP. Provisions are made, however, for more advanced analysis techniques to be adopted in the future, such as traffic signal timing programs for arterials, and freeway simulation models for limited access facilities. The use of these advanced simulation techniques will be at the discretion of each local agency.

Local

General Plan Infrastructure Element

The City of Ontario General Plan Infrastructures Element contains policies applicable to the area of circulation relative to the proposed project, as follows:

Policy 12.1: *Discourage direct driveway access to arterial roadways.*

Policy 12.2: *Maintain at least a Level of Service D for roadway segments and at least Level of Service E for intersections on all streets whenever possible.*

Policy 14.1: *A traffic impact analysis shall be prepared for all new development projects greater than 10,000 gross square feet. If needed, financing plans for circulation improvements shall be developed as part of this analysis.*

Policy 15.2: *Require new development to fund transit facilities, such as bus shelters and turnouts, where feasible.*

Policy 15.3: *Include pedestrian facilities in new developments where possible, especially pedestrian pathways in new residential developments and pedestrian plazas and connections in new employment centers where such plazas and connections can effectively reduce automobile travel.*

Policy 15.4: *Encourage bicycle riding through provision of a safe and efficient network of bike paths and bike lanes, particularly in newly developing areas.*

Applicable SOI GPA Policies

Policy 1.17.1 *Establish, as a priority, the inclusion of pedestrian and bicycle trails in the electrical energy transmission corridors to link neighborhoods and districts. (I-7 and I-10)*

Policy 11.1.3 *Implement hierarchy of roadways and roadway classifications, as shown in Figure 4-15, Figure 4-16, and Figure 4-17, that provides for efficient movement of regional through traffic and also protects the residential neighborhoods from intrusion of through traffic. (I-2)*

Policy 11.1.4 *Reserve adequate rights-of-way for roadways to implement the hierarchy of local roads within the Sphere of Influence that is consistent with the planned land uses. (I-30)*

Policy 11.1.9 *Augment and implement the comprehensive Citywide Traffic Model within the Sphere of Influence area to reflect the Sphere of Influence land uses and the proposed circulation system. (I-13)*

Policy 11.2.1 *Maintain a level of service not to exceed LOS D for intersections during the peak hours. (I-10)*

Policy 11.2.2 *Maintain a peak period level of service not to exceed LOS D for collector and arterial roadways. (I-10)*

Policy 11.2.3 *Maintain a peak period level of service not to exceed LOS C for residential streets. (I-10)*

Policy 11.3.3 *Actively support the County of San Bernardino's Congestion Management Plan. (I-40)*

Policy 11.3.4 *Support and implement locally applicable portions of the Regional Mobility Plan and Air Quality Management Plan. (I-40)*

Policy 11.3.7 *Require all Specific Plans within the Sphere of Influence to conduct and prepare separate traffic and circulation studies to:*

- *Assess internal circulation system need and to develop a traffic circulation plan for the Specific Plan Area;*
- *Identify regional transportation infrastructure connectivity requirements; and*
- *Identify specific traffic impacts related to the buildout of the Specific Plan on the surrounding areas (outside the Specific Plan) and to identify traffic improvement measures to mitigate these impacts. (I-7)*

Policy 11.4.1 *Require each major development phase or Specific Plan to develop a master plan of streets and conduct a comprehensive traffic impact study, as appropriate. (I-2, I-7, and I-10)*

Policy 11.4.3 *Require that development within the Sphere of Influence be consistent with the provisions of the Countywide Congestion Management Program. (I-10)*

Policy 11.4.8 *Require that developers provide all required onsite infrastructure and contribute their proportional share to offsite improvements. (I-30, I-31, and I-32)*

Policy 11.5.2 Integrate the Transportation Mobility Plan with the Congestion Management Planning process to identify and develop necessary transportation services, and assist land use and urban design decision making. (I-10)

3.10.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on transportation and traffic if it would result in any of the following:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (e.g., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)
- Exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

3.10.5 Project Impacts

The following sections summarize the analysis of the project's impacts on study area traffic conditions. First is a discussion of project-generated trips and distribution. This is followed by a description of the future baseline traffic conditions without the project. Then an analysis is presented of the project's impacts on intersection levels of service at the affected study area intersections. The anticipated traffic and parking impacts during construction are also addressed.

Project-Generated Traffic

Trip Generation

The trip generation component of the *Updated Year 2015 Ontario NMC Traffic Model (October 2004)* was used to generate the project trips for the Countryside Project. The City traffic model uses the Institute of Transportation Engineers (ITE) Trip Generation Manual, 5th Edition, rates during the assignment process to calculate project trips. The "Year 2015 Land Use Data" includes specific land use data for City of Ontario Traffic Analysis Zones 757 and 768, also known as the NMC Planning Subarea 5 (Countryside Project). Table 3.10-4 summarizes Daily, AM peak hour, and PM peak hour trip generation for all components of the project.

Trip Distribution

Trip distribution assumptions were derived from the results of the *Updated Year 2015 Ontario NMC Traffic Model (October 2004)* using select zone model runs for the proposed project (TAZ 757 and 768). Using the models assignment scheme, select zone model runs (AM and PM) report the distribution for specific zones. The directional percent distribution at each intersection and/or roadway for project traffic in the AM and

PM peak hour is illustrated in Figure 3.10-5 (Project Only Peak Hour Trip Distribution); the project trip distribution is illustrated in Figure 3.10-6 (Project Only Peak Hour Traffic Distribution).

Table 3.10-4 Total Trip Generation

Time Period	*In*	*Out*	*Total*
AM Peak Hour	149	481	630
PM Peak Hour	493	279	772
Daily	4,446	4,600	9,046

SOURCE: MMA 2005

Future Baseline Conditions without Project

This section summarizes the assumptions, methodology, and analysis related to future conditions without the proposed project. The *2015 Future Base "Without Project" Conditions* for each respective intersection turning movement traffic volume is calculated by subtracting the *Project-Only Trip Distribution* from the *2015 "With Project" Conditions*. This will serve as the basis for estimating impacts of the proposed project on background conditions for Year 2015.

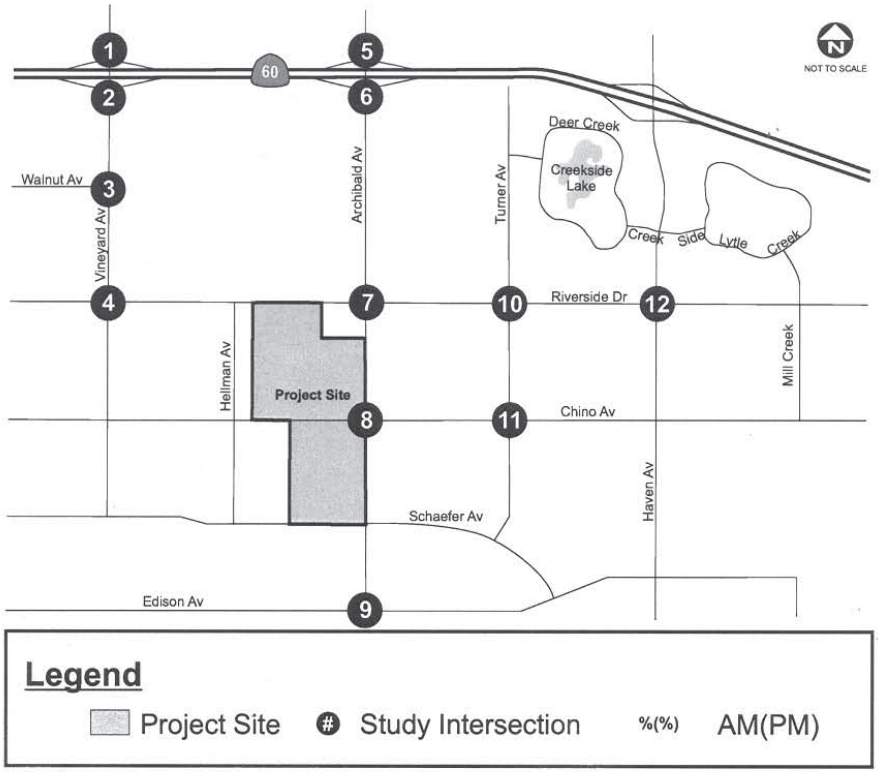
2015 Future Base Lane Assumptions

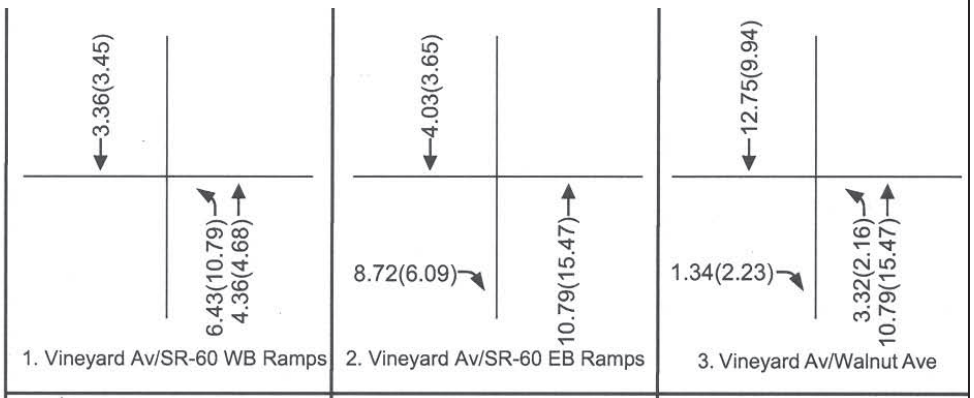
The Year 2015 future base circulation system in the NMC was developed by MMA in conjunction with City of Ontario staff. The roadway segments expected to be in place by Year 2015, the number of lanes carrying through traffic and the corresponding intersection lane configurations were determined from various sources.

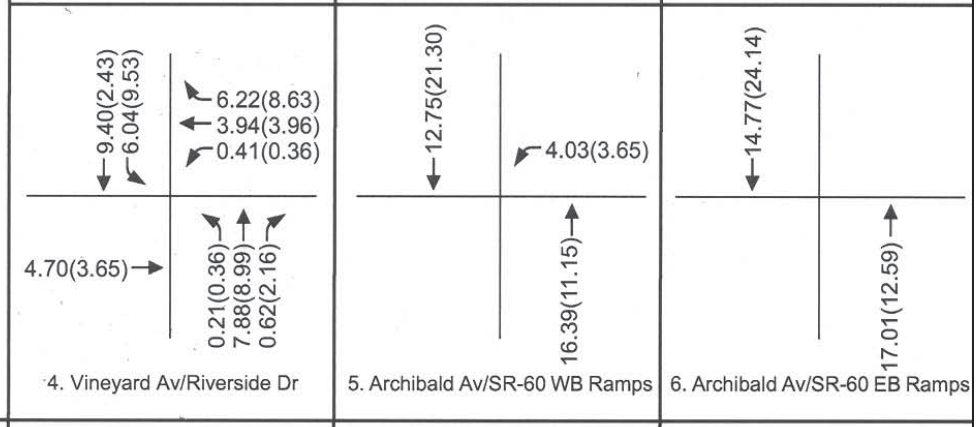
Roadway segments expected to be in place by Year 2015 were identified by City staff based on planned and programmed developments in the NMC. Specific plan developments in the Eastside of the NMC provide information for particular roadway segments bordering each respective project site. The Countryside Specific Plan identifies street improvements adjacent to the proposed project site. Riverside Drive (eastbound), Chino Avenue (eastbound and westbound), Schaeffer Avenue (eastbound and westbound), and Archibald Avenue (southbound) are expected to be in place by Year 2015. Figure 3.10-7 (New Model Colony Streets—Phase I) identifies other improvements in the NMC including signal modifications/installations, bridge modification/installations, and roadway arterial improvements (one additional lane, two additional lanes and/or fully improved arterials).

In addition to the improvements illustrated in Figure 3.10-7, City staff identified other proposed roadway segments considered essential circulation components of the NMC for Year 2015. These proposed roadway segments are as follows:

- Vineyard Avenue between Riverside Drive & Schaeffer Avenue
- Helman Avenue between Riverside Drive & Schaeffer Avenue
- Haven Avenue between Edison Avenue & Merril Avenue
- Chino Avenue between Haven Avenue & Mill Creek Avenue







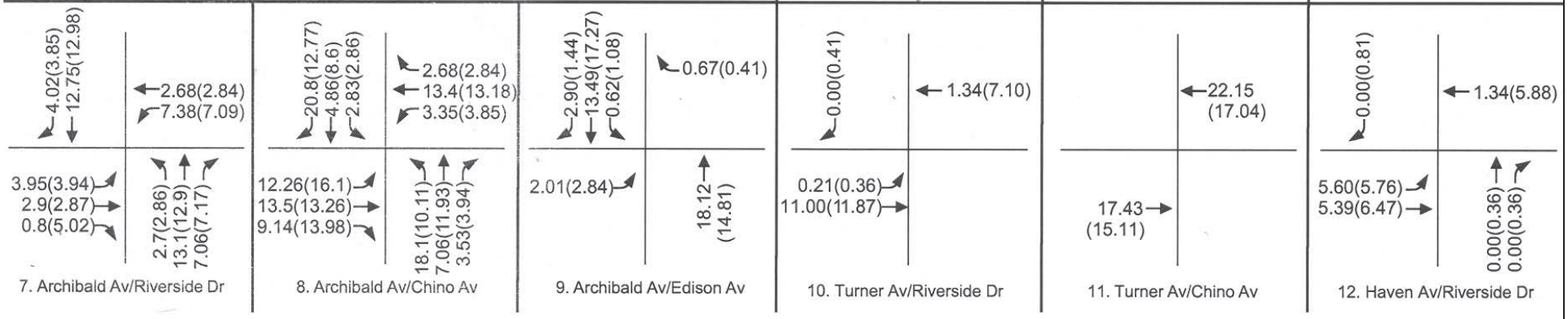


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FIGURE **3.10-5**

Project Only Peak Hour Trip Distribution

Source: Meyer, Mohhades Associates

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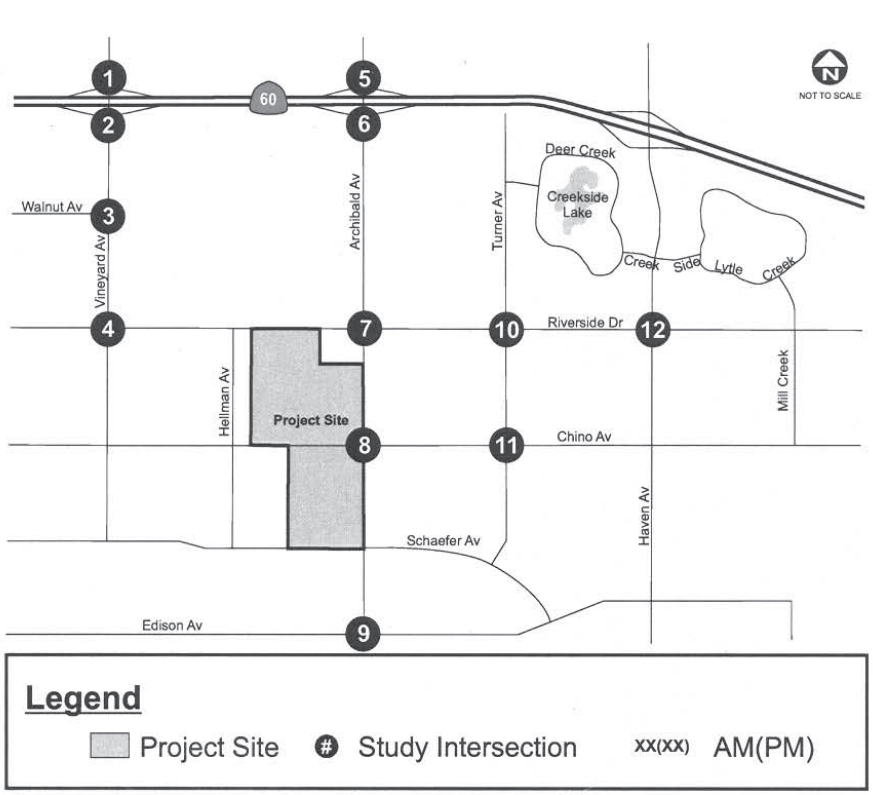
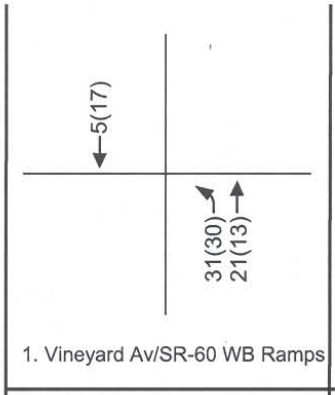
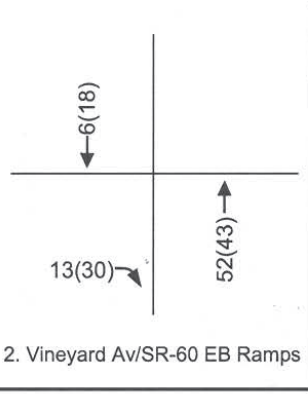




1. Vineyard Av/SR-60 WB Ramps



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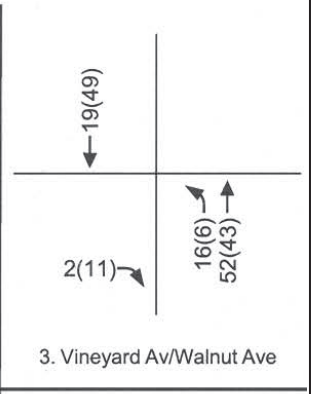
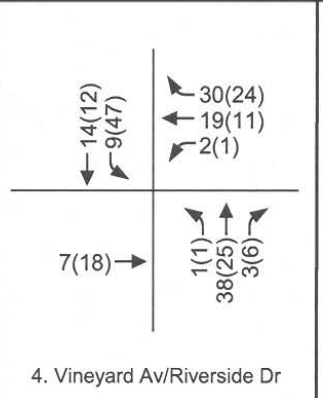


3. Vineyard Av/Walnut Ave



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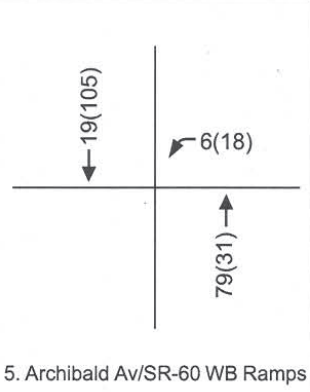

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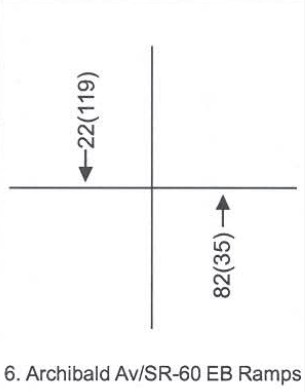
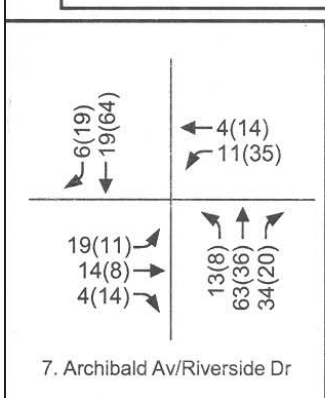
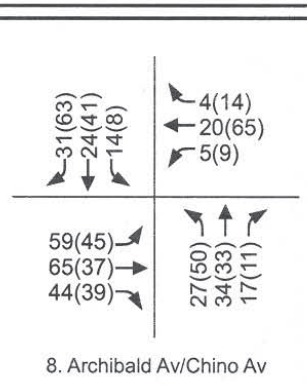


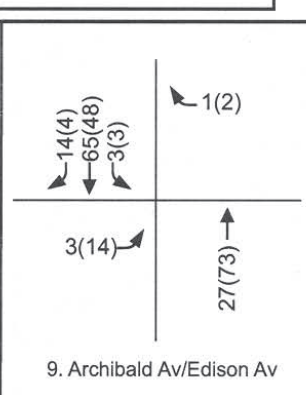
6. Archibald Av/SR-60 EB Ramps



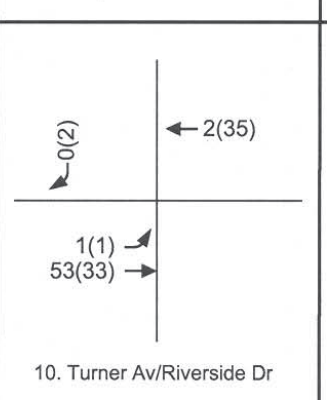
7. Archibald Av/Riverside Dr



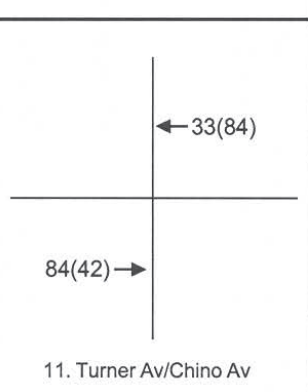
8. Archibald Av/Chino Av



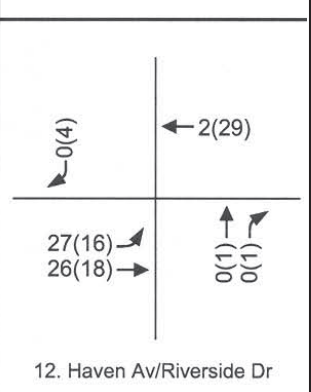
9. Archibald Av/Edison Av



10. Turner Av/Riverside Dr



11. Turner Av/Chino Av



12. Haven Av/Riverside Dr

FIGURE **3.10-6**

Project Only Peak Hour Traffic Distribution

Not to Scale

10905-00

Source: Meyer, Mohhades Associates

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MMA first performed a Year 2015 traffic assignment with the improvements illustrated in Figure 3.10-7 (New Model Colony Streets—Phase 1). An inspection of the traffic forecasts resulted in a need for extensive intersection mitigation measures at key intersection in the study area. A subsequent modeling effort which included the roadway segments listed above resulted in mitigation measures within the buildout assumptions described in the *City of Ontario Sphere of Influence General Plan Amendment* (January 7, 1998). Each proposed roadway segment illustrated in Figure 3.10-8 (Future Base with Roadway Improvements) is included in Year 2015 conditions.

Intersection lane designation assumptions in the NMC are based on the information provided in the *Ontario New Model Colony Transportation Program Implementation* Plan (February 2001). Information in this report include conceptual roadway alignments, width of public right-of-way, the number and width of lanes, parkway and median widths, location of bikeways and conceptual tree planning scheme.

2015 Future Base Traffic Operations Analysis

Figure 3.10-9 (2015 Future Base Peak Hour Traffic Volumes) illustrates the AM and PM peak hour traffic volumes for *2015 Future Base "Without Project" Conditions* at the study intersections. Based on the peak hour volumes shown in Figure 3.10-9, level of service analysis was then performed for both AM and PM peak hours as summarized in Table 3.10-5.

Table 3.10-5 2015 Future Without Project Conditions

Intersection	Without Project Conditions—Year 2015					
	AM Peak Hour			PM Peak Hour		
	LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Vineyard Avenue & SR-60 WB Ramps	D	42.6	1.052	F	136.1	1.366
2. Vineyard Avenue & SR-60 EB Ramps	F	80.4	1.167	E	57.4	1.096
3. Vineyard Avenue & Walnut Avenue	F	520.8	2.396	F	586.6	2.611
4. Vineyard Avenue & Riverside Drive	D	48.9	1.039	E	58.1	1.075
5. Archibald Avenue & SR-60 WB Ramps	C	34.1	0.857	D	41.3	1.011
6. Archibald Avenue & SR-60 EB Ramps	B	10.9	0.429	D	37.9	1.005
7. Archibald Avenue & Riverside Drive	C	24.9	0.757	E	58.4	1.081
8. Archibald Avenue & Chino Avenue	D	38.8	0.962	F	371.9	1.908
9. Archibald Avenue & Edison Avenue	F	148.1	1.339	F	438.4	2.321
10. Turner Avenue & Riverside Drive	B	16.0	0.720	A	9.5	0.628
11. Turner Avenue & Chino Avenue*	F	406.8	N/A	F	OVRFL	N/A
12. Haven Avenue & Riverside Drive	C	30.8	0.815	F	172.9	1.481

SOURCE: MMA 2005; Transportation Research Board 2000
HCM 2000 Operations Methodology
LOS = Level of Service; Delay = Average Vehicle Delay (Seconds); V/C = Volume-to-Capacity Ratio
BOLD values indicate unacceptable operating conditions.
*Unsignalized intersection, worse case level of service based on most constrained movement(s)

10905-00

FIGURE **3.10-7**

New Model Colony Streets - Phase 1

Source: Meyer, Mohhades Associates

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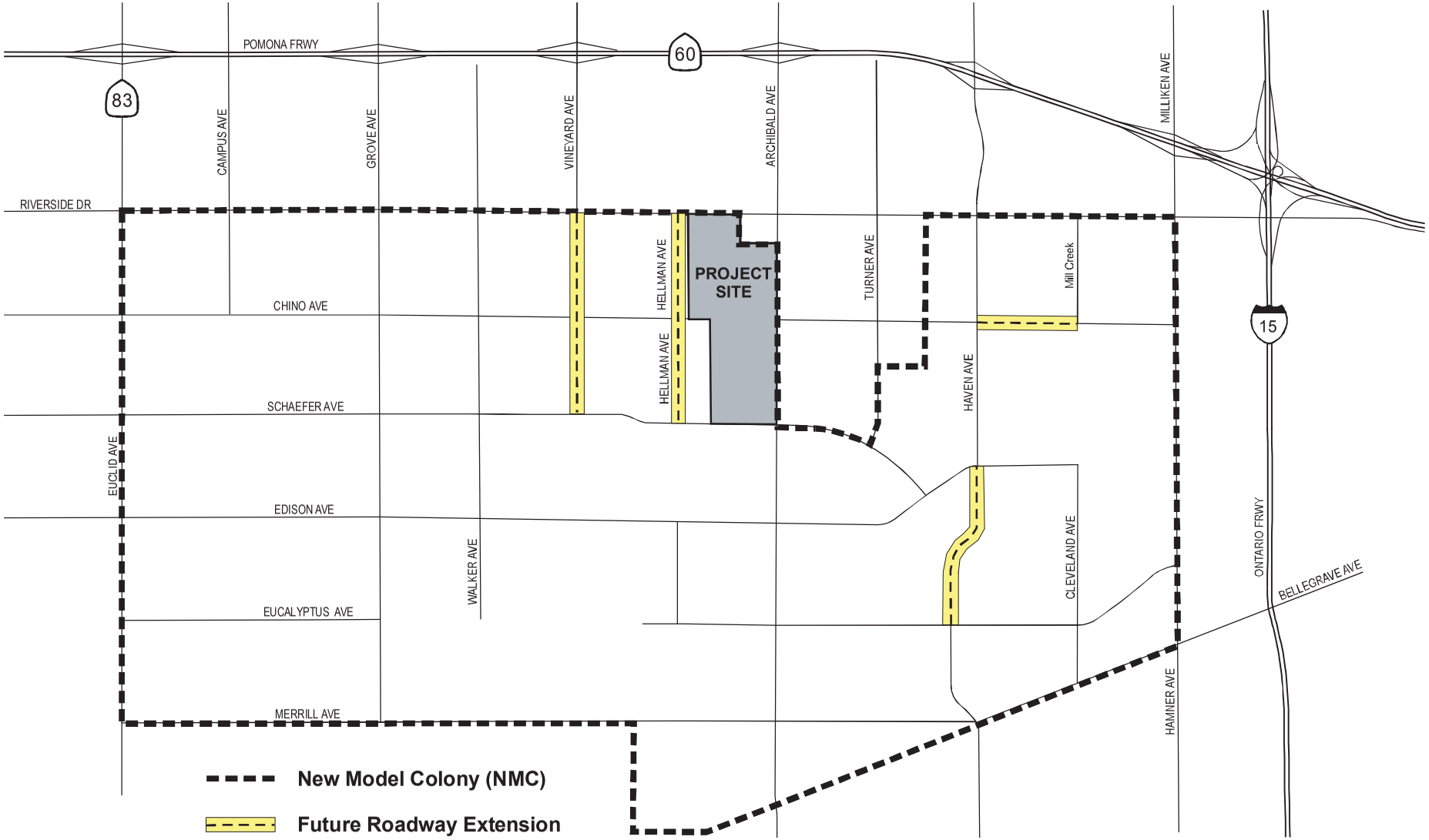

FIGURE **3.10-8**

Future Base with Roadway Improvements

Source: Meyer, Mohhades Associates

City of Ontario

Not to Scale

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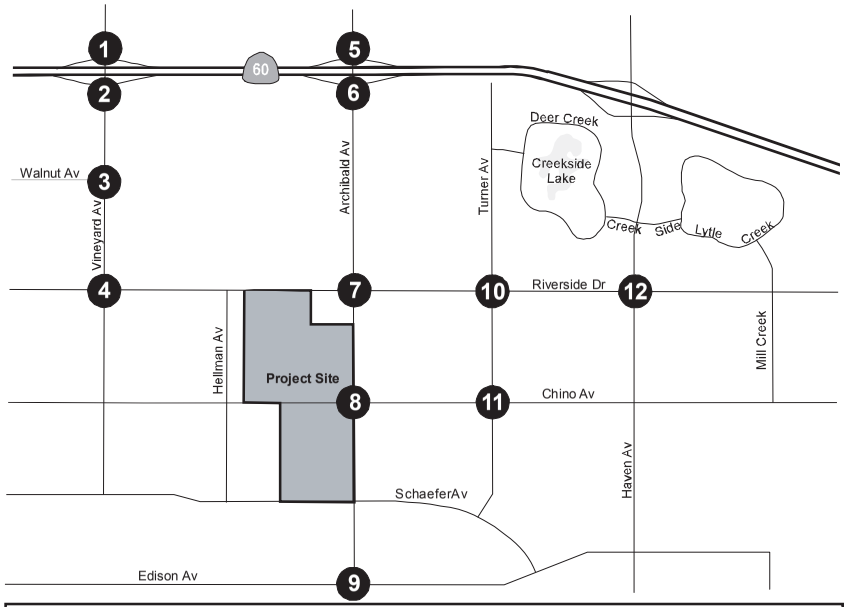

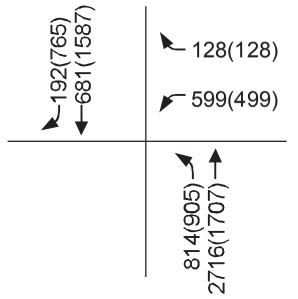

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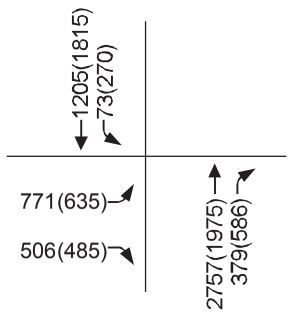
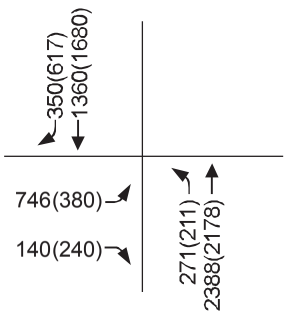
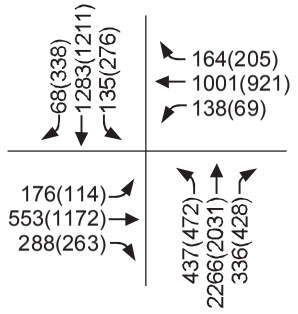


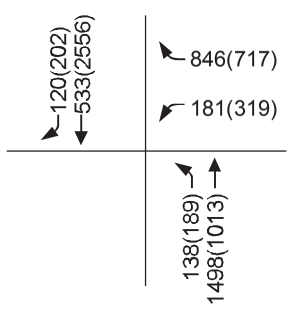
2. Vineyard Av/SR-60 EB Ramps



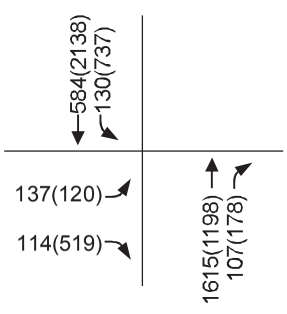
3. Vineyard Av/Walnut Ave



4. Vineyard Av/Riverside Dr



5. Archibald Av/SR-60 WB Ramps



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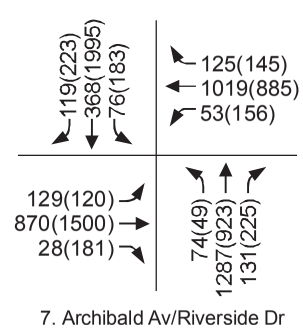

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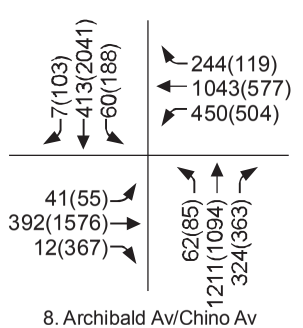
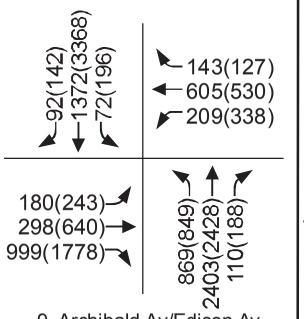
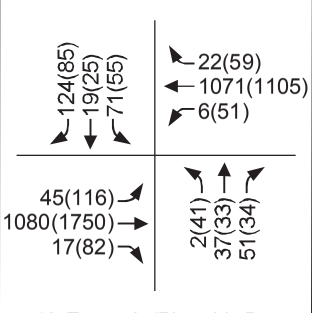


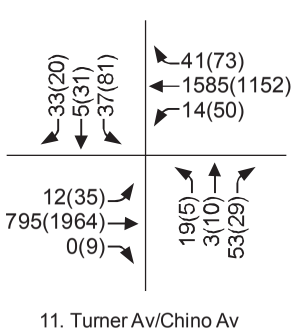
8. Archibald Av/Chino Av



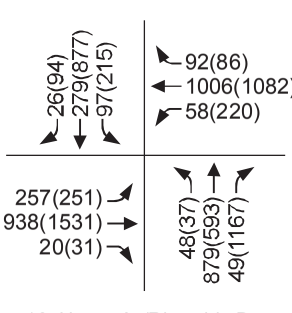
9. Archibald Av/Edison Av



10. Turner Av/Riverside Dr



11. Turner Av/Chino Av



12. Haven Av/Riverside Dr

10905-00

FIGURE **3.10-9**

2015 Future Base Peak Hour Traffic Volumes

Source: Meyer, Mohhades Associates

City of Ontario

Not to Scale

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In the AM peak hour, Table 3.10-5 shows that four intersections are expected to operate at LOS F. The stop-controlled intersections of Vineyard Avenue at Walnut Avenue and Turner Avenue at Chino Avenue are expected to operate at LOS F with delays of 521 and 407 seconds, respectively. The intersections of Vineyard Avenue at SR-60 Westbound Ramps and Riverside Drive are expected to operate at an acceptable LOS D with approximately 43 and 49 seconds of delay, respectively. However, based on a volume to capacity ratio of 1.052 and 1.039 (over the 1.0 threshold per CMP guidelines) the intersections are considered to operate unacceptably. The remaining six intersections are expected to operate acceptably with a maximum delay of 39 seconds and volume to capacity ratio of 0.962 at the intersection of Archibald Avenue and Chino Avenue.

In the PM peak hour, Table 3.10-5 shows that all but one of the intersections are expected to operate unacceptably. The intersection of Turner Avenue and Chino Avenue is expected to operate at LOS A with 9 seconds of delay and a volume to capacity ratio of 0.628, well below the 1.0 threshold per CMP guidelines. The intersections of Archibald Avenue at SR-60 Westbound and Eastbound Ramps are expected to operate at LOS D with over 38 seconds of delay. However, with volume to capacity ratios just over the acceptable 1.0, both intersections are considered as operating unacceptably.

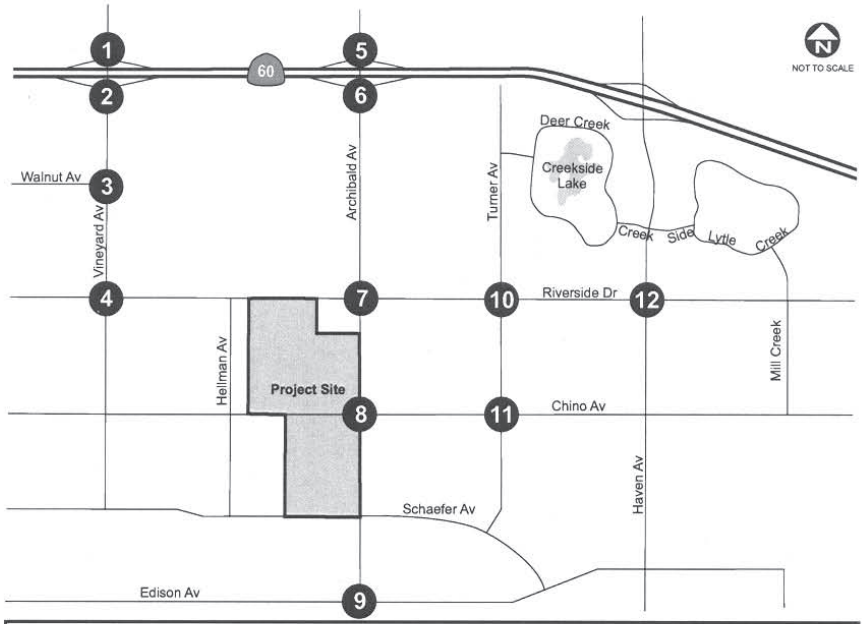
Traffic Impact Analysis

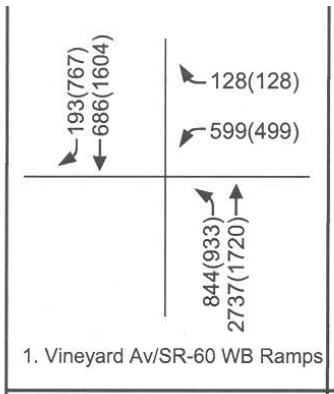
2015 Future With Project Traffic Operations Analysis

Potentially Significant

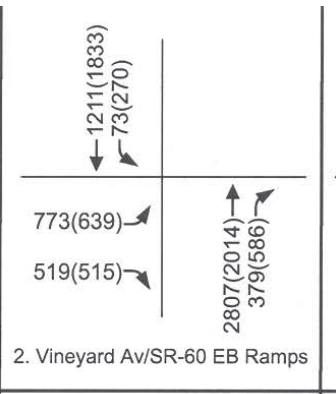
Impact TRAF-1 Implementation of the Countryside Specific Plan would result in additional vehicular trips during AM and PM peak hours, which would result in an increase in intersection levels of service beyond existing levels. This is considered a *significant and unavoidable* impact.

Implementation of the Countryside Specific Plan would result in an increase in residential population, which would in turn generate additional vehicle trips compared to existing conditions. Utilizing horizon year 2015, intersection volumes were analyzed for future level of service and impacts at study intersections for Specific Plan implementation conditions (2015 Future With Project). Results of the analysis are summarized in Table 3.10-6 for AM and PM peak hour, respectively. These illustrate the resulting 2015 Future With Project AM and PM peak hour intersection turning volumes. Figure 3.10-10 provides a graphic illustration of the traffic volumes under 2015 Future With Project conditions. The results of the 2015 with project analysis for the AM peak hour indicate that four intersections are expected to operate at LOS F and three at LOS D would operate at unacceptable conditions. The intersections of Vineyard Avenue at SR-60 Westbound Ramps and Riverside Avenue and Archibald Avenue and Chino Avenue with a volume to capacity ratio of 1.072, 1.067, and 1.029, respectively are considered to operate unacceptably—out of compliance with CMP guidelines. A total of seven intersections would require improvement measures. The remaining five intersections are expected to operate acceptably with a maximum delay of 36 seconds and a volume to capacity ratio of 0.873.

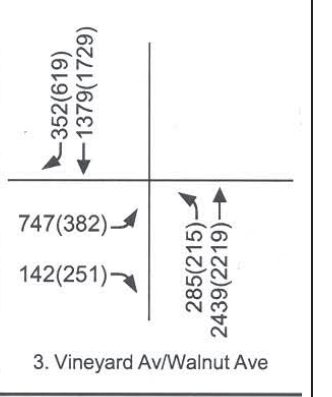




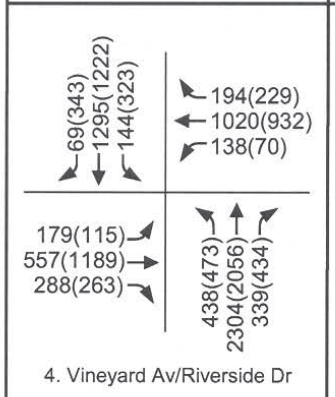
1. Vineyard Av/SR-60 WB Ramps



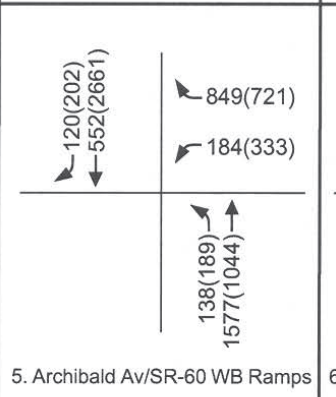
2. Vineyard Av/SR-60 EB Ramps



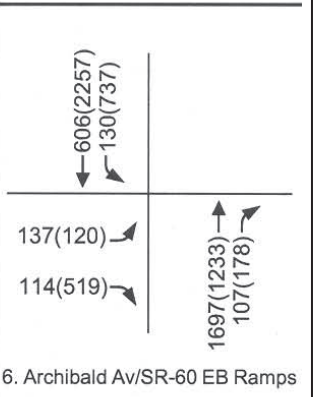
3. Vineyard Av/Walnut Ave



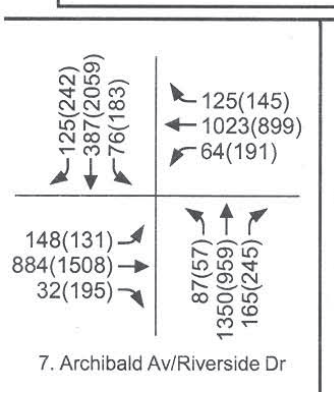
4. Vineyard Av/Riverside Dr



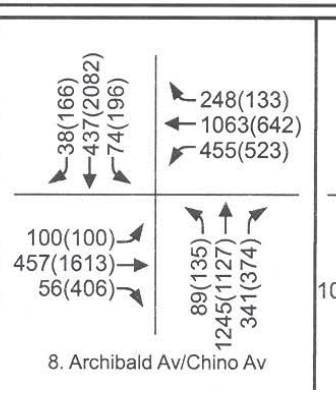
5. Archibald Av/SR-60 WB Ramps



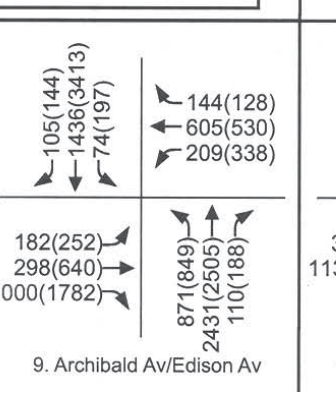
6. Archibald Av/SR-60 EB Ramps



7. Archibald Av/Riverside Dr



8. Archibald Av/Chino Av



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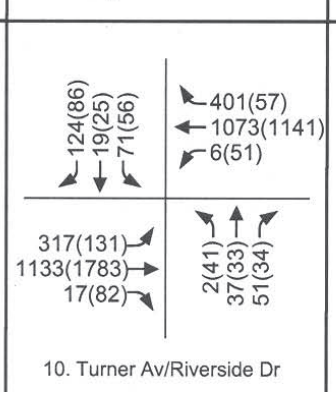

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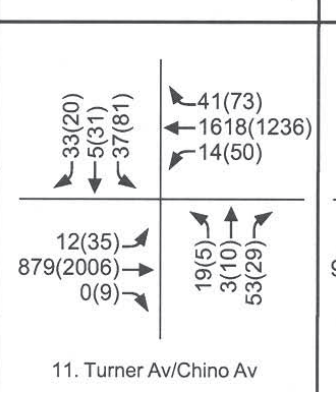

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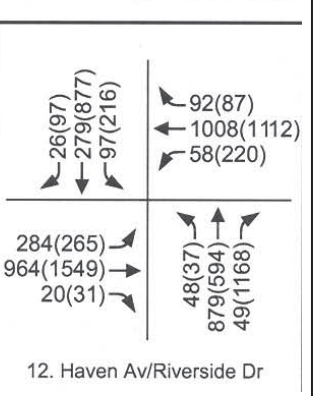

12. Haven Av/Riverside Dr

10905-00

FIGURE **3.10-10**

2015 Future with Project Peak Hour Traffic Volumes

Source: Meyer, Mohhades Associates

City of Ontario

Not to Scale

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Table 3.10-6 2015 Future With Project Conditions

Intersection	Without Project Conditions—Year 2015					
	AM Peak Hour			PM Peak Hour		
	LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Vineyard Avenue & SR-60 WB Ramps	D	45.4	1.072	F	142.5	1.386
2. Vineyard Avenue & SR-60 EB Ramps	F	83.8	1.178	E	60.3	1.105
3. Vineyard Avenue & Walnut Avenue	F	537.3	2.448	F	611.3	2.680
4. Vineyard Avenue & Riverside Drive	D	54.8	1.067	E	65.5	1.102
5. Archibald Avenue & SR-60 WB Ramps	D	36.0	0.873	D	44.3	1.027
6. Archibald Avenue & SR-60 EB Ramps	B	10.6	0.441	D	38.2	1.011
7. Archibald Avenue & Riverside Drive	C	26.2	0.791	E	71.8	1.132
8. Archibald Avenue & Chino Avenue	D	52.9	1.029	F	398.9	2.019
9. Archibald Avenue & Edison Avenue	F	151.0	1.356	F	443.1	2.332
10. Turner Avenue & Riverside Drive	B	15.8	0.721	A	9.5	0.638
11. Turner Avenue & Chino Avenue*	F	512.4	N/A	F	OVRFL	N/A
12. Haven Avenue & Riverside Drive	C	31.6	0.832	F	178.3	1.486

SOURCE: MMA 2005; Transportation Research Board 2000
HCM 2000 Operations Methodology
LOS = Level of Service; Delay = Average Vehicle Delay (Seconds); V/C = Volume-to-Capacity Ratio
BOLD values indicate unacceptable operating conditions.
*Unsignalized intersection, worse case level of service based on most constrained movement(s)

Similarly the results of the 2015 with project analysis for the PM peak hour indicate that six intersections are expected to operate at LOS F and three would be at LOS E. In addition, two intersections are expected to operate unacceptably at LOS D. Therefore a total of eleven out of twelve study intersections are projected to be out of compliance with CMP guidelines and City of Ontario LOS standards (LOS D or better with V/C<1.0) and would require improvement measures. The intersection of Turner Avenue and Riverside Avenue is the only intersection in the PM peak hour expected to operate acceptably with a delay of 9 seconds and a volume to capacity ratio of 0.638.

Traffic generated by the proposed project would result in a Volume to Capacity Ratio (V/C) of 1.00 or greater in value for seven intersections in the AM peak hour and eleven intersections in the PM peak hour that are projected to operate at Level of Service (LOS) D or worse. This would be considered a significant impact at these affected study area intersections. The V/C values and levels of service for these intersections are shown in Table 3.10-6. Implementation of Ontario SOI GPA EIR mitigation measures MM TRAF-1, MM TRAF-2, and MM TRAF-3, as well as project-specific mitigation measure MM TRAF-1-SP, would reduce these impacts to a less than significant level by bringing projected deficient intersections to acceptable operating conditions, (LOS D or better and V/C of less than 1.0) per City of Ontario Standards. The mitigated level of service forecasts (with the incorporation of MM TRAF-1, MM TRAF-2, MM TRAF-3, and MM TRAF-1-SP) for the AM and PM peak hours are shown in Table 3.10-7.

The intersection of Archibald Avenue and Edison Avenue would continue to operate unacceptably per City of Ontario and CMP guidelines. The volume to capacity ratio is slightly above the 1.0 threshold, however no additional mitigation measures are proposed at this location. An analysis of the traffic forecasts from the City's buildout model, the Updated Buildout Ontario NMC Traffic Model (October 2004), identifies that the proposed mitigation measures (MM TRAF-1, MM TRAF-2, MM TRAF-3, and MM TRAF-1-SP), which are within the guidelines of the City of Ontario Sphere of Influence General Plan Amendment (January 7, 1998), would satisfy the operating conditions of the intersection for buildout conditions. This is due to infrastructure developments in the NMC and the subsequent redistribution of traffic expected beyond Year 2015.

In addition, LOS at intersection of Archibald Avenue and Edison Avenue under the Future Without Project analysis would be F and V/C would be 1.983. Future With Project and associated mitigation would result in a LOS D and V/C of 1.004 at this intersection. As such, implementation of the proposed project would result in a beneficial impact with regard to LOS and V/C at this intersection. However, even though the LOS is improved from F to D and the V/C lowered by 0.979 with the project, in terms of City of Ontario and CMP guidelines, impacts would remain ***significant and unavoidable*** for the intersection of Archibald Avenue and Edison Avenue.

Table 3.10-7 2015 Future Project Conditions With Mitigations

Intersection	2015 Future Project With Mitigations					
	AM Peak Hour			PM Peak Hour		
	LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Vineyard Avenue & SR-60 WB Ramps	C	33.5	0.923	C	29.6	0.936
2. Vineyard Avenue & SR-60 EB Ramps	C	22.8	0.922	C	22.9	0.838
3. Vineyard Avenue & Walnut Avenue	C	30.2	0.918	B	17.3	0.818
4. Vineyard Avenue & Riverside Drive	D	39.3	0.987	D	35.2	0.942
5. Archibald Avenue & SR-60 WB Ramps	C	20.5	0.618	C	20.2	0.828
6. Archibald Avenue & SR-60 EB Ramps	A	9.4	0.414	C	21.0	0.856
7. Archibald Avenue & Riverside Drive	C	26.2	0.791	D	36.3	0.948
8. Archibald Avenue & Chino Avenue	C	26.6	0.753	D	35.2	0.927
9. Archibald Avenue & Edison Avenue	C	22.7	0.654	D	39.1	1.004
10. Turner Avenue & Riverside Drive	B	15.8	0.721	A	9.5	0.638
11. Turner Avenue & Chino Avenue*	A	3.2	0.524	A	3.9	0.660
12. Haven Avenue & Riverside Drive	C	30.8	0.816	D	39.8	0.909

SOURCE: MMA 2005; Transportation Research Board 2000
HCM 2000 Operations Methodology
LOS = Level of Service; Delay = Average Vehicle Delay (Seconds); V/C = Volume-to-Capacity Ratio
BOLD values indicate mitigated operating conditions.

Less Than Significant

Impact TRAF-2 The Countryside Specific Plan construction would result in the generation of construction-related vehicle trips, which could impact traffic conditions at individual intersections. This is considered a *less-than-significant* impact.

Implementation of the Countryside Specific Plan could result in the construction of eight neighborhoods in different phases on the project site. Construction of buildings could involve demolition of existing structures and removal of construction debris, grading of the site and associated export of earth materials, as well as delivery of construction materials and trips associated with construction workers. Construction of individual neighborhoods during Specific Plan implementation is not anticipated to result in substantial construction-related trip volumes. It's anticipated that during the construction phase, the maximum number of vehicles trips from construction vehicles and workers would be 25 one-way trips in the AM and PM peak hours of each day as well as total of 20 two-way daily trips for haul of equipment and materials. Major access points to the project site are off Riverside Drive and Archibald Avenue. Construction-related contribution to traffic along the existing roadway network would result in ***less than significant*** impacts to intersections. No mitigation is required.

Impact TRAF-3 Implementation of the Countryside Specific Plan would not substantially increase hazards due to design features or incompatible uses. This is considered a *less than significant* impact.

As the Countryside Specific Plan is implemented, new buildings and parking facilities would be constructed. It is anticipated that the development of new buildings and parking facilities would result in the need for new roadway segments. As individual neighborhoods are proposed and implemented, design development would include the use of standard engineering practices (e.g., use of standard road and driveway widths, provision of adequate sight lines, and avoidance of sharp turning radii) to avoid design elements that could result in hazards due to features such as sharp curves or dangerous intersections.

The City of Ontario NMC, of which the proposed Specific Plan is a part, proposes to accommodate residential and commercial growth requirements within the existing boundaries of the NMC area and within the building space capacity of the NMC area. The NMC is divided into thirty Specific Plan areas that serve as organizing land use elements that would extend existing grid-like (north/south, east/west) streets throughout the NMC area. With a lack of curvature and grade differential to the proposed roads, traffic hazards related to development of new roadway segments would be ***less than significant***. No mitigation is required.

3.10.6 Cumulative Impacts

As the traffic analysis presented above includes the cumulative impacts of general areawide growth and traffic that would be generated by other proposed specific plans within the NMC area, the overall cumulative impacts and the proposed project's contribution to the cumulative impacts have been addressed and quantified. As noted above, the intersection of Archibald Avenue and Edison Avenue would continue to

operate unacceptably per City of Ontario and CMP guidelines and significant and unavoidable cumulative impacts would occur. The traffic analysis performed above under Impact TRAF-1 accounted for cumulative development and concluded that the proposed project and associated mitigation would result in a beneficial impact with regard to LOS and V/C at this intersection. Therefore, the proposed project would have a less than significant contribution to cumulative impacts at the intersection Archibald Avenue and Edison Avenue.

The traffic, parking, and truck-related impacts during construction could potentially be exacerbated by the cumulative effects of other construction projects in the area if the construction schedules were to overlap. Due to the proposed phasing of construction of the specific plan areas within the NMC area, cumulative impacts related to construction-generated traffic would be less than significant.

3.10.7 Mitigation Measures and Residual Impacts

Ontario SOI GPA EIR Mitigation Measures

MM TRAF-1 *Implementation of the Sphere of Influence General Plan EIR shall require the project proponent to cooperate with the provision of additional through-traffic lanes by widening to accommodate the ultimate number of lanes designated in the general plan, or modifying functional classification for arterials to accommodate additional traffic lanes.*

MM TRAF-2 *The project proponent shall provide additional through traffic lanes by restriping using parking restrictions or other measures, where feasible.*

MM TRAF-3 *The project proponent shall provide traffic operations and traffic systems management (TSM) improvements including signal coordination, automated traffic control, Smart Corridors, intelligent transportation systems, and other measures.*

Project-Specific Mitigation Measures

The following mitigation measures are proposed to bring projected deficient project-area intersections to acceptable operating conditions, (LOS D or better and V/C of less than 1.0) per City of Ontario Standards. The mitigated level of service forecasts for the AM and PM peak hours are shown in Table 3.10-7. With the incorporation of the mitigation measures, all intersection impacts would be reduced to less than significant levels, with the exception of the intersection of Archibald Avenue and Edison Avenue, which would remain significant and unavoidable as described in Impact TRAF-1.

MM TRAF-1-SP *Development impact fees shall be paid for improvements or improvements shall be constructed as required by the City Engineer, for:*

(a) Intersection #1 Vineyard Avenue/SR-60 WB Ramps

- *provide NB left-turn only lane*
- *provide SB free-flow-right-turn only lane*

(b) Intersection #2 Vineyard Avenue/SR-60 EB Ramps

- *provide NB right-turn only lane*

- *provide EB left-turn only lane*
- *restripe EB shared left-turn/through lane as shared left-turn/through/right-turn lane*

(c) Intersection #3 Vineyard Avenue/Walnut Avenue

- *provide a signalized intersection with NB, SB, & WB permissive phasing and EB protected phasing*
- *provide EB left-turn only lane*

(d) Intersection #4 Vineyard Avenue/Riverside Drive

- *provide NB right-turn only lane*
- *provide SB right-turn only lane*
- *provide EB right-turn only lane*

(e) Intersection #5 Archibald Avenue/SR-60 WB Ramps

- *provide WB left-turn only lane*
- *restripe WB shared left-turn/through lane as shared left-turn/through/right-turn lane*

(f) Intersection #6 Archibald Avenue/SR-60 EB Ramps

- *provide EB left-turn only lane*
- *restripe EB shared left-turn/through lane as shared left-turn/through/right-turn lane*

(g) Intersection #7 Archibald Avenue/Riverside Drive

- *provide SB through only lane*
- *provide EB right-turn only lane*

(h) Intersection #8 Archibald Avenue/Chino Avenue

- *provide NB right-turn only lane*
- *provide SB through only lane*
- *provide two EB through only lanes*
- *provide EB right-turn only lane*
- *provide WB left-turn only lane*
- *provide WB shared through/right-turn only lane*

(i) Intersection #9 Archibald Avenue/Edison Avenue

- *provide NB through only lane*
- *provide NB right-turn only lane*
- *provide SB through only lane*
- *provide SB right-turn only lane*
- *provide EB free-flow-right-turn only lane*
- *provide WB right-turn only lane*

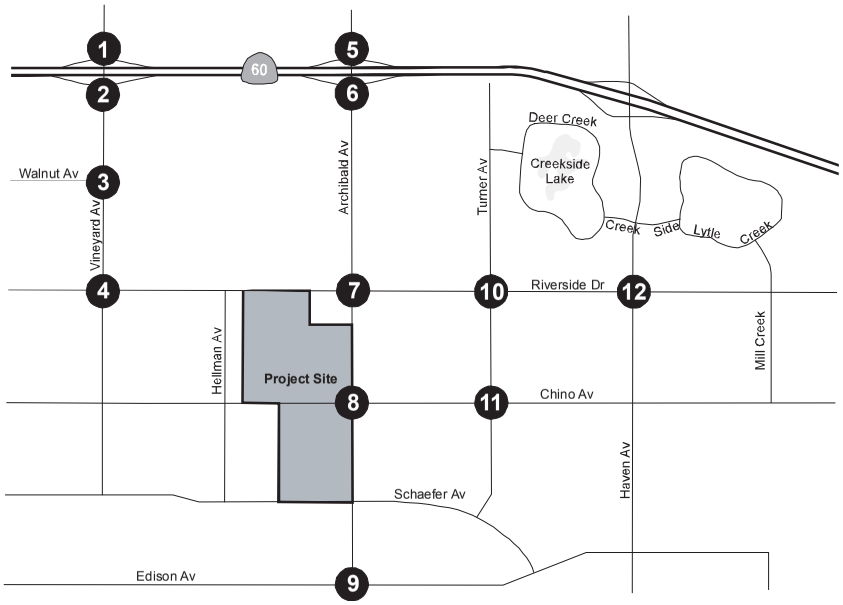
(j) Intersection #11 Turner Avenue/Chino Avenue

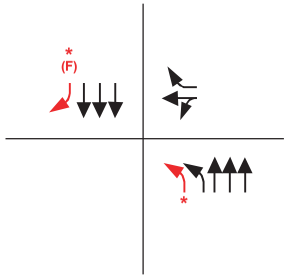
- *provide a signalized intersection with NB & SB permissive phasing and EB & WB protected phasing*

(k) Intersection #12 Haven Avenue/Riverside Drive

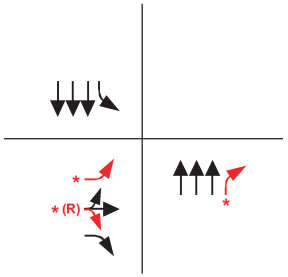
- *provide NB free-flow-right-turn only lane*

The implementation of these improvements may involve installation of the improvement by the project proponent or payment of appropriate fees to the City of Ontario, as determined by the City Engineer. The above proposed intersection improvement measures are graphically presented in Figure 3.10-11 (2015 Future with Mitigation Lane Configurations).





1. Vineyard Av/SR-60 WB Ramps



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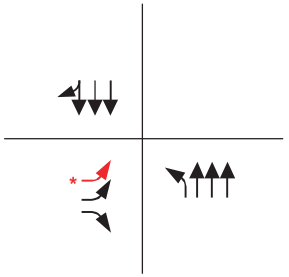
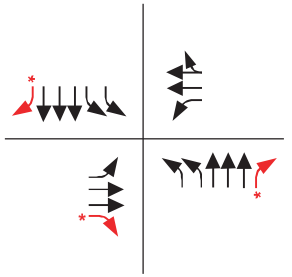
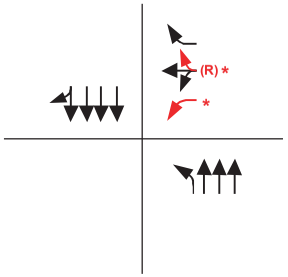


* SIGNALIZE

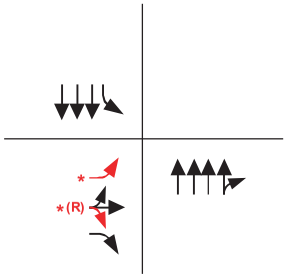
3. Vineyard Av/Walnut Ave



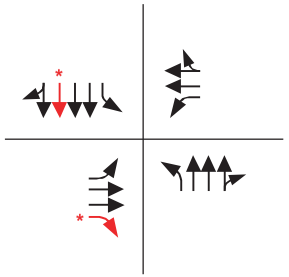
4. Vineyard Av/Riverside Dr



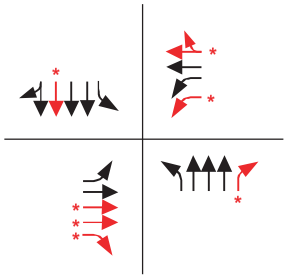
5. Archibald Av/SR-60 WB Ramps



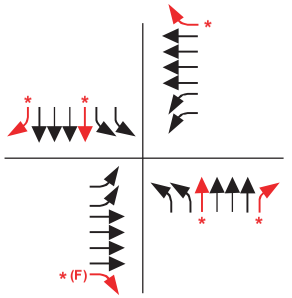
6. Archibald Av/SR-60 EB Ramps



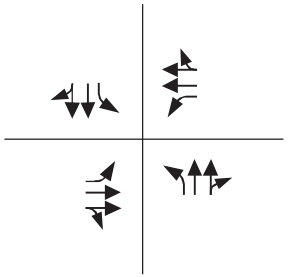
7. Archibald Av/Riverside Dr



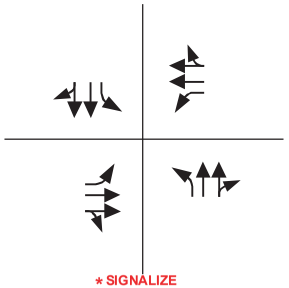
8. Archibald Av/Chino Av



9. Archibald Av/Edison Av

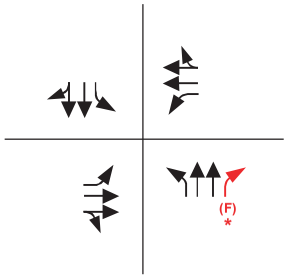


10. Turner Av/Riverside Dr



* SIGNALIZE

11. Turner Av/Chino Av



12. Haven Av/Riverside Dr

Legend

Project Site | # Study Intersection | (R) Restripe | (F) Free-Right

10905-00

FIGURE **3.10-11**

2015 Future with Mitigation Lane Configurations

Source: Meyer, Mohhades Associates

City of Ontario

Not to Scale

EIP ASSOCIATES

3.11 UTILITIES AND SERVICE SYSTEMS

This section evaluates the potential impacts related to Subarea Number 5 of the City of Ontario's NMC on utilities and service systems by identifying anticipated demand and existing and planned utility availability in the City of Ontario (the City). The Initial Study (Appendix A) identified the potential for impacts associated with water supply, wastewater services, solid waste services, and energy resources.

Data used in preparation of this section were taken from various sources, including Nolte Engineering's Utilities and Service Systems report prepared for the project, the City of Ontario Year 2000 Water Master Plan, the City of Ontario Master Plan of Drainage, the Water Supply Assessment (WSA) for the New Model Colony, previous environmental documentation, and information from the service providers regarding available service levels and current or anticipated constraints. Full bibliographic entries for all reference materials are provided in Chapter 7 (References).

No letters regarding utilities have been received in response to the Notice of Preparation and Initial Study prepared for the proposed project and circulated for public comment.

3.11.1 Existing Conditions

Water Supply

Sources

Derived from a combination of local groundwater and imported water, water in the proposed project area will be served by the City's Public Works Agency, Utilities Division. Currently, approximately 85 percent of the City's water is from local groundwater wells, while the remaining 15 percent is imported (City of Ontario 2003b).

The primary source of water for the City is the underlying Chino groundwater basin. The Chino Basin, a major aquifer system in the Santa Ana River watershed, has a total groundwater storage capacity estimated at over 6 million AF with approximately 5 million AF currently in storage. The operation of the Chino Basin is governed by a 1978 court judgment and agreement among producers. Each water producer, including the City of Ontario, is allowed a "base water right," which is a percentage of what can be safely pumped from the Chino Basin. Water producers can pump in excess of their base water right and either replenish the water or purchase water rights from other users (City of Ontario 2000).

During 2001-2002, the amount of groundwater which the City of Ontario was able to pump without being subject to a replenishment assessment was 19,281 acre feet per year (AFY). This represents 59 percent of total Basin production of 32,601 AFY. Actual water use for the City during 2001-2002 that was subject to a replenishment assessment was 13,320 acre feet (AF), which represents 41 percent of the total groundwater

production for the year and 69 percent of total water rights for the City (Albert A. Webb Associates 2004). Table 3.11-1 illustrates the breakdown of water usage for 2001-2002 as well as estimated 2029/30 usage.

Table 3.11-1 City of Ontario Water Rights and Replenishment Obligation[1]

Description	*2001-02 (Actual) Acre-Feet*	*2029-30 (Estimated) Acre-Feet*
Initial Safe Yield	11,374	11,374
Land Use Conversion	973	18,000
Ag Conversion Early Transfer	6,803	0
Recharge Activities	131	5,000
Total Operating Safe Yield	19,281	34,374
Total Groundwater Production [a]	32,601	65,000
Less Operating Safe Yield	(19,281)	(34,374)
Replenishment Obligation (net)	13,320	30,626

SOURCE: Albert A. Webb Associates 2004, Table 14

Based on 2001/02 Chino Basin Watermaster Assessment

[a] Total Production is adjusted for assigned water rights from Sunkist Company (equal to water provided by the City, approximately 1500 acre feet per year) and from San Antonio Water Company (equal to shares owned by the City, an entitlement of about 850 acre feet per year).

According to the City's Water Master Plan, water rights appurtenant to the parcels within the Ontario New Model Colony (NMC) are assigned to the City at the rate of 2 AFY of water. Thus, assuming 6,000 acres of the NMC is converted to urban use, 12,000 AFY of water rights will be assigned to the City, as shown above. However, the conversion rights may be reduced if future safe yield is found to be less than the current estimate.

The City's remaining source of water is imported surface water supplied through the Metropolitan Water District of Southern California (MWD) and the Inland Empire Utilities Agency (IEUA). This water, called State Water Project (SWP), comes from the Sacramento/San Joaquin Bay-Delta in Northern California and is delivered after traveling 400 miles through the California Aqueduct. SWP water is delivered through Lake Silverwood in the San Bernardino National Forest and is treated at the Agua de Lejos Treatment Plant. The treatment plant is located in the City of Upland and jointly owned by the City of Ontario and four other water agencies (City of Ontario 2003b). The treatment plant currently has a design capacity of approximately 81 mgd and currently operates at an approximate flow of 20.25 mgd (Albert A. Webb Associates 2004). Thus, the Agua de Lejos water treatment plant currently operates at approximately 25 percent. The capacity of the plant is divided among the five water agencies that own the plant. The City of Ontario is entitled to 31.4 percent of the plant's total capacity, or 25.43 mgd.

Demand

Table 3.11-2 below, shows historic water production rates (not including the NMC) and illustrates the continued growth trends associated with the City.

Table 3.11-2 City of Ontario Historic Water Production

Year	Volume (AF)
1989/90	37,839.8
1990/91	36,934.6
1991/92	34,748.6
1992/93	35,328.2
1993/94	35,362.6
1994/95	36,068.4
1995/96	40,603.2
1996/97	42,560.4
1997/98	39,229.3
1998/98	43,033.4
10-year average	38,170.9

SOURCE: City of Ontario 2000, Table 2-1

As discussed in the Water Master Plan, the City's water demands are anticipated to increase dramatically in the future. As the proposed project site is located within the NMC, Table 3.11-3 presents a summary of existing and ultimate demands by land use category for the City and NMC.

Table 3.11-3 Existing and Future Demand in City With and Without NMC

Land Use Category	Demand Factor	Existing		Ultimate				
	Gpm/acre	City pre-NMC (acres)	Demand (AFY)	City pre-NMC (acres)	City pre-NMC (AFY)	NMC (acres)	NMC Demand (AFY)	Total Demand (AFY)
Residential								
a. Low	2.71	4,552	19,875	4,689	20,473	4,666	20,374	40,847
b. Medium	2.82	1,026	4,666	1,094	4,976	200	910	5,886
c. High	3.08	344	1,709	322	1,757	330	1,801	3,558
Commercial	1.57	1,994	4,923	2,766	9,661	504	1,761	11,422
Industrial	0.50	4,781	3,856	6,283	5,715	338	307	6,023
Airport	0.23	1,393	507	1,394	507	0	0	507
Residential Commercial	4.50	130	944	944	1,342	0	0	1,342
Public	1.58	526	1,339	540	1,375	876	2,231	3,607
Irrigated Open Space	2.37	1,287	4,918	1,325	5,061	997	3,809	8,870
Total		*15,983*	*42,735*		*50,867*		*31,193*	*82,060*

SOURCE: City of Ontario 2000, Table 2-10

As shown above, development within the NMC is anticipated to result in an increased demand of approximately 31,193 AFY at buildout which will account for 38 percent of the City's overall demand

(Albert A. Webb Associates 2004). Total demands to be supplied from the City's ultimate system are thus projected to nearly double—from approximately 43,000 AFY to approximately 82,000 AFY.

Table 3.11-4 compares the sources of supply discussed above with the maximum day water demand for the City upon NMC buildout. According to the table, the City will be operating at a surplus for both regular as well dry weather demand between 2005 and 2030.

Table 3.11-4 Comparison of Future Water Supply and Demand (AFY)

	Groundwater	*Imported (WFA)*	*Desalter Water*	*Recycled Water*	*Total*	*Demand*	*Dry Weather Demand* [a]
2005	67,320	28,003	4,929	2,688	*102,940*	74,265	81,658
2010	94,091	28,003	4,929	4,257	*131,280*	86,250	94,876
2015	120,863	28,003	4,929	5,825	*159,507*	95,212	104,733
2020	140,913	28,003	4,929	7,281	*181,126*	104,061	114,478
2025	144,722	28,003	4,929	8,289	*185,943*	113,022	124,335
2030	148,754	28,003	4,929	9,297	*190,983*	121,871	134,080

SOURCE: Albert A. Webb Associates 2004

[a] Dry Weather Demand equals Demand column plus 10%

Infrastructure

The City's network of water distribution facilities includes approximately 356 miles of pipe in the hydraulic model ranging from 6 to 36 inches in diameter, 21 active wells, eleven storage reservoirs totaling approximately 60 million gallons (mg) of capacity, 12 booster stations, and 40 pressure-reducing valves located at 15 pressure-reducing stations (City of Ontario 2000). However, as the majority of the NMC is currently composed of agricultural uses, limited water infrastructure exists in the project site. Specifically, there are two existing water distribution mains located adjacent to the project site; a 10-inch main is located in Riverside Drive and a 12-inch main is located in Archibald Avenue.

The water main located in Riverside Drive adjacent to the project site provides water to the existing residential development at the southwest corner of Riverside Drive and Archibald Avenue. The water main in Archibald Avenue serves the existing residential and commercial sites to the east of Archibald Avenue. Currently, on-site residential uses within the project site are served by private wells (Meritage Homes 2004).

The project site spans two pressure zones within the City's water system service area, which include the Francis and Phillips streets pressure zones. The Francis Street pressure zone was established in 1999 to include the annexation of the NMC, and became the fifth pressure zone within the City (City of Ontario 2000). In addition, due to pressure considerations with the annexation of the NMC, the Phillips Pressure Zone was extended southerly to Chino Avenue, westerly of Cleveland Avenue ("New Phillips Zone") (City of Ontario 2000). Thus, the northern portion of the project site (north of Chino Avenue) lies within the New Phillips Street pressure zone, while the remainder of the project site lies within the Francis Street pressure zone. According to the Water Supply Assessment prepared for the NMC, the City's projected

water demand will be met using four water supply sources: imported water, local groundwater, treated groundwater, and recycled water. Table 3.11-5 illustrates current and projected contribution of overall demand for the five pressure zones serving the City.

Wastewater Service and Treatment

It is the responsibility of the City to convey sewage generated by the NMC through a system of sewers to the Inland Empire Utilities Agency (IEUA) facilities for further transport, treatment, and disposal. IEUA operates a regional wastewater collection system for the delivery of sewage collected by member cities or water districts to treatment plants. The IEUA regional wastewater system is deigned to serve as a backbone collection system accepting flows from the collection systems operated by member agencies and transmitting this water to an appropriate regional treatment plant (City of Ontario 1997).

IEUA's 242 square mile service area is located in the southwest corner of San Bernardino County (the County), and provides regional wastewater service and imported water deliveries to eight contracting agencies. These contracting agencies include the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, and Upland, as well as two water districts (IEUA 2004). IEUA owns and operates five regional wastewater treatment facilities. In addition, IEUA owns and operates a co-composting facility, several domestic trunk and interceptor sewage lines, as well as several industrial trunk interceptor sewage lines (IEUA 2004).

The City's existing wastewater collection system predominantly consists of gravity sewers flowing from the northern parts of the City south to IEUA's Regional Plant No. 1 (RP-1), which is the primary treatment facility serving the City of Ontario. Wastewater generated from portions of the City generally located south of Philadelphia Street, west of Cucamonga Creek, and south of Francis Street, east of Cucamonga Creek, has to be pumped to the treatment plant. Currently, the City owns and operates six sewer pump stations to support the gravity sewer collection system. Generally, each of the pump stations contains multiple pumps that pump the sewage to the City's gravity sewer system, and IEUA gravity system, or to RP-1 directly. The Archibald Ranch Pump Station is located adjacent to the project site at the corner of Archibald Avenue and Schaefer Avenue, and serves the existing residential uses within the area.

Presently, the project area does not have a system for wastewater collection, treatment and disposal. Rather, sewer service in the project area consists of septic tanks and subsurface disposal fields. However, as illustrated on Figure 3.11-1, existing sewer mains are located adjacent to the project site in Archibald Avenue and Riverside Drive, which serve existing residential uses located to the north and east of the project site (City of Ontario 2000).

The NMC Sewer Master Plan evaluated the requirements for sanitary sewer mains and treatment capacity based upon buildout of the NMC and determined the need for a new treatment facility and collection system to serve the area. Thus, future sewer collection service for the project site will be provided through a system of gravity sewers that will convey wastewater from the NMC, including the project site, to the south to IEUA's Kimball Interceptor (City of Ontario 2000). The Kimball Interceptor has been designed to accept 26.46 mgd at Baker Avenue, and 35.05 mgd at Euclid Avenue (City of Ontario 2000).

Table 3.11-5 Water Supply Forecast Maximum Day Water Demand (mgd)

Pressure Zone	*Source*	*2004*	*2005*	*2010*	*2015*	*2020*	*2025*	*2030*
13th St.	Groundwater	0.0	0.0	3.6	3.6	3.6	3.6	3.6
	Imported (WFA)	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Desalter Water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Recycled Water	0.0	0.0	0.1	0.1	0.2	0.2	0.2
	Total	*9.0*	*9.0*	*12.7*	*12.7*	*12.8*	*12.8*	*12.8*
8th St.	Groundwater	26.7	30.3	36.2	45.8	48.9	48.8	48.8
	Imported (WFA)	16.0	16.0	16.0	16.0	16.0	16.0	16.0
	Desalter Water	0.0	3.1	0.0	0.0	0.0	0.0	0.0
	Recycled Water	0.0	1.0	1.3	1.5	1.8	1.8	1.8
	Total	*42.7*	*50.4*	*53.5*	*63.4*	*66.7*	*66.8*	*66.6*
4th St.	Groundwater	13.6	24.5	28.1	38.8	41.4	41.4	41.4
	Imported (WFA)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Desalter Water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Recycled Water	0.1	0.1	0.2	0.3	0.4	0.4	0.4
	Total	*12.2*	*24.6*	*28.3*	*39.1*	*41.8*	*41.8*	*41.8*
Phillips St.	Groundwater	5.3	5.3	8.9	8.9	13.9	13.9	13.9
	Imported (WFA)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Desalter Water	0.0	1.3	1.3	0.0	0.0	0.0	0.0
	Recycled Water	1.0	1.1	1.3	1.5	1.6	1.7	1.8
	Total	*6.3*	*7.6*	*11.4*	*10.3*	*15.5*	*15.6*	*15.9*
Phillips St.	Groundwater	5.3	5.3	8.9	8.9	13.9	13.9	13.9
	Imported (WFA)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Desalter Water	0.0	1.3	1.3	0.0	0.0	0.0	0.0
	Recycled Water	1.0	1.1	1.3	1.5	1.6	1.7	1.8
	Total	*6.3*	*7.6*	*11.4*	*10.3*	*15.5*	*15.6*	*15.9*
Francis St.	Groundwater	0.0	0.0	7.2	10.8	18.0	21.6	25.2
	Imported (WFA)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Desalter Water	0.0	0.0	3.1	4.4	4.4	4.4	4.4
	Recycled Water	0.0	0.2	0.9	1.7	2.5	3.3	4.0
	Total	*0.0*	*0.2*	*11.2*	*16.9*	*24.9*	*29.3*	*33.6*
	Groundwater	45.5	60.1	84	107.9	125.8	129.3	132.9
	Imported (WFA)	25.0	25.0	25.0	25.0	25.0	25.0	25.0
	Desalter Water	0.0	4.4	4.4	4.4	4.4	4.4	4.4
	Recycled Water	1.1	2.4	3.8	5.1	6.5	7.4	8.2
	Total	*71.6*	*91.9*	*117.2*	*142.4*	*161.7*	*166.1*	*170.5*

SOURCE: Albert A. Webb Associates 2004

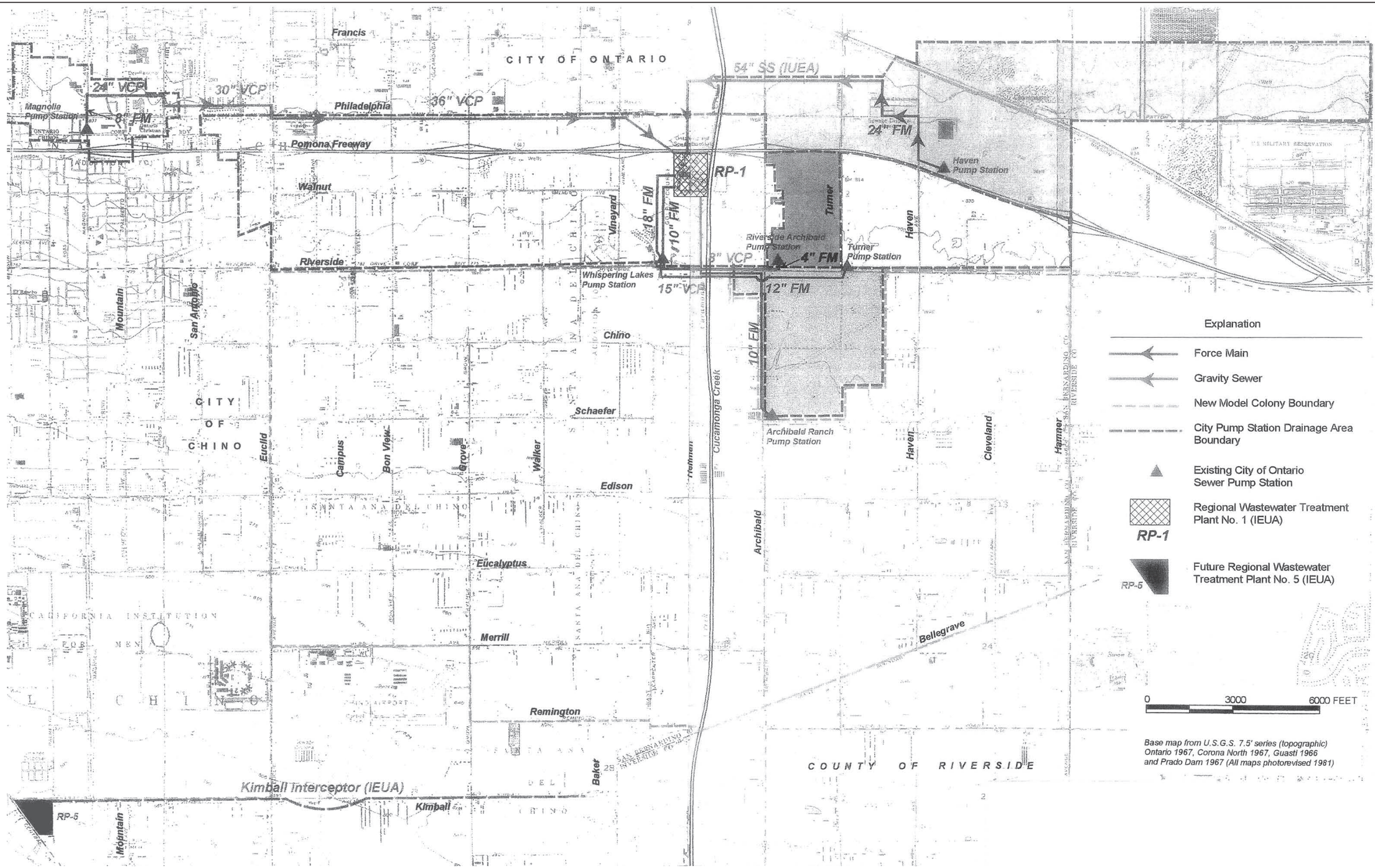


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FIGURE **3.11-1**

City of Ontario Wastewater Infrastructure

Source: AKM

City of Ontario

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The expected total average and peak flow to be generated by the NMC and conveyed to the Kimball Interceptor are estimated based upon the unit flow factors and the land uses within the service area. These flows are summarized below in Table 3.11-6.

Table 3.11-6 Anticipated NMC Sewer Flows to Kimball Interceptor

Connection Location	Average Flow		Peak Dry Weather Flow	
	Csf	Mgd	Cfs	mgd
Baker Avenue	9.64	6.23	14.95	9.66
Euclid Avenue	10.64	6.88	16.38	10.59

SOURCE: City of Ontario 2000, p. 1-5

The Kimball Interceptor will transport sewage west to IEUA's new wastewater treatment plant, RP-5, located in the city of Chino at the corner of Kimball Avenue and El Prado Road. Based upon anticipated development within the NMC, the RP-5 was recently completed in 2003. The current capacity of the RP-5 is approximately 15 mgd with existing flows at approximately 9 mgd (Mazier 2004). Thus, RP-5 is currently operating at approximately 60 percent capacity. The ultimate capacity at build-out will be 51 mgd (IEUA 2004).

Solid Waste Services

The City of Ontario Solid Waste Department provides solid waste services and is the exclusive hauler for the City. The City currently serves approximately 30,000 single-family homes and offers several residential solid waste programs. Solid waste collected from the City is hauled to the West Valley Materials Recovery Facility (MRF) located at 13373 Napa Street in the city of Fontana, California. Refuse is then transported to the El Sobrante Landfill located at in the City and county of Riverside (Murphy 2004). The El Sobrante Landfill can accommodate 10,000 tons per day (tpd) and has a remaining capacity of 6,680,486 tons. The El Sobrante Landfill has a life expectancy of approximately 30 years (Murphy 2004). The West Valley MRF has a permitted capacity of 5,877 tpd and a per day operating capacity of 5,000 tpd (CIWMB 2004). The West Valley MRF accepts construction and demolition waste, mixed municipal waste, green materials, inert waste and wood. At this time, there are no plans for expansion of either facility.

Additionally, the City of Ontario offers several programs in order to promote waste minimization and recycling efforts. These programs are extended to both residential and commercial/industrial customers (City of Ontario 2004).

The City's annual diversion rate for 2000 was 37 percent.[5] This is below the AB939 requirement of 50 percent diversion of solid waste by the year 2000.

[5] Data for 2000 was the most recent data that has been approved by the CIWMB Board. Preliminary data is available for 2001 and 2002 but this data is not yet board approved.

Energy

Electricity is provided to the project site by Southern California Edison (SCE). The power grid within the NMC consists of transmission, bulk power, and distribution components. The 500 and 220 kilovolt (kV) transmission lines, along with the 500 kV Mira Loma Substation within the NMC are considered to be part of SCE's backbone transmission system, bringing power from Northern California and Arizona to San Bernardino, Riverside and Orange Counties. The Mira Loma transmission substation is one of six transmission substations operated by SCE.

Power from the transmission system is delivered to SCE's Chino "bulk system" substation. The Chino substation currently delivers 770,000 kilowatts of power to its service radius which includes the NMC and the project area. In June 2001, an additional substation was constructed within the SCE's Mira Loma facility. This substation is interconnected with the other 66 kV substations and serves to provide added security during emergency shut downs at a particular substation. This substation has added SCE's service capability in the NMC area.

Power is distributed from the Chino bulk power substation to the NMC via a system of four 12 kV distribution stations and a network of 12 kV power lines. The nearest distribution substation to the proposed project area is located at Archibald Avenue and Edison Street.

Existing electrical infrastructure in the project area include a 220 kV transmission along the southern border of Subarea 5. This line terminates near the southeastern border of the project site and extends west to the Chino city border.

The Southern California Gas Company (SCG) provides natural gas service to the project site. SCG lines in the project area are pressurized at 500 pounds per square inch (psi). There are two lines serving the NMC area; the closest of which begins at Euclid and Edison Avenues and travels east to Archibald Avenue and proceeds to the north. The line travels north beginning at the southeastern corner of the project site and turns east approximately midway between Schaeffer and Chino Avenues.

3.11.2 Regulatory Framework

Federal

Safe Drinking Water Act

Enacted in 1974 and implemented by the United States Environmental Protection Agency (EPA), the federal *Safe Drinking Water Act* imposes water quality and infrastructure standards for potable water delivery systems nationwide. The primary standards are health-based thresholds established for numerous toxic substances. Secondary standards are recommended thresholds for taste and mineral content.

U.S. Environmental Protection Agency (EPA)

The EPA established primary drinking water standards in the *Clean Water Act* Section 304. States are required to ensure that potable water retailed to the public meets these standards. Standards for a total of eighty-one individual constituents have been established under the *Safe Drinking Water Act* as amended in 1986. The U.S. EPA may add additional constituents in the future. State primary and secondary drinking water standards are promulgated in CCR Title 22 Sections 64431–64501. Secondary drinking water standards incorporate non-health risk factors including taste, odor, and appearance.

State

AB 939—California Integrated Waste Management Act

In 1989, the Legislature adopted the *California Integrated Waste Management Act of 1989*. The Act requires that each county prepare a new Integrated Waste Management Plan. The Plan was required to include a Source Reduction and Recycling Element prepared by each city within the state by July 1, 1991. Each source reduction element included a schedule providing for source reduction, recycling, or composting of 25 percent of solid waste in the jurisdiction by January 1, 1995, and 50 percent by January 1, 2000. SB 2202 (Senate Environmental Quality Committee 2000) made a number of changes to the municipal solid waste diversion requirements under the *Integrated Waste Management Act*. These changes included a revision to the statutory requirement for 50 percent diversion of solid waste to clarify that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000.

California Safe Drinking Water Act

Enacted in 1976, the *California Safe Drinking Water Act* is codified in Title 22 of the California Code of Regulations (CCR). Potable water supply is managed through local agencies and water districts, the state Department of Water Resources (DWR), the Department of Health Services (DHS), the SWRCB, the EPA, and the U.S. Bureau of Reclamation. Water right applications are processed through the SWRCB for properties claiming riparian rights or requesting irrigation water from state or federal distribution facilities. The DWR manages the SWP and compiles planning information on supply and demand within the state.

SB 221 and SB 610

Signed into law on October 2001 and effective beginning January 2002, SB 221 and SB 610 serve to ensure that certain land developments in the state must be accompanied by an available and adequate supply of water to serve those developments. Serving as companion measures, SB 610 and SB 221 seek to promote more collaborative planning between local water suppliers and cities and counties.

SB 221 requires the legislative body of a city, county, or local agency to include, as a condition in any tentative map that includes a subdivision, a requirement that a sufficient water supply shall be available to serve the subdivision. A "subdivision" is defined as a proposed residential development of more than

500 dwelling units or one that would increase, by at least 10 percent, the number of service connections of a public water system having less than 5,000 connections. "Sufficient water supply" is defined as the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand of a proposed subdivision. SB 221 ensures that collaboration on finding the needed water supplies to serve a new large subdivision occurs before construction begins.

SB 610 requires additional factors to be considered in the preparation of urban water management plans and water supply assessments. SB 610 requires all urban water suppliers to prepare, adopt, and update an urban water management plan that, essentially, forecasts water demands and supplies within a certain service territory. In addition, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912(a)) subject to the *California Environmental Quality Act*.

Urban Water Management Planning Act

The *Urban Water Management Planning Act* was developed due to concerns for potential water supply shortages throughout the California. It requires information on water supply reliability and water use efficiency measures. Urban water suppliers are required, as part of the Act, to develop and implement Urban Water Management Plans to describe their efforts to promote efficient use and management of water resources.

Water Conservation Projects Act

The California's requirements for water conservation are codified in the *Water Conservation Projects Act* of 1985 (Water Code Sections 11950–11954), as reflected below:

> 11952. (a) It is then intent of the Legislature in enacting this chapter to encourage local agencies and private enterprise to implement potential water conservation and reclamation projects…

Water Recycling Act

Enacted in 1991, the *Water Recycling Act* established water recycling as a priority in California. The Act encourages municipal wastewater treatment districts to implement recycling programs to reduce local water demands.

Local

City of Ontario

All proposed development projects within the City of Ontario that may potentially impact surface drainage and groundwater are subject to the requirements and regulations of the following agencies:

- City Engineer
- City Public Works Agency / Utilities Department

- Inland Empire Utilities Agency
- Santa Ana Regional Water Quality Control Board

Applicable SOI GPA Policies

The proposed project must be consistent to applicable policies established under the Ontario Sphere of Influence General Plan Amendment. The SOI GPA established specific policies based upon identified impacts and mitigation measures. Applicable SOI policies relating to Utilities and Service Systems include the following:

Utility and Service Systems

Policy 1.1.8 *Require that all development projects, including those that are excluded from subarea Specific plans, contribute their "fair share" of infrastructure and public service costs. This shall be based on the determination of the estimated pro-rata share of infrastructure and service demands that are generated in accordance with AB 1600.*

Policy 3.2.1 *Require the provision of infrastructure needed to support anticipated residential development and ensure the proper integration of all services.*

Water Supply and Distribution

Policy 5.1.1 *Plan for and construct a water supply system to support development.*

Policy 5.1.3 *Require Specific Plans and large development projects to prepare a water system planning study.*

Policy 5.1.4 *Consider requiring the planning and construction of a dual pipe system to supply reclaimed water throughout the Sphere of Influence.*

Policy 5.2.1 *Require new development to construct and dedicate water supply facilities.*

Policy 5.3.1 *Require improvements to the water supply facilities necessitated by new development be borne by the new development benefiting from the improvements: either through the payment of fees, or by the actual construction of the improvements.*

Policy 6.1.1 *Enable the planning for and construction of a wastewater system to support new development.*

Wastewater Service and Treatment

Policy 6.2.2 *Require that sewer capacity and facilities are available before building permits are issued for new development.*

Policy 6.3.1 *Require the costs of improvements to the existing wastewater collection facilities necessitated by new development be borne by the new development benefiting from the improvements.*

Solid Waste Services

Policy 4.1 *Expand the recycling program to include multi-family residences, commercial and industrial uses.*

Policy 4.3 *Encourage and support regional and statewide efforts to reduce the solid waste stream*

Policy 4.6 *Provide solid waste recycling programs including exploring the possibility of the development of a Materials Recovery Facility (MRF).*

Policy 4.7 *Investigate the possibility of a City-sponsored program to recycle yard waste and development of end-markets for compost.*

Policy 4.9 *Encourage diversion of special wastes such as tires, white goods, and construction and demolition debris.*

Policy 1.18.3 *Require that developers commit to the provision of supporting uses and services through Development Agreements, Conditions of Development, bonds, and other appropriate techniques.*

Applicable General Plan Policies

The proposed project must be consistent to applicable policies established under the City of Ontario General Plan. The General Plan established policies based upon identified needs within the City. Applicable General Plan policies relating to Utilities and Service Systems include the following:

Infrastructure Element

Policy 1.1 *Update the City's Water System Master Plan as needed.*

Policy 1.2 *Include water system improvements as needed in the City's Capital Improvements Program.*

Policy 1.3 *Continue to give priority to relief of significant existing water supply and distribution problems in developed areas over construction of new systems in developing areas. Current City policy states that existing residents and businesses should not have to pay for additional facilities and services to secure new development.*

Policy 1.4 *Require financing plans for water system capital improvements in large developments as a condition of approval.*

Policy 1.5 *Preserve existing aquifer recharge areas.*

Policy 1.6 *The City will adopt a landscape water conservation ordinance by January 1, 1993 as required by state law.*

Policy 2.1 *Actively support local and regional water conservation programs.*

Policy 3.1 *Update the City's Sewer Master Plan.*

Policy 3.2 *Include sewer system improvements as needed in the City's Capital Improvement Program.*

Policy 3.3 *Continue to give priority to improvement of significant deficiencies in the existing system over new facilities to serve undeveloped areas of the City.*

Policy 3.4 *Reduce wastewater generation by developing standards for minimizing water use.*

Policy 3.5 *Work with IEUA to increase the environmentally sound opportunities to reuse treated wastewater. Support and, where feasible, mandate reuse of recycled waste water and sewage sludge in public and private landscaping.*

Policy 3.6 *Require financing plans for sewerage system capital improvements in large developments as a condition of approval.*

Policy 4.8 *Encourage backyard composting by property owners. Provide instructions on how to set up a composting system.*

Policy 4.9 *Encourage diversion of special wastes such as tires, white goods, and construction and demolition debris.*

Policy 4.10 *Support the local and regional development of the California Integrated Waste Management Board's Recycling Market Development Zones Program.*

3.11.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2004 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on Utilities and Service Systems if it would result in any of the following:

- Exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Create a shortfall of sufficient water supplies available to serve the Project from existing entitlements and resources, or may require issuance of new or expanded entitlements.
- Result in a determination (by the wastewater treatment provider that serves or may serve the Project) that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.
- Result in the permitted capacity being exceeded, of the landfill serving the Project's solid waste needs
- Comply with federal, state, and local statutes and regulations related to solid waste.
- Result in an adverse impact on local and regional energy supplies, including base or peak period demands, regardless of the presence of a will-serve letter from the appropriate energy provider.

3.11.4 Project Impacts

Potentially Significant

Impact UTIL-1 Implementation of the proposed project would require the construction of new or expanded wastewater conveyance systems, the construction of which could cause significant environmental effects. This is considered a *potentially significant* impact.

As discussed previously, the project area does not currently have a system for wastewater collection, treatment and disposal. Therefore, the project will require the construction of new wastewater collection systems within the project area. Installation of these lines will occur during the construction of public streets within the project area. Individual connections to residences will occur during their construction.

Wastewater conveyance facilities will be provided through a system of gravity sewers that will eventually convey wastewater from the project site to the IEUA Kimball Interceptor. As discussed under Impact UTIL-6, the proposed project is anticipated to generate approximately 221,130 gpd (0.22113 mgd) of wastewater at buildout. This increase of approximately 0.22113 mgd represents less than 1 percent of the total capacity of the Kimball Interceptor, which has been designed to accept 26.46 mgd at Baker Avenue, and 35.05 mgd at Euclid Avenue. Thus, sufficient capacity exists at the Kimball Interceptor, which will transport this sewage west to IEUA's new Regional Plant No. 5 (RP-5).

SOI GPA Policy 6.2.2 requires that sewer capacity and associated facilities are available prior to the issuance of building permits. The City's Sewer Master Plan proposes new sewer facilities extending along the easterly boundary of the project site in Archibald Avenue. Completion of these Master Plan improvements is required to provide sewer service to the proposed project. These improvements will be constructed by IEUA, which is constructing a 33-inch sewer main in Archibald Avenue from Riverside Drive southerly to connect to a main in Kimball Avenue. Onsite sewer will be provided by an 8-inch sewer system, which will drain into the 33-inch sewer in Archibald Avenue (Meritage Homes 2004). Thus, the project will be developed in accordance with Policy 6.2.2. Additionally, the project would be consistent with SOI GPA Policy 6.3.1 which requires that all costs necessitated by new development be borne through developer fees. Consistency with this policy further ensures that Policy 6.2.2 (discussed above) will be implemented in that the infrastructure required will have the funding necessary to ensure its implementation.

Figure 3.11-2 shows the proposed wastewater infrastructure for the proposed project area.

However, in order to determine the adequacy of the proposed sewer conveyance system to accept the additional wastewater flows from the project site, the preparation of a Subarea 5 Sewer Plan (SP) is necessary for the project site and must be completed prior to project implementation. Once completed, the SP study results will confirm whether the City lines will be adequate to receive the additional flows from the project and determine improvements that may be necessary to accommodate flows generated by the project. Because the SP has not yet been competed, impacts are considered potentially significant.

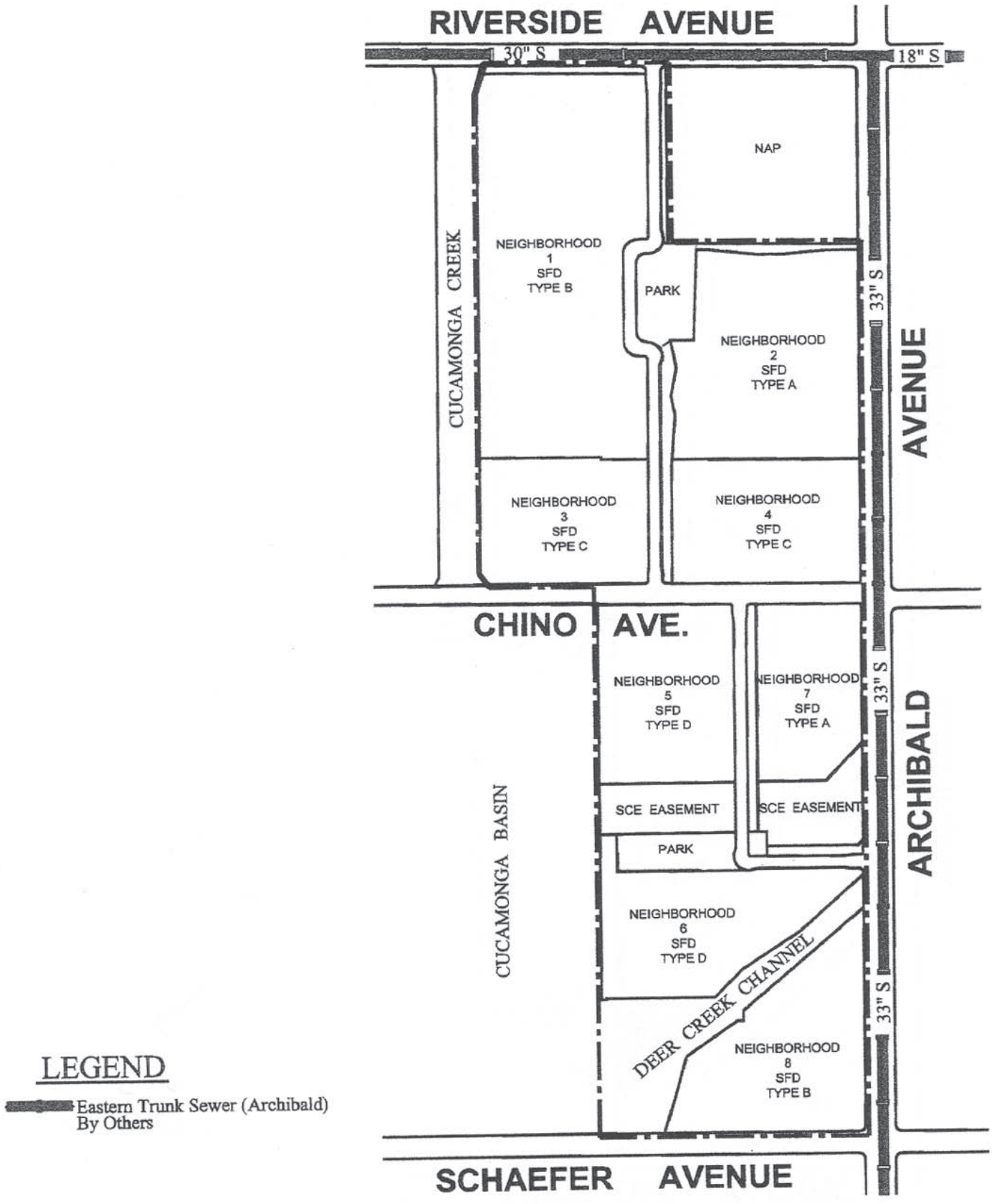

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FIGURE **3.11-2**

Proposed Wastewater Infrastructure

Source: Countryside Specific Plan, June 2004

City of Ontario

Not to Scale

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Mitigation measure MM UTIL-1-SP requires the preparation of and adherence to the future SP to be prepared for the project area. Implementation of MM UTIL-1–SP would reduce this impact to a ***less-than-significant*** level.

Impact UTIL-2 The proposed project would compromise the City's ability to comply with federal, state, and local statutes and regulations related to solid waste. This is considered a *potentially significant* impact.

AB939 is a state statute related to reducing solid waste disposal by 50 percent by the start of 2000 and preparation of a solid waste reduction plan to help reduce the amount of solid waste disposed at the landfills. As discussed above, the City is responsible for meeting this goal. As of the year 2000, the City achieved a 37 percent diversion rate. Preliminary numbers of the City's diversion rate performance (not yet approved by the CIWMB board) for years 2001 and 2002 are 43 percent and 32 percent, respectively.

In order to ensure compliance with requirements of AB 939, the additional solid waste generated during construction and operation of the proposed project would need to include provisions for recycling. The project would be sited in accordance with SOI GPA Policy 4.6 through preparation of a recycling plan which is anticipated to detail the percentage of C&D debris that would be diverted during the development process. However, because most recent numbers reported to the CIWMB indicate that the City is currently operating significantly under the required 50 percent rate of diversion, any increase in solid waste stream would likely contribute to the City's continued noncompliance with AB 939. As such, the proposed project includes mitigation measure MM UTIL-2-SP to ensure that a project-related solid waste plan is prepared to ensure that an acceptable amount of project-related solid waste is diverted from landfills. With the incorporation of MM UTIL-2-SP, project impacts related to compliance with state statute would be ***less than significant***.

Impact UTIL-3 Implementation of the proposed project could exceed the El Sobrante landfill's permitted capacity in order to serve future development's solid waste needs. This is considered a *potentially significant* impact.

The project would generate solid waste during construction and operation. Because the project site is largely undeveloped, little structural demolition generating substantial sources of refuse is likely to occur. Waste materials would be generated during construction from construction debris, scrap metals, and shipping materials. A portion of this refuse could be recycled, which would reduce the waste stream to landfills.

For project operation, generation rates were employed to calculate the proposed project's solid waste production per year. Table 3.11-7 presents this information.

Total solid waste produced by the proposed project would be approximately 1,658 tons per year, which equates to approximately 4.5 tons of solid waste per day. As discussed in Section 3.11.1 (Existing Conditions), West Valley MFR has a design capacity of 5,877 tpd, and that its current operating capacity is 5,000 tpd. As such, the approximate 4.5 tons of solid waste generated by the proposed project per day

would represent 0.09 percent of the MRF's existing operating capacity, and 0.5 percent of remaining capacity. Thus, solid waste generated by the proposed project could be accommodated by the West Valley MRF's facilities.

Table 3.11-7 Proposed Solid Waste Demand

Type of Use	*Generation Rate*	*Quantity*	*Tons Generated per Year*
Residential	12.23 pounds /household/day [a]	819 households	1,658
Total	n/a	n/a	1,658
Existing Landfill Capacity	n/a	n/a	6,680,486

SOURCE: EIP Associates 2004

[a] Value based on California Integrated Waste Management Board's Estimated Solid Waste Generation Rates for Residential Developments

The existing permitted capacity of the El Sobrante Landfill 10,000 tpd and has a remaining capacity of 6,680,486 tons. Thus, the approximate 4.5 tpd generated by the proposed project would represent 0.05 percent of daily tonnage to this landfill. As discussed, the Solid Waste Department for the City of Ontario has indicated that the proposed project would dispose of solid waste at this landfill and capacity would be adequate for approximately 30 years.

The proposed Specific Plan is also required to be consistent with other policies related to Solid Waste Services, as listed above. Additionally, the proposed project would be sited in accordance with SOI GPA Policy 4.6 which requires recycling programs be prepared for development within the SOI area. It is anticipated that implementation of a recycling program would reduce solid waste stream beyond what is listed in Table 3.11-7. In addition, mitigation measure MM UTIL-2-SP would ensure that a project-related solid waste plan is prepared to ensure that an acceptable amount of project-related solid waster is diverted from landfills. MM UTIL-2-SP details the type of recycling plan that would help achieve project consistency with SOI GPA Policies 4.3 (support of regional and statewide solid waste reduction efforts) and 4.9 (diversion of additional solid waste types). Implementation of this mitigation measure would ensure that impacts are reduced to a ***less-than-significant*** level.

Impact UTIL-4 Implementation of the proposed project would increase the demand for electricity and natural gas, but would not require or result in the construction of new energy production or transmission facilities, the construction of which could cause a significant environmental impact. This is considered a *potentially significant* impact.

Implementation of the Countryside Specific Plan would increase development on the site and correspondingly increase the demand for electricity and natural gas in the project area. This increased energy demand is considered a potentially significant impact. The estimated demand for electricity and natural gas services for the proposed project are calculated in Table 3.11-8, along with assumed generation rates. The proposed project would demand an additional 4,608,103 kilowatt hours per year of electricity and 179,443 cubic feet per year of natural gas.

Although the proposed project would result in the energy demand increases in demand noted above, an adequate energy supply is anticipated to be available, as the electrical and natural gas supplies and infrastructure to support demand are provided as needed by SCE and SCG. Therefore, the proposed project would not substantially increase demands beyond available supply. The project-generated demand for electricity and natural gas would be negligible in the context of overall demand within the City of Ontario and the state, and thus is not anticipated to require substantial upgrades or expansion of existing electricity systems. Thus, development of the proposed project would have a less-than-significant impact on overall energy and gas consumption. Implementation of MM UTIL-3-SP would further reduce impacts to ***less-than-significant*** levels.

Table 3.11-8 Proposed Electricity and Natural Gas Demand

Type of Use	*Generation Rate* [a]	*Quantity*	*Tons Generated per Year*
Electricity	5,626.5 kilowatt/hour/year	819 residential units	4,608,103 kWh/year
Natural Gas	219.1 cubic feet per day	819 residential units	179,443 cubic feet per year

SOURCE: EIP Associates 2004

[a] Values based on generation rates used in the City of Ontario Sphere of Influence General Plan EIR, October 1997.

Less than Significant

Impact UTIL-5 Implementation of the proposed project would generate an additional demand for water; however, the increased demand would not require water supplies in excess of existing and planned entitlements and resources. This is considered a *less-than-significant* impact.

Development under the proposed Countryside Specific Plan would result in the addition of approximately 819 residential units within the project area. The development proposed within Neighborhoods 1, 5, and 6 totals approximately 74 acres. This new development will increase demands for domestic water services. Specifically, with a demand factor of 2.71 gpm/acre (City of Ontario 2000, Table 2-10), development on approximately 74 acres would result in an increase of approximately 201 gpm or 323.5 AFY. According to the City's Water Master Plan, the NMC demands are projected be approximately 31,200 AFY at buildout. Thus, the project's contribution of 201 gpm (323.5 AFY) would represent approximately 1.04 percent of the NMC's total water demand at buildout.

New domestic water mains would be constructed as part of the development of the Countryside Specific Plan area. Neighborhood 1 would utilize an existing 10-inch water main in Riverside Drive and an existing 12-inch water main in Archibald Avenue. Development of a new 18-inch water main in Chino Avenue between Archibald Avenue and the easterly boundary of the Cucamonga Basin would be required to serve Neighborhood 1. Provision of domestic water service to Neighborhood 2 would require development of new water mains including a 12-inch water main in Chino Avenue between Archibald Avenue and the easterly boundary of the Cucamonga Basin, a 12-inch water main in Archibald Avenue between Chino Avenue and Schaefer Avenue, and a 12-inch water main in Schaefer Avenue between Archibald Avenue and

the easterly boundary of the Cucamonga Basin. In addition, 8-inch water mains would be developed within the local street system. The proposed domestic water infrastructure is illustrated in Figure 3.11-3.

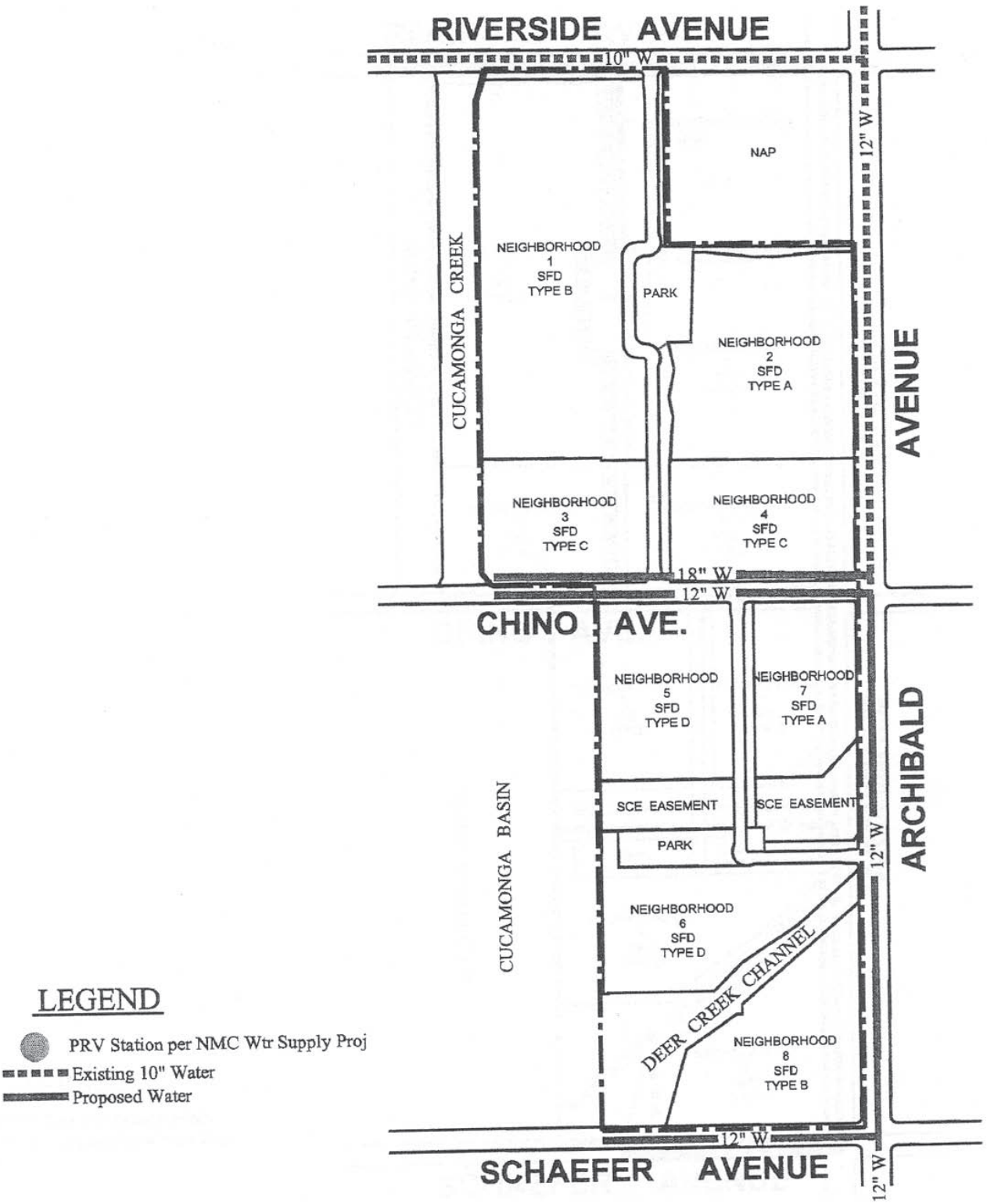
New reclaimed water lines would be constructed as part of the development of the Countryside Specific Plan area and would include 8-inch lines in Riverside Drive, Chino Avenue, Archibald Avenue, and Schaefer Avenue adjacent to the proposed project site. Additionally, 6-inch reclaimed water lines would be installed as required by the City Engineer to provide irrigation for public landscaped areas such as the local parks, parkways, and buffer areas. In addition to the new facilities, the applicant would be required to relocate an existing 30-inch reclaimed water line within the proposed project site. The proposed reclaimed water infrastructure is illustrated in Figure 3.11-4.

Senate Bill 610 requires a water provider to furnish substantial evidence that adequate water supplies would be available to meet the water demands of new customers through normal and single-dry and multiple-dry years for a twenty-year period. This evidence is established in the Water Supply Assessment (WSA) prepared for the NMC. As discussed in Section 3.11.1 (Existing Conditions), the WSA illustrates that the City's future water supply can adequately accommodate buildout of the NMC. Table 3.11-4 shows that between years 2005 and 2030, supply of water to the City (including the NMC) exceeds demand. Furthermore, the proposed project would be sited in accordance with SOI GPA Policy 5.2.1 which requires dedication of the necessary water supply facilities (should development require additional facilities), and Policy 5.3.1 which requires that costs for infrastructure improvements be borne through developer fees. In summary, the WSA illustrates an excess in water supply and water facilities and the SOI GPA Policies required for development within the NMC area further ensure that necessary infrastructure will be in place prior to development and that entitlements are available. As such, impacts related to the additional water demand generated by the proposed project are ***less than significant*** and no mitigation is required.

Impact UTIL-6 The proposed project would generate wastewater discharges that would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. This is considered a *less-than-significant* impact.

The proposed Countryside Specific Plan would comply with all provisions of wastewater permits, if required, which regulate discharges. Through compliance with the City's wastewater discharge permit, which is administered subject to the requirements and limitations of the NPDES program and enforced by the RWQCB, it can be assumed that development under the proposed project would not exceed the Board's wastewater treatment requirements.

Further, as analyzed in detail in Section 3.7 (Hydrology), the NPDES permit system also regulates both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the state (e.g., storm water systems). For point source discharges, each NPDES permit contains limits on allowable concentrations and emissions of pollutants contained in the discharge. For nonpoint source discharges, Phase I of the NPDES program establishes a comprehensive storm water quality program to manage urban storm water and minimize pollution of the environment for all areas of ground disturbance associated with



10905-00

FIGURE **3.11-3**

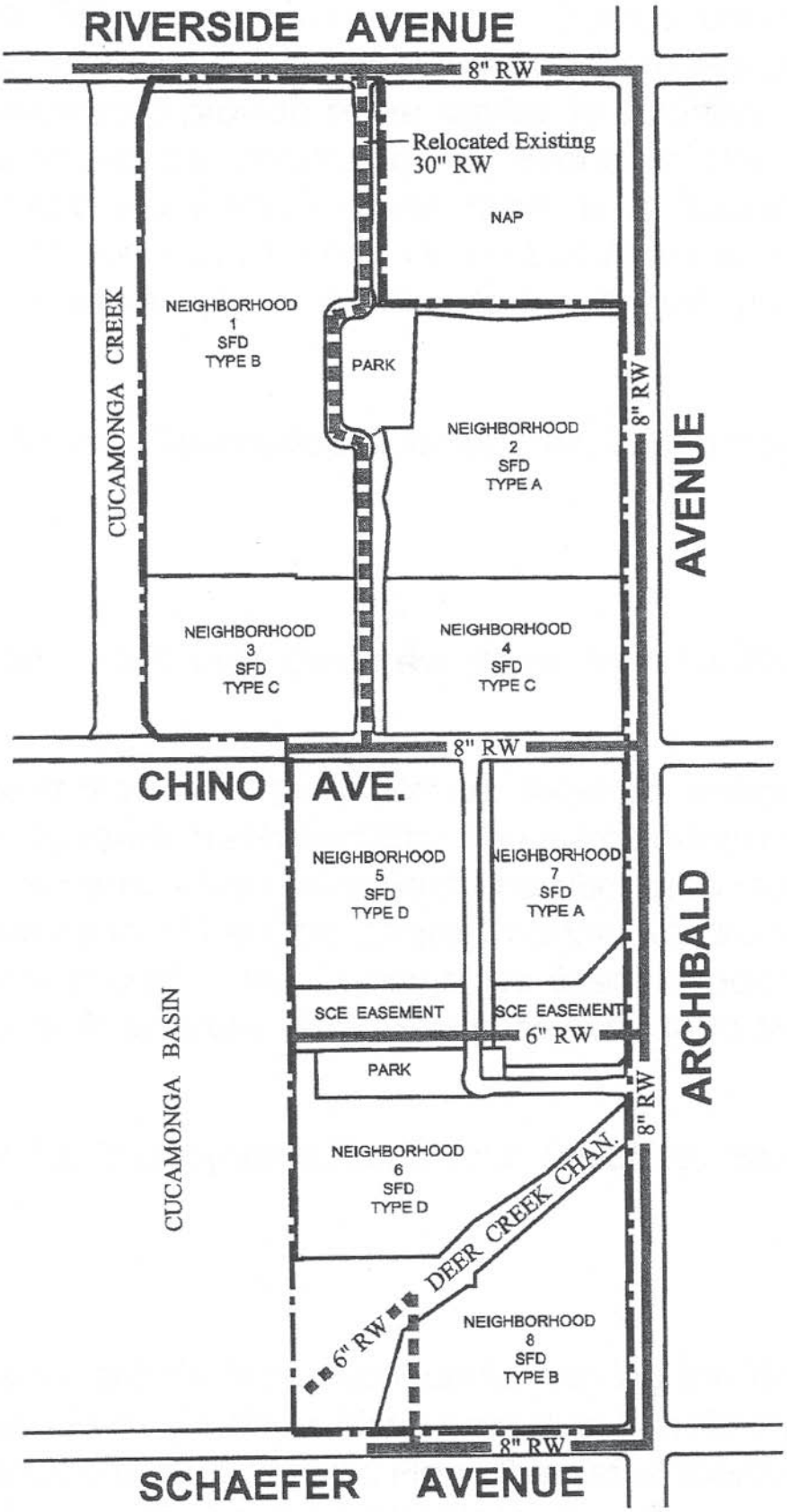
Proposed Domestic Water Infrastructure

Not to Scale

Source: Countryside Specific Plan, June 2004

City of Ontario

EIP ASSOCIATES



LEGEND

New Reclaimed Water

Existing Reclaimed Water

FIGURE **3.11-4**

Proposed Reclaimed Water Infrastructure

Not to Scale

10905-00

Source: Countryside Specific Plan, June 2004

City of Ontario

EIP ASSOCIATES

construction activities that exceed 5 acres. Development under the proposed Countryside Specific Plan would be required to apply for an NPDES Phase I permit, and would be required to comply with all applicable wastewater discharge requirements issued by the SWRCB and RWQCB. Therefore, implementation of the proposed project would not exceed applicable wastewater treatment requirements of the RWQCB with respect to discharges to the sewer system or storm water system. A ***less-than-significant*** impact would occur, and no mitigation is required.

Impact UTIL-7 Implementation of the proposed project would not require nor result in the construction of new or expanded water treatment facilities, the construction of which could cause significant environmental effects. This is considered a *less-than-significant* impact.

As discussed previously, the City's water supply is a mix of groundwater and imported water from MWD and IEUA. The majority of the City's water, or approximately 85 percent, comes from groundwater in the Chino Basin, which does not go through water treatment plants. Rather, the groundwater is stored in reservoirs and treated with chlorine before being delivered to customers. Alternately, only approximately 15 percent of the City's water is imported, which requires treatment.

Assuming the City continues to import approximately 15 percent of its total water supply through buildout, the increased demand from the proposed project would increase water flows from the Agua de Lejos treatment plant by 15 percent of 0.289 mgd, or 0.043 mgd. Considering the City's entitlement of 25.43 mgd of the plant's overall capacity, this increase of 0.043 mgd would represent approximately 0.17 percent of the City's allowable capacity. Therefore, the additional demand would be accommodated by existing facilities, and implementation of the proposed project would not require additional water treatment facilities or the expansion of existing facilities. However, SOI GPA Policies 1.1.8 and 5.3.1 ensure that development within the NMC area has available, adequate treatment capacity prior to project implementation and that any necessary infrastructure costs be borne by developer fees. It is not necessary, however, for these SOI GPA Policies to be implemented because, as discussed above, adequate treatment capacity currently exists. Therefore, the impact would be ***less than significant***, and no mitigation is required.

Impact UTIL-8 Implementation of the proposed project would not increase wastewater generation such that existing and planned treatment facilities would be inadequate to serve the project's projected demand in addition to the provider's existing commitments. This is considered a *less-than-significant* impact.

As part of previous NMC planning efforts, wastewater treatment requirements were assessed for future buildout to determine what infrastructure would be necessary to serve development. As a result, development of a new treatment plant, RP-5, was proposed to accommodate wastewater demands of the NMC ultimate land uses. Treatment plant RP-5 was completed in 2003 and is currently treating flows at approximately 9 mgd, with an existing capacity of approximately 15 mgd.

Development under the proposed project would increase the residential units and associated population in the project area, which would result in the generation and discharge of additional wastewater requiring treatment at the RP-5 plant. However, implementation of the proposed project would not generate wastewater that would exceed the capacity of the RP-5 wastewater treatment plant in combination with the provider's existing service commitments.

With a wastewater generation factor of approximately 270 gpd per dwelling unit (City of Ontario 2000), it is estimated that the proposed 819 residential units would generate approximately 221,130 gpd at buildout. The additional generation of 221,130 gpd (0.22113 mgd) of wastewater from implementation of the proposed project would be adequately treated by the RP-5 plant. The proposed project's contribution to the wastewater flows would constitute less than 4 percent of the remaining 6 mgd capacity in the RP-5. In addition, although not currently proposed, it is assumed that through consistency with SOI GPA Policy 6.1.1 (enable the planning of new wastewater infrastructure) and SOI GPA Policy 6.2.2 (provide adequate sewer capacity prior to project implementation), the RP-5 plant will eventually expand to increase the overall treatment plant capacity to approximately 51 mgd in order to serve future development. Thus, the treatment plant is anticipated to have adequate treatment capacity through buildout of the Countryside Specific Plan. Therefore, this impact would be ***less than significant***, and no mitigation is required.

3.11.5 Cumulative Impacts

Water

A Water Supply Assessment has been completed for the NMC area, which includes the proposed project plans, that demonstrates adequate supply of water will be available to serve the proposed project. The Water Supply Assessment factors in the water demands of the proposed project, based on the proposed land uses, and the water demands from existing and other planned future developments in the City. This assessment concludes that the total water supply available to the City of Ontario during normal, single-dry and multiple-dry years within a twenty-year projection will meet the projected water demand of the proposed project, as well as the demand of existing and other planned future uses. Therefore, the Water Supply Assessment addresses cumulative water demands within the City and concludes that adequate water supply would be available to meet those demands. As such, impacts related to water supply would not be cumulatively considerable. The project would have a less-than-significant contribution to this effect.

Wastewater

The proposed new sewer system serving the proposed project would add an estimated 0.22113 mgd of additional wastewater to the IEUA's RP-5, which is estimated to have more than 6 mgd of unused capacity. As such, this excess capacity is more than sufficient to handle the peak sewage flows of the proposed project. In addition, all discharges to the sewer from the proposed project would be required to meet IEUA's Wastewater Discharge Regulations. Cumulative projects within the vicinity of the proposed project, whose project status ranges from proposed to complete are detailed in Section 2.9 (Cumulative Projects and Impact Analysis Methodology). Overall, in addition to several other uses, the cumulative projects include a

total of approximately 4,500 single family residential units, 2,000 multi-family residential units, and 955,000 square feet of commercial and business park uses. At NMC buildout, the IEUA's RP-5 would be operating under capacity. Project-specific review would ensure that all discharges to the sewer from the cumulative projects would meet IEUA's Wastewater Discharge Regulations issued by the Local Regional Water Quality Control Board. Furthermore, as upgrades occur in association with proposed projects, overall City sewer capacity could increase. As such, impacts on wastewater would not be cumulatively considerable. The project would have a less-than-significant contribution to this effect.

Solid Waste

The City of Ontario is the exclusive hauler of all solid waste for the City and has indicated that capacity at El Sobrante Landfill is adequate to accommodate the proposed project's solid waste disposal needs. The projected 4.5 tons of solid waste generated per day by the proposed project would represent 0.05 percent of the design capacity of West Valley MRF. Additionally, capacity for the El Sobrante Landfill would be adequate for approximately 30 years. Thus, solid waste generation from the proposed project and cumulative projects in the City of Ontario would not exacerbate regional landfill capacity issues. Furthermore, the implementation of source reduction measures, such as a recycling plan, that would be implemented on a project-specific basis would partially address landfill capacity issues by diverting additional solid waste at the source of generation. Therefore, development associated with cumulative projects within the City would not be cumulatively considerable. The project would have a less-than-significant contribution to this effect.

Electricity and Natural Gas

Development of the proposed project would result in the permanent and continued use of electricity and natural gas resources. SCE and SCG have stated that electricity and natural gas would be available to the supply energy to the proposed project and the City of Ontario at full implementation of the proposed project. Since both utilities are able to meet future projected demands, there would be no significant cumulative impacts in terms of either supply or a potential need for additional facilities. Therefore, the overall and the cumulative impact as well as the contribution of the proposed project with respect to electricity and natural gas supplies, or the need for additional facilities would be less than significant.

3.11.6 Mitigation Measures and Residual Impacts

Ontario SOI GPA EIR Mitigation Measures

No mitigation measures would be applicable.

Project-specific Mitigation Measures

The following mitigation measures would be implemented to reduce impacts related to the proposed project:

MM UTIL-1-SP *In accordance with the NMC Sewer Master Plan, the Developer of the proposed project shall prepare a Subarea 5 Sewer Plan, which discusses how the project will be served, how the area will be connected to the City's backbone system, and the area's impact is on downstream facilities. The local subarea sewers should be required to meet the sewer design criteria provided in Subsection 4-5 of the NMC Sewer Master Plan and all other applicable construction standards set forth by the City. The Subarea 5 Sewer Plan Report shall include, but not be limited to, the following:*

- *Map showing project boundaries and drainage areas*
- *Detailed land use description and map*
- *Average dry weather, peak dry weather, and peak wet weather flow calculations*
- *Exhibit showing all proposed sewer facilities and connections to the backbone system*
- *Phasing of development and wastewater flows*
- *Hydraulic calculations meeting all sewer design criteria*

Implementation of MM UTIL-1-SP would ensure that implementation of the proposed project would not result in significant impacts through the preparation of a Sewer Plan Report that would identify means of reducing potentially significant impacts described in Impact UTIL-1 to less than significant levels.

MM UTIL-2-SP *Prior to issuance of building permits for the first project component, the Applicant shall submit a Solid Waste Management Plan to the City's Recycling Coordinator. This plan shall discuss how the project will implement source reduction and recycling methods in compliance with existing City programs. Additionally, this plan shall include how the project will address the construction and demolition-generated waste from the site. These methods shall include, but shall not be limited to, the following:*

- *Provision of recycling bins for glass, aluminum, and plastic for visitors and employees of the proposed project*
- *Provision of recycling bins for glass, aluminum, plastic, wood, steel, and concrete for construction workers during construction phases*
- *Bins for cardboard recycling during construction*
- *Scrap wood recycling during construction*
- *Green waste recycling of landscape materials*

MM UTIL-2-SP would ensure implementation of waste minimization programs and would ensure that the generation of additional solid waste during construction and operation of the proposed project would not substantially contribute to the City's lack of compliance with AB939. Impacts associated with solid waste, as discussed under Impact UTIL-2 and Impact UTIL-3, would be reduced to less-than-significant levels.

MM UTIL-3-SP *Project design and construction shall be coordinated with Southern California Edison and Southern California Gas Co., and improvements provided if necessary, in order to ensure that connections are adequate and capacity is available to accommodate estimated demand for gas and electric utilities.*

In the event that improvements are needed to the proposed project area's energy infrastructure, implementation of MM UTIL-3-SP would ensure that impacts described in Impact UTIL-4 would remain less than significant.

Chapter 4 ALTERNATIVES TO THE PROPOSED PROJECT

4.1 INTRODUCTION

Section 15126.6(a) of the CEQA Guidelines requires that an EIR describe a range of reasonable alternatives to the project that could feasibly attain the basic objectives of the project while reducing significant project impacts. An EIR is not required to consider every conceivable alternative to a project; rather, it must consider a range of potentially feasible alternatives that will foster informed decision-making and public participation. In addition, an EIR should evaluate the comparative merits of the alternatives. Therefore, this chapter sets forth potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines relating to the alternatives analysis (Section 15126.6 *et seq*.) are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The "no project" alternative shall be evaluated along with its impact. The "no project" analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved.
- The range of alternatives required in an EIR is governed by a "rule of reason"; therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

4.1.1 Rationale for Selecting Potentially Feasible Alternatives

The alternatives may include no project, a different type of project, modification of the proposed project, or suitable alternative project sites. However, the range of alternatives discussed in an EIR is governed by a "rule of reason" which CEQA Guidelines Section 15126.6(f) defines as:

> …set[ting] forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.

Among the factors that may be taken into account when addressing the feasibility of alternatives (as described in CEQA Guidelines Section 15126.6[f][1]) are environmental impacts, site suitability, economic

viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an alternative site. An EIR need not consider an alternative whose effects could not be reasonably identified, and whose implementation is remote or speculative.

For purposes of this analysis, the project alternatives are evaluated to determine the extent to which they attain the basic project objectives, while significantly lessening any significant effects of the project. The project objectives are as follows:

- To provide neighborhoods which are identifiable from each other, with public and private amenities, linked by a network of pedestrian trails
- To create a community sense of place, walk-ability and livability
- Provide a mix of housing types in response to evolving market demands
  - Short blocks that promote ease of access and neighborhood activity
  - Use of variable setback, reduced garage emphasis, and "architecture forward"
  - Curb separated landscaped parkways
- Establish clearly defined edges and entries that contribute to a district neighborhood identity
- Consider the use of alleyways to add flexibility to frontage designs and assist in the creation of more pedestrian oriented front areas
- Promote development of local street patterns that create and unify neighborhoods, rather than divide them
- Establish a pattern of blocks that promote access and neighborhood activity

4.2 ALTERNATIVES ANALYSIS

A total of three alternatives were identified as alternatives to the proposed project. The goal for evaluating any of these alternatives is to identify ways to avoid or lessen the significant environmental effects resulting from implementation of the proposed project, while attaining most of the project objectives. Alternatives selected for analysis include the following:

- **No Project/No Development Alternative**—This alternative assumes maintenance of the project site in its current status, and no changes would occur.
- **Reduced Density Project Alternative**—This alternative includes a reduction in residential uses while maintaining the same amount of parkland as the proposed project.
- **Alternative Configuration**—This alternative would consolidate residential uses on the northerly 75 percent of the site, and retain the southerly 25 percent of the site as open space.

4.2.1 No Project/No Development Alternative

Description

The No Project/No Development Alternative represents the status quo, or maintenance of the project site in its current state. The purpose of examining such an alternative is to allow decision-makers to compare the effects of approving the project with the effects on not approving the project. Existing on-site uses include

agricultural production, specifically current and former dairy farm uses, agricultural fields, a nursery/greenhouse and sporadic residential uses. Since the 178-gross-acre project site would not be developed under this alternative, these existing uses and conditions on the property would remain.

Attainment of Project Objectives

Implementation of the No Project/No Development Alternative would not meet any of the project objectives listed above for either the Lead Agency or the Applicant, as no new uses would be developed.

Impacts

In general, no new environmental effects would directly result from the selection of this alternative. Maintenance of the project site in its present state would avoid any environmental impacts associated with aesthetics, air quality, biological resources, cultural resources, geology and soils, hazardous materials, hydrology and water quality, land use, noise, population housing, public services, recreation, traffic, and utilities and service systems that were identified for the proposed project. In addition, although implementation of this alternative would not result in environmental changes to the existing hydrologic or soil conditions at the project site, poor water quality and methane hazards may occur due to the existing cattle manure stockpiles on the site. In terms of land use, the present state of the project site as a vacant and undeveloped parcel of land would conflict with the City's General Plan Amendment land use designations, but would represent a continuation of the existing conditions at the site. These existing conditions could result in adverse effects over the long term. The site would remain as an underutilized parcel of land adjacent to urbanized portions of the City. As such, no significant and adverse environmental impacts directly or cumulatively associated with the No Project/No Development Alternative would occur.

4.2.2 Reduced Density Project Alternative

Description

Implementation of the Reduced Project Alternative would result in less residential uses, while maintaining the same amount of park uses as under the proposed project. This alternative would provide a total of 615 residential units, thus reducing the number of residential units by 204. The overall site plan concept would remain the same, with the creation of residential neighborhoods. Cluster housing would remain, and the average lot size of the remaining seven neighborhoods would be 7,200 square feet. Parklands, paseos, and bicycle trails would remain, similar to the proposed project. Residential structures would be one to two stories in height, similar to the proposed project. In summary, key components of this alternative include the following:

- Eight residential neighborhoods
  - Seven average 7,200-square-foot lot neighborhoods
  - One cluster housing neighborhood
- 615 residential units total

- 5.75 acres of parkland in three key areas
- 4.36 acres of paseos (i.e., linear greenbelts)
- Bicycle trails throughout the neighborhoods

Attainment of Project Objectives

This alternative, by reducing the amount of residential development by 204 units, would achieve project objectives. Because the extent of residential development would not be as great as that allowed under the proposed project, the ability to generate housing opportunities for the community would be achieved to a lesser degree. However, the project would continue to provide a mix of housing types in response to evolving market demands.

Impacts

Agricultural Resources

Changes to land use densities would not affect impacts to agricultural resources in comparison to the proposed project, as existing on-site uses would be replaced by residential neighborhood development. This alternative would result in the conversion of Prime Farmland to nonagricultural uses, and this impact would be significant and unavoidable. Proposed uses would not conflict with the *Williamson Act*, and this impact would be less than significant.

Air Quality

Construction emissions are calculated based on daily emissions. This alternative would result in less total development, although daily construction activities would remain similar to the proposed project. Therefore, daily construction emissions would continue to exceed thresholds for VOCs and NOx, and this impact would be significant and unavoidable.

Changes to land use densities would result in a reduction in vehicular trips and consequently a reduction in air emissions as compared to the proposed project. The reduction of 204 units may reduce CO emissions below thresholds, and VOCs would continue to exceed thresholds, although to a lesser degree than the proposed project. Impacts would remain significant and unavoidable.

Other air quality impacts would remain less than significant, similar to the proposed project. These include implementation of the Air Quality Management Plan, localized CO concentrations, and release of toxic air contaminants.

Biological Resources

Changes to land use densities would not affect impacts to biological resources in comparison to the proposed project, as ground disturbance would still occur over the entire site. Potentially significant impacts to

biological resources would continue to include reduction in nesting opportunities for resident and migratory avian species of special concern; loss of migratory waterfowl habitat; loss of raptor foraging habitat; effects to hydrology and aquatic habitat quality of "Other Waters" of the United States as defined by section 404 of the *Clean Water Act*; introduction of undesirable invasive nonnative plant species to the project site and adjacent areas during construction; and potential loss of western burrowing owl. These impacts as discussed in Section 3.3 (Biological Resources) could be mitigated to less-than-significant levels through incorporation of mitigation measures identified for the proposed project. Less-than-significant impacts to biological resources under this alternative would also be similar to the proposed project. No further impacts to special-status or sensitive plant species would occur; limited impacts to non-avian wildlife movement function would result; there would be no adverse effect on federally protected wetlands as defined by Section 404 of the *Clean Water Act*; and this alternative would be in substantial conformance with local applicable policies protecting biological resources.

Cultural Resources

Changes to land use densities would not affect impacts to cultural resources in comparison to the proposed project, as ground disturbance would still occur over the entire site. Similar to the proposed project, this alternative would demolish existing structures on site, none of which are considered to be potentially historic resources. Potential disturbance or damage to undocumented archaeological resources, undocumented paleontological resources, or human remains could occur and would be reduced to less-than-significant levels through incorporation of mitigation measures identified for the proposed project.

Geological Resources

Changes to land use densities would not affect impacts to geological resources in comparison to the proposed project, as ground disturbance would still occur over the entire site. On-site structures would be exposed to seismic hazards, although structural development would comply with applicable codes in order to minimize risks. Construction would alter site topography, which could affect the rate or extent of erosion. This alternative would continue to locate structures on soils that are considered potentially expansive, unstable, prone to settlement, and corrosive. Mitigation measures identified for the proposed project would reduce these impacts to less than significant.

Hazards and Hazardous Materials

Changes to land use densities would not affect impacts to hazardous materials in comparison to the proposed project, as ground disturbance would still occur over the entire site. Construction under this alternative could expose construction workers to health and safety risks through earthmoving activities in areas with potentially contaminated structures, soils, or groundwater from previous site uses. Development of this alternative could expose construction workers, occupants of new residential structures and recreational users of proposed park areas to methane hazards. Project implementation within a quarter mile of Ranch View School could result in possible safety hazards associated with hazardous emissions or hazardous material handling in proximity to a school. These impacts would be reduced to less-than-significant levels

with incorporation of mitigation measures identified for the proposed project. Other impacts to hazardous materials would remain less than significant, similar to the proposed project. These impacts include lack of construction on a hazardous materials site identified by Government Code Section 65962.5; risks associated with wildland fires; and interference with an adopted emergency response or emergency evacuation plan.

Hydrology and Water Quality

Fewer residential units would be built under this alternative, which would reduce impacts to hydrology and water quality. This alternative would increase impervious surfaces and reduce groundwater recharge, although this would occur to a lesser degree than the proposed project. This impact could be reduced to less-than-significant levels by mitigation measures identified for the proposed project. Other impacts to hydrology and water quality would be less than significant, and these would occur to a lesser extent than the proposed project. This alternative would not violate water quality standards, waste discharge requirements, result in substantial sources of polluted runoff, or otherwise substantially degrade water quality. This alternative would alter the drainage patterns, although downstream effects would be less than significant, due to adherence to NPDES and WQMP requirements, as well as the standards set by the City of Ontario and the San Bernardino County Flood Control District.

Noise

This alternative would result in less total development, although daily construction activities would remain similar to the proposed project. Therefore, construction noise would continue to exceed thresholds at future on-site and existing off-site locations, and this impact would be significant and unavoidable.

Changes to land use densities would result in a reduction in vehicular trips and consequently a reduction in noise as compared to the proposed project. The reduction of 204 units would reduce noise levels, although noise would be anticipated to continue to exceed thresholds. Noise impacts on site would be mitigated through implementation of measures identified for the proposed project. Off site, noise levels at the roadway segment of Chino Avenue east of Turner Avenue would remain significant and unavoidable, although impacts would be of a lesser magnitude than the proposed project.

Public Services

Additional demands on public services would occur to a lesser degree than the proposed project because fewer residential units would be built. Additional students at local schools would result, although to a lesser extent than the proposed project. However, capacity at existing schools may still be exceeded. Payment of school fees would continue to mitigate this impact to less-than-significant levels.

Adequate fire and police services would be provided for the proposed project. This alternative includes fewer units, such that adequate fire and police services would be provided under this alternative as well. Impacts would be less than significant.

This alternative would include fewer residential units, which would lessen demands on parkland. Adequate parkland would continue to be provided on site, ensuring impacts to parkland remain less than significant.

Transportation and Traffic

Implementation of the Specific Plan would result in additional vehicular trips during AM and PM peak hours, which would result in a substantial degradation in intersection levels of service. Roadway improvements are proposed that would bring projected deficient intersections to acceptable operating conditions, (LOS D or better and V/C of less than 1.0) per City of Ontario Standards. A reduction in the number of residential units would result in a corresponding decrease in traffic generation. However, roadway improvements, similar to those identified for the proposed project, would still be required to ensure that intersections operate at acceptable levels. Implementation of these improvements would reduce impacts to less-than-significant levels.

Construction under this alternative would result in the generation of construction-related vehicle trips, which could impact traffic conditions at individual intersections, although these impacts would occur over the short term and would be less than significant. Access and internal circulation would be similar under this alternative to the proposed project, and would not substantially increase hazards due to design features or incompatible uses. Thus, this impact would remain less than significant.

Utilities and Service Systems

Because this alternative would result in fewer residential units than the proposed project, fewer demands on utilities and service systems would result.

Additional wastewater generation would result under this alternative. Impacts to conveyance capacity would be reduced to less-than-significant levels through adherence to the Sub Area Master Plan (SAMP) to confirm whether the City lines will be adequate to receive the additional flows from the project. The new wastewater treatment plant, RP5, is planned to accommodate wastewater demands of the NMC ultimate land uses, and this plant would have adequate capacity to accommodate flows from this alternative. Impacts would be less than significant.

Additional solid waste would be disposed at the El Sobrante landfill. Additional solid waste generated during construction and operation of this alternative would need to include provisions for recycling, which would be addressed through mitigation measures identified for the proposed project. The landfill serving the project site would have adequate capacity for project operations under this alternative, and these impacts would be less than significant.

Additional water demands under this alternative would be met through existing and planned entitlements and resources. This evidence is established in the WSA that was prepared for the proposed project, which would similarly ensure adequate water supplies under this alternative. Impacts would be less than significant.

This alternative would be required to comply with all applicable wastewater discharge requirements issued by the SWRCB and RWQCB, similar to the proposed project. Therefore, wastewater treatment requirements of the RWQCB would not be exceeded, and impacts would be less than significant.

This alternative would increase the demand for electricity and natural gas, but would not require or result in the construction of new energy production or transmission facilities. The electrical and natural gas supplies and infrastructure to support demand are provided as needed by SCE and SCG. This impact would be less than significant.

4.2.3 Alternative Configuration

This alternative would consolidate residential uses on 75 percent of the site, and retain 25 percent of the site in its current use. The southern portion of the site in the areas immediately adjacent to the Deer Creek Channel, currently designated as neighborhoods six and eight, would remain as is. This land is currently used for row crop production and a poultry farm. The remainder of the site comprised of areas including and north of the SCE Easement, would be developed with residential uses. The northeast corner of the site, designated as Neighborhood 1 under the proposed project, would be 12 du/acre condominiums. The remaining portions of the site would be developed at a density of 4.6 du/acre. In summary, key components of this alternative include:

- Six residential neighborhoods
  - Seven 4.6 du/acre single-family neighborhoods
  - One 12 du/acre condominium neighborhood
- 819 residential units total
- 5.75 acres of parkland in three key areas
- 4.36 acres of paseos (i.e., linear greenbelts)
- Development to occur on 149 acres
- 29 acres land remaining as is
- Bicycle trails throughout the neighborhoods

Attainment of Project Objectives

This alternative, by reducing the potential development area yet maintaining the construction of 819 residential units, would achieve the project objectives. Due to the 29-acre reduction in developable land and the corresponding overall increase in residential density of the remaining 148.94 acres, the level of public and private amenities available to residents within the Countryside Specific Plan Area would be provided to a lesser degree than the proposed project. However, this alternative would continue to provide a mix of housing types in response to evolving market demands.

Impacts

Agricultural Resources

Areas on site currently designated as Prime Farmland would continue to be replaced by residential neighborhood development. The portion of the site that would remain as is does not include Prime Farmland or lands under *Williamson Act* contracts. Thus, loss of Prime Farmland would still occur and this would remain significant and unavoidable, similar to the proposed project. Proposed uses would not conflict with the Williamson Act, and this impact would be less than significant.

Air Quality

Construction emissions are calculated based on daily emissions. This alternative would result in daily construction activities that would remain similar to the proposed project. Therefore, daily construction emissions would continue to exceed thresholds for VOCs and NOx, and this impact would be significant and unavoidable.

As the same total number of residential units would be built, vehicular trips and associated air emissions would be similar to the proposed project. CO and VOC emissions would continue to exceed thresholds, and impacts would remain significant and unavoidable.

The continuance of agricultural activities and the existing poultry farm would produce nuisance odors that could affect residential uses. Other air quality impacts would remain less than significant, similar to the proposed project. These include implementation of the Air Quality Management Plan, localized CO concentrations, and release of toxic air contaminants.

Biological Resources

Ground disturbance would still occur over a majority of the site. Impacts associated with biological resources would remain for the project, although these impacts would be concentrated only on the 149-acre portion of the site where development would occur. Potentially significant impacts would continue to include a reduction in existing nesting opportunities for resident and migratory avian species of special concern; a loss of migratory waterfowl habitat; a loss of raptor foraging habitat from existing conditions; effects to hydrology and aquatic habitat quality of "Other Waters" of the United States as defined by section 404 of the *Clean Water Act*; introduction of undesirable invasive nonnative plant species to the project site and adjacent areas during construction; and potential loss of western burrowing owl. These impacts as discussed in Section 3.3 Biological Resources could be mitigated to less-than-significant levels through incorporation of mitigation measures identified for the proposed project. Less-than-significant impacts to biological resources would also be similar to the proposed project, although the area over which they would occur would be reduced due to the fact that 29 acres would remain in their current condition. No further impacts to special-status or sensitive plant species would occur; limited impacts to non-avian wildlife movement function would result; there would be no adverse effect on federally protected wetlands as

defined by Section 404 of the *Clean Water Act*; and this alternative would be in substantial conformance with local applicable policies protecting biological resources.

Cultural Resources

Impacts associated with cultural resources would remain for the project, although these impacts would be concentrated only on the 149-acre portion of the site where development would occur. Similar to the proposed project, this alternative would demolish existing structures on site, none of which are considered to be potentially historic resources. Potential disturbance or damage to undocumented archaeological resources, undocumented paleontological resources, or human remains could occur. Impacts would be reduced to less-than-significant levels through incorporation of mitigation measures identified for the proposed project.

Geological Resources

Impacts associated with geological resources would remain for the project, although these impacts would be concentrated only on the 149-acre portion of the site where development would occur. Impacts to geological resources would be similar to the proposed project under this alternative. Although on-site structures may be sited differently, they would remain exposed to seismic hazards. Structural development would comply with applicable codes in order to minimize risks. Construction would alter site topography, which could affect the rate or extent of erosion. This alternative would continue to locate structures on soils that are considered potentially expansive, unstable, prone to settlement, and corrosive. Mitigation measures identified for the proposed project would reduce these impacts to less than significant.

Hazards and Hazardous Materials

Impacts associated with hazards and hazardous materials would remain for the project, although these impacts would be concentrated only on the 149-acre portion of the site where development would occur. Construction under this alternative could expose construction workers to health and safety risks through earthmoving activities in areas with potentially contaminated structures, soils, or groundwater from previous site uses. Development under this alternative could expose construction workers, occupants of new residential structures and recreational users of proposed park areas to methane hazards. Project implementation within a quarter mile of Ranch View School could result in possible safety hazards associated with hazardous emissions or hazardous material handling in proximity to a school. These impacts would be reduced to less-than-significant levels with incorporation of mitigation measures identified for the proposed project. Additional impacts could also occur due to the proximity of residential uses to continued agricultural and poultry farm operations. Standard mitigation practices would be implemented to reduce this impact to less-than-significant levels. Other impacts to hazardous materials would remain less than significant, similar to the proposed project. These impacts include lack of construction on a hazardous materials site identified by Government Code Section 65962.5; risks associated with wildland fires; and interference with an adopted emergency response or emergency evacuation plan.

Hydrology and Water Quality

Impacts associated with hydrology and water quality would remain for the project, although these impacts would be concentrated only on the 149 acre portion of the site where development would occur. This alternative would increase impervious surfaces and reduce groundwater recharge, although this would occur to a lesser degree than the proposed project since 29 acres would remain as is. This impact could be reduced to less-than-significant levels by mitigation measures identified for the proposed project. However, existing adverse effects from row crops and poultry farm production would continue to occur, resulting in impacts greater than the proposed project. Other impacts to hydrology and water quality would be less than significant. This alternative would not violate water quality standards, waste discharge requirements, result in substantial sources of polluted runoff, or otherwise substantially degrade water quality. Since some agricultural operations would remain, existing water quality effects from this runoff would continue, although agricultural operations would continue to be regulated to minimize pollutant loads. This alternative would alter drainage patterns, although downstream effects would be less than significant, due to adherence to NPDES and WQMP requirements, as well as the standards set by the City of Ontario and the San Bernardino County Flood Control District.

Noise

This alternative would result the same amount of total development occurring over a smaller area, and daily construction activities would remain similar to the proposed project. Therefore, construction noise would continue to exceed thresholds at future on-site and existing off-site locations, and this impact would be significant and unavoidable.

This alternative would result in a similar number of vehicular trips and consequently similar noise levels. Noise impacts on site would be mitigated through implementation of measures identified for the proposed project. Off site, noise levels at the roadway segment of Chino Avenue east of Turner Avenue would remain significant and unavoidable, at essentially the same magnitude of impact as the proposed project.

Public Services

Additional demands on public services would occur to a similar extent as the proposed project because the same number of residential units would be built, although they would be in a different configuration. Additional students at local schools would result, and capacity at existing schools may be exceeded. Payment of school fees would continue to mitigate this impact to less-than-significant levels.

Adequate fire and police services would be provided under this alternative, as this impact would be similar to the proposed project because a similar number of residential units would be built. Impacts would be less than significant.

This alternative would include the same number of residential units and parkland, such that similar impacts to parkland would occur. Adequate parkland would continue to be provided on site, ensuring impacts to parkland remain less than significant.

Transportation and Traffic

Traffic generation would be the same as the proposed project, because the same number of units would be constructed. Additional vehicular trips during AM and PM peak hours would result in a substantial degradation in intersection levels of service. Roadway improvements that would bring projected deficient intersections to acceptable operating conditions, (LOS D or better and V/C of less than 1.0) per City of Ontario Standards would be required, similar to the proposed project. Specific intersection impacts may differ somewhat from the proposed project because the alternative site configuration would distribute traffic differently onto adjacent roadway segments. However, roadway improvements, similar to those identified for the proposed project, would ensure that intersections operate at acceptable levels. Implementation of these improvements would reduce impacts to less-than-significant levels.

Construction under this alternative would result in the generation of construction-related vehicle trips, which could impact traffic conditions at individual intersections, although these impacts would occur over the short term and would be less than significant. Access and internal circulation would be similar under this alternative to the proposed project, and would not substantially increase hazards due to design features or incompatible uses. Thus, this impact would remain less than significant.

Utilities and Service Systems

Because this alternative would result in the same number of residential units as the proposed project, similar demands on utilities and service systems would result.

Additional wastewater generation would result under this alternative. Impacts to conveyance capacity would be reduced to less-than-significant levels through adherence to the Sub Area Master Plan (SAMP), which would confirm adequacy of City lines to receive the additional flows from the project. The new wastewater treatment plant, RP5, is planned to accommodate wastewater demands of the NMC ultimate land uses, and this plant would have adequate capacity to accommodate flows from this alternative. Impacts would be less than significant.

Additional solid waste would be disposed at the El Sobrante landfill. Additional solid waste generated during construction and operation of this alternative would need to include provisions for recycling, which would be addressed through mitigation measures identified for the proposed project. The landfill serving the project site would have adequate capacity for project operations under this alternative, and these impacts would be less than significant.

Additional water demands under this alternative would be met through existing and planned entitlements and resources. This evidence is established in the WSA that was prepared for the proposed project, which

would similarly ensure adequate water supplies under this alternative. Impacts would be less than significant.

This alternative would be required to comply with all applicable wastewater discharge requirements issued by the SWRCB and RWQCB, similar to the proposed project. Therefore, wastewater treatment requirements of the RWQCB would not be exceeded, and impacts would be less than significant.

This alternative would increase the demand for electricity and natural gas, but would not require or result in the construction of new energy production or transmission facilities. The electrical and natural gas supplies and infrastructure to support demand are provided as needed by SCE and SCG. This impact would be less than significant.

4.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

A comparison of the proposed project with the alternatives analyzed in this section provides the basis for determination of the environmentally superior alternative. Impacts of each of the alternatives are compared to the proposed project in Table 4-1. Impacts to a particular resource that would be greater than the proposed project are indicated with a plus (+) sign, and impacts to a particular resource that would be less than the proposed project are indicated with a minus (–) sign. Impacts to resources that would be roughly equivalent to the proposed project are indicated with an equals (=) sign in the table below.

Table 4-1 Comparison of Alternatives to the Proposed Project

Environmental Issue Area	*No Project/No Development Alternative*	*Reduced Density Project Alternative*	*Alternative Configuration*
Agricultural Resources	–	=	=
Air Quality	+	–	=
Biological Resources	–	=	–
Cultural Resources	–	=	=
Geological Resources	–	=	–
Hazards and Hazardous Materials	+	=	–
Hydrology and Water Quality	+	=	+
Noise	–	–	=
Public Services	–	–	=
Transportation and Traffic	–	–	=
Utilities and Service Systems	–	–	=

(–) = Impacts considered to be less when compared with the proposed project.
(+) = Impacts considered to be greater when compared with the proposed project.
(=) = Impacts considered to be equal or similar to the proposed project.

The No Project/No Development Alternative would be environmentally superior to the proposed project on the basis of the minimization or avoidance of physical environmental impacts. However, the CEQA

Guidelines require that if the environmentally superior alternative is the No Project Alternative, "the EIR shall also identify an environmentally superior alternative among the other alternatives."

Both the Reduced Density Project Alternative and the Alternative Configuration would reduce some impacts of the proposed project. The Reduced Density Project Alternative would reduce the magnitude of impacts to air quality and noise, although the impacts would remain significant and unavoidable. The Reduced Project Alternative would also reduce impacts to public services, transportation and traffic, and utilities and service systems. The Alternative Configuration would reduce impacts to biological resources, geological resources, hazards and hazardous materials, and hydrology and water quality. Neither alternative would reduce significant and unavoidable impacts to agricultural resources. Because the Reduced Density Project Alternative would lessen significant and unavoidable impacts to air quality and noise, this alternative is identified as the environmentally superior alternative.

Chapter 5 OTHER CEQA CONSIDERATIONS

Section 15126 of the State CEQA Guidelines requires that the EIR include a discussion of significant environmental effects of the proposed project; significant environmental effects which cannot be avoided if the proposed project is implemented; significant irreversible changes that would be involved in the proposed project should it be implemented; and growth-inducing impacts of the proposed project. Cumulative impacts are discussed under each environmental issue area in Chapter 3 (Environmental Analysis).

5.1 SIGNIFICANT, IRREVERSIBLE ENVIRONMENTAL CHANGES

The construction and implementation of the proposed project would entail the commitment of energy and human resources. This commitment of energy, personnel, and building materials would be commensurate with that of other residential projects of similar magnitude. Manpower would also be committed to the construction of buildings and infrastructure necessary to support the new development.

Ongoing maintenance of the project site would entail a long-term commitment of energy resources in the form of natural gas and electricity. Long-term impacts would also result from an incremental increase in vehicular traffic, and the associated air pollutant and noise emissions. This commitment of energy resources would be a long-term obligation because, practically speaking, it is impossible to return the land to its original condition once it has been developed. However the impacts of increased energy usage would not be considered significant adverse environmental impacts as discussed in Section 3.11 (Public Services).

5.2 SIGNIFICANT, UNAVOIDABLE ADVERSE IMPACTS

Significant, unavoidable adverse impacts that would result from the proposed project include the following:

Impact AG-1 **The proposed project would result in the conversion of Prime Farmland to nonagricultural uses.**

Impact AG 2 **Implementation of the proposed project would result in conflicts with the *Williamson Act*.**

Impact AG 3 **The proposed project would involve other changes in the existing environment that would result in the conversion of Farmland to nonagricultural use.**

Impact AQ 1 **Peak construction activities associated with the proposed project would generate emissions that exceed SCAQMD thresholds.**

Impact AQ 2 **Daily operation of the project would generate emissions that exceed SCAQMD thresholds.**

Impact BIO 14 **Cumulative development, in conjunction with the proposed project, could reduce raptor foraging habitat within the Ontario SOI area and the Region.**

Impact NOI 1 **Construction activities associated with the proposed Countryside Specific Plan could expose nearby sensitive uses to excessive groundborne vibration levels.**

Impact NOI 2 **Construction activities associated with the proposed Countryside Specific Plan could generate substantial temporary or periodic noise levels.**

Impact NOI 4 **The proposed project would generate increased local traffic volumes, which may result in a substantial permanent increase in off-site ambient noise levels.**

Impact TRAF 1 **Implementation of the Countryside Specific Plan would result in additional vehicular trips during AM and PM peak hours, which would result in a substantial degradation in intersection levels of service.**

5.3 GROWTH-INDUCING IMPACTS

This section discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth-inducing impacts are caused by those characteristics of a project that tend to foster or encourage population and/or economic growth. Inducements to growth include the generation of construction and permanent employment opportunities in the support sector of the economy. A project could also induce growth by lowering or removing barriers to growth or by creating an amenity that attracts new population or economic activity. The proposed project could result in the following types of growth-inducement: (1) extension of public facilities, such as roads, electrical lines, gas lines, sewers, and water; (2) the creation of short-term employment opportunities; and (3) increased population.

5.3.1 Extension of Public Facilities

The proposed project would require extension of roadways, sewer, water, gas, and electrical lines, which would be developed to serve the project site. The site currently includes limited infrastructure due to existing agricultural and dairy farm uses on-site. Improvements would be completed in accordance with infrastructure master plans developed for the New Model Colony to serve ultimate buildout of the area. Consequently, some of the roadways and utility lines developed to serve the site would also serve future Specific Plan development in the NMC area. Subsequent future development has been envisioned and considered on a programmatic level in the SOI GPA EIR. Thus, the extension of these facilities would not serve development beyond the scope of that planned for the area. However, because the project would result in extension of public facilities into areas not currently served by such facilities, and would facilitate subsequent development in the area, the project would be considered growth inducing.

5.3.2 Employment Generation

Development of the proposed project would generate some short-term, construction-related employment opportunities. The construction phases of the project would require a limited labor force due to the relatively short-term nature of construction employment. Given the supply of construction workers in the local work force, it is likely that these workers would come from within the Inland Empire area. Therefore, given the availability of local workers, the proposed project would not be considered growth inducing from a short-term employment perspective. The proposed project would not include any long-term employment opportunities.

5.3.3 Population Growth

The project would result in an additional 819 residential units in the area. Given the average household size of 3.6 persons per household (US Census 2000), the project would result in an additional 2,949 persons in the area. This population growth is consistent with that planned under the SOI GPA. Further, development of the Countryside Specific Plan is consistent with the anticipated growth planned for in the NMC. The population growth envisioned for the site has also been incorporated into SCAG projections. Thus, the project would induce population growth, and this growth has been planned for at the local and regional levels.

5.4 EFFECTS NOT FOUND TO BE SIGNIFICANT

The Initial Study, included as Appendix A to this EIR, determined that several impacts were not found significant within the issue areas of Aesthetics, Land Use, Mineral Resources, and Population and Housing. Please refer to Appendix A (Notice of Preparation/Initial Study) for a detailed explanation of the reasons these effects were not found to be significant.

Chapter 6 DOCUMENT PREPARERS

Table 6-1 List of EIR Preparers	
Name	*Issue Area*
LEAD AGENCY: CITY OF ONTARIO	
Scott Murphy	Project Manager
Richard Ayala	Senior Planner
EIR CONSULTANT: EIP ASSOCIATES	
Amy Walston	Project Manager
Marianne Tanzer	Senior Manager, Alternatives
Kelsey Bennett	Deputy Project Manager
Neill Brower. Amy Walston	Cultural Resources
Makeba Pease, Terrance Wong	Air Quality and Noise
John Spranza	Biological Resources
Erin Efner, TJ Weule	Section Writers
Joel Miller	Document Production, Word Processing
James Songco	Graphics
EIR SUBCONSULTANTS	
Meyer, Mohaddes Associates	
Viggen Davidian	Transportation and Circulation
Adolfo Ozaeta	Transportation and Circulation
Nolte Engineers	
Chuck Christoplis	Methane Hazards, Utilities
Dale Harvey	Methane Hazards, Utilities
PROJECT APPLICANT	
Meritage Homes—Bart Hayashi	Site Applicant
LD King—Debby Linn	Specific Plan Consultant
Stewart McPherson	Real Estate

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Chapter 8 INTRODUCTION TO THE FINAL EIR

8.1 CEQA REQUIREMENTS

Before approving a project, the *California Environmental Quality Act* (CEQA) requires the Lead Agency to prepare and certify a Final Environmental Impact Report (Final EIR). The contents of a Final EIR are specified in Section 15132 of the CEQA Guidelines, which states that:

> The Final EIR shall consist of
>
> (a) The Draft EIR or a revision of the Draft
>
> (b) Comments and recommendations received on the Draft EIR either verbatim or in summary
>
> (c) A list of persons, organizations, and public agencies commenting on the Draft EIR
>
> (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process
>
> (e) Any other information added by the Lead Agency

The Lead Agency (City of Ontario "City") must also provide each agency that commented on the Draft EIR with a copy of the District's response to those comments at least 10 days before certifying the Final EIR. In addition, the District may also provide an opportunity for members of the public to review the Final EIR prior to certification, though this is not a requirement of CEQA.

8.2 PUBLIC REVIEW PROCESS

The Draft EIR for the proposed Countryside Specific Plan was circulated for review and comment by the public, agencies, and organizations for a 45-day public review period that began on October 18, 2005, and concluded on December 1, 2005. The Draft EIR was also circulated to state agencies for review through the State Clearinghouse, Office of Planning and Research. During the public review period, three written comment letters on the Draft EIR were received.

8.3 USE OF THE FINAL EIR

The Final EIR allows the public and the City an opportunity to review revisions to the Draft EIR, the response to comments, and other components of the EIR, such as the MMP, prior to approval of the project. The Final EIR serves as the environmental document to support approval of the proposed project, either in whole or in part.

After completing the Final EIR, and before approving the project, the Lead Agency must make the following three certifications as required by Section 15090 of the CEQA Guidelines:

- That the Final EIR has been completed in compliance with CEQA

- That the Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information in the Final EIR prior to approving the project
- That the Final EIR reflects the Lead Agency's independent judgment and analysis

Additionally, pursuant to Section 15093(b) of the CEQA Guidelines, when a Lead Agency approves a project that would result in significant, unavoidable impacts that are disclosed in the Final EIR, the agency must state in writing its reasons for supporting the approved action. This Statement of Overriding Considerations is supported by substantial information in the record, which includes this Final EIR. Since the proposed project would result in significant, unavoidable impacts, the City Council would be required to adopt a Statement of Overriding Considerations if it approves the proposed project.

These certifications and the Findings of Fact are included in a separate Findings document. Both the Final EIR and the Findings will be submitted to the City for consideration of the proposed project.

Chapter 9 CHANGES TO THE DRAFT EIR

9.1 TEXT CHANGES TO THE DRAFT EIR

This section includes revisions to text, by Draft EIR section. Text changes are intended to clarify or correct information in the Draft EIR in response to comments received on the document, changes to the proposed project design, or as initiated by District staff. Revisions are shown throughout this chapter as excerpts from the Draft EIR text, with a ~~line through~~ deleted text and a double underline beneath inserted text. The changes appear in order of their location in the Draft EIR.

9.1.1 Summary

Page xiv, the third bullet under **MM AQ-1-SP** has been revised as follows:

- ~~Limit idling equipment to 10 minutes~~Advise contractors not to idle construction equipment on site for more than 10 minutes.

Page xvi, **MM BIO-2(a)-SP** has been revised to state:

~~Mitigation fees shall be paid p~~Prior to any groundbreaking within the Specific Plan Area, mitigation fees shall be paid to a land conservancy selected to oversee habitat land acquisition in accordance with the settlement agreement between the City , Sierra Club and Endangered Habitat League.

Page xvi, **MM BIO-2(b)-SP** has been revised to state:

The city shall work with the established land conservancy to design o~~O~~pen water within the offsite mitigation lands. It shall be configured into numerous individual bodies of various size, depth, and configuration to maximize shoreline area and serve as habitat for the existing range of waterfowl that winter in the Specific Plan Area. Design considerations are available from the California Department of Fish and Game and private waterfowl conservation groups (e.g. Ducks Unlimited).

Page xvi, **MM-BIO-2(c)-SP** has been amended as follows:

The city shall work with the established land conservancy to aid in designing p~~P~~ortions of some of the offsite mitigation ponds ~~shall~~ to be vegetated with emergent wetland plant species, such as cattails (Typha *spp.*). Aquatic plants (e.g., algae, fully submerged species) shall be introduced into some ponds as forage for ducks. Typical native invertebrates (e.g. dragonflies, crustaceans) and small native fishes shall be introduced as food for predatory birds. Appropriate forage species for

such introductions shall be determined through consultation with the California Department of Fish and Game.

Page xvi, **MM-BIO-2(d)-SP** has been amended to state:

The city shall work with the established land conservancy to aid in designing u~~U~~pland areas between offsite ponds ~~shall~~to be left open as roosting areas for waterfowl and foraging habitat for raptors. The periphery of the mitigation areas shall be planted with tall trees (preferably native sycamores or cottonwoods) to provide roosts for raptors.

Page xx, the following row has been added immediately following the Cultural Resources subheading. Refer to Section 9.1.3 of this chapter for further clarification as to the nature of the change.

Impact CUL-1 The proposed project would result in the destruction of historical resources. This is considered a *less than significant* impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: No mitigation measures apply.	Less than Significant

Page xx, Impact CUL-1 and any subsequent references to this impact or its mitigation measures has been revised such that this impact is hereafter referred to as Impact CUL-2 I in this chapter.

Page xxii, Impact CUL-2 and any subsequent references to this impact or its mitigation measures has been revised such that this impact is hereafter referred to as Impact CUL-3 in this chapter.

Page xxii, Impact CUL-3 and any subsequent references to this impact or its mitigation measures has been revised such that this impact is hereafter referred to as Impact CUL-4 in this chapter.

Page xxiii, the following text has been removed. Refer to Section 9.1.3 of this chapter for further clarification as to the nature of the change.

~~Impact CUL-4 The proposed project would result in the destruction of historical resources. This is considered a *significant and unavoidable* impact.~~	~~Applicable Mitigation Measures from Ontario SOI GPA EIR:~~ ~~No mitigation measures apply.~~ ~~Project-Specific Mitigation Measures:~~ ~~MM CUL-4 SP Prior to issuance of a demolition or grading permit, the applicant shall retain a qualified consultant to record the historic single family residence and associated detached garage located at 9541 Chino Avenue in a manner equivalent to Level II of the Historical American Building Survey (HABS). Copies of all documentation shall be provided to the Ontario Historical Society, the Ontario Public Library, and the City Planning Department.~~	~~Significant and Unavoidable~~

Page xxxi, the first sentence of **MM N-1** has been amended to state:

Prior to the issuance of ~~grading~~building permits for the planning area in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Engineer by the project developer.

Page xxxi, the first sentence of **MM N-2** has been amended to state:

Prior to the issuance of ~~grading~~building permits for the planning area in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Building Official and Planning Director by the project developer.

Page xxxii, the first sentence of **MM N-3** has been amended to state:

Prior to the issuance of ~~grading~~building permits for the planning area in the Sphere of Influence area, the required location of noise barriers on the project site shall be detailed in the Acoustical Analysis Report.

Page xxxii, the first sentence of **MM N-4** has been amended to state:

Prior to the issuance of ~~grading~~building permits for the planning area in the Sphere of Influence area, the Acoustical Analysis Report shall identify those residential lots that may require mechanical ventilation to achieve interior noise standards. When the operable doors and windows are open for homes facing roadways, interior 45 dBA CNEL interior noise limit for these units may be exceeded.

Page xxxiv, the first sentence of **MM TRAF-1-SP** has been amended as follows:

MM TRAF-1-SP ~~The following intersection improvements shall be~~ Development impact fees shall be paid for improvements or improvements shall be constructed as required by the City Engineer, for:

9.1.2 Agricultural Resources

Page 3.1-10, the third sentence of the first paragraph has been clarified to state:

Further, the development of the Countryside Specific Plan Area would occur as part of a wider pattern of development in the New Model Colony area, and other agricultural land would likely be converted to nonagricultural use as a part of the New Model Colony development (described further below in Section 3.1.6 [Cumulative Impacts]), the Countryside Specific Plan could promote such urban growth by contributing to the encirclement of other agricultural land with urban development~~, which could make subsequent cancellations of *Williamson Act* contracts more easy to justify~~.

9.1.3 Air Quality

Page 3.2-26, the third bullet under **MM AQ-1-SP** has been revised as follows:

- ~~Limit idling equipment to 10 minutes~~Advise contractors not to idle construction equipment on site for more than 10 minutes.

9.1.4 Biological Resources

Page 3.3-41, MM BIO-2(a)-SP has been revised to state:

~~Mitigation fees shall be paid p~~Prior to any groundbreaking within the Specific Plan Area, mitigation fees shall be paid to a land conservancy selected to oversee habitat land acquisition in accordance with the settlement agreement between the City , Sierra Club and Endangered Habitat League.

Page 3.3-41, MM BIO-2(b)-SP has been revised to state:

The city shall work with the established land conservancy to design o~~O~~pen water within the offsite mitigation lands. It shall be configured into numerous individual bodies of various size, depth, and configuration to maximize shoreline area and serve as habitat for the existing range of waterfowl that winter in the Specific Plan Area. Design considerations are available from the California Department of Fish and Game and private waterfowl conservation groups (e.g. Ducks Unlimited).

Page 3.3-41, MM-BIO-2(c)-SP has been amended as follows:

The city shall work with the established land conservancy to aid in designing p~~P~~ortions of some of the offsite mitigation ponds ~~shall~~ to be vegetated with emergent wetland plant species, such as cattails (Typha *spp.*). Aquatic plants (e.g., algae, fully submerged species) shall be introduced into some ponds as forage for ducks. Typical native invertebrates (e.g. dragonflies, crustaceans) and small native fishes shall be introduced as food for predatory birds. Appropriate forage species for such introductions shall be determined through consultation with the California Department of Fish and Game.

Page 3.3-42, MM-BIO-2(d)-SP has been amended to state:

The city shall work with the established land conservancy to aid in designing u~~U~~pland areas between offsite ponds ~~shall~~to be left open as roosting areas for waterfowl and foraging habitat for raptors. The periphery of the mitigation areas shall be planted with tall trees (preferably native sycamores or cottonwoods) to provide roosts for raptors.

9.1.5 Cultural Resources

Page 3.4-1, the second paragraph has been amended as follows:

Data used for preparation of this section include a historical and archaeological resources records check, literature survey, a cultural resources report prepared in 2004 by Chambers Group (included as Appendix D-1 of this EIR), the *City of Ontario's Historic Context for the New Model Colony Area* report (included as Appendix D-2 of this EIR), ~~a~~ California Department of Parks and Recreation Forms 523A and 523B prepared for the property at 9581 E. Chino Avenue and residence at 9541 Chino Avenue (included as Appendix D-3 of this EIR), previous environmental documentation prepared

for the City of Ontario (the City), and other data sources. Full bibliographic entries for all reference materials are provided in Chapter 7 (References).

Page 3.4-4, the second sentence of the fourth full paragraph has been revised as follows:

According to the *City of Ontario New Model Colony Historic Context Report* (NMC Historic Context Report) prepared for the City (2004, Galvin & Associates), included as Appendix D-2 of this EIR, there is one residence ~~and an associated detached garage~~ in the Countryside Specific Plan Area that ~~are~~ is at least 50 years old.

Page 3.4-4, the final paragraph has been revised to state:

According to the NMC Historic Context Report, one single family residence ~~and an associated detached garage~~ located on a parcel of land at 9581 E. Chino Avenue (Assessor's Parcel Number 218-131-12) within the project area ~~were~~was constructed in 1925. There are several buildings on this land parcel that constitute a dairy farm, however, all were built circa 1965 with the exception of the one noted residence ~~and associated garage~~. The residence ~~and garage built in 1925 (currently 80 years of age) are~~ or potentially historic resource is located on the northern portion of the parcel and ~~have~~has a unique street address of 9541 Chino Ave (although the overall parcel address is 9581 E. Chino Avenue). The single family residence ~~and detached garage were~~was evaluated for historic significance via an intensive ~~reconnaissance~~ survey by an architectural historian and recorded on State of California Department of Parks and Recreation (DPR) Forms 523A and 523B (attached as Appendix D-3). ~~The single family residence is representative of the Spanish Bungalow architectural style, while the detached garage is constructed of brick.~~Based on the results of the historic resources study that was performed and summarized in Appendix D-3, the original Spanish Bungalow style of architecture was significantly altered in 1972 when three additions were constructed in a Ranch style of architecture. As a result, the architectural integrity of the building has been significantly compromised and no longer represents a Spanish Bungalow style of architecture. As a result, the residence does not meet California Register Criterion 3. Further evaluation against the California Register Criterion concluded that the residence did not meet Criterion 1, 2, and 4 as well.

Page 3.4-5, the first paragraph has been amended as follows:

The NMC Historic Context Report identifies six distinct historical contexts that were used for identifying and evaluating resources within the NMC area. ~~The residence and detached garage at 9541 Chino Ave is classified as an example of the "pre-1930 rural or dairy property" historical context.~~The remainder of the dairy farm and associated properties located within the Countryside Specific Plan Area at 9521-9581 E. Chino Avenue were identified within the NMC Historic Context Report as being an associated property type for "Post 1950s Scientific-Large Capacity Dairies" and demonstrates a level of moderate integrity according to the guidelines provided in the NMC Historic Context Report. Properties associated with this historical context constituted the ~~first~~ third phase of dairy farming in the Chino Valley, occurring between ~~1900 and 1930~~1950 and 1969. ~~The~~

~~dairies were run by a single family who lived on and worked the land. In addition, the residence and garage at 9541 Chino Avenue are examples of a multi-generational property that has existed for many years under the ownership of one family.~~The dairy farm and associated properties were constructed less than 50 years ago and therefore do not meet the California Register Criterion nor is it of exceptional importance to the Community, State, or Nation.

Page 3.4-9, the following discussion has been added immediately following **3.4.5 Project Impacts**. Note that this is not a new impact statement. It reflects a refinement of an existing impact statement from the Draft EIR (CUL-4) based on subsequent evaluations of the proposed project site and does not indicate an increase in the severity of the potential impacts of the proposed project. For this reason, the presentation of the impact in this manner is appropriate.

Less than Significant

Impact CUL-1 The proposed project would not result in the destruction of historical resources. This is considered a *less than significant* impact.

As described above under Existing Conditions, the historical resource identified in the Countryside Specific Plan Area by the records search was the remnant of the historic Anza Trail, a California Point of Historical Interest. However, subsequent surveys indicated that the trail and any remnants have been destroyed by roadway improvements and other development activity in the vicinity of Riverside Drive. Consequently, the proposed project would not further deteriorate or otherwise affect this resource, this impact would be less than significant, and no mitigation would be required.

In addition, the majority of the dairy farm and associated properties located within the Countryside Specific Plan Area at 9521-9581 E. Chino Avenue were identified within the NMC Historic Context Report as being an associated property type for "Post 1950s Scientific-Large Capacity Dairies" and demonstrates a level of moderate integrity according to the guidelines provided in the NMC Historic Context Report. As mentioned previously, the majority of the dairy farm and associated properties were not evaluated against the California Register Criterion due to the less than 50 years old criteria. However, the home located at 9541 E. Chino Avenue was constructed in 1925. Due to its potential historical significance, the single family residence was evaluated for historic significance via an intensive survey by an architectural historian and recorded on State of California Department of Parks and Recreation (DPR) Forms 523A and 523B (attached as Appendix D-3).

Based on the results of the historic resources study that was performed and summarized in Appendix D-3, the original Spanish Bungalow style of architecture was significantly altered in 1972 when three additions were constructed in a Ranch style of architecture. As a result, the architectural integrity of the building has been significantly compromised and no longer represents a Spanish Bungalow style of architecture. As a result, the residence does not meet California Register Criterion 3. Further evaluation against the California Register Criterion concluded that the residence did not meet Criterion 1, 2, and 4 as well. Therefore, demolition of the residence and garage at 9541 Chino Avenue would not eliminate an example of the "pre-1930 rural or dairy property" historical context

defined in the NMC Historic Context Report. Therefore, this impact would be ***less-than-significant***.

Page 3.4-9, Impact CUL-1 and any subsequent references to this impact or its mitigation measures has been revised such that this impact is hereafter referred to as Impact CUL-2 in this chapter.

Page 3.4-9, Impact CUL-2 and any subsequent references to this impact or its mitigation measures has been revised such that this impact is hereafter referred to as Impact CUL-3 in this chapter.

Page 3.4-10, Impact CUL-3 and any subsequent references to this impact or its mitigation measures has been revised such that this impact is hereafter referred to as Impact CUL-4 in this chapter.

Page 3.4-10, Impact CUL-4 has been amended and moved as identified above.

Page 3.4-12, the second and third paragraphs have been revised to state:

~~***Significant and unavoidable***~~ Significant and unavoidable cumulative impacts to historic resources would occur if implementation of the proposed project results in the ~~as a result of~~ demolition of existing historically-aged structures ~~as a result of the proposed project~~ in conjunction with development of cumulative projects within the Ontario NMC area. However, as stated above under Impact CUIL-1, implementation of the proposed project would not require the demolition or removal of any historic resources. Therefore, the proposed project's contribution to ipacts on historic resources would not be cumulatively considerable, and impacts would be ***less than significant.*** Subsequently, ~~The proposed project would require the demolition of the single family residence and associated detached garage located within the Countryside Specific Plan Area at 9541 E. Chino Avenue. The home and garage were both constructed in 1925 and are examples of the "pre-1930 rural or dairy property" historical context defined in the NMC Historic Context Report. In addition, the demolition of the residence and garage would eliminate an example of a multi-generational property in the Ontario NMC area that has existed for many years under the ownership of one family. Development of cumulative specific plan areas within the Ontario NMC area would also result in the demolition of examples of pre-1930 rural or dairy properties and multi-generational properties.~~

~~Implementation of project-specific mitigation measure MM CUL-4-SP would reduce the project's contribution to cumulative impacts in the NMC area by requiring the recordation of the residence and garage at 9541 E. Chino Avenue the documentation and archival standards of the Historical American Building Survey (HABS) program. Similar measures can be taken to record historical structures located on other NMC specific plan areas prior to demolition. However, although recording the structures to HABS standards would ensure that some information regarding the~~

~~architecture, history, and historical context of the structures could be preserved, such measures would not prevent the loss of the resources. Consequently, cumulative impacts to historic resources would remain ***significant and unavoidable***, and~~ the proposed project's contribution to cumulative impacts would ~~remain~~ be ***less than significant*** ~~***and unavoidable***~~.

Page 3.4-15, the following text has been removed:

~~In addition, the following measure is proposed to reduce Impact CUL-4:~~

~~*MM CUL-4-SP* Prior to issuance of a demolition or grading permit, the applicant shall retain a qualified consultant to record the historic single family residence and associated detached garage located at 9541 Chino Avenue in a manner equivalent to Level II of the Historical American Building Survey (HABS). Copies of all documentation shall be provided to the Ontario Historical Society, the Ontario Public Library, and the City Planning Department.~~

~~Implementation of MM CUL-4-SP would reduce the impact (Impact CUL-4) on the historic single family residence and associated detached garage located at 9541 Chino Avenue by requiring the recordation of the structure to the documentation and archival standards of the HABS program, which would ensure that some documentary and photographic information regarding the structures would be retained after their demolition. However, although recording the structures to HABS standards would ensure that some information regarding the architecture, history, and historical context of the structures could be preserved, the measure would not prevent the loss of the resource. Consequently, this measure cannot reduce this impact to a less-than-significant level, and this impact would remain significant and unavoidable.~~

9.1.6 Noise

Page 3.8-28, the first sentence of **MM N-1** has been amended to state:

Prior to the issuance of ~~grading~~building permits for the planning area in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Engineer by the project developer.

Page 3.8-28, the first sentence of **MM N-2** has been amended to state:

Prior to the issuance of ~~grading~~building permits for the planning area in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Building Official and Planning Director by the project developer.

Page 3.8-28, the first sentence of **MM N-3** has been amended to state:

Prior to the issuance of ~~grading~~building permits for the planning area in the Sphere of Influence area, the required location of noise barriers on the project site shall be detailed in the Acoustical Analysis Report.

Page 3.8-28, the first sentence of **MM N-4** has been amended to state:

Prior to the issuance of ~~grading~~building permits for the planning area in the Sphere of Influence area, the Acoustical Analysis Report shall identify those residential lots that may require mechanical ventilation to achieve interior noise standards. When the operable doors and windows are open for homes facing roadways, interior 45 dBA CNEL interior noise limit for these units may be exceeded.

9.1.7 Transportation/Traffic

Page 3.10-31, the first sentence of **MM TRAF-1-SP** has been amended as follows:

MM TRAF-1-SP *~~The following intersection improvements shall be implemented~~ Development impact fees shall be paid for improvements or improvements shall be constructed as required by the City Engineer, for:*

9.1.8 Alternatives

Page 4-5, the second paragraph has been revised as follows:

Changes to land use densities would not affect impacts to cultural resources in comparison to the proposed project, as ground disturbance would still occur over the entire site. Similar to the proposed project, ~~T~~this alternative would demolish existing structures on site ~~and result in the loss of a potentially historic resource~~, none of which are considered to be potentially historic resources. ~~and this impact would be significant and unavoidable.~~ Potential disturbance or damage to undocumented archaeological resources, undocumented paleontological resources, or human remains could occur and would be reduced to less-than-significant levels through incorporation of mitigation measures identified for the proposed project.

Page 4-8, the following subheading and paragraph have been inserted prior to the discussion of impacts:

Attainment of Project Objectives

This alternative, by reducing the potential development area yet maintaining the construction of 819 residential units, would achieve the project objectives. Due to the 29-acre reduction in developable land and the corresponding overall increase in residential density of the remaining 148.94 acres, the level of public and private amenities available to residents within the Countryside Specific Plan Area

would be provided to a lesser degree than the proposed project. However, this alternative would continue to provide a mix of housing types in response to evolving market demands.

Page 4-9, the last paragraph has been revised to state:

Impacts associated with cultural resources would remain for the project, although these impacts would be concentrated only on the 149-acre portion of the site where development would occur. Similar to the proposed project, ~~T~~this alternative would demolish existing structures on site ~~and result in the loss of a potentially historic resource~~, none of which are considered to be potentially historic resources. ~~and this impact would be significant and unavoidable.~~ Potential disturbance or damage to undocumented archaeological resources, undocumented paleontological resources, or human remains could occur. Impacts would be reduced to less-than-significant levels through incorporation of mitigation measures identified for the proposed project.

Page 4-13, the last paragraph has been amended as follows:

Both the Reduced Density Project Alternative and the Alternative Configuration would reduce some impacts of the proposed project. The Reduced Density Project Alternative would reduce the magnitude of impacts to air quality and noise, although the impacts would remain significant and unavoidable. The Reduced Project Alternative would also reduce impacts to public services, transportation and traffic, and utilities and service systems. The Alternative Configuration would reduce impacts to biological resources, geological resources, hazards and hazardous materials, and hydrology and water quality. Neither alternative would reduce significant and unavoidable impacts to agricultural resources ~~or cultural resources~~. Because the Reduced Density Project Alternative would lessen significant and unavoidable impacts to air quality and noise, this alternative is identified as the environmentally superior alternative.

9.1.9 Other CEQA Considerations

Page 5-2, the following impact statement has been removed:

~~**Impact CUL-4 The proposed project would result in the destruction of historical resources.**~~

9.1.10 References

Page 7-1, the following reference has been added:

Kaplan Chen Kaplan. 2006. *9581 E. Chino Avenue – Completed DPR Form 523B*. 2 February.

Chapter 10 RESPONSES TO COMMENTS

10.1 OVERVIEW

The Draft EIR for the proposed Countryside Specific Plan was circulated for review and comment by the public, agencies, and organizations for a 45-day public review period that began on October 18, 2005, and concluded on December 1, 2005. The Draft EIR was also circulated to state agencies for review through the State Clearinghouse, Office of Planning and Research. During the review period written comments on the Draft EIR were submitted. During the public review period, three written comment letters on the Draft EIR were received. One additional comment letter was received after the comment period concluded, but that letter (California Department of Transportation) has been included.

Table 10-1 provides the following information: (1) a list of commenters presented in alphabetical order with agencies listed before individuals, (2) reference code used to identify the commenter, and (3) the page number where the comments and responses to those comments are located.

Table 10-1 List of Commenters

Comment Letter No.	*Commenter*	*Page Numbers*
A	California Department of Conservation, Division of Land Resource Protection	10-3
B	California Department of Transportation	10-9
C	California Public Utilities Commission	10-12
D	James Booth	10-14

This chapter of the Final EIR contains all comments received on the Draft EIR during the public review period, as well as the City's responses to these comments. Reasoned, factual responses have been provided to all comments received, with a particular emphasis on significant environmental issues. Detailed responses have been provided where a comment raises a specific issue; however, a general response has been provided where the comment is relatively general. Although some letters may raise legal or planning issues, these issues do not always constitute significant environmental issues. Therefore, the comment has been noted, but no response has been provided. Generally, the responses to comments provide explanation or amplification of information contained in the Draft EIR.

Section 10.2 contains the original comment letters, which have been bracketed to isolate the individual comments, as well as the responses to those comments. As noted above, and stated in Sections 15088(a) and 15088(b) of the CEQA Guidelines, comments that raise significant environmental issues are provided with responses. Comments that are outside of the scope of CEQA review will be forwarded for consideration to the decision makers as part of the project approval process. In some cases, a response may refer the reader to a previous response, if that previous response substantively addressed the same issues.

10.2 COMMENTS AND RESPONSES TO COMMENTS

Comments received on the Draft EIR are reproduced in entirety, each followed by the City's responses to those comments.

Letter A

STATE OF CALIFORNIA, RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEB SITE conservation.ca.gov

November 29, 2006

Ms. Nancy Martinez, Assistant Planner
City of Ontario Planning Department
303 East "B" Street
Ontario, CA 91764-4196

RE: Cancellation of Land Conservation (Williamson Act) Contract No. 69-124
Landowners: Van Veen Family Trust

Dear Ms. Martinez:

Thank you for submitting the notice to the Department of Conservation (Department) as required by Government Code section 51284.1 for the above referenced matter.

1 The petition proposes to cancel all of Contract No 69-124 consisting of 30.17 acres for residential development consistent with the Countryside Specific Plan. The City of Ontario assumed the rights and responsibilities of Contract No. 69-124 upon annexation in 1999. The property currently consists of 4 rural residences and an active dairy with ancillary facilities. Properties belonging to the San Bernardino County Flood Control District lies west and south of the cancellation site, to the north are equestrian and recycling facilities, as well as other vacant lands and to the east is a residence and a church. The site is located south of Chino Avenue between the Cucamonga Creek Channel and Archibald in the City of Ontario.

CEQA

2 The petition for cancellation included a copy of the draft Countryside Specific Plan EIR. Section 3.1.5 discusses the project impacts related to conversion of farmland to nonagricultural uses, including conversion of prime farmland and conflicts with Williamson Act lands. In large part, the DEIR indicates that the impacts are significant and unavoidable due to the lack of an agricultural mitigation program within the City and the timeliness of establishing such a program. The Department recommends that the City consider mitigation in the form of an in lieu fee donated to a land trust or other agency that specializes in the purchase and monitoring of permanent agricultural conservation easements. These easements could be purchased within the County,

Letter A

2

regionally or statewide in satisfaction of CEQA Guideline set ion 15370. The Department may be contacted for assistance in locating an appropriate agency.

Cancellation Findings

Government Code Section 51282 states that tentative approval for cancellation may be granted only if the local government makes one of the following findings: 1) cancellation is consistent with purposes of the Williamson Act or 2) cancellation is in the public interest. The Department has reviewed the petition and information provided and offers the following comments.

Cancellation is Consistent with the Purposes of the Williamson Act

For the cancellation to be consistent with purposes of the Williamson Act, the Ontario City Council (Council) must make findings with respect to all of the following: 1) a notice of nonrenewal has been served, 2) removal of adjacent land from agricultural use is unlikely, 3) the alternative use is consistent with the City's General Plan, 4) discontiguous patterns of urban development will not result, and 5) that there is no proximate noncontracted land which is available and suitable for the use proposed on the contracted land or that development of the contracted land would provide more contiguous patterns of urban development than development of proximate noncontracted land.

3

A notice of nonrenewal for Contract No. 69-124 was recorded on August 30, 2001. The contract is scheduled to expire on December 31, 2010 through the nonrenewal process.

The Department concurs that the cancellation will not result in the removal of adjacent lands from agricultural use and is consistent with the City's General Plan. The City designated the parcels for Specific Plan use with the adoption of the New Model Colony General Plan in 1998. The proposed Countryside Specific Plan proposes to zone the property Residential low-density.

The Department concurs that the cancellation will not result in discontiguous patterns of urban development. Existing residential development lies to the east and north of the Countryside Specific Plan boundary.

Evidence to substantiate a finding that there is no proximate noncontracted land which is available and suitable for the use proposed on the contracted land does not appear adequate. We have reviewed the maps provided and the Department's Williamson Act Map and note there is ample noncontracted land available within the 8,069-acre New Model Colony designated Specific Plan. Please note the California Supreme Court pointedly stressed that:

> "The purposes of the Williamson Act require that "proximate" not be construed to unreasonably limit the search for suitable noncontracted land. It would serve no purpose of the act to reject unrestricted property perfectly suited to fill the needs

> addressed by the proposal simply because that property is not in the immediate vicinity of the restricted land. In fact, under some circumstances land several miles from the proposed development site may be near enough to serve the same purposes. We therefore hold that "proximate" property means property close enough to the restricted parcel to serve as a practical alternative for the proposed one." (Sierra Club v. City of Hayward (1981), 28 Cal. 3d 861))

However, since the proposed cancellation parcels are adjacent to similarly developed property to the east and northeast and if the adjacent northern properties are developed in the near future, it could appear that development of the contracted land may provide more contiguous patterns of urban development than development of proximate noncontracted land.

Cancellation is in the Public Interest

For the cancellation to be in the public interest, the Council must make findings with respect to all of the following: (1) other public concerns substantially outweigh the objectives of the Williamson Act and (2) that there is no proximate noncontracted land which is available and suitable for the use proposed on the contracted land or that
3 development of the contracted land would provide more contiguous patterns of urban development than development of proximate noncontracted land. Our comments have already addressed the second finding required under public interest finding above.

In order to find that "other public concerns substantially outweigh the objectives of the Williamson Act," the Supreme Court has directed that the Board must consider the interest of the public as a whole in the value of the land for open space and agricultural use. Though the interests of the local and regional communities involved are also important, no decision regarding the public interest can be based exclusively on their parochialism. Moreover, the paramount 'interest' involved is the preservation of land in agricultural production. In providing for cancellation, the Legislature has recognized the relevance of other interests, such as housing, needed services, environmental protection through developed uses, economic growth and employment. However, it must be shown that open space objectives, explicitly and unequivocally protected by the act, are substantially outweighed by other public concerns before the cancellation can be deemed "in the public interest" (Sierra Club v City of Hayward (1981), 28 Cal. 3d. 840, 857)).

Nonrenewal

The DEIR provided with the petition appears to indicate that the City's right-to-farm ordinance allows landowners under contract the discretion to choose when, if at all, their property will be developed. It also appears to allow landowners under contract to retain a property tax advantage until development is profitable. To pass constitutional muster, a restriction must be enforceable in the face of imminent urban development, and may not be terminable merely because such development is desirable or profitable to the landowner. (Lewis v. City of Hayward, 177 Cal. App. 3d 103, 113.) The ordinance may

Letter A

be relevant to noncontracted agricultural land, but the interpretation as expressed in the DEIR is inapplicable to land under Williamson Act contract. As expressed in the DEIR, the ordinance would permit a contracting landowner the expectation that he or she can retain the tax benefit from participation in the Williamson Act until development to urban uses is imminent, and also the expectation that immediate contract termination would then be available. If this is a policy of the City, the ordinance is, on its face, inconsistent with the clearly articulated finding of the Court in Lewis.

The enforceable restrictions contained in the contract serve to prevent speculators from acquiring agricultural land and claiming a tax benefit for such speculation while waiting for development to arrive at their doorstep. Also, while it is true that the Williamson Act statute provides an extraordinary means for an immediate cancellation of contracts, the California Attorney General's Office has opined that cancellation is impermissible "except upon extremely stringent conditions", (62 Ops. Cal. Atty. Gen. 283, 240, (1979)). The Attorney General has also opined that nonrenewal is the preferred contract termination method: "If a landowner desires to change the use of his land under contract to uses other than agricultural production and compatible uses, the proper procedure is to give notices of nonrenewal pursuant to section 51245." (54 Ops. Cal. Atty. Gen 90, 92 (1971))

3

Lastly, legislation effective January 1, 2005, requires the county assessor to send notice to the Department and landowner of the current fair market value of the land and of the opportunity to request a formal review from the assessor prior to any action giving tentative approval to the cancellation of any contract. (SB 1620, Machado, Chapter 794, Statutes of 2004 (Section 51283(a)).

Thank you for the opportunity to provide comments on the proposed cancellation. Please provide our office with a copy of the Notice of the Public Hearing on this matter ten (10) working days before the hearing and a copy of the published notice of the Council's decision within 30 days of the tentative cancellation pursuant to section 51284. Additionally, we request a copy of the San Bernardino County Assessor's cancellation ... valuation for the proposed cancellation and a copy of the discussion of the Council's findings pursuant to section 51282. If you have any questions concerning our comments, please contact Adele Lagomarsino, Program Analyst at (916) 445-9411.

Sincerely,

Dennis J. O'Bryant
Acting Assistant Director

Response to Comments—California Department of Conservation

A-1 This comment contains narrative and general information, and is not a direct comment on the content or adequacy of the Draft EIR.

A-2 This comment provides information regarding the cancellation of Land Conservation (*Williamson Act*) Contract No. 69-124 Landowners; Van Veen Family Trust. The commenter recommends that under section 3.15, project impacts stated as significant and unavoidable can be mitigated in the form of an in lieu fee donated to a land trust or other agency that specializes in the purchase and monitoring of permanent agricultural conservation easements.

However, according to the Draft EIR, the City has not established an area for off-site acquisition of agricultural land, established any ratio of acquired easements to lost land, adopted a formal mechanism for the collection of fees to do so, nor does the City anticipate the establishment of any of the foregoing in the foreseeable future. In addition, no land has been reserved for this purpose, and the purchase of the quantity of land necessary to implement any such scheme is speculative, for both economic and policy reasons due to the lack of available contiguous parcels of high-quality agricultural land in the project region, as well as rising land costs and competition for use of land for commercial and residential uses. The development and establishment of such a mitigation plan that would include in lieu fees is not considered likely to occur prior to implementation of the proposed project. For this reason, this impact would be considered significant and unavoidable. This finding is consistent with the GPA FEIR which noted the loss of virtually all agricultural land in the NMC. This impact was identified as significant and unavoidable and a statement of overriding consideration was adopted. The cancellation of *Williamson Act* contracts do not change the ultimate conclusions contained in the GPA FEIR, but simply expedites the elimination of agricultural lands in the NMC.

A-3 As noted on page 3.1-9 of the EIR, any cancellation of *Williamson Act* contracts would be performed in compliance with the requirements of Government Code, §51282. Further, per CEQA and as part of the EIR approval process, a Statement of Overriding Considerations, which acknowledges the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (Section 15093 of the State CEQA Guidelines), will be prepared and included as part of this EIR, and would be considered to weigh the public interest versus the potential effects of a particular project.

The primary intention of a right-to-farm ordinance is to allow for the operation of agricultural property in the vicinity of nonagricultural uses. In addition, the purpose behind a right-to-farm ordinance is not to provide additional considerations to agricultural operations but to minimize potential conflicts that may arise as a result of increased residential development in the area. A right-to-farm ordinance does not afford agricultural land owners any additional benefits, including potential future profits (esp. tax benefits), beyond what is currently afforded but protects such

landowners from complaints by nearby residents as a result of daily operations on agricultural land that may result in forced conversion of agricultural land to nonagricultural use. Further, as noted under Impact AG-2, the right-to-farm ordinance is mentioned in connection with regard to *Williamson Act* contracts. The mention of *Williamson Act* contracts under Impact AG-3 was intended to state that, due to increasing urban sprawl within the project area, additional lands under *Williamson Act* contracts could be later converted to nonagricultural uses. As clarification, this statement has been removed. Please refer to Chapter 9 for a description of the text change.

Letter B

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING AND LOCAL ASSISTANCE (MS 722)
464 WEST 4th STREET, 6th FLOOR
SAN BERNARDINO, CA 92401-1400
PHONE (909) 383-4557
FAX (909) 383-5936
TTY (909) 383-6300

Flex your power!
Be energy efficient!

February 6, 2006

Mr. Richard Ayala
City of Ontario
Planning Department
303 East "B" Street
Ontario CA 91764

Dear Mr. Ayala:

Countryside Specific Plan – State Clearing House No. 2004071001
(08 SBd – 60 PM 7.87)

This letter is in response to the Draft Environmental Impact Report that was prepared for the proposed Countryside Specific Plan. The applicant has proposed 819 dwelling units on approximately 178 acres within 8 neighborhoods of varying densities.. Site is located on the south side of State Route 60 (SR-60) between Vineyard Avenue and Archibald Avenue.

Our Traffic Operations Department reviewed this development proposal and has the following comments:

1 • We recommend revising the traffic study to also include 2030 SCAG/RIV SAN Model traffic forecasts and related Level of Service calculations.

2 • Based on the impacts of this project and other growth in the area, by the year 2015 we recommend that the following traffic mitigation measures be considered:
1) Dual left turn lanes at Vineyard Avenue west bound SR-60 ramps.
2) Dual left turn lanes at the eastbound ramps at Archibald Avenue/SR-60 ramps.

Caltrans standards for the preparation of a Traffic Impact Analysis may be found at: http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/.

Responses to Comments—California Department of Transportation

B-1 As stated in the EIR, the Countryside Specific Plan is part of the New Model Colony (NMC) development area within the City of Ontario. The NMC includes development and implementation of infrastructure improvements through 2030, per the California Department of Transportation's request. However, based on the buildout schedule of the Countryside Specific Plan, the analysis of 2015 conditions is appropriate in this EIR.

B-2 Per mitigation measure **MM TRAF-1-SP**, the project applicant shall pay a fair share contribution for several intersection improvements. Item (a) of the aforementioned mitigation measure calls for the improvement of the Vineyard Avenue/WB SR-60 ramp intersection, including left-turn lanes.

B-3 This comment provides general guidance information regarding the encroachment permit process and requirements. This comment does not directly address the content or adequacy of the EIR, and as such, no further response is necessary.

B-4 This comment contains narrative and general information, and is not a direct comment on the content or adequacy of the Draft EIR.

Letter C

STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

November 22, 2005

File No. SCH 2004071001

Richard Ayala
City of Ontario
303 East "B" Street
Ontario, CA 91764

Subject: Countryside Specific Plan EIR

Dear Mr. Ayala:

As the state agency responsible for rail safety within California, we recommend that the proposed residential development project be planned with the safety of the rail corridor in mind. The proposed project is near the Union Pacific Railroad Company right-of-way. The full development of the project area will increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings.

Safety considerations may include, but are not limited to, the following items:

- Grade separation of the crossings along major thoroughfares
- Fencing to limit the access of pedestrians onto the railroad right-of-way
- Improvements to warning devices at existing at-grade highway-rail crossings
- Improvements to traffic signaling at intersections adjacent to crossings
- Improvements to roadway geometry and lane striping near crossings
- Increased enforcement of traffic laws at crossings
- A safety awareness program on rail related hazards

1

The above-mentioned safety improvements should be considered when approval is sought for new developments; this includes mitigation measures at highway-rail at-grade crossings. Working with Commission staff early in the conceptual design phase will help improve the safety to motorists and pedestrians in the community.

Please advise us on the status of the project. If you have any questions in this matter, please contact me at (213) 576-7078 or at rxm@cpuc.ca.gov.

Sincerely,

Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

cc: Richard Gonzales, UP

Responses to Comments—California Public Utilities Commission

C-1 The EIR acknowledges potential hazards, which would include safety hazards regarding railways, that may occur as a result of project implementation in Section 3.10 (Transportation/Traffic). It should be noted that the nearest railway is located approximately 1.7 miles to the northeast of the proposed project site. Further, the proposed Countryside Specific Plan is part of the NMC, which also addressed the nearby railway system in Section 5.7 of that EIR. In both cases, impacts were found to be less than significant. However, this comment is acknowledged and will be provided to the decision makers for their review and consideration of the proposed project.

Letter D

Richard Ayala, Senior Planner, 11/14/05
File No. Draft Environmental Impact Report for PSP04-001

1 This is in regards to the proposal for the development of up to 819 residential units going in along Archibald Avenue by Heritage Homes. I have serious concerns about the traffic impact that this poses. This brings in a lot more congestion onto Archibald Ave. We have already noticed more cars along Archibald and this is due to the new Corona area using this street as a 15-freeway alternative. This existing problem begins at Schaefer and goes north to the 60 freeway where there is only one lane to get onto the 60 freeway westbound posing additional problems to commuters. I would like to see roadway upgrades made prior to adding this many new homes. Thank you for hearing this concern.

Respectfully,

James G. Booth

James Booth
3416 Wrangler Pl.
Ontario
(909) 841-3127

Responses to Comments—James Booth

D-1 In response to Comment D-1, as described in Section 3.10 in Chapter 3 of the EIR, traffic impacts are considered significant due to the development of the proposed project. Mitigation measures have been provided in order to reduce these impacts, such as the provision of additional through traffic lanes by restriping using parking restrictions or other measure where feasible. In addition, mitigation measure include intersections improvements that shall be implemented prior to operation of the proposed project at the following intersections; Intersection, Archibald Avenue/ SR 60, Archibald Avenue/ Riverside Drive, Archibald Avenue/ Chino Avenue and Archibald Avenue/ Edison Avenue. With the incorporation of the mitigation measures stated in Chapter 3, Section 3.10 (Transportation/Traffic), all intersection impacts will be reduced, as will congestion onto Archibald Avenue.

Chapter 11 MITIGATION MONITORING PROGRAM

11.1 INTRODUCTION

The *California Environmental Quality Act* (CEQA) requires the adoption of feasible mitigation measures to reduce the severity and magnitude of potentially significant environmental impacts associated with project development. The Final Environmental Impact Report (Final EIR) for the proposed Countryside Specific Plan EIR (State Clearinghouse No.2004071001) located within the New Model Colony (NMC) of the City of Ontario (the City), includes project-specific mitigation measures to reduce the potential environmental effects of the proposed project.

Monitoring of the implementation of adopted mitigation measures is required by Public Resources Code Section 21081.6. The Final EIR for the proposed project provides a list of project-specific mitigation measures, and describes the process whereby the mitigation measures would be monitored. Following certification of the Final EIR and approval of this Mitigation Monitoring Program (MMP) by the City, the project-specific mitigation measures included in the Final EIR would be monitored as described in this MMP.

11.1.1 Purpose

The purpose of the proposed Countryside Specific Plan EIR MMP is to ensure compliance with all mitigation measures to mitigate or avoid potentially significant adverse environmental impacts resulting from the proposed project that were identified in the Final EIR. Implementation of this MMP shall be accomplished by the City of Ontario. Project-specific mitigation measures will be implemented (1) as part of design development of the project, (2) during project construction, or (3) as part of project operations.

11.1.2 Responsibilities and Duties

In general, monitoring will consist of demonstrating that mitigation measures were implemented, and that the responsible unit monitored the implementation of the measures. The responsible unit for determining compliance with all mitigation measures will be the City. Monitoring will consist of determining whether

- The specific issues identified in the mitigation measures were considered in the design development phase
- Construction contracts included the provisions specified in the mitigation measures
- The required actions specified in the mitigation measures occurred prior to or during construction
- Ongoing administrative activities included the provisions identified in the mitigation measures

Any concerns between monitors and construction personnel shall be addressed by the City of Ontario, Building Department. The contractor shall prepare a construction schedule subject to review and approval by the City of Ontario, Building Department.

11.2 LIST OF MITIGATION MEASURES

All project-specific mitigation measures included in the Final EIR for this project would be monitored as described above. These measures are listed in Table 11-1.

The mitigation monitoring matrix on the following pages is formatted to parallel the format of the Executive Summary table contained in the Final EIR. The matrix identifies the required mitigation measures, the time frame for monitoring, and the responsible monitoring agencies.

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
AGRICULTURAL RESOURCES				
Impact AG-3 The proposed project would involve other changes in the existing environment that would result in the conversion of Farmland to nonagricultural use.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM AG-1-SP *Deed Disclosure*—In order to reduce conflicting issues between sensitive receptors and agricultural uses, all residential units in the Countryside Specific Plan area shall be provided with a deed disclosure or similar notice approved by the City Attorney regarding the proximity and nature of neighboring agricultural uses. This disclosure shall be applied at the tentative map stage to the affected properties, or otherwise prior to finalizing the sale or rental agreement of any property. The written disclosure shall be supplied to the property purchaser or renter by the vendor or vendor's agent. The content and text of the disclosure shall be approved by the City Attorney, and shall include language to inform new residents that existing agricultural uses may create nuisances such as flies, odors, dust, night light, and chemical spraying.	The City of Ontario, Planning Department	The City of Ontario, Planning Department and the City Attorney	Applied at the tentative map stage to the affected properties, or prior to finalizing the sale or rental agreement of any property.
AIR QUALITY				
Impact AQ-1 Peak construction activities associated with the proposed project would generate emissions that exceed SCAQMD thresholds.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM AQ-1 Per SCAQMD Rule 403, the City shall enforce the following (regardless of whether the project is General Plan level or project specific): ■ During all construction activities, construction contractors shall use low emission mobile construction equipment where feasible to reduce the release of undesirable emissions. ■ During all construction activities, construction contractors shall encourage rideshare and transit programs for project construction personnel to reduce automobile emissions. ■ During all grading and site disturbance activities, construction contractors shall water active grading sites at least twice a day, and clean construction equipment in the morning and/or evening to reduce particulate emissions and fugitive dust. ■ During all construction activities, construction contractors shall, as necessary, wash truck tires leaving the site to reduce the amount of particulate matter transferred to paved streets as required by SCAQMD Rule 403. ■ During all construction activities, construction contractors shall sweep on and off site streets if silt is carried over to adjacent public thoroughfares, as determined by the City Engineer to reduce the amount of particulate matter on public streets. ■ During all construction activities, construction contractors shall limit traffic speeds on all unpaved road surfaces to 15 miles per hour or less to reduce fugitive dust. ■ During grading and all site disturbance activities, at the discretion of the City's Planning Director, construction contractors shall suspend all grading operations during first and second stage smog alerts to reduce fugitive dust.	The City of Ontario, Building Department.	Project Developer/ Contractor	During grading and construction

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	■ During grading and all site disturbance activities, at the discretion of the City's Planning Director, construction contractors shall suspend all trading operations when wind speeds (including instantaneous gusts) exceed 25 miles per hour to reduce fugitive dust. ■ During all construction activities, the construction contractors shall maintain construction equipment engines by keeping them tuned. ■ During all construction activities, the construction contractors shall use low sulfur fuel for stationary equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions. ■ During all construction activities, the construction contractors shall use existing on-site electrical power sources to the maximum extent practicable. Where such power is not available, the Contractor shall use clean fuel generators during the early stages of construction to minimize or eliminate the use of portable generators and reduce the release of undesirable emissions. ■ During all construction activities, the construction contractors shall use low emission, on-site stationary equipment (e.g., clean fuels) to the maximum extent practicable to reduce emissions, as determined by the City Engineer. ■ During all construction activities, the construction contractors shall ensure that all trucks hauling dirt, sand, soil or other loose materials are covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of the California Vehicle code Section 23114 to reduce spilling of material on area roads. <u>Project-Specific Mitigation Measures:</u> MM AQ-1-SP Prior to all phases of project construction, the City shall ensure that construction contracts include the following specifications: ■ If feasible, arrange for intense earth-moving activities to occur outside the ozone season of May through October. ■ When feasible, schedule equipment usage to avoid simultaneous use of equipment. ■ Advise contractors not to idle construction equipment on site for more than 10 minutes. ■ Use low NOx diesel fuel to the extent that it is readily available and cost effective in San Bernardino County Replace fossil-fueled equipment with electrically driven equivalents provided that they are not run via a portable generator set, to the extent available.	The City of Ontario, Building Department.	Project Developer/ Contractor	Prior to all phases of project construction

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
Impact AQ-2 Daily operation of the project would generate emissions that exceed SCAQMD thresholds.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM AQ-2-SP Prior to project construction, the project applicant and City shall consult with the SCAQMD to ensure all applicable and feasible mitigation measures are implemented to reduce emissions. These measures may include, but would not be limited to, the following or equally effective measures: ■ Outdoor electrical outlets shall be installed outside each residential building and each residential patio area to allow for the use of electric barbeques and landscaping equipment ■ Use solar or low emission water heaters ■ Increase wall and attic insulation in compliance with Title 24 requirements Only natural gas inert fireplaces shall be installed in homes	The City of Ontario, Building Department.	Project Applicant and City	Prior to project construction
Impact AQ-5 Project implementation would not release significant amounts of toxic air contaminants.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM HM-1(f)-SP applies.	Refer to MM HM-1(f)-SP	Refer to MM HM-1(f)-SP	Refer to MM HM-1(f)-SP
BIOLOGICAL RESOURCES				
Impact BIO-1 Implementation of the project could, through habitat modifications, result in a potential reduction in nesting opportunities for resident and migratory avian Species of Special Concern, including raptors or the loss of an active avian nest.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-1(a)-SP To ensure that avian Species of Concern, protected migratory species (e.g., Migratory Bird Treat Act), or raptors species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures: ■ When feasible, all tree removal shall occur between August 30 and February 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the California Department of Fish and Game (CDFG); or if it is not feasible to remove trees outside this window then, prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15 and August 30, all trees and potential burrowing owl habitat within 250 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30 days prior to	The City of Ontario, Planning Department	Project Applicant	Prior to and during Project construction

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	disturbance. If active raptor nests or burrows are found, and the site is within 250 feet of potential construction activity, a fence shall be erected around the tree or burrow(s) at a distance of up to 250 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City in consultation with CDFG. ■ No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones), unless directly related to the management or protection of the legally protected species. ■ In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s). If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.			
	MM BIO-1(b)-SP The large trees identified as windrows that occur along Archibald Avenue in the vicinity of the current poultry operations shall be retained to the extent feasible. If removal is required, these trees shall be replaced within the Specific Plan Area at a 2:1 ratio by native trees that would be appropriate to the project area.	City of Ontario Planning Division	Project Applicant	During Project construction
Impact BIO-2 Project implementation would remove state-mandated dairy manure water retention basins that serve as migratory waterfowl habitat.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> No mitigation measures apply.			
	<u>Project-Specific Mitigation Measures:</u> MM BIO-2(a)-SP Prior to any groundbreaking within the Specific Plan Area, mitigation fees shall be paid to a land conservancy selected to oversee habitat land acquisition in accordance with the settlement agreement between the City , Sierra Club and Endangered Habitat League.	City of Ontario Planning Division	Land Conservancy	Prior to issuance of a Grading Permit/ Construction
	MM BIO-2(b)-SP The city shall work with the established land conservancy to design open water within the offsite mitigation lands. It shall be configured into numerous individual bodies of various size, depth, and configuration to maximize shoreline area and serve as habitat for the existing range of waterfowl that winter in the Specific Plan Area. Design considerations are available from the California Department of Fish and Game and private waterfowl conservation groups (e.g. Ducks Unlimited).	City of Ontario Planning Division	Land Conservancy	During design and implementation of offsite mitigation.

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	MM BIO-2(c)-SP The city shall work with the established land conservancy to aid in designing portions of some of the offsite mitigation ponds to be vegetated with emergent wetland plant species, such as cattails (Typha *spp.*). Aquatic plants (e.g., algae, fully submerged species) shall be introduced into some ponds as forage for ducks. Typical native invertebrates (e.g. dragonflies, crustaceans) and small native fishes shall be introduced as food for predatory birds. Appropriate forage species for such introductions shall be determined through consultation with the California Department of Fish and Game.	City of Ontario Planning Division	Project Applicant	During design and implementation of offsite mitigation
	MM BIO-2(d)-SP The city shall work with the established land conservancy to aid in designing upland areas between offsite ponds to be left open as roosting areas for waterfowl and foraging habitat for raptors. The periphery of the mitigation areas shall be planted with tall trees (preferably native sycamores or cottonwoods) to provide roosts for raptors.	City of Ontario Planning Division	Project Applicant	During design and implementation of offsite mitigation
	MM BIO-2(e)-SP The City, with the input from the California Department of Fish and Game, shall develop a Mitigation Lands Management Plan for the offsite mitigation lands with the following components: ■ The offsite mitigation lands shall be operated by an appropriate conservation agency, whether public or private, and shall be overseen by an on-site manager with biological experience. ■ Prohibition of all consumptive uses, including hunting, off-road vehicles, dog training, dumping, etc. ■ The primary goal of the offsite mitigation areas shall be for conservation, and shall only be used for educational or scientific purposes, including school visits, Audubon Society Christmas Bird counts, scientific research, and promoting public awareness. ■ Control of trespass shall be on a case-by-case basis, with permission granted upon advanced notice and supervised by appropriate personnel. ■ The offsite mitigation areas shall be managed for waterfowl and raptor populations; nonnative predators shall be controlled as needed.	City of Ontario Planning Division	City of Ontario Planning Division	During design of offsite mitigation
	MM BIO-2(f)-SP The City shall enter into consultation with appropriate California Department of Fish and Game personnel before and during the establishment of the offsite mitigation areas, whether land purchased by fee or under conservation easement.	City of Ontario Planning Division	City of Ontario Planning Division	Before and During design and implementation of offsite mitigation.
Impact BIO-3 Implementation of the project would, through habitat modifications, result in the loss of raptor foraging habitat.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> The purchase of off-site mitigation areas and/or conservation easements within the El Prado Basin and retention of 160 acres of surface water within the El Prado Basin would result in an increase of waterfowl and migratory bird habitat within the project vicinity.	Refer to MM BIO-2(a–f)-SP	Refer to MM BIO-2(a–f)-SP	Refer to MM BIO-2(a–f)-SP
	<u>Project-Specific Mitigation Measures:</u> MM BIO-2(a–f)-SP apply.	Refer to MM BIO-2(a–f)-SP	Refer to MM BIO-2(a–f)-SP	Refer to MM BIO-2(a–f)-SP

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
Impact BIO-5 Grading activities during project construction and the establishment of project landscaping could result in the introduction of undesirable invasive nonnative plant species to the project site and adjacent areas.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-3-SP Exotic invasive species shall be prohibited in all open space areas and within 0.5 mile of the radius of all open areas and adjacent natural areas such as the Cucamonga Basin. Landscaping in open space areas within the Specific Plan Area shall include drought tolerant native species. Landscaping use of exotic invasive plants listed in the most recent update of the Exotic Pest Plant of Greatest Ecological Concern in California (California Invasive Plant Council) shall be prohibited within the Specific Plan Area and the applicant shall provide informational brochures to future residents on native and noninvasive nonnative landscaping requirements.	City of Ontario Planning Division	Project Applicant	During operation
Impact BIO-6 Implementation of the project could, through habitat modifications, result in the loss of western burrowing owl, a state and federal Species of Concern.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-4-SP The project applicant, in consultation with the California Department of Fish and Game (CDFG), shall conduct a pre-construction survey within the phases of the project site that are scheduled for construction activities. The survey shall be conducted by a qualified biologist to determine if western burrowing owls are occupying the project site. The survey shall be conducted no more than three weeks prior to grading of the project site. If the above survey does not identify burrowing owls on the project site, then no further mitigation would be required. However, should western burrowing owls be found on the project site, the following measures shall be required: The applicant shall avoid all potential western burrowing owl burrows that may be disturbed by project construction during the breeding season between February 15 and August 30 (the period when nest burrows are typically occupied by adults with eggs or young). Avoidance shall include the establishment of a 300-foot diameter non-disturbance buffer zone around any occupied burrows. The buffer zone shall be delineated by highly visible temporary construction fencing. Disturbance of any occupied burrows shall only occur outside of the breeding season (September 1 through February 14). Based on approval by the CDFG, preconstruction and non-breeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project-related disturbance (such as grading). Burrowing owls may be passively excluded from burrows in the construction area by placing one-way doors in the burrows according to current CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls, regardless of whether they exhibit signs of occupation, must be cleared. Burrows that have been cleared through the	City of Ontario Building Department	Project Applicant	Prior to grading permit/ construction

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	use of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow. The one-way doors shall not be used more than two weeks before construction to ensure that owls do not re-colonize the area of construction.			
Impact BIO-7 Implementation of the project could result in a potential take of Delhi Sands Flower-loving Fly.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM BIO-5-SP Prior to the issuance of grading permits within the project area, the project applicant and City, in consultation with the United States Fish and Wildlife Service (USFWS), shall conduct a survey in accordance with the conditions within the Interim General Survey Guidelines for the Delhi Sands Flower-loving Fly (DSFF). The survey shall be conducted during the appropriate season by a qualified biologist. If evidence of the presence of DSFF is found during the survey, the Specific Plan and/or development plan shall provide a plan and/or policies to protect this species. The plan and/or policies shall provide for avoidance of habitat that are found to support identified DSFF wherever feasible. If avoidance is not feasible, then the USFWS shall be consulted to approve appropriate relocation plans. Any subsequent avoidance, relocation, or other mitigation strategies required to reduce impacts to a less-than-significant level shall be implemented prior to issuance of a grading permit.	City of Ontario, Building Department	Project Applicant and City of Ontario, Planning Division	Prior to the issuance of grading permits
Impact BIO-15 Cumulative development of the proposed project could reduce open space and significantly interfere with migratory wildlife movement within the Ontario SOI area and the Region.	Applicable Mitigation Measures from Ontario SOI GPA EIR: The proposed project's contribution to cumulative impacts associated with loss of open space and wildlife movement would be *less than significant* and not be cumulatively considerable due to the relatively small amount of quality habitat that would be lost versus what would be retained and mitigated for via development fees (i.e., the mitigation and land acquisition terms of the 2001 settlement agreement), the lack of any considerable overland movement opportunities throughout the proposed project area due to location of the site within the Region (i.e. it is adjacent to existing development) and surrounding development. Implementation of applicable SOI GPA Policies such as Policies 18.1.2 through 18.1.11 that are designed to reduce impacts to wildlife habitat and retain contiguous areas, and the payment of mitigation fees that would be used to purchase conservation easements of land within the Region, would reduce cumulative habitat loss in the SOI GPA area.	Refer to MM BIO-1(a-b)-SP, MM BIO-2(a–f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP	Refer to MM BIO-1(a-b)-SP, MM BIO-2(a–f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP	Refer to MM BIO-1(a-b)-SP, MM BIO-2(a–f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP
	Project-Specific Mitigation Measures: MM BIO-1(a-b)-SP, MM BIO-2(a–f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP apply.	Refer to MM BIO-1(a-b)-SP, MM BIO-2(a–f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP	Refer to MM BIO-1(a-b)-SP, MM BIO-2(a–f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP	Refer to MM BIO-1(a-b)-SP, MM BIO-2(a–f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
CULTURAL RESOURCES				
Impact CUL-2 Earth-disturbing activities associated with implementation of the proposed project could potentially disturb or damage undocumented archaeological resources including human burials.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM C-1 In order to fulfill the requirements of CEQA and to preserve the cultural and historical resources of the area, the following mitigation measures are recommended: ■ For each proposed project that might impact cultural resources, any cultural resource in the project area should be identified in advance. A standard archaeological records check should be conducted through the San Bernardino County Museum Archaeological information Center in Redlands. For properties bordering the Riverside County boundary, additional research should be conducted through the University of California, Riverside, Archaeological Research Unit. ■ For each proposed project not previously surveyed within the past ten years, an intensive archaeological field survey should be completed under the supervision of a Society of Professional Archaeologists (SOPA) certified archaeologist. A technical report following format and content guidelines proposed by the Office of Historic Preservation must be completed. ■ For each proposed project with identified cultural resources, a formal evaluation of the resource(s) in accordance with the CEQA guidelines for significance (importance) must be completed. ■ For each project resulting in an adverse impact on a known significant resource, an appropriate planning approach must reduce the impact to a level of insignificance. ■ For each project where grading into previously undisturbed soils is planned, the retention of a qualified archaeologist should be required to monitor the grading in order to identify any cultural resources which may be exposed, complete a preliminary evaluation of the resource, and recommend appropriate resource management for the treatment of the resource. ■ For each future project, the City of Ontario should ensure the implementation of these recommendations through conditions of approval for any project.	Historic Preservation Program, City of Ontario Planning Department	Project Applicant	Prior to site preparation and grading activities
	<u>Project-Specific Mitigation Measures:</u> MM CUL-2(a)-SP Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological resources. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of archaeological resources is prohibited.	Historic Preservation Program, City of Ontario Planning Department	Project Applicant / City of Ontario Planning Division	Prior to site preparation and grading activities

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	MM CUL-2(b)-SP Prior to site preparation and grading activities, the applicant shall retain a qualified (SOPA-certified) archaeologist to monitor earth-disturbing activities. The frequency of monitoring shall occur at the discretion of the archaeologist, based upon site condition or other relevant factors. The archaeologist shall also be available on-call to assess any potential resources that may be exposed or discovered when the archaeologist is not present.	Historic Preservation Program, City of Ontario Planning Department	Project Applicant	Prior to site preparation and grading activities
	MM CUL-2(c)-SP For any potential archaeological resource uncovered during construction, a qualified archaeologist shall first determine whether it is a "unique archaeological resource" under Public Resources Code Section 21083.2(g). If the archaeological resource is determined to be a "unique archaeological resource," the archaeologist shall formulate a mitigation plan in consultation with the campus that satisfies the requirements of Section 21083.2 of CEQA. If the archaeologist determines that the archaeological resource is not a unique archaeological resource, the archaeologist may record the site and submit the recordation form to the California Historic Resources Information System South Central Coastal Information Center. The archaeologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the University and to the California Historic Resources Information System San Bernardino Archaeological Information Center.	Historic Preservation Program, City of Ontario Planning Department	Project Applicant / City of Ontario Planning Division	During construction
Impact CUL-3 Earth-disturbing activities associated with implementation of the proposed project could potentially disturb or damage undocumented paleontological resources.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM C-1 applies.	Refer to MM C-1	Refer to MM C-1	Refer to MM C-1
	<u>Project-Specific Mitigation Measures:</u> MM CUL-3(a)-SP Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering paleontological resources. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. All construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified paleontologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of paleontological resources is prohibited.	Historic Preservation Program, City of Ontario Planning Department	Project Applicant	Prior to Issuance of a Grading Permit/ Construction; and Prior to site preparation or grading activities

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	MM CUL-3(b)-SP Prior to site preparation and grading activities, the applicant shall retain a qualified (member of the American Society of Vertebrate Paleontologists) paleontologist to monitor earth-disturbing activities. The frequency of monitoring shall occur at the discretion of the paleontologist, based upon site conditions, soil or rock types, or other relevant factors. The paleontologist shall also be available on-call to assess any potential resources that may be exposed or discovered when the paleontologist is not present.	Historic Preservation Program, City of Ontario Planning Department	Project Applicant	Prior to site preparation and grading activities
	MM CUL-3(c)-SP For any potential paleontological resource uncovered during construction, a qualified paleontologist shall first determine whether it is a "unique resource". If the paleontological resource is determined to be a "unique resource," the paleontologist shall formulate a mitigation plan in consultation with the City that satisfies the requirements off the *Conformable Mitigation Guidelines* of the Society of Vertebrate Paleontology (News Bulletin Number 163, January 1995). If the paleontologist determines that the paleontological resource is not a unique resource, the paleontologist may record the site and submit the recordation form to the Natural History Museum of San Bernardino County. The paleontologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the City of Ontario and to the Natural History Museum of San Bernardino County.	Historic Preservation Program, City of Ontario Planning Department	Project Applicant / City of Ontario Planning Division	During construction
Impact CUL-4 Earth-disturbing activities could result in the disturbance of human remains, including those interred outside of formal cemeteries.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> No mitigation measures apply. <u>Project-Specific Mitigation Measures:</u> MM CUL-4-SP In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately, the area of the find shall be protected, and the University immediately shall notify the San Bernardino County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.	Historic Preservation Program, City of Ontario Planning Department	Project Developer / Contractor	Construction

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
GEOLOGY AND SOILS				
Impact GEO-1 Implementation of the proposed project could expose people or structures to seismic hazards.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM G-1 The City shall develop (pull together from existing materials) a Grading and Geotechnical Investigation Standards manual which will be available to developers and consultants in order to ensure the minimum proper soils engineering and engineering geologic study for all sites where grading will occur. Together these standards and policies should effectively mandate proper studies before development approval, in which grading, foundations, and slope stability would be analyzed and any potential hazards identified. Mitigation of the potential hazards would occur though the proper application of recommendations arising from these studies. Topics shall include but not necessarily be limited to soils engineering and foundations, slope stability, erosion, liquefaction/dynamic settlement, shallow groundwater, and fault location/activity. This manual shall be available at the permit stage prior to initial feasibility and design studies in order to enhance (streamline) the development review and environmental review processes.	City of Ontario Building Department	City of Ontario Building Department	Prior to Issuance of a Grading Permit
	<u>Project-Specific Mitigation Measures:</u> MM GEO-1-SP A final design geotechnical report shall be prepared for the proposed development to provide structure-specific geotechnical recommendations. The final report shall address all issues initially covered in the Preliminary Geotechnical Report. Final recommendations on earthwork, spread footings with slabs-on-grade, reinforced mat foundations, post-tensioned mats, friction piles, cathedral retaining (basement) walls, and measures to address soil corrosion shall be identified. The final report shall specify foundation recommendations to ensure issues associated with underlying soils are addressed. Construction of the project shall comply with all recommendations in the final geotechnical report.	City of Ontario Building Department	City of Ontario Building Department	Prior to Issuance of a Grading Permit
Impact GEO-2 The proposed project would alter site topography, which could affect the rate or extent of erosion.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM G-1 applies.	Refer to MM G-1	Refer to MM G-1	Refer to MM G-1
	<u>Project-Specific Mitigation Measures:</u> MM GEO-2(a)-SP Erosion control practices shall be employed and maintained on all vacant areas of the project site that have been graded.	City of Ontario Building Department	Project Developer / Contractor	Construction
	MM GEO-2(b)-SP The project applicant shall submit a Notice of Intent (NOI) to the State Water Resources Conservation Board (SWRCB) for coverage under the Statewide General Construction Activity Stormwater Permit and shall comply with all applicable requirements, including the preparation of a Stormwater Pollution Prevention Plan. A copy of the NOI shall be submitted to the City prior to issuance of a grading permit.	City of Ontario Building Department	Project Applicant	Prior to Issuance of a Grading Permit/ Construction
	MM GEO-2(b)-SP An erosion control plan shall be reviewed and approved by the City of Ontario prior to the issuance of grading permits.	City of Ontario Building Department	Project Applicant	Prior to Issuance of a Grading Permit/

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
Impact GEO-3 Project implementation would locate structures on soils that are considered potentially expansive, unstable, prone to settlement, and corrosive.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply.			
	Project-Specific Mitigation Measures: MM GEO-1-SP applies.	Refer to MM GEO-1-SP	Refer to MM GEO-1-SP	Refer to MM GEO-1-SP
	MM GEO-3(a)-SP Additional sampling and analysis shall be conducted during the final stages of grading to provide a complete assessment of soil corrosivity. If necessary, appropriate mitigation measures should be provided by a qualified corrosion engineer and incorporated into final design plans.	City of Ontario, Building and Planning Department	Civil Engineer	During Grading/construction
	MM GEO-3(b)-SP Additional soil sampling and testing shall be conducted following rough grading of the site. If necessary, to reduce the potential for damage due to soil expansion, slabs-on-grade shall be provided with sufficient reinforcement, and the footings shall extend below the zone of seasonal moisture fluctuation. A registered civil engineer or certified engineering geologist shall determine if post-tensioned slabs-on-grade may be used as another viable alternative to effectively address effects associated with expansive soils.	City of Ontario, Building and Planning Department	Civil engineer	During Grading/construction
HAZARDS AND HAZARDOUS MATERIALS				
Impact HM-1 Project construction could expose construction workers to health and safety risks through earthmoving and demolition activities in areas with potentially contaminated structures, soils, or groundwater.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM HM-1 Prior to consideration of any future development proposal within the Sphere of Influence, project developers will be required by the City to submit a completed Phase I Environmental Site Assessment, which, at a minimum, meets with the requirements of the most current standards of investigation established by the American Society or Testing and Materials (ASTM Standard E 1527).	City of Ontario Building Department	Project Developer, and the City of Ontario	Prior to issuance of permits
	MM HM-2 Prior to issuance of permits by the City of Ontario for major renovation of demolition of any pre-1979 structure within the Sphere of Influence, the project developer will be required to submit documentation to the City Building Department that asbestos and lead-based paint issues are not applicable to their property, or that appropriate actions will be taken to correct any asbestos or lead-based paint issues prior to development of the site.	City of Ontario Building Department	Project Developer, and the City of Ontario	Prior to issuance of permits
	Project-Specific Mitigation Measures: MM HM-1(a)-SP Existing groundwater wells shall be closed in accordance with current regulations.	City of Ontario Building Department	Project Developer / Contractor	Prior to issuance of permits
	MM HM-1(b)-SP If transformers are to be removed, the removal shall be completed and disposed of in accordance with current regulations by a licensed contractor of the utility company responsible for the transformer.	City of Ontario Building Department	Project Developer / Contractor	Prior to issuance of permits

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	MM HM-1(c)-SP Stained soil areas shall be excavated to five feet below ground and disposed of in accordance with current regulations. Confirmation sampling shall be conducted after removal to verify that the impacted soil has been adequately removed from the site.	City of Ontario Building Department	Contractor	During Construction
	MM HM-1(d)-SP If evidence of soil contamination is encountered in previously unidentified locations in the project area, work shall cease until the area can be tested, and, if necessary, remediated. Remediation activities could include removal of contaminated soil and/or on-site treatment. As part of this process, the City shall ensure that any necessary investigation and/or remediation activities conducted in the project area are coordinated with the Ontario Fire Department, San Bernardino County Division of Environmental Health, and, if needed, other appropriate state and/or local agencies and completed prior to commencement of construction.	City of Ontario Building Department/ Ontario Fire Department	Project Developer / Contractor	Prior to Construction
	MM HM-1(e)-SP Prior to issuance of a building permit, the project sponsor shall prepare a Contingency Plan for the site. The Contingency Plan shall delineate the procedures to be undertaken during grading, excavation, and construction to recognize areas of previously unidentified contamination. Such procedures shall, at a minimum, include air monitoring for organic compounds and visual observations. The Contingency Plan shall delineate the management procedures for such soils (e.g., separation of the material from other excavated soils, methods of delineating the extent of the unknown contamination, sampling protocol, and disposal methods). The Contingency Plan can be part of the Health and Safety Plan to be prepared for the construction workers. The Contingency Plan shall be submitted to the City for review and approval. Any subsequent investigation and remediation activities that would involve potential disturbance or release of hazardous materials shall comply with applicable federal, state, and local hazardous materials laws and regulations. At any time during construction or occupancy, the project proponent and contractors will be responsible for knowledge of and complying with applicable hazardous materials management regulations.	City of Ontario Building Department	Contractor	Prior to issuance of a Building permit/ During construction
	MM HM-1(f)-SP Prior to issuance of a grading or demolition permit for development of Neighborhood 3 of the Countryside Specific Plan area, a Phase I Environmental Site Assessment (ESA) report shall be prepared that documents any health risks at that site associated with the current salvage yard uses and, if contaminants are identified as present, includes a remedial action work plan that shall be implemented to prevent the release of any airborne or groundborne contaminants.	City of Ontario Building Department	City Engineer/ Project Developer	Prior to issuance of permits

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
Impact HM-2 Development of the proposed project could expose construction workers, occupants of new residential structures and recreational users of proposed park areas to methane hazards.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> No mitigation measures apply. <u>Project-Specific Mitigation Measures:</u> MM HM-2(a)-SP All stockpiled concentrations of animal manures shall be removed from the site and properly disposed or used as fertilizer or compost within existing local, state, and federal regulations for manure use.	The City of Ontario Building Department	City Engineer/ Project Developer	Construction
	MM HM-2(b)-SP A report shall be prepared for all former CAFOs addressing potential methane generation. The report shall include areas of identified methane risks and describe a risk abatement plan that details how methane risks will be reduced to a level below 2 percent of soil content. The City of Ontario City Engineer shall review and approve the report prior to map recordation.	The City of Ontario Building Department	City Engineer/ Project Developer	Prior to construction
	MM HM-2(c)-SP A post-grading test program shall be implemented for any site designated as a potential area of high methane concentration. Testing shall demonstrate that sites contain no more than 2 percent methane prior to issuance of building permits.	The City of Ontario Building Department	City Engineer/ Project Developer	Construction
Impact HM-3 Project implementation within a quarter mile of Ranch View School could result in possible safety hazards associated with hazardous emissions or hazardous material handling in proximity to a school.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> No mitigation measures apply. <u>Project-Specific Mitigation Measures:</u> MM HM-1(a–f)-SP and MM HM-2(a–c)-SP apply.	Refer to MM HM-1(a–f)-SP and MM HM-2(a–c)-SP	Refer to MM HM-1(a–f)-SP and MM HM-2(a–c)-SP	Refer to MM HM-1(a–f)-SP and MM HM-2(a–c)-SP
Impact HM-4 Project implementation would not result in construction on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would not create a significant hazard to the public or environment.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> No mitigation measures apply. <u>Project-Specific Mitigation Measures:</u> MM HM-1(a–f)-SP and MM HM-2(a–c)-SP apply.	Refer to MM HM-1(a–f)-SP and MM HM-2(a–c)-SP	Refer to MM HM-1(a–f)-SP and MM HM-2(a–c)-SP	Refer to MM HM-1(a–f)-SP and MM HM-2(a–c)-SP
Impact HM-5 Project implementation could expose people or structures to a risk of loss, injury, or death involving wildland fires.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> No mitigation measures apply. <u>Project-Specific Mitigation Measures:</u> MM HM-5(a)-SP Landscaping around development areas adjacent to open space shall minimize dense vegetation immediately adjacent to structural development. Specifically, 12 to 18 inches of bare ground shall be kept between structures and grasses of other vegetation.	City of Ontario Building Department	Project Developer	Construction

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	MM HM-5(b)-SP In order to maintain a fire break between the undeveloped areas and structures, fuel management setbacks shall be 10 feet from each side of a road and 30 feet from structures.	City of Ontario Building Department	Project Developer	Prior to issuance of a Grading Permit/ During Construction
	MM HM-5(c)-SP Grass and low-to-ground vegetation (e.g., weeds) in proximity to structures shall be kept no more than 6 inches high.	City of Ontario Building Department	Project Developer	During Construction
	MM HM-5(d)-SP Design of residential structures shall incorporate appropriate fire suppression systems into building design, which may include fire sprinkler systems, tempered or multiple pane windows, and fire-retardant materials for roofs, exterior walls, and siding.	City of Ontario Building Department	Project Developer	Prior to issuance of a Grading Permit
HYDROLOGY AND WATER QUALITY				
Impact HYD-1 Project implementation could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM HYD-1-SP All residences within the Specific Plan Area shall be provided with water conservation devices such as low flow showers and toilets.	City of Ontario, City Engineer	Project Developer	Construction/ After Construction
	MM HYD-2-SP All public landscaped areas shall be required to use reclaimed water for irrigation purposes once the planned regional reclaimed water system becomes functional at the project site.	City of Ontario, City Engineer	Project Developer	Prior to issuance of a Grading Permit
Impact HYD-2 Project implementation could substantially degrade water quality with conversion of agricultural lands to urban uses.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM WQ-5 Prior to moving construction equipment on a site within the Sphere of Influence, project developers shall provide evidence to the City Engineer that a National Pollutant Discharge Elimination System (NPDES) permit has been obtained from the State Water Resources Control Board (SWRCB). Once obtained, the NPDES permit shall be retained on the construction site throughout the construction period, and a copy shall be filed with the City Engineer.	City of Ontario, City Engineer	Project Developer	Prior to construction
	MM WQ-6 During construction of individual project, the City Engineer shall ensure compliance with all terms and conditions outlined in the NPDES permit, including the implementation of Best Management Practices (BMPs) consistent with the California Stormwater Quality Association's Construction Handbook.	City of Ontario, City Engineer	Project Developer	During construction
	MM WQ-7 Prior to issuance of grading permits, project developers shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for individual proposed project. These plans shall be submitted to the City Engineer for review and comment prior to implementing any SWPPP provisions or starting any construction activity. A copy of the SWPPP shall be held by the construction contractor(s) on the construction site throughout development of each project. The City Engineer will monitor and enforce the provisions of the SWPPP.	City of Ontario, City Engineer	Project Developer	Prior to issuance of a Grading Permit

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	MM WQ-8 During operation of facilities within the Sphere of Influence, the individual project owners and operators shall ensure that all pest control, herbicide, insecticide and other similar substances used as part of maintenance of project features are handles, stored, applied, and disposed of by those conducting facility maintenance in a manner consistent with all applicable federal, state and local regulations. The City Engineer shall monitor and enforce this provision. <u>Project-Specific Mitigation Measures:</u> No mitigation measures apply.	City of Ontario, City Engineer	Project Owner	During construction
Impact HYD-3 Project implementation could violate water quality standards, waste discharge requirements, result in substantial sources of polluted runoff, or otherwise substantially degrade water quality.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM WQ-5, MM WQ-6, MM WQ-7, and MM WQ-8 apply. <u>Project-Specific Mitigation Measures:</u> No mitigation measures apply.	Refer to MM WQ-5, MM WQ-6, MM WQ-7, and MM WQ-8	Refer to MM WQ-5, MM WQ-6, MM WQ-7, and MM WQ-8	Refer to MM WQ-5, MM WQ-6, MM WQ-7, and MM WQ-8
Impact HYD-4 Project implementation would alter the drainage patterns of the site and in a manner that could create substantial flooding, erosion, or siltation on or off site.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM WQ-1 Prior to the issuance of grading permits, project developers shall submit a final drainage plan for each proposed project for review and approval by the City Engineer. MM WQ-2 Prior to the issuance of grading permits, project developers shall ensure that coordination between the City of Ontario and the San Bernardino County Flood Control District has been undertaken to demonstrate the ability of the project to meet County flood control requirements. MM WQ-5, MM WQ-6, and MM WQ-7 apply. <u>Project-Specific Mitigation Measures:</u> MM HYD-3-SP All new storm drain infrastructure on site shall be consistent with the City's Master Plan of Drainage, or otherwise formal amendments or deviations shall be made via coordination and approval from the City.	City of Ontario, City Engineer City Engineer / San Bernardino County Flood Control District Refer to MM WQ-5, MM WQ-6, and MM WQ-7 City of Ontario, City Engineer	Project Developer Project Developer Refer to MM WQ-5, MM WQ-6, and MM WQ-7 Project Developer	Prior to issuance of a Grading Permit Prior to issuance of a Grading Permit Refer to MM WQ-5, MM WQ-6, and MM WQ-7 Prior to issuance of a Grading Permit

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
Impact HYD-5 Project implementation would alter the drainage patterns of the site and in a manner that could substantially increase the rate or amount of surface runoff on or off site.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM WQ-7 applies Project-Specific Mitigation Measures: MM HYD-3-SP applies.	Refer to MM WQ-7 Refer to MM HYD-3-SP	Refer to MM WQ-7 Refer to MM HYD-3-SP	Refer to MM WQ-7 Refer to MM HYD-3-SP
Impact HYD-6 Project implementation would create or contribute runoff water that could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM WQ-3 Prior to the issuance of building permits, project developers shall submit to the City Engineer proof of payment of the City's drainage fees, as applicable. Project-Specific Mitigation Measures: MM HYD-3-SP applies.	City of Ontario, City Engineer Refer to MM HYD-3-SP	Project Developer Refer to MM HYD-3-SP	Prior to issuance of a Grading Permit Refer to MM HYD-3-SP
NOISE				
Impact NOI-1 Construction activities associated with the proposed Countryside Specific Plan could expose nearby sensitive uses to excessive groundborne vibration levels.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM N-6 Construction on the Sphere of Influence site shall be limited to the hours of 7:00 A.M. to 7:00 P.M. Monday through Saturday, and shall be prohibited on Sundays and federal holidays. MM N-8 Stockpiling and/or vehicle staging areas shall be located as far as practical from existing residential units on and off the proposed project site. Project-Specific Mitigation Measures: No feasible mitigation measures apply.	The City of Ontario Planning Division The City of Ontario Building Department	Contractor Contractor	Construction Construction
Impact NOI-2 Construction activities associated with the proposed Countryside Specific Plan could generate substantial temporary or periodic noise levels.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM N-6 applies. MM N-7 All project construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. MM N-8 applies. MM N-9 Whenever feasible, the noisiest construction operations should be scheduled to occur together to avoid continuing periods of the greatest annoyance. Project-Specific Mitigation Measures: MM NOI-1-SP The project contractor(s) shall implement, but not be limited to, the following best management practices: ■ Outdoor construction work on the project shall be limited to the hours of 7:00 A.M. to 7:00 P.M. on weekdays and Saturdays. No construction activities shall occur on Sundays	Refer to MM N-6 City of Ontario Building Department Refer to MM N-8 City of Ontario Building Department City of Ontario Building Department	Refer to MM N-6 Contractor Refer to MM N-6 Contractor Contractor	Refer to MM N-6 Construction Refer to MM N-6 Construction Construction

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	or federal holidays. ■ All construction equipment with a high noise generating potential, including all equipment powered by internal combustion engines, shall be muffled or controlled. ■ All stationary noise generating equipment, such as compressors, shall be located as far as possible from existing houses ■ Machinery, including motors, shall be turned off when not in use. ■ Mobile equipment shall not be allowed to run idle near existing residences. ■ Neighbors within 200 feet of major construction areas shall be notified of the construction schedule in writing, prior to construction; the project sponsor shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise; the coordinator (who may be an employee of the developer or general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented; a telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site. Temporary noise barriers shall be installed where feasible and appropriate between the project construction areas and existing and future residences. Barriers shall be at least 10 feet in height.			
Impact NOI-3 Implementation of the proposed project development could expose existing and proposed residential uses to noise in excess of City standards.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM N-1 Prior to the issuance of building permits for the planning area in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Engineer by the project developer. The report shall describe the cumulative effect of road noise on surrounding land uses and recommend mitigation measures, if necessary, to attenuate that noise. If necessary, the City shall establish a noise attenuation fee program that requires developers in the Sphere of Influence area to make a fair share contribution to noise mitigation along some of roads surrounding the Sphere of Influence. The City of Ontario shall evaluate the need for such a fee program and establish participation guidelines prior to the issuance of grading permits.	The City of Ontario, Building Department	Project Developer	Prior to the issuance of building permits
	MM N-2 Prior to the issuance of building permits for the planning areas in the Sphere of Influence area, an Acoustical Analysis Report shall be submitted to the City Building Official and Planning Director by the project developer. The Report shall describe in detail the interior and exterior noise levels for residential uses on the site and the specific design and mitigation features to ensure compliance with the City's noise criteria of 65 dBA CNEL for outdoor living areas and 45 dBA CNEL in habitable rooms.	The City of Ontario, Building Department	Project Developer	Prior to the issuance of building permits
	MM N-3 Prior to the issuance of building permits for planning areas in the Sphere of Influence area, the required location of noise barriers on the project site shall be detailed in the Acoustical Analysis Report. The Report shall specify the height, location, and types of barriers capable of achieving the desired mitigation affect.	The City of Ontario, Building Department	Project Developer / The City of Ontario, Building Department	Prior to the issuance of building permits

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Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	MM N-4 Prior to the issuance of building permits for the planning areas in the Sphere of Influence area, the Acoustical Analysis Report shall identify those residential lots that may require mechanical ventilation to achieve interior noise standards. When the operable doors and windows are open for homes facing roadways, interior 45 dBA CNEL interior noise limit for these units may be exceeded. Therefore, a "windows closed" condition may be required for these units. Any proposed mechanical ventilation must meet the requirements of the *Uniform Building Code* (UBC) standard. It should be noted that the windows facing some roadways may be openable windows, but the homeowners would have the option to close the windows and still obtain adequate ventilation through the use of a mechanical ventilation system. This mechanical ventilation system shall supply two air changes per hour to each habitable room, including 20 percent (one-fifth) fresh make-up air obtained directly from the outdoors. The fresh air inlet duct shall be of sound attenuating construction and shall consist of a minimum of 10 feet of straight or curved duct or 6 feet plus one sharp 90-degree bend. The City Building Official shall ensure that the Acoustical Analysis Report identifies any requirements for mechanical ventilation for individual onsite residential units.	The City of Ontario, Building Department	Project Developer / The City of Ontario, Building Department	Prior to the issuance of building permits
	MM N-5 All prospective owners and occupants of residential units on the project site shall be formally notified prior to purchase, lease or rental, that certain units (without windows and doors closed), and outdoor areas could be subject to noise levels above City standards for residential uses. Such notification shall be in language approved by the City Planning Department, and shall be formalized in written Covenants, Conditions, and Restrictions (CC&Rs) recorded on the title of each residential lot in the project. In addition, each advertisement, solicitation and sales brochure or other literature regarding the project shall contain the approved notification language.	The City of Ontario, Building Department	The City of Ontario, Building Department	Prior to purchase, lease or rental
	<u>Project-Specific Mitigation Measures:</u> MM NOI-2-SP Once the precise location is known for future on-site residential units located adjacent to the segment of Archibald Avenue south of Chino Avenue, the applicant/developer shall conduct a focused study of future outdoor and indoor long-term traffic noise at these affected locations and submit the report for review and approval to the City. If it is determined that indoor noise levels at the future on-site residential units would exceed applicable City thresholds, the developer shall design and construct noise barriers and/or provide enhanced noise insulation at the affected on-site residential locations. The noise barriers or insulation shall be designed to ensure that indoor noise levels are below City indoor noise threshold criteria.	City of Ontario, Building Department	Project Applicant/ Project Developer	Prior to the issuance of grading permits
Impact NOI-4 The proposed project would generate increased local traffic volumes, which may result in a substantial permanent increase in off-site ambient noise levels.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> MM N-1 through MM N-4 apply. <u>Project-Specific Mitigation Measures</u> No feasible mitigation measures apply.	Refer to MM N-1 through MM N-4	Refer to MM N-1 through MM N-4	Refer to MM N-1 through MM N-4

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Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
Impact NOI-5 The proposed project site would be exposed to significant long-term cumulative traffic noise levels resulting from increased traffic from other specific plan areas to be developed within the New Model Colony area.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM N-1 through MM N-4 apply. Project-Specific Mitigation Measures: MM NOI-3-SP The Acoustical Analysis Report that will be submitted to the City Building Official and Planning Director by the project developer prior to the issuance of a grading permit, as required under the City of Ontario SOI GPA Policy 24.2.7 (SOI GPA EIR MM N-1 through MM N-4), shall consider the implementation of appropriate noise attenuation measures for the on-site residential uses to ensure that cumulative traffic noise levels generated from the adjacent off-site roadway would not exceed the City's indoor noise threshold criteria. The noise attenuation measures may include the construction of sound walls, dual-glazed windows, and additional wall insulation along the project site boundary adjacent to these off-site roadways. Locations where these noise attenuation measures to reduce cumulative traffic noise impacts should be considered include: ■ Roadway segment of Riverside Drive west of Archibald Avenue ■ Roadway segment of Archibald Avenue south of Riverside Drive ■ Roadway segment of Archibald Avenue south of Chino Avenue	Refer to MM N-1 through MM N-4 City of Ontario, Building Department	Refer to MM N-1 through MM N-4 Project Developer	Refer to MM N-1 through MM N-4 Prior to the issuance of grading permits
PUBLIC SERVICES				
Impact PS-1 Development of additional residential units would result in an increase in the number of students within the school district serving the site, and increase demands upon school facilities.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM PS-1-SP Consistent with current requirements, the developer shall pay statutory school fees in effect at the time of issuance of building permits to the MVD and CJUHSD for school facilities, thus ensuring that the new development would bear its fair share of the cost of housing additional students generated.	City of Ontario, Building Department	Project Applicant	Prior to Issuance of a Building Permit
TRANSPORTATION/TRAFFIC				
Impact TRAF-1 Implementation of the Countryside Specific Plan would result in additional vehicular trips during AM and PM peak hours, which would result in an increase in intersection levels of service beyond existing levels.	Applicable Mitigation Measures from Ontario SOI GPA EIR: MM TRAF-1 Implementation of the Sphere of Influence General Plan EIR shall require the project proponent to cooperate with the provision of additional through-traffic lanes by widening to accommodate the ultimate number of lanes designated in the general plan, or modifying functional classification for arterials to accommodate additional traffic lanes. MM TRAF-2 The project proponent shall provide additional through traffic lanes by restriping using parking restrictions or other measures, where feasible.	City of Ontario, Planning Division City of Ontario, Planning Division	Project Applicant Project Applicant	Construction/ Operation Construction/ Operation

Table 11-1 Proposed Countryside Specific Plan EIR, Mitigation Monitoring Program

Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	MM TRAF-3 The project proponent shall provide traffic operations and traffic systems management (TSM) improvements including signal coordination, automated traffic control, Smart Corridors, intelligent transportation systems, and other measures.	City of Ontario, Planning Division	Project Applicant	Construction/ Operation
	<u>Project-Specific Mitigation Measures:</u> MM TRAF-1-SP Development impact fees shall be paid for improvements or improvements shall be constructed as required by the City Engineer, for: (a) Intersection #1 Vineyard Avenue/SR-60 WB Ramps ■ Provide NB left-turn only lane ■ Provide SB free-flow-right-turn only lane (b) Intersection #2 Vineyard Avenue/SR-60 EB Ramps ■ Provide NB right-turn only lane ■ Provide EB left-turn only lane ■ Restripe EB shared left-turn/through lane as shared left-turn/through/right-turn lane (c) Intersection #3 Vineyard Avenue/Walnut Avenue ■ Provide a signalized intersection with NB, SB & WB permissive phasing and EB protected phasing ■ Provide EB left-turn only lane (d) Intersection #4 Vineyard Avenue/Riverside Drive ■ Provide NB right-turn only lane ■ Provide SB right-turn only lane ■ Provide EB right-turn only lane (e) Intersection #5 Archibald Avenue/SR-60 WB Ramps ■ Provide WB left-turn only lane ■ Restripe WB shared left-turn/through lane as shared left-turn/through/right-turn lane (f) Intersection #6 Archibald Avenue/SR-60 EB Ramps ■ Provide EB left-turn only lane ■ Restripe EB shared left-turn/through lane as shared left-turn/through/right-turn lane (g) Intersection #7 Archibald Avenue/Riverside Drive ■ Provide SB through only lane ■ Provide EB right-turn only lane (h) Intersection #8 Archibald Avenue/Chino Avenue ■ Provide NB right-turn only lane	City of Ontario, City Engineer	Project Applicant	At time of tentative tract map approval

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Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	■ Provide SB through only lane ■ Provide two EB through only lanes ■ Provide EB right-turn only lane ■ Provide WB left-turn only lane ■ Provide WB shared through/right-turn only lane (i) Intersection #9 Archibald Avenue/Edison Avenue ■ Provide NB through only lane ■ Provide NB right-turn only lane ■ Provide SB through only lane ■ Provide SB right-turn only lane ■ Provide EB free-flow-right-turn only lane ■ Provide WB right-turn only lane (j) Intersection #11 Turner Avenue/Chino Avenue ■ Provide a signalized intersection with NB & SB permissive phasing and EB & WB protected phasing (k) Intersection #12 Haven Avenue/Riverside Drive ■ Provide NB free-flow-right-turn only lane			
UTILITIES AND SERVICE SYSTEMS				
Impact UTIL-1 Implementation of the proposed project would require the construction of new or expanded wastewater conveyance systems, the construction of which could cause significant environmental effects.	<u>Applicable Mitigation Measures from Ontario SOI GPA EIR:</u> No mitigation measures apply. <u>Project-Specific Mitigation Measures:</u> MM UTIL-1-SP In accordance with the NMC Sewer Master Plan, the Developer of the proposed project shall prepare a Sub area 5 Sewer Plan, which discusses how the project will be served, how the area will be connected to the City's backbone system, and the area's impact is on downstream facilities. The local sub area sewers should be required to meet the sewer design criteria provided in Subsection 4-5 of the NMC Sewer Master Plan and all other applicable construction standards set forth by the City. The Sub area 5 Sewer Plan Report shall include, but not be limited to, the following: ■ Map showing project boundaries and drainage areas ■ Detailed land use description and map ■ Average dry weather, peak dry weather, and peak wet weather flow calculations ■ Exhibit showing all proposed sewer facilities and connections to the backbone system ■ Phasing of development and wastewater flows	City of Ontario, City Engineer	Project Developer	During Design

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Impacts	*Mitigation Measures*	*Monitoring Party*	*Implementing Party*	*Mitigation Timing*
	■ Hydraulic calculations meeting all sewer design criteria			
Impact UTIL-2 The proposed project would compromise the City's ability to comply with federal, state, and local statutes and regulations related to solid waste.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM UTIL-2-SP Prior to issuance of building permits for the first project component, the Applicant shall submit a Solid Waste Management Plan to the City's Recycling Coordinator. This plan shall discuss how the project will implement source reduction and recycling methods in compliance with existing City programs. Additionally, this plan shall include how the project will address the construction and demolition-generated waste from the site. These methods shall include, but shall not be limited to, the following: ■ Provision of recycling bins for glass, aluminum, and plastic for visitors and employees of the proposed project ■ Provision of recycling bins for glass, aluminum, plastic, wood, steel, and concrete for construction workers during construction phases ■ Bins for cardboard recycling during construction ■ Scrap wood recycling during construction ■ Green waste recycling of landscape materials	City of Ontario, Public Works	Project Applicant	Prior to Issuance of a Building Permit
Impact UTIL-3 Implementation of the proposed project could exceed the El Sobrante landfill's permitted capacity in order to serve future development's solid waste needs.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM UTIL-2-SP applies.	Refer to MM UTIL-2-SP	Refer to MM UTIL-2-SP	Refer to MM UTIL-2-SP
Impact UTIL-4 Implementation of the proposed project would increase the demand for electricity and natural gas, but would not require or result in the construction of new energy production or transmission facilities, the construction of which could cause a significant environmental impact.	Applicable Mitigation Measures from Ontario SOI GPA EIR: No mitigation measures apply. Project-Specific Mitigation Measures: MM UTIL-3-SP Project design and construction shall be coordinated with Southern California Edison and Southern California Gas Co., and improvements provided if necessary, in order to ensure that connections are adequate and capacity is available to accommodate estimated demand for gas and electric utilities.	City of Ontario, City Engineer	Project Design team	Design and construction