

Section 4.0

Alternatives

This section provides a description and analysis of alternatives to the proposed project and the potential environmental consequences of each project alternative considered.

4.1 Introduction

Section 15126.6 of the *California Environmental Quality Act (CEQA) Guidelines* requires an environmental impact report (EIR) to describe a range of reasonable alternatives to the project, or to the location of the 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 comparable merits of the alternatives.” The analysis of alternatives shall focus on alternatives “which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly.”

The selection and discussion of alternatives is intended to foster public participation and informed decision making. An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and/or speculative. The *State CEQA Guidelines* further require the analysis of a No Project Alternative, and the identification of the Environmentally Superior Alternative. Where the Environmentally Superior Alternative is the No Project Alternative, the EIR shall also identify an Environmentally Superior Alternative among the other alternatives.

In addition, Section 15126.6 of the *State CEQA Guidelines* requires an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination.

Accordingly, several alternatives that have the potential to avoid or substantially lessen project impacts were considered, and three alternatives were selected for further analysis, as detailed below.

Case law suggests that the discussion of alternatives need not be exhaustive and that alternatives be subject to a construction of reasonableness. The impacts of the alternatives may be discussed in less detail than the environmental effects of the proposed project.

4.2 Project Objectives

The alternatives to the proposed project ultimately selected for analysis in this EIR were developed to avoid or substantially lessen one or more of the significant environmental impacts associated with the proposed project, while still meeting many of the project’s objectives. The objectives for the proposed project include the following:

- Create a premier hotel development that adheres to the intent and the requirements of the City’s General Plan and the Central District Specific Plan.
- Create a hotel development that complements the existing neighboring uses intended to support the Old Pasadena Business District.

- Create a northwest entrance to the historic Old Pasadena that is compatible with its urban context and encourages pedestrian-oriented, less-motorized transportation, particularly within Old Pasadena.
- Strategically place a hotel use to help extend Old Pasadena north, while creating a link between Old Pasadena and Northwest Pasadena.
- Locate a new hotel within proximity of a major public transportation facility (the Gold Line) to support public transportation throughout the area.

4.3 Selection of Alternatives for Analysis

According to the *State CEQA Guidelines*, the discussion of alternatives should focus on alternatives to a project or its location that can feasibly avoid or lessen the significant effects of the project. The *State CEQA Guidelines* further indicate that the range of alternatives included in this discussion should be sufficient to allow decision makers a reasoned choice. The alternatives discussion should provide decision makers with an understanding of the merits and disadvantages of these alternatives.

Section 3.0, Environmental Impact Analysis, of this EIR concludes that implementation of the proposed project would not result in significant and unavoidable impacts. However, in compliance with CEQA and to fully explore and evaluate the impacts of what can be built on the project site, two build alternatives, in addition to the No Build Alternative, were considered.

- Alternative 1 – No Project

The No Project Alternative is the No Build Alternative and assumes that the proposed extended stay hotel would not be constructed; the site would remain in its current vacant state.

- Alternative 2 – Residential Project

The Residential Project Alternative assumes a fully residential project would be constructed in compliance with the existing zoning for the project site. Under existing codes, a 94,091 square foot residential project would be constructed, with a total of 84 units and up to 105 parking spaces.

- Alternative 3 – Commercial Office Project

The Commercial Office Project Alternative assumes the maximum allowable build-out of the project site with commercial and office uses. Under this alternative, a 94,091 square foot commercial office project would be constructed with approximately 282 parking spaces.

4.4 Alternatives Considered but Rejected as Infeasible

The *State CEQA Guidelines* requires an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons underlying the lead agency's determination. Section 15126.6(c) of the *State CEQA Guidelines* states the following:

The EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination...Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

The analysis of alternatives began with an identification of potential alternatives to the proposed project that had the potential to reduce or eliminate the project's significant environmental impacts. However, given that no significant unavoidable environmental impacts were identified, the analysis focused on what could reasonably be built. In addition to the No Project/No Build Alternative and the two build alternatives identified above, the City and project applicant considered, but dismissed as infeasible, the construction of the extended stay hotel on an alternate parcel in the City as well as the construction of a larger hotel on both the project site and the adjacent parcel to the project site, which is currently vacant. Construction of the extended stay hotel on an alternate project site was dismissed from further evaluation because the current project site is already owned by the applicant, the site's location relative to businesses and Old Pasadena is preferred, and few vacant parcels of this size exist in the western area of Pasadena. Construction of a larger hotel on the project site as well as the adjacent vacant parcel was dismissed from further consideration because the environmental impacts associated with the construction of a larger hotel project would be more severe than impacts associated with the proposed project and the project applicant does not have control or access to the adjacent vacant parcel.

4.5 Analysis Methodology

Each of the alternatives selected for analysis is evaluated in sufficient detail to determine whether its overall environmental impacts would be less, similar, or greater in comparison to the impacts of the proposed project. The impact analysis sections for the proposed project (within Section 3.0, Environmental Impact Analysis, of this EIR) include design features and mitigation measures that reduce the environmental impacts of the proposed project. The following analyses assume that equally effective design features and mitigation measures would apply to each of the build alternatives.

The analysis under each alternative includes the following:

- An evaluation of the environmental impacts anticipated to occur for each environmental issue analyzed in Section 2.0, Project Description, of this EIR and a determination as to the significance of those impacts. This discussion also includes an analysis of whether the alternative would avoid or substantially lessen any of the significant environmental impacts associated with the proposed project. Where the impacts of the alternative and the proposed project were roughly equivalent, the comparative impact is said to be similar.
- A summary of the comparative impacts across all of the issues.

4.6 Comparative Impact Analysis

4.6.1 Alternative 1 – No Project

Section 15126.6(e) of the *State CEQA Guidelines* requires evaluation of the No Project Alternative. As described in the *State CEQA Guidelines*, the purpose of describing and analyzing the No Project Alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Therefore, as required by the *State CEQA Guidelines*, the analysis must examine the impacts that might reasonably be expected to occur in the foreseeable future if the proposed project was not approved. Under the No Project Alternative the proposed extended stay hotel would not be constructed. The site would either remain in its current vacant state, or it is also reasonable to assume that given the vacant lot immediately adjacent to the project site, the site could be purchased and a larger project could be constructed on the two

contiguous vacant parcels. Under the No Project Alternative, none of the objectives of the proposed project would be achieved.

The No Project Alternative analysis that follows discusses the existing conditions at the time the Notice of Preparation was prepared as well as what would be reasonably expected to occur in the foreseeable future if the proposed project was not approved.

4.6.1.1 Aesthetics

Under the No Project Alternative, the project site would remain in its existing, undeveloped condition. The site is one of the gateway entrances to the City and would continue to remain vacant and surrounded by green construction fencing. In its current state, it is an eyesore to the community, and given the length of time in which the site has been vacant, can be considered blight. Due to its proximity to the Central Core of the City, there will always be the potential for development opportunity at the site; however, in the near term the site would remain undeveloped. Views of the surrounding buildings and the mountains to the north, nighttime lighting conditions, and the overall aesthetic environment in the project area would remain unchanged. If the site were to remain undeveloped, the existing blight conditions could worsen and therefore result in a negative aesthetic impact. Given that no significant and unavoidable aesthetic impacts were identified for the proposed project, the No Project Alternative would not avoid or reduce the severity of significant aesthetic impacts of the proposed project and would potentially even worsen the aesthetic conditions in the project vicinity.

4.6.1.2 Air Quality

Under the No Project Alternative, the project site would remain vacant and undeveloped; no construction activities would occur, and no new project emissions would result from construction or operation. However, given that no significant and unavoidable air quality impacts were identified for the proposed project, the No Project Alternative would not avoid or reduce the severity of significant air quality impacts from the proposed project.

4.6.1.3 Cultural Resources

Under the No Project Alternative, the project site would remain in its existing, undeveloped condition. Maintaining the site in its existing condition would not affect any neighboring historic resources or historic districts. Additionally, under the No Project Alternative, no new ground disturbing activities would occur; therefore, the potential to disturb or unearth archaeological materials would be reduced when compared to the proposed project. However, given that no significant and unavoidable cultural resources impacts were identified for the proposed project, the No Project Alternative would not avoid or reduce the severity of significant cultural resources impacts of the proposed project.

4.6.1.4 Greenhouse Gases

Under the No Project Alternative, the project site would remain vacant and undeveloped; no construction activities would occur, and no new greenhouse gas (GHG) emissions would result from construction or operation of a project. However, given that no significant and unavoidable GHG impacts were identified for the proposed project, the No Project Alternative would not avoid or reduce the severity of significant GHG impacts from the proposed project.

4.6.1.5 Noise

Under the No Project Alternative, the project site would remain vacant and undeveloped; no construction activities would occur, and no new noise emissions would result from construction or

operation of a project. However, given that no significant and unavoidable noise impacts were identified for the proposed project, the No Project Alternative would not avoid or reduce the severity of significant noise impacts from the proposed project.

4.6.1.6 Transportation and Traffic

Under the No Project Alternative, the project site would remain vacant and undeveloped; no construction activities would occur, and no new traffic would be generated by construction or operation of a project. However, given that no significant and unavoidable traffic impacts were identified for the proposed project, the No Project Alternative would not avoid or reduce the severity of significant traffic impacts from the proposed project.

4.6.1.7 Conclusion

Implementation of Alternative 1, the No Project Alternative would reduce environmental impacts when compared to the proposed project. However, the analysis included in Section 3.0 of this EIR identified that all potentially significant environmental impacts can be reduced to less than significant levels with the implementation of mitigation measures. Given that no significant and unavoidable impacts were identified for the proposed project, the No Project Alternative would not avoid or reduce the severity of significant impacts from the proposed project.

4.6.2 Alternative 2 – Residential Project

The Residential Project Alternative would involve the construction of a code-compliant residential project on the same site proposed for development of the extended stay hotel project. Under this alternative, a total of 84 residential units would be constructed, each of which would be approximately 500 square feet in size, and a maximum of 105 parking spaces would be provided. The overall building size would be approximately 94,091 square feet. Setbacks along Fair Oaks Avenue and Walnut Street would range between five and ten feet, and the maximum allowable height of the building, through height averaging would be 75 feet. Therefore, the residential building would be five stories. Under the Residential Project Alternative, the site would be redeveloped thereby creating an entrance to the City's northwest gateway corner that is compatible with its urban context and encourages pedestrian-oriented, less-motorized transportation; however, the basic project objectives related to providing additional hotel space within the City would not be achieved. It is acknowledged that this alternative would support public transportation and pedestrian activity, but Old Pasadena would continue to be underserved in terms of hotel uses to support local businesses, and a gateway to Old Pasadena for tourist purposes would not be accomplished.

4.6.2.1 Aesthetics

Under the Residential Project Alternative, the existing vacant project site would be developed with a five-story residential project that would be approximately the same size and mass as the proposed project. The building would occupy the existing vacant site and result in minor alterations of distant views of the mountains; however, as with the proposed project, no significant view impacts would occur. Additionally, as with the proposed project, a new source of light and glare would be introduced at the project site; however, lighting would be shielded to minimize spillover onto adjacent land uses as regulated by the Zoning Code. No significant aesthetic impacts would occur with the Residential Project Alternative. However, given that no significant and unavoidable aesthetic impacts were identified for the proposed project, the Residential Project Alternative would not avoid or reduce the severity of significant aesthetic impacts of the proposed project.

4.6.2.2 Air Quality

Under the Residential Project Alternative, a new residential building consistent in size and scale to the proposed project would be constructed. The construction schedule, as with the proposed project, is anticipated to last approximately 13 months. Construction emissions associated with constructing the Residential Project Alternative would be the same as those generated through construction of the proposed project.

The California Air Resources Board recommends against siting new sensitive land use within 500 feet of a freeway (CARB 2005). I-210 is approximately 205 feet north of the project site and would be a source of toxic air contaminants (TACs) on the proposed project. Sensitive land uses include, but are not limited to, residences, schools, day care centers, playgrounds, and medical facilities. Any land use that could expose persons vulnerable to health problems, including children, pregnant women, the elderly, and those with existing health problems, would be considered a sensitive land use. Because the residential building would be a sensitive receptor, it would be negatively impacted by TAC emissions from the freeway. Although a full health risk assessment was not completed, it is expected that the health risk from the freeway could exceed the SCAQMD's significance criteria.

Operationally, the Residential Project Alternative would generate fewer automobile trips overall. As shown in Table 4-1 below, overall emissions associated with the Residential Project Alternative would be reduced in comparison to the proposed project.

Table 4-1 Comparison of Operational Air Emissions – Proposed Project and Residential Project

Scenario	Daily VMT	Maximum Daily Emissions (pounds per day)					
		CO	NOx	PM10	PM2.5	ROG	SO2
Proposed Project	1,383	23.69	5.20	1.83	0.20	3.08	0.02
Alternative 2 - Residential (84 d.u.)	553	9.47	2.08	0.73	0.08	1.23	0.01
Difference from Proposed Project (pounds per day)							
Alternative 1 - No Project	-1,383	-23.69	-5.20	-1.83	-0.20	-3.08	-0.02
Alternative 2 - Residential (84 d.u.)	-830	-14.22	-3.12	-1.10	-0.12	-1.85	-0.01

Notes:

d.u. = dwelling units

As shown above, all operational emissions generated by Alternative 2 would be less than those generated by the proposed project. However, given that no significant and unavoidable air quality impacts were identified for the proposed project and that the Residential Project Alternative has the potential result in health risk impacts in excess of the SCAQMD's significance criteria, the Residential Project Alternative would not avoid or reduce the severity of significant air quality impacts of the proposed project and may in fact result in new, more significant impacts.

4.6.2.3 Cultural Resources

Under the Residential Project Alternative, a new building of similar size and scale to the proposed project would be constructed. Additionally, as part of the Residential Project Alternative, underground parking would be provided. As a result, similar impacts to historic resources, historic districts, archaeological resources, and paleontological resources would result with implementation of the Residential Project Alternative. However, given that no significant and unavoidable cultural resources impacts were identified for the proposed project, the Residential Project Alternative would not avoid or reduce the severity of significant cultural resources impacts of the proposed project.

4.6.2.4 Greenhouse Gases

The principal GHGs that contribute to climate change are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), and water vapor. The primary GHG emissions that could be generated by the Residential Project Alternative include CO₂, CH₄ and CO_{2e}; the major source for these emissions is vehicle trips. As shown in Table 4-2 below, because the Residential Project Alternative would result in fewer annual vehicle trips associated with operations, GHG emissions generated by Alternative 2 would be less than those generated by the proposed project. However, given that no significant and unavoidable GHG impacts were identified for the proposed project, the Residential Project Alternative would not avoid or reduce the severity of significant GHG impacts of the proposed project.

Table 4-2 Comparison of Greenhouse Gas Emissions – Proposed Project and Residential Project

Scenario	Annual VMT	Annual Emissions (metric tons per year)		
		CO ₂	CH ₄	CO _{2e}
Proposed Project	504,795	270.63	0.02	271.03
Alternative 1 - No Project	0	0.00	0.00	0.00
Alternative 2 - Residential (84 d.u.)	201,845	108.21	0.01	108.37
		Difference from Proposed Project (metric tons per year)		
Alternative 1 - No Project	-504,795	-270.63	-0.02	-271.03
Alternative 2 - Residential (84 d.u.)	-302,950	-162.42	-0.01	-162.66

Notes:

d.u. = dwelling units

4.6.2.5 Noise

Under the Residential Project Alternative, a building of similar size and scale to the proposed project would be constructed. The building would be five stories in height, 94,091 square feet in size, and require approximately 13 months to construct. As such, noise impacts during construction of Alternative 2 would be the same as those associated with construction of the proposed project. As with the proposed project, no significant construction noise impacts would occur.

Potential operational noise sources include traffic generated by the residences and general activities associated with residential buildings such as the running of air conditioning units. The Residential Project Alternative would result in fewer traffic trips overall when compared to the proposed project and the other operational noise sources would be comparable to those associated with the extended stay hotel. As such, similar to the proposed project, no significant noise impacts would result from the operation of the Residential Project Alternative.

Given that no significant and unavoidable noise impacts were identified for the proposed project, the Residential Project Alternative would not avoid or reduce the severity of significant noise impacts of the proposed project.

4.6.2.6 Transportation and Traffic

The Residential Project Alternative assumes development of the project site as a code-compliant residential project. This alternative would result in the construction of 84 multi-family dwelling units (condominiums), each approximately 500 square feet in size. A maximum of 105 parking spaces would be provided. The overall building size would be 94,091 square feet and the height of the building would be comparable to the proposed hotel building.

Utilizing the land use assumptions for this alternative, trip generation estimates were prepared utilizing the *Trip Generation – An ITE International Report*, 8th Edition and compared to trip estimated for the proposed project, as shown in Table 4-3 below.

Table 4-3 Comparison of Trip Generation Estimates – Proposed Project and Residential Project

Scenario	Daily Total	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project ^[1]	1,383	60	44	104	53	56	109
Alternative 2 – Residential (84 d.u.) ^[2]	553	8	37	45	35	17	52
Difference from Proposed Project	(830)	(52)	(7)	(59)	(18)	(39)	(57)
% Difference	-60%	-87%	-16%	-57%	-34%	-70%	-52%

Source: Marriott Residence Inn Project Alternatives Evaluation Addendum, Raju Associates, November 6, 2012.

Notes:

d.u. = dwelling units

^[1] Trip generation estimates from Traffic Study for the Marriott Residence Inn Project, Raju Associates Inc., October 2012.

^[2] Trip generation for Residential (Condominium – Institute of Transportation Engineers (ITE) Land Use Code 230) was calculated using the following equations:

Where:

Daily: $\text{Ln}(T) = 0.87 \text{Ln}(X) + 2.46$

AM Peak Hour: $\text{Ln}(T) = 0.80 \text{Ln}(X) + 0.26$

PM Peak Hour: $\text{Ln}(T) = 0.82 \text{Ln}(X) + 0.32$

Where:

Ln = Natural logarithm

T = Two-way volume traffic (total trip-ends)

X = Number of dwelling units

As shown in Table 4-3, the Residential Project Alternative would generate a total of 553 daily trip ends, representing approximately 60 percent fewer trips than the proposed project. During the AM and PM peak hours, this alternative would generate 45 and 52 trips, respectively. This represents 57 percent fewer trips in the AM peak hour and 52 percent fewer trips in the PM peak hour, when compared to the proposed project. According to the supplemental analysis included in within the *Marriott Residence Inn Project Alternatives Evaluation Addendum* (Raju Associates 2012), included within Appendix F of this EIR, Alternative 2 does not trigger significant impact thresholds at any of the analyzed intersections during either the AM or PM peak hour under existing and future conditions. Overall, this alternative would result in fewer traffic impacts than the proposed project. However, given that no significant and unavoidable traffic impacts were identified for the proposed project, the Residential Project Alternative would not avoid or reduce the severity of significant traffic impacts of the proposed project.

4.6.2.7 Conclusion

Overall, Alternative 2, the Residential Project Alternative, has the potential to result in fewer environmental impacts when compared to the proposed project. The building would be of a similar size and scale; as such aesthetic and cultural resources impacts would be the same as those associated with the proposed project. The residential building, however, would generate fewer vehicle trips when compared to the proposed project, thereby resulting in fewer operational air quality, GHG, noise and traffic impacts. However, health risk impacts to residents of the building may result from resident exposure to the I-210 Freeway. Therefore, no significant and unavoidable environmental impacts were identified for the proposed project and the Residential Project Alternative would not avoid or reduce the severity of significant environmental impacts of the proposed project. This alternative may instead result in a new health risk impact when compared to the proposed project.

4.6.3 Alternative 3 – Commercial Office Project

The Commercial Office Project Alternative would involve the construction of a code-compliant commercial office project on the same site proposed for development of the extended stay hotel project. Under this alternative, a 94,091 square foot building would be constructed with approximately 282 parking spaces. Building setbacks along Fair Oaks Avenue and Walnut Street would range between zero and five feet, and the maximum allowable height for the district is 60 feet but through height averaging portions of the building can go up to 75 feet. Therefore, the commercial office building would be five stories. Under the Commercial Office Project Alternative, the site would be redeveloped thereby creating an entrance to the City’s northwest gateway corner that is compatible with its urban context and encourages pedestrian-oriented, less-motorized transportation; however, the basic project objectives related to providing additional hotel space within the City would not be achieved. Old Pasadena would continue to be underserved in terms of hotel uses to support local businesses, and a gateway to Old Pasadena for tourist purposes would not be accomplished.

4.6.3.1 Aesthetics

Under the Commercial Office Project Alternative, the existing vacant project site would be developed with a five-story building that would be approximately the same size and mass as the proposed project. The building would occupy the existing vacant site (which was previously developed until 2007 with a multi-story structure) and result in minor alterations of distant views of the mountains; however, as with the proposed project, no significant view impacts would occur. Additionally, as with the proposed project, a new source of light and glare would be introduced at the project site; however, lighting would be shielded to minimize spillover onto adjacent land uses as required by the Zoning Code. No significant aesthetic impacts would occur with the Commercial Office Project Alternative. However, given that no significant and unavoidable aesthetic impacts were identified for the proposed project, the Commercial Office Project Alternative would not avoid or reduce the severity of significant aesthetic impacts of the proposed project.

4.6.3.2 Air Quality

Under the Commercial Office Project Alternative, a new office building of similar size and scale to the proposed project would be constructed. The construction schedule, as with the proposed project, is anticipated to last approximately 13 months. Construction of the office building would require an additional one to two more levels of subterranean parking than required for the proposed project. As a result, an increase in excavated soil would be required. Because the construction schedule is not expected to change from that described for the proposed project, the maximum daily emissions for this phase of construction would be higher than the proposed project because more off-road construction equipment would be needed per day to excavate the additional soil. Furthermore, there would be an increase in daily construction worker trips and on-road truck haul trips to export the excess soil and to import concrete for the parking levels. As such, construction of Alternative 2 has the potential to result in more construction emissions than the proposed project.

Operationally, the Commercial Office Project Alternative would generate fewer automobile trips overall. As shown in Table 4-4 below, overall emissions associated with the Commercial Office Project Alternative would be comparable or reduced in comparison to the proposed project.

Table 4-4 Comparison of Operational Air Emissions – Proposed Project and Commercial Office Project

Scenario	Daily VMT	Maximum Daily Emissions (pounds per day)					
		CO	NOx	PM10	PM2.5	ROG	SO2
Proposed Project	1,383	23.69	5.20	1.83	0.20	3.08	0.02
Alternative 3 – Office (94,091 s.f.)	1,273	21.80	4.79	1.68	0.18	2.84	0.02
Difference from Proposed Project (pounds per day)							
Alternative 1 - No Project	-1,383	-23.69	-5.20	-1.83	-0.20	-3.08	-0.02
Alternative 3 – Office (94,091 s.f.)	-110	-1.88	-0.41	-0.15	-0.02	-0.25	0.00

Notes:

s.f. = square feet

As shown above, all operational emissions, with the exception of sulfur dioxides, generated by Alternative 3 would be less than those generated by the proposed project. However, given that no significant and unavoidable air quality impacts were identified for the proposed project, the Commercial Office Project Alternative would not avoid or reduce the severity of significant air quality impacts of the proposed project and instead has the potential to result in additional construction air quality impacts when compared to the proposed project.

4.6.3.3 Cultural Resources

Under the Commercial Office Project Alternative, a new building of similar size and scale to the proposed project would be constructed. Additionally, as part of the Commercial Office Project Alternative, underground parking would be provided. However, commercial office uses require more parking than residential or hotel uses; therefore additional underground parking would be required. To provide the additional parking, a second and possibly third level of underground parking would be provided, thereby increasing the potential to encounter previously undiscovered archaeological and/or paleontological resources. With implementation of mitigation measures identified in Section 3.3 of this EIR, impacts to cultural resources could be reduced to less than significant levels. Although no significant and unavoidable cultural resources impacts were identified for the proposed project, the Commercial Office Project Alternative does have the potential to result in more cultural resources, and specifically archaeological and paleontological, impacts than the proposed project and would therefore not avoid or reduce the severity of significant cultural resources impacts due to the excavation required to accommodate additional parking.

4.6.3.4 Greenhouse Gases

The principal GHGs that contribute to climate change are CO₂, CH₄, N₂O, O₃, and water vapor. The primary GHG emissions that could be generated by the Commercial Office Project Alternative include CO₂, CH₄ and CO₂e; the major source for these emissions is vehicle trips. As shown in Table 4-5 below, because the Commercial Office Project Alternative would result in fewer annual vehicle trips associated with operations, GHG emissions generated by Alternative 3 would be less than those generated by the proposed project. Additionally, as included in Appendix B of this EIR, GHG emissions are estimated to be 1,659 metric tons of CO₂e (MTCO₂e) per year, which is less than the South Coast Air Quality Management District's significance threshold of 3,000 MTCO₂e per year. However, given that no significant and unavoidable GHG impacts were identified for the proposed project, the Commercial Office Project Alternative would not avoid or reduce the severity of significant GHG impacts of the proposed project.

Table 4-5 Comparison of Greenhouse Gas Emissions – Proposed Project and Commercial Office Project

Scenario	Annual VMT	Annual Emissions (metric tons per year)		
		CO2	CH4	CO2e
Proposed Project	504,795	270.63	0.02	271.03
Alternative 1 - No Project	0	0.00	0.00	0.00
Alternative 3 - Office (94,091 s.f.)	464,645	249.11	0.02	249.47
		Difference from Proposed Project (metric tons per year)		
Alternative 1 - No Project	-504,795	-270.63	-0.02	-271.03
Alternative 3 - Office (94,091 s.f.)	-40,150	-21.53	0.00	-21.56

Notes:

s.f. = square feet

4.6.3.5 Noise

Under the Commercial Office Project Alternative, a building consistent in size and scale to the proposed project would be constructed. The building would be five stories in height, 94,091 square feet in size, and require approximately 13 months to construct. As such, noise impacts during construction of Alternative 3 would be the same as those associated with construction of the proposed project. As with the proposed project, no significant construction noise impacts would occur.

Potential operational noise sources include traffic generated by the commercial office building and general activities associated with the building such as the running of air conditioning units. The Commercial Office Project Alternative would result in fewer traffic trips overall when compared to the proposed project and the other operational noise sources would be comparable to those associated with the extended stay hotel. As such, similar to the proposed project, no significant noise impacts from operation would result from the Commercial Office Project Alternative.

Given that no significant and unavoidable noise impacts were identified for the proposed project, the Commercial Office Project Alternative would not avoid or reduce the severity of significant noise impacts of the proposed project.

4.6.3.6 Transportation and Traffic

The Commercial Office Project Alternative would result in the construction of a code-compliant commercial office project. This alternative would consist of 94,091 square feet of office use and would provide approximately 282 parking spaces. The commercial office building would be comparable in height to the proposed extended stay hotel, approximately five stories.

Utilizing the land use assumptions for this alternative, trip generation estimates were prepared utilizing the *Trip Generation – An ITE Informational Report*, 8th Edition and compared to trips that would be generated by the proposed project, as shown in Table 4-6.

Table 4-6 Comparison of Trip Generation Estimates – Proposed Project and Commercial Office Project

Scenario	Daily Total	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project ^[1]	1,383	60	44	104	53	56	109
Alternative 3 – Office (94,091 s.f.) ^[2]	1,273	158	21	179	31	153	184
Difference from Proposed Project	(110)	98	(23)	75	(22)	97	75
% Difference	-8%	163%	-52%	72%	-42%	173%	69%

Source: Marriott Residence Inn Project Alternatives Evaluation Addendum, Raju Associates, November 6, 2012.

Notes:

s.f. = square feet

^[1] Trip generation estimates from Traffic Study for the Marriott Residence Inn Project, Raju Associates Inc., October 2012.^[2] Trip generation for Office (General Office – ITE Land Use Code 710) was calculated using the following equations:

Where:

Daily: $\text{Ln}(T) = 0.77 \text{Ln}(X) + 3.65$ AM Peak Hour: $\text{Ln}(T) = 0.80 \text{Ln}(X) + 1.55$ PM Peak Hour: $T = 1.12 \text{Ln}(X) + 78.81$

Where:

Ln = Natural logarithm

T = Two-way volume traffic (total trip-ends)

X = Area of 1,000 gross s.f. of leasable area

The Commercial Office Project Alternative would generate a total of 1,273 daily trip ends, representing approximately eight percent fewer trips than the proposed project. During the AM and PM peak hours, this alternative would generate 179 and 184 trips, respectively. Because of the nature of a commercial office land use would translate to additional in/out AM and PM trips, this represents 72 percent more trips during the AM peak hour and 69 percent more trips in the PM peak hour, when compared to the proposed project. According to the supplemental analysis included in the *Marriott Residence Inn Project Alternatives Evaluation Addendum* (Raju Associates 2012), included within Appendix F of this EIR, Alternative 3 would not trigger the significant impact thresholds at any of the analyzed intersections under existing and future conditions; although, on an overall basis, this alternative would result in more trips during the AM and PM peak periods and therefore have more traffic impacts when compared to the proposed project.

4.6.3.7 Conclusion

Overall, Alternative 3, the Commercial Office Project Alternative, has the potential to result in comparable, or in some cases fewer and other cases more environmental impacts when compared to the proposed project. The building would be of a similar size and scale; as such aesthetic impacts would be the same as those associated with the proposed project. The commercial office building would generate fewer vehicle trips when compared to the proposed project, thereby resulting in fewer overall operational air quality, GHG, noise and traffic impacts. During AM and PM peak periods, there is the potential that Alternative 3 would result in additional impacts to study intersections, as discussed above. However, impacts at these intersections would still remain less than significant. In addition, commercial office uses require more parking than residential or hotel uses; therefore additional underground parking would be required. To provide the additional parking, a second and possibly third level of underground parking would be provided, thereby increasing construction air emissions associated with hauling away excavated material and the potential to encounter previously undiscovered archaeological and/or paleontological resources. With implementation of mitigation measures identified in Section 3.3 of this EIR, impacts to cultural resources could be reduced to less than significant levels. Given that no significant and unavoidable environmental impacts were identified for the proposed project and that the Commercial Office Project Alternative would result in comparable, and in a few instances fewer impacts and in other instances more impacts than the proposed project, the Commercial Office Project Alternative would not avoid or reduce the severity of significant environmental impacts of the proposed project.

4.7 Environmentally Superior Alternative

State CEQA Guidelines Section 15126.6(e)(2) requires that an “environmentally superior” alternative be selected among the alternatives that are evaluated in the EIR. In general, the environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts. If the No Project Alternative is identified as environmentally superior, then another environmentally superior alternative shall be identified among the other alternatives. Table 4-7 summarizes the effects of the alternatives.

Table 4-7 Comparison of Alternatives to the Proposed Project

Environmental Issue Area	Alt 1 – No Project	Alt 2 – Residential	Alt 3 – Commercial Office
Aesthetics	No Impacts/Fewer than Proposed Project	Less than Significant/Same as Proposed Project	Less than Significant/Same as Proposed Project
Air Quality	No Impacts/Fewer than Proposed Project	Potentially Significant/More than Proposed Project	Less than Significant/More than Proposed Project
Cultural Resources	No Impacts/Fewer than Proposed Project	Less than Significant/Same as Proposed Project	Less than Significant/More than Proposed Project
Greenhouse Gases	No Impacts/Fewer than Proposed Project	Less than Significant/Fewer than Proposed Project	Less than Significant/Fewer than Proposed Project
Noise	No Impacts/Fewer than Proposed Project	Less than Significant/Fewer than Proposed Project	Less than Significant/Fewer than Proposed Project
Transportation and Traffic	No Impacts/Fewer than Proposed Project	Less than Significant/Fewer than Proposed Project	Less than Significant/ More than the Proposed Project

As identified above, the No Project Alternative would result in no environmental impacts and therefore would be the Environmentally Superior Alternative to the proposed project. However, as required by *State CEQA Guidelines* Section 15126.6(e)(2), if the No Project Alternative is identified as the Environmentally Superior Alternative, a second build alternative must be identified as the Environmentally Superior Alternative. As such, the code-compliant Alternative 2, Residential Project Alternative, would be the Environmentally Superior Alternative to the proposed project. However, given that the proposed project would not result in any significant and unavoidable environmental impacts, the Residential Project Alternative would not avoid or reduce the severity of significant environmental impacts, and would instead result in greater health risk impacts associated with the proposed project.