SECTION 8:
ALTERNATIVES TO THE PROPOSED PROJECT

8.1 - INTRODUCTION

The CEQA Guidelines require an EIR to describe a range of alternatives to the proposed project, or to the location of the proposed project, which would feasibly achieve most of the basic objectives of the proposed project, but would avoid or substantially lessen any of the significant effects identified in the analysis. An EIR is not required to consider every conceivable alternative to a proposed project. Rather, an EIR must consider a reasonable range of alternatives that are potentially feasible; an EIR is not required to consider alternatives that are infeasible.

Alternatives must be considered even if they would impede, to some degree, the attainment of project objectives or be more costly. The determination of the feasibility of project alternatives may include, but not be limited to, factors such as site suitability, economic viability, infrastructure, plan consistency, regulatory and jurisdictional limitations, and control of an alternative site, if applicable.

The analysis contained in this section compares each of the alternatives to the project, and includes an analysis of each alternative with respect to each of the environmental issues evaluated for the proposed project. In addition, the analysis of alternatives includes the assumption that all applicable mitigation measures associated with the proposed project would be implemented with an alternative. However, applicable mitigation measures may be scaled to reduce or avoid the potential impacts of the alternative under consideration, and may not precisely match those identified for the proposed project.

One of the alternatives must be identified as an Environmentally Superior Alternative. The Environmentally Superior Alternative is the one that would result in the fewest or least significant environmental impacts. If the Environmentally Superior Alternative that is identified is the No Project Alternative, then an Environmentally Superior Alternative must be selected from the remaining alternatives. Section 8.5 identifies and discusses the Environmentally Superior Alternative and includes Table 8-17 that compares the impacts of the alternatives and Table 8-18 that identifies the feasibility of each project objective by alternative.

The City has eliminated from further consideration the following alternative:

- Different Site Alternative.

The City has included for evaluation the following three alternatives:

- No Project Alternative - No Development;
- Baseline General Plan Alternative; and
- Reduced Density Alternative.

8.1.1 - Alternative Eliminated from Evaluation

Following is a discussion of the reasons the City has for eliminating the Different Site Alternative.

A Different Site Alternative would be defined by development of the land uses proposed by the Rich Haven Project in a different location, while the proposed project site would remain in its current condition. Analysis of a different site would be meaningful only if development of the proposed uses in a different location would avoid or substantially lessen the potentially significant effects of the proposed project. However, development of alternative locations in the vicinity of the project site would result in physical environmental impacts (i.e. biological, geology and soils, cultural, hydrology/water quality, aesthetic, etc.) that are similar to those associated with the project site, and no significant environmental benefit would be derived. Moreover, because the majority of the project objectives are linked to the vision and objectives associated with the NMC, a reallocation of proposed project land use and density to another site within the NMC would be in direct conflict with adopted plans. The NMC Plan identifies a major regional commercial node within the Rich Haven site; relocation of this major node to an alternative site, in particular, represents a substantial deviation from the NMC Plan, and is considered infeasible by the City.

Further evaluation of this alternative would not provide any meaningful information or environmental benefit, and this alternative has been eliminated from further consideration.

8.1.2 - Alternatives Identified for Evaluation

Following is a discussion of the reasons the City has for evaluation of 1) the No Project - No Development Alternative, 2) the Baseline General Plan Alternative, and 3) the Reduced Density Alternative.

No Project Alternative

The discussion and evaluation of a No Project Alternative is required by the CEQA Guidelines. This alternative provides a comparison between the environmental impacts of the proposed project in contrast to the environmental impacts that could result from not approving, or denying, the proposed project. Because the decision-making body of the City has discretionary authority over a proposed

project and could choose to deny it, the environmental impacts of that action must be disclosed. As a result of this potential decision, the project site could remain in its current state and condition for an undetermined period of time and not be the subject of any further development proposals. Evaluation of this alternative will determine if any significant impacts identified with the proposed project would be eliminated or if any less than significant impacts would be further reduced.

Section 8.2 below, discusses and evaluates the No Project Alternative - No Development.

Baseline General Plan Alternative

This Alternative reflects the adopted NMC General Plan land use for the site, without the proposed general plan amendment. This alternative also represents the maximum amount of regional commercial use and the least amount of residential units that can be built under the proposed Rich Haven Specific Plan unit transfer implementation mechanisms. The general plan amendment associated with the proposed project would allow the number of dwelling units (du) to increase from 1,268 to as many as 4,256, and result in a corresponding decrease in regional commercial uses from 1,306,000 square feet (sq ft) to as few as 889,200 sq ft. Evaluation of this Baseline General Plan Alternative will determine the level of impacts associated with the minimum amount of regional commercial/ mixed use and the maximum amount of residential units permitted under the proposed Rich Haven Specific Plan.

Section 8.3 that follows discusses and evaluates the Baseline General Plan Alternative.

Reduced Density Alternative

The reason the City selected this alternative is to evaluate the potential for reduced environmental impacts associated with an approximate 35 percent reduction in the number of du proposed on the site. The proposed project allows up to 2,479 du on 350 acres in the Residential District and 1,777 attached condominium type units within 160 acres in the Regional Commercial Mixed Use District. It is estimated that approximately 97 acres of the 160 acre area will be devoted to residential acres.

The Reduced Density Alternative would maintain some aspects of the mixed use concept and retain the proposed 889,200 sq ft of commercial use. This Alternative would provide for 2,765 du comprised of 1,610 single-family units in the Residential District (4.6 du per gross acre) and 1,155 attached dwelling in the Regional Commercial/Mixed Use District (12 du per gross acre.)

The Specific Plan includes 160 acres in the Regional Commercial/Mixed Use District, but it is estimated that 62.8 acres would be commercial and 97.8 acres will be residential if the maximum number or residential units were developed.

Section 8.4, following, discusses and evaluates this Reduced Density Alternative

8.2 - NO PROJECT ALTERNATIVE

8.2.1 - Description

This alternative is defined by, what would reasonably be expected to occur on the project site in the foreseeable future if a specific plan project were not approved. The environmental effects of the property remaining essentially in its current condition, with continuation of its current uses, are compared with the environmental effects that would occur if the proposed specific plan project is approved.

The land would remain largely in dairy and farming use, with improvements limited to accessory structures to existing agricultural uses.

8.2.2 - Impact Evaluation

Following is a comparison of each topical area with the No Project Alternative.

Agriculture

Under the proposed project, a significant impact would occur due to loss of Prime Farmland that would result from implementation of the proposed project as anticipated under the New Model Colony. In addition, the dairy and hog farm would cease operations and portions of the project site would no longer be used for row crop production.

Under the No Project Alternative, the loss of farmland would be avoided, although there is no assurance that the productive use of such farmland would be able to continue indefinitely into the future.

Hydrology and Water Quality

Under the proposed project, potentially significant impacts related to construction erosion and siltation, water quality in downstream receiving waters, and flooding and storm water runoff were

identified; however, these impacts would be reduced below the level of significance with implementation of the recommended mitigation measures.

Under the No Project Alternative, continued use of the project site for agricultural production may result in continued discharge of certain types of pollutants into the ground (e.g. nutrients and salts), and further concentration of these pollutants in the groundwater. It may also result in continued conveyance of such pollutants offsite in surface runoff during heavy rain events. The current lack of drainage improvements on the site and surrounding dairylands contributes to periodic flooding of lands to the south within Ontario and the Prado Basin. Although the potential for flooding would increase with urban development and increased impermeable surfaces on the project site, the potential for significant project flood impacts is mitigated by planned local and regional drainage improvements. The No Project Alternative would not result in avoiding the less than significant impacts to hydrology and water quality associated with the proposed project.

Biological Resources

Under the proposed project, potentially significant impacts were identified related to loss of windrows and water features that could provide habitat for migratory waterfowl and raptors, and possible direct impacts to the burrowing owl and Delhi Sands flower-loving fly. These potentially significant impacts would be reduced below the level of significance with implementation of the recommended mitigation measures and the remaining availability of some open space area.

Under the No Project Alternative, the project site would continue to be available for use by burrowing owls and the Delhi Sands flower-loving fly. Raptors and migratory birds may continue to use the windrow and open fields. Therefore, the No Project Alternative would result in avoiding or lessening the less than significant impacts to biological resources associated with the proposed project.

Geology and Soils

Under the proposed project, potentially significant impacts related to erosion and loss of topsoil, seismically-induced ground shaking and structural damage related to placing buildings in an area known to experience earthquakes, and compressible corrosive and expansive soils would be reduced below the level of significance with implementation of standard building code enforcement and replacement and compaction of fill material. Under the No Project Alternative, some erosion during flooding would continue, but no new structures would be built and the less than significant impacts would be further lessened.

Hazards

Under the proposed project, potentially significant impacts related to exposure from lead based paints and asbestos that would result from demolition activities and from methane that may have accumulated in the soil were identified. However, these impacts would be reduced below the level of significance with implementation of the recommended mitigation measures.

Under the No Project Alternative, the potential exposure to persons from lead based paints and asbestos related to demolition would be avoided because no structures would be removed and methane would continue to be released into the atmosphere, rather than potentially accumulate in the soil under paving and structural foundations. Therefore, this alternative would result in avoiding or lessening the less than significant impacts to hazards associated with the proposed project.

Transportation and Circulation

Under the proposed project, potentially significant impacts related to an increase in traffic were identified at eight study intersections in Year 2015. With the implementation of the recommended mitigation measures, all of the intersections would operate at or above established City level of service thresholds.

Under the No Project Alternative, the potential impacts related to traffic would be avoided because no development would occur that would result in additional generation of traffic. The No Project Alternative would not contribute Fair Share Fees to area traffic improvements, but presumably the improvements would be of a lesser scale proportionate to the traffic generated by the proposed project and therefore proportionately less costly. Therefore, this alternative would result in avoiding or lessening the significant impacts to transportation and circulation that would occur in Year 2015, associated with the proposed project.

Noise

Under the proposed project, potentially significant noise impacts were identified that would result from construction-related activities, and depending on the locations of sensitive receptors, the potential would exist to exceed established City noise standards due to an increase in traffic. With the implementation of the recommended mitigation measures, these impacts would be reduced below the level of significance.

Under the No Project Alternative, the potential exposure to persons from construction-related noise impacts and potential to exceed City noise standards would be avoided because no development would occur that would result in additional generation of noise. Therefore, this alternative would

result in avoiding or lessening the less than significant impacts to noise associated with the proposed project.

Air Quality

Under the proposed project, potentially significant impacts to air quality that related to short-term, construction activities and to long-term operations were identified. Implementation of the recommended mitigation measures would reduce many of the emissions below the thresholds identified by the South Coast Air Quality Management District (SCAQMD) thereby reducing the potentially significant impacts below the level of significance. However, with the implementation of the recommended mitigation measures, the following significant and unavoidable impacts to air quality would remain after implementation of the proposed project.

- Significant localized short-term air quality impacts during grading from PM_{10} and $PM_{2.5}$.
- Significant operational impacts during project occupancy from ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions.
- Cumulative health impacts during grading from localized emissions of PM_{10} and $PM_{2.5}$.
- Cumulative health impacts during operation for ground-level ozone, PM_{10}, and $PM_{2.5}$.
- The project is not consistent with the 2003 AQMP.
- The project is cumulatively considerable.

Under the No Project Alternative, the potentially significant impacts related to air quality resulting from the proposed project would be eliminated. However, the impacts to air quality that would result from continued operations of the dairy, hog farm, and row crop agricultural production would not be eliminated. The existing air quality emissions on the project site were not modeled for the purposes of this evaluation, but it is assumed that under this alternative PM-10 and methane would continue to be generated. It is further assumed that had the existing emissions such as ROC, NOx, and SOx been modeled, they would be less than the proposed project. Therefore, this alternative would result in avoiding or lessening significant impacts to air quality associated with the proposed project.

Public Services

Under the proposed project, no significant impacts were identified related to the provision of police or fire service, recreation or library use. However, each of these services will require additional resources and the payment of developer fees. Therefore, the No Project Alternative would result in avoiding or lessening the less than significant impacts to public services associated with the proposed project.

Under the proposed project, potentially significant impacts related to impacts on school facilities were identified due to the additional school-age children that would be generated. However, these impacts would be reduced below the level of significance with implementation of the recommended mitigation measures.

Under the No Project Alternative, the additional school-age children would not be generated and there would be no need for additional and/or expanded school facilities. Therefore, the No Project Alternative would avoid the less than significant impacts to school services associated with the proposed project.

Cultural Resources

The project site may contain potentially significant subsurface cultural resources. Under the proposed project, potentially significant impacts to Native American Resources, archaeological resources or paleontological resources could occur during construction-related activities. The project site does not include any historic architectural resources. With the implementation of the recommended mitigation measures, potential impacts to Native American Resources, archaeological resources or paleontological resources would be reduced below the level of significance.

Under the No Project Alternative, no development would occur and no disturbance of possible subsurface cultural resources would result. Therefore, this alternative would result in avoiding or lessening the less than significant impacts to cultural resources associated with the proposed project.

Utilities

Under the proposed project, no significant impacts were identified related to domestic water supply, wastewater conveyance and treatment capacity, solid waste landfill capacity, and the provision of electricity and natural gas. Cumulative impacts were identified relating to solid waste disposal capacity.

Under the No Project Alternative, consumption of natural gas and electricity would remain at their current levels, similar amounts of solid waste would be generated, wastewater would continue to be treated onsite through a septic and leach field system, and domestic water would continue to be provided from the on-site domestic wells. Therefore, this alternative would result in avoiding the less than significant impacts to utilities associated with the proposed project.

Land Use and Planning

Under the proposed project, the project site would be developed largely consistent with the land uses identified in the adopted New Model Colony General Plan. The project would require a General Plan Amendment to allow an increase in the number of residential units, with a corresponding decrease in the amount of allowable commercial space consistent with total vehicle trip capacity allocations. However, this change was envisioned in the Plan, and impacts are not significant.

The proposed project would reduce the number of jobs and increase the number of homes envisioned in the NMC GPA. This would reduce the jobs/housing ratio within the NMC and thus be in conflict with SCAG Regional Guidelines.

Under the No Project Alternative, there would be no increase in housing, population or commercial development as envisioned in the NMC General Plan. Therefore, the No Project Alternative would be inconsistent with the NMC General Plan and SCAG regional guidelines. The lack of development would be considered a significant impact in relation to Land Use and Planning.

The No Project Alternative would remove a substantial amount of commercial development and thus a substantial number of jobs from the number envisioned in the NMC General Plan. The number of jobs removed would be greater in proportion to the number of homes removed, and thus the No Project Alternative would have a significant impact on the jobs/housing ratio envisioned in the NMC General Plan.

Accordingly, the No Project Alternative would have significant impacts in comparison to the proposed project in relation to Land Use and Planning.

Population and Housing

Under the proposed project, the Population and Housing forecasts are consistent with the NMC General Plan and SCAG Regional Growth projections.

Under the No Project Alternative, the lack of development of housing and commercial uses would not fulfill the growth forecast by the NMC General Plan and SCAG regional guidelines. This would be a significant impact in relation to Population and Housing.

8.2.3 - Conclusions

The No Project Alternative is considered environmentally superior to the proposed project because, even though it would create impacts under Land Use and Planning and under Population and Housing, the continuation of the existing uses on the project site would eliminate or lessen the significant agriculture, air quality and traffic and circulation, impacts related to the proposed project.

8.3 - BASELINE GENERAL PLAN ALTERNATIVE

8.3.1 - Description

The Baseline General Plan Alternative is defined by the existing General Plan designations for the project site, that include two planning areas for 1,268 low density (4.6 du/ac) residential units and one area for Regional Commercial with 1,306,800 sq ft of floor area (Exhibit 3-8).

One of the components of the proposed project is a General Plan Amendment, which proposes to permit the transfer of residential development from the Regional Commercial area and increase the density in the residential area. In comparison to the Proposed Project, the Baseline General Plan Alternative would have 417,600 more sq ft of Regional Commercial floor area and 2,988 fewer du.

Agriculture

Under the proposed project, a significant impact would occur due to loss of Prime Farmland that would result from implementation of the proposed project as anticipated under the New Model Colony. In addition, the dairy and hog farm would cease operations and portions of the project site would no longer be used for row crop production.

Under the Baseline General Plan Alternative, the project site would still be developed with the same urban type uses as in the proposed project and result in conversion of the entire project site. Therefore, this alternative would not result in avoiding or lessening the significant and unavoidable impacts to agriculture associated with the proposed project.

Hydrology and Water Quality

Under the proposed project, potentially significant impacts related to construction erosion and siltation, water quality in downstream receiving waters, and flooding and storm water runoff were identified; however, these impacts would be reduced below the level of significance with implementation of the recommended mitigation measures.

Under the Baseline General Plan Alternative, the project site would still be developed with the same urban type uses as in the proposed project, but would result in somewhat lower impacts related to hydrology and water quality. This is due to the lower density and the increase in permeable surfaces associated with larger yards and landscaped areas. The increase in commercial uses associated with the Baseline Alternative would be similar to the high density residential associated with the proposed project in terms of the amount of permeable surfaces. Therefore, this alternative would not result in avoiding the impacts, but it would reduce the less than significant impacts to hydrology and water quality associated with the proposed project.

Biological Resources

Under the proposed project, potentially significant impacts were identified related to loss of windrows and water features that could provide habitat for migratory waterfowl and raptors, and possible direct impacts to the burrowing owl and Delhi Sands flower-loving fly. These potentially significant impacts would be reduced below the level of significance with implementation of the recommended mitigation measures.

Under the Baseline General Plan Alternative, the project site would still be developed with the overall configuration that would result in the same impacts as the proposed project. Therefore, this alternative would not result in avoiding or lessening the less than significant impacts to biological resources associated with the proposed project.

Geology and Soils

Under the proposed project, potentially significant impacts related to erosion and loss of topsoil, seismically-induced ground shaking and structural damage related to placing buildings in an area known to experience earthquakes, and compressible corrosive and expansive soils that would be reduced below the level of significance with implementation of standard building code enforcement and replacement and compaction of fill material.

Under the Baseline General Plan Alternative, the project site would still be developed with the same urban type uses as in the proposed project and would result in similar impacts related to geology and soils. Poor soil conditions are located throughout the project site, and higher density buildings tend to increase the potential for damage due to soil conditions. The increase in commercial square footage would tend to increase the impacts, and the decrease in residential density would tend to decrease impacts. The full-time population associated with the Baseline General Plan Alternative is 9,782 persons less than the Proposed Project. The overall floor area of construction for the Baseline General Plan Alternative is also considerably less than the Proposed Project. The additional 2,988 du would have a floor area of 5,976,000 sq. ft. assuming 2,000 sq. ft per du. That is over ten times

higher than the 417,000 sq ft of commercial it replaces under the Proposed Project. The Baseline General Plan Alternative would result in less population and less construction thereby reducing the risks associated with seismic events or poor soil conditions. On balance, therefore, the Baseline General Plan Alternative would reduce the less than significant impacts associated with soils and geology.

Hazards

Under the proposed project, potentially significant impacts related to exposure from lead based paints and asbestos that would result from demolition activities and from methane that may have accumulated in the soil were identified. However, these impacts would be reduced below the level of significance with implementation of the recommended mitigation measures.

Under the Baseline General Plan Alternative, the project site would still be developed with the same urban type uses as in the proposed project and would result in identical impacts related to hazards. Therefore, this alternative would not result in avoiding or lessening the less than significant impacts to hazards associated with the proposed project.

Transportation and Circulation

Under the proposed project, potentially significant impacts related to an increase in traffic were identified at eight study intersections in Year 2015. With the implementation of the recommended mitigation measures, all of the intersections would operate at or above established City level of service thresholds.

Under the Baseline General Plan Alternative, the project site would still be developed with the same urban type uses as in the proposed project but to different levels of residential and commercial uses. The proposed project is based on the concept that the total daily vehicle trips would not exceed the same level that would occur under the existing General Plan land use. This is confirmed by the traffic study, which indicates that total daily vehicle trips for the proposed project are less than the Baseline General Plan Alternative. However, as shown on Table 8-1, the Proposed Project creates somewhat more trips during the peak hours than does the Baseline General Plan Alternative.

Table 8-1: Comparison of Vehicle Trips

	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project	46,765	927	2004	2929	2818	1954	4772
Baseline General Plan Alternative	48,898	773	1,038	1,811	2,345	2,127	4,472

Because the peak hour is the basis for determining impact, the Baseline General Plan Alternative results in unacceptable conditions at five intersections, instead of the eight associated with the Proposed Project. Future Baseline Conditions for the Baseline General Plan Alternative are presented on Table 8-2.

Table 8-2: Year 2015 Future Baseline Conditions

Intersection	Year 2015 - With Baseline Conditions					
	AM Peak Hour			PM Peak Hour		
	LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Archibald Avenue at Riverside Drive	C	23.4	0.581	C	26.6	0.752
2. Archibald Avenue at Chino Avenue	B	11.2	0.489	B	12.9	0.530
3. Archibald Avenue at Schaefer Avenue	B	15.9	0.509	**B**	**19.0**	**0.627**
4. Archibald Avenue at Edison Avenue	C	29.3	0.668	**F**	**220.7**	**1.836**
5. Turner Avenue at Riverside Drive	B	14.1	0.294	B	14.3	0.330
6. Turner Avenue at Chino Avenue [a]	B	10.0	N/A	B	10.4	N/A
7. Turner Avenue at Schaefer Avenue	A	2.5	0.093	A	1.8	0.116
8. Edison Avenue at Schaefer Avenue	A	3.0	0.327	A	7.2	0.434
9. Haven Avenue at SR-60 WB Ramps	A	9.6	0.301	B	11.8	0.532
10. Haven Avenue at SR-60 EB Ramps	B	11.2	0.567	D	38.1	0.941
11. Haven Avenue at Riverside Drive	C	27.9	0.910	**E**	**63.0**	**1.203**
12. Haven Avenue at Chino Avenue	A	4.7	0.450	A	7.0	0.548
13 Haven Avenue at Edison Avenue	C	25.8	0.764	**E**	**70.7**	**1.130**
14. Mill Creek Avenue at Riverside Drive	B	17.9	0.579	B	18.9	0.692
15. Mill Creek Avenue at Chino Avenue	B	13.3	0.126	B	13.5	0.242
16. Mill Creek Avenue at Edison Avenue	A	5.9	0.356	A	4.0	0.454
17. Milliken Avenue at SR-60 WB Ramps	C	21.0	0.632	**F**	**109.3**	**1.229**

Table 8-2 (Cont.): Year 2015 Future Baseline Conditions

Intersection	Year 2015 - With Baseline Conditions					
	AM Peak Hour			PM Peak Hour		
	LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
18. Milliken Avenue at SR-60 EB Ramps	C	20.6	0.865	**F**	**197.7**	**1.137**
19. Milliken Avenue at Riverside Drive	**E**	**61.8**	**1.044**	**F**	**138.9**	**1.310**
20. Milliken Avenue/Hamner Avenue at Chino Avenue	B	12.6	0.308	A	5.0	0.352
21. Milliken Avenue/Hamner Avenue at Edison Avenue	C	30.5	0.777	**F**	**104.7**	**1.268**

Notes:
LOS = Level of Service Delay = Average Vehicle Delay (Seconds)
V/C = Volume-to-Capacity Ratio HCM 2000 Operations Methodology
BOLD indicates unacceptable operating conditions.

Mitigation measures identified to reduce traffic impacts of the Baseline General Plan Alternative below thresholds are listed below:

Baseline General Plan Alternative Traffic Mitigation Measures

Intersection #12 Haven Avenue/Edison Avenue

- Provide NB and SB left turn protected phasing

Intersection #16 Milliken Avenue/SR-60 WB Ramps

- Provide NB left-turn only lane
- Provide WB shared left-turn/right-turn lane

Intersection #17 Milliken Avenue/SR-60 EB Ramps

- Re-stripe EB shared left-turn/right-turn lane as free-flow-right-turn only lane

Intersection #18 Milliken Avenue/Riverside Drive

- Provide EB and WB left turn protected phasing
- Provide WB right-turn only lane with overlap phasing
- Provide EB left-turn only lane

Intersection #20 Milliken Avenue/Edison Avenue

- Provide SB right-turn only lane
- Provide SB through only lane

- Provide WB left-turn only lane

Mitigation measures for the Baseline Condition are similar to those of the Proposed Project, and impact levels after mitigation of the Baseline Condition are likewise less than significant. The Future Baseline Conditions are shown on Table 8-3.

Table 8-3: Baseline General Plan Alternative 2015 Future Conditions With Mitigations

Intersection	2015 Future Baseline With Mitigations					
	AM Peak Hour			PM Peak Hour		
	LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Archibald Avenue at Riverside Drive	C	23.4	0.581	C	26.6	0.752
2. Archibald Avenue at Chino Avenue	B	11.2	0.489	B	12.9	0.530
3. Archibald Avenue at Schaefer Avenue	B	15.9	0.509	**B**	**19.0**	**0.627**
4. Archibald Avenue at Edison Avenue	C	29.0	0.668	**C**	**32.6**	**0.774**
5. Turner Avenue at Riverside Drive	B	14.1	0.294	B	14.3	0.330
6. Turner Avenue at Chino Avenue [a]	B	10.0	N/A	B	10.4	N/A
7. Turner Avenue at Schaefer Avenue	A	2.5	0.093	A	1.8	0.116
8. Edison Avenue at Schaefer Avenue	A	3.0	0.327	A	7.2	0.434
9. Haven Avenue at SR-60 WB Ramps	A	9.6	0.301	B	11.8	0.532
10. Haven Avenue at SR-60 EB Ramps	B	11.2	0.567	D	38.1	0.941
11. Haven Avenue at Riverside Drive	C	30.0	0.777	**C**	**33.4**	**0.815**
12. Haven Avenue at Chino Avenue	A	4.7	0.450	A	7.0	0.548
13. Haven Avenue at Edison Avenue	C	30.1	0.720	**D**	**41.3**	**0.917**
14. Mill Creek Avenue at Riverside Drive	B	17.9	0.579	B	18.9	0.692
15. Mill Creek Avenue at Chino Avenue	B	13.3	0.126	B	13.5	0.242
16. Mill Creek Avenue at Edison Avenue	A	5.9	0.356	A	4.0	0.454
17. Milliken Avenue at SR-60 WB Ramps	B	18.1	0.431	**C**	**30.0**	**0.933**
18. Milliken Avenue at SR-60 EB Ramps	A	1.2	0.558	**A**	**1.8**	**0.648**
19. Milliken Avenue at Riverside Drive	**C**	**28.8**	**0.713**	**C**	**32.7**	**0.859**
20. Milliken Avenue/Hamner Avenue at Chino Avenue	B	12.6	0.308	A	5.0	0.352

Table 8-3 (Cont.): Baseline General Plan Alternative 2015 Future Conditions With Mitigations

Intersection	2015 Future Baseline With Mitigations					
	AM Peak Hour			PM Peak Hour		
	LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
21. Milliken Avenue/Hamner Avenue at Edison Avenue	C	28.6	0.771	**D**	**40.5**	**0.992**

Notes:
LOS = Level of Service Delay = Average Vehicle Delay (Seconds)
V/C = Volume-to-Capacity Ratio HCM 2000 Operations Methodology
BOLD indicates mitigated operating conditions.

The Baseline General Plan Alternative would create fewer and less severe traffic impacts than the Proposed Project, but would still require mitigation. Therefore, this alternative would result in avoiding or lessening the less than significant with mitigation impacts related to traffic associated with the proposed project.

Noise

Under the proposed project, potentially significant impacts related to noise were identified that would result from construction-related activities and, depending on the locations of sensitive receptors, the potential exists to exceed established City noise standards due to an increase in traffic. With the implementation of the recommended mitigation measures, these impacts would be reduced below the level of significance.

Under the Baseline General Plan Alternative, the project site would still be developed with the same urban type uses as in the proposed project and would result in similar impacts related to noise. Construction noise would be similar and would affect sensitive receptors at Colony High School and residential areas to the north and east. Long-term traffic noise would be somewhat less owing to the lower peak hour traffic. Noise from commercial uses and late night traffic would be confined generally to the commercial district and would not affect mixed use residential. Therefore, this alternative would result in lessening the less than significant impacts to noise associated with the proposed project.

Air Quality

Under the proposed project, potentially significant impacts to air quality that related to short-term, construction activities and to long-term operations were identified. Implementation of the recommended mitigation measures would reduce many of the emissions below the thresholds

identified by the South Coast Air Quality Management District (SCAQMD) thereby reducing the potentially significant impacts below the level of significance. However, with the implementation of the recommended mitigation measures, the following significant and unavoidable impacts to air quality would remain after implementation of the proposed project.

- Significant localized short-term air quality impacts during grading from PM_{10} and $PM_{2.5}$.
- Significant operational impacts during project occupancy from ROG, NOx, CO, PM_{10}, and $PM_{2.5}$ emissions.
- Cumulative health impacts during grading from localized emissions of PM_{10} and $PM_{2.5}$.
- Cumulative health impacts during operation for ground-level ozone, PM_{10}, and $PM_{2.5}$.
- The project is not consistent with the 2003 AQMP.
- The project is cumulatively considerable.

The Baseline General Plan Alternative would have similar emissions during construction and operation compared with the proposed project. The proposed project and the baseline project would have identical emissions during grading because the same footprint would be disturbed. During building/construction, the Baseline General Plan Alternative may be constructed more quickly due to the decreased number of du. Therefore, the baseline project may have slightly fewer emissions compared with the proposed project, but due to the overall large size of both projects, it is anticipated that the Baseline General Plan Alternative would have the same significant impacts during construction.

Operational emissions for the Baseline General Plan Alternative were estimated. The mobile emissions were estimated using trip generation rates in the project specific traffic study. These trip generation rates do not include the internal capture rate reduction, because the Baseline General Plan Alternative does not encourage pedestrian access and mixed-use land use as the proposed project does. As shown in Table 8-4 during operation, the baseline project and the proposed project's emissions are comparable. ROG emissions for the proposed project would be slightly higher due to more residents (increased consumer product and architectural coating emissions). Both projects would exceed the South Coast Air Quality Management District (SCAQMD) thresholds for ROG, NOx, CO, PM_{10}, and $PM_{2.5}$. Therefore, the level of significance would be the same.

Table 8-4: Comparison of Daily Operational Emissions

Activity	Operational Emissions (pounds per day)					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Emissions - Baseline	331	250	2478	3	458	453
Emissions - Proposed Project	552	255	2470	3	448	444
SCAQMD Regional Threshold	55	55	550	150	150	55
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes

Notes:
Emissions are from mobile vehicles, natural gas, landscaping, consumer products, and architectural coatings.
Source: URBEMIS Data, MBA, 2006.

As shown in Table 8-5, a comparison of the Baseline General Plan Alternative and the proposed project significant impacts indicates that the significant impacts are identical.

Table 8-5: Comparison of Baseline and Proposed Project Air Quality Impacts

Impact	Baseline Project	Proposed Project	Comment
Construction emissions are above the District's regional thresholds	Significant - ROG, NOx, and PM_{10}	Significant - ROG, NOx, and PM_{10}	Similar emissions during construction because the same project footprint would be impacted.
Construction concentrations above the District's localized thresholds	Significant during grading from PM_{10} and $PM_{2.5}$	Significant during grading from PM_{10} and $PM_{2.5}$	The impact would be identical because the same grading would occur.
Operational emissions above the District's regional thresholds	Significant for ROG, NOx, CO, PM_{10}, and $PM_{2.5}$	Significant for ROG, NOx, CO, PM_{10}, and $PM_{2.5}$	Both projects would be significant for the same pollutants.
Cumulative health impacts during construction	Significant grading from localized emissions of PM_{10} and $PM_{2.5}$	Significant grading from localized emissions of PM_{10} and $PM_{2.5}$	Both projects are within the South Coast Air Basin; therefore, the impact would be identical.
Cumulative health impacts during operation	Significant for ground-level ozone, PM_{10}, and $PM_{2.5}$	Significant for ground-level ozone, PM_{10}, and $PM_{2.5}$	Both projects are within the South Coast Air Basin; therefore, the impact would be identical.
Consistency with the air quality management plan	The project is not consistent	The project is not consistent	Both projects would exceed the SCAQMD regional and localized thresholds.

Table 8-5 (Cont.): Comparison of Baseline and Proposed Project Air Quality Impacts

Impact	Baseline Project	Proposed Project	Comment
The project is cumulatively considerable	Significant	Significant	Both projects exceed the SCAQMD regional and localized thresholds; therefore, the projects would not be consistent.

In conclusion, the Baseline General Plan Alternative would also create significant unavoidable impacts in relation to air quality. The Baseline General Plan Alternative would create greater impacts in relation to some pollutants, and lesser impacts in relation to other impacts. On balance, the impacts between the Proposed Project and the Baseline General Plan Alternative are approximately equal.

Public Services

Under the Baseline General Plan Alternative, the project site would still be developed with residential uses that would result in the generation of school-age children, but to a lesser degree. Under the proposed project, potentially significant impacts related to impacts on school facilities were identified, but these would be reduced below the level of significance with implementation of the developer fees. Table 8-6 compares the student generation rates between the proposed project and the Baseline General Plan Alternative. The Baseline General Plan Alternative would reduce the less than significant impacts to schools associated with the proposed project.

Table 8-6: Comparison of School Impacts

Factor	Proposed Project	Baseline General Plan Alternative	Difference
Student Generation: 0.64/sfdu 0.27/mfdu 0.2622/sfdu-0.1364/mfdu	 1,566 K-8 students 723 HS students	 812 K-8 students 333 HS students	 -754 K-8 students -390 HS students
Total Students	**2,289 students**	**1,145 students**	**-1,144 students**
sfdu = single-family dwelling unit mfdu = multi-family dwelling unit			

Less than significant demands for police and library services were also identified for the proposed project. Under the Baseline General Plan Alternative, the demand for other public services generally would decline due to the lower number of du. While the Baseline General Plan Alternative includes 417,600 sq ft more of commercial space than the Proposed Project, the planning factors for public services are typically based on population. Table 8-7 illustrates the differences between the Proposed Project and the Baseline General Plan Alternative. Therefore, Baseline General Plan Alternative

would result in avoiding or lessening the less than significant impacts related to public services associated with the proposed project.

Table 8-7: Comparison of Public Service Demand

Public Service	Planning Factor	Proposed Project	Baseline General Plan Alternative	Difference
Police	1.34 sworn officers per 1,000 population	21 officers	7 officers	-14 officers
Fire	Response Time	Adequate	Adequate	None
Library	0.5 sq ft per person	7,488 sq ft	2,535 sq ft	-4,953 sq ft

Utilities

Under the proposed project, no significant impacts were identified related to domestic water supply, wastewater conveyance and treatment capacity, solid waste landfill capacity, and the provision of electricity and natural gas. Cumulative impacts were identified for solid waste disposal. Under the Baseline General Plan Alternative, the project site would still be developed with the same urban type uses as in the proposed project, however the demands for utilities would be correspondingly less as shown in Table 8-8 and Table 8-9. Therefore, this alternative would result in lessening the less than significant impacts to utilities associated with the proposed project.

Table 8-8: Baseline General Plan Alternative Estimated Domestic Water Service Demands

Land Use	Area*	Generation Factor**	Total Demand (AFY)
Domestic Water			
Residential	203.1 AC	2,232 GPD / AC	507.78
Commercial	120.48 AC***	3,100 GPD / AC	418.36
School	24.8 AC	4,500 GPD / AC	125.01
Parks	27.0 AC	4,000 GPD/AC	120.98
SCE Easements	50.22***	0	0
Roadways/Buffers	85.0	0	0
Total	**510.6 AC**	**—**	**1,172.13**

Table 8-8 (Cont.): Baseline General Plan Alternative Estimated Domestic Water Service Demands

Land Use	Area*	Generation Factor**	Total Demand (AFY)
Notes: * Approximate acreage that assumes 17 percent for roadways and edge buffers that would not generate a demand for water supply. ** City of Ontario, NMC Final EIR, 1997, page 5.13-11 *** Source: RBF AC = Acre GPD = gallons-per-day AFY = acre feet-per-year One acre-foot equals 325,851 gallons. Draft guidelines under consideration by the City of Ontario Public Works Agency and recently updated 12-01-05 may produce results somewhat different from this table when the applicant seeks permits. This table is based on the NMC FEIR to provide consistency.			

Table 8-9: Comparison of Utility Usage

Utility	Proposed Project	Baseline General Plan Alternative	Difference
Water Supply	1,141.83 ACY	1,172.13 ACY	+30.3 ACY
Waste Water	**1,449,120 GPD**	815,800 GPD	-633,320 GPD
Solid Waste	28.95 TPD	11.02 TPD	-17.84 TPD
Electricity	**37.67** million KWH/YR	24.82 million KWH/YR	-12.85 KWH/YR
Natural Gas	**280.78** MCF/YR	153.87 MCF/YR	-126.91 MCF/YR
Notes: GPD =Gallons per day TPD = Tons Per Day KWH/YR = Kilowatt Hours per Year MCF/YR =Million Cubic Feet Per Year Water usage is determined by acre.			

Cultural Resources

The possibility exists for potentially significant subsurface cultural resources to occur on the site. There are no historic architectural resources on the site. Under the proposed project, potentially significant impacts to, Native American Resources, archaeological resources or paleontological resources could occur during construction-related activities. With the implementation of the recommended mitigation measures, these impacts would be reduced below the level of significance.

Under the Baseline General Plan Alternative alternative, the entire site would also be graded and developed. Therefore, this alternative would not result in avoiding or lessening the less than significant impacts to cultural resources associated with the proposed project.

Land Use and Planning

Under the proposed project, the project site would be developed largely consistent with the land uses identified in the adopted New Model Colony General Plan. The project would require a General Plan Amendment to allow an increase in the number of residential units, with a corresponding decrease in the amount of allowable commercial space consistent with total vehicle trip capacity allocations. The proposed project implements the mixed use opportunities envisioned by the NMC General Plan, However, this requires a General Plan Amendment to transfer and increase residential density on the site. The requirement for a GPA, in and of itself, does not represent a substantial land use impact or conflict with adopted plans. Thus, the change was envisioned in the Plan, and impacts are not significant.

The proposed project would reduce the number of jobs and increase the number of homes envisioned in the NMC GPA. This would reduce the jobs/housing ratio within the NMC and thus be in conflict with SCAG Regional Guidelines.

Under the Baseline General Plan Alternative, there would be a decrease in housing and population and an increase in commercial development to the amounts originally envisioned in the NMC General Plan. The Baseline General Plan Alternative would provide for 1,268 single-family units, and 1,306,800 sq ft of regional commercial. Considering that the Baseline General Plan Alternative proposes the same amount of development as originally envisioned in the NMC, the Baseline General Plan Alternative would be in full compliance with the General Plan with respect to the amount of Regional Commercial use on the site.

Also, as shown on Table 8-10, under the Baseline General Plan Alternative, housing is decreased and employment is increased creating a more favorable job/housing ratio as shown on Table 8-10. The Baseline General Plan Alternative includes 1,268 du and creates 2,730 jobs. The jobs to housing ratio after considering vacancies is 2.22/1 or 2.22 jobs for every house. This ratio is considerably higher than the 0.50/1 associated with the proposed project and the 0.84/1 envisioned in the original NMC GPA. Therefore, the Baseline General Plan Alternative serves to lessen the significant jobs/housing balance impacts under the proposed project.

A major caveat to this analysis however is the ability of the market to absorb the high levels of commercial development contained in the Baseline General Plan Alternative. If the market is saturated and there are no available commercial tenants for this property, the jobs/housing balance envisioned in this analysis could be illusory.

Table 8-10: Comparison of Projected Employment

Employment Type	Generation Factor	Proposed Project Employment Total	Baseline Employment Total
Commercial-Professional	1 per 500 sf	1,778	2,613
Education	1 per 15 students	153	77
Government	1 per 300 residents	47	14
Residential Service Workers	1 per 50 dwelling units	85	26
Number of homes, assuming 3% vacancy		4,129	1,230
Total Employment		**2,063**	**2,730**
Jobs/Housing Ratio		**0.50**	**2.22**
Source: MBA, Chino Preserve EIR, Projected Fiscal Impacts, Stanley R, Hoffman, 2001.			

Population and Housing

Under the proposed project, the Population and Housing forecasts are consistent with the NMC General Plan and SCAG Regional Growth projections. The proposed project creates additional opportunities for low and moderate-income housing through its mix of product types and price ranges. The proposed project is consistent with the Regional Housing Needs Assessment.

Under the Baseline General Plan Alternative, housing is decreased and commercial development is increased. The Baseline General Plan Alternative includes 1,268 single-family du. The amount of housing is consistent with the NMC General Plan and the SCAG Regional Growth projections. However, the Baseline General Plan Alternative provides only one housing type that is significantly higher priced than the attached housing included in the Proposed Project. Therefore, the Baseline General Plan Alternative provides less opportunities for low and moderate income housing than the proposed project.

Accordingly, the Baseline General Plan Alternative would not include the beneficial aspects regarding low and moderate-income housing that are contained in the proposed project.

8.3.2 - Conclusions

The Baseline General Plan Alternative is considered somewhat environmentally superior to the proposed project because of a lessening of impacts related to traffic, noise, public services, utilities and land use planning, despite an increase in impacts related to Population and Housing.

8.4 - REDUCED DENSITY ALTERNATIVE

8.4.1 - Description

This alternative evaluates the potential impacts associated with a number of dwelling units somewhere between the relatively low-density existing General Plan designations (the Baseline General Plan Alternative) and the relatively high density proposed project.

The proposed project includes 2,479 du on 350 acres in the Residential District and 1,777 attached condominium type units on approximately 97 acres within the 160 acre Regional Commercial Mixed Use District.

The Reduced Density Alternative would maintain some aspects of the mixed-use concept and retain the proposed 889,200 square feet of commercial use. This Alternative would provide for 2,765 du, which is approximately mid point between the 1,268 units in the Baseline General Plan Alternative and the 4,256 units in the proposed project. The Reduced Density Alternative is comprised of 1,610 single family units in the Residential District comprised of Planning Areas 1 through 19, and 1,155 attached du in the Regional Commercial/Mixed Use District. The gross density in the 350-acre residential district would therefore be 4.6 du/acre, and the gross density in the 97.2-acre residential area of Planning Areas 20 and 21 would be 11.88 du/acres. (The Specific Plan includes 160 acres in the Regional Commercial/Mixed Use District, but information provided by the Specific Plan consultant, RBF, indicates that 62.8 acres will be commercial.)

8.4.2 - Impact Evaluation

Agriculture

Under the proposed project, a significant impact would occur due to loss of Prime Farmland that would result from implementation of the proposed project as anticipated under the New Model Colony. In addition, the dairy and hog farm would cease operations and portions of the project site would no longer be used for row crop production.

Under the Reduced Density Alternative, the project site would still be developed with the same urban type uses as in the proposed project and result in conversion of the entire project site. Therefore, this alternative would not result in avoiding or lessening the significant and unavoidable impacts to agriculture associated with the proposed project.

Hydrology and Water Quality

Under the proposed project, potentially significant impacts related to construction erosion and siltation, water quality in downstream receiving waters, and flooding and storm water runoff were identified; however, these impacts would be reduced below the level of significance with implementation of the recommended mitigation measures

Under Reduced Density Alternative, the project site would still be developed with the same urban type uses as in the proposed project but would result in somewhat lower impacts related to hydrology and water quality. This is due to the lower density and the increase in permeable surfaces associated with larger yards and landscaped areas. Therefore, this alternative would not result in avoiding the impacts, but it would reduce the less than significant impacts to hydrology and water quality associated with the proposed project.

Biological Resources

Under the proposed project, potentially significant impacts were identified related to loss of windrows and water features that could provide habitat for migratory waterfowl and raptors, and possible direct impacts to the burrowing owl and Delhi Sands flower-loving fly. These potentially significant impacts would be reduced below the level of significance with implementation of the recommended mitigation measures.

Under the Reduced Density Alternative, the project site would still be developed with the overall configuration that would result in the same impacts as the proposed project. Therefore, this alternative would not result in avoiding or lessening the less than significant impacts to biological resources associated with the proposed project.

Geology and Soils

Under the proposed project, potentially significant impacts related to erosion and loss of topsoil, seismically-induced ground shaking and structural damage related to placing buildings in an area known to experience earthquakes, and compressible corrosive and expansive soils that would be reduced below the level of significance with implementation of standard building code enforcement and replacement and compaction of fill material.

Under the Reduced Density Alternative, the project site would still be developed with the same urban type uses as in the proposed project and would result in similar impacts related to geology and soils. Poor soil conditions are located throughout the project site, and higher density buildings tend to increase the potential for damage due to soil conditions. The decrease in residential density would

tend to decrease impacts. The full-time population associated with the Reduced Density Alternative is 4,900 persons less than the Proposed Project. The overall floor area of construction for the Reduced Density Alternative is also considerably less than the Proposed Project because the 2,765 du would have less floor area than the 4,259 du. On balance, therefore, the Reduced Density Alternative would reduce the less than significant impacts associated with soils and geology.

Hazards

Under the proposed project, potentially significant impacts related to exposure from lead based paints and asbestos that would result from demolition activities and from methane that may have accumulated in the soil were identified. However, these impacts would be reduced below the level of significance with implementation of the recommended mitigation measures.

Under the Reduced Density Alternative, the project site would still be developed with the same urban type uses as in the proposed project and would result in identical impacts related to hazards. Therefore, this alternative would not result in avoiding or lessening the less than significant impacts to hazards associated with the proposed project.

Transportation and Circulation

Under the proposed project, potentially significant impacts related to an increase in traffic were identified at eight study intersections in Year 2015. With the implementation of the recommended mitigation measures, all of the intersections would operate at or above established City level of service thresholds.

Under the Reduced Density Alternative, the project site would still be developed with the same urban type uses as in the proposed project but to different levels of residential uses. The amount and location of commercial uses would remain the same as the proposed project. The proposed project is based on the concept that the daily vehicle trips would total the same number as would be generated by the existing General Plan. As shown in the previous discussion of the Baseline General Plan Alternative, this is confirmed by the traffic study that indicates that total daily vehicle trips for the proposed project are less than the Baseline General Plan Alternative. However, the peak hour trips are greater under the proposed project in comparison to the Baseline General Plan Alternative because the increased residential use creates more peak hour commuters.

The Reduced Density Alternative reduces the total number of daily trips in comparison to both the proposed project and the Baseline General Plan Alternative, and decreases peak hour trips in

comparison to the proposed project. However, the Reduced Density Alternative would increase the peak hour trips in comparison to the Baseline General Plan Alternative as shown on Table 8-11.

Table 8-11: Comparison of Vehicle Trips

	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project	46,765	927	2,004	2,929	2,818	1,954	4,772
Baseline General Plan Alternative	48,898	773	1,038	1,811	2,345	2,127	4,472
Reduced Density Alternative*	38,802	835	1,466	2,301	2,101	1,615	3,717

* Based on Table 5 in the Traffic Study assuming that commercial development remains the same as the proposed project and that all 1,610 sf dwellings were constructed in PAs 1-19 and that all 1,155 mf dwellings were constructed in PAs 20, 21A and 21B.

Because the peak hour is the basis for determining impact, the Reduced Density Alternative would be expected to result in unacceptable conditions at intersections in the same manner as the Proposed Project and the Baseline General Plan Alternative. A complete traffic analysis was not conducted for the Reduced Density Alternative, but based on the peak hour trips it is likely that this alternative would impact at least the five intersections that were impacted by the Baseline General Plan Alternative, and perhaps some of the other three intersections that were also impacted by the proposed project.

The Reduced Density Alternative would create fewer and less severe traffic impacts than the Proposed Project, but would still require mitigation. Mitigation measures for the Reduced Density Alternative would be similar to those of the Proposed Project and the Baseline General Plan Alternative and would likewise reduce impacts to less than significant. Therefore, this alternative would result in avoiding or lessening the less than significant impacts related to traffic associated with the proposed project.

Noise

Under the proposed project, potentially significant impacts related to noise were identified that would result from construction-related activities and, depending on the locations of sensitive receptors, the potential to exceed established City noise standards due to an increase in traffic. With the implementation of the recommended mitigation measures, these impacts would be reduced below the level of significance.

Under the Reduced Density Alternative, the project site would still be developed with the same urban type uses as in the proposed project and would result in similar impacts related to noise. Construction noise would be similar and would affect sensitive receptors at Colony High School and residential areas to the north and east. Long term traffic noise would be somewhat less owing to the lower peak hour traffic. Noise from commercial uses and late night traffic would be confined generally to the commercial district and would not affect mixed use residential. Therefore, this alternative would result in lessening the less than significant impacts to hazards associated with the proposed project.

Air Quality

Under the proposed project, potentially significant impacts to air quality that related to short-term, construction activities and to long-term operations were identified. Implementation of the recommended mitigation measures would reduce many of the emissions below the thresholds identified by the South Coast Air Quality Management District (SCAQMD) thereby reducing the potentially significant impacts below the level of significance. However, with the implementation of the recommended mitigation measures, the following significant and unavoidable impacts to air quality would remain after implementation of the proposed project.

- Significant localized short-term air quality impacts during grading from PM_{10} and $PM_{2.5}$.
- Significant operational impacts during project occupancy from ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions.
- Cumulative health impacts during grading from localized emissions of PM_{10} and $PM_{2.5}$.
- Cumulative health impacts during operation for ground-level ozone, PM_{10}, and $PM_{2.5}$.
- The project is not consistent with the 2003 AQMP.
- The project is cumulatively considerable.

Under the Reduced Density Alternative, the project site would still be developed with the same urban type uses as in the proposed project but there would be less residential development. The construction impacts would be similar to the proposed project because the entire site would be graded. However, the operational impacts would be less because the number of residential units and the number of vehicle trips would be less than the proposed project. A detailed air quality analysis was not completed for the Reduced Density Alternative, but it can be surmised that the significant and unavoidable air quality impacts associated with the project would be lessened under the Reduced Density Alternative.

Public Services

Under the Reduced Density Alternative, the project site would still be developed with residential that would result in the generation of school-age children but to a lesser degree. Under the proposed project, potentially significant impacts related to impacts on school facilities were identified due to the additional school-age children that would be generated, but would be reduced below the level of significance with implementation of the developer fees. Table 8-12 compares the student generation rates between the proposed project and the Reduced Density Alternative. Therefore, this alternative would result in avoiding or lessening the less than significant impacts to schools associated with the proposed project.

Table 8-12: Comparison of School Impacts

Factor	Proposed Project	Reduced Density Alternative	Difference
Student Generation: 0.64/sfdu 0.27/mfdu 0.2622/sfdu-0.1364/mfdu	1,566 K-8 students 723 HS students	1,342 K-8 students 580 HS students	-224 K-8 students -143 HS students
Total Students	**2,289 students**	**1,922 students**	**-367 students**

Less than significant demands for police and library service were also identified for the proposed project. Under the Reduced Density Alternative, the demand for other public services generally would decline due to the lower number of du. The amount of commercial space in the Reduced Density Alternative is the same as in the Proposed Project, and the planning factors for public services are typically based on population. Table 8-13 illustrates the differences between the Proposed Project and the Reduced Density Alternative. Therefore, Reduced Density Alternative would result in avoiding or lessening the less than significant impacts related to public services associated with the proposed project.

Table 8-13: Comparison of Public Service Demand

Public Service	Planning Factor	Proposed Project	Reduced Density Alternative	Difference
Police	1.34 sworn officers per 1,000 population	21 officers	13 officers	-7 officers
Fire	Response Time	Adequate	Adequate	None
Library	0.5 sq. ft per person	7,488 square feet	5,150 square feet	-2,338 square feet

Utilities

Under the proposed project, no significant impacts were identified related to domestic water supply, wastewater conveyance and treatment capacity, solid waste landfill capacity, and the provision of electricity and natural gas. Cumulative impacts were identified in relation to solid waste disposal. Under the Reduced Density Alternative, the project site would still be developed with the same urban type uses as in the proposed project; however, the demands for utilities would be correspondingly less as shown in Table 8-14. The demand for water would most likely be somewhat less due to the lower number of residential uses, however the planning factors for water usage are based on acreage of land uses that are not expected to change between the proposed project and the Reduced Density Alternative. Therefore, this alternative would result in lessening the less than significant impacts to utilities associated with the proposed project.

Table 8-14: Comparison of Utility Usage

Utility	Proposed Project	Reduced Density Alternative	Difference
Water Supply	1,141.83 ACY	1,141.83 ACY	0*
Waste Water	1,449,120 GPD	976,500 GPD	-472,620 GPD
Solid Waste	28.95TPD	19.83 TPD	-9.12 TPD
Electricity	37.67million KWH/YR	29.43 million KWH/YR	-8.24 KWH/YR
Natural Gas	280.78 MCF/YR	222.24 MCF/YR	-58.54 MCF/YR

GPD =Gallons per day TPD = Tons Per Day KWH/YR = Kilowatt Hours per Year
MCF/YR =Million Cubic Feet Per Year
*Water usage is determined by acre.

Cultural Resources

The possibility exists for potentially significant subsurface cultural resources to occur on the site. There are no historic architectural resources on the site. Under the proposed project, potentially significant impacts to, Native American Resources, archaeological resources or paleontological resources could occur during construction-related activities. With the implementation of the recommended mitigation measures, these impacts would be reduced below the level of significance.

Under the Reduced Density Alternative, the entire site would be graded and developed. Therefore, this alternative would not result in avoiding or lessening the less than significant impacts to cultural resources associated with the proposed project.

Land Use and Planning

Under the proposed project, the project site would be developed largely consistent with the land uses identified in the adopted New Model Colony General Plan. The project would require a General Plan Amendment to allow an increase in the number of residential units, with a corresponding decrease in the amount of allowable commercial space consistent with total vehicle trip capacity allocations. The proposed project implements the mixed use opportunities envisioned by the NMC General Plan, However, this requires a General Plan Amendment to transfer and increase residential density on the site. The requirement for a GPA, in and of itself, does not represent a substantial land use impact or conflict with adopted plans. Thus, the change was envisioned in the Plan, and impacts are not significant.

The proposed project would reduce the number of jobs and increase the number of homes envisioned in the NMC GPA. This would reduce the jobs/housing ratio within the NMC and thus be in conflict with SCAG Regional Guidelines.

Under the Reduced Density Alternative, there would be an increase in housing and population and a decrease in commercial development as originally envisioned in the NMC General Plan. The Reduced Density Alternative would provide for 1,610 single-family units, 1,155 multi-family units and 889,200 square feet of regional commercial. Considering that the Reduced Density Alternative proposes the same amount of commercial uses and a smaller amount of residential uses, it would be somewhat more consistent with the policies of the NMC than the proposed project. Therefore, the Reduced Density Alternative would serve to further lessen the insignificant impacts of the proposed project in regards to land use planning.

Also, as shown on Table 8-15, the Reduced Density Alternative would maintain a higher jobs/housing ratio than the proposed project. However, the 0.74 jobs per housing unit is less than the 0.84/1 envisioned in the NMC GPA and the impacts remain significant. Thus, the Reduced Density Alternative would not be consistent with the NMC General Plan and the SCAG regional policy regarding jobs/housing balance. However, the Reduced Density Alternative can be considered to reduce the less than significant land use and planning impacts associated with the proposed project.

Table 8-15: Comparison of Projected Employment

Employment Type	Generation Factor	Proposed Project Employment Total	Reduced Density Employment Total
Commercial-Professional	1 per 500 sf	1,778	1,778
Education	1 per 15 students	153	129
Government	1 per 300 residents	47	34
Residential Service Workers	1 per 50 dwelling units	85	51
Number of homes assuming 3% vacancy		4,129	2,682
Total Employment		**2,063**	**1,992**
Jobs/Housing Ratio		**0.50/1**	**0.74/1**
Source: MBA, Chino Preserve EIR, Projected Fiscal Impacts, Stanley R, Hoffman, 2001.			

Population and Housing

Under the proposed project, the Population and Housing forecasts are consistent with the NMC General Plan and SCAG Regional Growth projections. The proposed project creates additional opportunities for low- and moderate-income housing through its mix of product types and price ranges. The proposed project is consistent with the Regional Housing Needs Assessment.

Under the Reduced Density Alternative, housing is decreased in relation to the proposed project and commercial development is held constant. The forecast population for the Reduced Density Alternative would be approximately 10,301 persons in 2,765 du. That amount of housing is consistent with the NMC General Plan and the SCAG Regional Growth projections. However, the Reduced Density Alternative provides a more limited assortment of housing types than the proposed project. While there would still be a mix of variously sized and priced homes, the variety would be less than that provided in the proposed project. Therefore, the Reduced Density Alternative provides less opportunities for low and moderate income housing than the proposed project.

8.4.3 - Conclusions

The Reduced Density Alternative is considered environmentally superior to the proposed project because the lower number of the residential units would lessen significant impacts in many categories of impact, particularly in relation to vehicle traffic, air quality, public services, utilities, and the job/housing balance.

8.5 - ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As previously discussed in Section 8.1, Introduction, the CEQA Guidelines requires that one of the alternatives be identified as the Environmentally Superior Alternative. In addition, if the Environmentally Superior Alternative identified is the No Project Alternative, then an Environmentally Superior Alternative must also be identified from the remaining alternatives.

Table 8-16 provides a summary of the major attributes and environmental factors for the four alternatives considered.

Table 8-16: Summary Comparison of Project Alternatives

Environmental Issue	Proposed Project	No Project -	Baseline General Plan Alternative	Reduced Density Alternative
Total Residential Units	4,256	6	1,268	2,765
Single Family Units	1,124	6	1,268	1,610
Multi-Family/Attached Units	3,132	0	0	1,155
Population	14,977	Est. 20	5,068	10,301
Commercial Square Footage	889,200	0	1,306,800	889,200
Total Employment	2,063	Est. 60	2,730	1,989
Jobs/Housing Ratio	0.50/1	N/A	2.2/1	0.74/1
Daily Vehicle Trips	46,765	N/A	48,898	38,802
AM Peak Hour Trips	2,931	N/A	1,811	2,301
PM Peak Hour Trips	4,772	N/A	4,472	3,717
Impacted Intersections	8	N/A	5	5-8
Total Students	2,289	N/A	1,145	1,922
Required Police Officers	21	N/A	7	14
Water Usage*	1,141.83 ACY	N/A	1,172.13 ACY	1,141.83 ACY
Waste Water	1,449,120 GPD	0	815,800 GPD	976,500 GPD
Solid Waste Generation	28.95 TPD	N/A	11.02 TPD	19.83 TPD

Notes:
* Based on acreage of use, not amount of development
ACY = Acre Foot Per Year GPD = Gallons Per Day TPD = Tons Per Day

Table 8-17 provides a summary of each alternative related to the 13 environmental issues evaluated in Section 5, Environmental Impact Analysis, of the DEIR, and includes the level of significance

associated with the proposed project in order to facilitate a thorough comparison of the alternatives. Refer to Section 5 of this document for a detailed discussion of each environmental issue.

Table 8-17: Impact Summary Comparison of Project Alternatives

Environmental Issue	Proposed Project	No Project -	Baseline General Plan Alternative	Reduced Density Alternative
Agricultural Resources	SIG	L	S	S
Hydrology and Water Quality	LTS	L	S	S
Biological Resources	LTS	L	S	S
Geology and Soils	LTS	L	S	S
Hazards	LTS	L	S	S
Transportation and Circulation	LTS	L	L	L
Noise	LTS	L	L	L
Air Quality	SIG	L	S	L
Public Services	LTS	L	L	L
Utilities	LTS	L	L	L
Cultural Resources	LTS	L	S	S
Land Use Planning	SIG	SIG	L	SIG
Population and Housing	LTS	SIG	G	G
L = Lesser impact than the proposed project G = Greater impact than the proposed project SIG = Significant		S = Similar impact as the proposed projects LTS = Less Than Significant		

A project alternative must be able to feasibly attain most of the basic objectives of the proposed project. Table 8-18 provides an assessment of the ability of each of the alternatives to achieve the basic objectives identified in Section 3.4, Project Objectives, of the Draft EIR. For reference, the objectives are repeated in this table.

Table 8-18: Objective Feasibility Comparison

Objectives	No Project - No Development Alternative	No Project -	Baseline General Plan Alternative	Reduced Density Alternative
OBJ-1. Implement the vision of the NMC General Plan, which is designed to be a place of diversity that includes the following: a mix of residential neighborhoods with a variety of housing options; regional serving centers that provide retail, professional office, medical facilities, high-density housing, entertainment complexes, and hotel and conference facilities; employment centers; and a Town Center that serves as the principal center of activity and the common focal point for all NMC neighborhoods and districts.	Yes	No	Yes	Yes
OBJ-2. Provide land uses that are compatible with surrounding land uses and that are consistent with the policies for specific plans identified in the NMC General Plan.	Yes	No	Yes	Yes
OBJ-3. Develop a variety of housing types within the residential component available for a range of lifestyles and prices that implement the housing policies of the NMC General Plan.	Yes	No	Yes	Yes
OBJ-4. Incorporate the opportunity for residential units to accommodate a live-work environment with living areas on the second floor and home office areas on the first floor in order to promote traditional neighborhood development concepts and to reduce vehicular trips due to job commutes.	Yes	No	Yes	Yes
OBJ-5. Linkage of the SCE Corridor trail to the City's Master Plan of trails.	Yes	Yes	Yes	Yes
OBJ-6. Provide infrastructure to serve the project in a timely manner consistent with NMC-programmed infrastructure plans.	Yes	N/A	Yes	Yes
OBJ-7. Provide employment opportunities on the project site.	Yes	No	Yes	Yes
No = Unable to feasibly attain the objective. Yes = Able to feasibly attain the objective				

Based on the analysis contained in this section, the Environmentally Superior Alternative is the No Project Alternative. The Environmentally Superior Alternative from the remaining three alternatives, which includes the proposed project, is the Reduced Density Alternative.