6.0 GROWTH INDUCEMENT

6.1 Existing Conditions

Growth inducement is usually associated with projects that foster economic or population growth, or construct additional housing, which either directly or indirectly results in the construction of new infrastructure facilities. According to Section 15126.2(d) of the CEQA Guidelines, "*It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*"

The project site is located within the Mission Valley and Serra Mesa communities; however, the project only proposes development within the Mission Valley community. According to the Mission Valley Community Plan, the project site is zoned MVPD-MV- M (Multiple Use Zone), allowing for a combination of commercial and residential uses, and RS-1-7 (Residential – Single Unit), which is intended for the development of single dwelling units on minimum 5,000 square foot lots.

According to current SANDAG estimates, there are a total of 10,657 housing units within the Mission Valley Community Planning Area. The total population of Mission Valley is approximately 17,038 residents, resulting in an average of 1.76 persons per household.

6.2 Impact Analysis

Impact Threshold

The City of San Diego's Significance Thresholds provides guidance to determine potential significance for growth inducement. Based on the Thresholds, a significant impact could occur if a project would:

- Induce substantial population growth in an area, either directly (for example by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Issue 1

Would this project foster economic or population growth, or the construction of additional housing either directly or indirectly?

The proposed project would allow for development of residential units, retail space, and office-business park uses, in addition to commercial, civic, parks and open space uses. The residential units provided by the project would increase the housing stock in the Mission Valley Community by approximately 45 percent, which is a substantial increase. Based on SANDAG's estimate of 1.74 persons per household, the project would also result in approximately 8,317 new residents to Mission Valley. Therefore, the project would result in substantial population growth to Mission Valley.

The amount of growth results in physical changes in the environment that have the potential for significant environmental effects. As presented in Section 5, significant direct impacts would result for the following issue areas: Land Use (traffic, air quality during construction, noise during

construction and as a result of traffic volumes on area roadways), Traffic and Circulation, Visual Effects and Neighborhood Character, Air Quality, Noise, Health and Safety, Biological Resources, Historical Resources, Paleontological Resources, and Public Utilities (solid waste). A discussion of the project's direct impacts to these environmental issue areas, as well as mitigation measures to reduce those impacts if determined to be significant are included in the following sections of this EIR:

- Section 5.1, *Land Use*
- Section 5.2, *Traffic Circulation*
- Section 5.3, *Visual Effects and Neighborhood Character*
- Section 5.4, *Air Quality*
- Section 5.5, *Noise*
- Section 5.6, *Biological Resources*
- Section 5.7, *Health and Safety*
- Section 5.8, *Historical Resources*
- Section 5.11, *Paleontological Resources*
- Section 5.12, *Public Utilities (Solid Waste)*

The proposed project would also result in significant cumulative impacts associated with Land Use (traffic) Traffic Circulation, Visual Effects and Neighborhood Character, and Public Utilities (solid waste). Cumulative impacts are addressed Section 8.0, *Cumulative Effects*.

The Quarry Falls project requires an amendment to the Mission Valley Community Plan as part of its approvals to allow for the proposed development. There are no other mining sites within Mission Valley or other comparably-sized properties that would request amendments to the Mission Valley Community Plan for their development as a result of the Quarry Falls project. The properties surrounding the project site are currently developed with residential, office, or commercial uses. Therefore, the Quarry Falls project is considered as a logical extension of existing development, rather than initiating a trend of development in the area.

Significance of Impacts

The proposed project would result in a substantial increase in housing and population in the Mission Valley community and is considered to be growth inducing. Development of the project site as a multiple use project has been anticipated by the Mission Valley Community Plan. The construction of housing has the potential to result in significant impacts associated with land use (traffic, air quality during construction, noise during construction and as a result of traffic volumes on area roadways), traffic and circulation, air quality, noise, biological resources, health and safety, historical resources, paleontological resources, public utilities (solid waste), and visual effects and neighborhood character.

Mitigation Measures

Previous sections of this EIR present mitigation measures that would reduce to below a level of significance environmental issues associated with air quality, noise, health and safety, biological resources, historical resources, and paleontological resources. Impacts associated with land use (traffic), traffic circulation, public utilities (solid waste) and visual effects and neighborhood character would remain significant and unmitigated even with implementation of recommended mitigation measures. Therefore, the decision-maker must consider project alternatives to further reduce or avoid significant unmitigable impacts or adopt a Statement of Overriding Considerations that explain why the project can be approved in light of its significant and unmitigable impacts.

7.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

As required by Section 15126.2(c) of the CEQA Guidelines, the significant irreversible environmental changes of a project must be identified. Irreversible commitments of resources are evaluated to assure that their use is justified. Irreversible environmental changes typically fall into three categories: primary impacts, such as the use of nonrenewable resources; secondary impacts, such as highway improvements which provide access to previously inaccessible areas; and environmental accidents associated with a project.

Future development that could occur on the project site as a result of the proposed project would entail the commitment of energy and natural resources. The primary energy source would be fossil fuels, representing an irreversible commitment of this resource. Construction of the project would also require the use of construction materials, including cement, concrete, lumber, steel, etc., and labor. These resources would also be irreversibly committed.

Once constructed, occupation of the residential units and operations of the commercial spaces would entail a further commitment of energy resources in the form of fossil fuels and electricity. This commitment would be a long-term obligation since the proposed structures are likely to have a useful life of 20 to 30 years or more. However, as discussed in Section 5.12, *Public Utilities*, of this EIR, the impacts of increased energy usage are not considered significantly adverse environmental impacts.

Development of the project site would also change the visual appearance of the project site from barren, mined land to urban uses. This change in visual quality would permanently alter views of the site as discussed in Section 5.3, *Visual Effects and Neighborhood Character*, of this EIR and is considered irreversible.

Specific significant irreversible environmental changes associated with implementation of the proposed project may include the following:

- Grading required for the project could irreversibly affect unknown cultural or paleontological resources. Any cultural or paleontological resources would be salvaged, as necessary, and data recovered. Mitigation identified in Section 5.8, Historical Resources and Section 5.11, Paleontological Resources, of this EIR, would reduce any impacts to below a level of significance. However, cultural resources or paleontological resources, if encountered, would be irreversibly committed.

- Commitment of energy, water, and other natural resources for the construction and occupancy of the residences, retail space and commercial office space is expected. This resource utilization is not expected to represent significant amounts of available resources in the region.

- Pollutant emissions from construction activities would occur but would be short-term and would not be significant. The additional vehicle trips on the surrounding roads would also cause an incremental increase in air pollutants associated with vehicle exhaust, which would add to area- and basin-wide air pollutant levels. Additionally, the project would provide live/work opportunities that may result in a reduction of trips from the project.

- Construction noise impacts would be incremental, temporary, and short-term. Development of the project would contribute long-term noise from vehicles traveling to and from the site, which would continue for the life of the project.

- The project would result in the loss of biological resources which would be mitigated through the preservation of higher quality resources off-site.

As addressed in Section 5.7, *Health Safety*, the proposed project is not anticipated to result in environmental accidents.

8.0 CUMULATIVE EFFECTS

Section 15355 of the State CEQA Guidelines describes *"cumulative impacts"* as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. These individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from a project is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

The discussion of cumulative impacts for the Quarry Falls project considers both existing and future projects in the Quarry Falls project vicinity. For this analysis, the project vicinity is defined as the Mission Valley and Serra Mesa communities. Existing and future projects are based on the following information sources:

- A summary of projections contained in the City's adopted Progress Guide and General Plan, the Mission Valley Community Plan, and the Serra Mesa Community Plan; and
- Past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the City of San Diego. These projects include those which result in or contribute to regional or area-wide conditions.

According to Section 15130 of the CEQA Guidelines, the discussion of cumulative effects "…*need not be provided as great a detail as is provided the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness.*" The evaluation of cumulative impacts is required by Section 15130 to be based on either: *"(A) a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) a summary of projections contained in an adopted general plan or related planning document, on in a prior environmental document which had been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative effect. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency."*

The basis and geographic area for the analysis of cumulative impacts is dependent on the nature of the issue and the project. For analysis of cumulative impacts is dependent on the nature of the issue and the project. For analysis of cumulative impacts which are localized (e.g., traffic and public services), a list of past, approved and pending projects was identified. The location of these projects is illustrated in Figure 8-1, *General Location of Cumulative Projects.*

Provided below is a description of the planning documents used in this analysis of cumulative effects, as well as the development projects which have been individually evaluated for their contribution to cumulative effects.

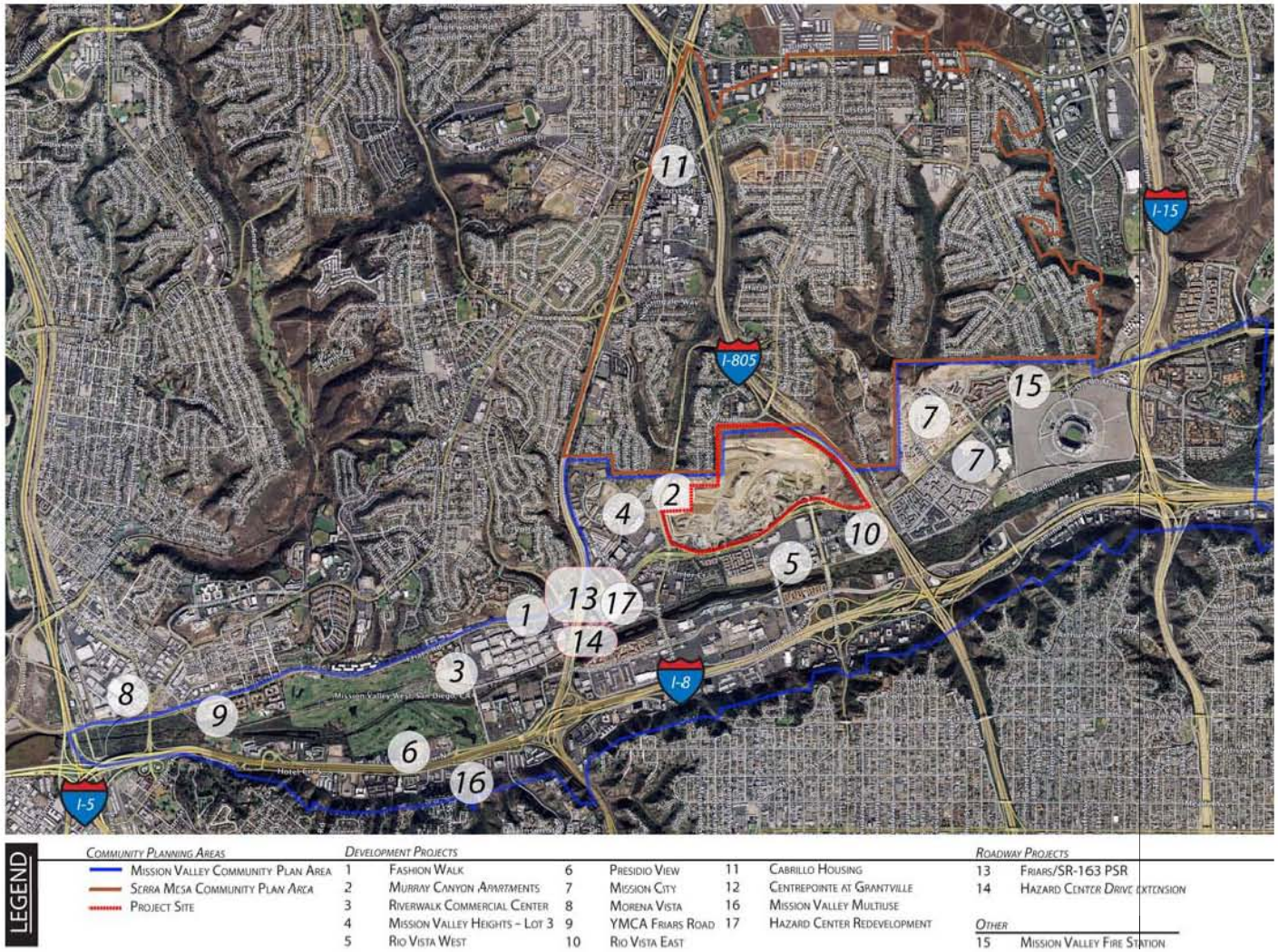

Figure 8-1.
General Location of Cumulative Projects

8.1 PLANS CONSIDERED FOR CUMULATIVE EFFECTS ANALYSIS

8.1.1 City of San Diego Progress Guide and General Plan

The proposed project is located within the City of San Diego. The City's Progress Guide and General Plan was last updated in June 1989, although the City is currently in the process of another update, as discussed below. San Diego comprises 219,241 acres (approximately 342 square miles), and less than four percent of this land remains vacant and developable. The City expects to reach an estimated population of 1,514,336 by the year 2020 and 1,656,257 by the end of 2030. Future development will require the City to reinvest in existing communities to plan for greater urbanization of infill sites.

The City of San Diego is in the process of updating the Progress Guide and General Plan. The current update is expected to be adopted by the City Council in 2008. As part of the update, the City adopted the Strategic Framework Element in October 2002. The Strategic Framework Element provides the overall structure to guide the General Plan update, including future Community Plan updates and amendments and implementation of an action plan. The Strategic Framework Element represents the City's new approach for shaping how the City will grow while preserving the character of its communities and its natural resources and amenities. As part of the Strategic Framework Element, the City of Villages strategy is discussed, which is a growth strategy that has been designed to create higher density mixed-use areas within communities throughout San Diego. The strategy draws upon strengths and characteristics of existing neighborhoods to determine where and how new growth should occur. Policies guiding the City of Villages strategy have been developed in the following eight areas: urban form, neighborhood quality, public facilities and services, conservation and the environment, mobility, housing affordability, economic prosperity and regionalism, and equitable development.

8.1.2 Mission Valley Community Plan

The majority of the project site is within the Mission Valley Community Plan area. The Mission Valley Community Plan is located within the central area of the City of San Diego, between the I-805 and I-15 freeways. The San Diego City Council first adopted the Mission Valley Community Plan ~~in~~on ~~1992~~June 25, 1985. It was subsequently amended ~~in 1994, 1995, 1996, 1997, 1998, and 2001~~numerous times between 1985 and 2005. In addition, a Community Plan Amendment for the Quarry Falls project is being processed concurrently with this Program EIR.

The Mission Valley Community Plan is intended to serve as a comprehensive guide for residential, industrial, and commercial developments, open space preservation, and development of a transportation network within the plan area. The expected population in the year 2030 is 31,122, based on SANDAG's population forecast for the Mission Valley Community.

8.1.3 Serra Mesa Community Plan

The northern six acres of the project site are located within the Serra Mesa Community Plan area. The Serra Mesa Community Plan was originally adopted by the San Diego City Council on March 3, 1977, with subsequent amendments occurring in 1985, 1986, 1988, 1989, 1992, 1993, 1996 and 2000. The 2000 amendment updated the existing conditions information and the

Housing and Environmental Management Elements. Based on SANDAG's population projections for the Serra Mesa community, the expected population in the year 2030 is 25,521.

8.1.4 Multiple Species Conservation Program (MSCP)

The City of San Diego's MSCP was developed to provide a regional mitigation solution for impacts to multiple, rather than single, species and their habitats. The MSCP is a cooperative effort consisting of federal and state resource agencies, local jurisdictions, environmental groups, property owners, and experts in the fields of biology, environmental planning, and conservation. The City's MSCP is part of the statewide Natural Community Conservation (NCCP) program, which was established under California law (Section 2800 *et seq.* of the California Fish and Game Code) "*to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth.*" The MSCP is one of several regional conservation planning efforts coordinated with CDFG and USFWS. On July 14, 1997, the City of San Diego signed an Implementing Agreement (IA) with the CDFG and USFWS. The IA is the contract between the City and the wildlife agencies, which outlines the obligations and commitments made for the successful completion of the MSCP. The agreement has been signed by all parties and became effective July 15, 1997.

The MHPA is a 56,831-acre focused planning area within which 90 percent of the lands will be preserved. The ultimate MHPA will contain approximately 52,000 acres. In the Mission Valley project area, the San Diego River and adjoining undeveloped public lands were included in the MHPA. The MSCP Subarea Plan provides guidelines for development in and adjacent to the MHPA.

8.2 PROJECTS CONSIDERED FOR CUMULATIVE EFFECTS ANALYSIS

As stated above, the past, present, and probable future projects considered in this cumulative analysis would produce related or cumulative impacts when evaluated in relation to the potential impacts of the proposed Quarry Falls project. Descriptions of development projects that have been individually evaluated for their contribution to cumulative effects are provided below.

8.2.1 Fashion Walk (LDR No. 99-1356; PTS No. 4301)

The Fashion Walk project is being constructed at 7148 Friars Road, west of Ulric Street, across from Fashion Valley Mall and east of Fashion Valley Road in the Linda Vista Community Plan area. The project involved the approval of a Planned Commercial Development Permit and Resource Protection Ordinance Permit to provide 161 condominium units on 1.8 acres of the 8.0-acre site. A Mitigated Negative Declaration (MND) was prepared for the project, with a final date of January 28, 2004. The MND addressed land use, visual quality, cultural resources, water quality, biology, geology, traffic, noise and paleontology. Mitigation measures were required to reduce impacts associated with biology, geology, traffic, noise and paleontology to below a level of significance.

8.2.2 Murray Canyon Apartments (Project No. 5700)

The Murray Canyon Apartments project will develop a 17.04-acre site located adjacent to and west of Quarry Falls with 268 apartment units. An MND was prepared for the project, with a final date of April 14, 2005. The MND addressed environmental issues associated with traffic

circulation/parking, air quality, utilities-solid waste, paleontological resources, water quality, land use, geology/soils, biology, noise, historical resources (archaeology), and visual quality. The project is required to incorporate measures which mitigate impacts associated with utilities (solid waste), traffic circulation/parking, air quality, and paleontology. All other environmental issues were found not to be significant.

8.2.3 Riverwalk Commercial Center

The Riverwalk Commercial Center project, currently on-hold, involves a Rezone, Planned Development Permit, Site Development Permit, Design Guidelines for Development Area 2, and Street Vacation for the development of a vacant, 7.15-acre site located at the northwest corner of Fashion Valley Road and Riverwalk Drive. The project proposed a 61,000-square-foot commercial center with a two-story 38,000-square-foot building containing a 33,000-square-foot health center, a 5,000-square-foot office, five racquetball courts, a two-story 8,000-square-foot office building, a one-story 7,000-square-foot and a one-story 8,000-square-foot restaurant. Because the project is being re-designed and is on-hold, the environmental review has not yet been completed for the project. The Riverwalk Commercial Center is part of the Levi-Cushman Specific Plan, which is included in the current Mission Valley Community Plan and the underlying traffic model.

8.2.4 Mission Valley Heights – Lot 3 (Project No. 2052; LDR No. 41-100)

The Mission Valley Heights – Lot 3 project is located on 2.22 acres within the Mission Valley Heights Specific Plan area. The project involved a PDP, amendment to approved Planned Commercial Development (PCD) 84-0128, and an amendment to the approved Mission Valley Heights Specific Plan to allow a change in planned land uses from 8,800 square feet of restaurant space to 26,000 square feet of commercial office use. An MND was prepared, with a final date of September 20, 2002. The MND addressed hydrology/water quality, geology, and paleontology. Mitigation measures, involving implementation of BMPs during construction and post construction, were required to mitigate impacts associated with hydrology and water quality.

8.2.5 Rio Vista West Project

The Rio Vista West Project is a portion of the larger Rio Vista West mixed-use, transit-oriented development located on approximately 94 acres, south of Friars Road, north of the San Diego River, east of Qualcomm Way and west of Mission Center Drive. The Rio Vista West Project developed the approximately 3.74 acres with 237 attached units. Environmental review for the Rio Vista West Project was in the form of an Addendum to EIR No. 92-0586.

8.2.6 Presidio View (LDR No. 99-0348; SCH No. 200000061060)

The Presidio View project is a multi-family residential development under construction on 15.46 acres of the 20.46-acre site located at 950 and 1450 Hotel Circle North in the Mission Valley community. This project involved an amendment to the Mission Valley Community Plan and the City's Progress Guide and General Plan, Density Transfer, Rezone, and Mission Valley Planned Development Ordinance Permit. The project will develop a 350-unit apartment complex, with future redevelopment of the existing Handlery Hotel. As part of the project, development credits were transferred from a five-acre parcel, with the five-acre parcel undeveloped and left as open space. An MND was prepared for the project, with a final date of

September 11, 2000. Environmental issues addressed in the MND included geology, hydrology, cumulative effects, water quality, historical resources, biological resources, and traffic. Mitigation measures were implemented to reduce impacts associated with historical resources, traffic and water quality to below a level of significance. All other environmental issue areas were found not to be significant.

8.2.7 Mission City (Fenton Market Place) (LDR No. 96-0544; SCH No. 96111039)

The Mission City project is located on 228.6 acres north and south of Friars Road in the eastern portion of the Mission Valley community. It involved approval of a Specific Plan, Community Plan and General Plan amendments, Rezones, Street Vacations, Tentative Map, Development Agreement Amendment, Amendment to CUP No. 82-0014, and consideration of Interim Habitat Loss Findings (due to project approval prior to adoption of the MSCP – San Diego Subarea Plan). Ultimate build-out of the project allows for 1,364 – 4,475 residential units, 163,350 – 400,000 square feet of commercial space and 87,120 – 174,240 square feet of office space. An EIR was prepared for the project, with a final date of March 3, 1998. The EIR addressed land use, traffic and circulation, landform alternation/visual quality, biology, geology/soils, noise, hydrology/water quality, air quality, public services and facilities, paleontological resources, cumulative effects and growth inducement. Mitigation measures were implemented to reduce significant impacts associated with land use, traffic and circulation, biology, geology/soils, noise, hydrology/water quality, public services and facilities, and paleontological resources. After mitigation, impacts associated with land use, traffic circulation, landform alteration/visual quality, noise, air quality, and public services remained significant and unmitigated, and the San Diego City Council adopted a Statement of Overriding Considerations for the project.

8.2.8 Morena Vista (Project No. 6137; SCH No. 2003061131)

The Morena Vista project is located on a 6.5-acre site located in the Linda Vista community, south of the Linda Vista Road/Napa Street intersection. The project involved a PDP/SDP and variance, Construction, Maintenance and Joint Parking Agreement, Tentative Map, ESL Deviation, Street Vacation, Street Dedication, and Easement Vacation. The project will provide a mixed-use (residential and retail commercial) project on 4.7 acres. Approximately 1.1 acres of the project site is associated with the Morena/Linda Vista Trolley Station and trolley parking. An MND was prepared for the project, with a final date of August 5, 2003. The MND was re-circulated for public review and finalized on October 29, 2003. Environmental issues addressed in the MND included human health/public safety, traffic noise, geology/soils, and hydrology/water quality. Mitigation measures were implemented to reduce impacts associated with hydrology/water quality and human health/public safety to below a level of significance. All other issue areas were not found to be significant.

8.2.9 YMCA Friars Road (Project No. 5501; SCH No. 2003061027)

The YMCA Friars Road project is located at the existing YMCA site (5505 Friars Road) in the Mission Valley community. It proposed an SDP/CUP (amending CUP No. 91-0215) and an MHPA Boundary Adjustment for the 8.3-acre City-owned property leased to the YMCA. The project involved demolition of approximately 2,801 square feet, renovation of approximately 7,913 square feet and the addition of 24,372 square feet. The project added 0.45 acre to the

MHPA. An MND was prepared for the project, addressing biological resources/land use (MSCP), hydrology/water quality, transportation/circulation/parking, and geology/soils. Mitigation measures were required for adjacency issues associated with being located adjacent to MHPA (San Diego River) including a landscape plan for an on-site vegetated buffer, BMPs, erosion control, and grading restrictions during the breeding season for sensitive bird species.

8.2.10 Rio Vista East (LDR No. 98-0518; MVPDO Permit No. 98-0518)

The Rio Vista East project is located on 12.22 acres, north of Rio San Diego Drive, east of Rio Bonito, south of Friars Road and west of the I-805 freeway bridge. The project involved an amendment to PCD No. 87-0517 to allow Lot 4 to be developed with 350,000 square feet of general office uses where the original PCD allowed 90,200 square feet of general office and 41,000 square feet of research and development uses and a transfer of development from Rio Vista West. A Negative Declaration (ND) was prepared for the project, with a final date of May 27, 1999. The ND addressed land use and planning, transportation and circulation, public services, and neighborhood character/urban form and aesthetics. No impacts were found to be potentially significant, and no mitigation measures were required.

8.2.11 Cabrillo Housing

The Cabrillo Housing project is a housing project completed by the U.S. Department of the Navy in the Serra Mesa community. The project replaced an existing 882 housing units with 900 housing units.

8.2.12 Mission Valley Fire Station (Project No. 6595; LDR No. 330900; CIP No. 33-090.0)

The Mission Valley Fire Station project involves the construction of a new fire station in the Mission Valley Community. Located at 9366 Friars Road, the fire station will be a two-story, 16,290 square foot structure and a public mini park on 16.7 acres. An MND was prepared for the project, with a final date of April 12, 2004. The MND addressed environmental issues associated with geology, transportation/parking, biology/MHPA, noise, water quality/hydrology, health and public safety. Mitigation measures included constructing a block wall at the toe of an on-site manufactured slope, opening a concrete median barrier and installing a traffic signal for emergency use on Friars Road and securing 1,000 parking spaces from San Diego State University.

8.2.13 Centrepointe at Grantville (PTS No. 80450)

Centrepointe at Grantville is in the affordable housing expedite project proposed for a 13-acre site at 6160 Mission Gorge Road, within the Navajo Community Plan area. This project would construct 588 multi-family residential units and 135,288 square feet of commercial/office/retail space. A Community Plan Amendment, Planned Development Permit, Vesting Tentative Map and Rezone from IL-3-1 & CC-4-2 to RM-3-8 & CO-1-1 are being processed for the Centrepointe at Grantville project.

8.2.14 Mission Valley Multi-Use

The Mission Valley Multi-Use project is an approximate 19-acre site located at 901 and 925 Hotel Circle South in the Mission Valley community planning area. The site is identified for

hotel and health club use in the Atlas Specific Plan and is currently developed with a hotel consisting of 210 rooms and associated uses such as conference/banquet rooms; approximately 6,880 square feet of commercial uses including a coffee shop, market and bar; an approximate 24,175 square foot health club; an approximate 2,500 square foot gas station; and tennis courts, swimming pools and other associated amenities. The Mission Valley Multi-Use project proposes the development of the site with a mixed-use urban village consisting of approximately 600 multi-family dwelling units, with ten percent of the units built as affordable on-site and a "Main Street" commercial area, consisting of approximately 18,000 square feet of commercial development. Environmental review has not yet been completed for the project. The current proposal limits traffic generation to the level of the existing use; therefore, the trip generation associated with this project accounted for in the existing baseline environmental condition.

8.2.15 Hazard Center Redevelopment

Hazard Center is an approximate 41.3 acre mixed-use development located between SR-163 on the west, Friars Road on the north, Mission Center Road on the east, and the San Diego River on the south, and is within the Mission Valley community planning area. The Hazard Center Redevelopment project proposes removal of the existing movie theater (approximately 26,125 square feet) and the addition of 473 residential dwelling unit, parking, and an additional 6,060 square feet of commercial space. Residential uses would include both rental and condominium units in a proposed 22-story tower, a 21-story tower, and 5-story row houses. The existing hotel, office building, commercial/retail space and residential dwelling units would remain in place. Environmental review has not yet been completed for the project. The current proposal limits traffic generation for the first phase of the project to no incremental increase in average daily trips. The second phase of the project (2020) is expected to generate an additional 500 – 1,000 driveway trips. ~~to the level of the existing use; therefore, t~~The trip generation associated with this project is accounted for in several conservative assumptions for the existing baseline environmental condition.

8.2.16 Friars/SR-163 PSR

The Quarry Falls project proposes to construct the following local improvements: widen southbound Ulric Street at Friars Road, widen westbound Friars Road from Frazee Road to SR-163 northbound ramps, widen eastbound Friars road at Frazee Road, widen ~~and lengthen~~ the Friars Road Bridge, and widen southbound approach to Friars Road/Frazee Road.

8.2.17 Hazard Center Drive Extension

Hazard Center Drive is to be extended to connect to Fashion Valley from Mission Center Road. This connection is expected to provide another route parallel to Friars Road for traffic traveling in the east-west direction.

8.3 CUMULATIVE EFFECTS ANALYSIS

The project's potential to make a considerable contribution to cumulative effects associated with the various environmental issue areas addressed in this Program EIR is evaluated below.

8.3.1 Land Use

As presented in this Program EIR, the majority of the Quarry Falls project develops a previously disturbed site identified for multiple use in the Mission Valley Community Plan and it is therefore consistent and compatible with that plan. As a general rule, projects that are consistent and compatible with surrounding land uses and the applicable community plan should not result in land use impacts. However, the intensity of development proposed by the Quarry Falls project would result in significant land use impacts associated with traffic circulation, including both direct and cumulative traffic circulation impacts. Cumulative impacts associated with traffic circulation would be the same as those evaluated in Section 5.2, *Transportation/Traffic Circulation/Parking*, of this Program EIR as *Horizon Year (Year 2030)*. Cumulatively significant traffic circulation impacts are also summarized in Section 8.3.2, below.

8.3.2 Traffic Circulation

For purposes of evaluating cumulative impacts associated with traffic circulation, the traffic analysis conducted for the project assumes build-out of the Serra Mesa and Mission Valley Community Plans, plus the individual projects listed under Section 8.2, above. Build-out under the Mission Valley and Serra Mesa community plans are assumed in the Horizon Year (2030). Additionally, several off-site roadway improvements are assumed to be in place during the Horizon Year, including the following:

1. Hazard Center Road connection from Mission Center Road to Fashion Valley Road;
2. Via las Cumbres extension south to Hotel Circle North;
3. Milly Way bridge (the extension of Fenton Parkway south to Camino del Rio North); and,
4. I-8 Hook Ramps and interchange realignment at Camino del Rio North and Qualcomm Way.

As presented in Section 5.2, under the cumulative impacts analysis for traffic circulation, the Quarry Falls project would contribute to cumulatively significant impacts. Table 8-1, *Cumulative Traffic Impacts Summary Table*, lists the various circulation segments, intersections, freeways and ramps where significant cumulative impacts would result. Table 8-1 also identifies measures that would mitigate significant cumulative impacts to below a level of significance and those that would partially mitigate significant cumulative impacts. Table 8-1 also indicates where mitigation for significant cumulative impacts is not feasible. For a discussion of the infeasible of mitigation measures at these locations, ~~se locations,~~ please see Section 5.2, *Transportation/Traffic Engineering/Parking*.

Table 8-1.
Cumulative Traffic Impact Summary Table

Circulation Element		Mitigation	Level of Impact after Mitigation
SEGMENTS	**LIMITS**		
Friars Road	Ulric/SR-163 SB Ramps to SR-163 NB Ramps	Construct the following local improvements: widen southbound Ulric Street at Friars Road; widen westbound Friars Road from Frazee Road to SR-163 northbound ramps; widen eastbound Friars Road at Frazee Road. The City may require the project to pay $5,000,000 (2007 dollars) in lieu of constructing such local improvements to assist in the funding of a more regional set of improvements at this same location.	Mitigated to below a level of significance.
	SR-163 NB Ramps to Frazee Road		
	I-15 SB ramps to I-15 NB ramps	No feasible mitigation available.	Significant; unmitigable.
	Rancho Mission Road to Riverdale Street	No feasible mitigation available.	Significant; unmitigable.
	Riverdale Street to Mission Gorge Road	No feasible mitigation available.	Significant; unmitigable.
Mission Center Road	Murray Ridge Road to I-805 Overpass	Provide 1-lane westbound and 2-lanes eastbound.	Mitigated to below a level of significance.
	Mission Valley Road to Friars Road	Widen by one northbound lane for a total of three thru lanes.	Mitigated to below a level of significance.
	Camino del Rio North to I-8 EB ramp	Unless built by others, construct the following improvements: widen eastbound off ramp; widen bridge; restripe eastbound approach and widen westbound approach at Mission Center Road/Camino Del Rio North; widen eastbound at Camino Del Rio North/I-8 westbound; widen westbound approach at Camino Del Rio South/Mission Center Road.	Phase 2 – Temporary unmitigated impact. Mitigated to below a level of significance in Phase 3.
Murray Ridge Road	I-805 SB Ramps to I-805 NB Ramps	Restripe to ~~a 4-lane Collector~~5 lanes.	Mitigated to below a level of significance.
	I-805 NB to Mission Center	Restripe to a 4-lane Collector or contribute $100,000 (2007 dollars) in funding for traffic calming from I-805 to Pinecrest Avenue to be determined by the community.	Mitigated to below a level of significance; if restriped; otherwise partially mitigated.
	Mission Center to Pinecrest Avenue		
Qualcomm Way	Rio San Diego to Camino de la Reina	No feasible mitigation available.	Significant; unmitigable.
	Camino Del Rio North/I-8 WB ramp to I-8 EB ramp	No feasible mitigation available.	Significant; unmitigable.
Texas Street	I-8 EB Ramps to Camino Del Rio South	No feasible mitigation available.	Significant; unmitigable.
	Camino Del Rio South to Madison Avenue	Implement pedestrian lighting and a new sidewalk~~s~~ as traffic calming	Partially mitigated.

Circulation Element		Mitigation	Level of Impact after Mitigation
		measures (see item T4 in the Greater North Park Planning Committee's Priority List of the Public Facilities Financing Plan, 2002).	
	Madison Avenue to Monroe Avenue	Provide $100,000 (2007 dollars) in funding for traffic calming to be determined by the Greater North Park community from Madison Avenue to El Cajon Boulevard.	Partially mitigated.
	Monroe Avenue to Meade Avenue		
	Meade Avenue to El Cajon Blvd		
ARTERIALS	**SEGMENT**		
Friars Road	Ulric/SR-163 SB Ramps to SR-163 NB Ramps (WB)	Construct the following local improvements: widen southbound Ulric Street at Friars Road; widen westbound Friars Road from Frazee Road to SR-163 northbound ramps; widen eastbound Friars Road at Frazee Road. The City may require the project to pay $5,000,000 (2007 dollars) in lieu of constructing such local improvements to assist in the funding of a more regional set of improvements at this same location.	Mitigated to below a level of significance.
	SR-163 NB ramps to Frazee Road (EB, WB)		
	Frazee Road to River Run (WB)		
	River Run to Fenton Parkway (EB)	No feasible mitigation available.	Significant; unmitigable.
	Fenton Parkway to Northside Drive (EB, WB)	No feasible mitigation available.	Significant; unmitigable.
	I-15 NB ramps to I-15 SB ramps (WB)	No feasible mitigation available.	Significant; unmitigable.
	I-15 NB ramps to Rancho Mission Road (EB, WB)	No feasible mitigation available.	Significant; unmitigable.
	Santo Road to Riverdale Street (EB)	No feasible mitigation available.	Significant; unmitigable.
	Riverdale Street to Mission Gorge Road (WB)	No feasible mitigation available.	Significant; unmitigable.
Mission Gorge Road	Friars Road to Zion Avenue (EB)	No feasible mitigation available.	Significant; unmitigable.
INTERSECTIONS			
Friars Road/Fashion Valley Road		Restripe westbound approach.	Mitigated to below a level of significance.
Friars Road/ SR-163 SB ramp/Ulric Street		Construct the following local improvements: widen NB approach of SR-163 SB off-ramp at Friars Road; widen southbound Ulric Street at Friars Road; widen westbound Friars Road from Frazee Road to SR-163 northbound ramps; reconfigure SB approach of Friars Road and SR-	Mitigated to below a level of significance.
Friars Road/ SR-163 NB ramp			

Circulation Element	Mitigation	Level of Impact after Mitigation
Friars Road/ Frazee Road	163 NB ramps; widen eastbound Friars Road at Frazee Road. The City may require the project to pay $5,000,000 (2007 dollars) in lieu of constructing such local improvements to assist in the funding of a more regional set of improvements at this same location.	
Friars Road EB/ Qualcomm Way	Widen eastbound approach; ~~widen~~ restripe southbound approach; ~~and~~ widen northbound approach~~es~~.	Mitigated to below a level of significance.
Friars Road/ Fenton Parkway	No feasible mitigation available.	Significant; unmitigable.
Friars Road/I-15 SB ramp	Widen southbound approach.	Mitigated to below a level of significance.
Friars Road/ Santo Road	Restripe southbound approach.	Partially mitigated.
Friars Road/ Riverdale Street	No feasible mitigation available.	Significant; unmitigable.
Mission Gorge Road/ Zion Avenue	Contribute a fair share towards widening ~~Widen~~the westbound approach.	Partially mitigated.
Mission Center Road/ Camino De La Reina	Contribute a fair share towards widening ~~Widen~~the eastbound approach.	Partially mitigated.
Mission Center Road/ Camino Del Rio North	Provide $1 million (2007 dollars) for a Project Study Report. Unless built by others, construct the following improvements: widen eastbound off ramp; widen bridge; widen southbound approach at Mission Center Road/I-8 eastbound ramps; restripe eastbound approach and widen westbound approach at Mission Center Road/Camino Del Rio North; widen eastbound approach at Camino Del Rio North/I-8 westbound; widen westbound approach at Camino Del Rio South/Mission Center Road;~~-~~ Widen southbound approach at Mission Center Road/Camino del Rio South; restripe eastbound approach.	Phase 2 Temporary unmitigated impacts. Mitigated to below a level of significance in Phase 3
Camino Del Rio North/ I-8 WB ramp		
Mission Center Road/ I-8 EB ramp		
Qualcomm Way/ Camino De La Reina	Contribute a fair share towards widening ~~Widen~~ the westbound approach.	~~Partially mitigated.~~Mitigated to below a level of significance in Phase 3.
Qualcomm Way/ I-8 WB Ramp	Widen westbound approach.	Mitigated to below a level of significance.
Texas Street/ Camino Del Rio South	Contribute a fair share towards widening the ~~Widen~~ northbound approach; restripe eastbound approach; widen southbound approach; widen westbound approach.	~~Partially mitigated.~~Mitigated to below a level of significance in Phase 3.

Circulation Element		Mitigation	Level of Impact after Mitigation
Texas Street/ Madison Avenue		Contribute a fair share towards restriping the ~~Restripe~~ eastbound approach.	~~Partially mitigated.~~Mitigated to below a level of significance.
Texas Street/ Monroe Avenue		No feasible mitigation available.	Significant; unmitigable.
Texas Street/ El Cajon Blvd		Widen eastbound approach.	Mitigated to below a level of significance.
Rio San Diego/ Fenton Parkway		Contribute a fair share towards widening the ~~Widen~~ northbound approach.	~~Partially mitigated.~~Mitigated to below a level of significance.
Phyllis Place/ I-805 SB ramp		Signalize.	Mitigated to below a level of significance.
Phyllis Place/ I-805 NB ramp		Signalize.	Mitigated to below a level of significance.
Murray Ridge Road/ Mission Center Road		Signalize. Restripe southbound approach; widen westbound approach; restripe eastbound approach.	Mitigated to below a level of significance.
Murray Ridge Road/ Pinecrest Avenue		Signalize.	Mitigated to below a level of significance.
FREEWAY RAMPS			
1-15 NB at Friars Road		No feasible mitigation available.	Significant; unmitigable.
I-8 EB at SB Texas Street		No feasible mitigation available.	Significant; unmitigable.
I-15 NB at Friars Road		No feasible mitigation available.	Significant; unmitigable.
I-15 SB at Friars Road (I-8 Bypass)		No feasible mitigation available.	Significant; unmitigable.
FREEWAY MAINLINE SEGMENTS			
SR-163 (north)	I-8 to Friars Road	No feasible mitigation available.	Significant; unmitigable.
SR- 163 (north)	Friars Road to Genesee Avenue	No feasible mitigation available.	Significant; unmitigable.
I-15 (north)	North of Friars Road	No feasible mitigation available.	Significant; unmitigable.
I-8 (east)	Mission Center Road to Qualcomm Way	No feasible mitigation available.	Significant; unmitigable.
SR-163 (south)	I-8 to Friars Road	No feasible mitigation available.	Significant; unmitigable.
SR-163 (south)	Friars Road to Genesee Avenue	No feasible mitigation available.	Significant; unmitigable.
I-15 (South)	North and South of Friars Road	No feasible mitigation available.	Significant; unmitigable.

The project proposes fair share contributions to circulation improvements that are not currently included in financing plans for the communities where the improvements would be located. These include: Friars Road/Santo Road; Mission Gorge/Zion Avenue; and Texas Street/Madison Avenue. If the affected community financing plans are amended to include these improvements and a funding source is identified to ensure their ultimate implementation, then the cumulative impacts at these locations would be mitigated to below a level of significance. If, however, the affected communities do not amend their respective financing plans to include these improvements, cumulative impacts would remain significant and not fully mitigated, although the project would mitigate its contribution to the cumulative impacts.

8.3.3 Visual Effects and Neighborhood Character

The Quarry Falls project is proposed for 230.5 acres, predominantly within the Mission Valley community. Approximately six acres of the proposed project are located in the Serra Mesa community, but no development is proposed in that area. Both the Mission Valley and Serra Mesa communities are considered "urbanized areas" in the City's Progress Guide and General Plan. As such, most of the land within these communities has developed or is developing with a variety of urban uses. Quarry Falls would continue that trend.

According to the City's "Significance Determination Guidelines under the California Environmental Quality Act," a project could have a cumulative effect based on potential significant impacts to the following:

- Views
- Neighborhood Character/Architecture
- Landform Alteration
- Development Features
- Light/Glare

A potential view impact may result form a project opening up a new area for development, which would ultimately cause "extensive" view blockage, especially from designated public view corridors and of public resources. View blockage would be considered "extensive" when the overall scenic quality of a resource is changed; for example, from an essentially natural view to a largely manufactured appearance. The project site's current appearance is of manufactured mined slopes. The project would result in "*opening up"* this area "*for development*." However, the overall scenic quality of the project site is low and would not be changed from an essentially natural view to a largely manufactured appearance.

A project would have a cumulative impact to neighborhood character, if the area opened for new development results in a change in the overall character of the area. Relative to neighborhood character, the project would develop an existing mining site, introducing urban uses to barren, undeveloped land, as anticipated by the Mission Valley Community Plan and the City's Progress Guide and General Plan. Quarry Falls is located in an area where surrounding land is fully developed, and the project's impacts on neighborhood character are limited to the immediate project area. The proposed project has been designed to be compatible and consistent with the development in the immediate vicinity by matching residential densities to the north and west portions of the site and locating higher intensity commercial and office components of the project directly across Friars Road from comparable uses.

While development may be occurring on other areas of nearby communities, projects are spatially separated and geographically unrelated. When considered with other projects in the Mission Valley and Serra Mesa communities, the project would make a considerable contribution to cumulative impacts associated with visual effects and neighborhood character.

The proposed project involves an amendment to the existing Reclamation Plans to modify the altered landform resulting from reclamation of the project site following completion of mining

activities. Where the approved Reclamation Plan calls for a single large flat pad surrounded on the north, east and west by steep mined slopes, the project proposes terracing of the site to accommodate development as proposed by the Quarry Falls Specific Plan. This would allow the overburden resulting from mined activities to remain on-site. Landform alterations associated with the proposed modification to the approved Reclamation Plans would not contribute to cumulatively significant impacts, because landform alterations would be limited to the project site and there are no other sites of a similar character in the project area which would be proposing similar modifications to landform.

8.3.4 Air Quality

In analyzing cumulative impacts from a proposed project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the San Diego Air Basin is listed as "non-attainment" for the State AAQS. A project that has a significant impact on air quality with regard to emissions of PM_{10}, NO_x and/or ROGs as determined by the screening criteria outlined Section 5.4, *Air Quality*, would have a significant cumulative effect. In the event direct impacts from a project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable future projects are in excess of screening levels identified above, and the project's contribution accounts for more than an insignificant proportion of the cumulative total emissions.

With regard to past and present projects, the background ambient air quality, as measured at the monitoring stations maintained and operated by the San Diego Air Pollution Control District, measures the concentrations of pollutants from existing sources. Past and present project impacts are therefore included in the background ambient air quality data.

The Traffic Impact Study included projects that are planned or reasonably foreseeable in the traffic projections used to develop estimates of LOS and impacts. Thus, the planned or reasonably foreseeable projects are included in the analysis to evaluate potential impacts to the ambient air quality based on traffic in the project area. As discussed in Section 5.4, the CO "hot spots" evaluation indicated that no significant impacts would result from cumulative traffic. With improvements in emissions from vehicles due to phase-out of older vehicles and implementation of more stringent emission standards by the California Air Resources Board, CO "hot spots" would not result from traffic associated with cumulative projects.

PM_{10} emissions associated with construction generally result in near-field impacts. As shown in the construction emissions evaluation presented in Section 5.4, the emissions of PM_{10} are above the significance levels; implementation of mitigation measures presented in Section 5.3, *Air Quality*, would reduce impacts to below a level of significance. Because of the localized nature of PM_{10} impacts, and because all of the past, present, and reasonably foreseeable future projects would not be undergoing construction at the same time as the project, the PM_{10} impacts associated with construction would not be cumulatively significant. Furthermore, because of the project related traffic's low emissions of PM_{10} (less than one percent of the daily and annual significance threshold), the project would not result in a cumulatively considerable net increase of PM_{10}.

With regard to cumulative impacts associated with ozone precursors ROGs and NOx, in general, provided a project is consistent with the community and general plans, it has been accounted for in the ozone attainment demonstration contained within the State Implementation Plan and would not cause a cumulatively significant impact on the ambient air quality for ozone. Because the Quarry Falls project is projecting more intense development than the community plan land use assumptions, an evaluation of the project's consistency with SANDAG's housing forecast for San Diego County to determine the project's consistency with the RAQS and SIP was conducted.

The project is located in the Central Major Statistical Area. The projected housing growth from 2004 to 2030 is 288,726 housing units for the San Diego Region. The project is proposing to construct 4,780 housing units, which would comprise only 1.66 percent of the total projected housing growth in the San Diego Region. The project would therefore be consistent with the growth forecasts for the region and would therefore be in conformity with the RAQS and SIP. Despite the fact that the project is proposing denser development than accounted for in the current community plan and therefore in the SIP, emissions associated with the project have been accounted for in the growth projections for the San Diego Region and would thus not result in a cumulatively significant impact on the ambient air quality.

The project also includes several ~~transportation~~ Transportation ~~demand~~ Demand ~~management~~ Management (TDM) measures that aid in reducing air quality impacts. A trail network, consisting of bicycle paths and walkways throughout the project, would provide an alternative to automobile travel, as well as recreational opportunities. Bike lanes would be provided on circulation roadways. Bus transit is available to the project and project developers will coordinate with MTS to add bus stops, as necessary, within the project. The Mission Valley LRT is located south of the project. The project would add a pedestrian bridge over Friars Road and connecting with pedestrianways within Rio Vista West to encourage future residents and workers within Quarry Falls to walk to the LRT. The project would also include a kiosk in a central location to encourage and outline alternative transportation programs, with a TDM coordinator identified in the property manager's office.

8.3.5 Noise

As presented in Section 5.5, *Noise*, the project has the potential to contribute traffic to off-site areas which, when considered with projected traffic volumes, could result in cumulative noise impacts. These off-site areas include: Qualcomm Way between Friars Road and Rio San Diego Drive, and Fenton Parkway between Friars Road and Rio San Diego Drive. However, there are no sensitive receptors located along the segments of Qualcomm Way, between Friars Road and Rio San Diego Drive. The Mission City EIR (LDR No. 96-0544; SCH No. 96111039) included requirements to mitigate cumulative noise levels as part of future developments in Mission City. Specifically, the Mission City EIR requires:

> "*Prior to the issuance of any building permits, noise studies shall be completed for all residential development within . . . 125 feet from either side of . . . "A" Street [Fenton Parkway]. . . These studies shall identify barriers or architectural features necessary to attenuate interior and exterior noise levels to the appropriate level. These measures shall be implemented during development.*"

Therefore, mitigation required as part of the Mission City project would adequately attenuate cumulative noise levels associated with traffic on Fenton Parkway.

8.3.6 Biological Resources

The proposed project would result in the incremental loss of regionally declining sensitive biological resources, including wetlands and upland habitats. The analysis of cumulative biological impacts, therefore, was conducted on a regional level. The sensitive biological resources impacted by the project occur in various locations throughout the City, which justifies a regional evaluation.

The proposed Quarry Falls project would result in the loss of approximately 0.18 acres of disturbed wetlands, 1.08 acres of coastal sage scrub, 0.28 acre of mixed chaparral, and 12.54 acres of annual grassland. Cumulative impacts associated with the loss of wetlands and upland habitats would be mitigated in accordance with the MSCP and the City of San Diego's Land Development Code. The MSCP provides for the long-term protection of sensitive habitats and species and mitigates for the incremental loss of such resources on as region-wide level. The project would mitigate to below a level of significance its loss of disturbed wetlands, coastal sage scrub, mixed chaparral, and annual grassland habitats through habitat creation, enhancement, preservation and/or monetary contributions to the City's Habitat Acquisition Fund. (See Section 5.6, *Biological Resource*, for a discussion of project impacts and mitigation associated with biological resources.)

The City of San Diego's Biology Guidelines recognize that wetlands are protected by federal and state regulations and that impacts to wetlands should be avoided to the maximum extent practicable. The City has adopted a "*no net loss*" policy relative to wetlands habitats. Where unavoidable impacts would occur as part of a project, the City requires mitigation which would ensure the replacement of wetland habitat to achieve a no net loss. Through consultation with the CDFG, a total of 0.06 acres of wetland habitat creation has been purchased from the Rancho Jamul Mitigation Bank located in San Diego County. To comply with the habitat restoration requirement, a minimum of 0.18 acres of non-native species, including arrundo, pepper trees, and tree tobacco will be removed from an approximately 17 acre property located within the San Diego River. This property is comprised of two adjoining parcels (APN #s 43805216 and 43805217) located south of the proposed project within the San Diego River, adjacent to the east side of Qualcomm Way and west of the I-805.

The City of San Diego implemented the MSCP to provide for a regional mitigation solution for impacts to multiple, rather than single, species and their habitats. As part of the MSCP planning process, a habitat evaluation model has been developed to identify critical biological resources areas with the MSCP's study area. The MSCP was designed to compensate for the regional loss of biological resources throughout the region. Projects that conform with the MSCP as specified

by the MSCP Plan, the City MSCP Subarea Plan, and implementing ordinances, [i.e. Biology Guidelines (July 2002) and ESL Regulations] would generally not result in a significant cumulative impact for those biological resources adequately covered by the MSCP [i.e. vegetation communities identified as Tier I through IV (see City's Biology Guidelines; July 2002)]. Vegetation communities impacted by the proposed project are covered by the MSCP. Additionally, the project's proposed mitigation for impacts to sensitive biological resources is in accord with City requirements. Other projects within the City that impact sensitive biological resources would be required to adhere to the same requirements.

8.3.7 Health and Safety

Health and Safety impacts evaluated in Section 5.7 of this Program EIR are specific to the proposed project and would not lend themselves to a cumulative impacts evaluation. Some of the other projects included in the cumulative impacts evaluation would also result in impacts associated with health and safety and those impacts would also be project and site specific. Mitigation measures, if required, would be implemented on a case-by-case basis. Therefore, the proposed project would not contribute to cumulative impacts associated with health and safety.

8.3.8 Historical Resources

As addressed in Section 5.8, *Historical Resources*, of this Program EIR, due to the project's proposal to disturb areas that have not been affected by on-going mining operations, the Quarry Falls project has the potential to impact subsurface archaeological resources as a result of construction activities. However, implementation of the standard mitigation measures set forth in Section 5.8 would reduce potential impacts to archaeological resources to below a level of significance. Other projects which involve grading of native materials would be conditioned in a similar manner to implement measures which would mitigate potential impacts to archaeological resources. Implementation of required mitigation measures would reduce the potential cumulative loss of important archaeological resources to below a level of significance.

8.3.9 Hydrology

As addressed by Section 5.9, *Hydrology*, of this Program EIR, the project would not extract water from an aquifer, increase runoff, increase flooding, or impact drainage patterns or impact downstream water bodies as a result of altered drainage patterns. Therefore, the project would not contribute to any cumulative hydrologic impact. The project would control drainage and runoff in accordance with City requirements. Similarly, other projects considered in this cumulative analysis would be required to control drainage and runoff in a similar manner. Therefore, no cumulative impacts associated with hydrology would be expected.

8.3.10 Geologic Conditions

As presented in Section 5.10, *Geologic Conditions*, of the EIR, no geologic hazards occur on-site which would result in significant impacts to people at the project site. Additionally, the proposed Quarry Falls project would follow standard construction practices to ensure no geologic impacts would result from project development. The proposed project would not contribute to cumulatively significant impacts related to geologic hazards or soils.

8.3.11 Paleontological Resources

As addressed in Section 5.11, *Paleontology*, of this Program EIR, due to the project's proposal to disturb areas that have not been affected by on-going mining operations and the existing paleontological characteristics of the project site, the Quarry Falls project has the potential to impact paleontological resources as a result of construction activities. However, implementation of the standard mitigation measures set forth in Section 5.11 would reduce potential impacts to paleontological resources to below a level of significance. Other projects which involve grading of native materials would be conditioned in a similar manner to implement measures which would mitigate potential impacts to paleontological resources. Implementation of required mitigation measures would reduce the potential cumulative loss of important paleontological resources to below a level of significance.

8.3.12 Public Utilities

Solid Waste Disposal

The Quarry Falls project would generate large amounts of solid waste through construction and operation of the proposed residential, commercial, mixed use, parks and civic uses. When considered in conjunction with build-out of the City's General Plan, community plan and individual projects evaluated for this cumulative impacts analysis, impacts to solid waste disposal would be considered cumulatively significant.

In accordance with ESD guidelines pertaining to new developments that are expected to generate large amounts of solid waste, a waste management plan would be required for the Quarry Falls project, as well as other development projects in San Diego. The plan would address solid waste management techniques for demolition, construction, and operational activities, including reuse and recycling of materials. To reduce the amount of waste generated by demolition activity, the demolished materials would be sorted at the project site and recycled in accordance with the demolition debris recycling strategies given by the City of San Diego Environmental Services Department. Additionally, the City's Municipal Code requires that new multi-unit residential and commercial/industrial developments provide adequate space for storage and collection of refuse and recyclable materials. The proposed project, as well as other development projects, would be required to comply with this requirement. While direct cumulative impacts associated with solid waste disposal would be mitigated by adherence to City requirements, the project's contribution to cumulatively significant solid waste impacts would remain considerable and significant.

Actions to increase landfill capacity include a City proposal to include the elevation of the active portion of the Miramar Landfill up to 20 feet to add approximately four years of capacity to the landfill. An EIS/EIR for that proposal has been prepared. Also, a proposal to expand the Sycamore Landfill is being processed by the City of San Diego. The City has determined that additional actions would be needed to increase landfill capacity (City of San Diego, General Plan Update, Draft Program EIR). Because there remains some uncertainty about the solid waste disposal capacity for the City to the year 2020, past, present and future projects (including Quarry Falls) within San Diego would contribute to cumulatively significant solid waste impacts.

Energy

During the development of Quarry Falls, the existing 12kv overhead lines on the north side of Friars Road would be converted to underground lines and would provide a source of electricity for the project at Qualcomm Way as well as at Gill Village Way. Electricity would be extended on-site via the existing transmission lines, and no new facilities would be required. Similarly, gas would be provided to the site via the existing gas transmission lines surrounding the project site. No impacts associated with energy facilities are anticipated.

The project would not result in significant direct or cumulative impacts associated with energy use. The project would not use power in excess of that anticipated for the proposed uses, which include a mix of residential, commercial, civic and parks uses. Development of the site could occur generally in four phases spanning a period of 15 years (2008 – 2023). Once developed, the project would use energy for street and parking lot lighting, lighting for open space and park areas, and landscape accent light and sign illumination. Electricity and gas would also be used by residents and users of commercial buildings as described above. Additionally, sustainable design would be incorporated into the project to reduce the project's overall demand for energy. For example, the landscape design of the Quarry Falls project would incorporate trees and shrubbery that are vertical in character. Such vertical landscape design would help shade buildings and contribute to the reduction of the project's use of air conditioning. Use of deciduous trees where appropriate aids in reducing the need for heating, lowering the use of natural gas resources. In addition, large canopy trees are proposed to be planted throughout the project site, contributing to the overall provision of shade and open space areas within the project site.

8.3.13 Water Quality

As discussed in Section 5.13, *Water Quality*, of this Program EIR, development of the Quarry Falls project would involve preparation of a SWPPP that sets forth Best Management Practices (BMPs) to minimize water quality impacts during construction, and preparation of a Water Quality Technical Report that identifies permanent post-construction BMPs for the project. With implementation of Best Management Practices, the proposed project would avoid significant impacts to water quality would not contribute to a cumulatively significant impact to water quality.

8.3.14 Mineral Resources

Of the projects considered for this cumulative impacts analysis, in addition to the Quarry Falls project, only the Mission City project results in impacts associated with mineral resources. Similar to the proposed Quarry Falls project, the Mission City project resulted from mining resources to depletion and developing the Mission City project site as a mixed use project. The EIR prepared for Mission City (LDR. No. 96-0544; SCH No. 96111039) does not specifically address mineral resources but does state that "*Most of the materials suitable for aggregate production have already been excavated from the property . . . the applicant estimates that minable material would be exhausted, and mining extraction activities would cease, before expiration of the current CUP.*" Therefore, cumulative impacts on mineral resources would not be significant, as mineral resources are being mined to depletion.

8.3.15 Global Climate Change

In September 2006, the California Global Warming Solutions Act of 2006 (also known as Assembly Bill 32, or AB 32) was signed into law. Through this legislation, the state of California declared global warming to be "a serious threat to the economic well-being, public health, natural resources, and the environment of California" (Health and Safety Code § 38501), and mandated a reduction of greenhouse gas emissions to 1990 emissions levels by 2020 (Health and Safety Code § 38550). However, the state of California has yet to set a statewide greenhouse gas emissions standard for development. In addition, in February 2007, the global scientific community expressed very high confidence (expressed as a nine out of ten chance of being correct) that global warming is caused by humans, and that global warming will lead to adverse climate change effects around the globe (IPCC 2007).

Greenhouse Gases and Climate Change

The Earth's temperature is regulated by a system commonly known as the "Greenhouse Effect." Naturally occurring gases, primarily water vapor, carbon dioxide (CO_2), methane (CH_4), near-surface ozone (O_3), nitrous oxide (N_2O), and chlorofluorocarbons (CFCs) (known collectively as greenhouse gases, or GHGs), absorb heat radiated from the Earth's surface and prevent it from escaping into space. The Earth's surface temperature would be about 34°C (61°F) colder than it is now if it were not for the natural heat-trapping effect of GHGs like CO_2, CH_4, N_2O, and water vapor (CalEPA 2006a).

Human-related GHG emissions – primarily associated with the burning of fossil fuels and deforestation, as well as off-gassing from agricultural activity and solid waste – have led to an increase in GHG concentrations in the atmosphere, which enhances the Greenhouse Effect by trapping more radiation and causes surface temperatures to increase. The most common human-related GHG emission is CO_2, which constitutes approximately 84 percent of all GHG emissions in California. Some atmospheric CO_2 is absorbed by soil, vegetation, and the ocean. These sources of CO_2 uptake are called carbon sinks.

GHGs vary in their effectiveness at perpetuating the Greenhouse Effect. Because CO_2 is the most prevalent GHG, GHG emissions are often expressed in terms of CO_2-equivalent emissions, in order to account for GHG pollutants' different contributions to global climate change. Human-related GHG emissions' relative contribution to global warming are: CO_2 (53 percent); CH_4 (17 percent); O_3 (13 percent); N_2O (12 percent); and CFCs (5 percent).

Climate change is a global problem, and GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Worldwide, the state of California ranks as the 12th to 16th largest emitter of CO_2 (the most prevalent GHG), and is responsible for approximately two percent of the world's CO_2 emissions (CEC 2006a). Approximately 41 percent of California GHG emissions in 2002 were related to transportation; 23 percent to industrial activities; 20 percent to electric power; 8 percent to agriculture and forestry; and 8 percent to other sources, such as residential housing (CalEPA 2006a).

Projections Regarding the Effects of Global Climate Change on California

The California Climate Change Center has attempted to estimate how temperature increases might impact the people, economy, and environment of California under three warming scenarios, based on the estimated level of GHG emissions (low, medium-high, and high) (CCC 2006a). Under various GHG emissions scenarios, the global warming effects in California could include the following impacts:

Public Health. Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources. A vast network of man-made reservoirs and aqueducts capture and transport water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada mountain snowpack to supply water during the dry spring and summer months. Rising temperatures could reduce spring snowpack by 30 to 90 percent, depending on the emissions scenario, increasing the risk of summer water shortages.

How much snowpack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. Loss of snowpack would pose challenges to water managers, hamper hydropower generation, and restrict or eliminate skiing and other snow-related recreational activities.

The state's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major state fresh water supply.

Agriculture. Increased GHG emissions are expected to cause widespread changes to the agricultural industry by reducing the quantity and quality of agricultural products statewide. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise. Global warming may reduce current water supply by up to 25 percent. Crop growth and development will change, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate O_3 pollution, which makes plants more susceptible to disease and pests, and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops. Accordingly, rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds, and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes. Global warming is expected to intensify the risk of wildfire, and alter the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30 percent toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90 percent.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems are expected to decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

Rising Sea Levels. Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

Regulatory Setting

Federal Plans, Policies, Regulations, and Laws. The federal government began studying the phenomenon of global warming as early as 1978 with the National Climate Protection Act, 92 Stat. 601, which required the President to establish a program to "assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications." The 1987 Global Climate Protection Act, Title XI of Pub. L. 100-204, directed the United States Environmental Protection Agency (USEPA) to propose a "coordinated national policy on global climate change," and ordered the Secretary of State to work "through

the channels of multilateral diplomacy" to coordinate efforts to address global warming. Further, in 1992, the United States ratified a nonbinding agreement among 154 nations to reduce atmospheric GHGs.

More recently, in *Massachusetts v. EPA* (April 2, 2007), the United State Supreme Court held that greenhouse gases fall within the Clean Air Act's definition of an "air pollutant," and directed the USEPA to consider whether greenhouse gases are causing climate change. If so, the USEPA must regulate greenhouse gas emissions from automobiles under the Clean Air Act. As of this writing, USEPA has yet to begin rulemaking proceedings to consider whether human greenhouse gas emissions are contributing to climate change.

In addition, Congress has ~~taken steps to~~ increased the corporate average fuel economy (CAFE) of the U.S. automotive fleet. In ~~mid-June~~December 2007, ~~the U.S. Senate approv~~President Bush signed a bill ~~that would raise~~raising the minimum average miles per gallon ~~fleetwide~~ for cars, sport utility vehicles, and light trucks to 35 miles per gallon by 2020. This increase in CAFE standard ~~would~~ will create a substantial reduction in GHG emissions from automobiles, which is the largest single emitting GHG sector in California. ~~Although this legislation is not final, it indicates a trend towards more fuel-efficient autos.~~

As of this writing, however, there are no adopted federal plans, policies, regulations or laws setting a mandatory limit on GHG emissions. Further, as noted above, USEPA has not finalized its evaluation in the wake of *Massachusetts v. EPA*.

California State Plans, Policies, Regulations, and Laws. In the past year, California has distinguished itself as a national leader in efforts to address global climate change by enacting several major pieces of legislation, engaging in multi-national and multi-state collaborative efforts, and preparing a wealth of information on the impacts associated with global climate change.

Assembly Bill 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code § 38500 et seq.). In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. In general, AB 32 directs the California Air Resources Board (ARB) to do the following:

- On or before June 30, 2007, ARB shall publish a list of discrete early action measures for reducing GHG emissions that can be implemented by January 1, 2010;
- By January 1, 2008, establish the statewide GHG emissions cap for 2020, based on ARB's calculation of statewide GHG emissions in 1990 (an approximately 25 percent reduction in existing statewide GHG emissions);
- Also by January 1, 2008, adopt mandatory reporting rules for GHG emissions sources that "contribute the most to statewide emissions" (Health & Safety Code § 38530);
- By January 1, 2009, adopt a scoping plan that indicates how GHG emission reductions will be achieved from significant GHG sources through regulations, market mechanisms, and other strategies;

- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020; and
- On January 1, 2012, ARB's GHG emissions regulations become operative.
- On January 1, 2020, achieve 1990 levels of GHG emissions.

In a December 2006 report, ARB estimated that California emitted between 425 and 468 million metric tons of CO_2 in 1990. In December 2007, ARB finalized 1990 emissions at 427 million metric tons of CO2. Between 1990 and 2020, the California Department of Finance (DOF 2007) estimates that the state's population will have grown from 29,758,213 in 1990 to ~~43,851,741~~44,135,923 in 2020 (approximately a ~~47.4~~48.3 percent increase). Using these population figures and ~~conservatively assuming that~~ ARB's 1990 baseline GHG emissions ~~will be set at~~of ~~425~~ 427 million metric tons of CO_2, it is possible to calculate a per capita emission figures for 1990 and 2020. In 1990, Californians emitted approximately 14.35 metric tons per person. Accordingly, using the DOF population estimate for 2020, Californians will reduce the per person CO_2 emissions to 9.67 metric tons (a per capita reduction of approximately 32.~~1~~ 6 percent).

Instead of applying a per capita reduction, however, AB 32 takes into account the relative contribution of each source or source category to protect adverse impacts on small businesses and others by requiring ARB to recommend a *de minimis* threshold of GHG emissions below which emissions reduction requirements would not apply. AB 32 also allows the Governor to adjust the deadlines mentioned above for individual regulations or the entire state to the earliest feasible date in the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm.

ARB "Early Action Measures" (June 30, 2007). On June 21, 2007, the ARB approved its early action measures to address climate change, as required by AB 32. The three measures include: (1) a low-carbon fuel standard, which will reduce the carbon-intensity in California fuels, thereby reducing total CO_2 emissions; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance through the restriction of "do-it-yourself" automotive refrigerants; and (3) increased CH_4 capture from landfills through the required implementation of state-of-the-art capture technologies.

ARB Mandatory Reporting Regulations (December 2007). Under AB 32, ARB propounded regulations to govern mandatory greenhouse gas emissions reporting for certain sectors of the economy, most dealing with approximately 94 percent of the industrial an commercial stationary sources of emissions. Regulated entities include electricity generating facilities, electricity retail providers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 metric tons of CO2 from stationary source combustion.

Senate Bill 97 (2007) (Public Resources Code § 21083.05). By July 1, 2009, the Governor's Office of Planning and Research (OPR) is directed to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, as required by the California Environmental Quality Act. The Resources Agency is required to certify and adopt these guidelines by January 1, 2010. OPR is required to periodically update these guidelines as ARB implements AB 32. In addition, SB 97 states that the failure to include a discussion of greenhouse gas emissions in any CEQA document for a project funded under the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or projects funded under the Disaster Preparedness and Flood Prevention Bond Act of 2006 shall not be a cause of action under CEQA. This last provision will be repealed on January 1, 2010.

Executive Order S-01-07 (2007). Executive Order S-01-07 calls for a reduction in the carbon intensity of California's transportation fuels by at least 10 percent by 2020. As noted above, the low-carbon fuel standard (LCFS) was adopted by ARB as one of its three "early action measures" on June 21, 2007.

Senate Bill 1368 (2006) (Public Utilities Code §§ 8340-41). SB 1368 required the California Public Utilities Commission (PUC) to establish a "greenhouse gas emission performance standard" by February 1, 2007, for all electricity providers under its jurisdiction, including the state's three largest privately-owned utilities (Pub. Res. Code § 8341(d)(1). These utilities provide approximately 30 percent of the state's electric power. After the PUC acted, the California Energy Commission (CEC) adopted a performance standard "consistent with" the PUC performance standard and applied it to local publicly-owned utilities on May 23, 2007 (over one month ahead of its June 30, 2007 deadline). Cal. Pub. Res. Code § 8341(e)(1). However, the California Office of Administrative Law (OAL) found four alleged flaws in the CEC's rulemaking. The CEC overcame these alleged flaws and adopted reformulating regulations in August 2007.~~As of this writing, the CEC is addressing the OAL's concerns in a renewed public process.~~

Senate Bill 107 (2006). Senate Bill 107 (SB 107) requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison and San Diego Gas and Electric, to generate 20 percent of their electricity from renewable sources by 2010. Previously, state law required that this target be achieved by 2017.

Western Regional Climate Action Initiative (Arizona, British Columbia, California, Montana, Manitoba, New Mexico, Oregon, Quebec, Utah, Washington) (2007). Acknowledging that the western states already experience a hotter, drier climate, the Governors of the foregoing states have committed to three time-sensitive actions: (1) by August 26, 2007, to set a regional goal to reduce emissions from the states collectively, consistent with state-by-state goals; (2) by August 26, 2008, to develop "a design for a regional market-based multi-sector mechanism, such as a load-based cap and trade program, to achieve the regional GHG reduction goal;" and (3) to participate in a multi-state greenhouse gas registry, "to enable tracking, management, and crediting for entities that reduce GHG emissions, consistent with state GHG reporting mechanisms and requirements."

Executive Order S-3-05 (June 1, 2005). Executive Order S-3-05 calls for a reduction in GHG emissions to 2000 levels by 2010; 1990 levels by 2020; and for an 80 percent reduction in GHG emissions below 1990 levels by 2050. It also directs the California Environmental Protection Agency (CalEPA) to prepare biennial science reports on the potential impact of continued global warming on certain sectors of the California economy.

California's Renewable Energy Portfolio Standard Program (2005). In 2002, California established its Renewable Energy Portfolio Standard Program, which originally included a goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent by 2017. The state's most recent 2005 Energy Action Plan raises the renewable energy goal from 20 percent by 2017, to 33 percent by 2020.

Title 24, Part 6, California Code of Regulations (2005). In 2005, California adopted new energy efficiency standards for residential and nonresidential buildings in order to reduce California's energy consumption. This program has been partially responsible for keeping California's per capita energy use approximately flat over the past 30 years.

Assembly Bill 1493 (2002) (Health and Safety Code § 43018.5). Assembly Bill 1493 (AB 1493) required ARB to develop and adopt the nation's first greenhouse gas emission standards for automobiles. ARB's regulations are currently stayed pending federal litigation~~,~~. Not only have litigants challenged their legality in federal court, but also USEPA denied California's request for a Clean Air Act waiver to implement its regulations. As of this writing, California and other states who seek to adopt California's greenhouse gas emissions standards for automobiles are challenging USEPA's denial in federal court.~~and while USEPA considers California's application under the Clean Air Act for USEPA's permission to enact the regulations.~~

Climate Action Registry (2001). California Senate Bills 1771 and 527 created the structure of the California Climate Action Registry (or the Registry), and former Governor Gray Davis signed the final version of the Registry's enabling legislation into law on October 13, 2001. These bills establish the Registry as a non-profit entity to help companies and organizations establish greenhouse gas emissions baselines against which future greenhouse gas emission reduction requirements could be applied. Using any year from 1990 forward as a base year, participants can record their annual greenhouse gas emissions with the Registry. In return for this voluntary action, the State of California promises to offer its "best efforts" to ensure that participants receive consideration for their early action if they are subject to any future state, federal, or international emissions regulatory scheme.

City of San Diego Local Plans and Programs

City of San Diego Sustainable Community Program and Climate Protection Action Plan (2002). On January 29, 2002, the San Diego City Council unanimously approved the San Diego Sustainable Community Program. Included in this program are: the City's GHG Emission Reduction Program, which sets a GHG emissions reduction target of 15 percent below 1990 levels by 2010; establishment of a scientific *ad hoc* Advisory Committee to expand the GHG Emission Reduction Action Plan for the City organization and broaden the scope to include community

actions; membership in the International Council for Local Environmental Initiatives (ICLEI) City for Climate Protection (CCP) Campaign to reduce GHG emissions; and charter membership in the California Climate Action Registry.

City of San Diego Climate Protection Action Plan (2005). As noted above, the City's Climate Protection Action Plan (2005) calls for the City to reduce its GHG emissions to 15 percent below 1990 levels by 2010. According to the action plan, of the GHG emissions in the City (including all residential, business, and commercial sectors within the City limits) the transportation sector (i.e., vehicle miles traveled) is responsible for approximately one-half (51 percent) of GHG emissions, followed by energy (electricity and natural gas) consumption (29 percent), and solid waste/landfills (20 percent). Overall, City residents and businesses are responsible for approximately 98 percent of GHG emissions (15.3 million tons) within the City, while municipal government operations are responsible for the remaining two percent (0.2 million tons) (City of San Diego 2005).

U.S. Mayors Climate Protection Agreement (2005). The Mayor of San Diego has signed on to the U.S. Mayors Climate Protection Agreement, which pledges to take local action to reduce GHG emissions by 7 percent below 1990 levels by 2012, in accordance with the Kyoto Protocol.

Through AB 32, the state's goal is to return to 1990 emissions levels by 2020, which, if realized, would contribute towards the stabilization of the concentration of CO_2 in the atmosphere, thereby reducing the effect of global warming. However, AB 32 will not be fully implemented ~~under~~ until January 1, 2012.

Global climate change is a global issue caused by GHG emissions all over the world. The proposed project's contribution to global GHG emissions is so small that, if viewed in isolation to the rest of the world's emissions, the proposed project could not have a direct impact on global climate change. For example, the entire sum of California's GHG emissions for a population of approximately 37 million residents only accounts for approximately two percent of the world's GHG emissions. The Quarry Falls project would result in an approximate population of 8,317, which represents approximately 0.0002 percent of California's population. Even when compared to California's GHG emissions, the Quarry Falls project's individual contribution is so small as to be insignificant. Therefore, for the purposes of this Program EIR, global climate change impacts will be considered at the cumulative level.

GHG emissions associated with the project were estimated using CO_2 emissions as a proxy for all GHG emissions. This is consistent with the reporting protocol of the California Climate Change Registry. The methodology suggested by the Greenhouse Gas Protocol (GHG Protocol) was used to account for the project's estimated contribution to GHG emissions. The GHG Protocol is a product of the World Business Council for Sustainable Development and the World Resources Institute, and is designed to account for those GHG emissions that are within the project's operational control. For a more detailed discussion of the methodology used to calculate the project's GHG emissions, see Appendix C - *Air Quality Technical Report.*

Greenhouse Gas Emission from Existing Uses

The project site is occupied by an on-going mining operations approved under a conditional use permit with no specific expiration date. The site is almost entirely devoid of vegetation due to previous mining activities and the ongoing implementation of the reclamation plan. This reclamation plan calls for the removal of approximately 2.4 million cubic yards of fill material to achieve the approved reclamation plan final grade. Therefore, there are already GHG emissions being generated at the project site. GHG emissions for the existing site must first be estimated for the following activities:

- Ongoing onsite mining and reclamation activities;
- Ongoing concrete and asphalt batch plant operations, including importing a variety of mixtures for the plants and truck trips; and
- One-time export of mining fill material.

While the existing CUP does not have an expiration date, if the proposed Quarry Falls project is implemented, mining operations would cease in about 2011 with final reclamation occurring no later than 2013. Emissions associated with these activities result from grading, compaction, and energy use by the existing rock plant, and are estimated as annual emissions of 8,717 tons (7,909 metric tons) of CO_2. The asphalt and concrete plants are proposed to be relocated to the southeast corner of the site and continue until 2022. Estimated ongoing batch plant operations result in annual emissions of 11,002 tons (9,982 metric tons) of CO_2. The approved Reclamation Plan would result in exporting 2.4 million cubic yards of fill material via truck trips to and from the site. An estimate of the emissions associated with exporting the fill material is 2,197 tons (1,993 metric tons) of CO_2 annually. Therefore, the existing uses on the project site would generate a maximum of approximately 21,916 tons (19,884 metric tons) of CO_2 annually. Regarding the export of fill material only, these emissions would occur for approximately four years and result in total cumulative emissions of approximately 8,788 tons (7,989 metric tons) of CO_2.

Project-Related Greenhouse Gas Emissions

Four sources of GHG emissions are considered to be under the Quarry Falls project's operational control: (1) residential and commercial GHG emissions; (2) water consumption-related GHG emissions; (3) vehicle GHG emissions; and (4) project construction emissions. The first three emissions sources are on-going emissions while project construction emissions are one-time emissions.

Residential and Commercial GHG Emissions

Total CO_2 per year associated with energy use for the project is estimated at 30,461 tons per year. This estimate is based on the following calculations for the various land uses proposed by the project:

Residential: Using average performance figures for Southern California residences from the CEC (CEC 2004), at full-build out the 4,780 dwelling units in the Quarry Falls project would contribute an estimated 17,599 tons (15,968 metric tons) of CO_2-equivalent greenhouse gases per year, based on emissions associated with electricity usage and natural gas consumption.

Commercial Office and Retail Uses: Based on estimates from the South Coast Air Quality Management District (SCAQMD) for commercial office and retail developments, emissions from the project's office and retail development will contribute 3,636 and 3,859 tons (3,299 and 3,501 metric tons) of CO_2-equivalent greenhouse gases per year, respectively.

School: Based on estimates from the South Coast Air Quality Management District (SCAQMD) for schools, emissions from the project's K-12 school, if constructed, will contribute 819 tons (743 metric tons) of CO_2-equivalent greenhouse gases per year.

Water Consumption-Related GHG Emissions

Water-use and energy consumption are often closely linked. Based on water demand estimates for the project, the energy consumption in conjunction with project water usage is estimated to emit approximately 4,519 tons (4,100 metric tons) of CO_2-equivalent greenhouse gases per year.

Vehicle GHG Emissions

Project-related vehicle emissions are estimated by multiplying the number of average daily trips (ADT) by the estimated length of each trip. SANDAG estimates the average trip length for Quarry Falls in 2030 to be 5.82 miles. The project's co-location of residential and retail/office/commercial uses has the potential to reduce both average daily trips and vehicle miles traveled; however, the Quarry Falls *Traffic Impact Study* uses the most conservative estimate for trip generation. Vehicle-related GHG emissions would remain the project's most significant source of GHG emissions.

Based on the project's ADT and estimated trip length, the EMFAC2007 model estimates the project's vehicle-related GHG emissions as set forth in Table 8-2, *Vehicle Greenhouse Gas Emission*, below.

Table 8-2.
Vehicle Greenhouse Gas Emissions

Project Phase	Greenhouse Gas Emissions (metric tons/year)			Total CO_2 Equivalent Emissions (metric tons/year)
	CO_2	N_2O	CH_4	
Phase 1	~~16,572~~15,646	3	3	
Phases 1 and 2	~~37,431~~35,107	7	6	
Phases 1, 2, and 3	~~43,149~~40,456	8	7	
Phases 1, 2, 3, and 4	~~49,280~~46,075	9	~~9~~8	
Total	**~~49,280~~46,075**	**9**	**~~9~~8**	
Global Warming Potential (compared to CO_2)	1	310	21	
Total CO_2 Equivalent Emissions (tons/year)	**~~49,280~~46,075**	**2,790**	**~~189~~168**	**~~52,259~~49,033**

As presented in Table 8-2, the project is estimated to emit 52,259 metric tons of CO_2-equivalent emissions from vehicles per year.

One-time Project Construction Emissions

One-time emissions from construction of the project have been estimated based upon the four project phases. Emission sources include on-site equipment and activities, construction truck trips for the delivery of materials, and construction worker trips. Approximately 17,776 tons (16,128 metric tons) of CO_2 would be generated over the build-out of the project.

However, these one-time construction emissions are entirely off-set by the amendment to the reclamation plan and conditional use permit. Instead of trucking 2.4 million cubic yards of fill from the project site, that material will be retained on the site, thereby avoiding approximately 400 truck trips per day for approximately four years, as well as the early termination of mining operations and implementation of the reclamation plan. These modifications result in a maximum net decrease of 6,436 tons (5,839 metric tons) of GHG emissions per year. On a cumulative basis, assuming rock crushing and mining activities terminate three years sooner due to the development of Quarry Falls, an additional 11,754 tons (10,685 metric tons) of GHG emissions would be avoided, which combined with the decrease of 8,788 tons (7,989 metric tons) of GHG emissions per year from retaining fill material on-site, results in a one-time reduction of 20,542 tons (18,674 metric tons), which more than offsets the one-time 17,776 tons (16,128 metric tons) of GHG emissions from the construction of the Quarry Falls project.

Ongoing Project-Related GHG Emissions

In order to estimate the total project-related GHG emissions at build-out, it is necessary to consider what the project operations would generate, including residential and commercial GHG emissions, water consumption-related GHG emissions, vehicle GHG emissions, and project construction emissions. The results of this calculation are presented in Table 8-3, *Summary of Estimated Operational Greenhouse Gas Emissions*, below.

Table 8-3.
Summary of Estimated Operational Greenhouse Gas Emissions
(metric tons)

	CO_2	N_2O	OH_4	TOTAL
Electricity Usage Emissions	16,827	0.08	0.14	
Natural Gas Usage Emissions	6,638	0.01	0.74	
Water Usage Emissions	4,094	0.02	0.03	
Vehicular Emissions	~~49,280~~46,075	9	~~9~~8	
Total	**~~76,839~~73,633**	**9.11**	**~~9~~8.91**	
Global Warming Potential (compared to CO_2)	1	310	21	
Total CO_2 Equivalent Emissions	**~~76,839~~73,633**	**2,824**	**~~208~~187**	**~~79,871~~76,644**

Therefore, as summarized in Table 8-3, *Summary of Estimated Operational Greenhouse Gas Emissions*, total project-related GHG emissions would be ~~79,871~~76,644 metric tons of CO_2-equivalent emissions per year.

The latest SANDAG population forecast for Mission Valley estimates 1.74 residents per household. Using the SANDAG forecast, Quarry Falls will generate 8,317 residents at build-out for 4,780 residential units.

On a per capita basis, this will result in per person emissions of 9.~~6~~22 metric tons annually, as shown in Table 8-4, *Per Capita Operational GHG Emissions*, below.

Table 8-4.
Per Capita Operational GHG Emissions

	CO2 Equivalent Emissions (metric tons)
Electricity Usage Emissions	16,853
Natural Gas Usage Emissions	6,658
Water Usage Emissions	4,100
Vehicular Emissions	~~52,259~~49,033
Total	**~~79,871~~76,644**
Forecasted Total Project Residents	**8,317**
Annual Per Capita Emissions: total GHG emissions/total project residents (in metric tons)	**9.~~6~~22**

As shown in Table 8-4, build-out of Quarry Falls would generate 9.~~6~~ 22 metric tons of GHG emissions per project resident per year, exclusive of the additional, unrecognized GHG emissions reduction benefits discussed below. This figure falls below the most conservative estimate of AB 32's emissions target for 2020, which can be estimated at 9.~~7~~ 67 metric tons of GHG emissions per person per year.

Additional, Unrecognized GHG Emission Reductions Associated with the Project

The discussion above does not quantify GHG emission reductions associated with the project from four sources: (1) carbon sequestration due to project landscaping; (2) reduced GHG-emissions associated with the state's implementation of SB 107 and more aggressive energy efficiency requirements for new construction; (3) ~~foreseeable~~ reduced GHG-emissions from automobiles associated with the increased federal CAFÉ standards to 35 miles per gallon, which will take effect by 2020; and (4) project design features that reduce the project's GHG emissions. As described above, at this time, the project site is almost entirely devoid of vegetation. The project will implement a landscaping plan that plants many trees, which will take up an uncalculated amount of project-related CO_2 emissions. (USDA 2000). In addition, SB 107 mandates that SDG&E must generate 20 percent of its electricity with renewable sources by 2010. As of this writing, SDG&E produces approximately 8% of its electricity with renewable sources. This 150 percent increase in renewable generating capacity will further reduce per capita GHG emissions associated with project-related electrical use and water usage. The analysis used conservative energy efficiency figures that will not be as stringent as those in place when the project is constructed. ~~Recent federal interest in increasing federal CAFÉ mileage makes it reasonably foreseeable that~~ Congress ~~will~~ has mandated more efficient automobiles during the project's lifetime (35 miles per gallon standard for fuel efficiency for cars, sport utility

vehicles, and light trucks by 2020), which will also reduce project-related GHGs associated with automobile trips. In addition, the Governor of California has signed Executive Order S-01-07, calling for a reduction in carbon content in fuels in California, the goal of which is to reduce carbon intensity in fuels by 10 percent by the year 2020. Therefore, the calculation above is a conservative analysis, based on current information and science available.

Project Features that Reduce the Project's GHG Emissions

As designed, the proposed Quarry Falls project incorporates a significant number of project design features (PDFs), which have the effect of reducing the number and length of automobile trips, and reducing energy consumption through energy and water efficient design.

- Provide a mix of uses and residential densities that implement the City of Villages Strategy by focusing growth into transit-oriented mixed-use activity centers that promote increased walking, bicycling, and use of public transit.

- Seek certification as a Leadership in Energy and Environmental Design – Neighborhood Development (LEED-ND) pilot program project which integrates the principles of smart growth, new urbanism, and green building.

- Provide street trees within public parkways and medians (where design permits), in surface parking lots, and throughout finger parks to reduce the "heat island" effect.

- Co-location of residential and retail/office/commercial uses, resulting in the potential for reduced trips as residents and employees are provided alternatives to using the automobile as the primary method for daily trips.

- Location proximate to a light-rail trolley line, which will be linked to the project by a pedestrian bridge that spans Friars Road and which provides a more efficient alternative to automobile travel.

- Require the majority of indoor residential plumbing products to carry the Environmental Protection Agency's (EPA) WaterSense certification.

- Require the installation of automatic bathroom sink features and waterless urinals in public facilities.

- Require the majority of indoor residential appliances to carry the Environmental Protection Agency's (EPA) ENERGYSTAR® certification.

- Require all indoor and outdoor lighting for private and public projects to be energy efficient.

- Require high-efficiency irrigation equipment such as evapotranspiration controllers, soil moisture sensors and drip emitters for all projects that install separate irrigation water meters.

- Recycle a minimum of 75 percent of unused and waste construction materials.
- Provide locations within the project for the implementation of a car sharing service.
- Provide electric car plug-in stations in public parking areas.
- Require residential buildings to be designed with operable windows oriented to take advantage of the prevailing winds to naturally ventilate indoor spaces.
- Require installation of vertical landscape elements such as trees, large shrubs and climbing vines to shade southern and western building facades to reduce heating in summer and increase solar heat gain in winter months.
- Require project-wide recycling, for single-family, multi-family, commercial, and retail establishments.
- Construct a pedestrian bridge across Friars Road to enable access to the Rio Vista Trolley Station to provide trolley access within a 15-minute walk to all residential homes.
- Work with the Metropolitan Transit System to make discounted trolley/bus passes available for project residents and employees.
- Provide a shuttle system for residents and employees that connects the project to trolley and bus stations.
- Require light colored/reflective roofing materials.
- Incorporate sun-shade patterns, prevailing winds, and other natural, passive cooling and heating sources into project design.

This analysis identifies and quantifies GHG emissions associated with the Quarry Falls project. These emissions are associated with energy use, natural gas consumption, water use, and automobile travel. At build-out, the project will emit 79,871 metric tons of GHGs, or 9.60 metric tons per resident.

The project would be required to comply with AB 32 when it is fully implemented. AB 32 would provide statewide guidance as to how to reduce GHG emissions to 1990 levels by 2020. Although they have yet to be propounded, the CEQA Guidelines to be prepared by OPR pursuant to SB 97 (codified at Public Resources Code § 21083.05) by July 1, 2009, may provide guidance as to how to address GHG emissions in CEQA documents. At this time, however, no significance threshold has been set for cumulative GHG emissions. In advance of the implementation of AB 32, the project incorporates many project design features that would reduce energy use, natural gas consumption, water use, and vehicle use, and correspondingly reduce the project's GHG emissions.

Even assuming that the 2020 GHG goal expressed in AB 32 was implemented immediately, it is estimated that the build-out of Quarry Falls would result in per capita emissions at a level below ~~the most conservative estimation of~~ AB 32's ultimate per capita emissions target. The Quarry Falls project will emit approximately 9.~~6~~ 22 metric tons of GHGs per resident per year, which is less than the 9.~~7~~ 67 metric tons of GHGs per person per year under AB 32. Accordingly, it is estimated that the project's residents would be emitting less than their proportional share of GHG emissions under AB 32. Therefore, the proposed project would be consistent with the goals of AB 32 to reduce GHG emissions to at or below 1990 levels by 2020 and the project's impacts on global climate change would not be significant.

In addition to the affect that the proposed project could have on global climate change, the effects of global climate change can also impact future residents of Quarry Falls. The project site is not susceptible to rising sea levels, forest fires, agricultural impacts, and other locational impacts. Furthermore, the City of San Diego's temperate climate would prevent heat-related impacts from being significant. The project is dependent on sources of water supply that could be negatively impacted by global climate change due to changes in precipitation patterns and in the Sierra Nevada snowpack. The City of San Diego's Water Supply Assessment demonstrates, however, that the City has an adequate log-term plan to supply water to the project. *See* Appendix L1, *Quarry Falls Water Supply Assessment*, and Appendix L2, *supplement to Quarry Falls Water Supply Assessment*. Furthermore, the City has already taken steps to insulate local water supply against such reductions by investing in recycled water facilities and nationally-recognized conservation programs. *See* Section 5.12, Public Utilities. The City is also exploring additional sources of supply through desalination of brackish groundwater and water transfers. Accordingly, the impact of global climate change on the project would not be significant.

9.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

Section 15128 of the State CEQA Guidelines requires an EIR to contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR. Pursuant to Section 15128 of the CEQA Guidelines, the following issue areas were determined not to have the potential to cause adverse effects, and therefore have not been addressed in detail in the EIR.

9.1 AGRICULTURAL RESOURCES

The proposed project site is currently the location of an approved and on-going sand and gravel mining operation and does not contain land that is designated as prime agricultural soils by the Soils Conservation Service, nor does it contain prime farmlands designated by the California Department of Conservation. The site is not subject to, nor is it near, a Williamson Act contract site pursuant to Sections 51200-51207 of the California Government Code. Therefore, impacts associated with agricultural resources are not considered significant.

The project area is urban and not designated as a prime farmland, unique farmland, or a farmland of statewide importance. No agricultural lands are located on or adjacent to the site. The site is designated as developed land and is not designated as farmland under the *Farmland Mapping and Monitoring Program* of the California Department of Conservation or the City of San Diego's Progress Guide and General Plan. Thus, no impact on important farmlands would occur with the proposed project.

10.0 ALTERNATIVES

In accordance with Section 15126.6(a) of the CEQA Guidelines, an EIR must contain a discussion of "a range of reasonable alternatives to a project, or the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Section 15126.6(f) further states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Thus, the following discussion focuses on project alternatives that are capable of eliminating significant environmental impacts or substantially reducing them as compared to the proposed project, even if the alternative would impede the attainment of some project objectives, or would be more costly. In accordance with Section 15126.6(f)(1) of the State CEQA Guidelines, among the factors that may be taken into account when addressing the feasibility of alternatives are: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

As required in CEQA Guidelines Section 15126.6(a), in developing the alternatives to be addressed in this section, consideration was given regarding an alternative's ability to meet most of the basic objectives of the proposed project. These objectives are presented Section 3, *Project Description*, of this EIR and are re-printed below for reference:

Develop a community that responds to the natural and created attributes of the project site by placing primary focus on the creation of an interactive system of public parks and open space;

Provide "for sale" and "for rent" multi-family and single-family residential units to serve a variety of income levels for residents of San Diego;

Enhance employment opportunities for the City through the creation of office/business parks that are fully integrated into the Quarry Falls community;

Provide a mixed-use area, with neighborhood, community and lifestyle retail commercial uses and residential development, to serve Quarry Falls and the surrounding areas;

Encourage pedestrian activity through a logical connection of trails, sidewalks, and bicycle facilities;

Unify land uses by setting forth design guidelines and an implementation program;

Design individual development projects that positively contribute to the character of the City of San Diego and reinforce community identities through control of project design elements such as architecture, landscaping, walls, fencing, lighting, and signage;

Demonstrate high quality design and construction;

Develop an environment that is visually attractive and efficiently and effectively organized, including visually pleasant landscaping;

Provide for a long-range comprehensive planning approach to the project site's development which cannot be accomplished on a parcel-by-parcel basis;

Attract commercial and office uses to serve community and regional needs;

Develop land uses that would serve as a revenue source for the City of San Diego through sales taxes, property taxes, and project-related fees;

Encourage sustainability in design to foster "green" development that reduces project energy needs and water consumption;

Improve the water quality of site run-off through sustainable design features, such as a natural bioswale.

Employ best management practices that result in improved storm water quality.

Phase development with respect to the logical extension of infrastructure and services; and

Allow for the option to construct a school to serve children within Quarry Falls and from other areas in Mission Valley, as well as areas served by the San Diego Unified School District.

Based on the analysis contained in Section 5.0 of this EIR, the proposed project would result in significant impacts to: Land Use (direct and cumulative), Traffic/Circulation (direct and cumulative), Visual Effects and Neighborhood Character (direct and cumulative), Air Quality (direct and cumulative), Noise (direct), Biological Resources (direct), Health and Safety (direct), Historical Resources (direct), , Paleontological Resources (direct) and Public Utilities (direct and cumulative). Mitigation measures have been identified which would reduce direct impacts to below a level of significance for all significant impacts except Land Use (traffic/circulation), Traffic/Circulation, and Visual Effects and Neighborhood Character. Cumulative impacts associated with Land Use (traffic/circulation), Traffic/Circulation, Visual Effects and Neighborhood Character, and Public Utilities (solid waste) would not be fully mitigated by the project.

The alternatives identified in this analysis are intended to further reduce or avoid significant environmental impacts associated with the proposed project. In accordance with Section 15126.6(c) of the State CEQA Guidelines, the following analysis of project alternatives is preceded by a brief description of the rationale for selecting the alternatives to be discussed. In addition, alternatives are identified that were considered but rejected.

10.1 ALTERNATIVES CONSIDERED BUT REJECTED

The following design alternatives were considered for the proposed project. These alternatives were rejected from further consideration due to a lack of meeting most of the project objectives or the infeasibility of the alternative.

10.1.1 Alternative Land Use Plan

Conventional development of the project site with solely residential land uses or solely commercial land uses has not been considered for the project. Such alternative land use plans would not implement the Mission Valley Community Plan's designation for a multiple use project on the site and would not allow the site to develop as an Urban Village, with integrated land uses and enhanced pedestrian and bicycle access proximate to transit opportunities, as envisioned by the City of Villages Strategy and the Strategic Framework Plan.

There are also numerous land use plans with a variety of land use mixes that could be considered for the project site which would meet most of the project objectives and the intent of the community plan. Different land use mixes at similar intensities as the proposed project would not eliminate the significant impacts associated with development of the site and have not been considered. A *Reduced Density Project* alternative that includes multiple uses but which would

reduce traffic impacts has been considered in this Program EIR and is presented as Alternative 3.

10.1.2 Alternative Locations

The City of San Diego Housing Element 2005-2010, adopted December 5, 2006, references SANDAG regional land use data that indicates that only four percent of San Diego's land remains vacant and developable, exclusive of sand and gravel activities that may not become available until 2010. Given the limited amount of vacant developable land remaining in the City, future housing will occur primarily on non-vacant sites. There are no known sites comparable in size to the project, such as the former General Dynamics facility in Kearny Mesa, available for redevelopment.

The project proposes an integrated mixed-use project on approximately 230.5 acres within the Mission Valley community. There are only two other areas within Mission Valley of sufficient size that could develop in a manner similar to that proposed by the Quarry Falls project. These are the Levi-Cushman Specific Plan area, located in the western portion of Mission Valley, and the Qualcomm Stadium site, located east of the Quarry Falls project site. The Levi-Cushman Specific Plan area is not owned by the same property owner as Quarry Falls and has been approved for mixed-use development. It can develop in the future under the adopted Specific Plan. The Qualcomm Stadium site is owned by the City of San Diego and encompasses approximately 166 acres. The Mission Valley Community Plan includes the potential re-development of that site to include a community park. The Mission Valley Community Plan does not show the Qualcomm site for development with multiple uses; however, the Strategic Framework Element does identify the Qualcomm Stadium as a potential site for an Urban Village.

While the Qualcomm site was identified as a good location for a potential Urban Village and could potentially develop with land uses and intensities similar to the proposed project, it is not owned by the same property owner as Quarry Falls. Private development similar to what is proposed by the Quarry Falls project would require approval by the City Council. Therefore, because existing or planned developments have already been considered for alternative sites and the alternative sites are owned by others, the alternative locations would not be available for the Quarry Falls project.

There are several existing sand and gravel sites in the City, located in Mission Gorge and Carroll Canyon. These sites are anticipated to develop with housing and a mix of retail and commercial uses once mining resources have been depleted and reclamation has occurred. These sites do not benefit from the same level of transit infrastructure that serves Mission Valley. In addition, these sites are actively pursuing entitlements for future development to a mix of uses, making acquisition of the property beyond the financial resources of the owners of Quarry Falls.

Otay Mesa is currently undergoing an update to the community plan to determine the appropriate mix of uses. Approval of this plan (or similar alternatives to the plan) may provide opportunities for future residential and mixed use development. The majority of land is privately held, however, the ability to acquire a contiguous site of comparable size (200+ acres)

would not be certain. The area has a poorly developed transportation network with no plan to add light rail service to the community. The timing for approval of the community plan update coupled with the need develop a multi-modal transit system would occur a number of years beyond the schedule for the development of Quarry Falls and therefore would not meet the expectations for development of the project.

Consideration was also given to alternative sites located in other cities or the County for a similar development. The project requires a large land mass to aggregate the types and intensities of development to form a viable Urban Village. Additionally, such a site must be accessible by public transit. While there are areas in other cities that remain undeveloped, many are constrained by sensitive biological resources, limiting development potential, or are planned for other uses in accordance with that city's General Plan.

Additionally, in accordance with CEQA Guidelines Section 15126.6(f)(2), alternative locations for the proposed project would be considered if "*any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessens any of the significant effects of the project would need to be considered for inclusion in the EIR.*" Moving the Quarry Falls project to an alternative site in the community or other areas of the City would not avoid or substantially lessen the project's impact and could result in greater environmental effects. The project is proposed for a disturbed quarry site in the middle of the City and the Mission Valley community which is under one ownership. The site has easy access to public streets and freeways and is served by transit. Given traffic congestion in the City and County, traffic impacts from the alternative sites would have the potential to impact circulation segments, intersections and freeways. Development in other areas could result in greater impacts to biological resources and impacts to historical resources. Additionally, large landholdings that could accommodate the project could be further removed from existing infrastructure and lack access to transit. For these reasons, there are no other feasible alternative locations for the Quarry Falls project as proposed.

10.1.3 Sensitive Biological Resources Avoidance Alternative

As presented in Section 5.6, *Biological Resources*, the proposed project would result in impacts to a total of 14.08 acres of sensitive habitat. This includes the direct loss of 0.18 acre of disturbed wetland, 1.08 acres of coastal sage scrub (Tier II), 0.28 acre of mixed chaparral (Tier IIIA), and 12.54 acres of non-native grassland (Tier IIIB). The project includes measures which would mitigate impacts to biological resources to below a level of significance. An alternative was considered that would avoid impacts to sensitive habitat. Modification to the project's grading in the Ridgetop subdistricts was studied to determine if there was an alternative grading scheme to avoid impacting coastal sage scrub, mixed chaparral and wetland vegetation.

In order to avoid sensitive resources in the northern portion of Specific Plan area, access to the Ridgetop West subdistrict would need to be modified. Additionally, grading would need to be modified along the eastern edge of the Ridgetop East subdistrict to avoid impacts to coastal sage scrub vegetation along the steep slope in this area.

While this alternative would reduce the grading necessary for development, it would not avoid all impacts to sensitive biological resources. In order for circulation roads and development proposed for other areas of the project to be constructed, drainage flowing into the disturbed wetland and being released onto the site must be controlled within a storm drain system. Therefore, the wetland area and adjacent vegetation would need to be removed and the drainage controlled by an on-site storm drain system. Additionally, this alternative would also include removing invasive plant species in an off-site drainage area. Similar to the proposed project, biological resources affected by the project would be lost under an alternative grading plan, and mitigation similar to that associated with the proposed project would be required. This alternative would not result in any additional environmental benefits and, therefore, has been rejected from further consideration.

10.1.4 Avoidance of Unmitigated Traffic Impacts Alternative

The proposed project would result in significant, unmitigated impacts to traffic and circulation, as discussed in Section 5.2, *Transportation/Traffic Circulation/Parking*, of this Program EIR. An alternative that would not result in unmitigated traffic impacts was considered.

In order to avoid unmitigated traffic impacts, traffic generated under this alternative would be held to 13.8 percent of the traffic generated by the proposed project. This would result in a total generation of 9,147 new daily driveway trips for the project under this alternative. Due to the reduced number of trips associated with this alternative, the ~~proposed~~ mix of land uses proposed by the project would not be feasible. Instead, 400 single-family homes 35,000 square feet of neighborhood retail uses, and 45,000 square feet of office space could be constructed on the project site. No multi-family residential or civic uses would occur.

Development of the project site under this alternative would avoid unmitigable traffic impacts on circulation element roadways. This alternative would not be in conformance with the Mission Valley Community Plan which envisions an urban, high-density mixed-use development and the City's Strategic Framework Element. This alternative does not provide for an infill project that allows for higher density housing in proximity to public services, transit and other urban amenities. It would not construct roadway improvements to serve Mission Valley; these improvements would be necessary with or without the proposed project. This alternative would construct only 400 homes and would not provide for an increase in housing to serve the housing needs of the City. Therefore, this alternative would not meet the project objectives and has been rejected from further evaluation.

10.2 ALTERNATIVES CONSIDERED

Alternatives to the Quarry Falls project are considered and discussed in this section. These include the "No Project" alternative that is mandated by CEQA and other alternatives that were developed in the course of project planning and environmental review for the proposed project.

Relative to the requirement to address a "No Project" alternative, CEQA Guidelines Section 15126.6(e) states that:

When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future.

If the project is other than an land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed.

For the Quarry Falls project, two No Project alternatives have been evaluated. The first is the No Project/No Build alternative, which is the continuation of the mining operations under the approved Conditional Use Permit and ultimate implementation of the approved Reclamation Plans. The second No Project alternative describes what would reasonably be expected to occur if the proposed project is not approved, based on build-out under the land uses and development intensities of the adopted community plans and consistent with available infrastructure and community services.

Therefore, the following project alternatives are addressed in this Program EIR:

Alternative 1 – No Project/No Build Alternative: Continuation of Approved Conditional Use Permit/ Implementation of Approved Reclamation Plans

Alternative 2 – No Project/Continuation of Existing Plan Alternative: Build-out Under Community Plans; with and without Phyllis Place Connection

Alternative 3 – Reduced Density Alternative; with and without Phyllis Place Connection

Alternative 4 – Phyllis Place Connection

10.2.1 Alternatives Analysis

The impacts of each alternative are analyzed in this section of the EIR. The review of alternatives includes an evaluation to determine if any specific environmental characteristic would have an effect that is "*substantially less*" than the proposed project. A significant effect is defined in Section 15382 of the CEQA Guidelines as "*a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project.*" The significant impacts that apply to this project are: land use, traffic and circulation, visual effects and neighborhood character, air quality, noise, biological resources, historical resources, paleontological resources, and public utilities. The discussion of alternatives provides:

A description of the alternative considered;

The identification of the impacts of the alternative;

A comparative analysis of the impacts of the alternative under consideration and the proposed project. The focus of this comparative analysis is to determine if the alternative is capable of eliminating or substantially reducing the significant environmental effects of the proposed project;

An analysis of whether the alternatives are feasible (as defined by State CEQA Guidelines, Section 15364), meet the objectives of the project (described in Section 3.0 of this EIR), and remain under consideration.

Table 10-10, *Comparison of Alternatives to Proposed Project*, provides a comparison of environmental issues for all alternatives analyzed in this section.

10.2.2 Alternative 1 – No Project/No Build: Continuation of Approved Conditional Use Permit/ Implementation of Approved Reclamation Plans

Because the project site is functioning under an approved CUP, the No Project/No Build alternative would be the continued operation of the CUP until resources are depleted, with phased implementation of the approved Reclamation Plans (see Figure 2-5, *Existing Approved Reclamation Plans*, and Figure 2-8, *Existing Approved Reclamation Plans Revegetation Plan*).

The on-going mining occurs in the eastern portion of the site, and mine facilities are generally located in the central portion of the site. Additionally, on-going removal and recompaction of existing fills is occurring at the site. The recompaction involves excavating existing fill to expose native soils, and replacing the excavated soils as properly compacted engineered fill. Topographically, the Quarry Falls project site has elevations ranging from approximately 60 feet AMSL to 130 feet AMSL where mining has occurred. Stockpiles occur at various locations throughout the site, and fill placement is on-going. Based on reclamation plans for the site, at the completion of mining and reclamation site elevations will range from 62 feet AMSL along the southern boundary of the property to approximately 220 AMSL at the northwest corner of the site(see Figure 2-5, *Existing Approved Reclamation Plans*, and Figure 2-8, *Existing Approved Reclamation Plans Revegetation Plan*).

Development proposed for the Quarry Falls project would not occur under the No Project/No Build alternative. Mining would continue on the project site, the adopted Reclamation Plans would continue to be implemented in a phased manner, and asphalt and concrete plants would continue to operate in accordance with the existing CUPs. No additional public services (including parks) would be required to serve the No Project/No Build alternative. The No Project/No Build alternative does not mean that development on the property would never occur; only that such development would not occur at this time and future applications would need to be submitted and reviewed for any future development.

Environmental Analysis

Land Use. The No Project/No Build alternative would not result in conflicts with adopted land use plans, policies or ordinances. A resource extraction operation is occurring on the project site in accordance with approved CUPs and Reclamation Plan. The No Project/No Build alternative would not result in a conflict with the current approvals. Objectives contained within the Mission Valley Community Plan include:

> Continue sand and gravel operations in the community until depletion is reached.
> Require and enforce land reclamation which is consistent with municipal, state and federal guidelines during and following termination of extraction activity for subsequent reuse.

The No Project/No Build alternative would continue to implement these goals. The No Project/No Build alternative would not implement other community goals directed as redevelopment of depleted mining areas. Specifically, the community plan calls for:

> When land within an existing sand and gravel extraction area is proposed for urban

development, multiple land uses would be considered and processed consistent with the land use and development guidelines of the Multiple Use Development Option of this [the Mission Valley] Plan.

Traffic/Circulation/Parking. Continuation of mining operations under the approved Conditional Use Permit would result in traffic and circulation impacts as described in the existing conditions analysis presented in Section 5.2, *Traffic/Circulation/Parking*, of this Program EIR and in the accompanying *Quarry Falls Traffic Impact Study*. Figure 5.2-1, *Existing Study Area Roadway Classifications*, presents existing roadway classifications in the community; and Tables 5.2.1, *Existing Roadway Segment Conditions*, and 5.2-2, *Existing Arterial Segment Classifications*, show the existing LOS on community street segments that would be affected by the proposed project. Under the No Project/No Build alternative, 13 roadway and arterial segments currently operate at unacceptable levels of service (LOS E or F). As shown in Table 5.2-3, *Existing Intersection Conditions*, five intersections within the community operate at LOS E or worse with the No Project/No Build alternative. Delays also occur at freeway ramps for I-15 Northbound at Friars Road in the AM peak hour and at I-805 Southbound at Murray Ridge, I-8 EB at SB Texas Street, I-15 Northbound at Friars Road, I-15 Southbound at Friars Road, and I-15 Southbound at Friars Road (I-8 Bypass) in the PM peak hour. Freeway segments along SR-163, I-805, I-8, and I-15 also currently operate at unacceptable levels of service.

The following Tables 10-1 through 10-5 compare impacts for the various alternatives at project build-out. Impacts which would be fully mitigated are designated with an asterisk (*).

Table 10-1.
Alternatives Comparison Summary of Roadway Segments Impact Significance

Roadway Segment	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alterative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
Friars Rd.								
Napa St. to Colusa St.	No	No	No	No	No	No	No	No
Colusa St. to Via Las Cumbres	No	No	No	No	No	No	No	No
Via Las Cumbres to Fashion Valley Rd.	No	No	No	No	No	No	No	No
Fashion Valley Rd. to Via Moda	No	No	No	No	No	No	No	No
Via Moda to Avenida de las Tiendas	No	No	No	No	No	No	No	No
Avenida de las Tiendas to Ulric St./SR-163 SB Ramps	No	No	No	No	No	No	No	No
Ulric/SR-163 SB Ramps to SR-163 NB Ramps	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
SR-163 NB Ramps to Frazee Rd.	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Frazee Rd. to Mission Center Rd.	No	No	No	No	No	No	No	No
Mission Center Rd. to Gill Village Way	No	No	No	No	No	No	No	No
Gill Village Way to Qualcomm Way	No	No	No	No	No	No	No	No
Qualcomm Way to Rio Bonito Way	No	No	No	No	No	No	No	No
Rio Bonito Way to River Run	No	No	No	No	No	No	No	No
River Run to Fenton Pkwy.	No	No	No	No	No	No	No	No
Fenton Parkway to Northside Dr.	No	No	No	No	No	No	No	No
Northside Dr. to Mission Village Rd.	No	No	No	No	No	No	No	No
Mission Village Rd. to I-15 SB Ramps	**Yes**	No	No	No	No	No	No	No
I-15 SB Ramps to I-15 NB Ramps	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
I-15 NB Ramps to Rancho Mission Rd.	No	No	No	No	No	No	No	No
Rancho Mission Rd. to Riverdale St.	No	No	No	No	No	No	No	No
Riverdale St. to Mission Gorge Rd.	No	No	No	No	No	No	No	No
Mission Center Rd.								
Murray Ridge Rd. to I-805 Overpass	**Yes***	**Yes**	**Yes**	**Yes***	No	No	No	No
I-805 Overpass to Sevan Ct.	No	No	No	No	No	No	No	No
Sevan Court to Mission Valley Rd.	No	No	No	No	No	No	No	No
Mission Valley Rd. to Friars Rd.	No	No	No	No	No	No	No	No
Friars Rd. to Mission Center Ct	No	No	No	No	No	No	No	No
Mission Center Ct to Hazard Center Dr.	No	No	No	No	No	No	No	No
Hazard Center Dr. to Camino de la Reina	No	No	No	No	No	No	No	No
Camino de la Reina to Camino del Rio North	No	No	No	No	No	No	No	No
Camino del Rio North to I-8 EB Ramp	**Yes***	No	Yes	**Yes**	No	No	No	No

Roadway Segment	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alterative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
Frazee Rd.								
Murray Canyon Rd. to Friars Rd.	No	No	No	No	No	No	No	No
Friars Rd. to Hazard Center Dr.	No	No	No	No	No	No	No	No
Mission Valley Rd.								
Metropolitan Dr. to Mission Center Rd.	No	No	No	No	No	No	No	No
Phyllis Place								
South of I-805 SB Ramps	No	No	No	No	No	No	No	No
Murray Ridge Rd.								
I-805 SB Ramps to I-805 NB Ramps	No	No	No	No	**Yes***	**Yes***	**Yes***	**Yes***
I-805 NB Ramps to Mission Center Dr.	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Mission Center Rd. to Pinecrest Ave.	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Qualcomm Way								
Friars Rd. to Quarry Falls Blvd.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Friars Rd. to Rio San Diego	No	No	No	No	No	No	No	No
Rio San Diego to Camino de la Reina	No	No	No	No	No	No	No	No
Camino del la Reina to Camino del Rio North/ I-8 WB Ramps	No	No	No	No	No	No	No	No
Camino Del Rio North/I-8 WB Ramps to I-8 EB Ramps	No	No	No	No	No	No	No	No
Texas Street								
I-8 EB Ramps to Camino del Rio South	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Camino del Rio South to Madison Ave.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Madison Ave to Monroe Ave.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Monroe Ave to Meade Ave.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Meade Ave to El Cajon Blvd.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Camino de la Reina								
Mission Center Rd. to Camino del Este	No	No	No	No	No	No	No	No
Camino del Este to Qualcomm Way	No	No	No	No	No	No	No	No
Camino del Rio North								
I-8 WB Ramp to Qualcomm Way	No	No	No	No	No	No	No	No
Gill Village Way								
South of Friars Rd.	No	No	No	No	No	No	No	No
Mission Gorge Rd.								
Friars Rd. to Zion Ave.	No	No	No	No	No	No	No	No
Zion Ave to Old Cliffs Rd.	No	No	No	No	No	No	No	No
Old Cliffs Rd. to Katelyn Ct.	No	No	No	No	No	No	No	No

Roadway Segment	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alterative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
Katelyn Ct to Princess View Dr.	No	No	No	No	No	No	No	No
Princess View Dr. to Margerum Ave	No	No	No	No	No	No	No	No
Margerum Ave to Jackson Dr.	No	No	No	No	No	No	No	No
Fenton Parkway								
Friars Rd. to Rio San Diego	No	No	No	No	No	No	No	No

*Indicates where impacts would be fully mitigated.

** The most conservative estimate of the community plan alternative assumes a maximum development intensity based upon driveway trip generation for the mix of land uses. The alternative analysis also includes an evaluation using external cumulative trips.

Table 10-2.
Alternatives Comparison Summary of Arterial Impacts Significance

Location	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
AM Peak Hour								
Eastbound								
Napa St. to Colusa St.	No	No	No	No	No	No	No	No
Colusa St. to Via Las Cumbres	No	No	No	No	No	No	No	No
Via Las Cumbres to Fashion Valley Rd.	No	No	No	No	No	No	No	No
Fashion Valley Rd. to Via Moda	No	No	No	No	No	No	No	No
Via Moda to Avenida de las Tiendas	No	No	No	No	No	No	No	No
Avenida de las Tiendas to Ulric St./SR-163 SB Ramps	No	No	No	No	No	No	No	No
Ulric/SR-163 SB Ramps to SR-163 NB Ramps	No	No	No	No	No	No	No	No
SR-163 NB Ramps to Frazee Rd.	**Yes***	No	**Yes***	**Yes***	**Yes***	No	No	No
Frazee Rd. to River Run	No	No	No	No	No	No	No	No
River Run to Fenton Pkwy.	No	No	No	No	No	No	No	No
Fenton Parkway to Northside Dr.	No	No	No	No	No	No	No	No
Northside Dr. to Stadium Rd.	No	No	No	No	No	No	No	No
Stadium Rd. to I-15 SB Ramps	No	No	No	No	No	No	No	No
I-15 SB Ramps to I-15 NB Ramps	No	No	No	No	No	No	No	No
I-15 NB Ramps to Rancho Mission Rd.	No	No	No	No	No	No	No	No
Rancho Mission Rd. to Santo Rd.	No	No	No	No	No	No	No	No
Santo Rd. to Riverdale St.	No	No	No	No	**Yes**	No	No	No
Riverdale St. to Mission Gorge Rd.	No	No	No	No	No	No	No	No
Friars Rd. to Zion Ave.	No	No	No	No	No	No	No	No
Zion Ave. to Old Cliffs Rd.	No	No	No	No	No	No	No	No
Old Cliffs Rd. to Katelyn Ct.	No	No	No	No	No	No	No	No
Katelyn Ct to Princess View Dr.	No	No	No	No	No	No	No	No
Princess View Dr. to Margerum Ave.	No	No	No	No	No	No	No	No
Margerum Ave. to Jackson Dr.	No	No	No	No	No	No	No	No
Westbound								
Napa St. to Colusa St.	No	No	No	No	No	No	No	No
Colusa St. to Via Las Cumbres	No	No	No	No	No	No	No	No

Location	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
Via Las Cumbres to Fashion Valley Rd.	No	No	No	No	No	No	No	No
Fashion Valley Rd. to Via Moda	No	No	No	No	No	No	No	No
Via Moda to Avenida de las Tiendas	No	No	No	No	No	No	No	No
Avenida de las Tiendas to Ulric St./SR-163 SB Ramps	No	No	No	No	No	No	No	No
Ulric/SR-163 SB Ramps to SR-163 NB Ramps	No	No	No	No	No	No	No	No
SR-163 NB Ramps to Frazee Rd.	**Yes***	No	No	No	**Yes***	**Yes***	**Yes***	**Yes***
Frazee Rd. to River Run	No	No	No	No	No	No	No	No
River Run to Fenton Pkwy.	No	No	No	No	No	No	No	No
Fenton Parkway to Northside Dr.	No	No	No	No	No	No	No	No
Northside Dr. to Stadium Rd.	**Yes***	No	No	No	**Yes***	No	No	No
Stadium Rd. to I-15 SB Ramps	No	No	No	No	No	No	No	No
I-15 SB Ramps to I-15 NB Ramps	**Yes**	No	No	No	**Yes**	No	No	No
I-15 NB Ramps to Rancho Mission Rd.	No	No	No	No	No	No	No	No
Rancho Mission Rd. to Santo Rd.	No	No	No	No	No	No	No	No
Santo Rd. to Riverdale St.	No	No	No	No	No	No	No	No
Riverdale St. to Mission Gorge Rd.	**Yes**	No	No	No	**Yes**	No	No	No
Friars Rd. to Zion Ave.	No	No	No	No	No	No	No	No
Zion Ave. to Old Cliffs Rd.	No	No	No	No	No	No	No	No
Old Cliffs Rd. to Katelyn Ct.	No	No	No	No	No	No	No	No
Katelyn Ct to Princess View Dr.	No	No	No	No	No	No	No	No
Princess View Dr. to Margerum Ave.	No	No	No	No	No	No	No	No
Margerum Ave. to Jackson Dr.	No	No	No	No	No	No	No	No
PM Peak Hour								
Eastbound								
Napa St. to Colusa St.	No	No	No	No	No	No	No	No
Colusa St. to Via Las Cumbres	No	No	No	No	No	No	No	No
Via Las Cumbres to Fashion Valley Rd.	No	No	No	No	No	No	No	No
Fashion Valley Rd. to Via Moda	No	No	No	No	No	No	No	No
Via Moda to Avenida de las Tiendas	No	No	No	No	No	No	No	No
Avenida de las Tiendas to Ulric St./SR-163 SB Ramps	No	No	No	No	**Yes***	No	No	No
Ulric/SR-163 SB Ramps to SR-163 NB Ramps	No	No	No	No	No	No	No	No

Location	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
SR-163 NB Ramps to Frazee Rd.	No	No	No	No	No	No	No	No
Frazee Rd. to River Run	No	No	No	No	No	No	No	No
River Run to Fenton Pkwy	No	No	No	No	No	No	No	No
Fenton Parkway to Northside Dr.	No	No	No	No	No	No	No	No
Northside Dr. to Stadium Rd.	No	No	No	No	No	No	No	No
Stadium Rd. to I-15 SB Ramps	No	No	No	No	**Yes**	No	No	No
I-15 SB Ramps to I-15 NB Ramps	No	No	No	No	No	No	No	No
I-15 NB Ramps to Rancho Mission Rd.	No	No	No	No	**Yes**	No	No	No
Rancho Mission Rd. to Santo Rd.	No	No	No	No	No	No	No	No
Santo Rd. to Riverdale St.	**Yes**	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Riverdale St. to Mission Gorge Rd.	No	No	No	No	No	No	No	No
Friars Rd. to Zion Ave.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Zion Ave. to Old Cliffs Rd.	No	No	No	No	No	No	No	No
Old Cliffs Rd. to Katelyn Ct.	No	No	No	No	No	No	No	No
Katelyn Ct to Princess View Dr.	No	No	No	No	No	No	No	No
Princess View Dr. to Margerum Ave.	No	No	No	No	No	No	No	No
Margerum Ave. to Jackson Dr.	No	No	No	No	No	No	No	No
Westbound								
Napa St. to Colusa St.	No	No	No	No	No	No	No	No
Colusa St. to Via Las Cumbres	No	No	No	No	No	No	No	No
Via Las Cumbres to Fashion Valley Rd.	No	No	No	No	No	No	No	No
Fashion Valley Rd. to Via Moda	No	No	No	No	No	No	No	No
Via Moda to Avenida de las Tiendas	No	No	No	No	No	No	No	No
Avenida de las Tiendas to Ulric St./SR-163 SB Ramps	No	No	No	No	No	No	No	No
Ulric/SR-163 SB Ramps to SR-163 NB Ramps	**Yes***	No	No	No	**Yes***	No	No	No
SR-163 NB Ramps to Frazee Rd.	No	No	No	No	No	No	No	No
Frazee Rd. to River Run	No	No	No	No	**Yes***	No	No	No
River Run to Fenton Pkwy.	No	No	No	No	No	No	No	No
Fenton Parkway to Northside Dr.	No	No	No	No	No	No	No	No
Northside Dr. to Stadium Rd.	No	No	No	No	No	No	No	No
Stadium Rd. to I-15 SB Ramps	No	No	No	No	No	No	No	No
I-15 SB Ramps to I-15 NB Ramps	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
I-15 NB Ramps to Rancho Mission Rd.	**Yes**	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**

Location	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
Rancho Mission Rd. to Santo Rd.	No	No	No	No	No	No	No	No
Santo Rd. to Riverdale St.	No	No	No	No	No	No	No	No
Riverdale St. to Mission Gorge Rd.	**Yes**	No	No	No	**Yes**	No	No	No
Friars Rd. to Zion Ave.	No	No	No	No	No	No	No	No
Zion Ave. to Old Cliffs Rd.	No	No	No	No	No	No	No	No
Old Cliffs Rd. to Katelyn Ct.	No	No	No	No	No	No	No	No
Katelyn Ct to Princess View Dr.	No	No	No	No	No	No	No	No
Princess View Dr. to Margerum Ave.	No	No	No	No	No	No	No	No
Margerum Ave. to Jackson Dr.	No	No	No	No	No	No	No	No

*Indicates where impacts would be fully mitigated.

** The most conservative estimate of the community plan alternative assumes a maximum development intensity based upon driveway trip generation for the mix of land uses. The alternative analysis also includes an evaluation using external cumulative trips.

Table 10-3.
Alternatives Comparison Summary of Intersection Impacts Significance

Intersection	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	~~Proposed Project~~ Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
AM Peak Hour								
Friars Rd./ Napa St.	No	No	No	No	No	No	No	No
Friars Rd./ Colusa St.	No	No	No	No	No	No	No	No
Friars Rd./ Via Las Cumbres	No	No	No	No	No	No	No	No
Friars Rd./ Fashion Valley Rd.	No	No	No	No	No	No	No	No
Friars Rd./ Via Moda	No	No	No	No	No	No	No	No
Friars Rd./ Avenida De Las Tiendas	No	No	No	No	No	No	No	No
Friars Rd./ SR-163 SB ramp/Ulric St.	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Friars Rd./ SR-163 RB ramp	No	No	No	No	No	No	No	No
Friars Rd./ Frazee Rd.	**Yes***	No	No	No	No	No	No	No
Friars Rd. WB ramp/ Mission Center Rd.	No	No	No	No	No	No	No	No
Friars Rd. EB ramp/ Mission Center Rd.	No	No	No	No	No	No	No	No
Friars Rd./ Gill Village Way	No	No	No	No	No	No	No	No
Friars Rd. WB ramp/ Qualcomm Way	No	No	No	No	No	No	No	No
Friars Rd. EB ramp/ Qualcomm Way	No	No	No	No	No	No	No	No
Friars Rd./ Rio Bonito	No	No	No	No	No	No	No	No
Friars Rd./ River Run	No	No	No	No	No	No	No	No
Friars Rd./ Fenton Pkwy	No	No	No	No	No	No	No	No
Friars Rd./ Northside Dr.	No	No	No	No	No	No	No	No
Friars Rd. WB ramp/ Mission Village Dr.	No	No	No	No	No	No	No	No
Friars Rd. EB ramp/ Mission Village Dr.	No	No	No	No	No	No	No	No
Friars Rd./ I-15 SB ramp	No	No	No	No	No	No	No	No
Friars Rd./ I-15 NB ramp	No	No	No	No	No	No	No	No
Friars Rd./ Rancho Mission Rd.	No	No	No	No	No	No	No	No
Friars Rd./ Santo Rd.	No	No	No	No	No	No	No	No
Friars Rd./ Riverdale St.	No	No	No	No	No	No	No	No
Friars Rd./ Mission Gorge Rd.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Zion Ave.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Old Cliffs Rd.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Katelyn Ct.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Princess View Dr.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Margerum Ave.	No	No	No	No	No	No	No	No

Intersection	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	~~Proposed Project~~ Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
Mission Gorge Rd./ Jackson Dr.	No	No	No	No	No	No	No	No
Mission Center Rd./ Quarry Falls Blvd,	No	No	No	No	No	No	No	No
Mission Center Rd./ Mission Center Drwy.	No	No	No	No	No	No	No	No
Mission Center Rd./ Mission Center Ct.	No	No	No	No	No	No	No	No
Mission Center Rd./ Hazard Center Dr.	No	No	No	No	No	No	No	No
Mission Center Rd./ Camino De La Reina	No	No	No	No	No	No	No	No
Mission Center Rd./ Camino Del Rio North	No	No	No	No	No	No	No	No
Camino Del Rio North/ I-8 WB ramp	No	No	No	No	No	No	No	No
Mission Center Rd./ I-8 EB ramp	No	No	No	No	No	No	No	No
Qualcomm Way/ Rio San Diego	No	No	No	No	No	No	No	No
Qualcomm Way/ Camino De La Reina	No	No	No	No	No	No	No	No
Camino De La Reina/ Camino Del Este	No	No	No	No	No	No	No	No
Qualcomm Way/ I-8 westbound ramp	No	No	No	No	No	No	No	No
Camino Del Rio North/ I-8 WB ramp	No	No	No	No	No	No	No	No
Qualcomm Way/ I-8 EB ramp	No	No	No	No	No	No	No	No
Texas St./ Camino Del Rio South	No	No	No	No	No	No	No	No
Texas St./ Madison Ave.	No	No	No	No	No	No	No	No
Texas St./ Monroe Ave.	No	No	No	No	No	No	No	No
Texas St./ Meade Ave.	No	No	No	No	No	No	No	No
Texas St./ El Cajon Blvd.	No	No	No	No	No	No	No	No
Rio San Diego/ Fenton Pkwy	No	No	No	No	No	No	No	No
Phyllis Place/ I-805 SB ramp	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Phyllis Place I-805 NB ramp	No	No	No	No	**Yes***	**Yes***	**Yes***	**Yes***
Murray Ridge Rd./ Mission Center Rd.	No	No	No	No	No	No	No	No
Murray Ridge Rd./ Pinecrest Ave.	No	No	No	No	No	No	No	No
SR-163 SB On/ Ulric St.	No	No	No	No	No	No	No	No
Camino de la Reina/ I-8 WB ramp	No	No	No	No	No	No	No	No
PM Peak Hour								
Friars Rd./ Napa St.	No	No	No	No	No	No	No	No
Friars Rd./ Colusa St.	No	No	No	No	No	No	No	No
Friars Rd./ Via Las Cumbres	No	No	No	No	No	No	No	No
Friars Rd./ Fashion Valley Rd.	No	No	No	No~~Yes*~~	No	No	No	No
Friars Rd./ Via Moda	No	No	No	No	No	No	No	No
Friars Rd./ Avenida De Las Tiendas	No	No	No	No	No	No	No	No
Friars Rd./ SR-163 SB ramp/Ulric St.	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Friars Rd./ SR-163 NB ramp	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Friars Rd./ Frazee Rd.	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***

Intersection	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	~~Proposed Project~~ Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
Friars Rd. WB ramp/ Mission Center Rd.	No	No	No	No	No	No	No	No
Friars Rd. EB ramp/ Mission Center Rd.	No	No	No	No	No	No	No	No
Friars Rd./ Gill Village Way	No	No	No	No	No	No	No	No
Friars Rd. WB ramp/ Qualcomm Way	No	No	No	No	No	No	No	No
Friars Rd. EB ramp/ Qualcomm Way	**Yes***	No	No	No	No	No	No	No
Friars Rd./ Rio Bonito	No	No	No	No	No	No	No	No
Friars Rd./ River Run	No	No	No	No	No	No	No	No
Friars Rd./ Fenton Pkwy	No	No	No	No	No	No	No	No
Friars Rd./ Northside Dr.	No	No	No	No	No	No	No	No
Friars Rd. WB ramp/ Mission Village Dr.	No	No	No	No	No	No	No	No
Friars Rd. EB ramp/ Mission Village Dr.	No	No	No	No	No	No	No	No
Friars Rd./ I-15 SB ramp	**Yes***	No	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Friars Rd./ I-15 NB ramp	No	No	No	No	No	No	No	No
Friars Rd./ Rancho Mission Rd.	No	No	No	No	No	No	No	No
Friars Rd./ Santo Rd.	No	No	No	No	No	No	No	No
Friars Rd./ Riverdale St	No	No	No	No	No	No	No	No
Friars Rd./ Mission Gorge Rd.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Zion Ave.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Old Cliffs Rd.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Katelyn Ct.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Princess View Dr.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Margerum Ave.	No	No	No	No	No	No	No	No
Mission Gorge Rd./ Jackson Dr.	No	No	No	No	No	No	No	No
Mission Center Rd./ Quarry Falls Blvd.	No	No	No	No	No	No	No	No
Mission Center Rd./ Mission Center Drwy.	No	No	No	No	No	No	No	No
Mission Center Rd./ Mission Center Ct.	No	No	No	No	No	No	No	No
Mission Center Rd./ Hazard Center Dr.	No	No	No	No	No	No	No	No
Mission Center Rd./ Camino De La Reina	No	No	No	No	No	No	No	No
Mission Center Rd./ Camino Del Rio North	No	No	No	No	No	No	No	No
Camino Del Rio North/ I-8 WB ramp	No	No	No	No	No	No	No	No
Mission Center Rd./ I-8 EB ramp	**Yes***	No	**Yes**	**Yes**	No	No	No	**No**
Qualcomm Way/ Rio San Diego	No	No	No	No	No	No	No	No
Qualcomm Way/ Camino De La Reina	No	No	No	No	No	No	No	No
Camino De La Reina/ Camino Del Este	No	No	No	No	No	No	No	No
Qualcomm Way/ I-8 WB ramp	**Yes***	No	No	No	No	No	No	No
Camino Del Rio North/ I-8 WB ramp	No	No	No	No	No	No	No	No
Qualcomm Way/ I-8 EB ramp	No	No	No	No	No	No	No	No

Intersection	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	~~Proposed Project~~ Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
Texas St./ Camino Del Rio South	No	No	No	No	No	No	No	No
Texas St./ Madison Ave.	No	No	No	No	No	No	No	No
Texas St./ Monroe Ave.	No	No	No	No	No	No	No	No
Texas St./ Meade Ave.	No	No	No	No	No	No	No	No
Texas St./ El Cajon Blvd.	**Yes***	No	No	No	**Yes***	No	No	No
Rio San Diego/ Fenton Pkwy	No	No	No	No	No	No	No	No
Phyllis Place/ I-805 SB ramp	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Phyllis Place I-805 NB ramp	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Murray Ridge Rd./ Mission Center Rd.	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
Murray Ridge Rd./ Pinecrest Ave.	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***	**Yes***
SR-163 SB On/ Ulric St.	No	No	No	No	No	No	No	No
Camino de la Reina/ I-8 WB ramp	No	No	No	No	No	No	No	No

*Indicates where impacts would be fully mitigated.

** The most conservative estimate of the community plan alternative assumes a maximum development intensity based upon driveway trip generation for the mix of land uses. The alternative analysis also includes an evaluation using external cumulative trips.

Table 10-4.
Alternatives Comparison Summary of Calculated Ramp Metering Impacts Significance

Location	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alterative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 – Phyllis Place Connection (52,332 ADT)	Alterative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
AM Peak Hour								
I-805 NB at Murray Ridge	No	No	No	No	**Yes***	**Yes***	**Yes***	**Yes***
I-15 NB at Friars Rd.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
I-15 NB at Friars Rd. (HOV)	No	No	No	No	No	No	No	No
PM Peak Hour								
I-805 SB at Murray Ridge	No	No	No	No	**Yes***	**Yes***	**Yes***	**Yes***
I-805 SB at Murray Ridge (HOV)	No	No	No	No	No	No	No	No
I-8 EB at SB Texas St.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
I-8 EB at SB Texas St. (HOV)	No	No	No	No	No	No	No	No
I-8 EB at NB Texas St.	No	No	No	No	No	No	No	No
I-15 NB at Friars Rd.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
I-15 NB at Friars Rd. (HOV)	No	No	No	No	No	No	No	No
I-15 SB at Friars Rd.	No	No	No	No	No	No	No	No
I-15 SB at Friars Rd. (I-8 Bypass)	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

*Indicates where impacts would be fully mitigated.
** The most conservative estimate of the community plan alternative assumes a maximum development intensity based upon driveway trip generation for the mix of land uses. The alternative analysis also includes an evaluation using external cumulative trips.
HOV = High Occupancy Vehicle

Table 10-5.
Summary of Freeway Segments Impacts Significance

Segment	WITHOUT PHYLLIS PLACE CONNECTION				WITH PHYLLIS PLACE CONNECTION			
	Proposed Project (52,332 ADT)	Alternative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)	Alternative 4 - Phyllis Place Connection (52,332 ADT)	Alterative 2 - No Project/ Continuation of Existing Plan		Alternative 3 - Reduced Density Alternative (39,563 ADT)
		140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)			140 ADT/Acre Driveway** (31,881 ADT)	140 ADT/Acre External** (31,881 ADT)	
	Significant?	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*	*Significant?*
AM Peak Hour								
I-8 (West)								
SR-163 to Mission Center Rd.	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
Mission Center Road to Qualcomm Way	No	No	No	No	No	No	No	No
Qualcomm Way to I-805	No	No	No	No	No	No	No	No
I-805 (North)								
I-8 to Phyllis Place/Murray Ridge	No	No	No	No	No	No	No	No
North of Phyllis Place	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
SR-163 (North)								
I-8 to Friars Rd.	**Yes**	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Friars Rd. to Genesee	**Yes**	No	No	No	No	No	No	No
I-15 (North)								
North of Friars Rd.	No	No	No	No	No	No	No	No
South of Friars Rd.	No	No	No	No	No	No	No	No
PM Peak Hour								
I-8 (East)								
SR-163 to Mission Center Rd.	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
Mission Center Rd. to Qualcomm Way	**Yes**	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Qualcomm Way to I-805	No	No	No	No	No	No	No	No
I-805 (South)								
I-8 to Phyllis Place/Murray Ridge	No	No	No	No	No	No	No	No
North of Phyllis Place	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
SR-163 (South)								
I-8 to Friars Rd.	**Yes**	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Friars Rd. to Genesee	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
I-15 (South)								
North of Friars Rd.	**Yes**	No	No	No	**Yes**	No	No	No
South of Friars Rd.	**Yes**	No	No	No	**Yes**	No	No	No

*Indicates where impacts would be fully mitigated.

** The most conservative estimate of the community plan alternative assumes a maximum development intensity based upon driveway trip generation for the mix of land uses. The alternative analysis also includes an evaluation using external cumulative trips.

Because mining operations would continue under the No Project/No Build alternative, the No Project/No Build alternative would continue to contribute traffic to areas identified as operating below accepted levels of service and standards, as is the situation today. Implementation of the No Project/No Build alternative would not eliminate significant circulation impacts in the community; however, the No Project/No Build alternative would not result in additional contributions to affected areas. Because the No Project/No Build alternative assumes continued operation under the approved Conditional Use Permit with ultimate implementation of the approved Reclamation Plans, traffic improvements would not be required. Once mining operations cease and reclamation of the site is completed, the site would remain undeveloped with no associated traffic until such time as development occurs.

However, under the No Project/No Build alternative, forecasted growth in Mission Valley and the surrounding area would contribute to unacceptable levels of service with no certainty of mitigation to alleviate these conditions. For several roadway segments and intersections, the implementation of mitigation for Quarry Falls would improve LOS from unacceptable to acceptable at build-out, improving circulation at those locations in Mission Valley from that projected for the No Project/No Build alternative. As presented in the *Quarry Falls Traffic Impact Study,* Tables 16-20 and 16-21, three roadway segments (Friars Road from SR-163 southbound ramps to SR-163 northbound ramps; and Murray Ridge Road from I-805 northbound ramps to Mission Center Road and from Mission Center Road to Pinecrest Avenue) would experience an improvement in LOS from unacceptable to acceptable due to the implementation of mitigation measures identified for the proposed project. An additional segment on Friars Road from Frazee Road to River Run Road would experience improved LOS from D to C. Two intersections in the AM Peak (Friars Road/SR-163 southbound ramp and Phyllis Place/I-805 northbound ramp) and eight intersections in the PM Peak (Friars Road/SR-163 southbound ramp, Friars Road/SR-163 northbound ramp, Friars Road/Frazee Road, Friars Road/I-15 southbound ramp, Mission Center Road/I-8 eastbound ramp, Phyllis Place/I-805 southbound ramp, Phyllis Place/I-805 northbound ramp, and Murray Ridge Road/Mission Center Road) would experience improvements in LOS from unacceptable to acceptable due to transportation mitigation measures (*Quarry Falls Traffic Impact Study,* Tables 16-22). One additional intersection in the AM Peak at Friars Road/Frazee Road would experience an improvement in LOS from D to C.

Parking in the project vicinity is generally provided through parking lots serving their respective developments. No parking is permitted along Friars Road or Mission Center Road adjacent to the project boundary. The No Project/No Build alternative would not alter current parking, result in increased parking needs, or create significant parking congestion.
Transit opportunities in the project vicinity include bus service and the trolley. The No Project/No Build alternative would not affect bus and trolley service.

Pedestrian and bicycle opportunities are provided through sidewalks and bicycle lanes throughout Mission Valley. The No Project/No Build alternative would not affect existing pedestrian and bicycle facilities.

Visual Effects and Neighborhood Character. The No Project/No Build alternative would result in continued views of the on-going mining operations until mining operations cease. A large flat pad rimmed with steep mined slopes that have been revegetated with a mix of native and naturalized vegetation. The mined and reclaimed site would not be replaced with an urban development. Instead, reclamation would occur in a phased manner. Views would be of the reclaimed site. Urban development has occurred around the mining site. The undeveloped landscape and industrial structures that support mining operations would be visible until mining ceases. The ultimate reclaimed site would contrast with the existing urbanized neighborhood character of the surrounding community.

Air Quality. Under the No Project/No Build alternative, air emissions associated with the mining operations and concrete and asphalt plant would continue until mining and reclamation are complete. With the exception of PM_{10}, current air emissions for the project site are below the City's thresholds for impacts to air quality and are quantified in Table 5.4-3 of Section 5.4, *Air Quality*, of this Program EIR. The existing operations occurring at the project site are permitted by the San Diego Air Pollution Control District and would continue to be permitted under this alternative. Since no development would occur, the No Project/No Build alternative would not result in emissions from grading and construction activities, or from project traffic, landscaping, and energy use. This alternative would result in less carbon monoxide, nitrous oxide, reactive organic compounds, and sulfur oxide emissions as compared to the proposed project. The No Project/No Build alternative would result in the continuation of truck traffic and air emissions associated with continued mining operations on the site; whereas the proposed project would leave more material on-site than the No Project/No Build alternative, resulting in less truck trips and associated emissions. Once mining operations are complete and reclamation has occurred, no source or operational air quality impacts would occur, as the site would remain undeveloped under this alternative.

Noise. The existing noise levels generated by the on-going mining operations would continue under this alternative. During mining and reclamation operations, noise associated with truck traffic would continue. Noise associated with mining and reclamation of the site would cease once the Reclamation Plans is fully implemented, avoiding noise impacts associated with adding the proposed project's traffic to community circulation roadways.

Biological Resources. Under this alternative, the site would be revegetated with native and naturalized plant material. The No Project/No Build alternative would not result in impacts to biological resources beyond those assumed with approval of the CUPs and Reclamation Plans. The VTM associated with the proposed project would result in grading outside the limits of the approved CUPs and Reclamation Plans, resulting in impacts to sensitive vegetation occurring in those areas. The No Project/No Build alternative would avoid increased impacts to sensitive habitat

Health and Safety. The No Project/No Build alternative would avoid subjecting sensitive receptors to potential health and safety risks, as no land uses other than resource extraction would occur on the site. Land use concerns associated with locating new residential development proximate to industrial land uses would not occur, although resource extraction

and the asphalt and concrete plants would remain where existing residential development occurs in nearby areas. Reclamation of the mined site would occur as mining phases are complete. The existing mining operation, including the phased reclamation activities, has demonstrated that it does not create substantial health risk concerns. Therefore, continuing the existing operations, as would be the case under the No Project/No Build alternative, would result in a insignificant level of risk.

Historical Resources. There are no identified historical resources located on the project site. However, the project site is located in an area of high sensitivity for cultural resources, and earth moving activities (including mining) would have the potential to affect unknown resources located within the undisturbed areas of the project site. Therefore, similar to the proposed project, the No Project/No Build alternative has the potential to affect historical resources.

Hydrology. The No Project/No Build alternative would not result in modifications to the existing site hydrology. Surface runoff from the project site is retained on-site in several retention ponds prior to discharging off-site through an existing seven-foot by seven-foot box culvert under Friars Road. The storm water then flows through an open channel to the San Diego River. Additionally, storm water from three off-site areas drain onto the project site. These areas are shown in Figure 5.9-2, *Off-Site Areas Affecting Site Hydrology*, and include:

O1 - A large 97.3-acre area to the northeast which drains onto the site through two 36-inch culverts flowing under I-805;
O2 - A 16.5-acre drainage area to the north of Phyllis Place; and
O3 - A 3.2-acre hillside area adjacent to the west side of the site.

The approved CUPs and Reclamation Plans, which represent the No Project/No Build alternative, currently operate under an approved Storm Water Pollution Prevention Plan (SWPPP) consisting of "Best Management Practices" (BMPs) to address short-term storm water pollution impacts related to sediment discharges during mining activities. The SWPPP for the pre-mixed concrete facilities includes an approved preventative maintenance program consisting of inspection and maintenance procedures of storm water conveyance devices, and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water. As such, the program includes inspection and maintenance of catch basins; proper functioning of drainage structures and sediment basins; and timely repairs or replacements of damaged erosion control devices.

The approved CUPs and Reclamation Plan would provide a uniform topographic relief of four percent grade from north to south towards the San Diego River. The estimated runoff from the entire project site (including upstream watershed areas) under approved reclamation plan conditions was calculated to be 383 cfs for the 100-year event. The implementation of the approved reclamation plan would not change the baseline condition for the site, therefore, the No Project/No Build alternative would not result in significant impacts to hydrology. The No Project/No Build alternative would not result in significant impacts to hydrology.

Geologic Conditions. The on-going mining operations and related facilities that currently occur at the project site would continue under the No Project/No Build alternative. As stated Section 5.10, *Geologic Conditions*, of this Program EIR, the project site is comprised of deposits of the Mission Valley Formation overlying deposits of Stadium Conglomerate. Additionally, on-going filling of the mining pit and removal and recompaction of existing fill is occurring. The potential for landslides, mudslides, or ground failures is considered low for the project site. The geologic formations underlying the Quarry Falls project site are such that the risk of seismically-induced damage is no greater than that for other parts of San Diego. The No Project/No Build alternative would not increase exposure of people or property to seismic risks.

Paleontological Resources. The proposed project site is underlain by the Mission Valley and Stadium Conglomerate formations. These formations have a high potential for recovery of paleontological resources. Grading activities proposed as part of the Quarry Falls project could extend into the previously undisturbed Mission Valley and Stadium Conglomerate formations and could potentially impact paleontological resources that may be present in the project area.

The No Project/No Build alternative would continue sand and gravel excavation activities within the limits of the approved CUPs and Reclamation Plans. These activities have resulted in mining of underlying resources and placement of engineered fill on the site. The No Project/No Build alternative would have the potential to result in significant impacts to paleontological resources through implementation of the Reclamation Plans.

Public Utilities (Solid Waste). The No Project/No Build alternative would not affect public facilities. Sewer, water, gas and electric services would continue to be provided as they are today. The No Project/No Build alternative would avoid significant impacts to landfills, as increased waste generation would not occur.

Water Quality. The No Project/No Build alternative would result in the continued sand and gravel extraction activities on the project site and ultimate implementation of the approved Reclamation Plans. Under the No Project/No Build alternative, the site is characterized by mass graded slopes and several retention basins to control storm water and drainage. The existing on-site uses implement required BMPs and are in compliance with the San Diego Regional Water Resources Control Board's (NPDES) General Permit No. 2001-01 as amended. The No Project/No Build alternative would not result in an increase in impervious surfaces. Runoff would continue to be controlled by on-site facilities. It is not anticipated that significant impacts to water quality would occur.

Mineral Resources. The No Project/No Build alternative would have a similar effect on mineral resources as the proposed project, as both the No Project/No Build alternative and the proposed project would mine resources to depletion.

Cumulative Effects. The No Project/No Build alternative would contribute to cumulative impacts associated with traffic and air quality. Because no development would occur under this alternative, cumulative impacts associated with noise, biological resources, historical resources, and public utilities (solid waste) would not occur. Relative to global climate change, the No

Project/No Build alternative assumes that mining and related activities would continue until resource depletion, at which time the reclamation would occur and existing green house gas emissions would cease. The export of 2.4 million cubic yards of fill material would result in one-time greenhouse gas emissions of over 17,000 metric tons; however, greenhouse gas emissions from the development of the site would be avoided.

Evaluation of Alternative

For the most part, the No Project/No Build Alternative would result in avoiding or reducing impacts associated with the proposed project. The No Project/No Build alternative would not provide for a multiple use development on the site. While the No Project/No Build alternative could allow for future construction of a street connection between Friars Road and Phyllis Place, as called for in the Mission Valley Community Plan, it would require importing a substantial amount of materials in order to design a road that meets City standards. The No Project/No Build alternative would not eliminate existing traffic impacts in the community; it would, however, result in substantially less traffic contributing to those impacts especially after the Reclamation Plans are fully implemented. Relative to air quality, this alternative would result in less carbon monoxide, nitrous oxide, reactive organic compounds, and sulfur oxide emissions, although none of the emissions would be at levels of significance with the proposed project.

The No Project/No Build alternative would result in no significant impacts to biological, and visual impacts (beyond those that exist today), because additional grading beyond the current limits of the CUPs and Reclamation Plans would not occur. Because the No Project/No Build alternative would not result in development of the project site, impacts to public services (including parks), facilities and utilities would also not occur. This alternative would also not develop the project site, but would implement the Reclamation Plans, leaving the site as a large flat pad rimmed with steep slopes, re-landscaped with native and naturalized plant material.

10.2.3 Alternative 2 – No Project/Continuation of Existing Plan Alternative: Build-Out Under Community Plans Alternative – With and Without Phyllis Place Connection

The proposed project is located in the Mission Valley and Serra Mesa communities. The Mission Valley Community Plan identifies the project site for Multiple Use development, and the project site is located within the Multiple Use Zone (MV-M) identified in the MVPDO. In accordance with the goals of this zone, the proposed project would develop a pedestrian oriented project that integrates residential, commercial retail, commercial office, civic, parks and open space uses. The project site is also within the Development Intensity District "F" (DID "F"), which is intended to "*limit development intensity to the levels allowed under the adopted community plan.*" In order to stay within the traffic limits of the MVPDO, the project's intensity within Mission Valley cannot exceed ~~32,040~~31,497 ADT. The northern six acres of the project site are within the Serra Mesa community. The Serra Mesa Community Plan designates the project site for Residential development, and the underlying RS-1-7 zone would allow single family development at a density of one unit per 7,000 square feet, allowing a development intensity of 48 units (384 ADT).

The No Project/Continuation of Existing Plan alternative would occur as a mixed-use project, similar to the proposed project, for that area within the Mission Valley Community Plan; however, the intensity of development would be reduced. Additionally, this alternative would develop the northern six acres with single family homes in accordance with the Serra Mesa Community Plan and the underlying RS-1-7 Zone. The most conservative the Community Plan Alternative is based upon driveway trip generation This alternative satisfies the CEQA Guidelines requirement to ensure the provision of a range of reasonable alternatives to a project and to analyze the No Project alternative for the continuation of the existing plan.

the Community Plan Alternative based upon external cumulative ADT B

Public park acreage would be reduced commensurate with the reduction in residential density of this alternative. Assuming a population of 3,828 (based on SANDAG's population forecast of 1.74 people per residential unit in Mission Valley), a total of ~~10.7~~7.6 acres of useable parkland would be required to serve the No Project/Continuation of Existing Plan alternative for a development intensity utilizing driveway trips. For the scenario utilizing external cumulative trips, a population of 5,116 would result, requiring a total of 10.25 acres of useable parkland.

~~(~~For the purposes of this alternative, construction of a road connection between Friars Road and Phyllis Place ~~is not~~has also been included . ~~However, t~~The road connection could occur with this alternative, if an amendment to the Serra Mesa Community Plan were to be approved by the San Diego City Council. The connection to Phyllis Place requires the construction of approximately ~~1~~one acre of additional right-of-way within the area identified for open space and residential development. The road connection is described in the *Road Connection to Phyllis Place Alternative* in Section 10.2.5.~~)~~

Table 10-6, *Proposed Project and No Project/Continuation of Existing Plan Alternative Land Uses and Intensity Comparison*, provides a summary of a typical project which could development in accordance with this alternative. Adoption of this alternative would require a re-design of the project, including developing a new land use plan for the project.

Table 10-6.
Proposed Project and No Project/Continuation of Existing Plan Alternative
Development Intensity Comparison

Land Use	Development Intensity				
	Proposed Project	No Project/Continuation of Existing Plan Alternative – Assuming Driveway Trips		No Project/continuation of Existing Plan Alternative – Assuming External Cumulative Trips	
		Without Connection to Phyllis Place	With connection to Phyllis Place	Without Connection to Phyllis Place	With connection to Phyllis Place
Parks/Civic/Public Open Space[1]	31.8 acres (17.5 acres neighborhood parks)	25 acres (7.6 acres neighborhood parks)	25 acres (7.6 acres neighborhood parks)	28 acres (10.25 acres neighborhood parks)	28 acres (10.25 acres neighborhood parks)
Private Recreation	2.1 acres	2.1 acres	2.1 acres	2.1 acres	2.1 acres
Total Residential	4,780 units (4,510 units with School Option)	2,200 units (1,930 units with School Option)	2,200 units (1,930 units with School Option)	2,940 units [2,670 units with School Option]	2,940 units [2,670 units with School Option]
Affordable (included in Total)	478 units (451 units with School Option)	220 units (193 units with School Option)	220 units (193 units with School Option)	294 units (267 units with School Option)	294 units (267 units with School Option)
Multiple Use	37.5 acres	37.5 acres	37.5 acres	37.5 acres	37.5 acres
Retail Commercial	603,000 square feet	150,000 square feet	150,000 square feet	225,000 square feet	225,000 square feet
Office Commercial	620,000 square feet	250,000 square feet	250,000 square feet	350,000 square feet	350,000 square feet
Residential (included in Total)	411 units	--	--	--	--
Circulation/Public Rights-of-Way	29.7 acres	29.7 acres	30.7 acres	29.7 acres	30.7 acres
Private/Revegetated Slopes	35.6 acres	35.6 acres	35.6 acres	35.6 acres	35.6 acres

[1] Includes public parks and open space and private parks and open space with public access easements.

The land use plan would look similar to that of the project, except that there would be single family units in the northern portion of the project, where no development is currently proposed. Residential development would also occur in the Ridgetop, Foothills, Terrace and Creekside Districts. Development would be as attached units in two to three story buildings, as townhomes, or in courtyards. Parking would be provided in surface lots and garages. The residential neighborhoods under this alternative would be similar to many of the low-medium and medium density multi-family developments which have occurred in older areas of Mission Valley. The Village Walk District would be the location of the retail commercial center and would be a more traditional shopping center with surface parking lots; no residential units would occur in the Village Walk District under this alternative. Employment uses would be located in the Quarry District, but parking would be in surface parking lots; structured parking would not be necessary, due to the lower intensity of office development. Park areas would be reduced to reflect the reduced amount of residential density. Circulation would be similar to that shown for the proposed project; for the condition where no street connection would occur between Friars Road and Phyllis Place.

If a connection to Phyllis Place were to occur under this alternative, the alignment of the street connection would be in an area where single family homes would be developed within the Serra Mesa community. Similar to the proposed project, this alternative would be connected by trails and pedestrian accessways. Also similar to the proposed project, the approved CUPs would involve amendments to modify the grading shown on the approved Reclamation Plans and to relocate the asphalt/concrete plant to the southeast corner of the project site as an interim use.

Environmental Analysis

Land Use. This alternative proposes a multiple use project as an end use to the existing mining operations, which would be consistent with the Mission Valley Community Plan. This alternative also proposes single family development on the northern six acres, which would be consistent with the Serra Mesa Community Plan; ~~and~~however, this alternative would not result in the intensity of land uses envisioned by the City of Villages Strategy and Strategic Framework Plan. It would not locate dense housing in an area where transit is available. This alternative would result in the construction of less affordable housing units on-site, because the City's Inclusionary Housing Ordinance is based on the total number of residential units associated with a project. [illegible] *Alternative 4 – Road Connection to Phyllis Place* [illegible] addressed as impacts to the Phyllis Place section.

Traffic/Circulation/Parking. This alternative would generate approximately ~~32,000~~31,881 ADT, with the more conservative driveway trip land use mix generating approximately half the amount of traffic as the proposed project. Tables 10-1 – 10-5 provide a comparison of the traffic impacts associated with this alternative as compared to the proposed project. As shown in Tables 10-1 – 10-5, this alternative would result in reducing the amount of street segments, arterials, intersections, and freeway links where significant traffic impacts would occur. Mitigation measures required under this alternative would be the same as those required for Phase 1 of the project, as presented in Table 5.2-9, *Transportation Phasing Plan*

R C Alternative

Impacts would be avoided to segments on Friars Road from Mission Village Road to the I-15 southbound ramps and Mission Center Road from Camino del Rio North to the I-8 eastbound ramp under this alternative. In addition, during the AM peak hour, this alternative would eliminate significant impacts for eastbound and westbound traffic between SR-163 northbound ramps and Frazee Road; and westbound traffic between Northside Drive and Stadium Road, I-15 southbound and I-15 northbound ramps, and Riverdale Street to Mission Gorge Road. During the PM peak hour, impacts for eastbound traffic on Friars Road (Santo Road to Riverdale Street) and at three locations (Ulric Street/SR-163 southbound ramps to SR-163 northbound ramps; I-15 northbound ramps to Rancho Mission Road; and Riverdale Street to Mission Gorge Road) for westbound traffic would be eliminated.

Relative to impacted intersections, this alternative would eliminate impacts at one intersection (Friars Road/Frazee Road) during the AM peak hour. During the PM peak hour, impacts would be eliminated at five intersections (Friars Road eastbound/Qualcomm Way; Friars Road/I-15 southbound ramp; Mission Center Road/I-8 eastbound ramp; Qualcomm Way/I-8 westbound ramp and Texas Street/El Cajon Boulevard).

For freeway segments significantly affected by the proposed project, the Build-out Under the Community Plan alternative would eliminate significant impacts on a portion of SR-163; north, from I-8 to Friars Road and from Friars Road to Genesee Avenue; and south from I-8 to Friars Road. Additionally, impacts would be avoided to freeway segments on I-15 southbound both north and south of Friars Road; and on I-8 eastbound, between Mission Center Road and Qualcomm Way. This alternative would have the same impact on freeway ramps as the proposed project.

While this alternative would reduce traffic impacts, significant traffic impacts would not be avoided. Mitigation similar to the proposed project would be required under this alternative. Even with implementation of mitigation measures, traffic impacts would remain significant and unmitigated. These impacts are those to portions of Friars Road ~~at SR-163~~ and Texas Street, ~~and Alvarado Canyon Road~~ as well as freeway ramps and segments. As summarized in Tables 10-1 ~~thru~~ through 10-3 (Build-out Comparison Summary), traffic impacts would generally be similar, with minor variations, if this alternative were adopted using external cumulative trips and a Phyllis Place connection.

Visual Effects and Neighborhood Character. Significant unmitigated visual impacts and impacts associated with neighborhood character would occur under this alternative, but would be slightly reduced in comparison with the proposed project, because of the reduced density. Similar to the proposed project, this alternative would result in development on a site currently void of vegetation and being mined for sand and gravel resources. Parking would occur primarily in open surface parking lots, similar to adjacent developments, rather than within a parking garage. Large expanses of open surface parking lots are generally considered visually less attractive than consolidating parking into parking garages. The connection of the roadway

would occur as a signalized intersection, with single family development fronting Phillis Place to each side of the connection, and therefore, would not significantly affect the visual environment beyond what is addressed in this Program EIR.

Air Quality. The No Project/Continuation of Existing Plan alternative would result in the similar construction emissions as the proposed project, since the same grading would occur. However, operation emissions would be reduced by ~~approximately~~ up to 50 percent, because this alternative would generate approximately ~~half the~~ 50 percent to 60 percent of the traffic as the proposed project. Project traffic is the primary source of emissions for the project, and the reduced vehicular emissions would not exceed the city's significance threshold for carbon monoxide, although the proposed project also would not result in unmitigated significant air quality impacts.

Noise. Noise impacts under this alternative would be reduced by approximately 50 percent, because this alternative would generate approximately half the traffic as the proposed project. Mitigation would be required for on-site land uses where noise levels would be projected to exceed City standards.

Biological Resources. Development of the project site as envisioned under this alternative would result in greater impacts to biological resources, as this alternative would grade the northern six acres and develop that area with housing. A greater amount of mitigation would be required under this alternative.

Health and Safety. Development of the project site as envisioned under this alternative would result in the same impacts associated with health and safety as the proposed project. Mitigation measures required for the proposed project would also be required under this alternative.

Historical Resources. There are no known historical resources located on the project site. However, the project has the potential to affect unknown subsurface resources. Therefore, similar to the proposed project, the No Project/Continuation of Existing Plan alternative would have the same potential to affect unknown subsurface resources. Mitigation measures required for the proposed project would also be required under this alternative similar to the proposed project

Hydrology. Development of the project site as envisioned under this alternative would result in ~~a the same~~ similar level of impacts associated with hydrology as the proposed project due to the additional footprint of residential development and the road connection. The additional impervious surface of approximately 0.60 acre would not result in significant impacts to hydrology. No mitigation measures are required for the proposed project; similarly, no mitigation would be required under this alternative.

Geologic Conditions. Development of the project site as envisioned under this alternative would result in the same impacts to geologic conditions as the proposed project. No mitigation measures for this alternative or the proposed project would be required.

Paleontological Resources. Development of the project site as envisioned under this alternative would result in similar impacts to paleontological resources as the proposed project. However, because this alternative would result in grading the area within the Serra Mesa community for residential development and the road connection, there would be a potential for an increase in impacts to paleontological resources. Mitigation measures required for the proposed project would also be required under this alternative.

Public Utilities (Solid Waste). This alternative would result in fewer impacts to solid waste, as less development would occur. Nonetheless, impacts to solid waste would be considered cumulatively significant requiring mitigation similar to the proposed project.

Water Quality. Development of the project site as envisioned under this alternative would be similar to the proposed project, however, development under this alternative would also occur in the northern six acres, increasing the amount of grading and construction of impervious surfaces. Measures which would be required under this alternative include construction and post BMPs, similar to the proposed project, and would ensure that significant water quality impacts are precluded.

Mineral Resources. This alternative would result in the completion of the on-going mining operations and replacement with urban development. This alternative would not result in impacts to mineral resources, nor would the proposed project.

Cumulative Effects. The No Project/Continuation of Existing Plan alternative would contribute to cumulative impacts associated with traffic and air quality, biological resources, historical resources, and public utilities (solid waste). Relative to global climate change, this alternative would result in a lower density project with a greater proportion of surface parking, especially for the commercial retail and office component of the project. In accordance with the goals of the Mission Valley Community Plan, the site would be developed as a pedestrian oriented project, which would have the potential to reduce vehicle miles traveled for residents and visitors. The development of lower density residential housing would result in larger units with a greater square footage per unit, resulting in slightly greater energy usage per unit and an increase in GHG emissions per capita. The development of a greater percentage of surface parking is less sustainable than that achieved from more compact development, also resulting in less desirable effects on global climate change.

Evaluation of Alternative

The No Project/Continuation of Existing Plan alternative would implement the intent of the Mission Valley and Serra Mesa Community Plans by developing the project site with multiple uses and single family homes. This alternative would not result in the intensity of development envisioned for an Urban Village as defined by the City of Villages Strategy and Strategic Framework Plan. This alternative would result in less impacts to traffic, when compared to the proposed project; however, all traffic impacts would not be avoided. As previously analyzed in the proposed project and Alternative 4 – Road Connection & Phase Two, slightly different traffic impacts would occur based upon development intensity and the road connection. Measures would be required to mitigate traffic impacts associated with this alternative. Even with

implementation of mitigation measures, some traffic impacts would remain significant and unmitigated. This alternative would result in greater impacts to biological resources due to grading and construction on the northern six acres where the proposed project does not anticipate development. The No Project/Continuation of Existing Plan alternative would result in ~~less impacts~~fewer impacts to population driven environmental issues, such as public services (including parks) and utilities (solid waste). Visual effects and neighborhood character impacts would be reduced, due to a reduced intensity of development, but not to a level below significance.

10.2.4 Alternative 3 - Reduced Density Alternative; With and Without Phyllis Place Connection

This alternative evaluates a reduced density alternative that would provide for an Urban Village, as envisioned by the City of Villages strategy and the Strategic Framework Element, but would reduce the intensity of development to reduce the amount of overall traffic generated by the project. Therefore, for the Reduced Density Alternative, development would occur as a mixed-use project, similar to the proposed project, for that area within the Mission Valley Community Plan, but at a reduced density. Similar to the proposed project, no development would occur within the area located in the Serra Mesa community. The required public park acreage would be reduced commensurate with the reduction in residential density of this alternative. Assuming a population of 6,125 (based on SANDAG's population forecast of 1.74 people per residential unit in Mission Valley), a total of 17.15 acres of useable parkland would be required to serve the Reduced Density alternative.

~~(~~For the purposes of this alternative, ~~environmental~~analysis ~~of~~with and without a road connection between Friars Road and Phyllis Place ~~is not~~has been included. However, the road connection could occur with this alternative. The road connection is described in the *Road Connection to Phyllis Place Alternative* in Section 10.2.5.~~)~~

Table 10-7, *Reduced Density Alternative Land Uses and Intensity*, provides a summary of a typical project which could development in accordance with this alternative. Figure 10-1, *Reduced Density Alternative Land Use Plan, without Construction of a Road Connection between Friars Road and Phyllis Place*, show~~s~~ the land uses associated with this alternative. See Figure 10-2, *Road Connection to Phyllis Place Alternative*, depicts a land use plan with the connection to Phyllis Place.

The land use plan would look similar to that of the project, with about 1,060 fewer residential units. This reduction in residential development would occur in the Ridgetop, Foothills, Terrace and Creekside Districts. Total retail space would be reduced by more than 40 percent, and the resulting commercial center would be less urban in character, with fewer two-story structures and more surface parking. Office development would be reduced by approximately 20 percent. Fewer parks would be required to serve the reduced population base anticipated under this alternative. This alternative would provide space for civic uses, albeit reduced in square footage. Circulation would be the same as that shown for the proposed project; no street connection would occur between Friars Road and Phyllis Place. Similar to the proposed project, this alternative would be connected by trails and pedestrian accessways. Also similar to the proposed project, the approved CUPs would involve amendments to modify the grading shown on the

approved Reclamation Plans and to relocate the asphalt/concrete plant to the southeast corner of the project site as an interim use.

Table 10-7.
Reduced Density Alternative Land Uses and Intensity

Land Use	Development Intensity		
	Proposed Project	**Reduced Density Project Development Alternative – without Phyllis Place**	**Reduced Density Project Development Alternative – with Phyllis Place**
Parks/Civic/Public Open Space[1]	31.8 acres (17.5 acres neighborhood parks)	30 acres (12.25 acres neighborhood parks)	30 acres (12.25 acres neighborhood parks)
Private Recreation	2.1 acres	2.1 acres	2.1 acres
Total Residential	4,780 units (~~target~~) [4,510 units with School Option]	3,~~520~~ 720 units (~~target~~) [3,~~250~~ 450 units with School Option]	3,720 units (3,450 units with School Option)
Affordable (included in Total)	478 units (451 units with School Option)	~~352~~ 372 units (~~325~~ 345 units with School Option)	372 units (345 units with School Option)
Multiple Use	37.5 acres	37.5 acres	37.5 acres
Retail Commercial	603,000 square feet (~~target~~)	350,000 square feet (~~target~~)	350,000 square feet
Office Commercial	620,000 square feet (~~target~~)	500,000 square feet (~~target~~)	500,000 square feet
Residential (included in Total)	411 units (~~target~~)	200 units (~~target~~)	200 units
Circulation/Public Rights-of-Way	29.7 acres	29.7 acres	30.7 acres
Private/Revegetated Slopes	35.6 acres	35.6 acres	35.6 acres
Traffic Generation	52,332 external ADT	39,563 external ADT	39,563 external ADT

[1] Includes public parks and open space and private parks and open space with public access easements.

Figure 10-1.
Reduced Density Alternative Land Use

Environmental Analysis

Land Use. This alternative proposes a multiple use project as an end use to the existing mining operations, which would be consistent with the Mission Valley Community Plan. However, this alternative would result in a reduced intensity of land uses and would not provide the same amount housing in an area where transit is available. This alternative would result in the construction of fewer affordable housing units on-site. See also discussion of *Alternative 4 – Road Connection to Phyllis Place*, for analysis of additional land use impacts of the road connection alternative.

Traffic/Circulation/Parking. This alternative would result in approximately 25 percent less traffic (approximately 39,563 external trips under this alternative compared to 52,332 external trips associated with the proposed project). As shown in Tables 10-1 – 10-5, this alternative would reduce the number of street segments, arterials, and intersections ~~and freeway links~~ where significant traffic impacts would occur. Mitigation measures required under this alternative would be the same as those required for Phase 2 of the project, as presented in Table 5.2-9, *Transportation Phasing Plan.*

Impacts would be avoided on segments of Friars Road from Mission Village Road to the I-15 southbound ramps and during the AM peak hour for westbound traffic at four locations: SR-163 northbound ramps to Frazee Road; Northside Drive to Stadium Road; I-15 southbound ramps to I-15 northbound ramps; and Riverdale Street to Mission Gorge Road. Reduced impacts also occur westbound in the PM peak hour from Ulric Street/SR-163 southbound ramps to SR-163 northbound ramps, from I-15 northbound ramps to Rancho Mission Road and from Riverdale Street to Mission Gorge Road. Relative to impacted intersections, this alternative would eliminate impacts at one intersection (Friars Road/Frazee Road) during the AM peak hour and at three intersections (Friars Road eastbound/Qualcomm Way; Qualcomm Way/I-8 westbound ramp; and Texas Street/El Cajon Boulevard).

For freeway segments significantly affected by the proposed project, the Reduced Density Project alternative would eliminate significant impacts on one portion of northbound SR-163: Friars Road to Genesee Avenue; and on two portions of I-15 southbound both north and south of Friars Road. This alternative would have significant impacts at the same ~~impact on~~ freeway ramps as the proposed project.

While this alternative would reduce traffic impacts, significant traffic impacts would not be avoided. Mitigation similar to the proposed project would be required under this alternative. Even with implementation of mitigation measures, traffic impacts to portions of Friars Road, Texas Street, Mission Center Road at I-8, and freeway ramps and segments would remain significant and unmitigated. As summarized in Tables 10-1 thru 10-5 of *Alternative Land Use Variants*, traffic impacts would generally be similar with minor variations at this alternative included a Phyllis Place connection.

This alternative would eliminate parking along the portion of Phyllis Place between Franklin Ridge Road and the I-805 southbound ramps. The widening of Phyllis Place would result in the loss of approximately 85 spaces; there is no development on the south side of the street, and the church on the north side of the street satisfies its parking requirements on-site. On-street

parking to serve the park area proposed under this alternative would be available west of the intersection of Franklin Ridge Road and Phyllis Place and would be increased by the addition of parking on the south side of Phyllis Place. The impact to the availability of on-street parking is not a result of a deficit in the parking proposed for Quarry Falls, as the project would provide parking in accordance with the City's parking requirements. Therefore, the loss of the convenience represented by the on-street parking does not constitute a significant impact.

Visual Effects and Neighborhood Character. Visual impacts would occur under this alternative and would be essentially the same as the proposed project. This alternative would result in urban development on a site currently void of vegetation and being mined for sand and gravel resources. Under this alternative, parking would occur more as open surface parking lots, similar to adjacent developments, and less as structured parking. The road connection through Quarry Falls, between Friars Road and Phyllis Place, provides an additional travelway for motorists traveling to/from the Mission Valley area. However, the connection of the roadway would not significantly affect the visual environment beyond what is addressed in this Program EIR.

Air Quality. The Reduced Density Project alternative would result in the same construction emissions as the proposed project since the same grading would occur. However, operation emissions would be reduced by approximately 25 percent because this alternative would generate approximately 25 percent less traffic as the proposed project. Project traffic is the primary source of emissions for the project; however, the proposed project would not result in significant direct air quality impacts. Similarly, this alternative would not result in significant direct air quality impacts.

Noise. The Reduced Density alternative would result in reduced noise impacts due to the approximate 25 percent reduction in vehicular trips. Noise impacts associated with construction and the asphalt/concrete plants would be similar to the proposed project.

Under this alternative with the road connection to Phyllis Place, two additional external roadway segments would experience an increase in noise levels: Phyllis Place – south of the I-805 ramps and Murray Ridge Road – I-805 southbound/I-805 northbound ramps. Both of these segments do not have adjacent residential uses, and ambient noise would be dominated by the freeway itself. Therefore, there would be no significant noise impacts along these segments. The connection would also eliminate noise impacts along several Mission Valley roadway segments by diverting a portion of the project travel demand. This alternative would not result in additional traffic on Fenton Parkway. Off-site traffic noise impacts associated with this alternative would considered less than significant because no noise-sensitive land uses would be affected. For internal roadways, this alternative would result in an increase in vehicular noise volumes for streets that would carry traffic on the connection between Friars Road and Phyllis Place. This alternative would require implementation of mitigation measures as with the proposed project to reduce interior noise impacts to below a level of significance.

Biological Resources. Development of the project site as envisioned under this alternative would result in the same impacts as those associated with the proposed project, as the same development footprint would occur. The mitigation measures required for the proposed project

would be required under this alternative. The connection to Phyllis Place would result in a slight increase in impacts associated with Biological Resources, because this scenario would construct a road through the part of the project within the Serra Mesa Community Plan as more fully described in *Alternative 4 – Road Connection to Phyllis Place.*

Health and Safety. Development of the project site as envisioned under this alternative would result in the same impacts associated with health and safety as the proposed project. Mitigation measures required for the proposed project would also be required under this alternative.

Historical Resources. There are no known historical resources located on the project site. Therefore, similar to the proposed project, the Reduced Density Project alternative would have the same potential to affect unknown subsurface resources. Mitigation measures for the proposed project would also be required under this alternative.

Hydrology. Development of the project site as envisioned under this alternative would result in the same or similar~~amount of~~ impacts associated with hydrology as the proposed project. The road connection would result in a small increase in impervious surface of approximately 0.60 acre that would not result in significant impacts to hydrology. Runoff from the additional street area would be captured in the same drainage area as the proposed project for treatment and detention in the bioswale system and BMPs. No mitigation measures are required for the proposed project; similarly, no mitigation would be required under this alternative.

Geologic Conditions. Development of the project site as envisioned under this alternative would result in the same impacts to geologic conditions as the proposed project. As with the proposed project, no mitigation measures would be required under this alternative.

Paleontological Resources. Development of the project site as envisioned under this alternative would result in the same impacts to paleontological resources as the proposed project~~.~~; although with the road connection, the increase in grading could result in a slightly greater potential to uncover paleontological resources. ~~because the same grading would occur.~~ Mitigation measures required for the proposed project would also be required under this alternative.

Public Utilities (Solid Waste). This alternative would result in a slight reduction in the generation of solid waste, as less development would occur. Nonetheless, impacts to solid waste would be considered cumulatively significant requiring mitigation similar to the proposed project.

Water Quality. Development of the project site as envisioned under this alternative would result in the same impacts to water quality as the proposed project, because the same amount of grading would occur. With the road connection, the additional grading to Phyllis Place would not result in significant impacts and therefore would also be the same as the proposed project. The small increase in impervious surfaces associated with street connection to Phyllis Place of 0.60 acre would be captured and routed to the north bioswale for treatment of the first flush. This runoff is directed south to the detention facility located in the Civic Center that provides additional beneficial treatment of storm water. Measures which would be required under this

alternative include construction and post BMPs, similar to the proposed project, and would ensure that significant water quality impacts are precluded.

Mineral Resources. This alternative would result in phasing out the on-going mining operations and replacing those with urban development. This alternative would not result in impacts to mineral resources, nor would the proposed project.

Cumulative Effects. The Reduced Density alternative would contribute to cumulative impacts associated with traffic and air quality, biological resources, historical resources, and public utilities (solid waste). Relative to global climate change, under this alternative, residential densities would be reduced; however, building types would be similar to those expected from the proposed project. Surface parking for commercial retail and office would be greater than the proposed project, although less than that expected from the community plan alternative. Vehicle miles traveled for residents and visitors would be less than the proposed project, with similar opportunities for walking, cycling, and the use of alternative modes of transportation, resulting in the potential for reduced GHG emissions.

Evaluation of Alternative

Build-out under the Reduced Density Project Alternative would implement the intent of the Mission Valley Community Plan by developing the project site with multiple uses; no development would occur on the six acres of the project site located in the Serra Mesa Community Plan area. This alternative would not result in the same intensity of development envisioned for an Urban Village as defined by the City of Villages Strategy and Strategic Framework Plan as the project. This alternative would result in fewer impacts to traffic when compared to the proposed project; however, all traffic impacts would not be avoided. Measures would be required to mitigate traffic impacts associated with this alternative. Even with implementation of mitigation measures, some traffic impacts would remain significant and unmitigated. Impacts to air quality would also be less; however, both this alternative and the proposed project would not result in significant direct air quality impacts. This alternative without a road connection would result in the same level of impacts to biological resources; whereas with a road connection there would be a slight increase in impacts requiring a slight increase in mitigation. Both scenarios would result in essentially the same level of impact to hydrology and water quality, ~~because the same amount of grading would occur~~although slightly more grading would occur with a road connection. The Reduced Density Project alternative would result in slightly less impacts to public services (including parks) and public utilities (solid waste), because 1,060 less residential units would be constructed under this alternative. Visual effects and neighborhood character impacts would be reduced, but not to a level below significance.

10.2.5 Alternative 4 – Road Connection to Phyllis Place

The Road Connection to Phyllis Place alternative would provide the street connection recommended by the Mission Valley Community Plan. In order to accommodate this connection, Franklin Ridge Road would be extended northward to a signalized intersection at Phyllis Place. The segment would be designed as a four lane major street with an approximate ~~100-foot~~109 - 117-foot right-of-way. This alignment requires a modification to the existing grading plan to provide additional fill material in this area in order to create the appropriate

grade transition for the roadway. An existing SDG&E high pressure gas line would be raised within its existing alignment and easement to achieve a preferred depth of three feet from finished elevation.

The road connection would bisect the proposed linear park at Phyllis Place. Minor modification to the proposed grading plan would generate the necessary additional fill material and provide the opportunity to expand the park area to address the loss of a small portion of the park due to the road connection. Other impacts for the road connection are discussed below as part of the environmental analysis for this alternative. All other aspects of this alternative would be the same as those of the proposed project. Figure 10-2, *Road Connection to Phyllis Place Alternative*, provides a graphic representation of this project alternative.

Environmental Analysis

Land Use. This alternative would implement the Mission Valley Community Plan's recommendation of providing a street connection between Friars Road and Phyllis Place. However, the Serra Mesa Community Plan does not identify a connection between Friars Road and Phyllis Place. This alternative would be consistent with the *Quarry Falls Specific Plan*; however, it would result in a conflict with the Serra Mesa Community Plan and, therefore, would require processing of an amendment to the Serra Mesa Community Plan. This alternative would satisfy the City's Inclusionary Housing Ordinance in the same manner as the proposed project – through the construction of affordable housing units on-site.

Traffic/Circulation/Parking. Under the Road Connection to Phyllis Place alternative, all existing and proposed roadways would be the same as the proposed project, except the road system would add a connection to Phyllis Place and some minor modifications to the proposed streets may be necessary to accommodate the connection. If approved, the road connection would occur during Phase 2 of the Quarry Falls project. Additional improvements to Phyllis Place and the I-805 southbound ramp include the widening of the southbound on and off-ramps, the widening of the Phyllis Place eastbound approach, the restriping of Murray Ridge Road bridge to five lanes, and the restriping of the Murray Ridge Road westbound approach (see Table 10-8, *Transportation Phasing Plan with Phyllis Place Road Connection*). Once constructed, approximately 1/3 of the project traffic would be expected to use the road connection to get to I-805 and beyond.

As shown in Tables 10-1 – 10-5, project traffic under this alternative would impact roadway segments and intersections similar to the proposed project. However, due to the different distribution of traffic associated with the Phyllis Place connection, traffic impacts under this alternative would occur at different locations; in other locations, impacts would be avoided. Although significant impacts are comparable, in general the redistribution of traffic to the Phyllis Place/I-805 interchange is beneficial to existing Mission Valley circulation streets where total vehicular trips are reduced, such as for Friars Road between SR-163 and I-15; Mission Center Road from Friars Road to I-8; and Qualcomm Way from Friars Road to I-8.

Figure 10-2.
Road Connection to Phyllis Place Alternative

Table 10-8.
Transportation Phasing Plan with Phyllis Place Road Connection

#	Location	Responsible Party[1]	Improvement
The following improvements are to be assured to the satisfaction of the City Engineer prior to the issuance of the first building permit.			
1a	Friars Road/ SR-163 interchange	Project[2]	Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the ~~C~~construction of the following local improvements: the widening of the northbound approach of the SR-163 southbound off-ramp at Friars Road by 1 right turn lane resulting in 1 left turn lane, 1 shared left thru lane and 2 right turn lanes; the widening of the southbound approach of Ulric Street at Friars Road by 1 right turn lane resulting in 1 left turn, 1 thru-left, and 1 right turn lane; the reconfiguring of the ~~northbound~~ southbound approach of Friars Road and (SR-163 ~~southbound~~ northbound ramps to provide 2 right-turn lanes); the widening of westbound Friars Road from Frazee Road to SR-163 northbound ramps by 1 thru lane and 1 right turn lane resulting in 3 thru lanes and 2 right-turn lanes; the widening of eastbound Friars Road at Frazee Road by 1 thru lane (with widening to accept the thru lane) and 2 right turn lanes resulting in dual left turn lanes, 4 thru lanes and 2 right turn lanes satisfactory to the City Engineer ~~, reconfigure southbound approach at Friars Road at SR-163 northbound ramps (SR-163 northbound to Friars Road westbound ramp)~~. The City may require the project to pay $5,000,000 (2007 dollars) to the City of San Diego in lieu of constructing such local improvements to assist in the funding of a more regional set of improvements at this same location satisfactory to the City Engineer.
2	Mission Center Road/Quarry Falls Blvd	Project[2]	Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the construction of the following improvements at the intersection of Mission Center Road and Quarry Falls Boulevard the ~~W~~widening of the northbound approach by 1 right turn trap lane resulting in 2 left turn lanes, 2 thru lanes and 1 right turn lane; the widening of the westbound approach by 2 left turn lanes resulting in 2 left turn lanes and 1 shared thru-right lane; and the widening of the eastbound approach by 1 right turn lane resulting in 1 left turn lane, 1 thru lane and 1 right-turn lane satisfactory to the City Engineer.
3	Mission Center Road from Quarry Falls Boulevard to Friars Road	Project[2]	Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the construction of the following improvement on Mission Center Road from Quarry Falls Boulevard to Friars Road the ~~W~~widening of ~~by one~~ northbound Mission Center Road to add one additional lane resulting in ~~for~~ a total of three thru lanes satisfactory to the City Engineer.
4	Friars Road from Qualcomm Way to Mission Center Road	Project[2]	Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the construction of a westbound auxiliary lane by ~~W~~widening Friars Road from Qualcomm Way to Mission Center Road resulting in ~~westbound segment by one auxiliary lane for~~ a total of three thru lanes and one auxiliary lane satisfactory to the City Engineer.
5a	Phyllis Place/ I-805 SB ramp	Project	Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the construction of a traffic signal at the intersection of Phyllis Place and I-805 southbound ramp with appropriate traffic signal interconnect, the widening of the Phyllis Place eastbound approach to provide 2 thru and 1 right turn lane, the widening of the southbound on-ramp, and the widening of the southbound off-ramp to provide 1 shared thru left and 2 right turn lanes satisfactory to the City Engineer ~~Signalize Widen southbound off-ramp, widen Phyllis Place eastbound~~

#	Location	Responsible Party[1]	Improvement
			~~approach from I-805 to Ainsley/Abbotshill Road, widen southbound on-ramp.~~
6	Phyllis Place/ I-805 NB ramp	Project	~~Signalize~~ Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the construction of a traffic signal at the intersection of Phyllis Place and I-805 northbound ramp with appropriate traffic signal interconnect. ~~R~~restripe northbound approach; restripe eastbound approach; reconfigure westbound approach and widen the northbound on-ramp satisfactory to the City Engineer.
7	Murray Ridge Road/ Mission Center Road	Project[2]	~~Signalize~~ Prior to the issuance of any building permits for Phase 1, the applicant shall assure by permit and bond the construction of the following improvements at the intersection of Mission Center Road and Murray Ridge Road: the installation of a traffic signal, the ~~R~~restriping of the southbound approach to provide 1 left turn lane, 1 thru lane, and 1 right turn lane; the widening of the westbound approach by 1 left turn lane resulting in 1 shared thru-right lane and 1 left turn lane; and, the ~~r~~restriping of the eastbound approach to provide 1 left turn lane and 1 thru-right lane satisfactory to the City Engineer.
8a	Murray Ridge Road from ~~SB~~ NB Interstate 805 ramps to Pinecrest Ave	Project[2]	Prior to the issuance of any building permits for Phase 1, the applicant shall assure by permit and bond the following improvements on Murray Ridge Road from the ~~south~~northbound I-805 ramps to Pinecrest Avenue: the ~~R~~restriping of Murray Ridge Road to a 4-lane collector or the contribution of $100,000 (2007 dollars) in funding for traffic calming to be determined by the Serra Mesa community ~~from I-805 northbound ramps to Pinecrest Avenue~~, satisfactory to the City Engineer.
8b	Murray Ridge Road Bridge over I-805	Project[2]	Prior to the issuance of any building permits for Phase 1, the applicant shall assure by permit and bond the restriping of the Murray Ridge Road/Phyllis Place, between the northbound and southbound ramps of I-805 ramps, to 5 lanes, satisfactory to the City Engineer.
9	Murray Ridge Road/ Pinecrest Ave	Project	~~Signalize~~ Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the construction of a traffic signal at the intersection of Murray Ridge Road and Pinecrest Avenue, satisfactory to the City Engineer.
10	Friars Road/ Avenida~~ve~~ De Las Tiendas	Project[2]	Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the lengthening of westbound dual left-turn lanes at the intersection of Friars Road and Avenida de las Tiendas to approximately 450 feet, satisfactory to the City Engineer.
11	Texas Street from Camino del Rio South to El Cajon Boulevard	Project	Prior to the issuance of any building permits for Phase 1 the applicant shall assure by permit and bond the implementation of the following traffic calming measures on Texas Street from El Cajon Boulevard to Camino Del Rio South: the provi~~d~~esion of pedestrian lighting and a new sidewalk~~s~~ from Camino del Rio South to Madison Avenue (~~see~~ per item T4 in the Greater North Park Planning Committee's Priority List on ~~page~~ 13) of the Public Facilities Financing Plan, 2002); and the contribut~~e~~ion of $100,000 (2007 dollars) in funding for traffic calming to be determined by the community from Madison Avenue to El Cajon Boulevard.
12	Transportation Demand Management measures	Project	Prior to the issuance of any building permits for Phase 1 the applicant shall ~~D~~develop a comprehensive ~~t~~Transportation ~~d~~Demand ~~m~~Management ~~p~~Plan that includes information kiosks in central locations, bike lockers, priority parking spaces for carpools, and co-ordination with MTS for potential public or private bus service in Quarry Falls satisfactory to the City Engineer.
Prior to the issuance of a building permit for development in excess of 2,375 EDU[3] the following improvements are to be assured to the satisfaction of the City Engineer.			

#	Location	Responsible Party[1]	Improvement
14	Friars Road/ Fashion Valley Road	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, the applicant shall assure by permit and bond the Rrestripeing of the westbound approach at the intersection of Friars Road and Fashion Valley Road by 1 left turn lane resulting in 2 left-turn lanes, 1 thru lane and 1 shared thru-right turn lane, satisfactory to the City Engineer.
16	Pedestrian Bridge across Friars Road	Project[4]	Prior to the issuance of any building permits for Phase 2 in the area represented by parcels 21, 24, or 25 of the Quarry Falls Vesting Tentative Map 183196 and that exceeds 23,750 ADT in total development, the applicant shall assure by permit and bond the Cconstruction of a pedestrian bridge over Friars Road to connect Quarry Falls to the Rio Vista West shopping center and provide access to the Rio Vista West trolley station, satisfactory to the City Engineer.
17	Friars Road EB ramp/ Qualcomm Way	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, the applicant shall assure by permit and bond the construction of the following improvement on Friars Road eastbound ramp and Qualcomm Way: the Wwidening of the eastbound approach by 1 left turn lane resulting in 1 left turn lane, a 1 shared left-thru lane and 1 right turn lane; the restripeing of the southbound approach within the existing bridge abutments resulting in 2 thru lanes and 2 left turn lanes; and the widening of the northbound approach by 2 thru lanes resulting in 4 thru lanes and 1 right turn lane, satisfactory to the City Engineer.
18	Friars Road WB ramp/ Qualcomm Way	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, the applicant shall assure by permit and bond the construction of the following improvements on Friars Road westbound ramp and Qualcomm Way: the Wwidening of the southbound approach by 1 thru lane and 1 right turn lane resulting in 1 right turn lane and 2 thru lanes and the restriping of the northbound approaches resulting in 2 thru lanes and 2 left turn lanes, satisfactory to the City Engineer.
5b	Phyllis Place/ I-805 SB ramp	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, the applicant shall assure by permit and bond the ~~Widen southbound off-ramp, widen Phyllis Place eastbound approach, widen southbound and northbound on-ramps,~~ Rrestripeing of the Murray Ridge Road bridge to five lanes ~~Restripe Murray Ridge Road westbound~~ satisfactory to the City Engineer.
19	Friars Road/I-15 SB off-ramp	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, the applicant shall assure by permit and bond the Wwidening of the southbound approach at Friars Road and I-15 southbound off-ramp by 1 left turn lane resulting in 2 left turn lanes, 1 shared thru-left turn lane and 2 right turn lanes, satisfactory to the City Engineer.
Prior to the issuance of a building permit for development in excess of 5,118 EDU[3] the following improvements are to be assured to the satisfaction of the City Engineer.			
20	Texas Street/El Cajon Blvd.	Project[2]	Prior to the issuance of any building permits for Phase 3 that exceeds 51,180 ADT in total development, the applicant shall assure by permit and bond the Wwidening of the eastbound approach at the intersection of Texas Street and El Cajon Boulevard by 1 right turn lane resulting in 1 left turn, 3 thru lanes and 1 right turn lane, satisfactory to the City Engineer.
1b	Friars Road/SR-163 Interchange	Project[2]	Prior to the issuance of any building permits for Phase 3 that exceeds 51,180 ADT in total development, the applicant shall assure by permit and bond the Cconstruction of the following local improvements at Friars Road and SR-163 interchange, the widening and lengthening of the Friars Road bridge from 6 lanes to 8 thru lanes from Frazee Road to Ulric Street and providing 2 left turn lanes across the bridge; the reconfiguration of the SR-163

#	Location	Responsible Party[1]	Improvement
			northbound off ramp by removing the free right turn and widening the existing loop off ramp to provide 3 left turn and 1 right turn lanes, the widening of the southbound approach of at Friars Road/ and Frazee Road intersection by 1 right turn lane resulting in 2 left turn lanes, 1 shared thru right and 2 right turn lanes. The City may require the project to pay $14,000,000 (2007 dollars) to the City of San Diego in lieu of constructing such local improvements to assist in the funding of a more regional set of improvements at this same location satisfactory to the City Engineer.
Prior to the issuance of a building permit for development in excess of 5,904 EDU[3] the following fair share contributions will be made to the satisfaction of the City Engineer.			
22	Friars Road/Santo Road	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT in total development, the applicant shall Contribute a fairshare ~~16~~15% of toward the cost of ~~the following improvement: R~~restriping the southbound approach at the intersection of Friars Road and Santo Road to provide dual left turn lanes and dual right turn lanes, satisfactory to the City Engineer.
23	Mission Gorge Road/Zion Avenue	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT in total development, the applicant shall ~~C~~contribute a fairshare of 20% ~~of~~ toward the cost of the installation of an additional ~~following improvement: Widen~~ westbound ~~approach~~left turn lane (requiring widening of the westleg of the intersection) resulting in dual left turn lanes and 1 shared thru-right turn lane at the intersection of Mission Gorge Road and Zion Avenue, satisfactory to the City Engineer.
24	Mission Center Road/Camino De La Reina	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT in total development the applicant shall ~~C~~contribute a fairshare of 7% ~~of~~ toward the cost of ~~the following improvement: W~~widening the eastbound approach at the intersection of Mission Center Road and Camino De La Reina by 1 right turn lane resulting in 2 left turn lanes, 2 thru lanes and 1 right turn lane, satisfactory to the City Engineer.
25	Qualcomm Way/Camino De La Reina	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT in total development, the applicant shall ~~C~~contribute a fairshare of 25% ~~of~~ toward the cost of ~~the following improvement: W~~widening the westbound approach at the intersection of Qualcomm Way and Camino De La Reina by 1 right turn lane resulting in 2 left turn lanes, 2 thru lanes and 2 right turn lanes, satisfactory to the City Engineer.
26	Texas Street/Camino Del Rio South	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT in total development the applicant shall ~~C~~contribute a fairshare of 1% ~~of~~ toward the cost of the following improvements at the intersection of Texas Street and Camino Del Rio South: the ~~W~~widening of the northbound approach by a shared thru-right lane resulting in 1 left turn lane, 2 thru lanes and 1 shared thru-right lane; the restriping of the eastbound approach resulting in 2 left turn lanes and 1 shared thru-right turn lane; the widening of the southbound approach by 1 left turn lane, resulting in 2 left turn lanes, 2 thru lanes and 1 right turn lane; and the widening of the westbound approach by 1 right turn lane resulting in 1 left turn lane, 1 thru lane and 2 right turn lanes, satisfactory to the City Engineer.
27	Texas Street/Madison Street	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT in total development the applicant shall ~~C~~contribute a fairshare of 27% ~~of~~ toward the cost of ~~the following improvement: R~~restriping the eastbound approach (which will require the widening of the northleg of the intersection) at the intersection of Texas Street and Madison Street resulting in 2 left turn lanes and 1 shared thru-right turn lane, satisfactory to the City Engineer.

#	Location	Responsible Party[1]	Improvement
28	Rio San Diego Drive/Fenton Parkway	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT in total development the applicant shall ~~C~~contribute a fairshare of 6% ~~of toward~~ the cost of ~~the following improvement: W~~widening the northbound approach at the intersection of Rio San Diego Drive and Fenton Parkway by 1 left turn lane resulting in 2 left turn lanes, 1 thru lane and 1 shared thru-right turn lane, satisfactory to the City Engineer.
29	Camino del Rio North/I-8 WB Ramp	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT in total development the applicant shall ~~C~~contribute a fairshare of 2% ~~of toward~~ the cost of ~~the following improvement: W~~widening the eastbound approach resulting in two thru-lanes and 2 right-turn lanes, satisfactory to the City Engineer.

[1] Construction and/or funding may also be the responsibility of others. Project may be eligible for DIF credits and/or reimbursements for construction of the improvement.

[2] Appendix I of the Traffic Impact Study contains conceptual designs for each of these improvements

[3] An EDU is equal to 10 ADT. Each development threshold is based on driveway trip generation rates.

[4] Assurance to the satisfaction of the City Engineer shall not be required until construction of the Village Walk District commences.

Segments. For roadway segments, this alternative would result in similar impacts compared to the proposed project. Additional impacts would occur to Murray Ridge Road from the I-805 southbound ramps to the I-805 northbound ramps and to two streets internal to the proposed project, Via Alta and Franklin Ridge Road. This alternative would eliminate impacts to Friars Road (Mission Village Road to I-15 southbound ramps) and Mission Center Road (between Murray Ridge Road and the I-805 overpass and between Camino del Rio North and the I-8 EB ramps).

Arterials. Relative to arterial streets, this alternative would result in significant impacts at five additional locations, with impacts occurring in AM peak hour (eastbound from Santo Road to Riverdale Street) and the PM peak hour (eastbound from Avenida de las Tiendas to Ulric Street/SR-163 southbound ramps; eastbound from Stadium Road to I-15 southbound ramps; and eastbound from I-15 northbound ramps to Rancho Mission Road; and westbound Frazee Road to River Run). This alternative results in the same or fewer total ADT on these arterials, however, impacts result from traffic signal timing changes that prioritize the optimization of intersection performance. The impacts to Avenida de las Tiendas to Ulric Street/SR-163 southbound ramps and Frazee Road to River Run are mitigated to below a level of significance by improvements made by the project.

Intersections. As compared to the proposed project, this alternative would avoid impacts to intersections at four locations. In the AM peak hour, impacts to one intersection would be reduced from significant to not significant (Friars Road/Frazee Road). Impacts at three intersections would be avoided in the PM peak hour (Friars Road eastbound/Qualcomm Way; Mission Center Road/I-8 eastbound ramp; and Qualcomm Way/I-8 westbound ramp). This alternative would create one new impact in the AM peak hour at the intersection of Phyllis Place/I-805 northbound ramp which is fully mitigated by the project.

Freeway Ramps and Segments. This alternative would increase impacts to freeway segments in areas where the proposed project would not result in significant impacts. Additional impacts would occur on I-8 westbound and eastbound, between SR-163 and Mission Center Road, and on I-805 northbound and southbound, north of Phyllis Place. Impacts to one freeway segment would be avoided under this alternative on SR-163 northbound from Friars Road to Genesee Avenue. Additionally, this alternative would result in significant impacts to freeway ramps during the AM peak hour (I-805 northbound ramps at Murray Ridge Road) and PM peak hour (I-805 southbound at Murray Ridge Road).

Overall, this alternative would result in similar traffic impacts, with the exception of Mission Center Road and I-8, which would not be impacted due to the redistribution of traffic to the Phyllis Place/Murray Ridge and I-805 interchange, as compared to the proposed project. Even with implementation of mitigation measures, similar traffic impacts to Friars Road, Mission Gorge Road, and Texas Street would remain significant and unmitigated. Additional impacts to three freeway segments would be significant and unmitigated. The following Transportation Phasing Plan for this alternative has been developed to provide mitigation where feasible.

Visual Effects and Neighborhood Character. This alternative would result in similar impacts associated with visual effects and neighborhood character as the proposed project, because the same development would occur. This alternative would allow for a connection through Quarry Falls, between Friars Road and Phyllis Place, providing an additional travelway for motorists traveling to/from the Mission Valley area. However, the connection of the roadway would not significantly affect the visual environment beyond what is addressed in this Program EIR.

Air Quality. The Road Connection to Phyllis Place alternative would result in the same impacts associated with air quality as the proposed project. While traffic would be allowed to travel through Quarry Falls to I-805 reducing some impacts on critical intersections and segments within Mission Valley, from an air quality perspective, this would not result in a substantial benefit to regional air quality, as additional trips would still be generated in the region.

Noise. Similar to the proposed project, this alternative would result in significant exterior noise levels on Mission Center Road, between Mission Valley Road and Friars Road. Implementation of mitigation measures as required for the proposed project would reduce the impact to below a level of significance.

Under this alternative, two additional external roadway segments would experience an increase in noise levels: Phyllis Place – south of the I-805 ramps and Murray Ridge Road – I-805 southbound/I-805 northbound ramps. Both of these segments do not have adjacent residential uses, and ambient noise would be dominated by the freeway itself. Therefore, there would be no significant noise impacts along these segments. The connection would also eliminate noise impacts along several Mission Valley roadway segments by diverting a portion of the project travel demand. This alternative would not result in additional traffic on Fenton Parkway. Off-site traffic noise impacts associated with this alternative would considered less than significant because no noise-sensitive land uses would be affected.

For internal roadways, this alternative would result in an increase in vehicular noise volumes for streets that would carry traffic on the connection between Friars Road and Phyllis Place. Table 10-9, *On-Site Noise Impact Analysis Comparison – Proposed Project and Alternative 4*, identifies where there would be a change in noise levels on interior streets. This alternative would require implementation of mitigation measures as with the proposed project to reduce interior noise impacts to below a level of significance.

Noise associated with construction, on-going mining operations, the existing asphalt and concrete plants, and the relocated asphalt and concrete plants would be the same as the proposed project and would require implementation of the same mitigation measures to reduce impacts to below a level of significance.

Biological Resources. Development of the project site as envisioned under this alternative would result in slightly greater impacts to biological resources than the proposed project, because this alternative would require additional grading associated with the road connection to Phyllis Place. The road extension and widening of Phyllis Place would ~~cross~~ impact sensitive native vegetation, which would not be affected by the proposed project, resulting in increased impacts to biological resources. The impacted area is comprised of coastal sage scrub (Tier II), non-native grassland (Tier IIIB), ~~and~~ disturbed habitat (Tier IV), and developed area. Mitigation measures required for the proposed project would also be required under this alternative. However, additional mitigation in the form of a payment to the City of San Diego's Habitat Acquisition Fund would be required for the increase in impacts to sensitive habitat. When compared to the proposed project, this alternative would result in the additional loss of 0.22 acre of coastal sage scrub, 0.13 acre of disturbed vegetation, and 0.64 acre of non-native grassland, and 0.59 acre of developed area for a total additional impact of 1.58 acres. In order to mitigate impacts to coastal sage scrub and non native grasslands, this alternative would require an increased acquisition of 0.22 acres of credit from the San Diego Habitat Acquisition Fund to mitigate the additional loss of coastal sage scrub and 0.32 acre of credit to mitigate the loss of non native grassland. Therefore, this scenario would result in a total increased acquisition of 0.54 acre of credit from the San Diego Habitat Acquisition Fund.

Health and Safety. Development of the project site as envisioned under this alternative would result in the same impacts associated with health and safety as the proposed project. Mitigation measures required for the proposed project would also be required under this alternative.

Historical Resources. There are no known historical resources located on the project site. However, the project has the potential to affect unknown subsurface resources. Therefore, similar to the proposed project, the Road Connection to Phyllis Place alternative would have the same potential to affect unknown subsurface resources. Mitigation measures required for the proposed project would also be required under this alternative similar to the proposed project.

Table 10-9.
On-Site Noise Impact Analysis Comparison – Proposed Project and Alternative 4

Roadway Segment:	Proposed Project (without Phyllis Place Connection			Alternative 4 – With Phyllis Place Connection			Change in Impacts between Proposed Project and Alternative 4
	dB CNEL – 50' from Centerline	Distance to 65 CNEL - Soft Site	Distance to 65 CNEL - Hard	CNEL – 50' from Centerline	Distance to 65 CNEL - Soft Site	Distance to 65 CNEL - Hard	
Mission Center Rd:							
Mission Valley-Friars	72.4	156	275	72.7	163	295	Increase
Qualcomm Way							
Friars Road – Quarry Falls	72.0	150'	250'	71.6	138'	229'	Decrease
Quarry Falls Blvd.							
Mission Center-Street1	69.5	100'	140'	68.8	90'	120'	Decrease
Street 1-Via Alta	69.2	95'	130'	68.9	90'	125'	Decrease
Via Alta-Russell Park Way	69.4	100'	140'	69.1	95'	130'	Decrease
Russell Park-Community	69.4	100'	140'	68.2	80'	105'	Decrease
Community Ln-Qualcomm	70.4	115'	175'	70.3	115'	170'	Decrease
Qualcomm-Franklin Ridge	68.0	80'	100'	69.9	105'	155'	Increase
Via Alta							
Quarry Falls-Franklin Ridge	67.6	75'	90'	70.4	115'	175'	Increase
Franklin Ridge Road							
Russell Park Way-Via Alta	65.3	55'	55'	69.6	100'	145'	Increase
Via Alta-Phyllis Place	DNE	n/a	n/a	72.0	145'	250'	--
Russell Park Way							
Friars Road-Street 1	68.3	85'	105'	66.6	65'	70'	Decrease
Street 1-Quarry Falls Blvd.	66.7	65'	75'	66.6	65'	70'	Decrease

DNE=Does Not Exist

Geologic Conditions. Development of the project site as envisioned under this alternative would result in the same impacts to geologic conditions as the proposed project. As with the proposed project, no mitigation measures would be required under this alternative.

Paleontological Resources. Development of the project site as envisioned under this alternative would result in greater impacts associated with paleontological resources than the proposed project, because additional grading required for construction of the road connection would occur. Mitigation measures required for the proposed project would also be required under this alternative.

Public Utilities (solid waste). Impacts to public utilities under this alternative would be the same as the proposed project, because the same level of development would occur.

Water Quality. Development of the project site as envisioned under this alternative would not result in significant impacts and therefore would be the same as the proposed project. The small increase in impervious surfaces associated with street connection to Phyllis Place of 0.60 acre would be captured and routed to the north bioswale for treatment of the first flush. This runoff is directed south to the detention facility located in the Civic Center that provides additional beneficial treatment of storm water. Measures which would be required under this alternative include construction and post BMPs, similar to the proposed project, and would ensure that significant water quality impacts are precluded.

Mineral Resources. This alternative would result in phasing out the on-going mining operations and replacing those with urban development. This alternative would result in the same impacts to mineral resources as the proposed project.

Cumulative Effects. This alternative includes a connection to Phyllis Place with all other elements of the proposed project being the same, including densities and land uses. This alternative would result in the same level of contribution to cumulative effects. This alternative would result in a change to traffic patterns in the area due to the construction of a connection between Friars Road and Phyllis Place. However, because average daily trips and vehicle miles traveled would be similar to the proposed project, GHG emissions would be expected to be the same.

Evaluation of Alternative

This alternative would implement the Mission Valley Community Plan by providing a connection between Friars Road and Phyllis Place; however, it would also result in creating a conflict with the Serra Mesa Community Plan, which does not call for that connection. This alternative would impact roadway segments and intersections similar to the proposed project. However, due to the different distribution of traffic associated with the Phyllis Place connection, some impacts in the Mission Valley community would be eliminated or reduced. More impacts to freeway segments would occur under this alternative, as shown in Table 10-6, *Summary of Freeway Segments Impacts Significance* (page 10-22). This alternative would also result in greater impacts to biological resources, due to construction of the road through sensitive habitat. This alternative would result in some improvement to fire and police access and eliminate the need for a secondary emergency access from Kaplan Drive.

This alternative would result in the same significant noise impacts as the proposed project relative to exterior noise levels, noise from the on-going mining operations, noise from the existing asphalt and concrete plants and noise from the relocated asphalt and concrete plants, requiring the same mitigation as the proposed project. Noise impacts due to interior streets would increase in some areas and decrease in others. This alternative would require the same mitigation as the proposed project for residential development located along internal streets, which would reduce impacts to below a level of significance.

Other impacts associated with this alternative would be the same or very similar to those associated with the proposed project.

10.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The environmental analysis of alternatives presented above is summarized in Table 10-10, *Comparison of Alternatives to Proposed Project.* CEQA requires that the EIR identify the environmentally superior alternative among all of the alternatives considered, including the proposed project. If the No Project alternative is selected as environmentally superior, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

Through a comparison of potential impacts from each of the proposed alternatives and the proposed project, the **No Project/No Build** alternative could be considered environmentally superior because it would result in the least amount of environmental impacts. However, the No Project/No Build alternative would result in greater impacts to land use than the proposed project, as it would not provide for a multiple use development on the site. The No Project alternative would not eliminate existing traffic impacts in the community; it would, however, result in substantially less traffic contributing to those impacts. Relative to air quality, the No Project/No Build alternative results in less carbon monoxide, nitrous oxide, reactive organic compounds, and sulfur oxide emissions, although none of the emissions are at levels of significance with the proposed project. The No Project/No Build alternative would result in fewer impacts to biological, historical, and paleontological resources than the proposed project, because additional grading beyond the current limits of the CUPs and Reclamation Plans would not occur.

Because the No Project /No Build alternative would not result in development of the project site, impacts to public services, facilities and utilities would also not occur. This No Project/No Build alternative would not develop the project site; instead, the site would remain as a reclaimed mining site until such time as a project to develop the site is brought forward. No Project/No Build alternative would not accomplish any of the objectives of the project.

Table 10-10.
Comparison of Alternatives to Proposed Project

Environmental Issue Area	Proposed Project (52,332 ADT)	Alternative 1 – No Project/ No Build	Alternative 2 – No Project/ Continuation of Existing Plan				Alternative 3 – Reduced Density Project (39,563 ADT)		Alternative 4 – Road Connection to Phyllis Place (52,332 ADT)
			140 ADT/Acre Driveway Trips (31,881 ADT)		140 ADT/Acre External Trips (31,881 ADT)		Without Road Connection to Phyllis Place	With Road Connection to Phyllis Place	
			Without Road Connection to Phyllis Place	With Road Connection to Phyllis Place	Without Road Connection to Phyllis Place	With Road Connection to Phyllis Place			
Land Use	Significant traffic impacts; partially mitigated. Significant impacts associated with air quality and noise; mitigated to below a level of significance.	Less impacts than proposed project relative to traffic, air quality and noise.	Less impacts than proposed project relative to traffic, air quality, and noise.	Less impacts than proposed project relative to traffic, air quality, and noise. Requires amendment to the Serra Mesa community plan.	Less impacts than proposed project relative to traffic, air quality, and noise.	Less impacts than proposed project relative to traffic, air quality, and noise. Requires amendment to the Serra Mesa community plan.	Same as proposed project.	Same as proposed project. Requires amendment to the Serra Mesa community plan.	Results in conflict with Serra Mesa Community Plan. Other impacts would be the same as the proposed project.
Traffic/ Circulation/ Parking	Significant impacts; partially mitigated.	Fewer impacts; no circulation improvements.	Reduced impacts; impacts partially mitigated.	Reduced impacts; impacts partially mitigated.	Reduced impacts; impacts partially mitigated.	Reduced impacts; impacts partially mitigated.	Reduced impacts; impacts partially mitigated.	Reduced impacts; impacts partially mitigated.	Similar to proposed project.
Visual Effects and Neighborhood Character	Impacts associated with visual effects and neighborhood character would be considered significant.	Fewer impacts associated with visual effects and neighborhood character.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.
Air Quality	Significant impacts associated with construction. Mitigated to below a level of significance.	Less impacts.	Less impacts.	Less impacts.	Less impacts.	Less impacts.	Less impacts.	Less impacts.	Same as proposed project.
Noise	Significant impacts associated with vehicular noise levels, construction activities, mining operations, and relocated asphalt/concrete plants; mitigated to below a level of significance.	Less impacts.	Less impacts.	Greater interior noise impacts; mitigated to below a level of significance.	Less impacts.	Greater interior noise impacts; mitigated to below a level of significance.	Less impacts.	Greater interior noise impacts; mitigated to below a level of significance.	Construction noise impacts, exterior road noise impacts and noise impacts associated with the on-going mining operations, existing asphalt and concrete plants and relocated plants would be the same as the proposed project. Noise impacts due to interior roads would decrease for some streets and increase for others. The same level of mitigation as with the proposed project would be required.

Environmental Issue Area	Proposed Project (52,332 ADT)	Alternative 1 – No Project/ No Build	Alternative 2 – No Project/ Continuation of Existing Plan				Alternative 3 – Reduced Density Project (39,563 ADT)		Alternative 4 – Road Connection to Phyllis Place (52,332 ADT)
			140 ADT/Acre Driveway Trips (31,881 ADT)		140 ADT/Acre External Trips (31,881 ADT)		Without Road Connection to Phyllis Place	With Road Connection to Phyllis Place	
			Without Road Connection to Phyllis Place	With Road Connection to Phyllis Place	Without Road Connection to Phyllis Place	With Road Connection to Phyllis Place			
Biological Resources	Significant impacts; mitigated to below a level of significance.	No significant impacts.	Greater impacts; can be mitigated.	Greater impacts; can be mitigated.	Greater impacts; can be mitigated.	Greater impacts; can be mitigated.	Same as proposed project.	Greater impacts; can be mitigated.	Greater impacts; can be mitigated.
Health and Safety	Potential hazardous materials could pose health risk; mitigated to below a level of significance.	No significant impacts.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.
Historical Resources	Grading could affect unknown resources; mitigated to below a level of significance.	No significant impacts.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.
Hydrology	No significant impacts.	No significant impacts.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.
Geologic Conditions	No significant impacts.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.
Paleontological Resources	Potential for significant impacts; mitigated to below a level of significance.	No significant impacts.	Greater impacts, but mitigable.	Greater impacts, but mitigable.	Greater impacts, but mitigable.	Greater impacts, but mitigable.	Similar to proposed project.	Greater impacts, but mitigable.	Greater impacts, but mitigable.
Public Utilities (solid waste)	Significant impacts associated with solid waste; partially mitigated.	No significant impacts.	Less impacts; partially mitigated.	Less impacts; partially mitigated.	Less impacts; partially mitigated.	Less impacts; partially mitigated.	Less impacts; partially mitigated.	Less impacts; partially mitigated.	Same as proposed project.
Water Quality	No significant impacts. Incorporation of BMPs precludes significant impacts.	No significant impacts.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.	Similar to proposed project.
Mineral Resources	No significant impacts.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.

The **No Project/Continuation of Existing Plans Alternative** could also be considered the environmentally superior alternative, because it would result in a reduction of those impacts associated with the proposed project that are density driven. This alternative would implement the intent of the Mission Valley and Serra Mesa Community Plans by developing the project site with multiple uses and single family homes. The inclusion of the road connection under this alternative would also implement the intent of the Mission Valley Community Plan relative to providing a road connection between Friars Road and Phyllis Place; however, it would be inconsistent with the Serra Mesa Community Plan. This alternative would result in fewer impacts to traffic, when compared to the proposed project; however, all traffic impacts would not be avoided and some traffic impacts would remain significant and unmitigated. This alternative would result in greater impacts to biological resources due to grading and construction on the northern six acres where the proposed project does not anticipate development. The No Project/Continuation of Existing Plans alternative would result in fewer impacts to public utilities (solid waste). Impacts associated with the visual environment would be reduced, due to a reduced intensity of development, but not to a level below significance. This alternative would accomplish most of the project goals. It would not, however, result in the intensity of development envisioned for an Urban Village as defined by the City of Villages Strategy and Strategic Framework Plan and would result in greater impacts to biological resources.

Because either of the No Project alternatives could be considered environmentally superior to the proposed project, CEQA requires that the EIR also identify an environmentally superior alternative among the other alternatives. For the Quarry Falls project, the Reduced Density Project alternative is identified as the environmentally superior among the other project alternatives.

The **Reduced Density Project** alternative would accomplish the project's main objectives and would result in fewer trips and less impacts to population driven environmental issues than the proposed project; therefore, this alternative could also be considered the environmentally superior alternative to the proposed project. Build-out under the Reduced Density Project Alternative would implement the intent of the Mission Valley Community Plan by developing the project site with multiple uses; no development would occur on the six acres of the project site located in the Serra Mesa Community Plan area. The inclusion of the road connection under this alternative would also implement the intent of the Mission Valley Community Plan relative to providing a road connection between Friars Road and Phyllis Place, however it would be inconsistent with the Serra Mesa Community Plan. Greater impacts to biological resources would occur, as additional grading and loss of vegetation would result from the road connection. Although this alternative would not contribute as much traffic to the community as the proposed project, impacts similar to the proposed project for traffic and circulation within the community would remain significant and unmitigated, requiring that the decision makers adopt a Statement of Overriding Considerations should they choose to approve this alternative. Impacts to air quality would also be less; however, both this alternative and the proposed project would not result in significant direct air quality impacts. This alternative would result in the same level of impacts to biological resources, hydrology, and water quality, because the same amount of grading would occur. All other impacts are also the same as the proposed project.

The Reduced Density Project alternative would result in slightly less impacts to public services (including parks) and public utilities (solid waste), because 1,060 less residential units would be constructed under this alternative. Impacts associated with visual effects would be reduced, but not to a

level below significance. This alternative would not result in the same intensity of development envisioned for an Urban Village as defined by the City of Villages Strategy and Strategic Framework Plan as the project.

Compared to the proposed project, this alternative would not create the same amount of housing in an area where transit is readily available, would result in less affordable housing units being added to the City's affordable housing stock, and would provide the community with less public park land.

11.0 MITIGATION MONITORING AND REPORTING PROGRAM

Section 21081.6 of the Public Resources Code (PRC) and CEQA Guidelines Section 15097 require the Lead Agency for each project which is subject to CEQA to monitor the performance of the mitigation measures included in any environmental document to ensure that implementation does, in fact, take place. The PRC requires the Lead Agency to adopt a monitoring and reporting program that is designed to ensure compliance during project implementation. In accordance with PRC Section 21081.6 and CEQA Guidelines section 15097, this Mitigation Monitoring and Reporting Program (MMRP) have been developed for Quarry Falls project. The mitigation measures, which are required to reduce or avoid the potentially significant adverse impacts of future development on the project site, are presented under each issue area below. Responsible parties, the time frame for implementation, and the monitoring parties are also identified for each measure.

11.1 GENERAL

The following measures must be completed prior to any authorization to proceed.

1. The Assistant Deputy Director (ADD) of the City's Land Development Review Division (LDR) shall verify that the following statement is shown on the grading and/or construction plans as a note under the heading Environmental Requirements: "The Quarry Falls Project is subject to a Mitigation, Monitoring and Reporting Program (MMRP) and shall conform to the mitigation conditions as contained in the PEIR (Project No. 49068)."
2. The owner/permittee shall make arrangements to schedule pre-construction meetings, for each of the development phases or individual projects, to ensure implementation of the MMRP. The meetings shall include the Resident Engineer, the Project Biologist, Paleontologist, Archaeologist, and the City's Mitigation Monitoring Coordination (MMC) Section.
3. Prior to the issuance of any construction permits, the ADD of the LDR shall verify that the following mitigation measures are noted on the construction/grading plans submitted and included in the specifications under the heading "Environmental Mitigation Requirements."

11.2 LAND USE

11.2.1 Impacts

Traffic generated from the proposed project would result in significant impacts to the land use associated with traffic circulation. Mitigation measures have been identified in Section 5.2, *Traffic Circulation*, to reduce impacts. However, mitigation measures would not fully mitigate impacts, and land use impacts associated with traffic circulation would remain significant and unmitigated.

Land use conflicts which could arise as a result of on-going mining operations and development of the project site with urban land uses are associated with the potential for increased air quality impacts during construction and increased noise impacts associated with construction and traffic volumes on area roadways. Section 5.4, *Air Quality*, of this Program EIR addresses Air Quality impacts, and Section 5.5, *Noise*, addresses Noise impacts based on technical studies prepared for those issue areas. Based on the analysis presented in Sections 5.4 and 5.5, impacts to sensitive receptors would occur, and mitigation measures are proposed which would reduce compatibility impacts to below a level of significance.

11.2.2 Mitigation Measures

Mitigations measures for traffic impacts are identified in Section 5.2, *Traffic Circulation*, and presented under 11.2.2 below. Mitigations measures for air quality impacts are identified in Section 5.4, *Air Quality*, and presented in Section 11.3.2 below. Section 5.5, *Noise*, and Section 11.4.2 below presents mitigation measures for noise impacts.

11.3 TRAFFIC CIRCULATION

11.3.1 Impacts

The project would result in significant direct and cumulative impacts to street segments, intersections, freeway segments, and freeway ramps. Impacts to freeway segments and ramps would remain significant and unmitigated

11.3.2 Mitigation Measures

The project shall implement the improvements contained in the *Transportation Phasing Plan* (Table 11-1) to mitigate traffic impacts.

Table 11-1.
Transportation Phasing Plan

#	Location	Responsible Party[1]	Improvement[2]
Phase 1			
1	Friars Road/ SR-163 interchange	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, construction of the following local improvements at Friars Road and SR-163 interchange: the widening of the northbound approach of the SR-163 southbound off-ramp ~~Ulric Street~~ at Friars Road by 1 right turn lane ~~for~~ resulting in 1 left turn lane, 1 ~~shared left~~ thru ~~lane,~~left and ~~2~~ 1 right turn lane~~s~~; the reconfiguring~~e~~ of the southbound approach of Friars Road and SR-163 northbound ramps to provide ~~1~~ 2 right-turn lane; the widening of west-bound Friars Road from Frazee Road to SR-163 northbound ramps by 1 thru lane and 1 right turn lane ~~for~~ resulting in 3 thru lanes and 2 right-turn lanes; the widening of eastbound Friars Road at Frazee Road by 1 thru lane (with widening to accept the thru lane) and 2 right turn lanes ~~for~~ resulting in dual left turn lanes, 4 thru lanes and 2 right turn lanes, satisfactory to the City Engineer. The City may require the project to pay $5,000,000 (2007 dollars) to the City of San Diego in lieu of constructing such local improvements to assist in the funding of a more regional set of improvements at this same location, satisfactory to the City Engineer.
2	Mission Center Road/Quarry Falls Boulevard	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, construction of the following improvements at the intersection of Mission Center Road and Quarry Falls Boulevard: the widening of the north-bound approach by 1 right turn trap lane ~~for~~ resulting in 2 left turn lanes, 2 thru lanes, and 1 right turn lane; the widening of the westbound approach by 2 left turn lanes ~~for~~ resulting in 2 left turn lanes and 1 shared thru-right lane; and the widening of the eastbound approach by 1 right turn lane ~~for~~ resulting in 1 left turn lane, 1 thru lane and 1 right-turn lane, satisfactory to the City Engineer.
3	Mission Center Road from Quarry Falls Boulevard to Friars Road	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, construction of the following improvement on Mission Center Road from Quarry Falls Boulevard to Friars Road; ~~including~~ the widening of northbound Mission Center Road to add one additional lane for a total of three thru lanes, satisfactory to the City Engineer.
4	Friars Road from Qualcomm Way to Mission Center Road	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, construction of a westbound auxiliary lane by widening ~~the following improvement on~~ Friars Road from

#	Location	Responsible Party[1]	Improvement[2]
			Qualcomm Way to Mission Center Road, ~~including the widening of westbound segment of Friars Road to add one additional auxiliary lane for~~resulting in a total of three thru lanes and one auxiliary lane, satisfactory to the City Engineer.
5	Phyllis Place/ I-805 SB ramp	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, construction of a traffic signal at the intersection of Phyllis Place and I-805 ~~northbound~~ southbound ramp with the appropriate traffic signal interconnect, satisfactory to the City Engineer.
6	Phyllis Place/ I-805 NB ramp	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, construction of a traffic signal at the intersection of Phyllis Place and I-805 ~~southbound~~ northbound ramp with the appropriate traffic signal interconnect, satisfactory to the City Engineer.
7	Murray Ridge Road/ Mission Center Road	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, construction of the following improvements at the intersection of Mission Center Road and Murray Ridge Road: the installation of a traffic signal, the restriping of the~~e~~ southbound approach to provide 1 left turn lane, 1 thru lane, and 1 right turn lane; the widening of the westbound approach by 1 left turn lane ~~for~~ resulting in 1 shared thru-right lane and 1 left turn lane; and the ~~restripe~~ restriping of the eastbound approach to provide 1 left turn lane and 1 thru-right lane, satisfactory to the City Engineer.
8a	Murray Ridge Road from ~~SB~~ NB Interstate 805 ramps to Pinecrest Avenue~~.~~	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, the following improvements on Murray Ridge Road from the southbound I-805 ramps to Pinecrest Avenue: the restriping~~e~~ of Murray Ridge Road to a 4-lane collector or the ~~contributes~~ contribution of $100,000 (2007 dollars) in funding for traffic calming to be determined by the Serra Mesa community ~~from I-805 to Pinecrest~~, satisfactory to the City Engineer.
8b	Murray Ridge Road Bridge over I-805	Project[2]	Prior to the issuance of any building permits for Phase 1, the applicant shall assure by permit and bond the restriping of the Murray Ridge Road/Phyllis Place, between the northbound and southbound ramps of I-805 ramps, to 5 lanes, satisfactory to the City Engineer.
9	Murray Ridge Road/ Pinecrest Ave.	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, the construction of a traffic signal at the intersection of Murray Ridge Road and Pinecrest Avenue, satisfactory to the City Engineer.
10	Friars Road/ Avenue De Las Tiendas	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, the lengthening of westbound dual left-turn lanes at the intersection of Friars Road and Avenida De Las Tiendas to approximately 450 feet, satisfactory to the City Engineer.
11	Texas Street from Camino del Rio South to El Cajon Boulevard	Project[2]	Prior to the issuance of any building permits for Phase 1, applicant shall assure by permit and bond, the implementation of the following traffic calming measures on Texas Street from El Cajon Boulevard to Camino Del Rio South: provide pedestrian lighting and a new sidewalk~~s~~ from Camino Del Rio South to Madison Avenue (per item T4 in the Greater North Park Planning Committee's Priority List on page 13 of the Public Facility Financing Plan, 2002), and contribute $100,000 (2007 dollars) in funding for traffic calming to be determined by the community from Madison Avenue to El Cajon Boulevard.
12	Transportation Demand Management measures	Project	Prior to the issuance of any building permits for Phase 1, applicant shall develop a comprehensive demand management plan that includes information kiosks in central locations, bike lockers, priority parking spaces for carpools, a shuttle system for residents and employees that connects to nearby LRT stations, transit passes for local residents and employees, an on-site shared car program utilizing hybrid veicles, and coordination with MTS for potential public or private bus service in Quarry Falls, satisfactory to the City Engineer.

#	Location	Responsible Party[1]	Improvement[2]
Phase 2			
13	Mission Center Road from I-805 to Murray Ridge Road	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, applicant shall assure by permit and bond, the construction of ~~the following improvement~~an additional eastbound thru lane on Mission Center Road by roadway widening from I-805 to Murray Ridge Road ~~including the widening of eastbound Mission Center Road to add one additional lane for~~resulting in a total of ~~two~~ 2 eastbound ~~thru~~ lanes and 1 westbound lane, satisfactory to the City Engineer.
14	Friars Road/ Fashion Valley Road	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, applicant shall assure by permit and bond, the restriping of the ~~widen~~ westbound approach at the intersection of Friars Road and Fashion Valley Road by 1 left turn lane ~~for~~ resulting in 2 left-turn lanes, 1 thru lane and 1 shared thru-right turn lane, satisfactory to the City Engineer.
15a	Friars Road/SR-163 Interchange	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, applicant shall assure by permit and bond, construction of the following local improvements at Friars Road and SR-163 interchange: the widening and lengthening of the Friars Road bridge from 6 lanes to 8 thru lanes from Frazee Road to Ulric Street and providing 2 left turn lanes across the bridge; the ~~reconfiguring~~ reconfiguration of the SR-163 northbound off ramp (by removing the free right turn lane and widening the existing loop off-ramp to provide 3 left turn and 1 right turn lanes); ~~lengthening northbound and southbound auxiliary lanes on SR-163;~~and the widening of the southbound approach at Friars Road and Frazee Road intersection by 1 right turn lane ~~for~~ resulting in 2 left turn lanes, 1 shared thru right and 2 right turn lanes. The City may require the project to pay $14,000,000 (2007 dollars) to the City of San Diego in lieu of constructing such local improvements to assist in the funding of a more regional set of improvements at this same location, satisfactory to the City Engineer.
~~16~~15b	Mission Center Road/I-8 Interchange	~~Project~~[2]Project[4]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT[3] in total development, applicant shall provide $1 million (2007 dollars) for the Mission Center Road and I-8 interchange ~~project~~ Project ~~study~~ Study ~~report~~Report, satisfactory to the City Engineer.
~~17~~16	Pedestrian Bridge across Friars Road	Project[3]	Prior to the issuance of any building permits for Phase 2 in the area represented by parcels 21, 24, or 25 of the Quarry Falls Vesting Tentative Map 183196 and that exceeds 23,750 ADT[3] in total development, applicant shall assure by permit and bond, the construction of a pedestrian bridge over Friars Road to connect Quarry Falls to Rio Vista West shopping center and provide access to Rio Vista West trolley station, satisfactory to the City Engineer.
~~18~~17	Friars Road EB ramp/ Qualcomm Way	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750[3] ADT in total development, applicant shall assure by permit and bond, construction of the following improvement on Friars Road eastbound ramp and Qualcomm Way; ~~including~~ the widening of eastbound approach by 1 left turn lane ~~for~~ resulting in 1 right turn lane, a 1 shared left-thru lane and 1 left turn lane; the ~~restripe~~ restriping of the southbound approach within the existing bridge abutments ~~for~~ resulting in 2 thru lanes and 2 left turn lanes; and the widening of the northbound approach by 2 thru lanes resulting in 4 thru lanes and 1 right turn lane, satisfactory to the City Engineer.
~~19~~18	Friars Road WB ramp/ Qualcomm Way	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT in total development, applicant shall assure by permit and bond, construction of the following improvement on Friars Road westbound ramp and Qualcomm Way; the widening of the southbound approach by 1 thru lane and 1 right turn lane for 1 right turn lane and 2 thru lanes; and the ~~restripe~~ restriping of the northbound approach ~~for~~ resulting in 2 thru lanes and 2 left turn lanes, satisfactory to the City Engineer.

#	Location	Responsible Party[1]	Improvement[2]
~~20~~19	Friars Road/I-15 SB off-ramp	Project[2]	Prior to the issuance of any building permits for Phase 2 that exceeds 23,750 ADT[3] in total development, applicant shall assure by permit and bond, the widening of southbound approach at Friars Road and I-15 southbound off-ramp by 1 left turn lane ~~for~~ resulting in 2 left turn lanes, 1 shared thru-left turn lane, and 2 right turn lanes, satisfactory to the City Engineer.
Phase 3			
~~21~~15b	Mission Center Road/I-8 Interchange	Project[2]	Prior to the issuance of any building permits for Phase 3 that exceeds 51,180 ADT[3] in total development, applicant shall assure by permit and bond, construction of the following improvements at Mission Center Road and I-8 interchange (unless built by others): the widening of the eastbound off ramp to provide 1 additional left turn lane ~~for~~ resulting in 3 left turn lanes, 1 right turn lane; the widening of ~~widen~~ Mission Center Road over I-8 ~~(~~bridge~~)~~ by one northbound thru lane ~~for~~ resulting in 2 southbound thru lanes and 3 northbound thru lanes; the widening of the southbound approach at Mission Center Road and I-8 eastbound ramp by 1 left turn lane ~~for~~ resulting in 2 left turn lanes and 2 thru lanes; the ~~restripe~~ restriping of the eastbound approach at Mission Center Road and Camino Del Rio North to ~~have~~ provide a ~~longer~~ 350-foot long right turn lane; the widening of the westbound approach at the intersection of Mission Center Road and Camino Del Rio North by 1 right turn lane ~~for~~ resulting in 2 left turn lanes, 2 thru lanes and 1 right turn lane; the widening of the eastbound approach at Camino Del Rio North and I-8 westbound ramp by 1 right turn lane ~~for~~ resulting in 2 thru lanes and 2 right turn lanes; at Camino Del Rio South and Mission Center Road, the widening of the southbound approach resulting in 2 left turn, 1 thru, and 2 right turn lanes, the restriping of the eastbound approach resulting in 2 left turn, 1 thru, and 1 shared thru-right lanes; and the widening of the westbound approach resulting in 1 left, 1 thru and 1 right turn lane, satisfactory to the City Engineer.
~~22~~20	Texas Street/El Cajon Boulevard	Project[2]	Prior to the issuance of any building permits for Phase 3 that exceeds 51,180 ADT[3] in total development, applicant shall assure by permit and bond, the widening of eastbound approach at the intersection of Texas Street and El Cajon Boulevard by 1 right turn lane for 1 left turn, 3 thru lanes and 1 right turn lane, satisfactory to the City Engineer.
~~23~~21	Qualcomm Way / I-8 WB off-ramp	Project[2]	Prior to the issuance of any building permits for Phase 3 that exceeds 51,180 ADT[3] in total development, applicant shall assure by permit and bond, the widening of westbound approach at the intersection of Qualcomm Way and I-8 westbound off-ramp by 1 right turn lane ~~for~~ resulting in 1 shared left-thru lane and 2 right turn lanes, satisfactory to the City Engineer.
Phase 4			
~~24~~22	Friars Road/Santo Road	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT[3] in total development, applicant shall contribute a fair share of 16% toward the cost of restriping southbound approach at the intersection of Friars Road and Santo Road to provide dual left turn lanes and dual right turn lanes, satisfactory to the City Engineer.
~~25~~23	Mission Gorge Road/Zion Avenue	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT[3] in total development, applicant shall contribute a fair share of 23% toward the cost of the installation of an additional ~~widening~~ westbound left turn lane (requiring widening of the west-leg of the intersection) ~~approach at the intersection of Mission Gorge Road and Zion Avenue by 1 left turn lane for~~ resulting in dual left turn lanes and 1 shared thru-right turn lane at the intersection of Mission Gorge Road and Zion Avenue, satisfactory to the City Engineer.

#	Location	Responsible Party[1]	Improvement[2]
~~26~~24	Mission Center Road/Camino De La Reina	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040[3] ADT in total development, applicant shall contribute a fair share of 15% toward the cost of widening the eastbound approach at the intersection of Mission Center Road and Camino De La Reina by 1 right turn lane ~~for~~ resulting in 2 left turn lanes, 2 thru lanes and 1 right turn lane, satisfactory to the City Engineer.
~~27~~25	Qualcomm Way/Camino De La Reina	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT[3] in total development, applicant shall contribute a fair share of 38% toward the cost of widening the westbound approach at the intersection of Qualcomm Way and Camino De La Reina by 1 right turn lane ~~for~~ resulting in 2 left turn lanes, 2 thru lanes and 2 right turn lanes, satisfactory to the City Engineer.
~~28~~26	Texas Street/Camino Del Rio South	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT[3] in total development, applicant shall contribute a fair share of 21% toward the cost of the following improvements at the intersection of Texas Street and Camino Del Rio South: the widening of the northbound approach by a shared thru-right lane ~~for~~ resulting in 1 left turn lane, 1 shared thru right turn lane and 2 thru lanes; the restriping of the eastbound approach ~~for~~ resulting in 2 left turn lanes and 1 shared thru-right turn lane; widening of southbound approach by 1 left turn lane, for 2 left turn lanes, 2 thru lanes and 1 right turn lane; and the widening of the westbound approach by 1 right turn lane ~~for~~ resulting in 1 left turn lane, 1 thru lane and 2 right turn lanes, satisfactory to the City Engineer.
~~29~~27	Texas Street/Madison Street	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT[3] in total development, applicant shall contribute a fair share of 30% toward the cost of restriping ~~of~~ the eastbound approach (which will require the widening of the north-leg of the intersection) at the intersection of Texas Street and Madison Street ~~for~~ resulting in 2 left turn lanes and 1 shared thru-right turn lane, satisfactory to the City Engineer.
~~30~~28	Rio San Diego Drive/Fenton Parkway	Project[2]	Prior to the issuance of any building permits for Phase 4 that exceeds 59,040 ADT[3] in total development, applicant shall contribute a fair share of 11% toward the cost of widening northbound approach at the intersection of Rio San Diego Drive and Fenton Parkway by 1 left turn lane ~~for~~ resulting in 2 left turn lanes, 1 thru lane and 1 shared thru-right turn lane, satisfactory to the City Engineer.
Project shall maintain a trip generation monitoring report and parking table that will be provided with every building permit submitted to the City of San Diego within the Quarry Falls development.			
Project shall be in conformance with the proposed Transportation Phasing plan included in the Quarry Falls Traffic Impact analysis.			
All transportation improvements shall be constructed and completed in accordance with the approved Transportation Phasing Plan included in the Quarry Falls traffic analysis.			

[1] Construction and/or funding may also be the responsibility of others. Project may be eligible for DIF credits and/or reimbursement for construction of the improvement.
[2] Appendix I of the Quarry Falls Traffic Impact Study contains conceptual designs for each of these improvements
[3] Each development threshold is based upon driveway trip generation rates.
[4] Assurance to the satisfaction of the City Engineer shall not be required until construction of the Village Walk District commences.

11.4 AIR QUALITY

11.4.1 Impacts

Temporary construction emissions of PM_{10} are considered significant.

11.4.2 Mitigation Measures

The following measure shall be implemented to mitigate air quality impacts associated with construction.

Air Quality	Responsible Party	Timing of Implementation
As a condition of the grading permit, the project shall implement best management practices to reduce the amount of fugitive dust generated from construction of the proposed project, and their respective control efficiencies (Based on control efficiencies provided in the SCAQMD CEQA Air Quality Handbook, Table 11-4). The BMPs and their respective control efficiencies include the following: a. Multiple applications of water during grading between dozer/scraper passes – 34-68% b. Watering or chemical stabilization of unpaved internal roadways after completion of grading – 92.5% c. Use of sweepers or water trucks to remove "track-out" at any point of public street access – 25-60% d. Termination of grading if winds exceed 25 mph – not quantified e. Stabilization of dirt storage piles by chemical binders, tarps, fencing or other erosion control – 30-65% f. Hydroseeding of graded residential lots – 30-65%	Permitee	Grading Permit

11.5 NOISE

11.5.1 Impacts

Future development proposed on-site would potentially be affected by traffic noise associated with the internal street network. Construction noise could result in significant impacts to occupied housing within Quarry Falls, as well as outdoor instructional use associated with development of a school within Quarry Falls. The on-going mining operations and concrete and asphalt plants may continue to operate for a short period of time during the initial phase of residential development. Significant noise impacts could occur if residential units are occupied while mining operations are being completed and before the concrete and asphalt plants are relocated. Operation of the proposed relocated asphalt and concrete plants would result in potentially significant noise impacts to residents, if development occurs within 500 feet of the relocated concrete and asphalt plants.

11.5.2 Mitigation Measures

The following measures shall be implemented to mitigate traffic, construction and noise from asphalt and concrete plant operations to below a level of significance.

Noise	Responsible Party	Timing of Implementation
All construction and general maintenance activities, except in an emergency, shall be limited to the hours of 7:00 AM to 7:00 PM Monday through Saturday and should utilize the quietest equipment available. All on-site construction equipment shall have properly operating mufflers and all construction staging areas shall be as far away as possible from any already completed residences. A noise mitigation plan would need to be developed and implemented to insure that the City's noise ordinance standard will not be exceeded. Components of such a plan would possibly include erecting temporary noise barriers, using smaller (quieter) earth-moving equipment, or insuring that no residents are present or that they have no opposition to such temporary operations for brief periods of time. With the restriction to hours of lesser sensitivity, and with enhanced mitigation if the setback distance to heavy equipment operations is less than 100 feet, construction activity noise would create less-than-significant noise impacts.	Permitee/Contractor	During grading and construction.
Construction activities occurring within 250 of a school shall be coordinated with school administrators to avoid conflicts with outdoor learning activities.	Permitee	Prior to commencement of grading.
The mining operations (rock crushing and grading) shall be limited to 7 AM to 7 PM upon occupancy of the first new residential unit for Quarry Falls Vesting Tentative Map #183196. [OU1]	Permitee	Prior to issuance of Certificate of Occupancy for the first residential unit.
Prior to issuance of building permits for new residential development within 2,000 feet of existing mining (rock crushing and grading activities), a noise mitigation plan shall be required that identifies modifications to limit noise levels to 65 dB Leq at the property line between 7 AM and 7 PM. A letter, verifying compliance with the 65 dB LEQ shall be prepared by a qualified acoustician and sent to the Mitigation, Monitoring and Coordination Section for review and approval prior to the occupancy of the residential units.	Permitee	Prior to issuance of building permits for new residential development within 2,000 feet.

Noise	Responsible Party	Timing of Implementation
Prior to issuance of building permits for new residential development within 1,580 feet of existing or relocated concrete and asphalt plant activities, a noise mitigation plan shall be required that identifies modifications to limit noise levels to 65 dB Leq at the property line between 7 AM and 7 PM. A letter, verifying compliance with the 65 dB Leq shall be prepared by a qualified acoustician and sent to the Mitigation, Monitoring and Coordination Section for review and approval prior to the occupancy of the residential units. Prior to the issuance of building permits for new residential development within 1,580 feet of the existing concrete and asphalt plant activities, a noise mitigation plan shall be required that identifies modifications to limit noise levels to 50 db Leq (presumed nuisance protection standard) between 7 PM and 7 AM. A letter, verifying compliance with the 50 db LEQ shall prepared by a qualified acoustician be sent to the Mitigation, Monitoring and Coordination Section for review and approval prior to the occupancy of the residential units.	Permitee	Prior to issuance of building permits for new residential development within 1,580 feet of existing and relocated concrete and asphalt plant activities.
Existing mining, rock crushing, and concrete and asphalt plant activities shall cease operation no later than December 31, 2011 or no later than two years after the issuance of the first residential building permit. [OU2]	Permitee	Prior to December 31, 2011 or no later than two years after the issuance of the first residential building permit.
The hours of operation of the relocated concrete and asphalt plants shall be from 4 AM to 7 PM. Queuing of trucks shall be prohibited between the hours of 7 PM and 4 AM.	Permitee	During operation of relocated asphalt and concrete plants.
The construction of the relocated concrete and asphalt plants shall incorporate earthen, landscaped berms and other noise attenuation features to interrupt the line of sight from future residential development.	Permitee	Prior to issuance of building permits residential development located within 500 feet of the relocated asphalt and concrete plants.
Prior to issuance of building permits for construction of the relocated concrete and asphalt plants, a noise mitigation plan shall be required that reduces/attenuates noise levels at the property line to 65 dB Leq between the hours of 7 AM and 7 PM by incorporating any of the following: limits on noise generating concrete and asphalt plant activities; noise attenuation screening of equipment; and state-of-the-art equipment (such as rock-handling noise reduction features). A letter, verifying compliance with the 65 dB Leq, shall be prepared by a qualified acoustician and sent to the Mitigation, Monitoring and Coordination Section for review and approval.	Permitee	Prior to building permits for relocated asphalt and concrete plants.
Prior to issuance of building permits for construction of the relocated concrete and asphalt plants, a noise mitigation plan shall be required that reduces/attenuates noise levels at the property line of all future residentially zoned parcels to 50 dB Leq (presumed nuisance protection standard) between the hours of 4 AM and 7 AM by incorporating any of the following: limits on its hours of operations; limits on noise generating concrete and asphalt plant activities; earthen, landscaped berms; noise attenuation screening of equipment; and state-of-the-art equipment (such as rock-handling noise reduction features). A letter, verifying compliance with the 50 dB Leq, shall be prepared by a qualified acoustician and sent to the Mitigation, Monitoring and Coordination Section for review and approval.	Permitee	Prior to building permits for relocated asphalt and concrete plants.

11.6 BIOLOGICAL RESOURCES

11.6.1 Impacts

The proposed project would result in direct impacts to a total of 14.08 acres of sensitive habitat. This includes the direct loss of 0.06 acre of on-site disturbed wetland, 0.12 acre of off-site disturbed wetlands, 1.08 acres of coastal sage scrub (Tier II), 0.28 acre of mixed chaparral (Tier IIIA), and 12.54 acres of non-native grassland (Tier IIIB). The proposed project would also result in potentially significant impacts to migratory birds, if construction activities affect active raptor nests.

11.6.2 Mitigation Measures

Implementation of the following measures would reduce project impacts to biological resources to below a level of significance.

Biological Resources	Responsible Party	Timing of Implementation
GENERAL: **Prior to Preconstruction meeting:** A. The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a qualified biologist, as defined in the City of San Diego's Biological Review References, has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project. B. The Biologist shall submit required documentation to MMC verifying that any special reports, maps, plans, and timelines; such as but not limited to, revegetation plans, plant relocation requirements and timing, MSCP requirements, avian or other wildlife protocol surveys, impact avoidance areas, or other such information has been completed and updated. **Preconstruction Meeting:** A. The Project biologist shall attend the Preconstruction meeting and discuss the project's biological monitoring program. B. The Project biologist shall submit a biological construction monitoring exhibit (BCME) (site plan reduced to 11X17) delineating the location of orange construction fencing to be installed at the limits of disturbance adjacent to any sensitive biological resources as shown on the project's approved construction documents. The exhibit shall also contain a biological monitoring schedule. **Prior to Construction:** The project biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats as shown on the BCME and approved construction documents.	Permitee/Consulting Biologist	As indicated in each mitigation measure.

Biological Resources	Responsible Party	Timing of Implementation
During Construction: The project biologist shall monitor construction activities as described on the BCME and approved construction documents to ensure that construction activities do not encroach into biologically sensitive areas beyond the approved limits of disturbance. **Post Construction:** The project biologist shall submit a final construction monitoring report to the MMC section within 30 days of construction completion. The report shall address all biological monitoring requirements described on the BCME and approved construction documents to the satisfaction of MMC.		
RESTORATION AREAS: A. Land Development Review (LDR) Plan Check 1) Prior to NTP or issuance for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, whichever is applicable, the ADD environmental designee shall verify that the requirements for the revegetation/restoration plans and specifications the enhancement/ restoration mitigation for direct impacts to 0.18 acres of CDFG jurisdictional/ESL disturbed wetlands located both on (0.06 acres) and off-site (0.12 acres) have been shown and noted on the appropriate landscape construction documents. The landscape construction documents and specifications must be found to be in conformance with the Wetland Habitat Enhancement, Mitigation and Monitoring Plan" (Exhibit A) prepared by Consultants Collaborative, September 2007, the requirements of which are summarized below: B. Revegetation/Restoration Plan(s) and Specifications 1) Landscape Construction Documents (LCD) shall be prepared on D-sheets and submitted to the City of San Diego Development Services Department, Landscape Architecture Section (LAS) for review and approval. LAS shall consult with Mitigation Monitoring Coordination (MMC) and obtain concurrence prior to approval of LCD. The LCD shall consist of revegetation/restoration, planting, irrigation and erosion control plans; including all required graphics, notes, details, specifications, letters, and reports as outlined below. 2) Landscape Revegetation/Restoration Planting and Irrigation Plans shall be prepared in accordance with the San Diego Land Development Code (LDC) Chapter 14, Article 2, Division 4, the LDC Landscape Standards submittal requirements, and Attachment "B" (General Outline for Revegetation/Restoration Plans) of the City of San Diego's LDC Biology Guidelines (July 2002). The Principal Qualified Biologist (PQB) shall identify and adequately document all pertinent information concerning the revegetation/restoration goals and requirements, such as but not limited to, plant/seed palettes, timing of installation, plant installation specifications, method of watering, protection of adjacent habitat, erosion and sediment control, performance/success criteria, inspection schedule by City staff, document submittals, reporting schedule, etc. The LCD shall also include comprehensive graphics and notes addressing the ongoing maintenance requirements (after final acceptance by the City). 3) The Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Construction Manager (CM) and Grading Contractor (GC), where applicable shall be responsible to insure that for all grading and contouring, clearing and grubbing, installation of plant materials, and any necessary maintenance activities or remedial actions required during installation and the		

Biological Resources	Responsible Party	Timing of Implementation
120 day plant establishment period are done per approved LCD. The following procedures at a minimum, but not limited to, shall be performed: a. The RMC shall be responsible for the maintenance of the mitigation area for a minimum period of 120 days. Maintenance visits shall be conducted on a *weekly* basis throughout the plant establishment period. b. At the end of the 120 day period the PQB shall review the mitigation area to assess the completion of the short-term plant establishment period and submit a report for approval by MMC. c. MMC will provide approval in writing to begin the *five year* long-term establishment/maintenance and monitoring program. d. Existing indigenous/native species shall not be pruned, thinned or cleared in the revegetation/mitigation area. e. The revegetation site shall not be fertilized. f. The RIC is responsible for reseeding (if applicable) if weeds are not removed, within one week of written recommendation by the PQB. g. Weed control measures shall include the following: (1) hand removal, (2) cutting, with power equipment, and (3) chemical control. Hand removal of weeds is the most desirable method of control and will be used wherever possible. h. Damaged areas shall be repaired immediately by the RIC/RMC. Insect infestations, plant diseases, herbivory, and other pest problems will be closely monitored throughout the *five-year* maintenance period. Protective mechanisms such as metal wire netting shall be used as necessary. Diseased and infected plants shall be immediately disposed of off-site in a legally-acceptable manner at the discretion of the PQB or Qualified Biological Monitor (QBM) (City approved). Where possible, biological controls will be used instead of pesticides and herbicides. 4) If a Brush Management Program is required the revegetation/restoration plan shall show the dimensions of each brush management zone and notes shall be provided describing the restrictions on planting and maintenance and identify that the area is impact neutral and shall not be used for habitat mitigation/credit purposes. C. Letters of Qualification Have Been Submitted to ADD 1) The applicant shall submit, for approval, a letter verifying the qualifications of the biological professional to MMC. This letter shall identify the PQB, Principal Restoration Specialist (PRS), and QBM, where applicable, and the names of all other persons involved in the implementation of the revegetation/restoration plan and biological monitoring program, as they are defined in the City of San Diego Biological Review References. Resumes and the biology worksheet should be updated annually. 2) MMC will provide a letter to the applicant confirming the qualifications of the PQB/ PRS/QBM and all City Approved persons involved in the revegetation/restoration plan and biological monitoring of the project. 3) Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the revegetation/restoration plan and biological monitoring of the project.		

Biological Resources	Responsible Party	Timing of Implementation
4) PBQ must also submit evidence to MMC that the PQB/QBM has completed Storm Water Pollution Prevention Program (SWPPP) training. **Prior to Start of Construction** A. PQB/PRS Shall Attend Preconstruction (Precon) Meetings 1) Prior to beginning any work that requires monitoring: a. The owner/permittee or their authorized representative shall arrange and perform a Precon Meeting that shall include the PQB or PRS, Construction Manager (CM) and/or Grading Contractor (GC), Landscape Architect (LA), Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. b. The PQB shall also attend any other grading/excavation related Precon Meetings to make comments and/or suggestions concerning the revegetation/restoration plan(s) and specifications with the RIC, CM and/or GC. c. If the PQB is unable to attend the Precon Meeting, the owner shall schedule a focused Precon Meeting with MMC, PQB/PRS, CM, BI, LA, RIC, RMC, RE and/or BI, if appropriate, prior to the start of any work associated with the revegetation/ restoration phase of the project, including site grading preparation. 2) Where Revegetation/Restoration Work Will Occur a. Prior to the start of any work, the PQB/PRS shall also submit a revegetation/restoration monitoring exhibit (RRME) based on the appropriate reduced LCD (reduced to 11"x 17" format) to MMC, and the RE, identifying the areas to be revegetated/restored including the delineation of the limits of any disturbance/grading and any excavation. b. PQB shall coordinate with the construction superintendent to identify appropriate Best Management Practices (BMP's) on the RRME. 3) When Biological Monitoring Will Occur a. Prior to the start of any work, the PQB/PRS shall also submit a monitoring procedures schedule to MMC and the RE indicating when and where biological monitoring and related activities will occur. 4) PQB Shall Contact MMC to Request Modification a. The PQB may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the revegetation/restoration plans and specifications. This request shall be based on relevant information (such as other sensitive species not listed by federal and/or state agencies and/or not covered by the MSCP and to which any impacts may be considered significant under CEQA) which may reduce or increase the potential for biological resources to be present. **During Construction** A. PQB or QBM Present During Construction/Grading/Planting 1) The PQB or QBM shall be present full-time during construction activities including but not limited to, site preparation, cleaning, grading, excavation, landscape establishment in association with the reliance upon the approved permits. This shall ensure that no impacts occur to sensitive biological resources (outside the approved limits) as identified in the LCD and on the RRME. **The**		

Biological Resources	Responsible Party	Timing of Implementation
RIC and/or QBM are responsible for notifying the PQB/PRS of changes to any approved construction plans, procedures, and/or activities. The PQB/PRS is responsible to notify the CM, LA, RE, BI and MMC of the changes. 2) The PQB or QBM shall document field activity via the Consultant Site Visit Record Forms (CSVR). The CSVR's shall be faxed by the CM the first day of monitoring, the last day of monitoring, monthly, and in the event that there is a deviation from conditions identified within the LCD and/or biological monitoring program. The RE shall forward copies to MMC. 3) The PQB or QBM shall be responsible for maintaining and submitting the CSVR at the time that CM responsibilities end (i.e., upon the completion of construction activity other then that of associated with biology). 4) All construction activities (including staging areas) shall be restricted to the development areas as shown on the LCD. The PQB/PRS or QBM staff shall monitor construction activities as needed, with MMC concurrence on method and schedule. This is to ensure that construction activities do not encroach into biologically sensitive areas beyond the limits of disturbance as shown on the approved LCD. 5) The PQB or QBM shall supervise the placement of orange construction fencing or City approved equivalent, along the limits of potential disturbance adjacent to (or at the edge of) all sensitive habitats, including the preserved coastal sage scrub, mixed chaparral, and non-native grasslands, as shown on the approved LCD. 6) The PBQ shall provide a letter to MMC that limits of potential disturbance has been surveyed, staked and that the construction fencing is installed properly. 7) The PQB or QBM shall oversee implementation of BMP's, such as gravel bags, straw logs, silt fences or equivalent erosion control measures, as needed to ensure prevention of any significant sediment transport. In addition, the PQB/QBM shall be responsible to verify the removal of all temporary construction BMP's upon completion of construction activities. Removal of temporary construction BMP's shall be verified in writing on the final construction phase CSVR. 8) PQB shall verify in writing on the CSVR's that no trash stockpiling or oil dumping, fueling of equipment, storage of hazardous wastes or construction equipment/material, parking or other construction related activities shall occur adjacent to sensitive habitat. These activities shall occur only within the designated staging area located outside the area defined as biological sensitive area. 9) The long-term establishment inspection and reporting schedule per LCD must all be approved by MMC prior to the issuance of the Notice of Completion (NOC) or any bond release. B. Disturbance/Discovery Notification Process 1) If unauthorized disturbances occurs or sensitive biological resources are discovered that where not previously identified on the LCD and/or RRME, the PQB or QBM shall direct the contractor to temporarily divert construction in the area of disturbance or discovery and immediately notify the RE or BI, as appropriate. 2) The PQB shall also immediately notify MMC by telephone of the disturbance and report the nature and extent of the disturbance and recommend the method of additional protection, such as fencing and appropriate Best Management Practices (BMP's). After obtaining concurrence with MMC and		

Biological Resources	Responsible Party	Timing of Implementation
the RE, PQB and CM shall install the approved protection and agreement on BMP's. 3) The PQB shall also submit written documentation of the disturbance to MMC within 24 hours by fax or email with photos of the resource in context (e.g., show adjacent vegetation). C. Determination of Significance 1) The PQB shall evaluate the significance of disturbance and/or discovered biological resource and provide a detailed analysis and recommendation in a letter report with the appropriate photo documentation to MMC to obtain concurrence and formulate a plan of action which can include fines, fees, and supplemental mitigation costs. 2) MMC shall review this letter report and provide the RE with MMC's recommendations and procedures. **Post Construction** A. Mitigation Monitoring and Reporting Period 1) *Five-Year* Mitigation Establishment/Maintenance Period a. The RMC shall be retained to complete maintenance monitoring activities throughout the *five-year* mitigation monitoring period. b. Maintenance visits will be conducted twice per month for the first six months, once per month for the remainder of the first year, and quarterly thereafter. c. Maintenance activities will include all items described in the LCD. d. Plant replacement will be conducted as recommended by the PQB (note: plants shall be increased in container size relative to the time of initial installation or establishment or maintenance period may be extended to the satisfaction of MMC. 2) Five-Year Biological Monitoring a. All biological monitoring and reporting shall be conducted by a PQB or QBM, as appropriate, consistent with the LCD. b. Monitoring shall involve both qualitative horticultural monitoring and quantitative monitoring (i.e., performance/success criteria). Horticultural monitoring shall focus on soil conditions (e.g., moisture and fertility), container plant health, seed germination rates, presence of native and non-native (e.g., invasive exotic) species, any significant disease or pest problems, irrigation repair and scheduling, trash removal, illegal trespass, and any erosion problems. c. After plant installation is complete, qualitative monitoring surveys will occur monthly during year one and quarterly during years two through five. d. Upon the completion of the 120-days short-term plant establishment period, quantitative monitoring surveys shall be conducted at 0, 6, 12, 24, 36, 48 and 60 months by the PQB or QBM. The revegetation/restoration effort shall be quantitatively evaluated once per year (in spring) during years three through five, to determine compliance with the performance standards identified on the LCD. All plant material must have survived without supplemental irrigation for the last two years. e. Quantitative monitoring shall include the use of fixed transects and photo points to determine the vegetative cover within the revegetated habitat. Collection of fixed transect data within the revegetation/restoration site shall result in the calculation of percent cover for each plant species present, percent cover of target vegetation, tree height and diameter at breast height		

Biological Resources	Responsible Party	Timing of Implementation
(if applicable) and percent cover of non-native/non invasive vegetation. Container plants will also be counted to determine percent survivorship. The data will be used determine attainment of performance/success criteria identified within the LCD. f. Biological monitoring requirements may be reduced if, before the end of the fifth year, the revegetation meets the fifth year criteria and the irrigation has been terminated for a period of the last two years. g. The PQB or QBM shall oversee implementation of post-construction BMP's, such as gravel bags, straw logs, silt fences or equivalent erosion control measure, as needed to ensure prevention of any significant sediment transport. In addition, the PBQ/QBM shall be responsible to verify the removal of all temporary post-construction BMP's upon completion of construction activities. Removal of temporary post-construction BMPs shall be verified in writing on the final post-construction phase CSVR. C. Submittal of Draft Monitoring Report 1) A draft monitoring letter report shall be prepared to document the completion of the 120-day plant establishment period. The report shall include discussion on weed control, horticultural treatments (pruning, mulching, and disease control), erosion control, trash/debris removal, replacement planting/reseeding, site protection/signage, pest management, vandalism, and irrigation maintenance. The revegetation/restoration effort shall be visually assessed at the end of 120 day period to determine mortality of individuals. 2) The PQB shall submit two copies of the Draft Monitoring Report which describes the results, analysis, and conclusions of all phases of the Biological Monitoring and Reporting Program (with appropriate graphics) to MMC for review and approval within 30 days following the completion of monitoring. Monitoring reports shall be prepared on an annual basis for a period of five years. Site progress reports shall be prepared by the PQB following each site visit and provided to the owner, RMC and RIC. Site progress reports shall review maintenance activities, qualitative and quantitative (when appropriate) monitoring results including progress of the revegetation relative to the performance/success criteria, and the need for any remedial measures. 3) Draft annual reports (three copies) summarizing the results of each progress report including quantitative monitoring results and photographs taken from permanent viewpoints shall be submitted to MMC for review and approval within 30 days following the completion of monitoring. 4) MMC shall return the Draft Monitoring Report to the PQB for revision or, for preparation of each report. 5) The PQB shall submit revised Monitoring Report to MMC (with a copy to RE) for approval within 30 days. 6) MMC will provide written acceptance of the PQB and RE of the approved report. D. Final Monitoring Reports(s) 1) PQB shall prepare a Final Monitoring upon achievement of the fifth year performance/success criteria and completion of the five-year maintenance period. a. This report may occur before the end of the fifth year if the revegetation meets the fifth year performance /success criteria and the irrigation has been terminated for a period of the last two years.		

Biological Resources	Responsible Party	Timing of Implementation
b. The Final Monitoring report shall be submitted to MMC for evaluation of the success of the mitigation effort and final acceptance. A request for a pre-final inspection shall be submitted at this time, MMC will schedule after review of report c. If at the end of the five years any of the revegetated area fails to meet the project's final success standards, the applicant must consult with MMC. This consultation shall take place to determine whether the revegetation effort is acceptable. The applicant understands that failure of any significant portion of the revegetation/restoration area may result in a requirement to replace or renegotiate that portion of the site and/or extend the monitoring and establishment/ maintenance period until all success standards are met.		
DISTURBED WETLANDS: Through consultation with CDFG, the following mitigation has been determined for the unavoidable impacts to the 0.18 acre of CDFG jurisdictional disturbed wetlands. ***On-Site Impacts:*** The 0.06 acre of disturbed wetlands permanently impacted on-site shall require a 2:1 mitigation ratio. On-site impacts shall be mitigated by the following: a 0.06 acre of wetlands creation has been purchased from the Rancho Jamul Mitigation Bank (1:1), and a 0.06 acre of wetlands enhancement has been proposed to be completed within the 17-acre river parcel northeast of the intersection of Qualcomm Way and Camino del Rio North. This 17-acre San Diego River property is comprised of two adjoining parcels (APNs 43805216 and 43805217) located south of the proposed project within the San Diego River, adjacent to the east side of Qualcomm Way and west of the I-805. ***Off-Site Impacts*:** The 0.12 acre of disturbed wetlands impacted by the project shall require a 1:1 mitigation ratio. Off-site impacts shall be mitigated by 0.12 acre of wetlands enhancement (1:1) shall be completed within the 17-acre river parcel northeast of the intersection of Qualcomm Way and Camino del Rio Norte. Therefore, a total of 0.24 acre of mitigation shall be required as follows: 0.18 acre of wetlands enhancement shall occur within the 17-acre river parcel and 0.06 acre of wetland creation credits have been purchased from Rancho Jamul Mitigation Bank. To comply with the 0.18 acre of required wetland habitat enhancement, a minimum of 0.18 acre of non-native exotic species dominated wetland habitat shall be enhanced within an approximately 17-acre property located within the San Diego River. Once removal of the invasive exotic species has been completed, the bare areas shall be planted, hydroseeded, and monitored as specified in the *Wetland Habitat Enhancement Mitigation and Monitoring Plan* (CCI 2007). The proposed enhancement area would be placed in a conservation or ~~covenant~~ easement and would occur off site within an approximately 17-acre parcel of which a portion is within the San Diego River Floodway. The property is comprised of two adjoining parcels (APN #s 43805216 and 43805217) located immediately north-east of the intersection of Camino Del Rio North and Qualcomm Way, south of the trolley and San Diego River. Currently, the property is fenced off to preclude public access to the greatest extent possible; and this fence would be maintained by the property owner. In addition, as a condition of the Master PDP, permanent signs would be placed on the fence to identify and	Permitee	Prior to issuance of grading permit where habitat is affected.

Biological Resources	Responsible Party	Timing of Implementation
protect the created enhanced area. The signs would be corrosion resistant, a minimum of 6" x 9" in size, on posts not less than three (3) feet in height from the ground surface, and would state the following: **SENSITIVE BIOLOGICAL RESOURCES** **DISTURBANCE BEYOND THIS POINT IS RESTRICTED** **NO TRESPASSING** Prior to the commencement of any activity that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank (which may include associated riparian resources) of a river, stream or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, the project applicant shall submit a complete Lake or Streambed Alteration Program notification package and fee to the California Department of Fish and Game.		
COASTAL SAGE SCRUB (TIER II) The mitigation ratio for the loss of 1.08 acres of coastal sage scrub outside of the MHPA would be 1:1, if the mitigation land is within a MHPA, or 1.5:1, if the mitigation land is outside of a MHPA. Therefore, either 1.08 acres (at a 1:1 ratio) or 1.6 acres (at a 1.5:1 ratio) of mitigation land will be required. Mitigation shall occur through acquisition of 1.08 credits from the San Diego Habitat Acquisition Fund.	Permitee	Prior to issuance of grading permit where habitat is affected.
MIXED CHAPARRAL (TIER IIIA) The mitigation ratio for the loss of 0.28 acre of mixed chaparral outside of the MHPA would be 0.5:1, if the mitigation land is within a MHPA, or 1:1, if the mitigation land is outside of a MHPA. Therefore, either 0.14 acres (at a 0.5:1 ratio) or 0.28 acres (at a 1:1 ratio) of mitigation land will be required. Mitigation shall occur through acquisition of 0.14 credits from the San Diego Habitat Acquisition Fund.	Permitee	Prior to issuance of grading permit where habitat is affected.
NON-NATIVE GRASSLANDS The mitigation ratio for the loss of 12.54 acres of non-native grasslands will be either 0.5:1, if the mitigation land is within a MHPA, or 1:1, if the mitigation land is outside of a MHPA. Therefore, either 6.27 acres (at a 0.5:1 ratio) or 12.54 acres (at a 1:1 ratio) of mitigation land will be required. Mitigation shall occur through acquisition of 6.27 credits from the City of San Diego Habitat Acquisition Fund.	Permitee	Prior to issuance of grading permit where habitat is affected.
MITIGATION SUMMARY: WETLAND HABITAT Prior to the issuance of the grading permit and/or authorization to proceed the ADD of the LDR shall verify that: A. 0.06 acre of wetlands creation has been purchased from the Rancho Jamul Mitigation Bank B. The 0.12 acre of disturbed wetlands impacted by the project shall require a 1:1 mitigation ratio. Off-site impacts shall be mitigated by 0.12 acre of wetlands enhancement (1:1) shall be completed within the 17-acre river parcel northeast of the intersection of Qualcomm Way and Camino del Rio Norte.	Permitee	Prior to the issuance of grading permits.
MITIGATION SUMMARY: UPLAND HABITAT Prior to the issuance of any authorization to proceed the ADD of LDR shall ensure that the applicant has provided verification of the payment in the amount of approximately $205,975 into the City of San Diego's	Permitee	Prior to the authorization to proceed.

Biological Resources	Responsible Party	Timing of Implementation
Habitat Acquisition fund as mitigation for impacts to 1.08 acre of Coastal Sage Scrub, 0.28 acre of Mixed Chaparral, and 12.54 acres of Non-Native Grasslands. (The payment shall be calculated based on the current Habitat Acquisition Fund fee at the time of grading permit issuance for the area(s) where the impact occurs – currently $35,000/acre – plus a 10 percent administration fee.)		
RAPTORS If project grading is proposed during the raptor breeding season (Feb. 1-Sept. 15), the project biologist shall conduct a pregrading survey for active raptor nests in within 300ft. of the development area and submit a letter report to MMC prior to the preconstruction meeting. A. If active raptor nests are detected, the report shall include mitigation in conformance with the City's Biology Guidelines (i.e. appropriate buffers, monitoring schedules, etc.) to the satisfaction of the Assistant Deputy Director (ADD) of the Land Development Review Division (LDR). Mitigation requirements determined by the project biologist and the ADD of LDR shall be incorporated into the project's Biological Construction Monitoring Exhibit (BCME) and monitoring results incorporated in to the final biological construction monitoring report. B. If no nesting raptors are detected during the pregrading survey, no mitigation is required.	Contractor	Prior to Start of Construction.

11.7 HEALTH AND SAFETY

11.7.1 Impacts

There are potential hazardous materials (USTs) present on the site that may pose a health risk

11.7.2 Mitigation Measures

The following mitigation measure would be implemented to reduce hazardous materials impacts to a level below significant.

Health and Safety	Responsible Party	Timing of Implementation
Prior to the issuance of building permits for each of the development phases/proposed site development, the project applicant shall contact the San Diego County Department of Environmental Health (DEH) and participate in the Voluntary Assistance Program (VAP) to assess potential impacts on health and safety. The applicant shall provide EAS with a concurrence letter from DEH subsequent to participation in the VAP and prior to the issuance of building permits for each of the development phases stating that human health, water resources and the environmental are adequately protected from any contamination that may have been present on the site.	Permitee	Prior to issuance of building permits.

11.8 HISTORICAL RESOURCES

11.8.1 Impacts

No cultural resources were identified on the project site as a result of the field survey and record search. Therefore, no known cultural resources would be adversely affected by implementation of the proposed project. However, the project site is located in an area of high sensitivity for cultural resources, and earth moving activities would have the potential to affect unknown resources located within the undisturbed areas of the project site and where off-site sewer and roadway (including work within Caltrans' rights-of-way) improvements would occur. Potential impacts to unknown cultural resources are considered to be significant.

11.8.2 Mitigation Measures

With implementation of the following mitigation measure, the Quarry Falls project would result in reducing the potentially significant impacts to cultural resources to below a level of significance. These mitigation measures shall apply to any areas of the project site which have not been disturbed by mining and reclamation but would be disturbed by proposed grading associated with the project, as well as off-site areas where infrastructure improvements are required.

Historical	Responsible Party	Timing of Implementation
PRIOR TO PERMIT ISSUANCE A. Land Development Review (LDR) Plan Check 1. Prior to Notice to Proceed (NTP) for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the appropriate construction documents. B. Letters of Qualification have been submitted to ADD 1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation. 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project. 3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the monitoring program.	ADD Permitee	Prior to issuance of building permits
PRIOR TO START OF CONSTRUCTION A. Verification of Records Search 1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from	Consulting Archaeologist	During construction.

Historical	Responsible Party	Timing of Implementation
South Coast Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed. 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities. 3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius. B. PI Shall Attend Precon Meetings 1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor. a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring. 2. Identify Areas to be Monitored a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits. b. The AME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation). 3. When Monitoring Will Occur a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur. b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.		
DURING CONSTRUCTION A. Monitor(s) Shall be Present During Grading/Excavation/Trenching 1. The Archaeological Monitor shall be present full-time during grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The Native American monitor shall determine the extent of their presence during construction related activities based on the AME and provide that information to the PI and MMC. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities.** 2. The monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion)**, and in the case of ANY discoveries. The RE shall forward copies to MMC.	Consulting Archeologist	During construction.

Historical	Responsible Party	Timing of Implementation
3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered may reduce or increase the potential for resources to be present. B. Discovery Notification Process 1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate. 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery. 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible. C. Determination of Significance 1. The PI and Native American monitor shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below. a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. c. If resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.		
DISCOVERY OF HUMAN REMAINS If human remains are discovered, work shall halt in that area and the following procedures as set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken: A. Notification 1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS). 2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone. B. Isolate discovery site 1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains. 2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience. 3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin. C. If Human Remains **ARE** determined to be Native American	Consulting Archeologist	During construction.

Historical	Responsible Party	Timing of Implementation
1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call. 2. The NAHC will contact the PI within 24 hours or sooner, after Medical Examiner has completed coordination. 3. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information. 4. The PI shall coordinate with the MLD for additional consultation. 5. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods. 6. Disposition of Native American Human Remains shall be determined between the MLD and the PI, IF: a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission; OR; b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner. c. In order to protect these sites, the Landowner shall do one or more of the following: (1) Record the site with the NAHC; (2) Record an open space or conservation easement on the site; (3) Record a document with the County. d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 6.c., above. D. If Human Remains are **NOT** Native American 1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial. 2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98). 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner and the Museum of Man.		
NIGHT AND/OR WEEKEND WORK A. If night and/or weekend work is included in the contract	Consulting Archeologist	During construction.

Historical	Responsible Party	Timing of Implementation
1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting. 2. The following procedures shall be followed. a. No Discoveries In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVR and submit to MMC via fax by 9 am the following morning of the next business day. b. Discoveries All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. c. Potentially Significant Discoveries If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed. d. The PI shall immediately contact MMC, or by 8AM the following morning to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made. B. If night and/or weekend work becomes necessary during the course of construction 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin. 2. The RE, or BI, as appropriate, shall notify MMC immediately. C. All other procedures described above shall apply, as appropriate.		
POST CONSTRUCTION A. Submittal of Draft Monitoring Report 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring, a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report. b. Recording Sites with State of California Department of Parks and Recreation The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report. 2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report. 3. The PI shall submit revised Draft Monitoring Report to MMC for approval. 4. MMC shall provide written verification to the PI of the approved report. 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.	Consulting Archaeologist	During construction.

Historical	Responsible Party	Timing of Implementation
B. Handling of Artifacts 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate. 3. The cost for curation is the responsibility of the property owner. C. Curation of artifacts: Accession Agreement and Acceptance Verification 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable. 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC. D. Final Monitoring Report(s) 1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved. 2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.		

11.9 PALEONTOLOGICAL RESOURCES

11.9.1 Impacts

Development of the Quarry Falls project would have the potential to impact paleontological resources and where off-site sewer impacts and roadway improvements (including work within Caltrans' rights-of-way) would occur. Potential impacts to paleontological resources are regarded as significant.

11.9.2 Mitigation Measures

The following mitigation measures shall be implemented to mitigation potential impacts to paleontological resources. These measures shall apply to areas of the project site and in off-site areas where infrastructure improvements would occur where native material would be graded or where material would be excavated. These measures will not apply to areas of fill on the site and in off-site areas where infrastructure improvements would occur, unless grading of the fill areas results in grading into native material. With implementation of these mitigation measures, the project's impact would be reduced to below a level of significance.

Paleontological Resources	Responsible Party	Timing of Implementation
PRIOR TO PERMIT ISSUANCE A. Land Development Review (LDR) Plan Check 1. Prior to Notice to Proceed (NTP) for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction documents. B. Letters of Qualification have been submitted to ADD 1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines. 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project. 3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.	Assistant Deputy Director of Land Development Review Permitee	Prior to the issuance of a Notice to Proceed (NTP) or any permits, including but not limited to, the first Grading Permit, Demolition Plans/ Permits and Building Plans/ Permits
PRIOR TO START OF CONSTRUCTION A. Verification of Records Search 1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed. 2. The letter shall introduce any pertinent information concerning expectations and probabilities of	MMC Consulting Paleontologist	

Paleontological Resources	Responsible Party	Timing of Implementation
discovery during trenching and/or grading activities. B. PI Shall Attend Precon Meetings 1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor. a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring. 2. Identify Areas to be Monitored Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation). 3. When Monitoring Will Occur a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur. b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.		
DURING CONSTRUCTION A. Monitor Shall be Present During Grading/Excavation/Trenching 1. The monitor shall be present full-time during grading/excavation/trenching activities as identified on the PME that could result in impacts to formations with high and moderate resource sensitivity. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities.** 2. The monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion)**, and in the case of ANY discoveries. The RE shall forward copies to MMC. 3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present. B. Discovery Notification Process 1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as	Consulting Paleontologist	Pre-construction Meeting

Paleontological Resources	Responsible Party	Timing of Implementation
appropriate. 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery. 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible. C. Determination of Significance 1. The PI shall evaluate the significance of the resource. a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI. b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered. d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.		
NIGHT AND/OR WEEKEND WORK A. If night and/or weekend work is included in the contract 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting. 2. The following procedures shall be followed. a. No Discoveries In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVR and submit to MMC via fax by 9am on the next business day. b. Discoveries All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction. c. Potentially Significant Discoveries If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed. d. The PI shall immediately contact MMC, or by 8AM the following morning to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made. B. If night work becomes necessary during the course of construction 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.	Consulting Paleontologist	During construction.

Paleontological Resources	Responsible Party	Timing of Implementation
2. The RE, or BI, as appropriate, shall notify MMC immediately. C. All other procedures described above shall apply, as appropriate.		
POST CONSTRUCTION A. Submittal of Draft Monitoring Report 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative) which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program shall be included in the Draft Monitoring Report. b. Recording Sites with the San Diego Natural History Museum The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report. 2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report. 3. The PI shall submit revised Draft Monitoring Report to MMC for approval. 4. MMC shall provide written verification to the PI of the approved report. 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals. B. Handling of Fossil Remains 1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued. 2. The PI shall be responsible for ensuring that all fossil remains are analyzed to identify function and chronology as they relate to the geologic history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate C. Curation of fossil remains: Deed of Gift and Acceptance Verification 1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution. 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC. D. Final Monitoring Report(s) 1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved. 2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.	Consulting Paleontologist	Post Construction

11.10 PUBLIC UTILITIES

11.10.1 Impacts

The project would generate large amounts of solid waste. Solid waste impacts are considered significant.

11.10.2 Mitigation Measures

The following mitigation measure has been identified to reduce direct and cumulative impacts to solid waste. Direct impacts would be mitigated to below a level of significance; cumulative impacts would remain significant and unmitigated.

Public Utilities (Solid Waste)	Responsible Party	Timing of Implementation
Land Development Review (LDR) Plan check 1. Prior to the issuance of any construction permit, including but is not limited to, demolition, grading, building or any other construction permit, the Assistant Deputy Director (ADD) Environmental Designee shall verify that the all the requirements of the Refuse & Recyclable Materials Storage Regulations and all of the requirements of the waste management plan are shown and noted on the appropriate construction documents. All requirements, notes and graphics shall be in substantial conformance with the conditions and exhibits of the associated discretionary approval. 2. The construction documents shall include a waste management plan that addresses the following information and elements for demolition, construction, and occupancy phases of the project as applicable: (a) tons of waste anticipated to be generated, (b) material type of waste to be generated, (c) source separation techniques for waste generated, (d) how materials will be reused on site, (e) name and location of recycling, reuse, or landfill facilities where waste will be taken if not reused on site, (f) a "buy recycled" program, (g) how the project will aim to reduce the generation of construction/ demolition debris, (h) a plan of how waste reduction and recycling goals will be communicated to subcontractors, (i) a time line for each of the three main phases of the project as stated above, (j) a list of required progress and final inspections by City staff. 3. The plan shall strive for a goal of 50% waste reduction. 4. The plan shall include specific performance measures to be assessed upon the completion of the project to measure success in achieving waste minimization goals. 5. The Plan shall include notes requiring the Permittee to notify MMC and ESD when: (a) a demolition permit is issued, (b) demolition begins on site,	Permittee	Prior to Permit Issuance or Bid opening/Bid award.

Public Utilities (Solid Waste)	Responsible Party	Timing of Implementation
(c) inspections are needed. The permittee shall arrange for progress inspections, and a final inspection, as specified in the plan and shall contact both MMC and ESD to perform these periodic site visits during demolition and construction to inspect the progress of the project's waste diversion efforts. When Demolition ends, notification shall be sent to: Mitigation Monitoring Coordination (MMC) Environmental Review Specialist 9601 Ridgehaven Court , Ste. 320, MS 1102 B San Diego, CA 92123 1636 (619) 980 7122 Development Service Department, Environmental Services Department (ESD) 9601 Ridgehaven Court, Ste. 320, MS 1103 B San Diego, CA 92123 1636 (858) 627-3303 6. Prior to the issuance of any grading or building permit, the applicant shall receive approval, in writing, from the ADD of LDR' environmental designee (MMC) that the waste management plan has been prepared, approved, and implemented. Also prior to the issuance of any grading or building permit, the applicant shall submit written evidence to the ADD that the final Demolition/Construction report has been approved by MMC and ESD. This report shall summarize the results of implementing the above Waste Management Plan elements, including: the actual waste generated and diverted from the project, the waste reduction percentage achieved, and how that goal was achieved, etc.		
A. Pre Construction Meeting 1. Demolition Permit - Prior to issuance of any demolition permit, the permittee shall be responsible to obtain written verification from MMC indicating that the permittee has arranged a preconstruction meeting to coordinate the implementation of the MMRP. The Precon Meeting that shall include: the Construction Manager, Demolition/Building/Grading Contractor; MMC; and ESD and the Building Inspector and/or the Resident Engineer (RE) (whichever is applicable) to verify that implementation of the waste management plan shall be performed in compliance with the plan approved by LDR and the San Diego Environmental Services Department (ESD), to ensure that impacts to solid waste facilities are mitigated to below a level of significance. 2. At the Precon Meeting, The Permittee shall submit Three (3) reduced copies (11"x 17") of the approved waste management plan, to MMC (2) and ESD (1). 3. Prior to the start of demolition, the Permittee / the Construction Manager shall submit a construction/demolition schedule to MMC and ESD. a. Grading and Building Permit - Prior to issuance of any grading or building permit, the permittee shall be responsible to arrange a preconstruction meeting to coordinate the implementation of the MMRP. The Precon Meeting that shall include: the Construction Manager, Building/Grading	Permittee	Prior to Start of Construction

Public Utilities (Solid Waste)	Responsible Party	Timing of Implementation
Contractor; MMC; and ESD and the Building Inspector and/or the Resident Engineer (RE) (whichever is applicable) to verify that implementation of the waste management plan shall be performed in compliance with the plan approved by LDR and the San Diego Environmental Services Department (ESD), to ensure that impacts to solid waste facilities are mitigated to below a level of significance. 4. At the Precon Meeting, The Permittee shall submit reduced copies (11"x 17") of the approved waste management plan, the RE, BI, MMC and ESD. 5. Prior to the start of construction, the Permittee / Construction Manager shall submit a construction schedule to the RE, BI, MMC and ESD.		
The Permittee/ Construction Manager shall call for inspections by the RE/BI and both MMC and ESD, who will periodically visit the demolition/construction site to verify implementation of the waste management plan. The Consultant Site Visit Record (CSVR) shall be used to document the Daily Waste Management Activity/progress.	Permittee	During Construction
Within 30 days after the completion of the implementation of the MMRP, for any demolition or construction permit, a final results report shall be submitted to both MMC and ESD for review and approval to the satisfaction of the City. MMC will coordinate the approval with ESD and issue the approval notification. Prior to final clearance of any demolition permit, issuance of any grading or building permit, release of the grading bond and/or issuance of any Certificate of Occupancy, the permitee shall provide documentation to the ADD of LDR, that the waste management plan has been effectively implemented.	Permittee	Post Construction
<u>The construction waste management plan shall divert at least 75 percent of construction and demolition waste from landfills, where City policy only requires 50 percent diversion.</u>		
<u>Domestic recycling shall be promoted through the installation of a two-bin waste in each residential kitchen drawer for recyclables and landfill garbage.</u>		
<u>All development within the Quarry Falls project shall be provided with recycling at no additional charge, and waste rates shall be charged on a volume generated basis. These measures are intended to encourage waste reduction. Waste hauling contracts shall be approved by the Franchise Administration in the City of San Diego to ensure compliance.</u>		

12.0 REFERENCES

A list of the reference materials consulted in the course of the EIR's preparation is included in this section.

- ASM Affiliates, Cultural Resources Study for the Quarry Falls Project (June 8, 2006)
- Carroll, Robert, San Diego Police Department, Letter to Karen Ruggels (November 1, 2005)
- Castro, Ben, City of San Diego Emergency Medical Services, Phone Conversation with Elysian Mah (November 1, 2005)
- Chralowicz, Donna, City of San Diego Waste Reduction and Enforcement Division, Letter to Karen L. Ruggels (November 7, 2005)
- Consultants Collaborative, Biological Survey Report for the Quarry Falls (July 15, 2005)
- EDAW, Inc., Water Quality Technical Report Quarry Falls (August 2007)
- Federal Aviation Administration (FAA), Determinations of No Hazard to Air Navigation (August 17, 2007)
- Geomatrix Consultants, Preliminary Geotechnical Investigation Report – Quarry Falls Development (April 27, 2005)
- Geomatrix Consultants, Quarry Falls Development Addendum Geotechnical Report (October 5, 2005)
- Geomatrix Consultants, Quarry Falls Development Revised Addendum Geotechnical Report (February 22, 2006)
- Giroux & Associates, Noise Impact Analysis (June 7, 2007)
- KOA, Quarry Falls Traffic Impact Study (September 2007)
- MacPhail, Roy, San Diego Unified School District, Letter to Karen Ruggels (December 6, 2006)
- Murphy, Frankie, Assistant Fire Marshall, City of San Diego Fire-Rescue Department, Memorandum to Marilyn Mirrasoni (September 4, 2007)
- Oates, Samuel L., City of San Diego Fire Marshal, Letter to Ms. Karen L. Ruggels (September 12, 2005)
- Oates, Samuel L., City of San Diego Fire Marshal, Letter to Ms. Karen L. Ruggels (February 17, 2006)
- San Diego, City of, 1989. Progress Guide and General Plan.
- San Diego, City of, 2007. Development Services Department, Significance Determination Guidelines, January 2007.
- San Diego, City of, 1997. MSCP Subarea Plan.
- San Diego, City of, Action Plan (2005)
- San Diego, City of, Draft General Plan (October 2006; September 2007)
- San Diego, City of, Draft General Plan Program Environmental Impact Report. (April 25, 2007)
- San Diego, City of, Land Development Code.

- San Diego, City of, Mission Valley Community Plan (amended January 2003)
- San Diego, City of, Mission Valley Community Plan (June 25, 1985, amended October 2003)
- San Diego, City of, October 2005. Draft General Plan
- San Diego, City of, October 22, 2002. Strategic Framework Plan
- San Diego, City of, Serra Mesa Community Plan (May 16, 2000)
- San Diego, City of, Strategic Framework Element (2005)
- San Diego, City of, Transit Oriented Development Design Guidelines (August 4, 1992)
- San Diego, City of, Water Supply Assessment Report (October 2007)
- San Diego, City of., 1992. Environmental Impact Report Guidelines, Revised September 2002.
- SANDAG, Current Estimates – Mission Valley (Fall 2005)
- Scientific Resources Associated, Air Quality Technical Report for the Quarry Falls at Mission Valley Project (July 30, 2007)
- TCB/AECOM, Hydrology Study (August 2007)
- TCB/AECOM, Sanitary Sewer Report Quarry Falls (August 2007)
- TCB/AECOM, Water Study for Quarry Falls (revised August 2007)
- Terzich, Chris, SDG&E, Correspondence with Karen Ruggels (August 9, 2005)
- Urban Systems Associates, Murray Canyon Properties Traffic Impact Study (TIS) (2005)

13.0 INDIVIDUALS AND AGENCIES CONSULTED

Agencies and individuals contacted during preparation of the EIR are identified in this section.

CITY OF SAN DIEGO

City Planning and Community Investment Department

- John Wilhoit, Senior Planner
- Brian Schoenfish, Senior Planner

Development Services Department

- Eileen Lower, Senior Planner
- Marilyn Mirrasoul, Associate Planner

Fire Department

- Bob Medan, Fire Marshal
- Sam Oates, Fire Marshal
- Frankie Murphy, Assistant Fire Marshal

Police Department

- Robert Carroll, Police Office

San Diego Public Library

- Mary Ann Tilotta, Capital Improvement Projects Analyst

Environmental Services Department

- Donna Chralowicz, Recycling Specialist

Emergency Medical Services

- Ben Castro, Captain

SAN DIEGO CITY SCHOOLS

- Charles Rynerson, Demographer
- Roy MacPhail, Supervising Facilities Planner

SAN DIEGO GAS & ELECTRIC

- Chris Terzich, Principal Environmental Specialist – Land Planning

14.0 CERTIFICATION

This document has been completed by the City of San Diego's Environmental Analysis Section, under the direction of the Development Services Department Environmental Review Manager. This Program EIR is based on independent analysis and determination made pursuant to the San Diego Land Development Code Section 128.0103.

Provided below is a list of City of San Diego staff, as well as the environmental and technical consultants, who assisted in preparing this document.

CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT

Environmental Analysis Section

- Robert J. Manis, Deputy Director, Development Services Department
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- George Ghossain, Associate Engineer - Traffic, LDR Transportation
- Craig Hooker, Associate Planner, LDR Landscaping
- Werner Landry, Senior Engineering Geologist
- James Quinn, Assistant Engineer, Geology Review

Community Planning and Community Investment Department

- Jeanne Krosch, Senior Planner, MSCP Reviewer
- Cheryl Robinson, Senior Management Analyst, Facilities Financing
- Brian Schoenfisch, Senior Planner, Long Range Planner

Parks and Recreation Department

- Jeff Harkness, Park Designer
- Deborah Sharpe, Project Officer

Fire Department

- Sam Oates, Deputy Chief
- Bob Medan, Fire Prevention Inspector, BDR Fire
- Frankie Murphy, Assistant Fire Marshal

Water Department

- Bob McCullough, Principal Water Resources Specialist

Police Department

- Jeff Hara, Police Sergeant

Metro Wastewater Department

- Janet Buttmann, Assistant Engineer-Civil, MWWD Reviewer

Environmental Services Department

- Donna Chralowicz, Recycling Specialist, Environmental Services Dept.

EIR Preparation and Management

- Karen L. Ruggels, KLR PLANNING
- Elysian Mah-Kurnik, AICP; LAND USE ENVIRONMENTAL PLANNER CONSULTANT
- Kerri Olson, SOMETHING MORE *Professional Documents*

Quarry Falls Traffic Impact Study
KOA

- Arnold Torma
- Seth Torma

Air Quality Technical Report
SCIENTIFIC RESOURCES ASSOCIATED

- Valorie Thompson, PhD

Noise Analysis
GIROUX & ASSOCIATES

- Hans Giroux

Biological Survey Report
CONSULTANTS COLLABORATIVE

- Mike Jefferson

Cultural Resources Study
ASM AFFILIATES

- John Cook, Principal

Hydrology Study
TCB/AECOM

- David L. Parkhill, R.C.E.

Preliminary Geotechnical Investigation Report
GEOMATRIX

- Jim Weaver, PE, GE

Water Study
TCB/AECOM

- David L. Parkhill, R.C.E.

Sewer Study
TCB/AECOM

- David L. Parkhill, R.C.E.

Water Quality Technical Report
EDAW

- Jennifer Guigliano, E.I.T., CPESC, CPSWQ, REA

Water Supply Assessment Report
CITY OF SAN DIEGO

Phase I Environmental Site Assessment
GEOCON

- Ron Kofron

Report of Soil Sampling and Analysis of Imported Sediment
GEOCON

- Ron Kofron