

SUPPLEMENTAL MITIGATION MONITORING AND REPORTING PROGRAM FOR GREEN VALLEY SPECIFIC PLAN PHASE 1B PROJECT AREA

In accordance with the California Environmental Quality Act (CEQA) Public Resources Code Section 21000 et seq.), in 1990 the City of Perris (City) prepared and certified an Environmental Impact Report (EIR) (State Clearinghouse No. 1989032707) that identified significant impacts of the Green Valley Specific Plan (GVSP). The City also adopted mitigation measures that would reduce the identified impacts to a less-than-significant level, or that would eliminate these impacts altogether. When the City certified the GVSP EIR in 1990 it adopted a Mitigation Monitoring and Reporting Program (MMRP) that would apply to future implementation of the GVSP.

CEQA and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies “to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment.” In 2017, an amendment to the GVSP was prepared and approved by the City for Phase 1A of the GVSP. The amendment analyzed revisions to design guidelines and development of two tract maps with 314 single-family residential units located in the southern portion of the GVSP. Shortly after the City approved the Addendum to the GVSP Final EIR for Phase 1A Project Area, it adopted a Supplemental MMRP. Similarly, a Supplemental MMRP is required for the GVSP Phase 1B project area because the Addendum to the GVSP Final EIR for the Phase 1B Project Area identifies the need for updated mitigation measures that reflect current conditions, regulations and technologies related to the project implementation, and mitigation measure have been identified to ensure that the impacts of the minor changes to the GVSP that are analyzed in the GVSP Phase 1B Addendum remain less than significant. Adoption of the Supplemental MMRP would occur along with approval of the project. The measures contained in the original 1990 MMRP will continue to apply to the Phase 1B project except as superseded or updated by the measures contained in this Supplemental MMRP.

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner before and during project construction and operation. The MMRP may be modified by the City during project implementation, as necessary, in response to changing conditions or other refinements; however, modifications to a mitigation measure that could reduce its effectiveness in reducing impacts may not occur without CEQA compliance.

Section 4.4 of this MMRP has been prepared to assist the responsible parties in implementing the supplemental mitigation measures. Section 4.4 identifies the individual mitigation measures, monitoring responsibility, mitigation timing, and provides space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the Addendum.

ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, the City is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. The City, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent. Section 21081.6 of the Public Resources Code, requires the lead agency to identify the “custodian of documents and other material” which constitutes the “record of

proceedings” upon which the action on the project was based. The Perris City Manager, or designee, is the custodian of such documents for GVSP.

Inquiries should be directed to:

Kenneth Phung, Planning Manager
(951) 943-5003

The location of this information is:

City of Perris
101 N.D. Street
Perris, CA 92570

The City is responsible for overall administration of the MRRP and for verifying that City staff members and/or the construction contractor has completed the necessary actions for each measure. The City may designate a project manager to oversee implementation of the MMRP. Duties of the project manager include the following:

- ▶ ensure routine inspections of the construction site are conducted by appropriate City staff; check plans, reports, and other documents required by the MMRP; and conduct report activities;
- ▶ serve as a liaison between the City and the contractor or project applicant regarding mitigation monitoring issues;
- ▶ complete forms and maintain reports and other records and documents generated for the MMRP; and
- ▶ coordinate and ensure that corrective actions or enforcement measures are taken, if necessary.

The responsible party for implementation of each item will identify the staff members responsible for coordinating with the City on the MMRP.

REPORTING

The City shall, or may require the developer to, prepare a monitoring report upon completion of the project describing the compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required. The report shall be presented to the City Council.

MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP is organized according to the categories described below.

- ▶ Mitigation Measure – This section provides the verbatim text of the adopted mitigation measure.
- ▶ Monitoring Responsibility – This section identifies the party responsible for enforcing compliance with the requirements of the mitigation measure.
- ▶ Timing – This section identifies the time frame in which the mitigation will be implemented.
- ▶ Verification – This section is to be dated and signed by the person (either project manager or his/her designee) responsible for verifying compliance with the requirements of the mitigation measure.

Air Quality

The following mitigation measures are required in addition to the measures set forth in the 1990 MMRP for the project to satisfy current SCAQMD guidance for mitigating new or modified projects analyzed under CEQA to the maximum extent feasible.

Mitigation Measure AQ-1: Use of Tier 4 Standards for All Heavy-Duty, Off-Road Construction Equipment with a Horsepower Rating Equal or Greater than 50

Construction

During grading activities, all heavy-duty off-road construction equipment, greater than or equal to 50 horsepower, shall be certified to meet or exceed the United States Environmental Protection Agency (USEPA) Tier 4 standards. Proof of compliance shall be reviewed by the City of Perris Building Division prior to issuance of a grading permit. An exemption from these requirements may be granted by the City in the event that the applicant documents that (1) equipment with the required tier is not reasonably available (e.g., reasonability factors to be considered include those available within Riverside/San Diego County within the scheduled construction period), and (2) corresponding reductions in criteria pollutant emissions are achieved from other construction equipment.

Monitoring Responsibility – City of Perris

Timing – Prior to issuance of grading permits and during construction.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure AQ-2: Electrification of Diesel- or Gasoline-Powered Generators.

Construction

Where feasible, electricity from power poles will be used instead of temporary diesel or gasoline powered generators. Feasibility, for purposes of this mitigation measure, shall be determined by the City of Perris Building Division, in consultation with the construction team, prior to issuance of grading permits.

Monitoring Responsibility – City of Perris

Timing – Prior to issuance of grading permits and during construction..

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure AQ-3: Maintain Equipment Conditions Consistent with Manufacturers' Specifications

Construction

During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris Building Division. Equipment maintenance records and equipment design specification data sheets shall be kept onsite during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris Building Division

Monitoring Responsibility – City of Perris

Timing – During construction.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure AQ-4: Minimize Vehicle and Truck Idling Time

Construction

All project construction contractors and their employees shall minimize vehicle and truck idling time during construction through the implementation of traffic control measures (e.g., including turn lanes during construction activities, scheduling of construction activities to minimize congestion, parking configuration to minimize traffic interference). Prior to issuance of grading permits, a traffic control plan detailing the traffic control measures shall be reviewed and approved by the City of Perris Building Division

Monitoring Responsibility – City of Perris

Timing – Prior to issuance of grading permits and during construction..

Verification – By: _____

Title: _____

Date: _____

Biological Resources

The following mitigation measures replace what was approved in the GVSP EIR (see Mitigation Measure 4.4.3 on pp. 4-28 and 4-29 of the GVSP Final EIR [in Appendix A of the Phase 1B Addendum] and pp. 5- 9 through 5-11 of the GVSP MMRP [in Appendix A of the Phase 1B Addendum] and were revised to include the more specific requirements where applicable for the project.

Mitigation Measure BIO-1: Preconstruction Burrowing Owl Survey

A qualified biologist will perform a pre-construction burrowing owl survey no more than 30 days prior to the initiation of ground disturbance, and no less than 14 days prior as directed by the Burrowing Owl Survey Instructions for Western Riverside County (RCA 2006). A minimum of one survey visit will be conducted to document/confirm presence or absence of owls within the project footprint. Subsequent surveys may be necessary for areas where disturbance is to be conducted more than 30 days from the initial pre-construction surveys. If burrowing owls are detected prior to ground disturbance, a Determination of Biological Equivalent or Superior Preservation and Burrowing Owl Protection and Relocation Plan will be created subject to the approval of the Regional Conservation Authority. The Burrowing Owl Protection and Relocation Plan will require that the owls will be excluded from the site outside of the breeding season subject to the approval of the Regional Conservation Authority and CDFW.

Monitoring Responsibility – City of Perris

Timing – No more than 30 days and no less than 14 days prior to initiation of construction and during construction.

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure BIO-2: Implement Applicable Requirements of the MSHCP

As the permittee under the MSHCP, the City of Perris shall ensure that the Phase 1B project participates in the MSHCP and implement all applicable requirements for survey, evaluation, and review required by the MSHCP. These requirements shall include those that apply to projects on the urban/wildlands interface (Section 6.1.4 in Western Riverside County 2003) to avoid indirect impacts to MSHCP Conservation Areas (e.g., restrictions on lighting, noise, invasive plants) that may be established within Criteria Cell 3467, an area located directly adjacent and to the north of the Phase 1b project area.

Monitoring Responsibility – City of Perris

Timing – Prior to issuance of grading permits and during construction.

Verification – By: _____

Title: _____

Date: _____

Cultural Resources

The following mitigation measures replace Mitigation Measure 4.5.3 of the 1990 GVSP EIR (see pp. 4-31 and 4-32 of the GVSP Final EIR [Appendix A] and p. 5-11 of the GVSP MMRP [Appendix C]) to represent current City practice:

Mitigation Measure ARCHAEO-1

Prior to the issuance of grading permits, the project proponent/developer shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeology (U.S. Department of Interior, 2012; Registered Professional Archaeologist preferred). The primary task of the consulting archaeologist shall be to monitor the initial ground-disturbing activities at both subject site for the identification of any previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of Perris Director of Development Services and no ground-disturbing activities shall occur at the site until the archaeologist has been approved by the City.

The archaeologist shall be responsible for monitoring ground-disturbing activities, maintaining daily field notes and a photographic record, and for reporting all finds to the developer and the City of Perris in a timely manner. The archaeologist shall be prepared and equipped to record and salvage cultural resources that may be unearthed during ground-disturbing activities and shall be empowered to temporarily halt or divert ground-disturbing equipment to allow time for the recording and removal of the resources.

In the event that archaeological resources are discovered at the project site or within the off-site project improvement areas, the handling of the discovered resource(s) will differ, depending on the nature of the find. Consistent with California Public Resources Code Section 21083.2(b) and Assembly Bill 52 (Chapter 532, Statutes of 2014), avoidance shall be the preferred method of preservation for Native American/tribal cultural/archaeological resources. However, it is understood that all artifacts, with the exception of human remains and related grave goods or sacred/ceremonial/religious objects, belong to the property owner. The property owner will commit to the relinquishing and curation of all artifacts identified as being of Native American origin. All artifacts, Native American or otherwise, discovered during the monitoring program shall be recorded and inventoried by the consulting archaeologist.

If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find (within a 50-foot radius) shall stop and the project proponent and project archaeologist shall notify the City of Perris Planning Division and the Soboba Band of Luiseño Indians and the Pechanga Band of Luiseño Indians. A designated Native American representative from either the Soboba Band of Luiseño Indians or the Pechanga Band of Luiseño Indians shall be retained to assist the project archaeologist in the significance determination of the Native American as deemed possible. The designated Luiseño tribal representative will be given ample time to examine the find. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the Luiseño tribe. If the find is determined to be of sacred or religious value, the Luiseño tribal representative will work with the City and consulting archaeologist to protect the resource in accordance with tribal requirements. All analysis will be undertaken in a manner that avoids destruction or other adverse impacts.

In the event that human remains are discovered at the project site or within the off-site project improvement areas, mitigation measure CUL-1 shall immediately apply and all items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling.

Native American artifacts that are relocated/reburied at the project site would be subject to a fully executed relocation/reburial agreement with the assisting Luiseño tribe. This shall include, but not be limited to, an agreement that artifacts will be reburied on-site and in an area of permanent protection, and that reburial shall not occur until all cataloging and basic recordation have been completed by the consulting archaeologist.

Native American artifacts that cannot be avoided or relocated at the project site shall be prepared for curation at an accredited curation facility in Riverside County that meets federal standards (per 36 CFR Part 79) and available to archaeologists/researchers for further study. The project archaeologist shall deliver the Native American artifacts,

including title, to the identified curation facility within a reasonable amount of time, along with applicable fees for permanent curation.

Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts will be subjected to curation, as deemed appropriate, or returned to the property owner.

Once grading activities have ceased and/or the archaeologist, in consultation with the designated Luiseño representative, determines that monitoring is no longer warranted, monitoring activities can be discontinued following notification to the City of Perris Planning Division.

A report of findings, including an itemized inventory of artifacts, shall be prepared upon completion of the tasks outlined above. The report shall include all data outlined by the Office of Historic Preservation guidelines, including a conclusion of the significance of all recovered, relocated, and reburied artifacts. A copy of the report shall also be filed with the City of Perris Planning Division, the University of California, Riverside, Eastern Information Center (EIC) and the Luiseño tribe(s) involved with the project.

Monitoring Responsibility – City of Perris

Timing – Prior to the issuance of grading permits and during grading activities.

Verification – By: _____
Title: _____
Date: _____

Mitigation Measure CUL-1

In the event that human remains (or remains that may be human) are discovered at the project site during grading or earthmoving, the construction contractors, project archaeologist, and/or designated Native American observer shall immediately stop all activities within 100 feet of the find. The project proponent shall then inform the Riverside County Coroner and the City of Perris Planning Division immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b).

If the coroner determines that the remains are of Native American origin, the coroner would notify the Native American Heritage Commission (NAHC), which will identify the "Most Likely Descendent" (MLD). Despite the affiliation with any Luiseño tribal representative(s) at the site, the NAHC's identification of the MLD will stand. The MLD shall be granted access to inspect the site of the discovery of Native American human remains and may recommend to the project proponent means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The disposition of the remains will be determined in consultation between the project proponent and the MLD. In the event that the project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The locations will be documented by the consulting archaeologist in conjunction with the various stakeholders and a report of findings will be filed with the Eastern Information Center (EIC).

If the human remains are determined to be other than Native American in origin, but still of archaeological value, the remains will be recovered for analysis and subject to curation or reburial at the expense of the project proponent. If deemed appropriate, the remains will be recovered by the Coroner and handled through the Coroner's Office.

Monitoring Responsibility – City of Perris

Timing – During grading or earthmoving activities.

Verification – By: _____

Title: _____

Date: _____

Geology and Soils

In addition to the mitigation measures identified in the 1990 GVSP EIR (see pp. 4-8 and 4-9 of the GVSP Final EIR [Appendix A] and pp. 5- 5 through 5-7 of the GVSP MMRP [Appendix C]), the following mitigation measures are also required:

Mitigation Measure GEO-1

GVSP FEIR Mitigation Measure 4.2.3.1 notes that “additional geotechnical studies and field work will be performed during project design to further evaluate near surface conditions” and that “continuous observation and testing under direction of a qualified geotechnical engineer and/or engineering geologist shall be accomplished to verify compliance with the report recommendations and to confirm that the geotechnical conditions found are consistent with the report findings”.

The geologic/geotechnical assessment (Petra 2020) contains additional recommendations related to site development. Compliance with these recommendations are considered necessary as part of the implementation process for Mitigation Measures 4.2.3.1, 4.2.3.2, and 4.2.3.3. Therefore, the applicant shall adhere to all recommendations contained in the Petra Geologic/Geotechnical EIR-Level Assessment (2020) by Petra Geosciences dated August 27, 2020 (included as Appendix H of this Addendum). The following are mitigation measures provided in the Geologic/Geotechnical EIR-Level Assessment prepared by Petra Geosciences dated August 27, 2020.

- a) The proposed structures within the site shall be designed and constructed to resist the effects of seismic ground motions as provided in the applicable portions of Section 1613 of the 2019 California Building Code (CBC).
- b) The potential detrimental effects of liquefaction-induced differential settlement shall be reduced to a less than significant level for engineering purposes through the use of properly designed and constructed, foundation systems for proposed 1- to 2-story structures. This measure addresses the detrimental effects of potential bearing failure with recommendations for proper remedial grading combined with the use of a properly designed post-tensioned or strengthened conventional concrete foundation systems. Specific recommendations for site grading and building foundation design should be provided in the comprehensive design-phase geotechnical report.
- c) The project shall implement proper storm water Best Management Practices (BMP's) prior to commencement of earthwork operations within the site, as well as diligent maintenance of erosion control devices throughout the early phases of construction until such time as the permanent storm water conveyance system has been constructed and activated. During the post-construction and occupancy period, the less-than-significant impact of soil erosion would be maintained through proper maintenance of irrigation systems and permanent storm water conveyance devices. If, after completion of grading, it is determined that near-surface soils within building pad areas exhibit an elevated expansion potential, it is expected that the detrimental impact of expansive soils can be mitigated to a less-than-significant level through proper design of building foundations, floor slabs and exterior improvements that takes into account the potential uplift forces that can develop in expansive soils.

Monitoring Responsibility – City of Perris

Timing – Prior to issuance of grading permits and during design phase, as specified in the Geologic/Geotechnical Assessment (Appendix H of the GVSP Phase 1B Addendum) .

Verification – By: _____

Title: _____

Date: _____

Mitigation Measure PALEO-1

Prior to the issuance of grading permits, the project applicant shall submit to and receive approval from the City, a Paleontological Resource Mitigation Monitoring Program (PRMMP). The PRMMP shall include the provision of a qualified professional paleontologist (or his or her trained paleontological monitor representative) during on-site and off-site subsurface excavation that exceeds three (3) feet in depth. Selection of the paleontologist shall be subject to approval of the City of Perris Director of Development Services and no grading activities shall occur at the site until the paleontologist has been approved by the City.

Monitoring shall be restricted to undisturbed subsurface areas of older Quaternary alluvium, which might be present below the surface. The approved paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Collected samples of sediments shall be washed to recover small invertebrate and vertebrate fossils. Recovered specimens shall be prepared so that they can be identified and permanently preserved. Specimens shall be identified and curated and placed into an accredited repository (such as the Western Science Center or the Riverside Metropolitan Museum) with permanent curation and retrievable storage.

A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the City of Perris Planning Division, would signify completion of the program to mitigate impacts to paleontological resources.

Monitoring Responsibility – City of Perris

Timing – Prior to the issuance of grading permits and during grading activities.

Verification – By: _____

Title: _____

Date: _____

Hydrology and Water Quality

In addition to Mitigation Measure 4.3.3 of the 1990 GVSP EIR (see pp. 4-18 and 4-19 of the GVSP Final EIR [in Appendix A of the GVSP Phase 1B Addendum] and pp. 5- 8 and 5-9 of the GVSP MMRP [in Appendix C of the GVSP Phase 1B Addendum]), the following mitigation measure shall be implemented:

Mitigation Measure HYDRO-1: Complete Final Drainage Plan and Provide Adequate Onsite Storm Drainage Facilities

With submittal of Improvement Plans to the City for each construction phase of the project site, the applicant shall prepare and submit a Final Drainage Analysis for the project site that conforms to the City's Storm Water Management Plan (SWMP) [see Appendix I of this Addendum for the Preliminary Drainage Studies prepared for the six TTMs proposed in the Phase 1B area].

The Final Drainage Analysis shall identify project drainage facilities and design features that ensure runoff from the project site will not exceed pre-development levels. The identified drainage facilities and design features shall be included in the Improvement Plans for each construction phase of the project site. At a minimum, the necessary drainage facilities and design features constructed with each phase of development shall be sufficient to mitigate post-development runoff to pre-development levels for each phase. Drainage facilities and design features for later phases of the project may be constructed with earlier phases of the project.

The Final Drainage Analysis for each phase shall include evaluation of the final design for the 85th percentile storm (water quality storm), the tenth percentile storm (10-year storm) and the one percentile storm (100-year) storm. The Final Drainage Analysis for each phase shall include a discussion of that phase set in the context of the overall project, considering prior and future phase drainage facilities and design features.

Maintenance of the project drainage facilities and design features shall be the responsibility of the Homeowner's Association (HOA). A provision for maintenance and management of the drainage facilities and design features shall be included in the Codes, Covenants and Restrictions for the project. A separate Maintenance Program shall be developed in accordance with the County's SWMP to guide the long-term maintenance and management of the systems by the HOA. The Maintenance Program shall be submitted to the County for review and approval prior to recordation of the first final map.

To meet state water quality standards, the project's approved Water Quality Management Plan (WQMP) shall incorporate on-lot, Low Impact Development (LID) depressions to minimize runoff from the project site. In a storm event, all street runoff will go to off-lot basins, which would discharge flow directly into Line A (i.e., the existing main drainage channel) which flows into the San Jacinto River. Prior to construction of the project, the Applicant shall lower Line A to ensure adequate capacity and positive flow to San Jacinto River. For all nuisance water created from individual homeowners, the on-lot LID depressions (i.e., natural drainage systems designed with no concrete) will allow for the water to infiltrate directly into the soil and minimize the potential for standing water, which could attract mosquitoes. Riverside County Health, which actively contracts with Riverside County Flood Control, address vector issues associated within flood control facilities in its jurisdiction, which includes Line A and the San Jacinto River.

Monitoring Responsibility – City of Perris

Timing – Prior to approval of Improvement Plans by the City for each construction phase of the project site.

Verification – By: _____

Title: _____

Date: _____

Noise

In addition to mitigation measure 4.10.3.1, 4.10.3.2, and 4.20.3.3 of the 1990 GVSP EIR (see pp. 4-109 through 4-112 of the GVSP FEIR [Appendix A] and pp. 5- 19 through 5-22 of the GVSP MMRP [Appendix B]), the following mitigation measures shall be implemented to address traffic noise at existing off-site noise-sensitive residential land uses and construction-generated noise at nearby noise-sensitive receptors:

Mitigation Measure NOISE-1

Traffic Noise at Proposed On-Site Noise-Sensitive Receptors

Implement noise reduction measures to ensure that exterior noise levels at on-site residential land uses developed near the north side of Ethanac Road east of Goetz Road do not exceed the City's current noise standard of 60 dB CNEL under cumulative-plus-project conditions. This measure is consistent with General Plan Implementation Measure II.A.2, which recommends the use of quieter roadway surface materials and solid noise barriers between noise-sensitive land uses and noise-generating roadways (City of Perris 2016:57). This performance standard can be achieved using any combination of the following measures:

- ▶ Pave the roadway segment with rubberized hot-mix asphalt or equivalent surface treatment with known noise-reducing properties on top of the roadway surface. The rubberized hot-mix asphalt overlay shall be designed with appropriate thickness and rubber component quantity (typically 15 percent by weight of the total blend), such that traffic noise levels are reduced by an average of 4 to 6 dB (noise levels vary depending on travel speeds, meteorological conditions, and pavement quality) as compared to noise levels generated by vehicle traffic traveling on standard asphalt. Rubberized hot-mix asphalt has been found to achieve this level of noise reduction in other parts of California (Sacramento County 1999). Pavement will require more frequent than normal maintenance and repair to maintain its noise attenuation effectiveness. The applicant shall fund the incremental cost for maintaining the roadway segment with the surface treatment.
- ▶ Construct a sound barrier along the northern side of the segment of Ethanac Road east of Goetz Road. The sound barrier shall extend along the south boundary of the project site. The sound barriers shall be constructed of solid material (e.g., wood, brick, adobe, an earthen berm, boulders, or combination thereof). The reflectivity of each sound barrier shall be minimized to ensure that traffic noise reflected off the barrier does not contribute to an exceedance of applicable CNEL standards at other receptors. The level of sound reflection from a barrier can be minimized with a textured or absorptive surface or with vegetation on or next to the barrier. Scenic quality factors shall be taken into account during design, such as using more natural materials (e.g., berms and boulders) to reduce the visible mass of a wall. All barriers shall be designed to blend into the landscape along the roadway, to the extent feasible. Ensuring a character consistent with the surrounding area may involve the use of strategically placed native trees or other vegetation; the addition of special materials (e.g., wood or stonework) on the façade of the sound wall; and/or a sound wall that is covered in vegetation. If necessary, the sound barrier shall be divided into overlapping segments with a gap in the overlapped portion to provide access to the driveways. If the sound barriers ensure that exterior traffic noise levels on the residential properties would not exceed 60 dB CNEL, then the applicant shall not be required to pave the roadway with a special low-noise surface treatment.
- ▶ Set back residential land uses from the edge of Ethanac Road.

Monitoring Responsibility – City of Perris

Timing – Prior to issuance of building permits.

Verification – By: _____
Title: _____
Date: _____

Mitigation Measure NOISE-2

Noise reduction measures shall be implemented to ensure that maximum construction-generated noise levels do not exceed the City's exterior noise standard of 80 dB on nearby operational residential properties, including the existing single family homes located along the south side of Ethanac Road. This performance standard shall be achieved through implementation of some or all of the noise reduction measures listed below.

- ▶ All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses;
- ▶ All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation;
- ▶ Replace individual construction operations and techniques with quieter procedures (e.g., using welding instead of riveting, mixing concrete off-site instead of on-site) where feasible and consistent with building codes and other applicable laws and regulations.
- ▶ Equip all construction equipment with audible self-adjusting backup alarms or alarms that only sound when an object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dB over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. In addition to the use of backup alarms, the construction contractor shall consider other techniques such as observers and the scheduling of construction activities so that alarm noise is minimized.
- ▶ Avoid using more than one piece of construction equipment in areas located within 200 feet of the nearest residential land use; and/or
- ▶ Install a temporary sound barrier near construction activity along the southern portion of the project area. The temporary sound barriers shall provide a minimum reduction of 4 dB. Temporary sound barriers may consist of noise curtains, straw bales, or solid walls. The temporary noise barriers shall be installed as close as possible to the boundary of the construction site within the direct line-of-sight path of the nearby sensitive receptor(s).
- ▶ Prior to construction activity a construction noise mitigation plan shall be prepared by a qualified acoustical engineer demonstrating that the selected measures will be sufficient to ensure that maximum construction noise levels will not exceed 80 dB at the boundary of off-site residential land uses. The acoustical engineer shall be selected by City of Perris staff. Implementation of all construction noise reduction measures and the construction noise mitigation plan shall be fully funded by the project applicant.
- ▶ In addition, the applicant or construction contractors shall post visible signs along the perimeter of the construction site that provide a contact number for a City of Perris enforcement officer to whom noise complaints can be filed and recorded. The applicant will be informed of any noise complaints and responsible for investigating complaints and implementing feasible and appropriate measures to reduce maximum construction-generated noise levels to less than 80 dB at receiving land uses.

Monitoring Responsibility – City of Perris

Timing – During construction.

Verification – By: _____
Title: _____
Date: _____

Transportation

The following portions of mitigation measure 4.8.3 of the 1990 GVSP EIR analysis would continue to remain applicable if the project were approved:

- ▶ Mitigation Measure 4.8.3 (paragraph 3): The applicant shall provide bus pull-out areas and shelters within the Specific Plan. The location and number of bus pull-outs shall be subject to approval of the City of Perris, RTA, and school districts and shall be at locations where it can be seen with assurance that the bus stop location will remain, prior to approval of any subdivision within each phase (see p. 4-89 of the GVSP Final EIR [Appendix A] and p. 5- 14 of the GVSP MMRP [Appendix B])
- ▶ Mitigation Measure 4.8.3 – Areawide Measures (see p. 4-92 of the GVSP Final EIR [Appendix A] and p. 5- 17 of the GVSP MMRP [Appendix B]): The City of Perris will support and participate in the demand management strategies contained within SCAG’s Regional Mobility Plan and Air Quality Management Plan. The proposed project will incorporate the following transportation demand management strategies:
 - Bike racks and bike lockers should be provided in commercial and industrial areas as determined during development plan review

In addition to mitigation measure 4.8.3 of the 1990 GVSP EIR as described above, the following mitigation measure shall be implemented:

Mitigation Measure TRANS-1

The project applicant shall fully fund and implement the following on-site improvements:

- ▶ Project On-site Safety Improvements:
 - Sight distance at the project entrance roadway shall be reviewed and approved by City staff at the time final grading, landscape, and street improvement plans are submitted to the City.
 - Signing/stripping of all planned roadways shall be implemented in conjunction with detailed construction plans for the project site.
- ▶ Project On-site Bike and Pedestrian Improvements:
 - As part of the construction of partial width improvements on the northerly side of Ethanac Road, the project applicant shall construct Class II bike lanes, according to City Standards, along the portion of the road abutting the project site.
 - As part of the construction of roadway improvements along Goetz Road, the project applicant shall construct Class II bike lanes, according to City Standards, along both sides of the portion of the road abutting the project site.
 - As part of the construction of full width improvements along Murrieta Road, the project applicant shall construct Class II bike lanes, according to City Standards, along both sides of the portion of the road abutting the project site.
- ▶ Project On-site Construction:
 - A traffic control and management plan shall be prepared, and address all means to minimize temporary impacts from roadway and travel lane disruptions. The traffic control and management plan shall be submitted to and approved by the City of Perris prior to construction to minimize project impacts on local streets, highways, freeways, or other forms of transportation (Class I and Class II bicycle routes). The traffic control and management plan shall at a minimum contain the following:
 - describe the proposed work zone;
 - delineate construction areas in a manner that protects vehicles, bicyclists, and pedestrians;
 - describe applicable detours and lane closures;

- describe appropriate tapers and lengths, signs, and spacing;
- identify appropriate channelization devices and spacing;
- identify work hours and workdays;
- identify proposed speed limit changes if applicable;
- describe the signalized and non-signalized intersections that would be affected by the work;
- describe the trucks that would be used during construction, including the number and size of the trucks used per day, their expected arrival and departure times, their general weight and size, and circulation patterns;
- identify all staging areas;
- require that access to all nearby parcels be maintained;
- provide a description and/or documentation of the pavement conditions along the roadways used to access the site before the commencement of construction and at the conclusion of construction;
- coordinate with the City to determine how any potential pavement damage directly resulting from construction of the project would be mitigated;
- require that access to all surrounding parcels and properties be maintained at all times;
- require that adequate emergency vehicle access to all surrounding parcels and properties be maintained at all times; and
- where the project work area encroaches on a public ROW and reduces the existing pedestrian path of travel to less than 48 inches wide, alternate pedestrian routing shall be provided during construction activities.

Monitoring Responsibility – City of Perris

Timing – Prior to initiation of construction unless otherwise specified.

Verification – By: _____

Title: _____

Date: _____